



**Centre for Aerospace & Defence Laws (CADL)  
Directorate of Distance Education  
NALSAR University of Law, Hyderabad**

**Course Material**

**M.A. (SECURITY AND DEFENCE LAWS)**

**1.2.7. DEFENCE PROCUREMENT POLICIES:  
NATIONAL AND INTERNATIONAL  
PERSPECTIVES**

**Compiled by:  
Prof. (Dr.) V. Balakista Reddy**

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# **MODULE-I**

## **INTRODUCTION TO PROCUREMENT AND DEFENCE PROCUREMENT**



## **PUBLIC PROCUREMENT**

Governments and state-owned enterprises purchase a wide variety of goods, services and public works from the private sector, from basic computer equipment to the construction of roads. Public procurement is a key economic activity of governments that represents a significant percentage of the Gross Domestic Product (GDP) generating huge financial flows, estimated on average at 10-15% of GDP across the world. An effective procurement system plays a strategic role in governments for avoiding mismanagement and waste of public funds.

Public procurement is the process by which public bodies acquire goods, works and services of civil application. In recent decades, public procurement has undergone what has been described as a “global revolution” in public debate. An important driver of this phenomenon is the significance of public procurement markets for international trade as domestic suppliers increasingly face foreign competition when competing for public contracts. In two of the world’s largest procurement markets, the European Union (EU) and the United States of America (USA), public procurement expenditure accounts for approximately 14 per cent and 10 per cent respectively of Gross Domestic Product. By value, in 2012, these procurement markets were estimated at €1.8 and \$1.7 trillion.

The political, economic and legal significance of public procurement is also reflected in international and regional legal regimes designed to reduce barriers to open public procurement markets. Unlike a national procurement system, the primary objective of which is to obtain value for money for the taxpayer, the principal objectives are to prevent discrimination, enable equal treatment and provide transparency in procurement processes. For example, the World Trade Organization (WTO) provides an option for its members to sign up to a pluri-lateral Government Procurement Agreement (GPA) providing such guarantees between signatories<sup>1</sup>.

However, dealing with government procurement was not generally a priority in the early phase of the multilateral trading system, nor in early regional and bilateral free trade agreements. Rather, the initial efforts of those responsible for negotiating these arrangements tended to focus on more conventional trade barriers, such as tariffs and quotas, both because these were perceived as more important (and their removal a necessary initial step for access to government markets in any case) and because of the particular sensitivity of government procurement. As other trade barriers have diminished, however, the WTO, in common with many other regimes, has increasingly turned its attention to opening up public markets. Most recently, the importance of government procurement has been enhanced by the increased importance of public infrastructure investment and other procurement activities as an aspect of world economic activity in the context of the recent economic crisis and as a consequence

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<sup>1</sup> Uruguay Round of Multilateral Trade Negotiations (1986–1994) Agreement on Government Procurement (WTO) (GPA 1994)

of continuing high growth and, consequently, infrastructure demand in emerging economies such as China and India. Also relevant is an increasing recognition, both in scholarly writing and in public policy formulation, of the role of governance mechanisms – i.e. the rules and institutions that establish the framework for the operation of markets – as an underpinning of long-run economic growth and prosperity.

### **ROLE OF PUBLIC PROCUREMENT:**

The procurement is defined as acquiring resources from outside suppliers. In this sense, procurement activities are very critical to all organizational units from households to firms, organizations, and the government. From the functional viewpoint, procurement is an indispensable activity and its successful achievement is essential to any organization. In the private sector, procurement is considered as a profit center to maximize the firm's profit in saving material cost. However, there is a major distinction in public procurement as it draws its funds from tax revenue. Hence, unlike procurement in the private sector, governmental procurement should reflect public concerns as well as efficiency. Nevertheless, both are quite similar in many ways such as cost savings, quality assurance, supplier relationship, procurement ethics, supply market analysis, green procurement and so on.

The size of the public procurement is quite considerable. In Korea, public authorities spend approximately 10 % of the Korean GDP. Thus, public procurement accounts for a significant portion of the overall demand for goods and services and is increasingly seen as an attractive and feasible instrument for developing society and nation. Therefore, a simple policy of public procurement can make a profound impact on a nation or industry. As a matter of fact, public procurement has come to play a major role in enhancing the quality level of public and private sectors, and there has been much research into public purchasing. Role of public procurement can be classified into five categories – (i) The national economic contribution, (ii) The leadership in government officials, (iii) Social responsibilities, (iv) Eco-Friendly activities, and (v) Industry innovation.

### **The Goal of Public Procurement:**

The Procurement Cycle begins with the identification of a need and ends with the award of a contract. The goal of public procurement is to award timely and cost-effective contracts to qualified contractors, suppliers and service providers for the provision of goods, work and services to support government and public services operations, in accordance with principles and procedures established in the public procurement rules.

### **Actors, Stakeholders and Beneficiaries of Public Procurement**

Procurement practitioners are the principal actors in the public procurement process. They are responsible for ensuring the goal of public procurement is achieved. They must gain stakeholder's trust and ensure they fully understand the procurement process and principles.

Procurement practitioners are directly and indirectly engaged in the procurement process, from need assessment to contract close-out. Although, they are more directly involved in the public procurement process, they also provide advice and support during contract execution.

### **Stakeholders of Public Procurement**

Stakeholders are those who stand to benefit from the results of public procurement, including those interested in the process and who might be affected, directly or indirectly, by a particular procurement action.

The difference between actors and stakeholders is primarily participation. Actors play an active role in the procurement process, while stakeholders a more passive role. Actors are also stakeholders because of the benefits they derive from the use of public goods and services.

### **Beneficiaries of Public Procurement**

All inhabitants of a country are beneficiaries of the public procurement system through public goods and services available and provided in the form of transportation systems, public utilities, educational systems, and medical services and facilities, among others.

### **Similarities and Differences between Public and Private Sector Procurement**

Public sector and private sector procurement organizations are designed to acquire goods and services. The main difference between these two types of organizations is the purpose for acquiring those goods and services. One is focused primarily on a social benefit, the other is profit centric.

Private sector procurement activities are for supporting the principal business objective of a company, which is to make a profit. This does not rule out the fact that private entities may also seek social benefit; however, it is not their primary business objective. In the public sector, the two main reasons for acquiring goods and services are: (i) for supporting government operations, and (ii) to provide public services.

Source of funding is another fundamental difference between private sector and public sector procurement. While private sector procurement is funded by owners or shareholders of the company, funds used in public procurement are primarily from taxes and/or grants and loans obtained by the government on behalf of the country.

Concerning governing rules, private sector procurement complies primarily with contract or commercial law with respect to the formation of contracts, but their methods of procurement are governed by company policy. The entire public sector procurement process, however, is governed by the public procurement legal and institutional frameworks (procurement rules), and practitioners are obliged to adhere to them. Private sector procurement is also governed

by company policy. Such policies are not necessarily dictated by law, but by the objectives of the company. A private company can engage in a contract with another private company or individual, and the procurement method is dictated entirely by the internal policies of the company.

Public sector procurement is governed by the public procurement rules. In most countries, there is a law that governs the procurement of goods, services and works with public funds. These rules set the basis for managing procurement and the various methods permitted under different circumstances. Public procurement must also adhere to certain principles. The process should be open to public scrutiny, depending on the procurement method used, and any confidentiality agreement stemming from the particular procurement method used. Sometimes, the procurement law is comprehensive, with high level of detail; sometimes it covers only the fundamentals, leaving the details for further development in procurement regulations, guidelines and manuals (institutional frameworks), which should expand on but not contravene the public procurement law.

With respect to oversight, the private sector procurement process is mostly closed to public scrutiny. Shareholders may, however, require reviews of the procurement process. Public sector procurement, in contrast, is open to public scrutiny, and public procurement practitioners are accountable for their actions, and need to ensure public procurement is managed in accordance with the objectives, principles and procedures defined in the public procurement rules.

Public procurement management, requirement identification and budget allocation, procurement planning and strategy development, procurement method selection, solicitation documents preparation and advertisement, bid and proposal submission, evaluation and selection, and contract award to closeout, are all addressed in the procurement rules. Public procurement practitioners are not at liberty to use a procurement method not stipulated in the procurement rules or not identified for a specific type of procurement requirement. Any deviation from public procurement rules requires justification and clearance from a designated approving authority, sometimes a Tender Board, before the action is carried out.

Under private sector procurement, procurement practitioners answer only to management, and are responsible for their actions; public sector procurement practitioners are public servants and are accountable for what they do or fail to do when managing public funds.

The ultimate aim of public sector procurement is to provide public services and support government operations at all levels within a country.

The procurement legal and institutional frameworks (procurement rules) govern everything from the identification of a requirement through to the closing out of a contract; sometimes including disposal, reutilization and destruction of goods.

## **Basic Principles of Public Procurement:**

Public procurement principles are the foundation of public procurement and should be addressed in the public procurement rules. They govern the management of public procurement, and also set the framework for a code of conduct for public procurement practitioners and all other officials directly or indirectly associated with the public procurement process. Weak governance in public procurement hinders market competition and raises the price paid by the administration for goods and services, directly impacting public expenditures and therefore taxpayers' resources. The financial interests at stake, and the close interaction between the public and private sectors, make public procurement a major risk area. Although it is widely agreed that public procurement reforms should adhere to good governance principles, reform efforts at the international level have focused largely on the formation of contracts in the last decade, when tenders from suppliers are solicited and evaluated. These reforms were made in order to promote competitive tendering for the selection of suppliers, even though rules also allow, in certain circumstances, less formal selection procedures. So far, the formation of contracts – starting with the definition of requirements to the contract award – is the most regulated and transparent phase of the procurement cycle, the “tip of the iceberg”. Procedures that enhance transparency, good management, prevention of misconduct, accountability and control contribute to preventing the waste of public resources as well as corrupt practices. Efforts to enhance good governance and integrity in public procurement are fully part of an efficient and effective management of public resources.

Transparency, integrity, economy, openness, fairness, competition and accountability are some of the fundamental principles of public procurement. They are briefly discussed below.

### **Transparency**

Transparency in public procurement is important. Information on the public procurement process must be made available to all public procurement stakeholders: contractors, suppliers, service providers, and the public at large, unless there are valid and legal reasons for keeping certain information confidential. Examples of confidential information are: proprietary information belonging to companies or individuals participating in the solicitation process, and certain military and defense-related procurements, to mention a few.

When a public procurement requirement is announced, electronically, through press release, the internet, and other venues, the announcement must include sufficient details for interested contractors, suppliers and service providers to determine if they are qualified to compete. After reading the documents, interested contractors, suppliers and service providers should also be able to determine:

- the nature of the requirement and its scope
- the closing date for submission of offers or information

- the evaluation and selection criteria
- how and where offers should be submitted
- the number of copies to be submitted, and point of contact for additional information and response to queries (clarifications)
- the deadline for submission of queries
- the schedule of pre-bid meetings and site visits (if applicable), and any other pertinent details

Additionally, if there is a change to the documents, all stakeholders should be notified using the same publications that were used for the initial notification, so interested contractors, suppliers or service providers can take necessary and timely actions to comply with the change.

### **Integrity of the Public Procurement Process**

Integrity is essentially reliability. Bidders, and all other stakeholders, must be able to rely on any information disseminated by the procuring entity, formally or informally. The integrity of the procurement process assures confidence in the public procurement system. When documents are made publicly available, the information they contain must be dependable and free of ambiguities or bias. When reviewing solicitation documents, prospective bidders should be able to determine if they are qualified to undertake the assignment. They also should be able to assess the need for association with other bidders and the type of association they would need to form given their qualifications and the requirements of the assignment.

Bidders should have a clear understanding of the requirement, and know how they will be evaluated. Evaluation and selection criteria must be clearly stated in the documents. These criteria should remain unchanged unless there is need to modify them. If modification is required, the documents should be amended, published and made available to all prospective bidders. Any changes in the offer submission date, should allow bidders sufficient time to adjust their offers accordingly to meet the new submission deadline.

### **Economy**

Synonymous with efficiency, value for money, and commercially reasonable price, the principle of economy emphasizes the need to manage public funds with care and due diligence so that prices paid for goods, services and works are acceptable and represent good value for the public funds expended on them.

Everyone associated with the public procurement process or directly responsible for facilitating the acquisition of goods and services with public funds, should strive to avoid fraud, waste and abuse of public resources; whether it is the result of over specifications of required goods, paying unreasonably high prices for substandard goods, collusion with other bidders, or other forms of unacceptable practices.

## **Openness**

Public procurement requirements should be open to all qualified organizations and individuals. The public should also have access to information pertaining to public procurement requirements. Access to public procurement information is not absolute. Confidential and proprietary information belonging to organizations and individuals participating in process should not be available publicly, and the extent of their disclosure should be detailed in the procurement rules or other relevant regulation.

There are also procurement methods, such as restricted or selective bidding, that limit the availability of solicitation documents to only those firms meeting certain qualifications. The request for quotations (or shopping), and direct contracting (sole source) also present certain limitations on competition given that the request for offers is limited to a certain number and type of organizations or individuals.

The evaluation of offers received is always kept confidential until the evaluation panel reaches a final conclusion and after the evaluation report is cleared by a designated approving authority. This would be defined in the procurement rules.

Most defense procurements are confidential, restricting relevant information to a “need-to-know” basis only.

Except for confidential defense procurements, the results of the public procurement process should be published and made available on relevant websites. In addition, public procurement information (except for confidential/proprietary information) should be open to all on a restricted access basis.

## **Fairness**

There are different interpretations of fairness in public procurement, so rather than define fairness as treating all bidders equally, better to mention how fairness is achieved in public procurement.

To achieve fairness in the public procurement process:

- Decision-making and actions must be unbiased, and no preferential treatment should be extended to individuals or organizations given that public procurement activities are undertaken with public funds.
- All offers must be considered on the basis of their compliance with the stipulations of the solicitation documents, and offers should not be rejected for reasons other than those specifically stated in the solicitation documents and the procurement rules.
- A contract should only be signed with the supplier, contractor or service provider whose offer is compliant and best responds to the objectives of the requirement in terms of technical capability and price.

- Suppliers, contractors or service providers should have the right to challenge the procurement process whenever they feel they were unfairly treated or that the procuring entity failed to carry out the procurement process in accordance with the public procurement rules. Such challenges must be based on the documents and/or the public procurement rules.

## **Competition**

The public procurement process should not be manipulated for the benefit of any organization or individual. Given that public procurement is funded primarily with tax payers' money, all eligible organizations and individuals should be allowed to participate by submitting offers in response to a specific requirement for which they are qualified.

Public procurement requirements should be widely disseminated to increase the chances of a good market response, leading to the award of competitively-priced contracts.

Despite this principle, not all contracts are awarded using a competitive process because this sometimes depends on the urgency of need and the resulting procurement method used to fulfill a specific requirement.

The use of non-competitive procurement methods, although justified under certain conditions, should be kept to a minimum. Examples of non-competitive procurement methods are: shopping (also called request for quotations or invitation to quote) and direct contracting (single/sole sourcing). Each of these non-competitive procurement methods have their purpose and should not be misused.

## **Accountability**

Accountability in public procurement means that anyone involved in the procurement process is responsible for their actions and decisions with respect to the public procurement process. As public servants, procurement practitioners, and others involved in the public procurement process, are accountable and exposed to sanctions as a remedy for any behavior that contravenes the public procurement rules. You also have an obligation to report and/or answer to a designated oversight entity, and the public, on the consequences of your actions and decisions.

## **Implementing the Principles:**

The procurement cycle comprises three main phases:

- pre-tendering, including needs assessment, planning and budgeting, definition of requirements and choice of procedures;
- tendering, including the invitation to tender, evaluation and award; and
- Post-tendering, including contract management, order and payment.

1. Pre-tendering phase:

Risks to integrity in pre-tendering:

In the pre-tendering phase, common risks to integrity include:

- the lack of adequate needs assessment, planning and budgeting of public procurement;
- influence of external actors, including political interference;
- requirements that are not adequately or objectively defined;
- an inadequate or irregular choice of the procedure; and
- a timeframe for the preparation of the tender that is insufficient or not consistently applied.

Precautionary measures in pre-tendering:

Stage 1: Needs assessment:

- Reduce information asymmetry with the private sector to take a strategic approach to the management of procurement markets based on government needs, for instance:
  - a) gather as much information as possible on the industry or the goods and services (e.g. through a market study, existing databases); and
  - b) organise consultations with the private sector where appropriate, in cases where a large number of potential suppliers could be involved in relation to a specific procurement project. Attention should be paid to ensuring that the information exchange is organised in an open, structured and ethical manner to avoid collusion between potential suppliers and that the outcomes of discussions are recorded.
- Provide an assessment of the need for the procurement, in particular whether:
  - a) the need is for the replacement or enhancement of existing resources or to meet an entirely new requirement;
  - b) there are no alternatives, including the use of in-house resources or the enhancement of existing capacity through enhanced efficiency;
  - c) procurement would be essential for the conduct of business or to improve performance; and
  - d) the planned capacity or size is actually needed.
- Use a validation system that is independent from the decision maker, in particular:
  - a) ensure that decisions to launch a specific procurement are taken by more than one official to the extent possible, especially for projects of high value, to minimise the risk of lobbying or collusion with a specific firm;
  - b) for projects at risk because of their value, complexity or sensitivity, consider the use of independent validation of the process (e.g. approval by a review committee, use of a probity advisor), and

- c) consult representatives from end-user organisations and the wider public in the needs assessment (e.g. in the form of a survey of public utility).

## Stage 2: Planning and budgeting:

- Ensure that the procurement is aligned with:
  - a) the strategic priorities of the organisation; and
  - b) the overall investment decision making process and the general budget process which should be completed prior to the commencement of the tendering process.
- As part of the planning, ensure clear and reasonable time frames for each stage of the procurement process by:
  - a) ensuring that these timeframes can be consistently applied; and
  - b) taking into account the value, complexity and sensitivity of the contract when fixing the timescale for responses.
- Provide a realistic estimation of the budget and ensure its timely approval, in particular by:
  - a) preparing a realistic estimate of all phases of the procurement, based on sound forecasting methods;
  - b) verifying that funds are available to meet the procurement to the extent possible;
  - c) requesting the budget holder to approve expenditure; and
  - d) taking into account possible variations over time, which could have an impact on the contract.
- Prepare a business case for major projects that are particularly at risk because of their value, complexity or sensitivity by:
  - a) taking specialised advice from project and technical experts to assess costs and benefits in a realistic manner. Also possibly request independent peer review of economic, environmental, and social forecasts (e.g. involve independent oversight body, specialised public agencies, panel of experts or representatives from civil society, or academic institutes or think tanks, etc.);
  - b) ensuring a sound project management regime. In particular: make sure that project management costs are properly funded, that dedicated project officials are in place, and that key stages of the project are appropriately documented;
  - c) preparing project-specific procurement plans to determine the level of risk of the project and plan precautionary measures accordingly (e.g. use of gateway reviews to provide an independent review at each stage of the procurement cycle, probity auditor, etc.); and
  - d) ensuring that criteria for making procurement decisions are defined in a clear and objective manner, included in the tendering documents, and that decisions demonstrate that criteria have been respected.
- Clearly define responsibilities taking into account possible risks by:

- a) attributing the responsibility of project development and implementation to one project organisation, with directors being held accountable;
  - b) defining the delegated levels of authority for approval of spending, sign off and approval of key stages;
  - c) performing an assessment of the positions of officials which are vulnerable and those activities in the procurement where risks may arise; and
  - d) planning senior-level review within the organisation at key stages of the procurement process and considering additional control depending on the value, complexity and sensitivity of the procurement.
- Make sure that officials are aware of the requirements for the transparency of the procurement system and well prepared to apply them by:
- a) designating the official(s) in charge of ensuring publicity over government decisions;
  - b) publishing any law, regulation, judicial decision, administrative ruling, standard contract clauses mandated by law or regulation, and procedure regarding procurement, and any modifications thereof;
  - c) using an electronic and/or paper medium that is widely disseminated and remains readily accessible to the public;
  - d) ensuring adequate record storage and management for recording key decisions throughout the procurement cycle; and
  - e) reaping the benefits from the use of new technologies that can automatically process and record transactions while avoiding human intervention.
- Ensure separation of duties and authorisation, which can take several forms such as:
- a) ensuring segregation of technical, financial, contractual and project authorities for the approval process when possible. The following functions could be handled by different personnel: issue of purchase orders; recommendation of award; certification of the receipt of goods and services; and payment verification; and
  - b) identifying separate personnel with clear responsibility for key stages of the procurement process, including definition of requirements, evaluation, control of performance and payment. When these duties cannot be separated, compensating controls should be put in place (e.g. random audit).

### Stage 3: Definition of requirements:

- Take precautionary measures to prevent conflict of interest, collusion and corruption and promote integrity, in particular by:
- a) obtaining declarations of private interests from officials involved in the procurement process and, in case of consultation, of other parties involved where appropriate;
  - b) ensuring that officials are informed and have received guidance about how to handle conflict-of-interest situations. For officials and other actors involved in the

- process (e.g. civil society monitors), make them aware of restrictions and prohibitions (e.g. receipt of gifts, handling of confidential information);
- c) ensuring that officials are familiar with identified risks to integrity in the procurement process (for instance through a risk map or training) and encourage them to liaise with competition and/or enforcement officials in case of doubt of collusion or corruption; and
  - d) promoting integrity, not only by delineating minimal standards but also by defining a set of values that officials should aspire to.
- Take into account integrity considerations in the selection process, in particular by:
- a) establishing satisfactory evidence of identity of potential suppliers and sub-contractors, including documentary evidence of the identity of key actors who have the legal power to operate in the business;
  - b) where applicable, collecting declarations of integrity from potential suppliers in which they testify that they have not been involved in corrupt activities in the past. Consider possible sources of information to verify the accuracy of the information submitted. In addition, consider the possibility of placing requirements on potential suppliers/contractors to show evidence of anti-corruption policies and to contractually commit to complying with anti-corruption standards;
  - c) when selecting tenderers on the basis of criteria that include integrity considerations, ensure that this information can be collected and that it can be obtained from a reputable source (e.g. official certificate of absence of convictions in Court);
  - d) considering the use of Integrity Pacts to ensure the mutual commitment of officials and potential suppliers to integrity standards; and
  - e) where applicable, excluding tenderers who have been involved in corruption or debarred on corruption charges.
- Make requirements available to all parties by:
- a) publishing requirements for participation and recording them in writing; and
  - b) where possible, providing potential suppliers with the right to seek clarifications, especially for high-value procurements, while ensuring that the answers are widely shared and recording them in writing.
- When considering the use of a list of suppliers, ensure that:
- a) inherent risks to competition and transparency are taken into account before deciding to use a list of suppliers;
  - b) the list of suitable suppliers is published on the basis of a set of criteria that are clearly defined and stated;
  - c) the list is updated on a regular basis (at least on a yearly basis) and that a clear channel and sufficient timeline is advertised for application; and

- d) proposed prices are compatible with goods and services, in reference to established market prices or based on the knowledge of prior procurements of a similar nature (e.g. through a database or data mining).
- Ensure that specifications are:
  - a) based on the needs identified. Suppliers and end-users may be consulted in the drafting of specifications, provided that the number of participants is sufficiently large and representative, and that the results are reviewed in light of market analysis done by the procuring authority to provide objective analysis;
  - b) designed in a way to avoid bias, in particular that they are clear and comprehensive but not discriminatory (e.g. no proprietary brands or trade descriptions). It is necessary to avoid any form of specification that favours a particular product or service; and
  - c) designed in relation to functional performance, with a focus on what is to be achieved rather than how it is to be done in order to encourage innovative solutions and value for money.
- Ensure that award criteria are clearly and objectively defined by:
  - a) using evaluation criteria on the basis of the economically most advantageous, unless this is a commodity purchase for which the basis of the lowest price may be used;
  - b) specifying the relative weightings of each criteria and justifying them in advance;
  - c) specifying to what extent these considerations are taken into account in award criteria when using economic, social or environmental criteria; and
  - d) including any action that the procuring agency is entitled to make in the criteria (such as negotiations, under what conditions, etc.) and recording them.

#### Stage 4: Choice of procedures:

- Guide officials in determining the optimum procurement strategy that balances concerns of administrative efficiency with fair access for suppliers, in particular by:
  - a) making sure that the choice of the method ensures sufficient competition for the procurement and adapting the degree of openness depending on the procurement concerned;
  - b) providing clear rules to guide the choice of the procurement method, ensuring a competitive process and developing additional guidelines for officials to help the implementation of these rules;
  - c) reviewing and approving procurement strategies for all procurements, to ensure that they are proportional to the value and risk associated to the procurement; and
  - d) considering consulting with officials in competition authorities to ensure that the procurement strategy adopted is the one that is most likely to achieve an efficient and competitive outcome.

- Take precautionary measures for enhancing integrity where competitive tendering is not required by regulations. These measures may be proportionate to the value of the contract and include for instance:
    - a) clear and documented requirements;
    - b) the justification of the choice of procedure (when using non-competitive procedures) and the appropriate records;
    - c) a specification of the level of the authorising personnel;
    - d) planning of random reviews of results of non-competitive procedures;
    - e) a consideration of the possibility of involving stakeholders and civil society to scrutinise the integrity of the process, especially for exceptional circumstances such as extreme urgency or for high-value contracts;
    - f) the publication of the criteria to be applied for the selection of the supplier, and the expected terms of the contract; and
    - g) after the award of contract, a publication of the contract agreement.
  - For restricted/selective tendering methods, specific measures could be taken to enhance integrity, such as:
    - a) considering the minimum number of suppliers to be invited for tendering according to regulations, estimating the maximum number of suppliers that could be realistically considered for the specific procurement, and recording justifications if the minimum number of tenders cannot be met; and
    - b) conducting spot checks to confirm suppliers' offers and contacting suppliers who do not respond to repeated invitations to tender with a view to detecting potential manipulation.
  - For negotiated/limited tendering methods, specific measures could be taken to enhance integrity, such as:
    - a) providing more detailed record, including for instance the particular supplier who was selected; and
    - b) including the terms agreed upon in the contract, with a specification reflecting the supplier's solution.
  - Ensure transparency for qualification processes that cover multiple procurements and are not open at all times for application (e.g. framework agreements) by:
    - a) publishing the current list of qualified suppliers;
    - b) publishing the invitation to apply for qualification on a regular basis, including the qualification criteria;
    - c) ensuring that specifications are set up in advance and published; and
    - d) publishing all awards under framework agreements, either per order or on a regular basis.
2. Tendering phase:
- Risks to integrity in tendering:
- In the tendering phase, common risks to integrity include:

- inconsistent access to information for tendering in the invitation to tender;
- lack of competition or, in some cases, collusive tendering resulting in inadequate prices;
- conflict-of-interest situations that lead to bias and corruption in the evaluation and in the approval process; and
- lack of access to records on the procedure in the award that discourages unsuccessful tenderers to challenge a procurement decision.

#### Stage 5: Invitation to tender

- Ensure a sufficient level of transparency in the procurement opportunity:
  - a) for open tendering: make the information on the procurement publicly available, including related evaluation criteria; and
  - b) for restricted/selective and negotiated/limited methods: publish information on how to qualify in a readily available medium within a timeframe and in a manner that would reasonably allow eligible suppliers to apply.
- Publish a tender notice that includes:
  - a) information on the nature of the product or service to be procured, specifications, quantity, timeframe for delivery, realistic closing dates and times, where to obtain documentation, and where to submit tenders;
  - b) a clear and complete description of selection and award criteria that is non-discriminatory and cannot be altered afterwards;
  - c) details on the management of the contract and the plan and method for payment and possibly the guarantees when required; and
  - d) details of the contact point for enquiries.
- Communicate to potential suppliers in the same timeframe and in the same manner, in particular by:
  - a) encouraging information exchange on a formal basis (e.g. contact points for enquiries, information sessions, on-line module to observe clarification meetings, on-line posting of questions and answers);
  - b) ensuring that questions for clarification are promptly responded to and that this information is transmitted to all interested parties;
  - c) communicating changes immediately, preferably in the same channel originally used; and
  - d) publishing information, preferably on-line, to allow for external monitoring and public scrutiny.

#### Stage 6: Evaluation:

- Ensure security and confidentiality of information submitted, in particular by:
  - a) ensuring that measures are in place for the security and storage of tendering documents (e.g. keeping a document register, numbering all documents or having

- a central storage area for all documents), as well as for limiting access to documents; and
  - b) considering electronic security issues and having documented processes for electronic storage and communication (e.g. tenders submitted electronically are safeguarded from access before the closing time; the system has the capacity to reject late tenders automatically).
- Define a clear procedure for the opening of the tender, in particular by:
  - a) having a team open, authenticate and duplicate sealed tenders as soon as possible after the designated time, immediately followed by public opening, if possible;
  - b) performing the opening of tenders, preferably before a public audience where basic information on the tenders is disclosed and recorded in official minutes;
  - c) specifying clear policy defining circumstances under which tenders would be invalidated (e.g. tenders received after the closing time are invalidated unless it is due to a procuring agency error);
  - d) ensuring that any clarification of submitted tenders does not result in substantive alterations after the deadline for submission; and
  - e) ensuring that a clear and formal report of all the tenders received is produced (including their date and time of arrival, as well as the comments received from tenderers) before passing them to the officers responsible for their evaluation.
- Ensure that the evaluation process is not biased and confidential by:
  - a) undertaking evaluations with more than one evaluating official or preferably a committee. Depending on the value of the procurement and the level of risk, the committee could include not only officials from different departments but also possibly external experts;
  - b) using notified evaluation criteria systematically and exclusively and assessing them independently (e.g. technical, project and risk criteria could be assessed prior to and separately from financial criteria). Tenders should be evaluated against notified criteria, preferably on a “whole-of-life basis”;
  - c) verifying that officials in charge of the evaluation are not in a conflict-of-interest situation (e.g. through mandatory disclosure) and are bound by confidentiality requirements. In the case of an evaluation committee, integrity and professional considerations must be taken into account in the selection of members and involve a member that is external to the procurement team when possible; and
  - d) including all relevant aspects of the evaluation in a written report signed by the evaluation officers/committee.
- When allowing negotiations after the award to prevent waste and potential corruption (e.g. only one tender is received):
  - a) ensure that negotiations are conducted in a structured and ethical manner and are held within a predefined period of time so that they do not discriminate between different suppliers;

- b) handle information on tenders in a confidential manner; and
- c) keep detailed records of the negotiation.

#### Stage 7: Award:

- Inform tenderers as well as the wider public on the outcome of the tendering process by:
  - a) promptly notifying unsuccessful tenderers of the outcome of their tenders, as well as when and where the contract award information is published;
  - b) publishing the outcome of the tendering process in a readily available medium. A description of goods or services, the name and address of the procuring entity; the name and address of the successful supplier, the value of the successful tender or the highest and lowest offers taken into account in the award of the contract, the date of award; and the type of procurement method used should be included. In cases where limited tendering was used, a description of the circumstances justifying the use of limited tendering should also be included;
  - c) considering the possibility of publishing the grounds for the award, including the consideration given to qualitative tender elements. Do not disclose commercially-sensitive information about the winning tender or about other tenders, which could favour collusion in future procurements; and
  - d) allowing the mandatory standstill period, where one exists, before the beginning of the contract.
- Offer the possibility of debriefing to suppliers on request by:
  - a) withholding confidential information (e.g. trade secrets, pricing);
  - b) highlighting the strengths and weaknesses of the unsuccessful tender;
  - c) for debriefings in writing, ensuring that the written report is approved beforehand by a senior procurement official; and
  - d) organising oral debriefings, provided that discussions are carried out in a structured manner so that they do not disclose confidential information, and that they are properly recorded.
- Resolve possible disputes through constructive dialogue when possible, and provide an identified channel for formal review by:
  - a) in the case of problems with potential suppliers, making an effort to resolve disputes through negotiation as a first step;
  - b) providing information on how to lodge a complaint related to the procurement process;
  - c) providing the possibility to use dispute resolution mechanisms not only before but also after the award; and
  - d) considering the possibility of using interim measures to enable the prompt processing and resolution of complaints. The possible overriding adverse consequences for the interests concerned, including the public interest, should be taken into account when deciding whether such measures should be applied.

### 3. Post-tendering phase

Risks to integrity after the award:

In the phase following the contract award, common risks to integrity include:

- abuse of the contractor in performing the contract, in particular in relation to its quality, price and timing;
- deficient supervision from public officials and/or collusion between contractors and supervising officials;
- the non-transparent choice or lack of accountability of subcontractors and partners;
- lack of supervision of public officials; and
- the deficient separation of financial duties, especially for payment.

Precautionary measures in post-tendering

Stage 8: Contract management:

- Clarify expectations, roles and responsibilities for the management of the contract by:
  - a) ensuring that the contracting agency and the supplier are aware of policies in order to prevent conflict of interest and corruption (e.g. publication of the policies, reference in the contract) and that the supplier communicates this information to potential sub-contractors;
  - b) ensuring that contract and purchase orders provide sufficient information to enable the supplier to deliver the goods/services of the correct description and quantity within the specified time;
  - c) including models in the contract for appropriate risk sharing between the contracting authority and the contractor, especially for complex procurements (e.g. performance bond, penalty for late delivery and/or payment);
  - d) including the payment in the contract, and where this is not possible, informing suppliers of the payment period following approval of invoice; and
  - e) stating in the contract possible compensation in case of undue withholding of payment by contracting officials.
- Supervise closely the contractor's performance and integrity, in particular by:
  - a) monitoring the contractor's performance against specific targets and levels laid down in the contract at regular intervals;
  - b) ensuring that costs are monitored and kept in line with contract rates and approved budgets;
  - c) organising inspection of "work-in-progress" (especially regarding structural elements that could be hidden by ongoing construction) and completing work and random sample checks;
  - d) using electronic systems to monitor progress of contract and timely payment and sending warnings regarding possible irregularities or corruption;

- e) involving third parties to scrutinise the process (e.g. selected member from an end-user organisation); and
- f) where possible, testing the product, system or other results in a realworld environment prior to delivery of the work.
- Control change in the contract by:
  - a) ensuring that contract changes that alter the price and/or description of the work are supported by a robust and objective amendment approval process;
  - b) ensuring that contract changes beyond a cumulative threshold are monitored at a high level, preferably by the decision making body that awarded the contract;
  - c) allowing contract changes only up to a reasonable threshold, and changes that do not alter the quality of the good or service. Beyond this threshold, a review system could be set up to understand the reasons for these changes and consider the possibility to re-tender;
  - d) clearly tying in the variation with the main contract to provide an audit trail; and
  - e) recording changes to the contract and possibly communicating them to unsuccessful tenderers as well as other stakeholders and civil society.
- Enable stakeholders, civil society and the wider public to scrutinise public procurement by:
  - a) recording, co-ordinating and communicating information in relation to contract management;
  - b) organising regular review meetings between the customer and contractor, and recording end-user satisfaction with the service; and
  - c) ensuring access to records for stakeholders and possibly civil society and the wider public for a reasonable number of years after the contract award.

#### Stage 9: Order and payment :

- Verify that the receipt of goods/services is in line with expected standards by:
  - a) inspecting the goods against the purchase order and the delivery invoice before payment. It is also necessary to assess and certify the standard of service to ensure quality;
  - b) when possible, involving at least two officials in the verification that the receipt of goods/services is in line with expected standards; and
  - c) involving, in addition to procurement officials, end-users when possible to enhance checks and balances.
- Ensure that the final accounting or audit of a project is not carried out by personnel involved in former phases to ensure the separation of duties and authorisation, for instance:
  - a) officials who examine the invoice against the goods and orders/delivery note should differ from those officials who give the payment order to the accounting department; and

- b) payments should be cross-checked by the accounting entity afterwards.
- Ensure that the budgeting system provides for a timely release of funds to make payment against contractual conditions, in particular by:
  - a) committing budget funds promptly prior to or during the award of the contract;
  - b) using innovative methods such as purchase cards for small value procurements, provided that their use is limited to purchases of specified items and that expenditure is limited;
  - c) organising random supervisory checks on payments and, where financial systems permit, monitor outstanding payments; and
  - d) preparing systematic completion reports for certification of budget execution and for reconciliation of delivery with budget programming.
- Consider the possibility of a post project assessment, in particular by:
  - a) selecting projects for post project assessment on the basis of identified criteria, including the value of the procurement as well as its complexity, sensitivity and specificity (e.g. exceptions to competitive procedures);
  - b) reviewing the procurement process, drawing lessons that can be learned for any future contracts and placing this information on record;
  - c) considering the possibility of a “feedback loop” through the consultation of end-users in the post project assessment, particularly for high-value procurements, and involving civil society representatives who monitored the project, if applicable;
  - d) Including information on discrepancies and abnormal trends in procurement (e.g. possible collusion, split orders) in the report for information management as well as liaising with competition and/or law enforcement agencies, when relevant; and
  - e) Transmitting information on high-value procurements to the supreme audit institution or other oversight bodies.

### **PUBLIC PROCUREMENT FOR INNOVATION (PPI)**

This part addresses public procurement for innovation, which is a demand-side innovation policy instrument in the form of an order, placed by a public organization, for a new or improved product to fulfill its particular needs. Traditionally, innovation policy initiatives have mostly come from the supply side. Countries and regions have actively implemented and used innovation policy instruments such as fiscal measures, support for training and mobility, public financing of research and development (R&D), information and brokerage support and networking measures.

The role of demand as an enabler and source of innovation has been a topic in innovation studies and innovation policy for quite some time. Discussions on the positive impacts of demand-side innovation policies took place as far back as the 1970s. Recent years have seen a resurgence of the interest in demand-side approaches to innovation policy. For example, in 2004, three governments issued a position paper to the European Council calling for the use of public procurement across Europe to spur innovation (French, German, UK Governments,

2004). This development continued and was manifested in various reports, including the Aho Group Report, which identified several application areas, or grand challenges, where demand-side policies could be used to a larger extent: e-health, pharmaceuticals, energy, environment, transport and logistics, security and digital content. Demand-side intervention is intended to increase the demand for innovations, to improve the conditions for the uptake of innovations and to improve the articulation of demand. Cluster policies, regulation (for example, standards), public procurement (that is, R&D procurement and innovation procurement), and support of private demand are examples of demand-side innovation policy instruments.

Until fairly recently this phenomenon was called ‘public technology procurement’. Edquist et al. (2000)<sup>2</sup> compiled an extensive set of cases illustrating the potential for innovation involved in this policy instrument. Since then, the terminology of the 1990s and earlier has changed into ‘public procurement for innovation’. This reflects a widening of the content of the notion, since ‘innovation’ includes more than ‘technology’.

### **Definition of innovation:**

Innovations are new creations of economic or societal significance mainly carried out by firms. Innovations are the result of interactive processes among the multiple actors contained within innovation systems. In fact, according to the innovation systems approach, interaction and interactive learning between organizations are pillars upon which innovations are based. These innovations may be new or improved products or processes. While new or improved products may be material goods or intangible services, new or improved processes may be technological or organizational advancements.

To qualify as an innovation, the product or process needs to be implemented which means that the new products must be introduced on a market or that the new processes are used in production. Innovations must therefore be commercialized, that is, launched on the market, or in other ways widely diffused to users on a large scale in the economy or society. This includes innovations in public activities. A prototype is a model that functions under certain conditions. It is not produced in a large series, not commercialized and its commercial viability is not proven. Hence, a tested prototype is not an innovation.

In the early days of innovation research and innovation policy, the so-called ‘linear model’, based on the assumption that innovations are applied scientific knowledge, dominated the view of how innovation processes developed. It was called ‘linear’ because the process was seen as a number of well-defined and consecutive stages that innovations were assumed to go through, for example basic research, applied research, development work resulting in new

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<sup>2</sup> Edquist, C., Hommen, L. and Tsipouri, L. (eds) (2000). *Public Technology Procurement and Innovation*. Boston, MA, USA; Dordrecht, Germany; London, UK: Kluwer Academic Publishers.

products and processes that ultimately influence growth and employment. It was a supply-push view.

In the realm of innovation research, the linear view has been replaced almost completely by the systems of innovation approach in the latest couple of decades. In its different versions, it is defined in terms of determinants of innovation processes, although different determinants are emphasized in different versions. A general definition of systems of innovation is that they include ‘all important economic, social, political, organizational, institutional and other factors that influence the development, diffusion and use of innovations’

### **PUBLIC PROCUREMENT FOR INNOVATION: A TAXONOMY:**

There are different types of public procurement (for innovation). The different types are used as policy instruments in different ways and according to different rules and procedures. They are also often mixed up with each other. Public procurement refers to the purchase of goods and services by a public agency. In the case of regular procurement, public agencies buy ready-made products ‘off the shelf’, and normally no innovations are the result of the public intervention. Public procurement is roughly estimated to account for 15–20 per cent of gross domestic product (GDP) in developed countries. In 2009 it was 19.4 per cent of European GDP, equal to €2.3 trillion.

Public procurement for innovation (PPI) occurs when a public organization places an order for the fulfillment of certain functions (that are not met at the moment of the order or call) within a reasonable period of time through a new or improved product.<sup>6</sup> Hence, the objective of PPI is not primarily to enhance the development of new products, but to target functions that satisfy human needs, solve societal problems or support agency missions or needs. Still, some form of innovation (new product or process) is necessary before delivery can take place. Because of the large numbers involved, and to the extent that something new is purchased, there is also the notion that public procurement may provide a ‘lead customer’ or a lead market for an innovative product or process (European Commission, 2007a).

We must point out here that the diffusion of the product from the procuring organizations is not always among the major objectives of this type of programme. However, there are cases in which diffusion of the new product is aimed at from the very start of the procurement process. This difference reflects the distinction between PPI carried out mainly for the missions or needs of the procuring agency, and PPI to support economy-wide innovation. That way, a public agency may demand the purchase of certain products or systems that are novel to the agency, but not to the market. Be that as it may, innovation is needed in all PPI before delivery can take place.

#### Innovation-friendly public procurement:

Innovation-friendly public procurement is regular procurement which is carried out in such a way that new and innovative solutions are not excluded or treated unfairly. The background

is a concern that many public procurements are carried out in a routine-like manner, meaning that the procuring organization demands the same solution as in the previous procurement. This might actually constitute an obstacle to innovation. The most powerful means to overcome this obstacle is to require calls for public procurement to be formulated in functional terms, and not as descriptions of products. Hence, there is reason to distinguish between innovation-friendly procurement and public procurement for innovation. Innovation-friendly procurement does not require innovation as PPI, but encourages and facilitates innovation.

### **CLASSIFICATION OF PPI:**

The classification of PPI below is made according to three dimensions. The first dimension that allows us to identify different forms of PPI relates to whom the user of the result (good, service, system, and so on) might be. This dimension may be used to identify two categories of PPI: direct and catalytic.

#### **Direct PPI:**

Direct PPI is when the procuring organization is also the end-user of the product resulting from the procurement, which is the ‘classic’ case. The buying agency simply uses its own demand or need to influence or induce innovation. This type of PPI includes the procurement undertaken to meet the (‘mission’) needs of the public agencies themselves. It exerts direct ‘demand-pull’ on suppliers, often through long-term contracting arrangements. Nonetheless, the resulting product is often also diffused to other users once the initial procurement process is finished, and the agency has benefited from the results obtained for a certain period. Hence, innovations resulting from PPI can be useful for the procuring agencies, as well as for society as a whole.

#### **Catalytic PPI:**

Catalytic PPI is when public sector organizations act as buyers even if they are not the intended end-users of the results of the procurement process. In other words, the procuring agency serves as a catalyst, coordinator and technical resource for the benefit of end-users. The needs are located ‘outside’ the public agency acting as the ‘buyer’. Thus, the public agency aims to procure new products on behalf of other organizations, and public demand articulates, sponsors, and helps to shape private demand. It acts to catalyze the development of innovations for broader public use and not for directly supporting the mission of the agency.

The second dimension in the classification relates to the character of the innovation embedded in the resulting product. This dimension leads to two types of procurement: incremental and radical.

### Incremental PPI:

Incremental PPI is when the product or system procured is adaptive and new only to the user of the results of the procurement process (public agency, private firm, country, region, city, and so on). Hence, innovation is required in order to adapt the product to specific national or local conditions. It may also be labelled ‘diffusion-oriented’ or ‘absorption-oriented’ PPI.

### Radical PPI:

Radical PPI implies that completely new-to-the-world products and/or systems are created as a result of the procurement process. It may be regarded as ‘creation-oriented’ PPI and involves the development of brand new innovations.

It is also important to address a third dimension in the classification, namely the fact that PPI can be characterized by different degrees of collaboration and interactive learning (among procurers, suppliers and – sometimes – other organizations). This collaboration is a matter of degrees, not a dichotomous variable. It is important, since we know that interactive learning is a central determinant of the development and diffusion of innovations. All four previous categories can be carried out with different degrees of collaboration. It may be expected, though, that collaboration is more important in catalytic than in direct PPI, simply because the catalytic type involves more than two actors.

In January 2014, the European Parliament decided on new directives on public procurement. In addition to considering the lowest price in the procurement, other dimensions are now important in the selection of contractors: quality, sustainability, social conditions and innovation. The decision also includes a new ‘procedure’ called innovation partnerships. Such partnerships make possible collaboration between the procuring organization and suppliers in order to achieve the objectives of the procurer. The new directive has to be implemented in all member states within 24 months.

### **Pre-commercial procurement (PCP):**

Pre-commercial procurement (PCP) refers to the procurement of (expected) research results and is a matter of direct public R&D investments, but not actual product development. Moreover, it does not involve the purchase of a large number of units of a (non-existing) product, and no buyer of such a product is therefore involved in the procurement (as in PPI). It is not PPI since a product must be commercialized to constitute an innovation. This type of procurement may also be labelled ‘contract’ research, and may include the development of a product prototype.<sup>10</sup> This type of public R&D funding is very problem-oriented and targeted, as opposed to general public R&D funding or tax deductions that firms can make for their R&D expenditures. Of course, the procured research results may be developed into a product innovation when the PCP process (or phase) has been completed. In addition, a PCP may be the same as the R&D phase in a PPI.

## OPERATIONALIZING PUBLIC PROCUREMENT FOR INNOVATION:

There are many challenges involved in the implementation of PPI, and we address a number of these in this section. The typical PPI process may be divided into the following stages –

1. Identification of a public agency mission need or of a grand challenge and its formulation in terms of a lack of satisfaction of a human need or an unsolved societal problem.
2. Translation of the identified challenge into functional specifications.
3. Tendering process:
  - a. opening of the bidding process through a tender;
  - b. translation of the functional specification into technical specifications by potential suppliers;
  - c. Submission of formal bids by potential suppliers.
4. Assessment of tenders and awarding of contracts.
5. Delivery process:
  - a. product development;
  - b. production of the product;
  - c. Final delivery to the purchasing agency.

### **Procurement Legal Framework**

Public procurement is governed by the procurement legal framework, which is a law or regulation (or part of a law or regulation) that is sanctioned by the judicial system of a particular country. This sets the rules for the management of public procurement.

The procurement legal framework is usually further developed into policies and procedures, procurement and contract administration manuals and guidelines, including standard solicitation documents that are used to call for offers from contractors, suppliers and service providers. The language of public procurement policies, procedures, guidelines, manuals and standard solicitation documents must align with what is established in the public procurement legal framework. Adherence to the public procurement law is obligatory; any infraction is punishable by law.

### The Main Instruments:

There are several international instruments (“Instruments”) that may be relied on by governments as guidance with respect to the conduct of public procurement. These Instruments have contributed to the development of internationally accepted principles of public procurement. They demonstrate that public procurement is an effective tool and strategic part of public sector policy and systems, and an administrative function that can contribute to a higher objective. However, the various Instruments have different objectives – whether a fiduciary purpose, the promotion of international trade, the creation of a common

market, the prevention of corruption, or other socio-economic policies. In particular, the value of procurement as a basic administrative function enabling public agencies to use allocated public funds to perform their mandate is not emphasized in these Instruments. In this respect, despite harmonization at the level of “principles,” there are no universally accepted international standards of public procurement. Countries apply in their procurement systems the standards that meet the principles in accordance with the respective Agreement/s to which they have explicitly consented to be bound. Because these Agreements have different objectives, the adoption and incorporation of the principles into existing institutional and legal frameworks requires thoughtful policy consideration and legal analysis to avoid systemic internal inconsistencies and inefficiencies.

The main Instruments that are compared in this part are the multilateral Instruments – the World Bank Procurement and Consultant Guidelines (“Guidelines”), the Government Procurement Agreement (“GPA”)<sup>3</sup>, the EU Procurement Directives (“EU Directives”), and the United Nations Convention against Corruption (“UNCAC”). The UNCITRAL Model Law on Public Procurement (“UNCITRAL Model Law”) is also included in this comparison, although it is not an Agreement with the equivalent legal status and effect of the Guidelines, GPA, EU Directives or UNCAC. Rather, the UNCITRAL Model Law is intended to serve as a model for states in the development of procurement legislation and practice, as well as to support the harmonization of procurement regulation. There are numerous other instruments, such as regional and bilateral trade or investment agreements, that also may impact on country procurement systems.

### **World Bank Guidelines:**

The World Bank<sup>4</sup> is a public international organization created by sovereign member states through Articles of Agreement that entered into force in December 1945. IBRD’s Articles of Agreement require that the World Bank “The Bank shall make arrangements to ensure that the proceeds of any loan are used only for the purposes for which the loan was granted, with due attention to considerations of economy and efficiency and without regard to political or other non-economic influences or considerations,” and provide that the Borrower may withdraw the loan proceeds “only to meet expenditures made in connection with the operation as they are actually incurred.” IDA’s Articles of Agreement contemplate a similar requirement.

In response to this requirement, the World Bank has developed detailed procurement rules, the Procurement Guidelines and Consultant Guidelines, which are approved by its Board of

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<sup>3</sup> Technically, the GPA is a “plurilateral” rather than a multi-lateral agreement of the World Trade Organization (“WTO”), regulating government procurement market of the WTO members that have chosen to become parties to it.

<sup>4</sup> “World Bank” refers to the International Bank for Reconstruction for Development (IBRD) and the International Development Association (IDA).

Executive Directors representing all the World Bank's shareholder/member countries. These Guidelines place the responsibility for project execution, and therefore the procurement of contracts financed by the World Bank, on the Borrower. Thus, the World Bank's Guidelines are intended first and foremost to serve a fiduciary purpose, to ensure that the Loan proceeds are used for its intended purpose.

The World Bank Guidelines apply to all contracts for goods, works, and services financed in whole or in part from Bank loans, and are made applicable through the Loan Agreement. A World Bank Loan Agreement is an "international agreement" with the status of a treaty and governed by international law. The General Conditions applicable to each Loan Agreement provide that the Loan Agreement takes precedence over national law and is insulated from the effect of changes in national law. Pursuant to the General Conditions, the rights and obligations of the Bank under such Loan Agreement shall be valid and enforceable in accordance with its terms, notwithstanding the law of the state or any political subdivision thereof to the contrary. This includes any inconsistent requirements in the Borrower's own national procurement law. The Loan Agreement provides remedies to the Bank if the Borrower fails to follow the procurement procedures as required in the Loan Agreement.

#### **GPA:**

The Government Procurement Agreement (GPA) is a plurilateral agreement of the World Trade Organization ("WTO") regulating the government procurement market of those WTO members that have chosen to become Parties<sup>5</sup> to it. The purpose of the GPA is to facilitate market access by suppliers from GPA member countries to contract opportunities in the covered public sector entities in other GPA member countries.

The GPA sets out high-level standards rather than detailed procurement rules and procedures. It reflects a lowest common denominator approach, or the minimum requirements to which the Parties should adhere and must give effect through legislative changes in their public procurement laws. As set forth in its fourth recital, "[t]he procedural commitments under this Agreement should be sufficiently flexible to accommodate the specific circumstances of each Party."

As a binding legal instrument with respect to its Parties, the GPA provides for dispute settlement procedures to ensure that the rights and obligations established under the GPA through negotiations are enforced. Disputes may be brought by one Party against another through the WTO Dispute Settlement Body, when benefits accruing under the GPA are directly or indirectly nullified or impaired, or the attainment of any objective of the GPA is

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<sup>5</sup> Canada, EU plus its 27 member States (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom), Hong Kong (China), Iceland, Israel, Japan, Korea, Liechtenstein, Aruba (the Netherlands), Norway, Republic of Armenia, Singapore, Switzerland, Chinese Taipei, United States.

being impeded by another Party. In addition, the mechanisms for effective challenge required by the GPA may also be used by bidders to challenge the application of the procurement procedures with a GPA-covered procuring entity.

The GPA applies only to the procuring entities that each Party has included, relating respectively to central government entities, sub-central government entities and other entities such as utilities, and only for goods, services and construction services it has specified.

### **EU Procurement Directives:**

One of the main objectives set forth in the EC Treaty<sup>6</sup> is the creation of a Community market. In this context, the EU has adopted several Directives with respect to public procurement. The EU Public Procurement Directives considered in this Note are: (i) Directive 2004/18/EC (the “Public Sector Directive”);<sup>7</sup> (ii) Directive 2004/17/EC (the “Utilities Directive”);<sup>8</sup> and (iii) Directive 89/665/EEC (the “Remedies Public Sector Directive”)<sup>9</sup> and Directive 92/13/EEC (the “Remedies Utilities Directive”),<sup>10</sup> both as amended by Directive 2007/66/EC<sup>11</sup> (collectively, the “Remedies Directives”).

The Public Sector Directive and the Utilities Directive coordinate the procedures for the award of procurement contracts in EU Member States above the set financial thresholds. This is in order to open up the Community market to competition and to avoid discrimination among economic operators from different Member States. These Directives set out a minimum common set of procedural rules, and – like all EU Directives -- they are mandatory on EU Member States, which have the obligation to transpose them into national law. Outside of this minimum common set of procedural rules, it is left to Member States to regulate other aspects of public procurement in respect of the fundamental principles of the EC Treaty, and in particular the principle of freedom of movement of goods, the principle of freedom of establishment, the principle of freedom to provide services, and the principles deriving therefrom, such as the principles of equal treatment, non-discrimination, mutual recognition, proportionality and transparency.

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<sup>6</sup> Treaty of Rome of 1957, as subsequently amended.

<sup>7</sup> Directive 2004/18/EC of 31 March 2004 on the coordination of the procedures for the award of public works contracts, public supply contracts and public service contracts.

<sup>8</sup> Directive 2004/17/EC of 31 March 2004, coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors

<sup>9</sup> Directive 89/665/EEC of 21 December 1989 on the coordination of the laws, regulations and administrative provisions relating to the application of review procedures to the award of public supply and public works contracts

<sup>10</sup> Directive 92/13/EEC of 25 February 1992, coordinating the laws, regulations and administrative provisions relating to the application of Community rules on the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors

<sup>11</sup> Directive 2007/66/EC of 11 December 2007, amending Council Directives 89/665/EEC and 92/13/EEC with regard to improving the effectiveness of review procedures concerning the award of public contracts.

As mentioned above, the Public Sector Directive and the Utilities Directive apply only to contracts above set financial thresholds, which have not been excluded on the basis of the exceptions provided in the Directives, and which have as their object the supply of goods, the execution of works or the provision of services within the meaning of the Directives<sup>12</sup>. Contracts below the set EU financial thresholds, however, are subject to the fundamental principles of the EC Treaty and the principles deriving therefrom referred above.

The Remedies Directives deal with complaints/review systems and some of the main features of these Directives are examined at a later stage in this Note. Enforcement of the EU Procurement Directives is ensured by national courts/review bodies but also by the European Commission, which may start infringement proceedings before the European Court of Justice (ECJ) against EU Member States for infringement of the Directives. The ECJ also plays an important role with respect to the interpretation of the EU Procurement Directives and has issued several judgments in this respect.

In the context of the overall program of modernization of public procurement in the EU, in December 2011, the European Commission adopted three proposals of Directives, i.e.: (i) a proposal on the revision of the Public Sector Directive, (ii) a proposal on the revision of the Utilities Directive, and (iii) a proposal on the adoption of a new Directive on the award of concessions contracts, which are now only partially regulated at the EU level.

#### **UNCAC:**

The United Nations Convention against Corruption (UNCAC) was adopted by the United Nations General Assembly by its Resolution 58/4 of October 31, 2003 and entered into force in December 14, 2005. It is legally binding on its contracting states, meaning those states which have consented to the Treaty either by ratification, accession or acceptance. As of October 19, 2012, UNCAC has 163 States Parties, and 140 signatories.

UNCAC has four main chapters dealing substantively with the themes of Prevention, Criminalization, Asset Recovery, and International Cooperation. Each chapter includes provisions which have different levels of obligations for contracting states: mandatory provisions, or those which a contracting state has an obligation to implement through legislative or other measures; optional requirements, or those which a contracting state has an obligation to consider; and optional measures, or those which contracting states may wish to consider<sup>13</sup>.

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<sup>12</sup> Article 1(2)(a), Public Sector Directive, and Article 1(2)(a), Utilities Directive

<sup>13</sup> Legislative Guide for the implementation of the United Nations Convention against Corruption, UNITED NATIONS, New York, 2006

Article 63 of UNCAC requires the Conference of the States Parties<sup>14</sup> to provide for a mechanism for the review of implementation of the Convention. The guiding principles and characteristics of the mechanism, process and other requirements are defined in the Terms of Reference of the Mechanism for the Review of Implementation of the United Nations Convention against Corruption<sup>15</sup>. Participation in the review mechanism is voluntary. Briefly, the review mechanism, which is under the authority of the Conference of the States Parties, shall be, among other things, transparent, non-adversarial and non-punitive, and shall not serve as an instrument to intervene in the domestic affairs of other States. It is in essence, a “peer review” inter-governmental process which involves a self-assessment by the State Party under review, a desk review by experts from other States Parties, and finally, a dialogue among the State Party under review and the experts which will result in a country report and identification of areas of technical assistance to ensure effective implementation of the UNCAC. It is an information exchange and sharing process and shall take into account the levels of development of States Parties, as well as the diversity of judicial, legal, political, economic and social systems and differences in legal traditions, which is consistent with a fundamental principle of UNCAC that States Parties shall carry out their obligations under the Convention in a manner consistent with the principles of sovereign equality and territorial integrity of States and non-intervention in the domestic affairs of other States<sup>16</sup>. Under the present review cycle, compliance with the chapter on preventive measures, which includes systems on public procurement, is not yet underway but will eventually take place when the review on the chapters on criminalization and international cooperation are completed. UNCAC applies to public procurement systems, but systems may take into account appropriate threshold values in their application to avoid overly complex procedures for small amounts.

### **UNCITRAL Model Law:**

The United Nations Commission on International Trade Law (UNCITRAL) was established by the United Nations General Assembly<sup>17</sup> in 1966 with the mandate to “further the progressive harmonization and unification of the law of international trade” in recognition that the disparities in national laws governing international trade created obstacles to the flow of trade”. The Commission is comprised of sixty UN member states.

The UNCITRAL approach to unification and harmonization of international trade is through various means, including the development of model trade laws. The UNCITRAL Model Law

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<sup>14</sup> A Conference of the States Parties to the Convention was established to improve the capacity of and cooperation between States Parties to achieve the objectives set forth in this Convention and to promote and review its implementation. Article 63 (1), UNCAC.

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See:

[http://www.unodc.org/documents/treaties/UNCAC/Publications/ReviewMechanismBasicDocuments/Mechanism\\_for\\_the\\_Review\\_of\\_Implementation\\_-\\_Basic\\_Documents\\_-\\_E.pdf](http://www.unodc.org/documents/treaties/UNCAC/Publications/ReviewMechanismBasicDocuments/Mechanism_for_the_Review_of_Implementation_-_Basic_Documents_-_E.pdf).

<sup>16</sup> Article 4(1), UNCAC

<sup>17</sup> 5 UN Resolution 2205(XXI) of 17 December 1966.

on Public Procurement (UNCITRAL Model Law) is one such model law. As a model law, the UNCITRAL Model Law is not mandatory for use; it is intended to serve as model for States for purposes of evaluation and modernization of procurement laws and practices, and establishment of procurement legislation where none currently exists, to support harmonization of procurement regulation internationally, and so to promote international trade. States may choose to enact some or all parts of the Model Law, although in order to “increase the likelihood of achieving a satisfactory degree of unification and to provide certainty about the extent of unification, States are encouraged to make as few changes as possible when incorporating a model law into their legal system.”

The UNCITRAL Model Law covers “public procurement,” which is described as the acquisition of goods, construction or services by a “procuring entity.” In turn, the UNCITRAL Model Law provides options for enacting States to consider in drafting national legislation as to the meaning of “procuring entity.” Based on Article 1, the UNCITRAL Model Law is intended to cover all types of public procurement.

The objectives of these Instruments are self-evident from the Instruments themselves. How these objectives are met through the public procurement system of a member state should not diminish the basic purpose of public procurement itself, which is essentially to purchase the goods, works and services which a public agency needs to perform its mandate. That a public procurement system can have features or can be a mechanism which can help achieve a higher level objective beyond and through this basic procurement function creates challenges for policy makers in defining the role that such system can play in the overall country strategy. The different Instruments, for example, address international trade policy (GPA, UNCITRAL Model Law), creation of a common market (EU Directives), or anti-corruption policy (UNCAC), and a member country to the specific instrument would need to embed those features in its public procurement systems which can facilitate international trade or prevent corruption. However, the main purpose of the public procurement function is neither to promote international trade nor to prevent corruption, although it may be an effective mechanism to contribute to such higher-level policy objectives. For a public agency to perform its mandate at the agency level, it needs to be able to exercise the procurement function strategically while always ensuring that public funds are used for their intended purpose. In this regard, the statement of fiduciary purpose in the current World Bank Guidelines is aligned with the fundamental purpose of public procurement.

The different objectives affect how the principles of procurement are applied into the local legal framework. The Instruments are intended to either achieve coordination in country level procurement rules (i.e., standards and procedures) among their Parties/Member States to facilitate international trade/cross-border trade (the GPA, EU Directives), or to strengthen governance and integrity in the public sector (UNCAC). The UNCITRAL Model Law was drafted with all such considerations in mind. While they all have for their purpose the harmonization or coordination of procurement rules in their respective members,

harmonization or coordination for the purpose of facilitating trade is driven by the private sector to enable their participation in procurement markets to broaden their business opportunities. Harmonized or coordinated procurement rules in various procurement markets enhance these business opportunities, and ensure a degree of consistency, predictability, and transparency in the actions of public entities from whom they hope to obtain a contract to supply their goods or services. From the perspective of good governance and integrity, it is intended to satisfy the citizenry (i.e., taxpayers) that public funds are used to obtain the goods, works, and services so agencies of the state can deliver services in the public interest, and to provide the minimum standards on measures to prevent corruption in public procurement.

The legal systems of countries that adopt these Instruments may require deeper legal integration and structural changes to their public and private sector environments. Country legal systems and institutions may not be properly equipped to translate the principles into legal standards as prescribed in these Instruments, and may require broader reforms outside the scope of any reforms to procurement systems. When the government enters into a binding international agreement, it is also assumed that informed decisions have been made on the basis of the broader policy framework of the government on trade (in the case of international instruments on trade), public sector governance (in the case of international instruments on anticorruption, bribery, transnational crime, mutual legal cooperation, etc.), labor, environment, and other considerations.

With respect to the UNCITRAL Model Law, its incorporation into country systems for any substantive subject matter of law should be part of a comprehensive reform approach which takes into account not only policy choices, but equally as important for legitimacy, the process of law reform (including stakeholder consultations), the necessity of well-functioning institutions, and resources to support the law's effective implementation. Transplanting the Model Law in an institutional and legal vacuum as part of procurement law reform will not be sustainable or effective if not grounded in the local context. Moreover, the decision whether to regard the procurement function as part of the system of public expenditure management, trade, anti-corruption, or all of the above, is a policy one that cannot be preempted by the transplant of a model law on trade.

The World Bank, for its part, does not draft laws for its Borrowers, nor does it endorse the transplant of "model laws" or legal systems, having learned from the failure of law reform movements of the 1960s and 1970s. As stated by then World Bank General Counsel Ibrahim Shihata in his widely disseminated Legal Memorandum on Governance, the "substance of rules will, of course, reflect the policies of each government and should be based on its choices and convictions. The Bank may assist in the design of policies related to its field of competence and its mandate....the concern with the substance of the rules is appropriate as long as it based on considerations of economy and efficiency."

## Conditions for Participation of Bidder:

Based on the particular objective it aims to achieve, each Instrument sets forth a set of conditions under which a procuring entity may determine the eligibility of a supplier/contractor to participate in procurement and the legitimate grounds to exclude suppliers/contractors from participation in such bid. All of the Instruments specify that criteria for qualification of bidders shall be limited only to those criteria essential to ensure that a supplier/contractor has the legal and financial capabilities and technical and professional abilities to undertake the relevant procurement<sup>18</sup>. All require that the qualification criteria should be disclosed in the tender notice and specified in the bidding documents. The Instruments provide for the assessment of the qualifications of the tenderer or candidate either prior to or after the submission of bids. In this regard, the World Bank Procurement Guidelines and the UNCITRAL Model Law both contemplate the potential use of prequalification proceedings preceding the bid submission stage. When no prequalification takes place, both Instruments contemplate use of a “post-qualification” process, using the same criteria that would normally apply in prequalification. The EU Directives (Public Sector Directive) provide instead for procurement methods, i.e. restricted procedure, competitive dialogue and negotiated procedure with publication of a contract notice, which are all characterized by a separate prequalification stage.<sup>19</sup>

With regard to conditions of participation based on nationality of the bidder, the World Bank does not exclude bidders on the basis of nationality, except if the Borrower, by law or official regulation, prohibits commercial relations with a country; or if, by an act of compliance with a UN Security Council decision, the Borrower prohibits the import of goods from or payments to a particular country, firm or person.<sup>20</sup> Since the World Bank is an intergovernmental organization that provides development financing (loans, credits or grants) to its member countries, the principal considerations guiding the World Bank’s procurement requirements (i.e., economy and efficiency, equal opportunity of all eligible bidders, development of domestic industry, and transparency in the procurement process) are intended so a Borrower, in procuring goods, works and services using loan proceeds, may obtain the most advantageous bid and avoid incurring more external debt. Thus, conditions of participation under the World Bank Guidelines are intended to enable the widest sourcing options for the Borrower, limited only by conditions affecting the firm’s capability to fulfill the contract in question,<sup>21</sup> and situations involving conflicts of interest.<sup>22</sup>

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<sup>18</sup> With respect to the EU Directives, the Utility Directive – in contrast to the Public Sector Directive - does not set out an exhaustive list of criteria for qualitative selection and it allows for more flexibility with respect to their choice. See Article 54, Utilities Directive.

<sup>19</sup> It is to be noted that, by contrast with the Public Sector Directive, the Utilities Directive does not provide for competitive dialogue among the procurement methods allowed under the Directive.

<sup>20</sup> Par. 1.10 (a), Procurement Guidelines; par. 1.13 (a), Consultant Guidelines.

<sup>21</sup> Par. 1.8, Procurement Guidelines; par. 1.11, Consultant Guidelines.

<sup>22</sup> Pars. 1.8, 1.9., Procurement Guidelines; pars. 1.11, 1.12, Consultant Guidelines.

Each Instrument specifies all or some grounds for exclusion, which include conviction by final judgment for participation in criminal organizations, fraud and corruption, and money laundering; professional misconduct; serious crimes; misrepresentation; nonexistence of bankruptcy proceedings; and failure to pay taxes.

Exclusion from participation under the World Bank Guidelines is narrowly and strictly applied. Grounds for exclusion consist of: (i) prohibition of commercial relations by country law or UN Security Council resolutions; (ii) participation of State-Owned Entities (“SOEs”) that do not meet the requirements for legal and financial autonomy, operation under commercial law and independence from the procuring entity; and (iii) inclusion in the World Bank’s debarment or suspension list in accordance with the fraud and corruption sections of the Procurement Guidelines or the Anti-corruption Guidelines. In general, the World Bank Guidelines do not recognize exclusion outside the scope of the World Bank’s sanctions system. Exceptionally, in the case of NCB, the World Bank may agree, if requested by the Borrower, to include in the bidding documents a clause rendering ineligible a firm or individual of the Borrower’s country that is under a sanction of debarment for fraud and corruption by a judicial authority of the Borrower’s country.

There are exclusions in the conditions of participation in the GPA and EU Directives which are more extensive than those contained in the World Bank Guidelines. For example, the GPA envisages persistent deficiencies or failure to perform prior contracts as a ground for exclusion. Similarly, with respect to the personal situation of economic operators, the EU Directives (Public Sector Directive) specify two types of grounds for exclusions, namely: (i) mandatory grounds; and (ii) optional grounds. While in the first instance, the failure to satisfy the grounds for participation shall lead to automatic exclusion of a bidder or candidate in all cases, in the second, it is left to the discretion of the contracting authority whether or not to apply such criteria in a specific procurement process.<sup>23</sup>

Procurement under Bank-financed projects is excluded from the scope of the GPA and EU Procurement Directives, and member countries applying the World Bank Guidelines under a Bank financed project cannot apply any of the exclusions under the GPA or EU Procurement Directives to the Bank-financed contract. In this regard, a Borrower applying the World Bank Guidelines is better positioned to support the participation in its contracts of firms from all eligible countries, especially developing countries who are increasingly part of such aspects of production or distribution.

#### Supplier’s Lists:

Among the Instruments, the GPA and the EU Directives (the Utilities Directive) envisage the possibility of establishing qualification systems/lists of qualified suppliers. In operating such systems, contracting authorities are required to ensure openness and accessibility at all

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<sup>23</sup> Article 45, Public Sector Directive.

times by qualified suppliers/contractors, and use of objective criteria and rules of qualification, and to avoid introducing obstacles to participation by suppliers/contractors.

#### Fraud and Corruption:

It is commonly noted that all the Instruments specify measures to safeguard the integrity of the procurement process, and they all include engagement in fraud and corruption as a cause for bid rejection or disqualification from the procurement process. Particularly in the case of UNCAC, the integrity of the procurement process is the main purpose of the Instrument, requiring the Parties to take the necessary measures, both legislative and administrative, to prevent and punish corruption.

Similarly, all the other Instruments (World Bank Procurement and Consultant Guidelines, EU Directives, GPA and the UNCITRAL Model Law) include provisions to address fraud and corruption. In particular, the World Bank Guidelines reflect the World Bank's policy requiring all the parties to observe the highest standards of ethics. In pursuance of this policy, the Bank defines fraud and corruption and expands the scope to include collusion, coercion and obstruction (the latter is a distinct feature of the World Bank's sanctions system). When found to have engaged in one of these practices, a bidder/supplier/contractor will be rejected from the procurement process and may be included in the list of debarred firms for a defined period of time.

The UNCITRAL Model Law also provides for exclusion from participation in procurement proceedings on the grounds of inducements, unfair competitive advantage or conflict of interest. The UNCITRAL Model Law also includes among the listed qualification criteria that suppliers/contractors have not, and their directors or officers have not, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a specified period of time, or have not been otherwise disqualified pursuant to administrative suspension or debarment proceedings.

With regard to fraud and corruption, the EU Directives do not define "fraud" or "corruption" but instead make reference to other acts of EU legislation. Similarly, the GPA requires that the procurement proceedings are conducted in a manner so to avoid corrupt practices, making reference to the applicable international instruments, such as UNCAC, for the definitions of improper actions.

#### Conflict of Interest:

With the exception of EU Directives, all of the Instruments include provisions on conflict of interest. Most notably, the World Bank Guidelines require that suppliers/contractors shall not have a conflict of interest. Furthermore, they define the main situations that may cause a conflict of interest and provide that conflict of interest shall result in the rejection of the

supplier/contractor (including in those cases where the conflict is susceptible to mitigation but is not mitigated). In the same vein, the UNCITRAL Model Law envisages conflict of interest or unfair competitive advantage as cause for rejection of a supplier/contractor. Distinct from the other Instruments, it further introduces the requirement for a code of conduct for procuring entity staff.

Similarly, the GPA and the UNCAC require the members/parties to take the necessary steps to establish appropriate procurement systems, based on transparency and objective criteria so as to avoid conflict of interest.

### **Procurement Methods and Use of Electronic Means under the above instruments:**

Generally, all of the Instruments offer a menu of permissible procurement methods, which are to be used under and as per the conditions specified in each text. These methods include, among others, open tendering, restricted tendering, negotiated tendering (with and without prior call for competition), two-stage bidding, competitive dialogue, limited tendering, international competitive bidding, limited international bidding, and direct contracting.

Although the methods have distinct names and detailed procedures under each system, they also show strong similarities. For example, two-stage bidding under the World Bank Procurement Guidelines arguably may be considered to be analogous to competitive dialogue in the Public Sector Directive and two-stage bidding under the UNCITRAL Model Law. Similarly, direct contracting under the World Bank Procurement Guidelines is akin to the negotiated procedure without prior call for competition under the EU Directives, limited bidding under the

GPA, and single-source procurement under the UNCITRAL Model Law. Conversely, there are methods that do not have a corollary in other systems, which may be attributable to the nature and purpose of each Instrument. For example, the NCB method is only found in the World Bank Procurement Guidelines. And even though the World Bank Procurement Guidelines list NCB under procurement methods, in reality NCB procurement defers to a Borrower's own procurement procedures. More precisely, the procedure to be used is the Borrower's most competitive procurement method, which is applied with certain modifications prescribed by the World Bank so as to ensure broad consistency with the general requirements and considerations of the World Bank Procurement Guidelines. The practical effect of using such method is the use of a Borrower's open tendering-type procurement method with the prescribed World Bank modifications.

In contrast with the other Instruments which set out specific conditions for use of permissible procurement methods, the GPA more broadly requires only that procurement be conducted in an impartial and fair manner, consistent with the Agreement, using methods such as open tendering, selective tendering and limited tendering. These methods are so broadly defined in the GPA that most of the distinct methods contemplated under other Instruments could be

accommodated within the scope of GPA. The rationale for this GPA approach may arise from the GPA preamble text regarding flexibility of procedural commitments to accommodate the specific circumstances of each party to the GPA, which arguably is a step towards a principles based rather than rule-based system. UNCAC does not prescribe any specific methods; it requires only that “each State Party shall, in accordance with the fundamental principles of its legal system, take the necessary steps to establish appropriate systems of procurement, based on transparency, competition and objective criteria in decision-making, that are effective, inter alia, in preventing corruption, including the establishment, in advance...of ...tendering rules, and their publication.”<sup>24</sup>

#### Open Competition:

As previously noted, competition is an important principle across the Instruments. From a strict procurement perspective, the principle of open competition includes a range of features including the presence of open competitive methods, procurement planning and prior notice of procurement information, use of standards and technical specifications that promote competition, and wide dissemination of opportunities to bid. This Note has focused particularly on the use of “open competition” as the preferred or default method of procurement. Accordingly, the EU Directives (Public Sector Directive), the UNCITRAL Model Law, and the World Bank Procurement Guidelines each specify a preferred or default method(s), respectively, Open Tendering and Restricted Tendering (putting both methods at par and leaving the choice to the contracting authority),<sup>25</sup> Open Tendering, and International Competitive Bidding (“ICB”), with alternative methods to be used only as otherwise provided for under each respective Instrument. In contrast, the GPA and UNCAC do not specify a preferred method of procurement.

#### Framework Agreements (“FAs”):

The use of FAs has increasingly become an important procurement method (or as otherwise known under the EU Directives, “procurement technique”) in many systems around the world. In this respect, the EU Directives, the UNCITRAL Model Law and the World Bank Procurement Guidelines all include provisions on FAs. Although FAs are not expressly contemplated under the GPA, given the GPA’s broad definition of procurement methods, the use of FAs arguably could be accommodated within the scope of the methods identified in the GPA. It is generally noted among the Instruments that FAs may be concluded with one or more suppliers. The various Instruments generally contemplate FA durations of no more than 3 to 5 years. With the exception of the World Bank Guidelines, which permit use of FAs only for goods/works/non-consulting services, the Instruments permit use of FAs for all types of

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<sup>24</sup> Article 9(1) b, UNCAC.

<sup>25</sup> In the case of the Utilities Directive, contracting authorities are free to choose among the open procedure, restricted procedure and negotiated procedure with prior publication of a contract notice.

procurement, including advisory or consulting services. There also are some differences, mainly on procedural aspects of FA procurement, among the Instruments.

#### Use of Electronic Means:

All of the Instruments encourage the use of electronic means in the conduct of public procurement, and emphasize that the means chosen should be readily available and shall not restrict access to the procurement proceedings. Furthermore, most of the Instruments (the EU Directives, GPA and UNCITRAL Model Law) set out specific requirements for the use of electronic means in the conduct of procurement proceedings, including without limitation, the need for measures to secure the authenticity, integrity and confidentiality of information. Additionally, the Instruments require that the types of technology and software to be used shall be of a kind generally available and interoperable with other generally available information technology systems and software. With the exception of the World Bank Procurement Guidelines and UNCAC, the Instruments contemplate specific procedures for procurement through auctions using electronic means -- termed electronic auctions under the GPA and EU Directives, and electronic reverse auctions under the UNCITRAL Model Law.

#### Evaluation Criteria/Basis for Award

UNCAC does not prescribe details but merely provides that its State Parties shall establish procurement systems and tendering rules including selection and award criteria on the basis of the principles of transparency, competition and objective criteria in decision making. All of the other Instruments, namely, the GPA, EU Directives, UNCITRAL Model Law and the World Bank Guidelines, include specific provisions on evaluation criteria and the basis for determining the successful tenderer and thus for contract award. Such considerations differ, however, among the Instruments.

All the Instruments<sup>26</sup> provide that bidding documents for a particular procurement shall specify the relevant criteria in addition to price to be considered in bid evaluation, as well as the manner in which they will be applied for purposes of determining the successful tenderer. Similar to the EU Directives and UNCITRAL Model Law, the World Bank Procurement Guidelines envisage the possible use of non-price criteria that include, among others, payment schedule, delivery time, operating costs, efficiency and compatibility of equipment, availability of after sale services and spare parts, etc.<sup>27</sup>

However, the World Bank Procurement Guidelines differ from the other Instruments by requiring that the evaluation criteria shall be, to the extent practicable, expressed in monetary

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<sup>26</sup> To reiterate, UNCAC does not prescribe how this is defined in the tendering rules, but requires that such selection and evaluation criteria are based on the principles of transparency, competition and objective criteria in the decision-making. Article 9 (1) b.

<sup>27</sup> The UNCITRAL Model Law, for example, provides an illustrative list of other possible criteria that may be used depending on the nature of a particular procurement.

terms in the evaluation provisions of the bidding documents. Exceptionally, the Procurement Guidelines allow deviations from this requirement in cases when the specifications cannot be precisely defined or factors other than price cannot always be expressed in monetary terms, such as may occur in connection with the procurement of complex information technology and textbooks.

With regard to the basis for award, the World Bank Procurement Guidelines contemplate that contract award to be made to the bidder who meets the appropriate standards of capability and resources, and whose bid has been determined to be substantially responsive to the bidding documents, and to offer the lowest evaluated cost -- in other words, the qualified bidder submitting the “lowest evaluated substantially responsive bid.”

By contrast, the GPA, EU Directives and UNCITRAL Model Law each contemplate two main bases upon which contract award may be made, namely: (i) the lowest price, when price is the only award criterion; and (ii) the most (economically) advantageous tender, when price is considered in combination with other criteria specified in the applicable bidding documents. Where criteria in addition to price are used, the EU Directives and the UNCITRAL Model Law (under most procurement methods) specify that the evaluation criteria should be assigned, in the applicable bidding documents, specific relative weights to be used in the evaluation of tenders. Also, the EU Directives specify that said evaluation criteria shall be linked to the subject-matter of the contract in question.

With regard to consulting services, the World Bank Consultant Guidelines include specific methods for the selection of consultants. These methods provide a basis for award in keeping with the title ascribed to each method, for example, price and quality (Quality and Costbased Selection, or QCBS), quality only (Quality Based Selection, or QBS), lowest cost amongst the technically responsive proposals (Least Cost Selection), and highest ranked technical proposal within the specified budget (Fixed Budget). In terms of the evaluation criteria to be applied, the World Bank Consultant Guidelines identify the consultant’s specific experience, the quality of the methodology proposed, qualifications of the key experts proposed, the transfer of knowledge, and the extent of participation of nationals among key experts in the performance of the assignment. The selected criteria and the respective weight shall be determined based on the nature and complexity of the specific assignment and shall be disclosed in the Request for Proposal (“RFP”). The other Instruments do not provide for distinct methods and/or contract award criteria for the category of consulting services. However, while the UNCITRAL Model Law itself does not provide specific methods for the procurement of consulting services, the Draft Guide to UNCITRAL Model Law does note that multilateral development banks historically have included methods with features of request-for-proposals without negotiation and request-for-proposals with consecutive negotiations (as set out in Model Law) only for the procurement of services such as consulting services.

### **Complaints Review Mechanism:**

All of the Instruments require the establishment of an effective and independent complaints review mechanism as a tool to meet the transparency and accountability requirements guiding the Instruments and public procurement systems in general. In this regard, depending on its specific purpose and applicability, each Instrument sets forth the fundamental principles guiding a complaint review mechanism.

More specifically, the GPA requires each party to provide a timely, effective, transparent and non-discriminatory administrative or judicial review procedure. As the GPA reflects a lowest common denominator approach to which the Parties should adhere, with the exception of a few high-level requirements explained below, it does not lay out detailed rules and procedures. Similarly, the Remedies Directives “are designed to help ensure that the procurement that is not carried out fairly and transparently will be remedied through review procedures,”<sup>28</sup> and to coordinate national review systems by imposing some common standards intended to ensure availability of rapid and effective means of redress. To that end, EU Member States are required to ensure the implementation of these Directives by effective, available and transparent mechanism. The UNCITRAL Model Law and UNCAC similarly promote the need for an effective review/challenge system. The World Bank, on the other hand, has developed a special arrangement for the review of complaints. In contrast to the other Instruments, the review of complaints related to World Bank-financed contracts is of a special nature, stemming from the fact that its Borrowers are responsible for the conduct of procurement. Therefore, complaints should be administered by the procuring entities in charge for the procurement. Only when the complaining parties are not satisfied with the Borrower’s response, they can address their complaints to the World Bank. However, the role of the World Bank in this review is in no way a substitute for an independent body, as it should be considered strictly within the context of the fiduciary function, deriving from the World Bank’s Articles of Agreement. In placing the responsibility for the complaints review on Borrowers, the World Bank, through its Procurement Guidelines, requires them to have in place an effective and independent complaints review mechanism.

It should be noted that the decision to design and establish a domestic complaint review system, perhaps more than for any other aspect of public procurement, is closely related to the constitutional, legal, administrative and judicial traditions of the Party/Member State seeking to establish such a system. Probably for that reason, the compared Instruments do not provide detailed requirements/arrangements in this respect, leaving flexibility to the Party/Member State. Nevertheless, the Instruments set forth in broad terms some of the basic elements that would contribute to an effective complaints review mechanism. Based on international good practice, the following general categories represent the minimal elements

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<sup>28</sup> SIGMA Paper No.30, Public Procurement Review Procedures, p.6, available at <http://www.sigmaweb.org>

to be considered in establishing a complaints review mechanism. However, these categories are not exhaustive nor are they presented in any order of priority.<sup>29</sup>

#### Standing:

The Instruments vary in specifying the parties that are eligible to file a complaint. In the case of the Remedies Directives, such standing is given to any “person having or having had an interest in obtaining a particular contract and who has been or risks being harmed by an alleged infringement.”<sup>30</sup> The GPA permits “a supplier who has or has had an interest” to submit a complaint. It would appear, *prima facie*, that the GPA is more restrictive in the range of parties allowed filing a complaint. However, various commentators have argued that the GPA provides for a broader scope of eligible parties, i.e., subcontractor, suppliers, etc. and that it is up to a GPA Party to expand the right to parties other than the main contractors in its domestic procurement legislation. With respect to the World Bank Guidelines, bidders who submitted a bid before bid submission deadline shall be eligible to submit a complaint. The consistent interpretation of the World Bank Guidelines has been that the first tier contractors only, i.e. those who submit the bid, are eligible to file a complaint. Similarly, the UNCITRAL Model Law extends the eligibility to file a complaint to “a supplier or contractor that claims to have suffered or claims that it may suffer loss or injury because of the alleged non-compliance of a decision or action of the procuring entity.”<sup>31</sup>

#### Forum for review:

The forum for review, including determining where to locate it and whether to establish a tiered review system, is an important consideration in establishing an effective complaints review system. In this respect, there are differences among the Instruments. More specifically, the GPA contains a specific requirement that the Party should establish or designate at least one impartial administrative or judicial authority that is independent of its procuring entities. The current wording of the GPA provides great latitude to a Party in complying with this requirement. Similarly, the UNCITRAL Model Law presents review by the procuring entity as an option that can be considered, but does not make it a mandatory first step in the challenge process. Depending on the legal and administrative context of the enacting State, the UNCITRAL Model Law offers three alternatives, namely: (i) as an optional first level of review, application for reconsideration by the procuring entity if a contract has not yet been awarded; (ii) application for review by the independent body designated to conduct such review; and (iii) application for review or appeal to a competent court. The Remedies Directives, on the other hand, include a provision on the possibility to

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<sup>29</sup> Because there is no uniformity in terminology among the various Instruments -- “challenge”(GPA and UNCITRAL Model Law), “complaint” (World Bank Guidelines), “review” (Remedies Directives) -- the term “complaint” is used here for ease of reference

<sup>30</sup> Article 1 (3) of Directive 89/665/EEC and of Directive 92/13/EEC .

<sup>31</sup> Article 64, UNCITRAL Model Law.

demand the complaining party to first seek redress before a contracting authority. Furthermore, the Remedies Directives specify that whenever the bodies responsible for review are not judicial in character, certain requirements are to be met, including that the decisions shall be subject to judicial review or review by another body which is a court or tribunal within the meaning of the EC Treaty and independent of both the contracting authority and review body. As explained above, the World Bank Guidelines require in all cases (unless the complaint relates to allegation for fraud and corruption by the Borrower) that the complaint is addressed and reviewed at the procuring entity level. The Bank will only review a complaint when the complaining party is not satisfied with Borrower's response.

#### Interim relief:

In this respect, the GPA and the Remedies Directives require the Parties/Member States, to provide for interim measures to preserve the rights of the complaining party. Such measures include automatic suspension of the procurement proceedings at the time of filing of complaints. In the same vein, the World Bank Guidelines envisage that the Bank's review will not be completed until the complaint is fully examined and considered. Thus, it is anticipated that no contract shall be signed without the Borrower having fully addressing the complaint. Similarly, the UNCITRAL Model Law contemplates a general prohibition on the entry into force of a contract while a complaint is being reviewed. The UNCITRAL Model Law also provides interim measures to preserve the rights of the complaining party, including the ability of reviewing entities to suspend the procurement proceedings upon the filing of a complaint. Additionally, both the UNCITRAL Model Law and the Remedies Directives provide for the imposition of a standstill period during which a procuring entity cannot accept the successful submission and disappointed parties can file complaints.

#### Remedies:

The GPA requires that each Party shall maintain procedures that provide for corrective action or compensation for the loss or damage suffered, when the review body has determined that there has been a breach or failure of the agreement. Under the Remedies Directives, the remedies available to the review body include setting aside of the decisions taken unlawfully, awarding of damages and ineffectiveness of concluded contracts. Similarly, the UNCITRAL Model Law offers a listing of potential remedies that may be taken by the independent review body, including, among others: overturning a decision of the procuring entity, ordering the termination of procurement proceedings, and requiring the payment of compensation. With regard to procuring entity-level complaint review, the UNCITRAL Model Law provides that a procuring entity may overturn, correct, vary or uphold any decision or action taken in the procurement proceedings to which the complaint relates. The World Bank Guidelines do not have specific provisions with respect to the remedies in case of a complaint found to be grounded, except that the World Bank may require the Borrower to take the necessary steps to comply with the Guidelines, otherwise it would be subject to

misprocurement and the remedies in the Loan Agreement such as cancellation or suspension of the loan. Other remedies are available under the World Bank's Anti-Corruption Guidelines, if the complaint is grounded in a case of fraud or corruption.

### **DEFENCE PROCUREMENT:**

Defence procurement is the process through which authorities in the field of defence acquire the various goods, services or works they need in order to perform their duties and missions. For example, these authorities acquire stationery and IT equipment in order to perform their administrative duties; they purchase food for their soldiers; they procure cleaning services for their premises; they acquire submarines, fighter jets, armoured vehicles, munitions, missiles and other defence material for protecting national security, territorial integrity or for fulfilling other international commitments, for example, participation in peacekeeping operations abroad; they also procure the relevant maintenance services in order to keep defence material ready for action in a continuous and seamless manner.

Although there is no authoritative definition of the notion of defence procurement, it could arguably be defined in a wide and in a narrow way.

Defence procurement widely defined covers any procurement carried out by contracting authorities in the field of defence. In this sense the notion of defence procurement covers all the examples referred to above: procurement of stationery, IT equipment, aircraft, submarines, etc.

Defence procurement narrowly defined covers only the goods and services manufactured or intended to be used for purely military purposes, namely, using the above examples, submarines, fighter jets, armoured vehicles, munitions, missiles, and associated services. It could be argued that defence procurement narrowly defined also covers also the procurement of "dualuse" technologies, i.e., technologies that could be used, in principle, for both military and nonmilitary purposes, provided that the acquisition was made primarily for military use and that the specifications of these "dual-use" technologies underwent some alterations to meet military requirements.

The distinction between defence procurement narrowly and widely defined reflects the fact that some procurement activity in the field of defence is more closely linked with the core of what could be termed as national defence and national security and is often characterised by the complex nature of the relevant technologies (i.e., the case of defence procurement narrowly defined), whereas other procurement activity in the same sector is clearly, in principle, less sensitive (procurement of non-military equipment and services). This distinction further highlights the fact that more sensitive procurement needs to be subject to a regulatory regime that acknowledges its specificities and tries to strike a balance between openness and transparency of the procurement process, on the one hand, and protection of the core security concerns of the procuring state, on the other.

### **Particular Characteristics of Defence Procurement:**

By its very nature, defence procurement has some distinguishing features.

Firstly, it differs from general public procurement in qualitative terms by the fact that it deals with the main aim of defence procurement, the protection of national security and defence.

Secondly, more often than not, defence equipment tends to be assemblies of complex technologies. As a result of this combination of strategic and security imperatives and the complexity of the subject matter, many countries around the world have introduced differentiated procurement legislation in the field of defence that departs from the general standards of openness and transparency that are usually required in public procurement. The degree of departure of defence procurement legislation from the general standards of openness and transparency varies amongst jurisdictions but invariably involves a wider than usual margin of discretion for contracting authorities. Unfortunately, this environment of secrecy and lessened transparency, together with a wider than usual field of discretion for contracting authorities, lends itself to becoming a fertile ground for protectionism, corruption and inefficient use of public resources.

### **REGULATING DEFENCE PROCUREMENT IN EU, UK AND USA:**

Whilst many states accord a high priority to the procurement of defence equipment in practice, the legal regulation of defence procurement has only featured peripherally in global debate. Many factors may explain this position. Whilst all forms of procurement raise concerns about the state's need to retain control over budgetary appropriation, the organisation and delivery of public services, and the determination of industrial and social policy, defence procurement is also intimately linked to a core sovereign function, the defence and security of the state. States are inevitably reluctant to open up defence procurement to too much scrutiny or to subject areas of high policy to formalistic procurement rules given the potential to fetter discretion in areas where discretion may be needed most. States also express concern about the ability of procurement rules to safeguard the security of information provided to contractors and the supply of defence material on request, in particular, where contractors are not based in the procuring state. Many states have also used defence procurement to insulate domestic defence industries from foreign competition to maintain levels of domestic employment in the name of industrial policy. Therefore, it is unsurprising that defence procurement has historically been excluded from the GPA and the EU procurement Directives both as a matter of coverage and through treaty derogations permitting states to exempt the full application of open market rules to safeguard their security interests. Limited regulation beyond the national level has, in turn, limited appetite for global legal debate.

However, there may be signs of change. As part of its so-called "Defence Package", in 2009, the EU adopted a Directive coordinating procedures for the award of contracts in the fields of

defence and security (“Defence Directive”)<sup>32</sup> and a Directive simplifying terms and conditions for the intra-Community transfer of defence-related products (“ICT Directive”).<sup>33</sup> Concerning the Defence Directive specifically, the aim is to reduce the tendency of many Member States to exempt the award of defence contracts from compliance with procurement rules and EU Treaty principles designed to guarantee non-discrimination. The Defence Directive require national contracting authorities to comply with a set of specially adapted procurement rules modelled on the EU public procurement Directive. The objective is to reduce the high incidence of uncompetitive domestic awards considered partly responsible for the fragmentation of defence markets along national lines and develop a more integrated, competitive EU internal market in the area of defence trade.

The Defence Directive is not only significant from an internal European perspective. For many years, the USA and European countries have argued the need to reduce the USA’s significant defence trade advantage on the basis that more balanced reciprocal trade as a result of more open access and non-discriminatory treatment in areas such as defence procurement will improve the overall competitiveness of a transatlantic defence market. This has been considered a necessary step to improve the cost effectiveness and interoperability of defence equipment in the pursuit of effective military and security cooperation. The need for Europe to lead its own initiatives for a more competitive European defence market has also been considered a necessary prerequisite to joint US–European transatlantic initiatives aimed at reducing barriers to transatlantic defence trade. A predominant fear is that, if the USA and Europe enable immediate and unrestricted access to each other’s markets now, a less competitive European defence market would be unable to offer the same economies of scale and scope as the US defence market. The result could be an increase in the USA’s defence trade advantage, reduce European defence technological industrial capability and threaten even greater dependence on the USA for defence technology and material.

This development may invigorate legal debate not only within the EU but internationally. Firstly, an important issue concerns how the emerging EU legal framework in the field of defence procurement will deal with what may be described as its “external interface”. Inevitably, Member States will continue to award defence contracts to contractors from outside the EU (“third countries”) and awarded contracts will continue to rely on material sourced from third countries. Secondly, any concerns expressed by the USA or other third countries regarding the potential for the Defence Directive to erect barriers to access and treatment of third country contractors invites consideration of how the USA and other third country legal and policy regimes governing defence procurement operate in relation to EU

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<sup>32</sup> Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC [2009] OJ L216/76.

<sup>33</sup> Directive 2009/43/EC of the European Parliament and of the Council of 6 May 2009 simplifying terms and conditions of transfers of defence-related products within the Community [2009] OJ L146/1.

and other foreign contractors. Thirdly, both aspects may be considered within the broader context of historical and contemporary initiatives to address barriers to transatlantic trade including the area of defence trade.

### **Primary EU Law: Free Movement of Goods, Establishment and Services:**

Historically, the EU Treaties did not contain detailed provisions to regulate the opening up of public procurement. However, the various iterations of the Treaties have always contained general provisions on non-discrimination and free movement which are equally applicable to public procurement. These provisions have direct effect such that they are binding and enforceable without the need for Member States to take implementing measures.

Article 18 TFEU provides that any discrimination on grounds of nationality is prohibited. Article 18 TFEU only applies to nationals of EU Member States. Article 18 TFEU does not apply to nationals from third countries. It has generally been considered unnecessary to invoke Article 18 TFEU in procurement cases given that the TFEU's free movement provisions give specific implementation to this principle within their fields of application. Concerning the free movement provisions, the TFEU provides that the internal market shall comprise an area without internal frontiers in which the freemovement of goods, persons, services and capital is assured. These provisions prohibit conduct in the field of public procurement that hinders access of industry of other Member States to public markets.

The first significant regime concerns free movement of goods. Article 28 TFEU provides that the EU shall comprise a customs union. Member States are prohibited from imposing customs duties on imports and exports and all charges having equivalent effect. The customs union also requires the adoption of a common customs tariff in Member State relations with third countries. However, where third country goods have complied with import formalities and any customs duties or charges having equivalent effect in the importing Member State, those goods must then be treated as goods in free circulation within the customs union. Third country goods in free circulation must, therefore, be treated in the same way as products originating in Member States. Articles 34 and 35 TFEU prohibit quantitative restrictions on imports and exports between Member States and measures having equivalent effect. This may include both restrictions on the supply of goods under a public contract as well as restrictions on products to be used or supplied in performance of a public contract.

The second and third significant free movement regimes concern the freedom of establishment and the freedom to provide services. Article 49 TFEU prohibits restrictions on the freedom of nationals of a Member State to establish themselves in the territory of another Member State on a permanent basis. This freedom also applies to companies set up under the law of one of the Member States and which have their registered office, central administration or principal place of business in the EU. This includes the setting up of agencies, branches or subsidiaries and to the conduct of activities once established, for

example, access of established non-nationals to government markets. Therefore, Article 49 TFEU may be violated where a foreign firm is required to establish a local base in order to be considered for a government contract. Article 56 TFEU prohibits restrictions on the freedom of nationals of Member States established in one Member State from providing services intended for a person established in another Member State. It follows that this does not require the service provider to establish itself within the receiving Member State but does allow persons to base themselves temporarily in the state where the services are provided. Whilst not identical, the similarities between Articles 49 and 56 TFEU have legitimated almost identical treatment.

### **Defence procurement and industrial policy in the EU:**

Ever since modern states began to emerge, national governments, seeking to exercise their own sovereignty, have been protective of their autonomy in developing, producing and procuring military goods and services. This preoccupation is reflected in international norms that recognize the right of states to retain security and sovereignty through their control over the production and procurement of defence materiel. This normative stance sits in tension with EU initiatives intended to liberalize defence procurement markets, with the result that while the EU has succeeded in creating a single market for public procurement of civil goods and services, the scope for market liberalization in the defence procurement sector has been limited.

Indeed, defence procurement has, in essence, remained largely immune from the drive towards open markets. The current vehicle used by EU member states to ensure that they retain control over defence procurement is article 346 of the 2007 Treaty on the Functioning of the EU (the Lisbon Treaty). This article, which has remained largely unchanged since the 1957 Treaty of Rome, stipulates that:

*Any Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the common market regarding products which are not intended for specifically military purposes.*

Article 346 provisions have effectively allowed EU member states to ‘set their own rules’ for the tendering of defence-related contracts. As Jay Edwards<sup>34</sup> observes, this has perpetuated longstanding arrangements whereby

*each member state with indigenous industrial capability ensures that it spends the majority of any investment in defence domestically to protect the industry from any competition and to*

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<sup>34</sup> Jay Edwards, *The EU Defence and Security Procurement Directive: a step towards affordability?* (London: Chatham House, 2011), p. 4.

*sustain what has long been seen as a manufacturing sector of strategic significance nationally.*

A succession of studies have sought to identify the ‘costs of non-Europe’— essentially, the costs arising from the gaps in and barriers to a truly integrated and competitive EU single market. In the realm of defence, the latest (2015) European Parliament report mapping the ‘costs of non-Europe’ estimates these as ranging ‘from some 130 billion euro, at the high end, to at least 26.0 billion euro per year, on a more cautious estimate’.<sup>35</sup> Or, to put it another way, the failure to integrate comes at a price: ‘The existence of 28 compartmentalised national markets, each with its own administrative burden and regulated separately, hinders competition and results in a missed opportunity for economies of scale for industry and production.’

Despite widespread recognition of the ‘costs of non-Europe’, defence equipment production and procurement are driven by the national interests and sovereignty concerns of member states and thus continue to be *sui generis*. Nevertheless, the European Commission has progressively sought to overcome EU defence market fragmentation and the duplicative defence programmes resulting from the protectionist application of article 346 by the member states. Commission initiatives have focused on stimulating greater intra-EU defence trade by making EU governments put more non-sensitive, non-article 346 defence contracts out to tender. More recently, the Commission’s proposals for a European defence technological and industrial base (EDTIB) have sought to safeguard Europe’s defence markets against international competition and enhance the operational autonomy of the EU states within the CSDP and NATO. In July 2009, the European Parliament and Council adopted Directive 2009/81/EC on defence procurement, the latest Commission-led attempt to confine the use of article 346 by member states to ‘clearly exceptional cases’.

These initiatives have had little impact; national protectionist practices— whether motivated by ‘essential security’ considerations or by the desire to preserve domestic jobs and industries—remain the dominant driving force in EU defence procurement. Indeed, the value of Directive 2009/81/EC has been questioned from the outset, as member states have flouted its provisions, either by continuing to promote protectionist procurement practices or by exploiting the government-to- government sales exemption in the directive to safeguard their respective domestic defence-industrial bases. The latest EDA estimates, for instance, indicate that approximately 80 per cent of EU defence expenditure not assigned to international collaborative weapons projects is spent nationally. Although research sponsored by the European Commission acknowledges that ‘this does not mean that these 80 % are exclusively spent on equipment from national suppliers’, it does indicate that the degree of openness to suppliers from other member states has been ‘relatively low’. The ambiguity

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<sup>35</sup> European Parliamentary Research Unit (EPRU), *Mapping the cost of non-Europe, 2014–19* (Brussels: European Parliament, April 2015), p. 21.

concerning the EDA 80 per cent ‘headline’ statistic stems in part from the fact that data collected and provided by national governments are often incomplete. The UK Ministry of Defence (MoD) statistical publications, for example, no longer differentiate between defence equipment and equipment support sourced from the UK and that sourced via direct imports.

While the European single market is based on the principles of transparency and competition for civil goods and services, then, different rules (and norms) apply for defence materiel and services. A recent study for the European Parliament of the implementation of Directive 2009/81/EC demonstrated that its impact on pan-EU tendering for defence contracts has been limited. On the one hand, it shows that since the Directive came into force all of the major equipment contracts issued by the EU member states were awarded using article 346 provisions, which suggests that previous national procurement practices have continued. On the other, where pan-EU tendering has been adopted by the member states it has been for contracts ‘dealing with services, the acquisition of equipment deemed to be of low value, and sub-systems’. Moreover, the data show that since 2011 the proportion of selected suppliers located on national territory following pan-EU tendering for contracts has reached 98 per cent for Germany, 97 per cent for France, 96 per cent for Italy, 96 per cent for Poland, 92 per cent for the UK, 90 per cent for Romania and 64 per cent for Finland.

It was against this backdrop of protectionism in defence procurement that the British government launched its overarching ‘review of the balance of competences between the United Kingdom and the European Union’ in July 2012. The review sought to audit ‘what the EU does, how it affects the UK, where competence lies, how the EU’s competences are used, and what that means for the UK’s national interest’. Its primary findings relating to defence procurement were threefold. The first was that the European Commission has progressively claimed ‘more competences in this particular area’ and ‘sees an even broader role for itself’, raising concerns about a potential shift of competences from the EU member states to Brussels. The second was that there is scope for the Commission to take a more proactive stance within its existing competence, notably preventing ‘abuses’ of article 346 by those member states using it as a pretext to discriminate against non-national bidders for non-sensitive defence contracts. In identifying this possibility, the review reaffirmed the UK government’s support for efforts to open up the EU defence market to more competition and eliminate economically driven ‘buy national’ policies, ‘while respecting member states’ right to maintain certain strategic industrial capabilities for reasons of national security’. Finally, the review reaffirmed that the UK government ‘does not support any extension of Commission competence’.

### **Sources of US Federal Defence Procurement Law:**

In contrast to the relatively recent legal origins of more detailed procurement law within the EU and, indeed, in many of its Member States, the USA has developed its own procurement law system over more than 200 years. Consequently, this system is characterised by

“startling formal and practical complexity”. US law also covers many aspects of the procurement process which are otherwise not explicitly regulated under EU law, from source selection decisions through to contract performance. As comparatists have observed, a cursory account, therefore, risks misleading even those with an extensive knowledge of other procurement law systems.

It should be observed that each US state operates its own procurement law regimes at the state level. However, in light of the fact that the federal government is primarily responsible for the exercise of defence procurement competences, this section focuses exclusively on federal statute law and regulation. In this regard, the exercise of procurement competence is shared between the Executive and Legislative branches. The Executive branch has the constitutional power to execute laws and enters into contracts whilst Congress enacts statutes authorizing programmes or activities and their funding. This section outlines the main forms of statute law and regulation. There is no single statute governing US federal procurement although certain statutes are considered to provide the basic legal framework.

### **Armed Services Procurement Act:**

The Armed Services Procurement Act 1948 (“ASPA”)<sup>36</sup> and the Federal Property and Administrative Services Act 1949 (“FPASA”)<sup>37</sup> are the two principal statutes covering most Executive branch procurement. Focusing specifically on armed services procurement, the ASPA was enacted with the objective to promote competition through formal advertising under sealed bidding procedures but allowing negotiated procurement in certain circumstances. ASPA grants authority to the secretaries of the armed services to make procurement decisions. ASPA also provides general guidelines under which such decisions are made. The ASPA applies to procurement of all property (other than land) and services undertaken by the DoD, the Department of the Army, the Department of the Navy, the Department of the Air Force, the Coast Guard and the National Aeronautics and Space Administration (“NASA”). However, as will be discussed, ASPA has been substantially amended and largely superseded by statutory requirements introduced in 1984, to which this section now turn.

### **Competition in Contracting Act:**

In 1984, the Competition in Contract Act was introduced in light, *inter alia*, of claims regarding the inability of ASPA to reduce noncompetitive procurement in US federal

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<sup>36</sup> Armed Services Procurement Act of 1947, Pub L No 80–413, 62 Stat. 21 (1948) (codified in 10 USC §2301, et seq.). For a useful discussion of the history of ASPA, see C. A. Barnes, ‘New Improved Awards without Discussions or Foreign Competition (1990–1991)’, 20 *Public Contract Law Journal* 532, 536–7.

<sup>37</sup> Federal Property and Administrative Services Act of 1949, as amended Pub L 152, Ch. 288, 63 Stat 377 (codified as amended in 41 USC §351 et seq.)

procurement.<sup>38</sup> CICA amended the ASPA, including its preference for sealed bidding, to provide that agencies must obtain “full and open competition through the use of competitive procedures”. CICA applies to most contracts, excluding only those subject to procurement procedures authorised by a particular statute. CICA categorises competition according to three forms: “full and open competition”; “full and open competition after exclusion of sources”; and “other than full and open competition”. CICA also requires competition when using simplified acquisition procedures for low-value purchases, and for the award of so-called task order and delivery order (“TO/DO”) contracts, the equivalent of “framework” agreements under EU law. CICA has been implemented in Part 6 of the Federal Acquisition Regulation (“FAR”) and Sub Part 206 of the Defense Federal Acquisition Regulation Supplement (“DFARS”) which are outlined in Section 2.2.

## **DEFENCE PROCUREMENT IN UK**

### DEFENCE AND SECURITY PUBLIC CONTRACTS REGULATIONS (DSPCR), 2011:

On 21<sup>st</sup> August, 2011, DSPCR is assimilated into United Kingdom (UK) Law to Implement the EU Defence and Security Procurement Directive. The Regulations are applicable to defence and security procurements by authorities and Utilities (the procurers) throughout England, Scotland, Wales and Northern Ireland<sup>39</sup>. The regulations cover specific Contracts in defence and Security for procurement of -

- a) the supply of military equipment (which includes arms, munitions and war materials), including any parts, compartments or sub-assemblies of military equipment;
- b) the supply of sensitive security equipment<sup>40</sup>,
- c) work, works, goods and services (including all or any elements of life cycle) directly related to the equipment referred to military equipment and sensitive security equipment;
- d) works and services for specific military purpose or sensitive services including tools, tests facilities or support.<sup>41</sup>

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<sup>38</sup> CICA was enacted as part of the Deficit Reduction Act of 1984, Pub L 98–369, §§2701– 2753, 98 Stat 1175 (1984). CICA amended the Armed Services Procurement Act of 1947, the Federal Property and Administrative Services Act of 1949 and the Office of Federal Procurement Policy Act of 1974. It also created a statutory basis for the bid-protest function of the GAO outlined in Section 3.2.3. CICA’s competition requirements took effect on 1 April 1985. For contemporary commentary on CICA, see W. S. Cohen, ‘The Competition in Contracting Act’ (1983–1984) 14 *Public Contract Law Journal* .

<sup>39</sup> The Defence and Security Public Contracts Regulations, Chapter-1-Overview, Government of UK, version 1.4, 2017; available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/670825/2017\\_1201-DSPCR\\_Chapter\\_01\\_Overview\\_Dec\\_17\\_Edn\\_clean\\_version-o.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/670825/2017_1201-DSPCR_Chapter_01_Overview_Dec_17_Edn_clean_version-o.pdf);

<sup>40</sup> Contracts of Sensitive security equipment involves or contains or requires classified information in the interest of national security.

<sup>41</sup> Chapter-2 of DSPCR: Scope of DSPCR

Chapter-3 of DSPCR stipulates the financial scope of contracts which fall under the purview of the Regulation. The regulations apply to all contracts (which are qualified under chapter-2) with value (exclusive of VAT) which are equal to or greater than -

- a) £363,424 for Goods and Services
- b) £4,551,413 for works.

However, the financial threshold is revised every two years and is effective from 1<sup>st</sup> January on an even numbered year.

The regulations are solely applicable to potential suppliers in the member states of EU and Norway, as it being part of European Economic Area Agreement. The suppliers outside of EU states and Norway are not under the purview of the Regulation. Hence they do not have the Right to participate in the procurement procedure and cannot avail the remedies in part-9 (applications to the Court) of the regulations. However, the procurers are at liberty to allow potential suppliers from outside EU and Ministry of Defence (MOD) procurers should do so as matter of policy.

#### Procedure for the procurement under DSPCR:

Under DSPCR, advertisement for procurement should be published in Official Journal of the European Union (OJEU). DSPCR does not include the open procedure, dynamic purchasing systems or any concession contracts as in Public Contract Regulation (PCR), 2015. However, the procurers have the free choice of running competition under a restricted procedure or a negotiated procedure with prior publication of a contract notice, which is called as “competitive negotiated procedure”. The procurer may opt for competitive dialogue procedure for little complex procurement if the contract cannot fall under restricted or negotiated procedure with prior publication of contract notice.

However, the DSPCR had provided an exception to the condition of prior publication of a contract notice and opt for non-competitive procurement under following justified conditions:

- a) if the procurer receive irregular, unacceptable, unsuitable tenders or no application during a restricted, competitive dialogue or competitive negotiated procedure.
- b) Where the procurer can award the contract to particular supplier for technical reasons or for reasons with respect to the protection of exclusive rights.
- c) “Where the normal and accelerated time limits laid down for restricted and competitive negotiated procedures cannot be met:”
  - 1. for reasons of urgency from a crisis;
  - 2. due to the nature of the market for air and maritime transport services when deploying military or security forces abroad;
  - 3. for extreme urgency brought about by the events not foreseeable or attributable to the procurer.

- d) For additional deliveries by the original supplier with in the span of five years of contractual arrangements.
- e) Where goods are quoted and purchased on a commodity market.
- f) To benefit from an advantageous terms in a closing down scale or where a supplier is bankrupt, insolvent or being wound up.
- g) For research and development services other than those are exempted under exclusion.
- h) Where the sole purpose of procurement is research, experiment or development but not for recovering research and development costs or commercial viability.

#### Security of information and Security of Supply:

The DSPCR provide the ability to procurers to protect classified information throughout the tendering and contracting process, where they have ability to -

- a) impose obligations on the contractors and require flow-down of obligations to the subcontractors to safeguard the information throughout the tendering and contracting process;
- b) reject contractors and subcontractors where they –
  - 1. do not possess the necessary reliability to exclude risks to national security;
  - 2. have breached obligations relating to security of information during previous contract amounting to grave misconduct;
- c) request information from contractors and sub-contractors to assess their ability to protect information;
- d) impose contractual obligations to protect information to the required level.

The DSPCR provide provisions to assess the capability of contractor and its subcontractors to meet the procurer's security of supply requirements. The procurer can require the tenderer to provide certain information which demonstrates their ability to honour the contractual obligations by obtaining export licences or by identifying restrictions on disclosure, transfer or use of technology or by demonstrating that their supply chains will be complying with security of supply or to make them establish industrial capacity in case of crisis etc.,.

#### Subcontracting:

The DSPCR had given the procurer an option to:

- a) require tenderers to indicate the intended sub-contract;
- b) require tenderers to indicate their proposed sub-contractor and any other if they intend to change during the life of contact;
- c) the tenderer is required to publish advertisement in OJEU with respect to the proposed subcontracts to third parties;

- d) “reject a subcontractor selected by tenderer at any stage of the contract award procedure or during contract performance in accordance with all or part of the selection criteria for the main contract.”

It is also emphasised that the prime contractor has the full responsibility to honour the contract and it also encourages the prime contractors to use competition advertise any subcontract opportunities. The procurer is to justify any mandate by taking into account the value of contract, the nature of contract and the structure of the market.

#### Remedies under the Regulation:

The DSPCR provide review procedure which enables the suppliers to challenge the procurement decisions and also the remedies to protect the rights of suppliers. Some of the major decisions which are most likely to be challenged, which not complied with caution are:

- a) the exemptions in TFEU or exclusions under regulation.
- b) With respect to the negotiated procedures which are not advertised.
- c) When the supplier to tender is not invited after he expressed an interest.
- d) Ultimate decision of award.

To overcome some of the above possible conflicts in interest, it is essential to record the reasons for the decisions taken and comply the regulations. And to provide proper recourse to the possible aggrieved, the regulation also provide the “stand still” period to initiate the remedies under the regulation.

# **MODULE-II**

## **DEFENCE PROCUREMENT AND FDI POLICIES IN INDIA**



## **PUBLIC PROCUREMENT IN INDIA**

### **Introduction:**

Government procurement is defined in India as procurement made for and on behalf of the government, and includes central government, state governments, public sector undertakings (PSUs) and public bodies. While data from cross-national studies suggest that government procurement typically constitutes in the range of 10–15 per cent or more of total economic activity, in India, its overall value is very likely significantly higher given the role of public companies in key sectors of the economy, such as railways. A World Bank estimate placed the value of Indian procurement markets to be in the order of \$100 billion, representing over 20 per cent of GDP.

Indian procurement policy has traditionally followed a hierarchy of preferences to buy, first, goods wholly produced in India; second, goods manufactured in India from imported materials; third, goods from foreign manufacturers held in stock in India; and, last, imported products received for supply through Indian agents or India-based establishments. Government procurement policy has therefore been discriminatory, at least to a degree, although participation by foreign firms has also been welcomed in particular sectors. Purchasing entities have been accorded the discretion to give price preference to domestically produced products over imported ones and also to articles produced by cottage and small scale industry over those manufactured by larger ones. For instance, in 1980 the Bureau of Public Enterprises mandated central government ministries and departments as well as PSUs to grant a price preference to PSUs up to 10 per cent and even more in appropriate cases. If the price quoted by a PSU was within 10 per cent of the lowest quotation, negotiations were held with the PSU and the tender awarded to it at that lowest quoted amount.

The rationale for price preferences in India is social responsibility. Small firms, cottage industries and women's employment schemes operate in economically backward regions and procurement can provide employment to these sectors of the population. The Indian government has used procurement contracts to direct employment towards marginalized groups such as the scheduled castes, for example, in labour-intensive public works contracts or by unbundling or splitting up large contracts into smaller packages so domestic firms and particularly SMEs are better able to fulfill them. The procurement of specific pharmaceuticals has also been restricted to some PSUs for similar social welfare arguments. PSUs have been protected from competition through reservation, and mandates have allowed both central government departments and public sector enterprises to apply price and purchase preference in favour of the public sector.

At the central level, there is no single law exclusively governing public procurement of goods in India. The central regulatory framework in place consists of: (i) the General Financial Rules (GFR); (ii) the Delegation of Financial Powers Rules (DFPR); (iii) the

Manual on Policies and Procedures for Purchase of Goods issued by the Ministry of Finance (Manual); (iv) government orders regarding price or purchase preference or other facilities to sellers in the handloom sector, cottage and small scale industries and to central public sector undertakings, etc.; and (v) the guidelines issued by the Central Vigilance Commission to increase transparency and objectivity in public procurement.

### **INDIAN PROCUREMENT POLICY**

The General Financial Rules (GFR) governing central level procurement in India were overhauled in 2005 with the objective of enhancing administrative flexibility and ensuring full accountability for the use of public funds and appropriate transparency mechanisms. Rule 137 of the GFR 2005 lays down the basic underlying principles of the regime and provides that every authority delegated with the financial powers of procuring goods in the public interest shall have the responsibility and accountability to bring efficiency, economy and transparency in matters relating to public procurement and for fair and equitable treatment of suppliers and promotion of competition in public procurement. All government purchases must be in accordance with the principles outlined in the GFR. Organizations with a website must publish their tender notices and enquiries on those websites, while those without a website must post the notices on the National Information Centre (NIC) website. Central procurement agencies follow the procedures set out below, depending upon the circumstances and factors underlying the procurement:

- The normal procedure for procurement over Rs 2.5 million is through open tender. However, department heads have discretion in deciding whether to advertise tenders abroad. Open tenders are invited through advertisements published in the Indian Trade Journal and in two national daily newspapers.
- Limited tendering is allowed for procurement up to Rs 2.5 million, advertised to pre-selected approved suppliers. This is also allowed in cases of urgency and where justification is provided by the ministry/department; where it is considered not to be in the public interest to procure goods through open tender; and where the possibility of additional suppliers being tapped is deemed to be remote.
- Commonly used goods required by central government entities on a recurring basis typically are purchased under rate contracts administered by the Directorate-General of Supplies and Disposals (DGS&D) in the Department of Commerce. These contracts are intended to allow the procurement of goods from reliable sources without the need for recurrent tenders. It is important to note that, in principle, there is no preference for domestic as opposed to imported goods for such procurement. Foreign manufacturers may be registered, with or without Indian agents. However, both Indian and non-Indian suppliers must be able to provide after-sales support in India, and the products purchased must be 'suitable for use' in India.
- For petty purchases of goods or works, cash purchase is resorted to. A minimum of three quotations is obtained from suppliers and the order given to the lowest.

- The GFR also provides for purchase of goods without quotation (up to Rs 15,000) and purchase of goods by local purchase committee (up to Rs 100,000) (Rule 151 GFR).
- Procurement in the railway, postal system, telegraph and defence sectors are subject to specialized procedures but within the overall framework of the GFR. Competition from foreign suppliers is generally permitted in respect of high-technology or high-value items. In the railways sector, foreign firms are free to participate in tenders advertised in India only. Payment against such contracts must be made in Indian rupees at par with indigenous suppliers. Global tendering is frequently used in procurement of rolling stock, wheels, machinery and plant equipment, including technology transfer.
- As a part of the modernization of central procurement, tender documents have been substantially standardized on the basis of national or international standard specifications. In respect of global tenders, more time is generally given for submission of overseas bids than in the case of domestic tenders and notices are published or disseminated through Indian embassies.

Despite the 2005 reforms and Rule 137's explicit objective of creating fair and equitable treatment of suppliers and promotion of competition in public procurement, India retains extensive preferential policies for central public-sector enterprises and micro and small enterprises (MSEs). The 2007 WTO Trade Policy Review noted that for tenders valued between Rs 50 million and Rs 1 billion, a central public-sector enterprise whose bid is within 10 per cent of that of a large private unit is allowed to revise its price downward and is eligible for a contract or parallel-rate contract. Further, MSEs receive purchase and price preferences in procurement by central government ministries and departments and public-sector enterprises. Under the purchase-preference system, 358 specified items must be procured exclusively from MSEs. The price preference system also provides that if the price offered by the micro or small enterprise is not more than 15 per cent above the price offered by a large enterprise, the product must be purchased from the former. MSEs are assisted by way of: (i) issue of tender sets free of cost; (ii) exemption from payment of 'earnest money' (deposits); and (iii) waiver of security deposits up to the monetary limit for which the unit is eligible, based on certain transparent criteria.

At the state level, procurement reform has been even less extensive. With some exceptions, Indian state governments continue to make extensive use of procurement systems as an instrument of industrial policy, and tend to make less extensive use of electronic procurement tools.

#### **Bid challenge procedure:**

At the central level, all unsuccessful bidders to a government tender are notified through a regret card. The competent authority deciding on the tenders is obliged to record the reasons

for rejection of the bids. Unsuccessful bidders are not generally given reasons for the rejection of their bids, however. There is also no requirement to publish details of the contracts awarded.

Once the tender has been awarded, dispute resolution mechanisms exist. In the event of a dispute, the parties are encouraged to resolve differences with the purchaser by mutual consultation. If this fails to resolve the dispute within twenty-one days, then either the purchaser or the supplier may give notice to the other party of its intention to commence arbitration. If the contract is with a domestic supplier, the applicable arbitration procedure will be as per the Indian Arbitration and Conciliation Act 1996. If the contract is with a foreign supplier, the supplier has the option to choose either the Indian Arbitration and Conciliation Act 1996 or arbitration in accordance with the provision of the UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. The venue of arbitration shall generally be the place from where the contract has been issued, except that when a foreign supplier opts for arbitration, in accordance with the provision of UNCITRAL Arbitration Rules, the venue can be a neutral country. Citizens can also lodge complaints with the Central Vigilance Commission (CVC) or with ombudsmen to trigger investigations into alleged acts of corruption in procurement by public officials or politicians. This is complemented by the Right to Information Act 2005 which enables general access to information about procurement decisions within a specified time-frame. Internal and external audits of procuring agencies and offices at the federal and local levels are other instruments in place to curb and detect corruption in public procurement. The reports of external audits are made publicly available.

While Rule 11 of the Manual on Policy and Procedure for Purchase of Goods provides for a tenderer's right to question the purchaser on improper procedure or rejection of tender, there is no comprehensive bid challenge mechanism for disappointed bidders or those bidders who feel that the appropriate tender regulations have not been applied and that this has denied them their right to due process. Under the writ jurisdiction of the High Courts and the Supreme Courts Articles 32 and 226 of the Constitution of India, unsuccessful bidders can contest any administrative action that violates fundamental rights. Nevertheless, when compared to challenge mechanisms set out in the GPA or most regional trade agreements, this framework is incomplete and unsatisfactorily defined. This has negative consequences because, in addition to providing redress, bid challenges are important self-monitoring and self-implementing mechanisms. They allow those most affected by the failure to apply national procurement laws to have redress, ensuring that problems in the procurement system are identified and addressed quickly and efficiently.

### **Regulatory framework**

In India, the legislative framework on public procurement is a motley scaffold of guidelines. Though purchases made through tenders have been a desirable and viable method of

fortifying large procurements, there is still no comprehensive law on the subject. In the absence of any national legislation, prominence is given to rules, procedures and manuals that govern the process of procurement. The following generic or sector-specific guidelines apply to Government departments and public sector undertakings:

### **Constitutional Framework:**

The constitution of India authorizes the Central and State Governments to contract for goods and services in the name of the President of India or the Governor of the state respectively, and directs autonomy in public spending (Article-298, 299). However, it does not stipulate any procurement policies or procedures. The executive power is vested with the president and the Governor, while the financial powers with the ministry of finance under Article-53. This enables the Government to procure the necessities.

### **Indian Penal Code 1860 and the Prevention of Corruption Act 1988:**

This two pieces of legislation prescribe criminal penalties for bidders indulging in malicious, corrupt and fraudulent practices.

### **General Financial Rules 2005 (GFR) supplemented by Delegation of Financial Powers Rules 1978 (DFPR):**

The GFR provide a broad legal framework and contains the general rules on procurement applicable to all Ministries and Departments. The DFPR are rules reflecting the principles of the GFR giving the Central Government through the Ministry of Finance (MoF), the power to sanction expenditure for the purchase and execution of contracts. There are additional guidelines issued from time to time with the aim of fostering transparency and integrity in public sector procurement by the Directorate General of Supplies and Disposals (DGS&D) and the Central Vigilance Commission (CVC) under the instructions and office memorandums of the Ministry of Finance (MoF).

### **General Financial Rules (GFR) 2017:**

The policy framework primarily covered by the General Financial Rules (GFRs) 1963 (amended in 2005 and 2017) framed by the Ministry of Finance by executive order and the Delegation of Financial Powers Rules 1978 (again framed by the Ministry of Finance). The Ministry of Finance issued GFRs on 11 February 2017 and came into force on 8 March 2017. Rule 153(iii) of the GFRs 2017 allows the Central Government to provide (by way of notification) mandatory procurement of any goods or services from any category of bidders, or provide for preference to bidders on the grounds of promotion of locally manufactured goods or locally provided services. The main features of GFRs are as follows:

- Defines works, goods, and services to be procured and the scope of public procurement.

- Outlines the fundamental principles of public procurement like enhancing transparency and efficiency, instilling fair practice, and promotion of competition.
- Prescribes monetary thresholds for using specific procurement methods across the categories of procurement, i.e., works, goods, and services.
- Describes different procurement methods and their applicability.
- Prescribes Code of Integrity.
- Specifies tender award criteria.
- Outlines general principles and rules of contract management

#### **Difference between 2005 and 2017 GRF:**

While GFR 2017 had kept intact the monetary threshold limits for a few categories as given in GFR 2005, it has augmented the threshold limits for others. For instance, GFR 2017 had kept intact the threshold limit for the procurement of original works through limited tender. However, it has enhanced the upper threshold limit for open tender enquiry from INR 10 lakhs to 30 lakhs. Alternatively, it has increased the upper threshold limit for procurement of goods by the purchasing committee from INR 1 lakh to 2.5 lakhs. While GFR 2005 had recognised procurement of all kinds of services to be similar, GFR 2017 had procurement of services into two broad categories viz., ‘consulting services’ and ‘non-consulting services’.

In addition to these changes, GFR 2017 also incorporated a few important in order to streamline the public procurement activities in the country. GFR 2017 recommended two-stage bidding where a procuring entity holds discussions with the bidder community to finalize the technical specifications in the first stage. The financial bid was called from those whose ideas were accepted, and the bid is awarded to the bidder with the best quality-price ratio. It was expected to enhance the technical capacity of the procuring entity by drawing on the know-how from the market. It directed towards assigning higher weightage to quality as compared to the price especially in the procurement of services through the quality and cost-based selection.

It provided emphasis on the use of information technology in public procurement to ensure greater transparency and competition by mandating the use of Central Public Procurement Portal (CPPP) for publication of all tender details, compulsory e-bidding for all procurements, and promotion of electronic reverse auction. It introduced Code of Integrity to address probity in procurement activities. It urged to include environmental issues in the bid documents. It directed towards sharing the reasons of rejecting a tender or non-issuing a bid document to a prospective bidder upon request.

#### **Defence Procurement Manual (DPM) and Defence Procurement Procedures (DPP):**

These procedures seek to balance the competing requirements of expeditious procurement and development of an indigenous defence ministry through expeditious decision-making and simplification of contractual procedures. These guidelines have expanded into the following procedures:

- Buy and Make through Transfer of Technology;
- Buy and Make (Indian); and
- Make.

DPPs were revised in 2011, 2013, 2016 and 2019 to further streamline the procurement process. Detailed analysis of DPM is done in further part of this module.

### **Rules for Central Public Sector Undertakings (CPSU):**

State Governments as well as the CPSUs have their own set of GFR that are consistent with the principles of the GFR. Some state legislation such as the Tamil Nadu Transparency in Tenders Act 1998 (and the rules framed under it in 2000) and the Karnataka Transparency in Public Procurement Act 1999 govern the issue of procurement within their respective jurisdictions.

### **Public Procurement Bill 2012 (Bill):**

The Bill has been introduced in the Parliament of India for the Legislature's approval and derives its essence from the UNCITRAL Model Law of July 2011. It seeks to regulate public procurement to:

- ensure transparency, accountability and probity in the process;
- ensure the fair and equitable treatment of bidders;
- promote competition;
- enhance efficiency and economy;
- maintain integrity and public confidence in the public procurement process.
- mandates publication of all procurement-related information on a Central Public Procurement Portal.
- penalizes both the acceptance of a bribe by a public servant as well as the offering of a bribe or undue influencing of the procurement process by the bidder with imprisonment and a fine.

The Bill covers procurements for goods, services, works, procurements by PPPs, special purpose vehicles (SPVs) for execution of contracts awarded through the procurement process, and others as notified by the Central Government. The Bill sets Open Competitive Bidding as the preferred procurement method; an entity must provide reasons for using any other method. It also specifies the conditions and procedure for the use of other methods. The Bill provides for setting up Procurement Redressal Committees. An aggrieved bidder may approach the concerned Committee for redressal.

Issues concerning:

The Bill exempts certain procurements from the specified process, besides allowing the government to limit competition in certain cases. It is unclear why the government has been given further powers to exempt any procurement or procuring entity from the applicability of the Bill. The Bill specifies Open Competitive Bidding as the preferred method of

procurement, without defining the term. In cases where procurement from a particular supplier is necessary to ensure standardization or compatibility with existing systems, the Bill does not require certification from a competent technical expert. Such a certification is required by existing regulations and model laws. In a departure from existing regulations, the Bill does not restrict use of cost-plus contracts, which provide no incentive for efficiency.

### **Public procurement (preference to make in India), Order, 2017:**

The government has issued public procurement (preference to make in India), Order, 2017 as part of the policy of the Government of India to encourage ‘make in India’ and promote manufacturing and production of goods and services in India with the view to enhancing income and employment.

According to the Order, “if the nodal ministry is satisfied that the Indian suppliers of an item are not allowed to participate and/or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for the procurement of that item and/or other items relating to the nodal ministry”.

A five member committee chaired by the secretary in the department of industrial Policy and promotion has been set up to oversee the implementation of the policy. The committee may assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practice, cartelization or increase in public expenditure and suggest remedial measures. However, subject to the provisions of this order and to any specific instructions issued by the nodal ministry or in pursuance of this order, purchase preference shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified.

As per the order the minimum local content shall ordinarily be 50%. The nodal ministry may prescribe a higher or lower percentage in respect of any particular item and may also prescribe the manner of calculation of local content. The margin of purchase preference shall be 20%. Ministries, departments and the board of directors of government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this order.

### **Regulating Authorities:**

India is a federal union of states comprising 29 states and seven union territories. The states and union territories are further subdivided into districts. There are no precise regulatory authorities governing the whole procurement process for the federal union, states, and local governments. The procurer must follow the due process expressed under the applicable rules at all stages until the award of contract is made. Therefore, there is no separate and exclusive regulating authority governing any material breach in the case of public procurements.

However, the administrative actions of the procurers are subject to judicial review by the respective High Courts of the competent jurisdiction.

### **Scope of rules – entities covered under the Rules:**

Both the procurer being a Government Department, Public Sector Undertakings (PSU), a state government, local government, or from any qualified sector and the bidder must adhere to the procurement rules.

The Public Procurement Bill 2012 (Bill) proposes that the following entities are specifically covered under the Bill:

- Government departments and ministries.
- Constitutional bodies or entities that may be set up under any acts of parliament and central government undertakings (entities or companies with government shareholdings of 50% or more, directly or indirectly).
- SPVs incorporated for executing public private partnership (PPP) contracts.

Exemptions: Entities not covered under Article 12 of the Indian Constitution can be considered as beyond the scope of the procurement rules. This implies that private bodies that are unfettered by government control are not bound by any procurement rule or guideline.

### **Contracts covered:**

The rules on procurement apply to all the contracts offered by government bodies at the central, state or local level. The monetary benchmark of these contracts is thought to equal or exceed INR50 million. Examples include:

- **Public private partnership (PPP) contracts:**  
These concern projects based on a contract or concession agreement between a government or any statutory entity and a private company for investing in the maintenance and construction of an infrastructure asset or delivering infrastructure service.
- **Engineering procurement and construction (EPC) contracts:**  
EPC contracts involve the detailed engineering design of the project by procuring all the necessary materials and equipment and constructing the facility or asset within a prescribed time frame.
- **Concession agreements:**  
This is a contract between a company and a government giving the company a right to design, builds, operates and maintains business within the government's jurisdiction.
- **Operation and management (O&M) contracts:**  
Here a project company delegates its work to a reputed expert operator to operate and maintain projects that are owned and controlled by the government.

**Exemptions:** In an exceptional situation, any ministry or government department may, by consulting with the competent authority, outsource a job that would be allowed by the competent authority to a specifically preferred contractor (*Rule 184, General Financial Rules 2005*). A detailed justification, the circumstances leading to the outsourcing and the special interest or purpose must be an integral part of the proposal.

**Thresholds:** If the value of the contract is below the limit of INR5 million, the contract escapes the jurisdiction of the procurement regime.

**Concessions:** Concession contracts are covered under the procurement regime in India. The first stage is generally referred to as expression of interest (EOI) or request for qualification (RFQ). The aim is to pick out eligible bidders for the second stage of the process. The second stage is generally referred to as request for proposal (RFP) or invitation of financial bids. At this stage short-listed bidders conduct an all-inclusive assessment of the project and submit their fiscal offers. The contract is then awarded.

**Privatisations:** In India, privatisation is subject to the law on procurement. A due process must be complied with. These procedures are laid down in the General Financial Rules 2005 (GFR) and various other guidelines issued by the Central Vigilance Commission (CVC) and Ministry of Finance (MoF). These rules are modified from time to time through ministry notifications. The Public Procurement Bill (Bill) aims to incorporate the principles of UNCITRAL Model Law of 2011 into domestic law.

**PPPs:** The Government has evolved special procedures and guidelines for procurement of PPP projects based on:

- Government policy issued by the CVC and the MoF.
- Sector specific policies.
- The Bill.

More specific provision can be found alongside the MoF's Model request for proposal (RFP) and request for qualification provisions. In addition, the government authorities are expected to adopt an integrity pact on the CVC's recommendation.

**Shared services and "in-house" arrangements:** In-house arrangements attract the provisions of the various guidelines and set of rules governing procurement in India. There are no exceptions because there is no release from the rules permissible for in-house arrangements unless the project comes under the threshold limit.

### **Procurement procedures: Available procedures**

In most cases, there is one rigid procedure of bidding for procurement: the precondition of a notice that determines future procedure. Procurement is generally conducted through the advertised enquiries of tenders. The advertisement must be published by the Government in

the *Indian Trade Law Journal*. The Government has now created a central public procurement portal (CPPP) within which all the prerequisites and authentications are carried out and documents are published. Proposed bidding procedures include (*Public Procurement Bill 2012*):

- Open competitive bidding.
- Restrictive bidding.
- Two-stage bidding.
- Single source procurement.
- Electronic procurement (the procurement of goods and services effected by electronic means).
- Spot purchase.
- Other methods notified by the Government.

Freedom of choice: The procurer chooses to subscribe to one of the above procedures when deciding on the subject matter and nature of the procurement. The method chosen must be consistent with the criteria of pre-qualification and any restrictions that are imposed before execution.

Suitability: The available procedures must comply with the general principles of Rule 160 and 161 of the General Financial Rules. The parties must act in good faith, exhibit prudence and fairness in their dealings without any hint of arbitrariness or anti-competitiveness and act accordingly. Judicious use of public money and equal treatment to all the bidders must also be applied in assessing the suitability of a bid.

### **Open competitive bidding process**

Key features: Under this procedure the sealed bids are opened in public to enable the parties and persons interested to be aware of the selection.

Time limits: The time limits vary depending on the nature of the procurement and can range from six to 15 weeks (in the case of global tenders).

### **Restrictive bidding**

Key features: This procedure of bidding delimits the number of participants when the procurers create an atroupement of prequalified bidders through a thorough screening process.

Time limits: The time limits vary depending on the nature of the procurement and can range from six to 15 weeks (in the case of global tenders).

### **Two stage bidding**

Key features: This procedure is usually taken up in cases where a heightened sense of professional proficiency is requisite. Two bids (technical and financial) are invited from the procurers.

Time limits: The time limits vary depending on the nature of the procurement and can range from six to 15 weeks (in the case of global tenders).

### **Single source procurement and spot purchases**

Key features: These methods are non-competitive and are used only in exceptional circumstances after the approval of a competent authority. Procurements qualifying under this category are made in special circumstances such as emergency, limitation of cost or continuance of previous work.

Time limits: The time limits vary depending on the nature of the procurement and can range from six to 15 weeks (in the case of global tenders).

The Public Procurement Bill 2012 states that in fixing the last date for submission of bids, the procuring entity must take into account the need of the bidders to be given reasonable time to prepare and submit their bids.

### **Technical specifications**

The basic objectives of procurement activity that governs the technical specifications while inviting tenders are to promote (*Rule 137, General Financial Rules*):

- Economic efficiency.
- Transparency.
- Fair and equitable treatment of suppliers.
- Competition.

Rule 137 lays down detailed procedures to avoid cartelisation, such as clarity in the specification of quality and quantity of goods to be procured while giving specifications in the tender in an equitable manner. The overriding objective is to put all the bidders on the same footing as they submit their bids without any undue advantage to a particular party.

**Alternative bids:** Generally, such bids are not recognised. In principle, a bid once placed by a bidder cannot be altered unless it is permitted by the terms and conditions comprehensively set out in the tender. Acceptance of alternative bids is circumstantial and would depend on the rarity and gravity of the case.

### **Contract award criteria:**

Evaluation: The main criterion for the grant of an award is evaluation of the tender as guided by the mandate of the Constitution of India. The procurer evaluates the bid on the basis of price, quality, costs of operation, terms of payment and guarantee, and the technical and professional competence of bidders.

A common ground for selecting a bidder includes selection of the lowest bid (L1 method). These bidders are selected for projects that are economically less or not viable. The highest bidder method (H1) is for bidders who are technically qualified to participate in revenue share-based pacts ensuring a considerable margin of return for the procurer. Collectively, a procurer's scores from evaluation of the technical and financial bids are also a means to give leverage to the favorable bidder.

Exception to the highest bid rule: Procurers are not obliged to accept the bid quoting the highest price and can settle with another bidder if they are convinced of the fact that the selection process was unbiased, fair, reasonable and non-arbitrary.

National interest and public policy considerations: There can be outsourcing of the job of a contractor if there are exceptional circumstances (*Rule 184, General Financial Rules*). Outsourcing performed in the national interest in times of war or any disaster is considered an exceptional circumstance. Specific examples include:

- Exclusive purchase of handlooms from *khadi* and village industries notified handloom units of the Association of Corporations Apex Societies of Handlooms and the Women's Development Organisation, Dehradun.
- 358 items that have been categorised as reserved for exclusive purchase from small scale industries.
- Offers of SSI Units that are given a price preference of about 15% over the lowest bid of a large scale private sector entity. The price preference is usually decided on a case sensitive footing.

### **Enforcement:**

Right to bring a claim: A claim can be brought against the procurer by any bidder if the contract has been awarded on irrational, arbitrary, unfair or anti-competitive grounds. A claim becomes enforceable where the procurer has discriminated illegally between parties and has not disclosed documents material to the interested parties.

Enforcement procedures: A bidder can make an application for review before a procuring entity. The bidding process can be subject to limited judicial review in the exercise of the writ jurisdiction of the High Courts and the Supreme Court of India. The courts intercede in the bidding process only in cases of violation of the constitutional or any statutory requirements, or due to a lack of transparency or reasonableness, or arbitrary conduct. The same process applies to contracts that have been executed. They are subject to judicial review or specific performance through judicial intervention, with respect to breach of contract.

The Public Procurement Bill 2012 suggests the setting up of independent procurement redressal committees presided over by ex-High Court judges of "high moral character". The

monitor appointed under the pact can ask for a review and the forum's decision will be binding unless challenged in a court of law of the appropriate jurisdiction.

Statutes of limitation: The Limitations Act 1963 stipulates that an award must be challenged in court within three years from the date the cause of action arose.

**Issues in public procurement in India:** In reality, procurement practices in the country often differ from what is prescribed because of the hurdles such as inefficient monitoring process, limited accountability and governance, limited awareness, and organizational culture. Given below are the major challenges involved in the Indian Public Procurement System:

**The absence of a comprehensive procurement Act:** In the absence of a comprehensive procurement Act, GFRs allow the government entities to frame procurement process with its own understanding of public interest.

**Lack of standard bid documents:** In spite of the initiatives for standardizing the bid documents and code of contract following the international agencies such as IMF and the World Bank, there continues to be a multiplicity of bid documents across the entities in terms of addition/rephrase/repetition of clauses/provisions. Such ambiguities and contradictions in the bid documents stand against the principles of standardization, transparency, and accountability.

**Delays in activities in procurement cycle:** The introduction of e-procurement has managed to reduce the procurement cycle especially in the stages of publication, submission, opening, and evaluation of bids. However, the procurement process is often delayed in the stage of need assessment, budget preparation, and approval.

**Unfair practices and corruption:** Despite the procedural safeguards corruption level in India is perceived to be high in recent years leading to low quality of public services which ultimately hampers the development process.

**Anti-competitive elements:** The existence of anti-competitive practices by the bidders' community tends to hamper the procurement process by negating the best value of money. Competition issues in India mainly concern with collusive bidding, bid rigging, cartelization, and abuse of dominance.

**Low participation of the domestic MSEs:** Despite the MSMEs provisions, the participation of domestic MSMEs in the public procurement activities remains low in India. Apart from resource-related entry barriers including anti-competitive elements, many MSMEs do not also take part in public procurement due to a perception that government procuring entities often delay in releasing the contract payments.

**Absence of an independent grievance redressal mechanism:** India does not have an Independent Grievance Redressal Mechanism in the procurement system. The GFR 2017 only allows the aggrieved bidders to file complaints with procuring entities, arbitrators, and courts.

**Competency and skill of the procurement officials:** There are implementation challenges concerning the skills and competency of the government procurement officials as these activities require professional skills. The officials need to be more acquainted with the procurement management, rules and regulations, legal issues, contract management issues, and others.

## **DEFENCE PROCUREMENT**

In 1952, the economist John Perry Miller at Yale predicted the need for economic analysis in military procurement, because unlike the two world wars where economic mobilization for war had been a temporary event, the Cold War created a situation where there was ‘a possibility of a large procurement program lasting possibly for decades’. From an operational perspective, India has been engaged in territorial conflicts since its independence in 1947. The Indian Army and Indian Air Force were called to intervene in securing India’s northern frontier in Jammu and Kashmir in 1947–1948. The Indian Army was engaged again in 1962 with China in the northern and eastern border. India and Pakistan fought wars in 1965 and 1971. Indian Peace Keeping Forces were engaged in operations in Sri Lanka from 1987 to 1990. In 1999, India and Pakistan fought over the control of Kargil in the Jammu and Kashmir region for nearly 3 months. India and Pakistan continue to engage in cross-border firings even today. Thus, for India, arms procurement has been large in magnitude and composition, and conflicts have lasted for decades with no plausible end in sight.

Despite frequent and continuous military engagements, the Indian military has never harboured political ambitions and is subservient to civilian control. The Ministry of Defence (MoD) is headed by a Member of Parliament nominated by the Prime Minister and most of the executives in the ministry are civilians, members of the Indian Administrative Service (IAS) deputed to serve in the MoD for variable lengths of time. The military’s involvement with the MoD occurs through the Service Headquarters located in the national capital. The Ministry has four sub-departments- the Department of Defence, the Department of Ex-Servicemen Welfare, the Department of Defence Production and the Department of Defence Research and Development. Procurement is handled by the Department of Defence in coordination with the Department of Defence Production and the Department of Defence Research and Development.

### **Planning and procurement:**

Unlike some countries, the Indian government does not publish any white paper on defence. Defence plans are classified documents and there is no public version, even for the

Parliament's review. There is an expectation that defence plans should be approved by a cabinet committee and be prepared in consultation with the Ministry of Finance, but this is not a procedural or statutory requirement and has been rarely attempted. MoD, therefore, exercises considerable autonomy in defining the defence strategy, operational requirements, and choice of equipment, although the lack of coordinated planning and absence of cabinet approval might reduce the level of government commitment that can be projected for the plans.

The user service (Indian Air Force/Indian Army/Indian Navy) has a dominant role in the formulation of Service Qualitative Requirements (SQRs) and the issuing of tender documents like Request for Information (RFI) and Request for Proposal (RFP). The RFP document invites vendors to supply an item based on the specifications in the SQR. The SQRs are approved at three stages- the Services Capital Acquisition Plan Categorisation Committee, the Services Capital Acquisition Higher Categorisation Committee and the Defence Acquisition Council (DAC). The Categorisation Committees and DAC accord 'Acceptance of Necessity' for procurement. These bodies include representatives from the concerned service, the finance division of the MoD (MoD Finance), the integrated defence service headquarters, the Defence Research and Development Organisation (DRDO), the Department of Defence Production and the Acquisition Wing of MoD. The actual procurement is processed by the Acquisition Wing. Essentially, the responsibility of requirement formulation and contract management lies on the service headquarter (SHQ) and post-contract management and monitoring are conducted by the Acquisition Wing jointly with the concerned SHQ.

The responses received to an RFP from vendors are then subjected to technical evaluation, followed by commercial evaluation. Technical evaluation is conducted in two stages, the first based on the documents provided by the vendor, and the second at the field, with the equipment offered by the vendor. The SHQ is involved in the technical evaluation and the field trial team is composed of members from the SHQ, the Directorate General-Quality Assurance of the respective service, the DRDO and MoD Acquisition Wing. The commercial evaluation and subsequent selection of vendor and finalisation of contract is done in a collegiate manner by the Contract Negotiation Committee (CNC) which involves the MoD, its finance and acquisition wings, and the SHQ. The involvement of MoD Finance is integral in decision-making at every stage of the procurement process to accommodate financial concerns. While different offices of the MoD are involved in the procurement (MoD Finance, Director General of Acquisitions), the major functions are performed by the SHQ.

The guidelines for procurement are provided in a document called the Defence Procurement Procedure (DPP), first compiled in 1992. It has undergone a number of revisions and the latest version was released in March 2016 and amended subsequently, latest being in 2019. The document defines the procedures to be followed for different kinds of capital procurement, the roles and responsibilities of different stakeholders and the policies

regarding domestic industry promotion through procurement. Defence procurement in India happens in a preferential manner under the following categories: Buy (Indian), Buy and Make (Indian), Make (Indian), Buy and Make, and Buy (Global). The preference order requires that the Services provide a reason for not using a higher category that involves a greater degree of indigenisation during procurement. DPP-2016 introduced a new category for procurement called 'Buy (Indian – Indigenously Designed, Developed and Manufactured)' which has been placed as the most preferred category, placing emphasis on defence industries in India.

### **Defence industries:**

The first defence industries to be set up in India were the Ordnance Factories which supplied simple arms and ammunition for the British Army's operations in the region when India was still a British colony. After independence, these factories formed the core of the state-controlled defence industry. The 1962 military defeat in the hands of China urged India to build its defence industry in order to achieve self-reliance, either through licence production or co-production arrangements with foreign suppliers. But receiving low-interest rate credits and deferred foreign currency payments for arms imports during the Cold War weakened the pressure on industrialization.

In 2001, India liberalised the defence sector and private Indian companies began to compete for defence contracts. However, private sector participation in defence procurement is still quite limited. The Ordnance Factories and state-owned Defence Public Sector Undertakings (DPSU) continue to enjoy a privileged position in the defence industrial base, partly because defence production has a steep learning curve and prohibitive costs because of its specificity. Companies that have been in the industry longer have advantages over new entrants, especially for major projects. Private industries in India hoping to enter the defence sector face conflicting incentives – while the government is vocal about enhancing indigenous capacity, the Buy/Make hierarchy is more of a curse than a boon since it imposes indigenous requirements that are costlier to meet for private enterprises. Liberalisation has not led to desired results.

Neither has defence industrialisation benefitted from technology transfers from abroad. This is attributed to the structural weaknesses in Indian defence industries- a risk-averse, state-centric, bureaucratic attitude that resists efforts at revitalization. An offset policy was formally announced in 2005. Before this, India's offsets policy had been an undefined territory that witnessed licensed production, deferred payment for imports, and countertrade, but these failed to develop India's defence industries because suppliers always withheld core technologies and countertrade mainly involved non-military goods. In the 2005 offset policy, it was stipulated that for contracts with a value of more than 300 crore INR (approximately 42 million USD), a 30% offset would be mandatory. The policy was supplemented with information on the methods of executing offsets – direct purchase of Indian defence products

and investments in India's defence industry or R&D capacity. The 2008 revision of the policy included a 'banking provision' that allowed the transfer of excess value of offset from one contract to future contracts. The 2013 revision included a multiplier to create incentives for purchase from small industries located in India. In 2016, MoD changed the threshold at which offsets become mandatory from 300 crore INR to 2000 crore INR (approximately 282 million USD). All these changes are yet to yield substantial results. Absence of an explicit intellectual property rights policy hampers technology transfers from abroad (Gupta 2008). Indian industries also lack the capacity to absorb technology.

It is possible to execute offsets by transferring technology to the Defence Research and Development Organisation (DRDO) as well. DRDO was formed in 1958 to function as India's military innovation lab, but DRDO only got a major boost in resources during the 1980s when it was asked to undertake ambitious projects like development of a fighter aircraft, main battle tank, torpedoes and missile systems. Currently, the DRDO is involved in all procurement projects to identify opportunities for indigenous technological development. DRDO has its headquarters in New Delhi, at close proximity with the Ministry of Defence. The Scientific Advisor to the Defence Minister is usually a senior DRDO scientist and has a say in the formulation of the Request for Proposal document and choice of categorisation for procurement (Buy/Buy and Make/Make) ('Buy', 'Buy and Make', or 'Make').

### **Laws governing defence procurement:**

As discussed earlier, there are no proper procurement laws in India. The procurement is governed by the regulations, rules, policies and orders. In defence, procurement and acquisition are governed by the Defence Procurement Manual (DPM) and Defence Procurement Policy (DPP).

#### **Defence Procurement Manual (DPM), 2009:**

This Manual contains principles and procedure relating to procurement of goods and services for the Defence Services, Organizations and Establishments, laid down in terms of Rule 135 of the General Financial Rules, 2005 and came into force from 1st of April 2009.

Applicability: The principles and procedures contained in this Manual are followed by all wings of the Ministry of Defence and the Defence Services, as well as all organizations and units/establishments thereunder, for procurement of goods and services, expenditure on account of which is met from the revenue heads of the Defence Services Estimates (DSE) and any other type of purchases to which the provisions are made specifically applicable.

The procedure laid down in this Manual shall also be applicable to the following:

- a. The Coast Guard Organization and Jammu & Kashmir Light Infantry (JAKLI) for procurement under the revenue heads for which budgetary allocation is made in the Demand for Grant of the Ministry of Defence (Civil);

- b. Procurement of certain capital items, as notified by the Ministry of Defence from time to time;
- c. Procurement of medical equipment, both under revenue and capital heads; and
- d. Purchases made by the Defence Services from grants placed at their disposal by other Ministries/Departments like the Ministry of Home Affairs, Ministry of Environment and Forests, etc

The procedure laid down in this Manual shall be followed for central procurement as well as local purchases under delegated financial powers of authorities in the Ministry of Defence, Service Headquarters and all subordinate authorities in the Command Headquarters, lower formations, establishments and units thereunder at all levels.

Scope: Under this manual, the term procurement means acquiring all types of goods (both scaled and non-scaled), such as equipment, stores, spares, technical literature, etc., as well as all types of services, including packing, unpacking, preservation, transportation, insurance, delivery, special services, leasing, technical assessment, consultancy, systems study, software development, maintenance, updates, conservancy, etc.

Departmental Manuals and Instructions: The provisions contained in this Manual are in conformity with other Government manuals like the General Financial Rules, Financial Regulations (Defence Services Regulations), as also other instructions issued by the Government and the Central Vigilance Commission from time to time. If any instance of variance between the provisions of this Manual and other Government Manuals comes to notice, the matter should be immediately referred to the Ministry of Defence for clarification. In such cases, however, the on-going procurement need not be stopped pending resolution of the issue, if the requirement is operationally urgent or delay is likely to have any adverse implications.

Purchases made by the Ordnance Factories are regulated by the provisions of the Material Management and Procurement Manual, 2005. DRDO also follows the procedure laid down in the Purchase Manual, 2006. Ordnance Factories Board and the DRDO had to take immediate steps to review the said Manuals and make necessary amendments, if required, to ensure that the provisions thereof are in conformity with the provisions of this Manual.

### **Procurement - objective and policy:**

Fundamental Principles of Public Buying: Every authority delegated with the financial powers of procuring goods in public interest shall have the responsibility and accountability to bring efficiency, economy, transparency in matters relating to public procurement and for fair and equitable treatment of suppliers and promotion of competition in public procurement

Procedural Propriety: The procedure to be followed in making public procurement must conform to the following yardsticks:

- a. The specifications in terms of quality, type etc., as also quantity of goods to be procured, should be clearly spelt out keeping in view the specific needs of the procuring organizations. The specifications so worked out should meet the basic needs of the organization without including superfluous and non-essential features, which may result in unwarranted expenditure. Care should also be taken to avoid purchasing quantities in excess of requirement to avoid inventory carrying costs;
- b. offers should be invited following a fair, transparent and reasonable procedure;
- c. the procuring authority should be satisfied that the selected offer adequately meets the requirement in all respects;
- d. the procuring authority should satisfy itself that the price of the selected offer is reasonable and consistent with the quality required;
- e. at each stage of procurement the concerned procuring authority must place on record, in precise terms, the considerations which weighed with it while taking the procurement decision.

Channels of Procurement: Procurement of stores will in general be done by one of the following methods:

- I. Placing demands on the Director General of Ordnance Factories for manufacture of stores in Ordnance Factories;
- II. Placing demands on:
  - a. Other Ministries of the Government of India.
  - b. State Governments, for supply from factories/ workshops/ other procurement agencies under them.
- III. Placing demands on the Industries/Factories/Statutory Corporations – whether wholly or partly financed by the State set-up for the manufacture of specific range of items in the country;
- IV. Placing demands on the indigenous trade either directly or through the Director General of Supplies and Disposals including Textile Commissioner, Mumbai;
- V. Local Purchase in respect of items which are not supplied by the central procurement authority/ organizations of the Services / Departments and stores emergently required; and
- VI. Placing demands on Defence Public Sector Undertakings and other Government Public Sector Undertakings for purchase / repair/manufacture/fabrication of items/equipment/systems/ aircrafts etc. to meet Defence Services requirements.

### **Policy Guidelines:**

Economy: Purchases of stores must be made in the most economical manner and in accordance with the definite requirements of the defence Services. Stores should not be purchased in small quantities. Periodical indents should be prepared covering the requirement for one year or more, except where for reasons of short life or for other recorded reasons it is

necessary to procure lesser quantities. Care should also be taken not to purchase stores much in advance of actual requirements, if such purchase is likely to prove unprofitable to the Government, and thus locking up of capital in stock should be minimized.

Scales: Where scales of consumption or limits of stores have been laid down by the competent authority, the officer ordering a supply should certify on the purchase order/demands that the prescribed scales or limits are not exceeded.

Splitting: Purchase order should not be split to avoid the necessity for obtaining the sanction of the higher authority required with reference to the total amount of the orders.

Open competitive tendering: When stores are purchased from contractors, the system of open competitive tender should normally be the preferred mode, except where otherwise permissible under the rules and the purchase should be made from the lowest tenderer.

### **Decentralization and delegation of powers:**

Decentralization: With implementation of the New Management Strategy (NMS) in the three Services, the Government has decentralized decisionmaking process so as to enhance efficiency and expedite decisionmaking. The procurement function has also been decentralized and most of the defence organizations undertake bulk of the central procurement and local purchase themselves. While DGS&D continues to conclude Rate Contracts for supply of general use items, service specific items are being procured by the procurement agencies of the Service concerned. It must be ensured that all procurement officers meticulously follow the laid down procedures.

Delegation of Powers: With the objective of decentralizing powers to enable effective use of resources by the actual operators, financial powers have been delegated to various authorities in the defence establishments down to the unit commanders. These powers are to be used within the framework of laid down procedures, cannons of financial propriety and amplificatory instructions. The powers so delegated also imply accountability and the CFAs must ensure that financial propriety and probity are observed in all cases.

### **Types of Procurement:**

**Capital Procurement:** As per Rule 90 of the General Financial Rules, 2005, significant expenditure incurred with the object of acquiring tangible assets of a permanent nature (for use in the organization and not for sale in the ordinary course of business) or enhancing the utility of the existing assets, shall broadly be defined as Capital expenditure. Further, as per Rule 91 (a) of the General Financial Rules, 2005, Capital shall bear all charges for the first construction and equipment of a project as well as charges for intermediate maintenance of the work while not yet opened for service. It shall also bear charges for such further additions and improvements, which enhance the useful life of the asset. Capital procurement would,

therefore, refer to procurement of all goods and services that fit the description of capital expenditure. The procedure for capital procurement is separately laid down in the Defence Procurement Procedure, 2008.

**Revenue Procurement:** As per Rule 91 of the General Financial Rules, 2005, revenue should bear all subsequent charges for maintenance and all working expenses, including all expenditure on working and upkeep of the project and also on such renewals and replacements and such additions, improvements or extensions, etc., as under rules made by the Government are debitable to revenue account. The revenue procurement, therefore, implies procurement of items and equipments, including replacement equipment (functionally similar) assemblies/sub assemblies and components, to maintain and operate already sanctioned assets in the service, the necessity of which has been established and accepted by the Government.

**Financial powers for procurement:** For Revenue Procurement, Government has delegated financial powers under revenue heads to a number of authorities in each Service/Department. Procurements involving financial implications beyond the delegated powers of the Service HQrs and Heads of the ISOs are undertaken with the approval of the Ministry of Defence.

**Indigenous Procurement:** Procurement from indigenous sources is called indigenous procurement. It is the policy of the Government to encourage indigenization, particularly in the field of defence to achieve self-reliance. Hence, indigenous firms should be given all support to produce and supply quality goods conforming to specifications. Proper loading criteria for all taxes, duties and other expenses involved in procurement of an item need to be applied to provide a level playing field to the indigenous manufacturers. Payments against indigenous procurement are made in rupee terms.

**Foreign Procurement (Import):** For such defence equipment and assets, which are of foreign origin, items required to maintain and operate these equipments may also need to be procured from suppliers abroad.

**Central Procurement:** Central Procurement (CP) is undertaken against indents resulting from planned provisioning process like the Annual Provision Review, refit planning, obsolescence planning and planned routines. CP indents normally cover the entire requirement of the item for the duration of the provisioning period.

**Local Procurement:** Local Purchase (LP) is undertaken within the LP powers of various authorities as per the delegated powers in the following circumstances:

- a. To meet the short-term, ad-hoc or urgent requirements of units/ establishments when supplies are not available through the central provisioning agency. Intimation regarding such purchases should immediately be sent to the central provisioning agency so that the latter could take the quantities procured through local purchase into account.

- b. To meet the normal requirements of units/establishments for stores which are not within the purview of central purchase organizations.

**Procurement from Ordnance Factories and Defence Public Sector Undertakings:** The following guidelines should be followed for procurement of goods/services from the Ordnance Factories and Defence Public Sector Undertakings:

1. After acceptance of necessity, all stores falling within the product range of the Ordnance Factories should be procured through the Ordnance Factories Board (OFB) by placing indents without issuing RFPs. In the case of emergent purchase, items falling within OFB's product range may be procured from trade following the tendering procedure but only after obtaining a "No Objection Certificate" from the OFB. All requests for obtaining No Objection Certificate should be addressed to the Secretary, Ordnance Factories Board.
2. Goods and Services may be procured from Defence Public Sector Undertakings by following the tendering procedure. Any item developed/ manufactured by a Defence PSU specifically for the Defence Services, with transfer of technology or through design and development, should be procured from the concerned Defence PSU only. Similarly, Defence PSUs shall be approached for providing any service, such as repairs and overhauling, if facility for providing such services has been set up by a Defence PSU exclusively for the Defence Services.
3. For induction of new equipment or procurement of new goods and services on the basis of global/open/limited tendering, RFPs should also be issued to the OFB/concerned Defence PSUs. In such cases, tender fee, EMD and PBG need not be taken from the OFB/Defence PSU.

**Purchase of goods and services without quotation:** Purchase of goods and services up to the value of Rs. 15,000/- (Rupees Fifteen Thousand) only on each occasion may be made without inviting quotations or bids on the basis of a certificate to be recorded by the Competent Financial Authority in the following format.

"I, \_\_\_\_\_, am personally satisfied that these goods/services purchased are of the requisite quality and specification and have been purchased from a reliable supplier/service provider at a reasonable price."

**Purchase of goods by Purchase Committee:** Purchase of goods costing above Rs. 15,000/- (Rupees Fifteen Thousand) only and up to Rs. 1,00,000/- (Rupees one lakh) only on each occasion may be made on the recommendations of a duly constituted Local Purchase Committee consisting of three members of an appropriate level as decided by the Competent Financial Authority. The committee will be required to survey the market to ascertain the reasonableness of rate, quality and specifications and identify the appropriate supplier.

Before recommending placement of the purchase order, the members of the committee should jointly record a certificate as under:

“Certified that we, \_\_\_\_\_, members of the local purchase committee are jointly and individually satisfied that the goods/services recommended for purchase are of the requisite specification and quality, priced at the prevailing market rate and the supplier recommended is reliable and competent to supply the goods in question.”

**Non-application of the provisions of this Manual:** Provisions of this Manual will not be applicable in the case of procurements made under delegated financial powers of certain specified authorities in the Defence Services which are exercisable by them without IFA’s concurrence during period preparatory to war, hostilities, special operations, natural calamities and disasters. Provisions of this paragraph should be invoked only as and when the aforesaid eventualities are notified by the Government. Separate orders laying down the fast track procedure to be followed uniformly by the three Services would be laid down by the Ministry of Defence.

**Cash and Carry Procurement:** Cash and carry purchase is a type of LP (local purchase) resorted to in case of extreme urgency or when the supplier is not willing to supply the required item on credit. Cash and carry powers are very limited as such procurement is made only in exceptional cases when cash payment is made from the imprest of the unit and the same is claimed from the paying authority who reimburses the amount after due audit of the transaction.

**Time Limit for Procurement & Accountability:** The effect of delay in processing and clearance of various procurement activities needs no emphasis. The decentralization of decision-making mechanism and delegation of financial powers are aimed at facilitating faster decision making and obtaining the best value for money. However, delegation of powers also implies ‘authority with accountability’. Every individual in the chain of the procurement process is accountable for taking action in a specified time period so that the requirements of the Defence Departments are met on time.

**Source and quality:**

Identification of suitable suppliers: Proper source knowledge and identification of suitable suppliers capable of meeting the product quality required by the defence departments, particularly by the Defence Services, are vital functions for ensuring procurement of quality goods. Providing equal opportunity and ensuring fair play are also important requirements in any procurement process so as to achieve transparency. Hence, the selection and registration of firms, their performance appraisal and classification must be clearly spelt out and properly disseminated.

**Registration of Firms:** Registration by the Central Procurement Agencies:

The detailed procedure for registration of firms is given in Joint Services Guide on Assessment and registration of Suppliers for Defence (JSG: 015: 03:2007) published by the Directorate of Standardization, Department of Defence Production, Ministry of Defence. JSG is an enabling document which serves as a guide for procurement agencies to formulate guidelines for registration of vendors. The publication is available on DGQA website [www.dgqadefence.gov.in](http://www.dgqadefence.gov.in).

Registration by Agencies at the Command and Other Levels: Apart from the central procurement agencies at the Services Headquarters, firms should also be registered by the Command Headquarters, Depots, Workshops and Naval Dockyards, etc.,

Registration at the Unit Level: It would not be necessary to register the firms at the unit level for the purpose of carrying out local purchase. However, the reputation, capacity and credibility must be ascertained before obtaining quotations from or placing supply orders on a particular firm.

Scrutiny of the Credentials of the Firms: It is essential that the credentials of the firms applying for registration, including their financial status, the manufacturing and quality control facilities, the business ethics and their market standing are thoroughly scrutinized before registering them as an approved source of supply.

Inter-Services and Inter-Departmental Acceptability of Registration: A firm registered with any department of the Ministry of Defence, the Services or OFB or the Inter-services organizations, may be considered as a registered firm for procurement by other departments of the ministry or the other services, for the same range of products/goods/services for which the firm is registered with any of the aforesaid organizations.

Registration of Suppliers and Service Providers: The Joint Services Guide on Assessment and registration of Suppliers for Defence (JSG: 015: 03:2007) is applicable mainly to registration of manufacturing firms as suppliers. The guidelines and procedures laid down therein may, however, also be applied, mutatis mutandis, by the Registering Agencies to other suppliers and service providers till such time as a separate procedure is laid down by DGQA.

**Criteria for Assessment of Performance:**

Performance of the registered firms must be reviewed by the procurement agencies periodically and reported to the Registering Agency. While the detailed guidelines in this regard are contained in DGQA Publication JSG:015:03 – 2007, the general criteria for assessing the performance of the registered firms are as follows:

- a) Quality:

Quality has to be assessed from the inspector's report as well as the feedback from the actual users.

b) Delivery:

Delivery compliance has to be assessed from the delivery data against purchase orders placed on the firm. The purchaser could generate the data from the computer records to determine the percentage of orders in which delivery was completed within the original delivery date as per the contract/supply order.

c) Price:

Price competitiveness of a firm has to be assessed against its ability to secure orders on competitive basis. Orders secured as percentage of quotes should indicate the price competitiveness of the supplier. This data can be generated from the computer records.

d) Response:

The response analysis of the firms could be carried out in terms of number of quotes submitted against the number of RFPs sent to them. Computer generated data for quotes received as a percentage of RFPs sent could be one of the valid criteria for response analysis.

e) Product Support:

Product support record of a firm may be determined on the basis of response to enquiries for spare parts and maintenance services for the equipment originally supplied by that firm.

Assessment of Technical and Financial Capabilities: The technical and financial capabilities of the firms, including their past performance, must be carefully evaluated and verified by a Board of Officers constituted by AHSP/Registering Agencies for the purpose of considering registration/renewal of registration. The Registering Agency may also co-opt a representative of the User. IFA may be associated with assessment of the financial capabilities of the firm, if considered necessary by the CFA. The format for preparing Verification Report of Vendor capacity/capability has been given in Form DPM-5.

**Removal from the List of the Approved Firms:**

Removal from the List: Whenever a firm is found lacking in performance in terms of response, delivery compliance, capacity, quality standards, ethics or any other valid reason, the firm may be removed from the list by the registering authority after giving notice of proposed removal to the firm. Besides, there may be registered firms which may have ceased to exist or may have been acquired by or merged with another firm, may have switched over to other sectors of business operation or indulged in unethical business practices and influence peddling. Such firms should be removed from the list of approved vendors after giving them notice of the proposed removal.

Effect of Removal from the List: Whenever a firm is removed from the list of approved vendors, its registration stands cancelled. Such removal must be communicated to all other registering and procuring agencies so that no further business relations are maintained with such firms.

**Ban on dealings with a firm:** When the misconduct of a firm or its continued poor performance justifies imposition of ban on business relations with the firm, this action should be taken by the appropriate authority after due consideration of all factors and circumstances of the case and after giving due notice.

**Specifications:**

Items bought by the defence department, particularly the defence services, must be manufactured as per or conforming to the specifications. The specifications are the detailed qualitative requirements of the item being procured and should indicate the material composition, physical, dimensional and performance parameters, tolerances, if any, manufacturing process where applicable, test schedule, preservation and packing etc. AHSP/ Specification promulgating authority should forward copies of specification/amendments to all the concerned procurement agencies periodically. Various types of specifications relevant to the defence items are as follows:

- **PAC Specifications:**  
These are available only with the proprietary firms and are protected by the intellectual property right. Hence, PAC specifications are normally not available with the purchaser and firm's certificate of quality is accepted. However, essential characteristics required for inspection should be available with the procuring and inspecting agencies.
- **Branded Product:**  
The specification for branded commercial product is not available with the purchaser or the inspecting agency and these are to be accepted on the firm's guarantee.
- **Industrial Specification:**  
There are standard industrial specifications like the IS, BS, DIN and GOST available for sale in the market. In the case of medical stores standard specifications are issued by WHO, FDA, CE etc. Every procuring and inspecting agency should acquire such specifications for reference to ensure quality standards of the product being procured.
- **Defence Specifications:**  
There are defence specifications for specialist items for use by the defence departments, particularly the Defence Services. These are Joint Services Specification, Milspecs, etc. Copies of such specifications should be available with the procuring agency, authority and the AHSP.
- **Indigenized Item:**

The manufacturing agency, QA agency, DRDO and Service Headquarters, involved in the indigenization efforts often successfully indigenize some items as import substitute. In such cases, the specification including the drawing and other details are formulated by these agencies in consultation with the manufacturing firms/QA agency/Design agency/Service HQrs, as the case may be, to guide future production. Such specifications should be available with the purchase agency as well as the inspecting authority so as to ensure conformity with the required quality standards of the items being supplied.

- **Ad-hoc Specifications:**

There are items for which neither industrial nor defence specifications are available. In such cases, the indenter must indicate the general parameters, normally the dimensional and performance parameters to enable procurement and inspection. Such adhoc specifications must be broad enough to permit wider participation by the suppliers and should not be restrictive so that adequate competition is not obviated.

- **As per Sample:**

There are occasions when items, normally PAC products, cannot be procured from the original manufacturer and have to be procured from another manufacturer as per sample in the absence of detailed specifications or drawing. For such items the supplier prepares detailed specification as well as the drawing. The purchaser and the inspecting authority should acquire such specifications and drawings and retain with them to guide future production and inspection.

- **Common Use Items:**

There are a large number of items in use by the defence departments and defence services, which are common-use items, freely available in the open market. As in the case of ad-hoc specifications, specifications of common use items should also be broad enough to permit wider participation by the suppliers and should not be restrictive so that it does not pre-empt adequate competition.

### **Procurement of goods and services from foreign countries:**

Import of spares and equipment from the revenue budget constitutes a sizeable portion of the overall defence expenditure. The Defence Services have been acquiring latest state-of-the-art equipment and weapon systems from various foreign countries. To ensure their serviceability at all times, it is essential that the spares and equipment support is provided at the right time, ensuring value for money spent. Hence, it is of paramount importance to lay down comprehensive procedures and policies in respect of foreign procurement in line with international procurement practices for implementation by all concerned with the process. While proposals for procurement of goods and services are also to be processed generally as per the procedure laid down in Chapter 5 of the Manual, some special features of procurements from abroad are explained in this part.

**Indents:** Information to be given in the Indents:

The process of procurement of stores commences only on receipt of indents, duly approved and authenticated by the competent authority. Every indent should contain the following information:

- a. Complete details like part numbers and specifications of the equipment indented.
- b. A realistic estimate of the cost with basis of assessment so that back references to the indenters is avoided.
- c. Where a demand is being indented for the first time, an indication to this effect.
- d. When an item has been purchased before, the indent should indicate the price at which it was purchased and also give the contract /SO number and date and the source of supply.
- e. Names of likely sources of supply, if available.
- f. Reference to the page No. of publication where the item is described.
- g. Code Head to which the expenditure is debitible.
- h. Consignee depot.
- i. Desired Delivery Schedule.
- j. Normally, items of similar or allied nature should be indented in one indent.

Documents etc. to be furnished along with the Indents: Every Indent should be accompanied by the following in the form of documents/records/inputs or endorsement in the case of automated inventory management system:

- a. Schedule of Requirement of the indent
- b. Complete Technical specifications of the items
- c. A certificate of provision of funds to meet proposed expenditure
- d. A copy of the financial concurrence to the indent
- e. A copy of CFA's approval of the indent
- f. A certificate of necessary import clearance, wherever applicable
- g. Proprietary Article Certificate (PAC) given in the prescribed format, where applicable
- h. Priority of the indent, i.e. whether normal or urgent.

### **Registration of Foreign OEMs and Vendors:**

Procedure for Registration: At present foreign OEMs and vendors are being registered by the Service Headquarters and Headquarters of other Departments. Till such time as common guidelines are formulated, these Registering Authorities would continue to register foreign OEMs and vendors as per the existing procedure followed by them.

Registration of Authorized Vendors/Stockists of Foreign OEMs by the Service Headquarters etc.: Widening of the foreign vendor base is a multi-disciplinary and techno-commercial exercise. Registration of foreign OEMs and their authorized vendors/stockists is to be

undertaken as per laid down guidelines, with the help of the Defence Attachés and Commercial Counselors in the Indian Embassies/High Commissions abroad.

### **Vendor Selection**

Prospective vendor(s) to be indicated in the Indent: Details of registered vendors and likely sources of supply are to be indicated in the indent. Vendors already registered with Army, Navy, Air Force, Ordnance factories, DRDO, DGS&D and Defence PSUs for similar items will be treated as registered vendors and may be considered for issue of Limited Tender Enquiry. The registering agency should include all foreign vendors registered with different departments of MOD. However, specific needs of the departments/wings are to be kept in mind and complied with.

Selection of vendor: A careful selection of the authorized and registered vendors is to be made for the range of spares listed in the Schedule of Requirement by the Procuring Agency for the purpose of issuing the RFP. Widening of the foreign vendor base is a multi-disciplinary and techno-commercial exercise. Registration of foreign OEMs and their authorized vendors / stockists should be undertaken as per laid down guidelines with the help of our Defence Attaché and Commercial Counselors in our Embassies / High Commissions abroad.

**Mode of Tendering:** The mode of tendering should be decided with regard to factors like, whether the stores / equipment are general purpose or specialized, likely and known sources of supply, expected competition, delivery schedule desired, urgency of requirement, etc.. In foreign procurements, one of the following methods of inviting tenders can be adopted.

- a. Global tenders Enquiry
- b. Limited tenders Enquiry
- c. Single tender Enquiry without Proprietary Article Certificate (PAC)
- d. PAC Enquiry

### **Processing of procurement proposals and CFA's approval:**

Processing of proposals: The manner of processing of proposals for procurement of goods and services from foreign sources and the procedure for obtaining CFA's approval are the same as mentioned in Chapter 5 of this Manual. Special attention, however, needs to be paid to preparation of Request for Proposal (RFP) as mentioned in the following paragraph.

### **Request for Proposals (RFP):**

RFP format: The RFP is a very important document and should be a true and complete reflection of the indent. A standard format of RFP is given in Appendix 'C'. The goods/services required, bidding procedures and contract terms are prescribed in the RFP. Special attention should be paid to the following aspects while preparing the RFP:

1. Description of the required goods and services
2. Date and time of opening of the tenders
3. Desired period of validity of offers
4. Technical specifications
5. Inspection clauses
6. Special Conditions of Contract
7. Quality assurance requirements
8. Source of supply in case of vendors/stockists
9. Mode and terms of delivery
10. Delivery Schedule
11. Mode of payment and the paying authority
12. Terms of payment and paying authority
13. Evaluation parameters
14. Performance bank guarantee, if applicable
15. Arbitration Clause
16. Liquidated damages clause
17. Advance payments
18. Installation, commissioning and AMC, if applicable
19. Life time product support for spares, maintenance advice, defect investigation and information on product upgrade
20. Repeat Order and Option Clause
21. Risk and Expense Clause
22. Apportionment of Quantity
23. Acceptance of excess or short deliveries
24. Force Majeure
25. Claims
26. Applicability of Laws

**Processing of Proposal after CFA's approval:**

1. Issue of Request for Proposal (RFP):

The decision regarding mode of tendering to be adopted in a particular case is required to be taken while seeking CFA's approval. The guidelines given in Chapter 4 of this Manual (which is discussed in defence contracts and tenders) regarding publicity and dispatch of RFPs should be followed in foreign procurement cases also. As per those guidelines, the RFPs to foreign vendors can be sent by registered post. In addition, these may be sent by fax or e-mail also, which should, however, be followed by a copy by registered post. RFPs will not be given to Indian agents of foreign firms. However, if any foreign firm has its branch office in India, RFPs can be given to it. Meticulous records of mode of issue/dispatch of RFPs should be maintained.
2. Extension of Tender Opening Date, Clarification/ Amendment of Tender Documents and Modification/Withdrawal of Bids.

3. Resultant Single Vendor Situation.
4. Comparative Statement of Tenders:

On receipt of all accepted tenders, the purchase cell should collate them in the form of a Comparative Statement of Tenders (CST). The CST should be exhaustive and must include all details given in the quotations. Deviation from the tender documents is to be brought out in the CST. Last Purchase Price (LPP), wherever available, should be indicated for a fair comparison of the offered prices. CST should be vetted by the IFA with reference to original quotations, indents and other supporting documents, where financial powers are to be exercised with the concurrence of integrated finance. The purchase officer should sign the CST.

5. Exchange Rate:

Exchange Rate applicable for various currencies prevailing on the date of opening of commercial bid as indicated in the RFP for two bid cases and date of bid opening for single bids will be taken into account for working out the prices in Rupee Terms for comparison.

### **Commercial Negotiations and Conclusion of Contract/Supply Order:**

Commercial Negotiations: The procedure laid down in Chapter 5 of this Manual for constitution of the CNC, commercial negotiations, determining price reasonableness and recording of minutes of CNC would be followed for foreign procurement also.

Obtaining best offer through Fax: In case of foreign firms, which do not have their regional offices in India, it may not be possible for their representatives to come for CNC meetings except for high value items. In such cases, CNC/CFA may obtain the best revised offer with all terms clarified from the lowest bidder through fax before finalizing the price.

Action by the CNC: CNC recommendation is to be clear and unambiguous. A counter offer may be made to the L1 firm only by the CNC. In case the CNC/CFA is unable to conclude the negotiations satisfactorily, it may refer the case to the next higher CFA for conducting negotiations. The minutes of all CNC meetings should be meticulously maintained and signed by all members.

Acceptance of Cost Over Estimates: When it is proposed to accept an offer higher than the sanctioned indent price which may be based on last purchase price or assessed price, the empowered CFA may accept such an offer within delegated powers provided the increased amount is within his delegated powers and after recording reasons for doing so. Whenever the increased amount exceeds the financial powers of the CFA, approval of next higher CFA, within whose delegated powers the case falls, should be taken.

Acceptance of an offer other than L1: In no case, an offer other than the lowest would be accepted.

Determination of L1 on Entire Package: In case an RFP contains a large number of items of spares and it is indicated in the RFP that L1 will be decided based on the package price, the L1 offer should be determined on the basis of the cash outflow for the entire package. After determining L1 in this manner, negotiations should be held with that firm in respect of items for which rates quoted by the firm are higher than those quoted by other vendors. In such cases, negotiation with L1 vendor would have to be done with reference to the lowest bid for that item (items). In case the L1 vendor does not reduce his price reasonably for high value item(s), possibility of concluding a fresh contract by issuing a separate RFP for such item(s) may be considered keeping in view the operational requirements.

Purchase Decision: The CFA/Committee CFA must consider all aspects of the case including reasonability of offered prices, quoted terms and conditions, technical evaluation report etc. It has to be ensured that proper policies and procedure have been followed at various stages of procurement for determining L1 firm. The financial implication should be considered as the all-inclusive cost to the user on delivery to the designated consignee. Purchase decisions should be taken through a formal written order.

Signing of the Contract/Placement of Supply Order: The draft contract, duly vetted by the IFA, where required as per delegation of financial powers, should be put up for CFA's approval before concluding the contract with the vendor. The contract/supply order should be signed by an officer authorized to do so. The contract /supply order should be signed on each page by the authorized representative of the vendor and duly acknowledged as accepted.

Amendment to Contract: All amendments to contracts, which have financial implications, including short closing and delivery period extensions with or without imposition of liquidated damages, should be invariably approved by the CFA, and also in consultation with the IFA, wherever the original contract was concluded with the concurrence of integrated finance. Amendments affecting delivery period should not be made as a matter of routine. All cases for extension of delivery period should be processed with imposition of liquidated damages and other penalties as per the contract, except for the cases where the contract provides for waiving off of the liquidated damages on account of justified reasons.

Re-tendering: Re-tendering may be recommended by the CNC with caution and approved by the CFA with the concurrence of the IFA, wherever applicable, under the circumstances mentioned in chapter-4 of this manual.

Standard Conditions of Contract - Foreign Procurement: The Standard conditions of contract will apply to all contracts made/supply orders placed as per the procedure laid down in this Manual, except to the extent that any clause thereof has been modified in any particular contract/supply order.

**INCO Terms:** Since 1936 INCO terms are used in International Documentary Credits in respect of mode/style of delivery of goods, which have been recognized as practical, cost

saving tools, used worldwide for smooth international trading practice. The RFP should indicate the applicable INCO terms for delivery of goods and incorporate them in the contract to avoid disputes at a later date.

### **Defence Procurement Policy**

While the MoD takes its time in deciding on the ‘strategic partnership model’, it is business as usual in so far as defence procurement is concerned. The DPP 2016 (subsequently amended), which regulates capital procurements, requires preference to be given to procurement from Indian sources. Each procurement programme has to be placed under one of the categories mentioned in the DPP, which are arranged in hierarchical order of descending preference. This implies that a procurement programme can be placed in one of the categories lower down in the hierarchy only if it can be demonstrated while seeking approval-in-principle to commence the procurement process that it is not feasible to place it under any other category that ranks higher in the hierarchy. The hierarchy consists of the following categories:

- Buy (Indian—Indian Designed, Developed and Manufactured[IDDM])
- Buy (Indian)
- Buy and Make (Indian)
- Buy and Make
- Buy (Global)

Apart from these five categories, there is another category of ‘Make’ projects which involves indigenous design, development and manufacture of prototypes of equipment and other systems identified by the MoD. The provision of ‘Make’ category of capital acquisition in Defence Procurement Procedure (DPP) is a vital pillar for realising the vision behind the ‘Make in India’ initiative of the Government, by fostering indigenous capabilities through design & development of required defence equipment/product/systems or upgrades/ sub-systems/components /parts by both public and private sector industry/organization in a faster time frame.

‘Make’ Procedure has following two sub-categories:

- i. Make-I (Government Funded):  
Projects under ‘Make-I’ sub-category will involve Government funding of 90%, released in a phased manner and based on the progress of the scheme, as per terms agreed between MoD and the vendor.
- ii. Make-II (Industry Funded):  
Projects under 'Make-II' category will involve prototype development of equipment/ system/ platform or their upgrades or their sub-systems/ sub-assembly/assemblies/ components, primarily for import substitution/innovative solutions, for which no Government funding will be provided for prototype development purposes.

In Feb 2018, Government has notified a separate, simplified procedure for sub-category 'Make-II' which has many industry friendly provisions.

The 'Make-II' projects listed on the website have been divided into two lists:

- i. List-1: contains the potential 'Make' projects for which 'Approval -in-Principle(AIP)' has been accorded as per new 'Make-II' procedure and are being progressed for accord of Acceptance of Necessity (AoN) by SHQs.
- ii. List-2: contains the projects which are at exploratory stages & the process of preliminary Feasibility study is under way.

### **Defence Procurement Procedure (DPP)-2016:**

Defence Procurement Procedure (DPP)-2016, which has come into effect from April 2016, focuses on institutionalising, streamlining and simplifying defence procurement procedure to give a boost to "Make in India" initiative of the Government of India, by promoting indigenous design, development and manufacturing of defence equipment, platforms, systems and sub-systems. The key features of revised DPP, 2016 promoting 'Make in India' inter alia include:

- a) A new category of procurement 'Buy {Indian-IDDMM (Indigenously Designed, Developed and Manufactured)}' has been introduced in Defence Procurement Procedure-2016 and the same has been accorded top most priority for procurement of capital equipment.
- b) Preference has been accorded to 'Buy (Indian)' and 'Buy and Make (Indian)' categories of capital acquisition over 'Buy (Global)' & 'Buy & Make (Global)' categories.
- c) Requirement of Indigenous content has been enhanced / rationalised for various categories of capital acquisition.
- d) The 'Make' Procedure has been simplified with provisions for funding of 90 % of development cost by the government to Indian industry and reserving projects not exceeding development cost of Rs. 10 crore (government funded) and Rs. 3 crore (industry funded) for MSMEs.

### **Applicability of DPP, 2016:**

- The DPP contains policies and procedures for procurement and acquisition from the capital budget of the Defence Ministry in order to modernise the Armed Forces including the Coast Guard.
- The DPM contains principles and procedures relating to procurement of goods and services for the Defence Services, organisations and establishments.

### **Flaws in DPP 2016:**

- Offset requirements under the DPP are not helping it achieve its goal. (Offsets are a portion of a contracted price with a foreign supplier that must be re-invested in the Indian defence sector, or against which the government can purchase technology.)

- Besides, the recent Rafale controversy is the symptom of a larger underlying problem in decision-making, transparency and consistency of public policy.
- The DPP even seems to indicate that the foreign supplier has complete discretion on choice of the Indian offset partner (IOP). If assumed it to be true, it would result in a moral hazard at the outset and, by extension, would permit the Indian government to avoid public procurement rules when taxpayer money is routed through a foreign supplier towards “offsets”.
- While the procurement policy recognizes the need for domestic private partnership, it does not mandate a fair and diverse procurement process for offsets. Given the large contract values involved, this makes it likely that foreign suppliers will partner with just one or two large industrial groups to discharge their offset obligations.
- Lack of transparency in procurement contracts is another big drawback.

### **Reviewing Defence Procurement Procedure:**

Raksha Mantri ShriRajnath Singh has approved setting up of a Committee under the Chairmanship of Director General (Acquisition) to review the Defence Procurement Procedure (DPP) 2016 and Defence Procurement Manual (DPM) 2009. The Committee will revise and align the procedures with the aim of ensuring seamless flow from asset acquisition to life cycle support.

The DPP 2016 and DPM 2009 have been due for revision. Aligning the procedures will ensure seamless flow from asset acquisition to life cycle support and strengthen the ‘Make in India’ initiative of the Government. Apart from DG (Acq) 11 other members, not below the rank of Joint Secretary/Major General equivalent, are part of this high-level committee.

The terms of reference include:

- Revising the procedures to remove procedural bottlenecks and hasten acquisition;
- Align and standardise the provisions to optimise life cycle support for equipment,
- Simplify policy and procedures to facilitate greater participation of the industry and develop robust Defence industrial base.
- Wherever applicable, examine and incorporate new concepts, such as life cycle costing, life cycle support, performance based logistics, lease contracting, codification & standardisation.
- Setting up provisions to promote Indian start-ups and Research & Development.
- Any other aspect which will contribute towards refining the acquisition process and support the ‘Make in India’ initiative.

The Committee has been given six months to submit its recommendations.

Achievements under DPP: The following achievement have been made by the Government under this programme:-

- Defence Acquisition Council (DAC) accorded approval of 136 capital procurement cases at an estimated cost of Rs. 4,00,714/- crore during the last two financial years (2014-15 and 2015-16) and current year 2016-17 (upto January 2017), out of which 96 cases involving Rs. 2,46,417/- crore are under the 'Buy (Indian-IDDMM)', 'Buy (Indian)', 'Buy & Make (Indian)', 'Make' categories.
- 141 contracts with total value of Rs. 2,00,010/- Crore (approx.) were signed during the last two financial years (2014-15 and 2015-16) and current year 2016-17 (upto December 2016), out of which 90 contracts involving a value of Rs. 83,344/- crore (Approx) were signed with Indian vendors.
- Capital expenditure of Rs. 1,75,420/- Crore (approx.) was incurred on purchase of defence items for Armed forces during the last two financial years (2014-15 and 2015-16) and current year 2016-17 (upto December 2016), out of which of Capital expenditure of Rs. 1,05,030/- Crore (approx.) was incurred on purchase from Indian vendors.

The responsibility of quality assurance of raw material used in defence products rests with Organizations such as Ordnance Factory Board (OFB), Defence Public Sector Undertakings (DPSUs), Directorate General of Quality Assurance (DGQA), etc. At present, there is no proposal to open any new lab in the country to check / investigate the defence products. However DGQA, DRDO, OFB, DPSUs and Armed forces already have their own laboratories or test facilities at various locations across the country to check / investigate the defence products. These agencies have offered some of their test facilities to private sector, details of which are available on their respective websites.

### **Other initiatives taken by the Government in defence procurement:**

#### **Defence production policy, 2018:**

Objective:

- To mark India's position among the top defence production countries in the world through a focus on self-reliance.
- To change India's position as the largest importer of arms in the world.

Features:

#### ***Indigenous Defence Production:***

- It targets 2025 as a year for becoming self-reliant in 13 weapons platforms. It includes fighter aircraft, warships, tanks, missiles, and artillery, which constitute the bulk of India's imports.
- It plans to develop 2 defence production corridors.

*PPP Model:*

It aims at increased productivity and innovation, which implies, calls for enhanced participation of MSMEs, start-ups and other players from the private sector in the defence industry and creation of defence innovation hubs.

*Liberal Policy:*

- The policy would liberalise licenses that will be provided to defence industries.
- Unnecessary requirements for renewal of licenses will be withdrawn.
- Companies with good track record will be given priority.
- Also liberalises the FDI regime in the defence sector. It has permitted 74% FDI in “niche” technologies.

*Skill development:* It aims at strengthening the existing defence PSUs through skill development and overall program management.

*Overseas marketing:* The policy seeks to integrate technologies from Ordnance Factory Board, Defence PSUs, and private players by establishing Defence Export Organization in partnership with the industry. This will enable overseas marketing of domestically manufactured goods.

**Strategic Partnership Policy (SPP):**

The GOI has started the acquisition of defence infrastructure under the newly adopted Strategic Partnership Policy. It intends to promote Indian Private sector participation in defence manufacturing. It was approved by Defence Acquisition Council (DAC) in 2017 and placed in the DPP, 2016 titled as ‘Revitalising Defence Industrial Ecosystem through Strategic Partnerships’. The concept of this model was first suggested by the Dhirendra Singh Committee. The partnership model broadly involves creating two separate pools of Indian Private Companies and foreign Original Equipment Manufacturer (OEMs).

The policy aims to promote joint ventures between the indigenous private sector and global defence majors. These few Indian private companies will be designed as Strategic Partners (SP) that would assume the role of system integrators and also lay a strong defence industrial foundation. The Government will co-opt them for ‘buy and make’ and Government-to-Government procurement programmes. The selected SPs by the defence ministry will tie up with foreign original equipment manufacturer (OEM) to build weapon platforms in India under 4 segments – fighter aircrafts, helicopter, submarine, and armoured fighting vehicles or main battle tanks. The government aims to achieve a turnover of Rs 1,70,000 Crore in military goods and services by 2015.

#### Significance:

- It will boost self-reliance by encouraging the indigenous defence industry and aligning the defence sector with the 'make-in-India' initiative leading to a reduction in dependence on imports.
- Help enhance competition, increase efficiencies, facilitate faster and more significant absorption of technology.
- Create a tiered industrial ecosystem, ensure the development of a wider skill base, trigger innovation and enable participation in global value chains as well as promote exports.
- It can bridge the long-standing trust gap between Indian Private Sector and the ministry of defence.
- Streamlining procurement as dependence on foreign players causes a delay in procurements and at times substandard quality is provided by them, there are issues regarding getting the spare parts too.

#### **Challenges in Indian defence procurement:**

The identification of risks in defence procurement has assumed greater importance since the end of the Cold War because of globalisation of defence production. Globalisation in the 21st century exposes the costs of internal arming- the diversion of resources from activities which voters may have greater preference for (health, education, infrastructure), the inefficiencies of industrial protectionism, and the comparative advantage of importing weapons when they are of superior quality.

There exist several remarkable theories that help us to understand the challenges of defence procurement. For example, the agency theory posits the challenge of public procurement (and defence procurement is a form of public procurement) as one where the incentives for the agent are not sufficient to make them act in the interests of the principal (Rogerson 1991; Reichelstein 1992; McCue and Prier 2008)<sup>42</sup>. Transaction cost economics assumes that there are non-pecuniary costs to contracts and some of the parties in a contract behave opportunistically, selfishly and with guile, which is the reason for problems in contract negotiation and execution (Williamson 1979; Oudot 2010)<sup>43</sup>. In a more general sense,

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<sup>42</sup> Rogerson, W. P. 1991. "Incentives, the Budgetary Process, and Inefficiently Low Production Rates in Defence Procurement." *Defence Economics* 3 (1): 1–18. doi:10.1080/10430719108404711; Reichelstein, S. 1992. "Constructing Incentive Schemes for Government Contracts: An Application of Agency Theory." *The Accounting Review* 67 (4): 712–731; McCue, C., and E. Prier. 2008. "Using Agency Theory to Model Cooperative Public Purchasing." *Journal of Public Procurement* 8 (1): 1–35. doi:10.1108/JOPP-08-01-2008-B001.

<sup>43</sup> Williamson, O. E. 1979. "Transaction-Cost Economics: The Governance of Contractual Relations." *The Journal of Law and Economics* 22 (2): 233–261. doi:10.1086/466942.

defence procurement occurs in imperfect market conditions, if one considers the procurement of non-standardized, technologically complex items, sometimes unique to military use.

Since the market cannot provide full information, generate competition, and mediate on the price, the government has to regulate and create a market, sometimes choosing to even take control of production, besides being a buyer (Keisler and Buehring 2005)<sup>44</sup>. The research on information asymmetry is also relevant for studying the challenges of defence procurement (Tirole 1986; Laffont and Martimort 2009)<sup>45</sup>. Research on organisational behaviour (Manohara 1998; Franck and Udis 2017)<sup>46</sup>, public choice theory (Cowen and Lee 1992)<sup>47</sup>, and industrial policy research (Pugh 1993; Hall, Markowski, and Thomson 1998)<sup>48</sup> have been used to identify the challenges of defence procurement.

A variety of challenges have been identified over time and these can be broadly categorized into three types of risks – technological, contractual, and organisational. Technological risks refer to the rapid rate of innovation and technological change in the face of relatively low technical capabilities and inability to precisely anticipate or comprehend futuristic requirements, engineering, and design issues. Contractual risks involve awarding a contract in a situation of incomplete information, opportunism in the formulation and enforcement of contracts and inefficiencies resulting from renegotiation of contracts. Organisational risks refer to organisational structure and management that affect procurement performance.

A method to identify the most critical challenge in procurement to inform policymaking and procurement reform is risk analysis, and it is relatively new and less well known. Risk analysis involves identifying objectives pursued in the procurement process, determining

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Oudot, J.-M. 2010. "Performance and Risks in the Defense Procurement Sector." *Journal of Public Policy* 30 (2): 201–218. doi: 10.1017/S0143814X10000073.

<sup>44</sup> Keisler, J. M., and W. A. Buehring. 2005. "How Many Vendors Does It Take to Screw down A Price? A Primer on Competition." *Journal of Public Procurement* 5 (3): 291–317. doi:10.1108/JOPP-05-03-2005-B001.

<sup>45</sup> Tirole, J. 1986. "Procurement and Renegotiation." *Journal of Political Economy* 94 (2): 235–259. doi:10.1086/261372.

Laffont, J.-J., and D. Martimort. 2009. *The Theory of Incentives: The Principal-Agent Model*. Princeton: Princeton University Press.

<sup>46</sup> Manohara, C. 1998. "Defence Procurement and Industry Policy - A Singapore Perspective." *Defence and Peace Economics* 9 (1–2): 119–136. doi:10.1080/10430719808404897.

Franck, R., and B. Udis. 2017. "Quarrelsome Committees in US Defense Acquisition: The KC-X Case." *Defence and Peace Economics* 28 (3): 344–366. doi:10.1080/10242694.2015.1073488.

<sup>47</sup> Cowen, T., and D. Lee. 1992. "The Usefulness of Inefficient Procurement." *Defence Economics* 3 (3): 219–227. doi:10.1080/10430719208404730.

<sup>48</sup> Pugh, P. G. 1993. "The Procurement Nexus." *Defence Economics* 4 (2): 179–194. doi:10.1080/10430719308404758.

Markowski, S., and P. Hall. 1998. "Challenges of Defence Procurement." *Defence and Peace Economics* 9 (1–2): 3–37. doi:10.1080/10430719808404892.

performance indicators corresponding to the objectives (i.e. the performance parameter), obtaining statistics on the indicators specified and finally explaining the variation in the statistics. Since a performance parameter is associated with the risks, it is possible to identify the probability of occurrence and impact of risks on the procurement performance parameter. Demonstration of the method can be found in government publications of the USA and the UK. Since 2013, the Department of Defence in USA has been publishing an annual report titled Performance of the Defence Acquisition System which calculates cost overruns, delays, and the fulfilment of technical objectives and makes it possible to analyze the severity of different challenges in procurement. In the UK, the National Audit Office publishes an annual Major Projects Report that provides information on equipment acquisition. The report discusses cost and time schedules, the difference between projected and actual values in these categories and provides explanations for the performance. Oudot (2010)<sup>49</sup> uses risk analysis to identify procurement challenges for the French defence sector.

India provides a fascinating background for studying defence procurement challenges. With the fifth largest military expenditure in the world, India needs little justification in terms of significance for defence economists. India is engaged in military conflicts with Pakistan and China to protect its territory and therefore wishes to achieve self-sufficiency in arms procurement, but at the same time, it must contend with an unfulfilled developmental agenda that makes it very hard to invest in military research and specialised production.

### **Categorizing contracts according to sources of risk:**

CAG defence audit reports provided the reason for delay in 76 of the 88 contracts. In cases where there were multiple reasons for delay. The reasons for delay were categorized into three sources of risk – technological, contractual, and organizational.

A contract is said to have faced ‘technological challenges’ when the delay was due to the lack of technological skills, resources, and infrastructure relative to the technological complexity of the project, or because of changes in design. A contract is said to have faced ‘contractual challenges’ if the schedule performance was affected by delays in negotiation and writing of contracts, compliance to design requirements, lack of response from the supplier, non-adherence to contract by supplier, or non-enforcement of contracts. A contract is said to have faced ‘organizational challenges’ when there were delays in authorization, delegation of tasks, coordination, or because of ambiguity of regulations and procedures, conflicting reports from different executive branches involved in the project, or even organizational capacity (overworked and understaffed organizations).

**Risks according to probability:** Technological challenges are the most probable of defence procurement challenges in India when discussing delays in procurement.

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<sup>49</sup> Oudot, J.-M. 2010. “Performance and Risks in the Defense Procurement Sector.” *Journal of Public Policy* 30 (2): 201–218. doi:10.1017/S0143814X10000073.

**Risks according to impact:** Although technological risks are the most probable cause for delays, the observations in a study show the worse schedule performance (delays greater than 300%) were affected by contractual and organizational risks. Contractual risks emerge as the source of risk having the greatest impact on performance. Contractual risks also become more probable than technological risks when delays are greater than 100%. The average delay caused by contractual risks is much higher than any other source of risk, although organizational risks follow closely behind.

**Risks according to phases of procurement:** Rogerson (1994)<sup>50</sup> divides the life cycle of a defence procurement program into three phases – design, which is associated with specification of requirements and multiple firms pursuing competing designs; sole-source selection, where firms submit their plans, bid for the contract, and the negotiation of the contract with the vendor takes place; and production, the phase in which production, supply and sometimes renegotiation of the contract takes place.

The study on some selected audit reports showed that the, delays occurred mostly in the production phase (48 contracts), followed by the design phase (24 contracts), and finally the selection phase (16 contracts). Technological risks are prevalent in the design phase (19 of 24 contracts) and organizational risks in the selection phase (11 of 16 contracts). In the production and supply phase, technological and contractual risks help to explain a high share of delays.

**Risks according to partner agency:** Partner agency here refers to the supply-side organization with whom the Ministry of Defence signed the contract. The various supply-side organizations are the Defence Research and Development Organisation (DRDO), the government-owned defence companies (defence public sector undertakings or DPSUs), privately owned Indian defence companies (Indian private company), and foreign firms. Of the 76 contracts (from above mentioned audit reports) where a reason for delay was mentioned, 10 involved DRDO on the supply-side, 35 involved DPSUs, 23 involved foreign firms, and 4 involved Indian private companies.

Technological risks prominently feature in contracts with the DRDO, India's research and development organization (all 10 DRDO contracts). Technological challenges are also prominent in the contracts with defence public sector companies (26 of 35 contracts involving DPSUs). On the other hand, contractual challenges are prominent when an Indian private company or a foreign firm is on the supply side (19 of 27 contracts).

**Risks according to military service:** On the demand side, it is possible to note the occurrence of adverse events for the different military services that are involved in the contract. The user-service (Indian Air Force/Indian Army/ Indian Navy) in India, through the

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<sup>50</sup> Rogerson, W. P. 1994. "Economic Incentives and the Defense Procurement Process." *Journal of Economic Perspectives* 8 (4): 65–90. doi:10.1257/jep.8.4.65.

service headquarter (SHQ), have a dominant role in the formulation of Service Qualitative Requirements and the issuing of Request for Information and Request for Proposal that invites vendors. The concerned service headquarter is also involved in the technical and commercial evaluation of the bids. Of the 76 contracts where procurement challenges could be identified, 21 involved the Indian Air Force, 20 involved the Indian Army, and 34 involved the Indian Navy.

**Some defence procurement Scams in India:** Defence procurement has always been a messy business in India. Some of the famous scams are listed as follows:

➤ **Tatra trucks scam:**

These trucks are manufactured in the Czech Republic. Since 1986, the Indian Army has bought over 7,000 Tatra trucks. According to the defence procurement guidelines, all purchases should be made from the original equipment manufacturer (OEM). But BEML (Bharat Earth Movers Limited) had been flouting the guidelines and had made purchases from a middleman in London.

➤ **Scorpene Submarine scam:**

The Scorpene deal scam was a bribery scandal, in which USD 175 million (Rupees 1,100 crores) were alleged to have been paid to government decision makers by Thales (-is a French multinational company that designs and builds electrical systems and provides services for the aerospace, defence, transportation and security markets; headquarters are in Paris). Scorpene submarines are now being built in India under a technology transfer agreement that was part of that contract.

➤ **AgustaWestland chopper scam:**

Controversy over the contract came to light, with arrest of Giuseppe Orsi, the CEO of Finmeccanica, AgustaWestland's parent company by Italian authorities as they found him guilty of bribery. Defence Ministry had allegedly tweaked technical requirements to enable Finmeccanica to bid for the deal with its AW101 helicopter. Rs 375 crore was allegedly paid as bribery to the middlemen in the deal.

➤ **Coffin scam:**

After the Kargil war of 1999, there were allegations of corruption in the purchase of coffins by the then BJP-led Government. The government had incurred a heavy loss of 1,87,000 USD in the entire transaction.

➤ **Bofors scam:**

Bofors (Bofors AB is a Swedish arms manufacturer) paid kickbacks to people from a number of countries including top Swedish, and Indian politicians and key defence officials to seal defence procurement deals.

➤ **Current Issue:**

**The Rafale** controversy once again calls for the introspection of underlying problem in the country's Defence Procurement Procedure (DPP). It is time for an analysis of whether the DPP is transparent in decision making. The Opposition is intensely

raising questions over the financial terms of the agreement and alleging crony capitalism while the government is rejecting all the accusations. The Opposition is also claiming that there is no transparency in the deal with Reliance Defence, and that the company will be a key financial beneficiary at the expense of the state-owned Hindustan Aeronautics Limited (HAL).

## **FOREIGN DIRECT INVESTMENT (FDI) IN INDIA**

Foreign Direct Investment is the investment made in production or business by the country in another country by either means of buying a company or expanding its business in the foreign country. It is usually by means of bonds and shares. Generally speaking FDI refers to capital inflows from abroad that invest in the production capacity of the economy and are “usually preferred over other forms of external finance because they are non-debt creating, non-volatile and their returns depend on the performance of the projects financed by the investors. FDI also facilitates international trade and transfer of knowledge, skills and technology.”

According to the Financial Times, “Standard definitions of control use the internationally agreed 10 percent threshold of voting shares, but this is a grey area as often a smaller block of shares will give control in widely held companies. Moreover, control of technology, management, even crucial inputs can confer de facto control.”

### **Types of FDI:**

a. **Horizontal FDI:**

Horizontal FDI arises when a firm duplicates its home country-based activities at the same value chain stage in a host country through FDI.

b. **Platform FDI:**

Platform FDI Foreign direct investment from a source country into a destination country for the purpose of exporting to a third country.

c. **Vertical FDI:**

Vertical FDI takes place when a firm through FDI moves upstream or downstream in different value chains i.e., when firms perform value adding activities stage by stage in a vertical fashion in a host country.

**Methods of FDI:** The foreign direct investor may acquire voting power of an enterprise in an economy through any of the following methods:

- a. by incorporating a wholly owned subsidiary or company anywhere
- b. by acquiring shares in an associated enterprise
- c. through a merger or an acquisition of an unrelated enterprise
- d. participating in an equity joint venture with another investor or enterprise

## **History of FDI in India:**

The initial entry of FDI in India can be loosely considered from the time of establishment of East India Company of Britain during the colonial era in the 17th century when the British merchants approached the Mughal Emperor for establishing factory in Surat city of India. Along with them the British brought on the Industrial revolution to India which led to development of transportation (Railways and Roadways) and communication systems albeit for their benefits. The new innovations and inventions happening around the European countries got introduced to the Indian subcontinent too.

After the Second World War, many Japanese companies entered the Indian market and enhanced their trade with India. After our Independence the policy makers of new India realized the need of foreign investment for development and designed the FDI policies aiming it as a medium for bringing in advanced technologies and gaining valuable foreign exchange resources. With time and as per economic and political regimes there have been changes in the FDI policy too. The industrial policy of 1965, allowed MNCs to venture through technical collaboration in India. Therefore, the government adopted a liberal attitude by allowing more frequent equity.

With time, economic situations in the country and the outlook of government in power, the attitudes of the policy makers kept changing towards foreign companies investing in India.

FDI was introduced in the year 1991 under Foreign Exchange Management Act (FEMA), by then finance minister Dr. Manmohan Singh. It started with a baseline of \$1 billion in 1990. India is considered as second important destination for foreign investment. The major sectors that attracted FDI are services, telecommunication, construction activities and computer software and hardware.

India in 1997 allowed foreign direct investment (FDI) in cash and carry wholesale. Then, it required government approval. The approval requirement was relaxed, and automatic permission was granted in 2006. From 2000 to 2010, Indian retail has attracted about \$1.8 billion in foreign direct investment, representing a very small 1.5% of total investment flow into India.

India has received till now a total foreign investment of US \$ 306.88 billion since 2000 with 94 per cent of the amount coming during the last nine years. In the period 1999–2004, India received US \$ 19.52 billion of foreign investment. In the period 2004–09, foreign investment in the country touched US\$ 114.55 billion, further increasing to US\$ 172.82 billion between 2009–Sept 2013. During FY 2012- 13, India attracted FDI worth US\$ 22.42 billion. Tourism, pharmaceuticals, services, chemicals and construction were among the biggest beneficiaries.

**FDI approval Routes in India:** In India the FDI is approved in the way of three routes:

1. automatic approval by Reserve Bank of India (RBI):

- a. Automatic approval within period of two weeks (subject to compliance of norms).
- b. Foreign equity up to 24%, 50%, 51%, 74% and 100% depending on industry category and sector caps.

FDI in sectors/activities to the extent permitted under automatic route does not require any prior approval either by the Government or RBI. The investors are only required to notify the Regional office concerned of RBI within 30 days of receipt of inward remittances and file the required documents with that office within 30 days of issue of shares to foreign investors.

List of activities or items for which automatic route for foreign investment is not available, include the following:

- a. Banking
  - b. NBFC's Activities in Financial Services Sector
  - c. Civil Aviation
  - d. Petroleum Including Exploration/Refinery/Marketing
  - e. Housing & Real Estate Development Sector for Investment from Persons other than NRIs/OCBs.
  - f. Venture Capital Fund and Venture Capital Company
  - g. Investing Companies in Infrastructure & Service Sector
  - h. Atomic Energy & Related Projects
  - i. Defence and Strategic Industries
  - j. Agriculture (Including Plantation)
  - k. Print Media
  - l. Broadcasting
  - m. Postal Services
2. The FIPB route - Processing of non-automatic approval cases:
    - a. FIPB stands for Foreign Investment Promotion Board.
    - b. Approves all cases where automatic parameters are not met.
    - c. Processing time 4 to 6 weeks.

General permission of RBI under FEMA: Indian companies having foreign investment approval through FIPB route do not require any further clearance from RBI for receiving inward remittance and issue of shares to the foreign investors. The companies are required to notify the concerned Regional office of the RBI of receipt of inward remittances within 30 days of such receipt and within 30 days of issue of shares to the foreign investors or NRIs. Application can be made in Form FC-IL; Plain paper applications carrying all relevant details are also accepted. No fee is payable.

Procedure under government approval: FDI in activities not covered under the automatic route, requires prior Government approval and are considered by the Foreign Investment Promotion Board (FIPB). Approvals of composite proposals involving foreign

investment/foreign technical collaboration are also granted on the recommendations of the FIPB. Application for all FDI cases, except Non-Resident Indian (NRI) investments and 100% Export Oriented Units (EOUs), should be submitted to the FIPB Unit, Department of Economic Affairs (DEA), Ministry of Finance. Application for NRI and 100% EOU cases should be presented to SIA in Department of Industrial Policy & Promotion.

Investment by way of share acquisition: A foreign investing company is entitled to acquire the shares of an Indian company without obtaining any prior permission of the FIPB subject to prescribed parameters/ guidelines. If the acquisition of shares directly or indirectly results in the acquisition of a company listed on the stock exchange, it would require the approval of the Security Exchange Board of India.

New investment by an existing collaboration in India: A foreign investor with an existing venture or collaboration (technical and financial) with an Indian partner in particular field proposes to invest in another area, such type of additional investment is subject to a prior approval from the FIPB, wherein both the parties are required to participate to demonstrate that the new venture does not prejudice the old one.

Participation by international financial Institutions: Equity participation by international financial institutions such as ADB, IFC, CDC, DEG, etc., in domestic companies is permitted through automatic route, subject to SEBI/RBI regulations and sector specific cap on FDI.

FDI in small scale sectors (SSI) units: A small-scale unit cannot have more than 24 per cent equity in its paid up capital from any industrial undertaking, either foreign or domestic. If the equity from another company (including foreign equity) exceeds 24 per cent, even if the investment in plant and machinery in the unit does not exceed Rs 10 million, the unit loses its small-scale status and shall require an industrial license to manufacture items reserved for small-scale sector.

### 3. CCFI route:

- a. CCFI stands for Cabinet Committee on Foreign Investment
- b. Sector not notified in the automatic route
- c. Cost of project should be 6000 million or more

### **Challenges and Improvement Areas:**

India is definitely a lucrative place for FDI, but there are certainly some challenges and areas for improvement still present. Until, these areas are honed to perfection, India will not become the number one place for FDI. Some of the key areas are listed below:

Political risk: Amongst the top items is the political instability of the country. On one hand the fact that India is the world's largest democracy does add a sense of pride and security, but the hard reality is that there is insurmountable instability present. Just the fact that the past

two governments have been based on coalitions between a few parties is reason enough to be skeptical. Moreover, each new government has certain policies which are different from the ruling government and if there is frequent change in government, this will lead to changes in policy and increased uncertainty.

Bureaucracy: Another very important factor that affects India's competitiveness on the world standing is the Bureaucracy. Particularly in the FDI process the Indian Government has already invested a lot of time and effort but there is still a lot of room for improvement in the identification, approval and implementation process e.g. creating more centres for assistance, more user friendly processes, effective use of technology, being as clear as possible leaving no room for interpretation, assisting in identifying new areas for investment etc.

Security risk: Another important factor that needs to be handled with care and worked upon is the ever present security risk. This risk includes the geopolitical risk with Pakistan and the ongoing dispute over the Kashmir issue, which on numerous occasions has brought these two countries armed with nuclear weapons to the brink of war. The other security risks would include incidences of domestic terrorism, not only in the Kashmir valley but also in Assam, Manipur and Nagaland, where numerous separatists group operate.

Cost advantage: One of the attractions of India is the lower cost advantage as compared to most western economies. The Indian Government would have to work on creating an atmosphere where this advantage can be maintained else it might result in India not seem as attractive. One of the key drivers would be to try and control inflation because if there is increased level of inflation then there would be increased costs and reduced returns. Other factors which would act in similar respects would be increased tax incentives and reduced tariffs.

Intellectual Property (IP) Rights & Piracy: With the increased instances of Piracy around the world and the extreme importance placed by Investors on maintaining their IP rights, this is definitely an area which needs improvement in India. India has begun instilling intellectual property rules and regulations into the country but there is still a long road ahead. The main area for improvement in this respect is the enforcement, which is the most crucial part but the weakest at present in the country. The enforcement of IP rights included the increased crackdown in the market on pirated and knock-downed good.

Privatization and deregulation: Increased privatization of various sectors would definitely enhance the attractiveness of India as an FDI destination. India has already taken steps to privatize areas such as electricity, telecommunication etc. and increase the foreign holding capacity in sectors such as banking and insurance which is a first step.

Infrastructure: It definitely is an added bonus to the investor if there is adequate infrastructure present in the country. In India there is substantial lack of robust infrastructure around the country, e.g. proper roads, highways, adequate supply of clean water, uninterrupted supply

of electricity etc. But there is a flipside to this lack of Infrastructure. lack of infrastructure can definitely be seen as a blessing in disguise and be a substantial source of FDI, but nevertheless if this FDI does not materialize, the Government will have to invest their own funds into it and try and attract other investments.

### **Foreign Investment: compliance under RBI/FEMA:**

For a country where capital is not readily available, Foreign Direct Investment (FDI) has been an important source of funds for companies. Under FDI, overseas money, either by an individual or entity, is invested in an Indian company. According to Organization for Economic Co-operation and Development (OECD), an investment of 10% or above from overseas is considered as FDI. In India, foreign direct investment policy is regulated under the Foreign Exchange Management Act, 2000 governed by the Reserve Bank of India. One can invest in India - either under Automatic Route which does not require approval from RBI or under Government Route, which requires prior approval from the concerned Ministries/Departments via a single window - Foreign Investment Facilitation Portal (FIFB) administered by the Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce and Industry, Government of India.

Apart from specified 11 sectors/activities (mentioned below), where Government approval is mandatory, applications where there is a doubt over which Ministry should the application fall under, DIPP has the responsibility of identifying who would be the concerned authority. Proposals from NRIs and Export Oriented Units, applications relating to issues of equity for import of capital goods/equipment, pre-operative/pre-incorporation expenses, etc. are also handled by DIPP.

For effective handling of cases, monthly reviews by the concerned Ministries/Authorities and quarterly review meetings, co-chaired by Secretary, Department of Economic Affairs and Secretary, DIPP are also proposed to be undertaken to discuss pendency of proposals with the Government. Various categories of foreign investors - Foreign Portfolio Investors, Foreign Institutional Investors, Foreign Venture Capital Investor, Non-Resident Indians can hold stakes in Indian business entities (company, partnership firms, proprietary concerns, LLPs) subject to conditions and sectoral caps on ownerships.

FIIIs/FPIs are allowed to invest and trade in equity securities, with a maximum total investment of 24 percent of the issued and paid up capital of a company. This limit can be raised up to the prescribed sectoral cap of that particular industry by passing a special resolution to the effect. Every non-resident entity is allowed to invest in India either under Automatic or Government Approval Route, except in prohibited sectors. However, individuals or entities of Bangladesh and Pakistan can invest only under Government Route. Check out list of sectors which require prior approval as well as sectors under automatic route along with relevant sectoral caps by clicking on the links.

Every non-resident entity is allowed to invest in India either under Automatic or Government Approval Route, except in prohibited sectors. However, individuals or entities of Bangladesh and Pakistan can invest only under Government Route. Check out list of sectors which require prior approval as well as sectors under automatic route along with relevant sectoral caps by clicking on the links. FDI is a capital account transaction and any violation of its regulations attracts penal provisions under FEMA. RBI administers FEMA and Directorate of Enforcement, Ministry of Finance - Government of India has the authority to investigate in case of any violation of its rules.

FDI in partnership firm/sole proprietary concern: NRIs or Person of Indian Origin (PIO) resident outside India are allowed to contribute to the capital of a partnership firm or sole proprietary concern without prior approval, provided:

1. The contribution is on non-repatriation basis
2. Investment is done as an inward remittance, or out of NRE/FCNR (B)/NRO account maintained with AD Category-1 Bank.
3. The Indian firm or proprietary concern should not be engaged in agricultural, print media or real estate business.

In the following cases, investors may apply for prior permission of RBI and Government of India, provided the last two conditions mentioned above are adhered to:

1. Where investment is preferred to be repatriable by NRIs/PIO.
2. For investors other than NRIs/PIO. The decision for the same will be taken by RBI and Government of India on case-by-case basis.

FDI in limited liability partnership: FDI in LLPs was liberalized significantly in 2015 with the objective to promote foreign investment inflows in the country. Up to 100% FDI is allowed in LLPs, provided you are adhering to the specific sectoral limits. In that case, the investment will not require any prior approval by FIPB.

1. There are no conditions relating to FDI-linked performance.
2. Foreign companies or individuals can be appointed as Designated Partner as required under Section 7 of Limited Liability Partnership Act, 2008.
3. LLPs can make further downstream investment in another company or LLP. Earlier they were not permitted to make any downstream investments.
4. Repatriation of capital is permissible with adherence of appropriate pricing guidelines and reporting requirements.
5. All investments should comply with relevant provisions of LLP Act, 2008.
6. LLPs can avail External Commercial Borrowings (ECBs).
7. FPIs/FVCIs can contribute to the capital of LLPs in India.
8. In case of companies with FDI, converting into LLP can be done under the automatic route if the investment in sector concerned is within corresponding sectoral limit for automatic investment route.

FDI in private limited company: A Foreign business entity can enter India via a number of alternatives, subject to general conditions mentioned in FDI Policy:

1. As an Indian Company-
  - a. By setting up a wholly owned subsidiary
  - b. Joint Venture with an Indian entity/person
2. Operate as a foreign company and be registered with the Registrar of Companies, MCA.
  - a. Opening up Liaison office - This type of office is only allowed to collect market information and liaison with the foreign company. They are not allowed to earn income from any activities.
  - b. Branch Offices - The scope of activities of BOs is much larger as compared to Liaison Offices. BOs are allowed to generate revenue by various alternatives, such as- i. Providing professional services; ii. Providing technical support for products imported/assembled/manufactured by the parent/holding company.
  - c. Project Offices - Set up to execute specific projects, project offices are allowed in India if :
    - i. The foreign entity has secured a contract in India, which will be funded via inward remittance by either a bilateral or multilateral financing agency.
    - ii. Loan has been sanctioned by a public financial institution or bank to the Indian company contracting the project.

If the above conditions are not met, the foreign investor/entity will have to make an application with RBI via its AD bank.

Partnership firms and sole proprietary concerns set up abroad are not allowed to establish Branch or liaison offices in India. Branch/Liaison/Project Offices have to open non-interest bearing current accounts in RBI through AD Banks. Application for setting up offices in India has to be made in Form FNC-1 to RBI along with:

1. Certificate of Incorporation or Memorandum & Articles of Association attested by Indian Embassy or Notary Public in their home country.
2. Latest Audited Balance sheet.

This form has to be submitted to the designated AD bank for further submission to the relevant department of Reserve Bank of India (Foreign Investment Division), Mumbai. NRIs are also allowed to contribute to capital of Indian companies by investing in shares on Recognized Stock Exchanges under Portfolio Investment Route. The investment can be repatriable or non-repatriable, but the maximum limit of investment is 10% of paid-up capital of the relevant company. This limit can be raised up to the 24% by passing a special resolution to the effect. Investment is done as an inward remittance, or out of NRE/FCNR (B)/NRO account maintained with AD Category-1 Bank. A report of such investments has to be filed with RBI by AD Bank.

**FDI in small scale industries:** Except for the prohibited sectors, foreign investors are allowed to invest in small-scale industrial unit operating in various sectors. The investment is limited to 24% of paid-up capital of an SSI unit. To issue more than 24% to foreign investors, SSI units have to comply with the following conditions:

1. Give up its status as SSI, i.e. exceeding prescribed limits of investment in plant and machinery according to Micro, Small and Medium Enterprises Development Act, 2006.
2. Not engage in manufacture of reserved items.
3. Comply with relevant sectoral caps.

**Approval process:** FDI proposals are processed following a standard operating plan devised by DIPP. The process includes:

1. Submission of proposal and uploading documents (mentioned below) on Foreign Investment Facilitation Portal.
2. Department of Industrial Policy and Promotion (DIPP) assigns the case to the concerned Ministry within 2 working days.
  - a. Submission of physical copies to concerned department is not required in case of digitally signed documents.
  - b. For applications not digitally signed, online communication to applicant will be made to submit one signed physical copy of the proposal to the Competent Authority. Applicants are required to submit required documents within 5 days of such intimation.
3. The proposal is circulated online within 2 days to Reserve Bank of India for review from FEMA perspective. All proposals are shared with Ministry of External Affairs (MEA) and Department of Revenue (DoR) for record. Any advice/comments from above mentioned departments are directly shared with concerned Administrative Ministry/Department assigned to decide on the proposal.
4. Proposals are scrutinized within 1 week and additional information/clarifications, if required, are asked for.
5. On getting all required information, the Competent Authority is required to give out its decision in next two weeks. Approval/rejection letters are sent online to the applicant, consulted Ministries/Departments and DIPP.
  - a. Where total foreign equity inflow is more than Rs 5000 crore, the Competent Authority is required to place the same to Cabinet Committee on Economic Affairs for consideration within timelines

Following documents are required to be uploaded along with the proposal. Please note, this list is not an exhaustive list - other documents may be required based for specific cases.

1. From both Investee & Investor Companies/Entities:
  - a. Certificate of Incorporation
  - b. Memorandum of Association (MOA)

- c. Board Resolution.
- d. Audited Financial Statement of Last Financial Year
- e. Article of Association
2. List of Names, addresses and identification proof of all foreign collaborators of the Investor Company/Entity.
3. Pre-and Post-investment shareholding pattern of the Investee Company.
4. An Affidavit stating that all information provided in hard copy and online is the same and correct.
5. In case of existing ventures, copy of joint venture agreement/shareholders' agreement/technology transfer/trademark/brand assignment agreement (as applicable).
6. Copy of Downstream Intimation.
7. Copy of relevant past FIPB/SIA/RBI approvals, connected with the current proposal.
8. Relevant Foreign Inward Remittance Certificate (FIRC) in case investment has already flowed in.
9. High Court order in case of scheme of arrangement.
10. Valuation certificate as approved by a certified Chartered Accountant.

### **Latest FDI trends in India:**

Apart from being a critical driver of economic growth, foreign direct investment (FDI) is a major source of non-debt financial resource for the economic development of India. Foreign companies invest in India to take advantage of relatively lower wages, special investment privileges such as tax exemptions, etc. For a country where foreign investments are being made, it also means achieving technical know-how and generating employment.

The Indian government's favourable policy regime and robust business environment have ensured that foreign capital keeps flowing into the country. The government has taken many initiatives in recent years such as relaxing FDI norms across sectors such as defence, PSU oil refineries, telecom, power exchanges, and stock exchanges, among others.

### **Market size**

According to the Department for Promotion of Industry and Internal Trade (DPIIT), FDI equity inflows in India in 2019-20 (till August) stood at US\$ 19.33 billion, indicating that government's effort to improve ease of doing business and relaxation in FDI norms is yielding results. The net foreign direct investment stood at US\$ 1.8 billion in August 2019 and US\$ 3.8 billion in July 2019. India invited US\$ 2.73 billion of foreign investment in month of August 2019 as compared to US\$ 2.54 billion in previous year.

Data for Q1 2019-20 indicates that the telecommunications sector attracted the highest FDI equity inflow of US\$ 4.22 billion, followed by service sector - US\$ 2.79 billion, computer software and hardware – US\$ 2.24 billion, and trading – US\$ 1.13 billion. Most recently, the total FDI equity inflows for the month of June 2019 touched US\$ 7.28 billion.

During Q1 2019-20, India received the maximum FDI equity inflows from Singapore (US\$ 5.33 billion), followed by Mauritius (US\$ 4.67 billion), Netherlands (US\$ 1.35 billion), USA (US\$ 1.45 billion), and Japan (US\$ 0.47 billion).

### **Investments/ developments**

India emerged as the top recipient of greenfield FDI Inflows from the Commonwealth, as per a trade review released by The Commonwealth in 2018. Some of the recent significant FDI announcements are as follows:

- In October 2019, French oil and gas giant Total S.A. have acquired a 37.4 per cent stake in Adani Gas Ltd for Rs 5,662 crore (US\$ 810 million) making it the largest Foreign Direct Investment (FDI) in India's city gas distribution (CGD) sector.
- In August 2019, Reliance Industries (RIL) announced one of India's biggest FDI deals, as Saudi Aramco will buy a 20 per cent stake in Reliance's oil-to-chemicals (OTC) business at an enterprise value of US\$ 75 billion.
- In October 2018, VMware, a leading software innovating enterprise of US has announced investment of US\$ 2 billion in India between by 2023.
- In August 2018, Bharti Airtel received approval of the Government of India for sale of 20 per cent stake in its DTH arm to an America based private equity firm, Warburg Pincus, for around \$350 million.
- In June 2018, Idea's appeal for 100 per cent FDI was approved by Department of Telecommunication (DoT) followed by its Indian merger with Vodafone making Vodafone Idea the largest telecom operator in India.
- In February 2018, Ikea announced its plans to invest up to Rs 4,000 crore (US\$ 612 million) in the state of Maharashtra to set up multi-format stores and experience centres.
- Kathmandu based conglomerate, CG Group is looking to invest Rs 1,000 crore (US\$ 155.97 million) in India by 2020 in its food and beverage business, stated Mr Varun Choudhary, Executive Director, CG Corp Global.
- International Finance Corporation (IFC), the investment arm of the World Bank Group, is planning to invest about US\$ 6 billion through 2022 in several sustainable and renewable energy programmes in India.

### **Government Initiatives**

- In August 2019, government permitted 100 per cent FDI under the automatic route in coal mining for open sale (as well as in developing allied infrastructure like washeries).
- In Union Budget 2019-2020, the government of India proposed opening of FDI in aviation, media (animation, AVGC) and insurance sectors in consultation with all stakeholders.
- 100 per cent FDI is permitted for insurance intermediaries.

- As of February 2019, the Government of India is working on a road map to achieve its goal of US\$ 100 billion worth of FDI inflows.
- In February 2019, the Government of India released the Draft National E-Commerce Policy which encourages FDI in the marketplace model of e-commerce. Further, it states that the FDI policy for e-commerce sector has been developed to ensure a level playing field for all participants.
- Government of India is planning to consider 100 per cent FDI in Insurance intermediaries in India to give a boost to the sector and attracting more funds.
- In December 2018, the Government of India revised FDI rules related to e-commerce. As per the rules 100 per cent FDI is allowed in the marketplace-based model of e-commerce. Also, sales of any vendor through an e-commerce marketplace entity or its group companies have been limited to 25 per cent of the total sales of such vendor.
- In September 2018, the Government of India released the National Digital Communications Policy, 2018 which envisages increasing FDI inflows in the telecommunications sector to US\$ 100 billion by 2022.
- In January 2018, Government of India allowed foreign airlines to invest in Air India up to 49 per cent with government approval. The investment cannot exceed 49 per cent directly or indirectly.
- No government approval will be required for FDI up to an extent of 100 per cent in Real Estate Broking Services.
- The Government of India is in talks with stakeholders to further ease foreign direct investment (FDI) in defence under the automatic route to 51 per cent from the current 49 per cent, in order to give a boost to the Make in India initiative and to generate employment.

### **Road ahead**

India has become the most attractive emerging market for global partners (GP) investment for the coming 12 months, as per a recent market attractiveness survey conducted by Emerging Market Private Equity Association (EMPEA). Annual FDI inflows in the country are expected to rise to US\$ 75 billion over the next five years, as per a report by UBS. The Government of India is aiming to achieve US\$ 100 billion worth of FDI inflows in the next two years. Note: Conversion rate used as on August 2019, Re 1 = US\$ 0.014056

### **FDI in Indian Defence:**

India plans to spend \$ 130 bn on military modernization in the next 5 years, as achieving self- reliance in defence production is a key target for the Government of India. The Government has opened up the Defence industry for private sector participation to provide impetus to indigenous manufacturing. The opening up of the industry also paves the way for foreign original equipment manufacturers to enter into strategic partnerships with Indian

companies. Annual Turnover by Private sector in Defence and Aerospace sector in 2018-19 is \$ 2.4 bn.

A Defence export strategy has been formulated with a view of facilitating Defence Public Sector Enterprises (DPSUs) and private defence players in exploring business opportunities abroad. The total value of production for OFB & DPSUS together accounts for \$ 8.0 bn. 100% FDI is allowed in Defence industry; wherein 49% is allowed under automatic route and beyond 49% through Government route.

Industry Scenario: 5.3% increase in defence allocation was recorded in budget 2017-18 compared to budget 2016-17. The allocation towards defence in budget 2017-18 stood at \$ 41 bn with \$ 13.3 bn (or 31.7% of the total budget) reserved for capital expenditure. The total budget sanctioned for the Indian military for the financial year 2018-19 is \$ 62.8 bn; accounting for 12.1% of the total Union Government expenditure for 2018-19. India's share in global military expenditure stood at 3.3% in 2016.

Service/ department-wise allocation as a percentage of total defence estimates 2017-18 (BE):

- Army: 55.9%
- Navy: 14.6%
- Airforce: 22.5%
- DGOF (Directorate General of Ordnance Factories): 0.8%
- DGQA (Director General of Quality Assurance): 0.5%
- R&D: 5.7%

**Growth drivers:**

- Defence exports strategy  
Liberalised process of issuing clearances
- Online NOCs  
Started in November 2014 for industry friendliness
- Shore Based Test Facility (SBTF)  
Improved test facilities leading to more local manufacturing
- Indigenously Designed, Developed & Manufactured (IDDM)  
Focus – Buy and make IDDM, Indian over global
- Modernization programmes  
\$ 0.7 bn allocation for modernisation

Recent developments

DIPP vide Press Note No. 5 of 2016 Series dated 24/06/2016 notified review of Foreign Direct Investment (FDI) Policy on various sectors which includes conditions related to FDI in defence. According to the revised guidelines, Foreign Direct Investment Cap is 100%. Foreign Direct Investment up to 49% is allowed through automatic route and above 49%

under government route wherever it is likely to result in access to modern technology or for other reasons to be recorded. Defence Industry subject to Industrial License under the Industries (Development & Regulation) Act, 1951 and manufacture of small arms and ammunition under the Arms Act, 1959. The detailed guidelines in this regard may be seen under the Press Note available at DIPP website ([www.dipp.nic.in](http://www.dipp.nic.in) followed by link Acts & Rules).

The other conditions governing FDI Policy in defence manufacturing sector as notified in the Press Note 5 of 2016 Series dated 24/06/2016 are as under:

- i. Infusion of fresh foreign investment within the permitted automatic route level, in a company not seeking industrial licence, resulting in change in the ownership pattern or transfer of stake by existing investor to new foreign investor, will require Government approval.
- ii. License applications will be considered and licenses given by the Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, in consultation with Ministry of Defence and Ministry of External Affairs.
- iii. Foreign investment in the sector is subject to security clearance and guidelines of the Ministry of Defence.
- iv. Investee company should be structured to be self-sufficient in areas of product design and development. The investee/joint venture company along with manufacturing facility, should also have maintenance and life cycle support facility of the product being manufactured in India.

Further, subsequent to abolition of the Foreign Investment Promotion Board (FIPB) by the Government vide O.M No. 01/01/FC12017-FIPB dated 05.06.2017, the work of granting approval for foreign investment under the extant FDI Policy, has been entrusted to the concerned Administrative Ministries/Departments. The Department of Industrial Policy & Promotion, Ministry of Commerce & Industry has been given the responsibility of overseeing the applications filed on the Foreign Investment Promotion Portal (FIFP) and to forward the same to the concerned Administrative Ministry. DIPP has finalized a Standard Operating Procedure (SOP) for examination of foreign investment proposals by Administrative Ministries and placed on their website.



# **MODULE-III**

## **EXPORT CONTROL REGIMES**



## **MULTILATERAL EXPORT CONTROL REGIME: AN INTRODUCTION**

Ever since the end of World War II, industrialized and developed countries have tried to control the spread of strategic goods and dual-use technologies. Following the onset of the Cold War in the 1950s, these efforts gained further traction among the developed world keen to restrict the proliferation of such goods and technologies to the Soviet Union and its allies.

Multilateral Regimes are groups that are independent of the United Nations that states may use to organize their export control programs. Their regulations apply only to members and it is not obligatory that a country join.

Thus broadly Multilateral Control Regime:

- Contribute by establishing control lists and guidelines that most of the potential suppliers subscribe to.
- Help keep the most/best technology out of the hands of proliferators.
- Create Global Standards

### **The four major Multilateral Non-proliferation Export Control Regimes are:**

The Australia Group - Ensuring would-be proliferators are not able to obtain necessary inputs for chemical and biological weapons through the development of ways to minimize export and transshipping risks. Licensing authority over a wide range of chemical weapons precursors is one way to reduce risk. Members require licenses for the export of dual-use chemical manufacturing facilities, equipment, and related technology, plant pathogens, animal pathogens, biological agents, and dual-use biological equipment. These items form the basis for the Group's common control lists.

The Wassenaar Arrangement - Contributing to regional and international security and stability by promoting transparency and responsibility in transfers of conventional arms and sensitive dual-use (civilian/military) goods and technologies. Members of the Wassenaar Arrangement implement export controls on specific armaments and technologies. Export control guidelines help prevent destabilizing accumulations of weapons and technologies in volatile regions around the world.

Missile Technology Control Regime - Minimizing the risk of the proliferation of WMD delivery systems through the adherence of member states to common export policies and guidelines. Specifically, the aim of the MTCR is to restrict the proliferation of missiles, complete rocket systems, unmanned air vehicles, and related technology for those systems capable of carrying a 500 kilogram payload at least 300 kilometers, as well as systems intended for the delivery of weapons of mass destruction. It achieves its goals through export controls and licensing, relative information exchange between members, and outreach to non-members.

Nuclear Suppliers Group - Contributing to the nonproliferation of nuclear weapons through the implementation of guidelines for nuclear and related exports. Forty member countries have developed export guidelines, which aim to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices. These guidelines cover nuclear material, technology and equipment, which may be considered dual-use.

### **Information on Other Organizations and Treaties**

World Customs Organization - Enhancing the effectiveness and efficiency of customs administrations by promoting honest, transparent, and predictable customs environments. Comprised of 159 customs administrations, WCO members process 95% of international trade worldwide. The WCO and its partners assist customs agencies administer technologies and guidelines, which help to harmonize and simplify customs procedures around the world.

International Atomic Energy Agency - Promoting safe, secure, and peaceful nuclear technologies. The IAEA exists to verify that safeguarded nuclear material and activities are not used for military purposes, upgrade nuclear safety and security and prepare for and respond to emergencies, and mobilize peaceful applications of nuclear science and technology for critical needs in developing countries.

South Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC) - Stopping the flow and availability of small arms and light weapons in Southeastern Europe by sensitizing governments and civil society to small arms issues and formulating national strategies for SALW control. SEESAC liaises directly with governments and communities to provide technical input, information exchange, coordination and overview of current and future efforts and fund-raising assistance for specific projects.

Nonproliferation and Arms Control Treaties and Agreements - Listing treaties and agreements support by the United States Department of State Bureaus of Arms Control and Nonproliferation.

### **Critical analysis**

The primary function of the regimes during their formative stages was to aid in the harmonization of national export control policies and to provide fora for cooperation, information sharing, and the promulgation of norms to govern trade in sensitive items and technologies. The regimes were not originally mandated to take on separate lives as organizations, charged with taking independent measures in the struggle against proliferation, and were certainly not chartered as institutions focused upon the very nebulous and at that time immature phenomenon of international terrorism.

Further since the end of the Cold War, the number of states participating in the regimes has grown, but at the cost of diluting the original membership criteria. This expansion was driven primarily by the euphoric belief in the non-proliferation community that the end of the Cold War had inaugurated an era in which former Warsaw Pact states would make common cause with the West to squelch WMD proliferation. Another factor was the consolidation of the European Union (EU) into a common economic market with few barriers to the movement of goods and services. The extension of the export control regimes to include the EU thus became almost automatic.

The MTCR, for example, has grown in membership from seven members (the Group of Seven) in 1987 to 33 in 2002. That means that the regimes now include non-suppliers as well as states that differ significantly in their definition of threats and their understanding of the letter and spirit of the requirements imposed by the regimes.

Third, the control regimes do not require their members to fully disclose which exports they have approved and which they have denied; consequently, they lack the kind of transparency that is crucial to prevent one country from supplying an item that was denied by another.

According to the experts multilateral export control regime should be governed by the following principles and objectives:

1. Replace consensus decision-making with majority voting, at least in such areas as admitting new members, identifying violations by existing members, and developing remedies to deal with violations.
2. Specify the commitments and responsibilities of members and formalize the operations of the regime.
3. Introduce a dispute-resolution mechanism that allows collective discussion about possible violations by a member, gives that member an opportunity to explain its behavior, and requires all members to abide by the collective decision at the end of the process.
4. Establish clear and uniform criteria for membership, possibly including conditions for expulsion.
5. Create a team of international experts to provide export control training to prospective members and countries interested in adhering to the standards upheld by the regime.
6. Strengthen information-sharing requirements to include not only denial notifications, but approvals.

### **ZANGGER COMMITTEE, 1971**

The following topic is intended to provide some insight into the development of international nuclear export controls under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). It deals with the history of the Zangger Committee (ZAC), the Trigger List, the ZAC's practices and procedures, and its future work. In the history section, the article also

touches upon parallel nonproliferation developments in order to set the ZAC in context, and refers to the relations of the ZAC to the Nuclear Suppliers Group (NSG) and to the International Atomic Energy Agency (IAEA).

### **History of the ZAC**

The text of Article III of the NPT formulated the twin obligations for safeguards and export control rather generally. Thus, there was a need to interpret this language into concrete details and further clarify the respective requirements.

In 1970, the IAEA (being entrusted by the NPT with the safeguards task) set up a committee to develop a model safeguards agreement that would satisfy the obligations of Article III.1. The Safeguards Committee formed in 1970 fulfilled its task in a rather short period of intense activity and drafted a model that—after approval by the Board of Governors and the General Conference of the IAEA—became the basis for all bilateral safeguards agreements between the IAEA and the individual non-nuclear weapon states party to the NPT. The text of this model agreement was published as IAEA Document Information Circular 153 (hereafter “INFCIRC/ 153”).

Immediately after the committee finished its work, a number of major supplier countries—some already party to the NPT, some only intending to become members—met in March 1971 under the chairmanship of Swiss Professor Claude Zangger on a very informal and confidential basis in Vienna to discuss how to implement Article III.2 and fulfill its obligations. This group, which became known as the “Zangger Committee,” agreed that its decisions would not be legally binding upon its members but would serve as a basis for harmonized unilateral policy declarations.

The group defined its objectives as:

1. to reach a common understanding on what constituted nuclear material, and equipment or material especially designed or prepared for the processing, use, or production of special fissionable material; and
2. to consider procedures in relation to exports of nuclear materials and certain categories of equipment and material in the light of the commitment of states pursuant to Article III.2 of the NPT with a view to establishing a common understanding as to the way in which each state would interpret and implement this commitment.

In particular, the objective was to draw up a list of commodities that should be subject to export control on a common international basis. One guiding principle of the group was that these self-imposed restrictions should not disturb fair international commercial competition. It was also agreed that each item on the list should have a specific nuclear end-use rather than a “dual-use” suitable for other conventional industrial uses.

In 1972, a consensus on the basic understandings (“Expurgated Version” of 9/27/72) was reached. However, due to delays in securing the participation of the Soviet Union, the Committee waited two years before making the understandings public in two separate memoranda both dated August 14, 1974. The first memorandum covered exports of “source and special fissionable material” (Article III.2a), and the second covered exports of “equipment or material especially designed or prepared for the processing, use or production of special fissionable material” (Article III.2b). Both are referred to collectively as the “Trigger List.”

As to the question of which safeguards should be triggered by exports to non-nuclear weapon states not party to the NPT, it was decided to require safeguards by the IAEA on the nuclear material “in accordance with its [IAEA’s] safeguards system,” leaving open whether this meant the “old” (facility-related) (INFCIRC 66/Rev.2) or the “new” NPT-type “full-scope safeguards” system (INFCIRC/153). Initially, only a very few countries adopted a governmental policy of requiring full-scope safeguards for such exports. Thus, INFCIRC/66 safeguards became the standard to be applied in recipient non-nuclear weapon states not party to the NPT. Why this solution was adopted, and what implications it had will be dealt with later.

The Committee further agreed to exchange information about actual exports or the issuance of licenses for exports to any non-nuclear weapon states not party to the NPT through its system of annual returns, which are circulated on a confidential basis among the membership each year in April.

### **Early Shock to the NPT’s System**

India’s detonation of a nuclear device in May 1974 not only caused a tremor in the earth but also in the foundations of the nonproliferation regime. Was the NPT inappropriate, inadequate, or even a failure?

India was not an NPT party, and the Treaty was still too young to be blamed for being unable to prevent technology transfer from a NPT party. But the explosion led to increased concern about the conditions for permitting nuclear exports. Following preliminary consultations in 1974, seven major supplier countries met in 1975 with the goal of defining what, if any, additional conditions of supply should be added to those in the NPT and the Zangger Committee memoranda (which required non-explosive use assurances, safeguards, and retransfer approval rights). In 1976, these countries established a set of guidelines and criteria known as the “London Suppliers Guidelines” that identified two further conditions of supply:

1. to apply physical protection measures on nuclear material on the basis of the recommendations in IAEA document INFCIRC/225; and
2. to agree that any facility that was built on the basis of the knowhow of supplied technology (“knowhow clause”) would be put under safeguards.

In addition, the guidelines of the London Group introduced the term “sensitive facilities,” for which a transfer of technology should be handled particularly cautiously. Two categories in the Trigger List (reprocessing facilities and isotope separation facilities) were understood to fall within this category. The London Group adopted the basic “Trigger List” of the ZAC, but added a few new items—such as heavy water production plants—and clarified the entries for zirconium tubes and isotope separation equipment.

### **The Trigger List**

The term “Trigger List” was chosen because the export of items listed on it “trigger” IAEA safeguards on the source or special fissionable material produced, processed, or used in the equipment or material in question. The ZAC Trigger List, as first issued in 1974, referred mainly to complete facilities in the nuclear fuel cycle, with the exception of reactors, where several typical components were explicitly mentioned (for the contents of the first list see Appendix). Attached to the Trigger List was an annex clarifying and defining the items in some detail.

In line with technological developments, the Trigger List has undergone several changes since 1974. These changes strengthened the coverage over certain areas that were initially only roughly structured or referred to only “complete” facilities. At the time of the development of the initial list, it was understood that this would be enough to hinder clandestine developments in most countries. With the further advance of technology development worldwide and with further experience in the implementation of technology transfer controls, the ZAC has constantly been engaged in monitoring the need for revisions or further clarifications of the Trigger List items. As a result, the original annex has grown considerably. Since 1974 there have been seven phases of development:

1. In November 1977, following the initiative of the London Suppliers Group, the Trigger List was amended to include heavy water production plants. While a few members of the Committee believed that these plants did not fall within the scope of Article III.2, most of the members were positive. They argued that if the export of heavy water were included, it was only logical that production plants for this material should also be subject to controls. This first amendment to the list was published as INFCIRC/209/Mod.1, issued on December 1, 1978 (and later further clarified in May 1992; see point 5 below).
2. In 1984, Trigger List clarifications were made to the entries covering isotope separation by the gas centrifuge process (INFCIRC/209/ Mod. 2, February 1984).
3. In 1985, amendments were made in the annex to clarify the coverage of fuel reprocessing plants (INFCIRC/209/Mod. 3, August 1985).
4. In 1990, clarifying amendments were adopted for isotope separation plant equipment at gaseous diffusion enrichment plants (INFCIRC/209/Mod. 4, February 1990).

5. In 1992, an amendment was introduced to further clarify plants for the production of heavy water, deuterium and deuterium compounds, and associated equipment (INFCIRC 209/Rev.1/Mod.1, May 1992).
6. The latest amendment, in 1994, adopts further clarifications to the enrichment section and a modification of the entry on “Primary Coolant Pumps” (to include “Water Pumps”) (INFCIRC/209/Rev.1/ Mod. 2, April 1994).
7. Finally, agreement has been reached recently to amend paragraph 6 of Memorandum A attached to INFCIRC 209/Rev.1, to prevent the unsafeguarded export of bulk quantities of source material for nonnuclear use. Member state letters to the IAEA have been sent, but the IAEA has not yet published the formal notification document.

In summary, it is fair to say that the Zangger Committee has devoted extensive efforts to adding structure and detail to the original Trigger List.

### **One Area of Dispute**

There has only been one major element of the nuclear fuel cycle where diverging views existed within the Committee. This was the area of conversion facilities. While, in the past, several countries held the view that conversion facilities would not fall under the definition of Article III.2 (as they do not deal with special fissionable material but only with source material—natural uranium), a technical working group set up by the NSG showed that most of the components of conversion facilities are considered to be dual-use items and that only a few would warrant entry on the ZAC Trigger List.

It is also worthwhile to consider whether these components are only to be used in the front end or also in the back end of the conversion process, where gaseous-enriched uranium is being reconverted. Insofar as these latter components are specially designed or prepared, they would undoubtedly be covered by Article III.2 and should therefore become a part of the ZAC’s Trigger List.

### **Parallel Activities by the NSG**

For many years, following the initial publication of its guidelines in 1977, the London Group did not see a reason to meet. Instead, it relied on the periodic amendments of the Trigger List as carried out by the ZAC. However, one of the early priorities of the newly created NSG in 1991 was to formally harmonize the old London Group trigger list with the ZAC Trigger List.

The NSG also focused on a second area of interest to the nonproliferation regime, namely dual-use items. While ZAC and the London Group only dealt with nuclear items “with a major nuclear use,” the NSG elaborated a list of “dual-use” commodities characterized by their legitimate conventional end-uses, but also with a special utility for use in nuclear applications. This list, which was established by the NSG, hence became known as the

“nuclear related dual use list.” This new dual-use regime can be seen as the main reason for the revitalization of the former “London Group” in 1991 as the “Nuclear Suppliers Group,” which from its very beginning aimed at attracting all supplier countries whether or not they are members of the NPT.

### **ZAC Business Practices and Procedures**

Contrary to rumors (or allegations) spread in the 1970s, Zangger Committee members never attempted to deprive less developed countries of the peaceful benefits of nuclear energy. Quite the opposite is true. It cannot, in my opinion, be said too often that membership in the Zangger Committee imposes no obligations that have not already been undertaken by parties to the NPT. In fact, it is correct to say that the Zangger commitments, as they are directly derived from Article III.2 of the NPT, are shared by all members of the Treaty.

At present, membership in the Committee is identical to that of the NSG, except for Argentina—which is only in the NSG—and South Korea—which is an observer in the ZAC. There are currently 29 members in the ZAC. Since 1992, France, Spain, Bulgaria, Portugal, and South Africa have all become members. Others are under consideration.

The Committee meets twice a year, always in Vienna, in premises made available by the Austrian Federal Chancellery. From the very beginning, it has always been understood that the Committee would be an informal body and that its discussions would remain confidential. It is also generally recognized that the May meeting is the main event, and that a second meeting would take place in October if business justified it. In practice, the October meeting has become a permanent feature.

The chairman is elected by employing much the same sort of quiet backstage consultative procedure that elects the Pope. The term of office is indefinite, which is perhaps an unusual arrangement, but one which works well. There have been three chairmen so far: Professor Claude Zangger, from the Committee’s inception in 1971 to 1989; Mr. Ilkka Mäkipentti of Finland from 1989 to 1993, and, since May 1993, the author of this article.

The United Kingdom’s Mission in Vienna has traditionally provided the secretary, because, so the story goes, the only record of the very first meeting was in the form of a few notes scribbled on the back of an old envelope by the U.K. delegate, which he humbly shared with all who asked.

### **The Committee’s Work Routine**

The meetings themselves are truly informal. Delegations do not sit behind nameplates and microphones are deliberately not used. (This may change in the future if the Committee continues to grow at its present rate.) Meetings almost never last more than a morning. This may be largely because the Committee could be said to be more or less permanently in

session; the coordination between meetings is conducted through the secretary. In that way, issues can be brought to an advanced state of maturity in time for the meetings. Another contributing factor may be that the secretary produces a full and accurate record of the meetings, which is then individually confirmed by each member delegation. This provides Committee members with a clear statement of the arguments, agreements reached, and the subsequent steps to be taken on any particular issue.

### **Procedures for Work on the Trigger List**

Taking into account the Zangger Committee's mandate, it is the task of the Committee to create a level safeguards playing field (within the terms laid down by the NPT) by agreeing to the rules under which its members will make nuclear exports to non-nuclear weapon states not party to the NPT.

This is done in a perpetual process of review, which tends to be activated by the initiative of the major technology holders. It usually begins with a draft proposal tabled by one or more holders of the particular technology, which asks for other capitals' comments within a certain time frame. Thereafter, the technology holders might meet as a separate group, and usually not as members of the Zangger Committee, to prepare a revised version of the proposal, incorporating comments received. The revision is then circulated to all Committee members by the secretary, inviting further comments by a specific date. At this point, the secretary will also attach a draft note verbale that members will exchange with each other when the exercise reaches the final stage of adoption. These notes, known as "Internal Notes," take the form of identically-worded unilateral declarations to the effect that the export of the items in question will be controlled through domestic legislation.

The secretary will also provide a model letter to be sent to the Director-General of the IAEA at the end of the exercise, asking him to inform all member states of the changes to the Trigger List through the publication of a new INFCIRC in the 209 series. This refinement procedure is repeated, with appropriate variations, until consensus is reached in the Committee. The consensus, expressed by the exchange of the Internal Notes, then becomes part of the Committee's "understandings."

The initiative by the technology holders to improve or further clarify the Trigger List and the procedure to work outside the formal framework of the Committee have an additional advantage. They make it possible to harmonize the work inside the Committee with countries outside. For example, this made it possible to achieve and implement a Trigger List clarification when such a significant technology holder as France remained a non-member of the ZAC. While remaining a nonparty to the NPT, France had undertaken to act as if it were a party. Consequently, France became actively engaged in meetings of technology holders, who usually met as a separate group outside the framework of the Zangger Committee. At the final stage in the process, France adopted the same export control arrangements as the

United Kingdom, through arrangements agreed to in Vienna, London, and Paris. However, this “special procedure” is now part of history, France having joined the NPT and the Zangger Committee in 1992.

## **Future Work of The ZAC**

### The ZAC and the NSG

The reemergence of the NSG has given rise to questions about the need to retain the ZAC. The usual argument for merging the two groups was that the ZAC's mandate is firmly circumscribed by the NPT (and therefore narrow), while the NSG has no such self-imposed limitations on its activities. It was, of course, an attractive and logical point of view, at first. But there were sound counter arguments for continuing the Committee, which have been well-rehearsed over the last year or so: the fact that ZAC derives its existence directly from the NPT (i.e., not just from Article III.2), that it is accepted by all members of the NPT, and that there is still flexibility for further elaborations within Article III.2 itself (as will be discussed below).

The ZAC will therefore continue to do what it was created for and what it does best: to provide a forum for interpreting supplier commitments under Article III.2 of the NPT (a view endorsed by the Committee at its meeting in October 1992). In the meantime, the NSG should take advantage of the Committee's work and relate its efforts mainly to the dual-use regime. Unnecessary duplication of work should be avoided. It is also essential to have close cooperation between the two bodies (through their chairmen).

### The 1995 NPT Conference

The 1995 NPT Review and Extension Conference features prominently in the Committee's agenda. There is no doubt that the subject matter of Article III.2 will loom large in its considerations. I firmly believe that the Committee can bring significant influence to bear in bridging diverging group interests to the ultimate benefit of our common objective of nuclear nonproliferation. The ZAC is recognized by the membership of the NPT as the responsible body in charge of Article III.2. This was confirmed by the last NPT Review Conference in 1990 when the Main Committee II stated:

*The Conference notes that a number of States Parties engaged in the supply of nuclear material and equipment have met regularly as an informal group which has become known as the Zangger Committee in order to coordinate their implementation of Article III.2. To this end these States have adopted certain requirements, including a list of items triggering IAEA safeguards, for their export to non-nuclearweapon states not party to the Treaty, as set forth in the IAEA document INFCIRC/209 as revised. The Conference urges all states to adopt these requirements in connection with any nuclear cooperation with non-nuclear-weapon states not party to the Treaty.*

*The Conference recommends that the list of items triggering IAEA safeguards and the procedures for implementation be reviewed from time to time to take into account advances in technology and changes in procurement practices. The Conference recommends the States Parties to consider further ways to improve the measures to prevent diversion of nuclear technology for nuclear weapons, other nuclear explosive purposes or nuclear weapon capabilities. While recognizing the efforts of the Zangger Committee in the nonproliferation regime, the Conference also notes that items included in the “Trigger List” are essential in the development of nuclear energy programmes for peaceful uses. In this regard, the Conference requests that the Zangger Committee should continue to take appropriate measures to ensure that the export requirements laid down by it do not hamper the acquisition of such items by States parties for the development of nuclear energy for peaceful uses.*

As the Committee’s work received such wide recognition in 1990, it seems appropriate to consider whether information about the Committee should be provided to the NPT Review Conference in 1995, to give an insight into the ZAC’s accomplishments to date and to highlight the areas that may require further attention in the future. Such an educational exercise would help all NPT members to understand the Committee’s activities better and could facilitate the drafting of language for the final document.

#### **NUCLEAR SUPPLIERS GROUP, 1974**

The Nuclear Suppliers Group is a group of nuclear supplier countries that seeks to contribute to the nonproliferation of nuclear weapons through the implementation of two sets of Guidelines for nuclear exports and nuclear-related exports. The NSG first met in November 1975 in London, and is thus popularly referred to as the “London Club” (“Club de Londres”).

Established in 1975, the Nuclear Suppliers Group (NSG) is comprised of 48 states that have voluntarily agreed to coordinate their export controls to non-nuclear-weapon states. The NSG governs the transfers of civilian nuclear material and nuclear-related equipment and technology. The participants are: Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Latvia, Lithuania, Luxembourg, Malta, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, and the United States.

The NSG aims to prevent nuclear exports for commercial and peaceful purposes from being used to make nuclear weapons. In order to ensure that their nuclear imports are not used to develop weapons, NSG members are expected to forgo nuclear trade with governments that do not subject themselves to confidence-building international measures and inspections. The

NSG has two sets of Guidelines listing the specific nuclear materials, equipment, and technologies that are subject to export controls.

## **History**

Negotiated in 1968, the nuclear Nonproliferation Treaty (NPT) granted non-nuclear-weapon states access to nuclear materials and technology for strictly peaceful purposes. Recognizing peaceful nuclear programs could turn into weapons programs, several NPT nuclear supplier states sought to determine the conditions for sharing specific equipment and materials with non-nuclear-weapon states. In 1971, these supplier states formed the Zangger Committee in order to require states outside the NPT to institute International Atomic Energy Agency (IAEA) safeguards before importing certain items that could be used to pursue nuclear weapons—referred to as the "Trigger List."

India's explosion of a nuclear device in 1974 reaffirmed the fact that nuclear materials and technologies acquired under the guise of peaceful purposes could be diverted to build weapons. In response to India's action, several Zangger Committee members, along with France—who was not a member of the NPT at that time—established the NSG to further regulate nuclear-related exports. The NSG also added supplemental technologies to the original Zangger Committee's "Trigger List," becoming Part I of the NSG Guidelines. In addition, NSG members agreed to apply their trade restrictions to all states, not just those outside the NPT.

## **Guidelines and Operation**

The NSG Guidelines require that importing states provide assurances to NSG members that proposed deals will not contribute to the creation of nuclear weapons. Potential recipients are also expected to have physical security measures in place to prevent theft or unauthorized use of their imports and to promise that nuclear materials and information will not be transferred to a third party without the explicit permission of the original exporter. In addition, final destinations for any transfer must have IAEA safeguards in place. The IAEA is charged with verifying that non-nuclear-weapon states are not illicitly pursuing nuclear weapons. To prevent nuclear material or technology from being stolen or misappropriated for weapons, IAEA safeguards include inspections, remote monitoring, seals, and other measures. The Guidelines are comprised of two parts, each created in response to significant proliferation events that highlighted shortcomings in the export control systems.

Part I lists materials and technology designed specifically for nuclear use. These include fissile materials, nuclear reactors and equipment, and reprocessing and enrichment equipment. First published in 1978, Part I responded to India's 1974 diversion of nuclear imports for supposedly peaceful purposes to conduct a nuclear explosion. To be eligible for importing Part I items from an NSG member, states must have comprehensive IAEA safeguards covering all their nuclear activities and facilities. In the case of Part II goods,

IAEA safeguards are only required for the specific nuclear activity or facility designated for the import.

Part II identifies dual-use goods; non-nuclear items with legitimate civilian applications that can also be used to develop weapons. Machine tools and lasers are two types of dual-use goods. NSG members adopted Part II in 1992 after discovering how close Iraq came to realizing its nuclear weapons ambitions. Iraq had illicitly employed dual-use imports in a covert nuclear weapons program before the 1991 Persian Gulf War. At a May 2004 meeting, NSG members adopted a "catch-all" mechanism, which authorizes members to block any export suspected to be destined to a nuclear weapons program even if the export does not appear on one of the control lists.

Because the regime is voluntary, NSG members may ultimately make a political calculation to proceed with a transfer that violates the guidelines. For instance, Russia transferred nuclear fuel to India in January 2001 even though 32 of 34 NSG members earlier declared that the shipment would contradict Russia's NSG commitments. Members are supposed to report their export denials to each other so potential proliferators cannot approach several suppliers with the same request and receive different responses. NSG states are expected to refrain from making exports identical or similar to those denied by other members.

In 2008, the NSG agreed to exempt India from its requirement that recipient countries must have comprehensive IAEA safeguards covering all nuclear activities. The United States pressed for a three-year exemption to allow nuclear trade with India, but some NSG members were reluctant to agree to such a reversal. The waiver commits each NSG member to regularly inform the group of approved transfers to India and invites each country to share information on their bilateral nuclear cooperation agreements with India.

As part of the organization, NSG members periodically review the Guidelines to add new items that pose proliferation risks or to eliminate goods that no longer require special trade controls. An annual plenary, which is chaired on a rotating basis among members, is held to discuss the regime's operation, including possible changes to the Guidelines. All NSG decisions are made by consensus. Members also participate in regular meetings of separate standing bodies—the Dual-Use Consultations and the Joint Information Exchange—devoted to reviewing Part II of the Guidelines and exchanging pertinent information. The Permanent Mission of Japan to the International Organisations in Vienna serves as the NSG point of contact. It receives and distributes NSG documents, schedules meetings, and assists with other administrative work.

## **Membership**

Any state that conducts exports appearing on the Guidelines may apply for NSG membership. A potential member is evaluated on its proliferation record for national export controls and adherence to international nonproliferation treaties and agreements. All existing

members must approve an applicant for admittance to the regime. There are several countries with nuclear programs outside the NSG, most notably India, Israel, Pakistan, and North Korea. In recent years, India has advanced its bid to join the NSG. Although President Barack Obama expressed support for India's membership to the NSG in 2010, the group remains divided, in part because, as a non-state-party to the NPT, India doesn't meet a core criterion for membership.

At the June 2016 NSG meeting, the United States and India pushed for acceptance of India's bid for membership. All of the participating states, except for China, support allowing India to join the NSG without signing the NPT. China noted that other non-NPT states in addition to India had expressed desire in joining the NSG, and therefore India should not receive an exclusive exemption. As China's ambassador to Vienna, Shi Zhongjun, explained in June 2016, as "NPT membership constitutes one of the prerequisite factors for consideration of NSG participation, [m]ore discussions are needed before the Group is in a position to review...participation by any specific non-NPT state at the meetings of the Group." China's aim is to define non-discriminatory guidelines for membership that would remove the possibility of political bias.

In response to India's bid, Pakistan also expressed a desire to join the NSG. On May 20, 2016, Pakistan's ambassador sent a letter to formally apply for NSG membership, arguing that it also has the credentials to join.

## **Membership Criteria**

Factors taken into account for membership include the following:

- The ability to supply items (including items in transit) covered by the annexes to Parts 1 and 2 of the NSG Guidelines
- Adherence to the Guidelines and action in accordance with them
- Enforcement of a legally based domestic export control system which gives effect to the commitment to act in accordance with the Guidelines
- Full compliance with the obligations of one or more of the following: the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Treaties of Pelindaba, Rarotonga, Tlatelolco, Bangkok, or an equivalent international nuclear nonproliferation agreement
- Support of international efforts towards nonproliferation of weapons of mass destruction and of their delivery vehicles

## **Goals**

NSG members pursue the aims of the NSG through adherence to NSG Guidelines that are adopted by consensus, and through an exchange of information, notably on developments of nuclear proliferation concern. The first set of NSG Guidelines governs the export of items that are especially designed or prepared for nuclear use. These include: (i) nuclear material;

(ii) nuclear reactors and equipment therefore; (iii) non-nuclear material for reactors; (iv) plant and equipment for the reprocessing, enrichment, and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) technology associated with each of the above items. The second set of NSG Guidelines governs the export of nuclear-related dual-use items and technologies (items that have both nuclear and non-nuclear applications), which could make a significant contribution to an unsafeguarded nuclear fuel cycle or nuclear explosive activity.

The NSG Guidelines are consistent with, and complement, the various international, legally binding instruments in the field of nuclear nonproliferation. These include the NPT, and the Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco), the South Pacific Nuclear Weapons-Free Zone Treaty (Treaty of Rarotonga), the African Nuclear-Weapons-Free Zone Treaty (Treaty of Pelindaba) and the Treaty on the Southeast Asia Nuclear-Weapons-Free Zone (Treaty of Bangkok).

The NSG Guidelines aim to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices, while not hindering international trade and cooperation in the nuclear field. The NSG Guidelines facilitate the development of peaceful nuclear trade by providing the means whereby obligations to facilitate peaceful nuclear cooperation can be implemented in a manner consistent with international nuclear nonproliferation norms. NSG members commit themselves to conditions of supply, in the context of the further development of the applications of nuclear energy for peaceful purposes.

### **Safeguards**

The NSG aims to ensure that nuclear exports are carried out with appropriate safeguards, physical protection, and nonproliferation conditions, and other appropriate restraints. The NSG also seeks to restrict the export of sensitive items that can contribute to the proliferation of nuclear weapons.

The NSG, taking into account the work already done by the Zangger Committee, agreed on a set of Guidelines incorporating a trigger list. These were published in 1978 as International Atomic Energy Agency (IAEA) Document INFCIRC/254 (subsequently amended) to apply to nuclear transfers for peaceful purposes to help ensure that such transfers would not be diverted to an unsafeguarded nuclear fuel cycle or nuclear explosive activities. There is a requirement for formal government assurances from recipients to this effect. The Guidelines also include a requirement for physical protection measures agreement to exercise particular caution in the transfer of sensitive facilities, technology, and weapons materials—and strengthened re-transfer provisions. In doing so, the Guidelines recognize that there is a class of technologies and materials that are particularly sensitive because they can lead directly to the creation of weapons-usable material. The implementation of effective physical protection measures is also critical to help prevent the theft and illicit transfer of nuclear material.

At the 1990 NPT Review Conference, the committee reviewing the implementation of Article III made a number of recommendations that had a significant impact on the NSG's activities in the 1990s. These included the following recommendations: that NPT parties consider further improvements in measures to prevent the diversion of nuclear technology for nuclear weapons; that States engage in consultations to ensure appropriate coordination of their controls on the exports of items, such as tritium, not identified in Article III.2 but still relevant to nuclear weapons proliferation and therefore to the NPT as a whole; that nuclear supplier States require, as a necessary condition for the transfer of relevant nuclear supplies to non-nuclear weapon States (NNWS), the acceptance of IAEA Safeguards on all their current and future nuclear activities (i.e., full-scope safeguards, or comprehensive safeguards).

The endorsement at the 1995 NPT Review and Extension Conference (NPTREC) of the full-scope safeguards policy already adopted by the NSG in 1992 showed that the international community believed this nuclear supply policy is vital to promote shared nuclear nonproliferation commitments and obligations. Specifically, Paragraph 12 of the decision on "Principles and Objectives for Nuclear Non-proliferation and Disarmament" at the 1995 NPTREC states that full-scope safeguards and international, legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices should be a condition for granting licenses for trigger list items under new supply arrangements with NNWS.

The final document of the 2000 NPT Review Conference reaffirmed Paragraph 12 of the decision on "Principles and Objectives for Nuclear Non-proliferation and Disarmament" and recognized the value of export restrictions to prevent the further proliferation of nuclear weapons.

### **Dual-Use Controls**

At the beginning of the 1990's it became apparent that export control provisions then in force had not prevented Iraq, a party to the NPT, from pursuing a clandestine nuclear weapons program, which later prompted UN Security Council action. A large part of Iraq's effort had been to acquire dual-use items not covered by the Guidelines and then to build materials within Iraq needed for a nuclear weapons program. Iraq's program gave substantial impetus to the NSG's development of its dual-use Guidelines. In doing so, the NSG demonstrated its commitment to nuclear nonproliferation by ensuring that items like those used by Iraq would only be used for peaceful purposes. These items would remain available for peaceful nuclear activities subject to IAEA safeguards, as well as for other industrial activities that would not contribute to nuclear proliferation.

Following these developments, the NSG decided in 1992 to establish Guidelines for transfers of nuclear-related dual-use equipment, material, and technology (items that have both nuclear and non-nuclear applications), which could make a significant contribution to an

unsafeguarded nuclear fuel cycle or nuclear explosive activity. These dual-use Guidelines were published as Part 2 of INFCIRC/254 to establish a framework for consultation on the dual-use Guidelines, for the exchange of information on their implementation, and for procurement activities of potential proliferation concern; to establish procedures for exchanging notifications that have been issued as a result of national decisions not to authorize transfers of dual-use equipment or technology, and to ensure that members do not approve transfers of such items without first consulting with the State that issued the notification. The guidelines also serve to make a full-scope safeguards agreement with the IAEA a condition for the future supply of trigger list items to any non-nuclear weapon State. This decision ensured that only NPT parties and other States with full-scope safeguards agreements could benefit from nuclear transfers.

### **Regime Procedures & Early Developments**

The NSG requires IAEA safeguards as a condition of supply, with full-scope safeguards as the norm; national control laws and procedures; physical protection against theft for sensitive parts of the nuclear fuel cycle; restraint of enrichment and reprocessing plant assistance to countries of proliferation concern; a common control list; export restraint to regions of conflict and instability; and information-sharing among members.

The Guidelines for Nuclear Transfers, initially agreed upon by supplier States in 1977 and transmitted to the IAEA Director-General in January 1978, envisage additional export control restraints beyond those provided for in the NPT. These restraints prohibit the use of exports from being used in any nuclear explosive device; mandate restraint in the transfer of facilities and technologies used for reprocessing, uranium enrichment, and heavy water production; require physical protection of nuclear materials and facilities; and mandate control of re-transfer of items and acceptance of the Zangger Committee Trigger List.

At its 1992 Warsaw meeting, the NSG agreed on the Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Material and Related Technology and the List of Nuclear-Related Dual-Use Equipment and Materials and Related Technology, which includes 67 categories of dual-use items. Also at the 1992 Warsaw meeting, the NSG adopted the Statement on Full-Scope Safeguards, requiring the application of IAEA safeguards on all source and special fissionable materials in recipient States' current and future nuclear activities.

The 1993 Lucerne NSG meeting endorsed an amendment to the NSG Guidelines that requires IAEA safeguards on all current and future nuclear activities as a condition for any significant new supply commitments to NNWS. Transfers to NNWS without a full-scope safeguards agreement shall be authorized only in exceptional cases when the transfers are deemed essential for the safe operation of existing facilities, and only if safeguards are applied to those facilities. This policy does not apply to agreements or contracts drawn up on

or prior to 3 April 1992. The updated NSG Guidelines were published as IAEA document INFCIRC/254/Rev 1, Part 1 and 2.

The NSG called on nuclear supplier countries that have not yet adopted the full-scope safeguards policy to do so as soon as possible. In return, the NSG would attempt to ensure that indirect supply through third countries does not undermine this policy.

The 1993 Lucerne meeting also adopted an arrangement that established the procedure for joining the regime. The procedure calls for the NSG members to reach a consensus about the invitation of a new State and requires the new State to accept the NSG Guidelines in their entirety (i.e., both Parts 1 and 2 of INFCIRC/254/Rev 1). Countries adhering only to Part 1 may be granted the right to attend the meetings, although they may not participate fully before their adherence to Part 2. The invitation of observers, whether they are countries or international organizations, requires the consensus of all members.

On the basis of recommendations by the Technical Working Group on conditions of supply, the NSG reviewed the Guidelines for Nuclear Transfers (INFCIRC/254/Rev.1/Mod. 1, Part 1) and adopted several changes in order to respond to new concerns in the field of nuclear proliferation. The Group agreed to strengthen the retransfer provisions of the Guidelines and to incorporate a new provision underlining the importance of members' satisfying themselves that their transfers would not contribute to the proliferation of nuclear weapons or other nuclear explosive devices.

The Technical Working Group was mandated to continue reviewing the nuclear-related items included in the Annex to Part 1 of the Guidelines. A new Technical Working Group was created to review the Annex to Part 2 of the Guidelines.

The NSG decided to restructure its arrangements for exchanging information on proliferation threats with the objective of further enhancing the members' ability to respond to these threats. The NSG affirmed the principle of transparency and agreed that members should continue their efforts to brief nonmembers on the aims and activities of the Group.

### **The NSG, the Zangger Committee, and the NPT**

The Zangger Committee's provisions are closely tied to Article III.2 of the NPT. In contrast to Zangger Committee members, NSG members are not required to be parties to the NPT, but they all must adhere to instruments that contain equally binding commitments. The NSG Guidelines are designed to strengthen implementation of the nonproliferation undertakings contained in those legal instruments.

The NSG and the Zangger Committee differ in the scope of their trigger lists of especially designed or prepared items (EDP) and in the export conditions for items on those lists. Concerning the scope of those lists, the Zangger list is restricted to items falling under Article

III.2 of the NPT. As an export condition for the items on the trigger lists, the NSG has a formal full-scope safeguards requirement as a condition of supply, with the exception of India as it was granted a waiver from these requirements on 6 September 2008. However, even before this waiver some sales to India and Pakistan took place: Russian and Chinese contracts with India and Pakistan that were in place before the establishment of the NSG continued to be honored, while Russia sold nuclear fuel to India citing safety issues. Otherwise, all members of the NSG and the Zangger Committee apply full-scope safeguards as a condition of supply for trigger list items to NNWS parties to the NPT.

The NSG arrangement covering exports of dual-use items is a major difference between the NSG and the Zangger Committee. As dual-use items cannot be defined as EDP equipment, they fall outside the Zangger Committee's mandate. As noted above, the control of dual-use items has been recognized as making an important contribution to nuclear nonproliferation.

The NSG Guidelines apply to transfers to all NNWS. The Zangger Committee memoranda only apply to transfers to NNWS not party to the NPT, as compliance with NPT obligations fulfills the criteria of the Zangger Committee understandings. In 1994, the NSG also strengthened its re-transfer provisions to require government-to-government assurances to support the stipulation that a supplier's consent be obtained for the re-transfer of trigger list items from any State that does not require full-scope safeguards as a condition of supply. At the same time, the NSG also adopted the so-called "nonproliferation principle," whereby a supplier, notwithstanding other provisions in the Guidelines, should authorize a transfer only when satisfied that the transfer would not contribute to the proliferation of nuclear weapons. The nonproliferation principle seeks to cover the rare, but important cases where adherence to the NPT or to a nuclear-weapon-free zone treaty may not by itself be a guarantee that a State will consistently share the objectives of the treaty or that it will remain in compliance with its treaty obligations.

Despite these differences between the two regimes, they serve the same objective and are equally valid instruments of nuclear nonproliferation efforts. There is close cooperation between the NSG and the Zangger Committee on the review and amendment of the trigger lists.

### **Verification and Compliance**

The NSG regime is a voluntary association, not bound by a treaty, and therefore has no formal mechanism to enforce compliance. The NSG guidelines are applied both to members and non-members of the NSG. As practiced by NSG members, export controls operate on the basic principle of cooperation with restrictions as the exception. Few NPT parties have been refused controlled items: this has occurred when a supplier State had good reason to believe that the item in question could contribute to nuclear proliferation. Almost all rejections by

NSG members of applications for export licenses have concerned States with unsafeguarded nuclear programs.

## **Recent Developments**

2010: On 9 March, Israeli Minister of National Infrastructure Uzi Landau reaffirmed his country's interest in pursuing a nuclear power program raising the issue of an NSG exemption for Israel. On 24-25 June 2010, the NSG held its 20<sup>th</sup> Plenary Meeting in Christchurch, New Zealand, chaired by Ambassador Jennifer Macmillan, Permanent Representative of New Zealand to the United Nations Office and Other International Organisations in Vienna.

At the plenary, the group heard briefings on developments related to non-NSG states, and continued consideration of the implementation of the Statement on Civil Nuclear Cooperation with India that exempts the state from the requirement of the IAEA comprehensive safeguards agreement as a condition of nuclear trade. Regarding the demand for civil nuclear power the group reaffirmed its obligation to address proliferation concerns without hampering important prospective nuclear trade relationships. In addition, the group stressed the benefits of licensing based on NSG guidelines, control lists, and enforcements. Group members also agreed to strive for the strengthening of guidelines dealing with the transfer of enrichment and reprocessing technologies (ENR).

The NSG member-states discussed the implementation of UNSC resolutions and their relevance to the purposes of the NSG. In order to inform of developments within the Group, to assist partner nations with enhancement of their export controls and to facilitate adherence to the NSG Guidelines, the group mandated that the Chair and other NSG members maintain contact with non-participating governments and international organizations. Despite the high-profile nature of the issue, the potential sale of two additional reactors from China to Pakistan was not on the 2010 NSG plenary meeting agenda.

The group delayed talks on the Additional Protocol as condition of nuclear trade in favor of completing negotiations on proposed enrichment and reprocessing guidelines. The group, however, did not reach consensus. The guidelines, which were introduced in late 2008, would allow Argentina and Brazil to receive enrichment and reprocessing items without adhering to the Additional Protocol, on the grounds that they participate in the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), a bilateral safeguards agency established in 1991. The possible exemption of these states from adherence to the Additional Protocol in the draft guidelines would leave South Africa as one of two remaining NSG member states that continues to object to the Additional Protocol as a condition for supplying enrichment and reprocessing items.

Turkey expressed fundamental opposition to the proposed enrichment and reprocessing guidelines on the grounds that they would further restrict access to nuclear material,

equipment, and technology beyond restrictions outlined in the NPT. The 20<sup>th</sup> annual plenary meeting concluded with the NSG taking note of briefings on developments concerning non-NSG states and agreeing on the value of ongoing consultation and transparency in regard to the nuclear-related activities of these states. During a state visit to India on November 6-9, U.S. President Barack Obama announced U.S. support for India's joining of the NSG.

2011: On 23-24 June, the NSG held its 21<sup>st</sup> Plenary Meeting in Noordwijk, Netherlands. In its public statement, the Group discussed current trends in preventing the proliferation of nuclear weapons through export controls on nuclear material, dual use material, as well as other technologies and software.

NSG members expressed their sympathy for the nuclear devastation that took place in Japan in March 2011 and welcomed global efforts to strengthen nuclear safety. The participants highlighted the existing challenges, such as proliferation threats presented by Iran, the Democratic People's Republic of Korea, and Syria. It also decided to continue consideration of "all aspects of the implementation of the 2008 Statement on Civil Nuclear Cooperation with India."

The Group agreed to strengthen its guidelines on transfer of enrichment and reprocessing technologies and called on all states to "make best efforts" to ensure exports of technologies and goods do not promote the proliferation of nuclear weapons. In addition, the members emphasized the importance of keeping the NSG's lists up to date with technological developments, including a review of adherence to the Additional Protocol, set forth by the 2006 Brasilia Plenary.

On 26 July, the current Chairman of the NSG from the Netherlands issued a Note Verbale to the IAEA discussing Member States' guidelines for the export of nuclear material, equipment, and technology. The note informed the IAEA that the Member States of the NSG decided to amend paragraphs 6 and 7 of the Part 1 Guidelines to emphasize (inter alia):

- Suppliers should "exercise a policy of restraint" when transferring materials "usable for nuclear weapons"
- Suppliers should "consult with potential recipients to ensure" nuclear materials and facilities transferred "are intended for peaceful purposes only"
- Special Arrangements should be made when transferring materials used for the enrichment of uranium, ensuring they will not "be modified or operated for the production of greater than 20% enriched uranium"

On 24 October, the Foreign Minister of France spoke on the amended export rules, emphasizing that the state planned to continue adhering to exemptions for India set forth by the NSG in 2008. On 14 November, China reported that its new 1,000 MW reactor had "passed safety inspections and was ready for use."

2012: On 3 May, Australia publicly committed to supporting Indian membership in the NSG. On 21-22 June, the NSG held its 22<sup>nd</sup> Plenary Meeting in Seattle. The meeting was chaired by the Netherlands, Mexico and Serbia attended as observer states. In its public statement, the NSG noted concerns regarding the nuclear proliferation programs of Iran and the DPRK, approved a paper to outline outreach to non-party states, discussed the NSG's relationship with India, and reiterated the importance of keeping its lists updated in accordance with technological developments.

The Seattle Plenary agreed to offer Mexico NSG membership after the completion of an intersessional procedure. It also agreed to offer Serbia NSG Membership following completed consultations with the government of Serbia. On 15 September, Mexico was admitted to the NSG, thus expanding membership to 47. 2013: On 13 – 14 June, the 23<sup>rd</sup> Plenary Meeting of the Nuclear Suppliers Group took place in Prague, chaired by Ambassador Veronika Kuchyňová Šmigolová of the Czech Republic. Mexico and Serbia attended as NSG Participating Governments for the first time. In its public statement, the NSG noted the proliferation implications of the DPRK's nuclear program, the DPRK's 12 February nuclear test, and Iran's nuclear program with grave concern.

At the Plenary, the NSG considered implementing the 2008 Statement on Civil Nuclear Cooperation with India, agreed to launch a new and revised NSG public website, and discussed NSG outreach efforts. The Plenary adopted 28 amendments to the NSG Control List and will request the IAEA publish all 54 agreed amendments in a revised INFCIRC/254/Parts 1 and 2. During a visit to Turkey on 8 October, the President of India sought support for a permanent membership to the NSG. On 15 October, India and the United States raised objections in the NSG over China's proposed sale of two nuclear reactors to Pakistan. They believe it violates the norms established by the NSG.

2014: On 26-27 June, the Nuclear Suppliers Group, led by Argentinian Ambassador Rafael Mariano Grossi, held its 24<sup>th</sup> Plenary Meeting in Buenos Aires. Points of discussion for the committee included Argentina's role in chairing the NSG, DPRK's nuclear program, international outreach efforts, informational materials for the 2015 NPT Review Conference, and the 2008 Statement on Civil Nuclear Cooperation with India.

2015: During the 2015 NPT Review Conference (27 April-22 May 2015), Ambassador Rafael Mariano Grossi (Argentina) delivered a statement to Main Committee II on behalf of the NSG, addressing the activities of the Group since the 2010 Review Conference and calling for cooperation in nuclear export controls. On 3-5 June, the Nuclear Suppliers Group, led by Argentinian Ambassador Rafael Mariano Grossi, held its 25<sup>th</sup> Plenary Meeting in Bariloche, Argentina. Topics of discussion included the DPRK's nuclear program, Iran nuclear negotiations, the outcome of the 2015 NPT Review Conference and the NSG's relationship with India. Following the conclusion of the 25<sup>th</sup> Plenary Meeting both the Trigger List and Dual-use List of the NSG control lists were updated.

2016: On 21 March, Indian Prime Minister Narendra Modi stated his objective for the 2016 Nuclear Security Summit is to gain membership in the NSG. On 19 May, Pakistan submitted its formal application for membership. On 7 June, Prime Minister Modi and President Barack Obama met in Washington, D.C to discuss India's readiness to join the Nuclear Suppliers Group. On 23 and 24 June, the Nuclear Suppliers Group held its twenty-sixth Plenary Meeting in Seoul, Republic of Korea. A public statement was released during the meeting where the NSG welcomed the JCPOA and deplored the January nuclear test by the DPRK. The NSG confirmed that Switzerland will assume the Chairmanship of the NSG from 2017 to 2018 and Switzerland's plans to host the next plenary.

During the Plenary Meeting in Seoul, Republic of Korea, India was unsuccessful in its attempt to become the newest member of the Nuclear Suppliers Group. A block of nations led by China opposed India's entrance into the group. On 8 November, the Nuclear Suppliers Group Part 1 and 2 Guidelines were revised and updated. Part 1 addresses guidelines for nuclear transfers and Part 2 addresses guidelines for nuclear-related dual-use equipment, materials, software, and related technology. On 11 November, the Nuclear Suppliers Group held a special meeting in Vienna to discuss criteria for India's entry. China continued to block India's entry into the NSG, citing the need for a non-discriminatory solution to admit non-NPT members.

2017: On June 23 and 24, The Nuclear Suppliers Group held its twenty seventh Plenary Meeting in Bern, Switzerland. In a released public statement, the NSG strongly condemned the Democratic People's Republic of Korea's (DPRK) nuclear test and welcomed the continued implementation of the Joint Comprehensive Plan of Action. During the Plenary Meeting, India was unsuccessful in its attempt to join the Nuclear Suppliers Group. China led the opposition against India's entry; the situation has become a source of tension between the two countries. On 6 December, Russia reaffirmed its support for India's entry into the NSG and assured it would raise the issue with China at the 15th RIC foreign ministerial meeting.

2018: From 14 to 15 June, the Nuclear Suppliers Group held its twenty-eighth Plenary Meeting in Jurmala, Latvia. The NSG reaffirmed support for the full implementation of the NPT and for the continued implementation of the JCPOA. The NSG also released updated control lists.

2019: On 31 January, China stated that India must sign the Non-Proliferation Treaty before China will allow India to join the Nuclear Suppliers Group, halting further progress for India's admittance to the group.

### **AUSTRALIA GROUP, 1985**

The Australia Group (AG) is an informal association that works on the basis of consensus. It aims to allow exporters or transshipment countries to minimize the risk of further proliferation of chemical and biological weapons (CBW). The Group meets annually to

assess ways in which the national level export licensing measures of its 41 participants can collectively be rendered more effective to ensure that would-be proliferators are unable to obtain necessary inputs for CBW programs, which are banned under the provisions of the Chemical Weapons Convention (CWC). All States participating in the AG are Parties to the CWC and the Biological and Toxin Weapons Convention (BTWC).

Established in 1985, the Australia Group is a voluntary, informal, export-control arrangement through which 42 countries, as well as the European Union, coordinate their national export controls to limit the supply of chemicals and biological agents-as well as related equipment, technologies, and knowledge-to countries and nonstate entities suspected of pursuing chemical or biological weapons (CBW) capabilities. All participants are members of the 1997 Chemical Weapons Convention (CWC) and the 1972 Biological Weapons Convention (BWC) and have stated that they view the Australia Group as a practical way to uphold the core purpose of these accords: preventing the spread of chemical and biological weapons.

Citing the use of chemical weapons during the Iran-Iraq war, the Australian government proposed creating the group in April 1985 as a means of uniting 15 countries that had independently established national controls on chemical weapons-related exports. At the first meeting in June 1985, the Australia Group initially focused on chemical weapons but by 1990 had extended its activities to include biological weapons. Although the group has traditionally aimed to prevent states from acquiring CBW-related materials, it decided at its June 2002 meeting to also address the flow of CBW capabilities to nonstate actors, such as terrorists.

The Australia Group establishes "control lists," and its members are expected to deny export license requests for items on the lists when there is a concern that the items might be used in a CBW program. Each year members meet in Paris to coordinate these export control policies, discuss possible revisions to the common control lists, and share intelligence about global CBW proliferation and export denials. The group has no charter or constitution, and each country uses its own discretion when implementing national export controls, relying on the group's lists as a baseline but often creating stricter controls than suggested by the group. Sensitive items on these control lists can be divided into five categories:

- Chemical weapons precursors-chemicals used in the production of chemical weapons.
- Dual-use chemical manufacturing facilities, equipment, and related technology-items that can be used either for civilian purposes or for chemical weapons production, such as reactors, storage tanks, pumps, and valves.
- Biological agents-disease-causing microorganisms, whether natural or genetically modified, such as smallpox, Marburg, foot-and-mouth disease, and anthrax.
- Toxins-poisonous substances either made by living organisms or produced synthetically that adversely affect humans, animals, or plants, such as botulinum toxin and ricin.

- Dual-use biological equipment-items that can be used for both peaceful research and biological weapons production, such as fermenters, containment facilities, freeze-drying equipment, and aerosol testing chambers.

As with all other decisions, the Australia Group accepts new members only by consensus. Countries wishing to gain membership to the group must meet certain criteria, including proven compliance with the CWC and the BWC, and an established, effective national export control and enforcement mechanism for all the items on the group's control lists. In deciding whether to accept new members, each current member also weighs its willingness to share intelligence with the applicant country. Nonparticipating states complain that the criteria for membership are excessively strict and that denying a country membership implicitly accuses that applicant of pursuing chemical or biological weapons.

Nonmembers have also questioned the Australia Group's relationship to the CWC and BWC. Countries in the Non-Aligned Movement (NAM), for instance, have repeatedly asserted that they already made legally binding commitments not to acquire CBW by signing the biological and chemical weapons conventions, and that the Australia Group is at odds with the BWC provision for the "fullest possible technical exchange" for the advancement of peaceful scientific endeavors. Participants of the Australia Group, however, maintain that the group complements CWC and the BWC and serves the same goals. A U.S. State Department official explained that "the Australia Group offers another layer of control, but one-in the U.S.'s view-that is consistent with the U.S.'s obligations under the chemical and biological weapons treaties."

At their June 2002 meeting, the members unanimously decided to adopt a set of formal, but not legally binding, guidelines outlining criteria for evaluating export requests and reaffirming the value of sharing intelligence about CBW proliferation. The two key provisions in these guidelines were a "no undercut" agreement and a "catch all" requirement. In the no-undercut provision, members pledged not to approve a particular export to a specific country that another member had previously denied without first consulting with that member. The catch-all provision requires member countries to be able to halt the transfer of any export, regardless of whether it appears on the group's control lists, if an importer might use it in a chemical or biological weapons program. This provision further stipulates that exporters in member states notify their governments if they suspect that an importer intends to use any import for CBW development.

In response to heightened concerns about chemical and biological terrorism, the group also decided in June 2002 to control the spread of technology by "intangible means," prohibiting the transmission of CBW technologies by e-mail, phone, or fax. For instance, with controls on intangible technology transfers, a company could be required to obtain government authorization before faxing abroad a "cookbook" for growth media that could be used in a biological weapons program. At the June 2012 plenary meeting, the group agreed to amend

the guidelines in order to enhance controls on brokering services and continued reviewing the proliferation risks of new and emerging technologies, particularly in the area of nanotechnology. Although the effectiveness of the Australia Group is difficult to gauge definitively, the 42 member countries assert that the regime acts as an impediment to CBW proliferation by working to ensure that industries in member nations do not, either inadvertently or intentionally, assist states or groups seeking to develop CBW capabilities.

## **Background**

In April 1984, following the findings of a special mission dispatched by the UN Secretary General to Iran to investigate the use of chemical weapons (CW) by Iraq in the Iran-Iraq War, a number of governments introduced licensing measures on the export of certain chemicals used in the manufacture of CW. They took this action in order to meet the political requirement for a response to Iraq's violation of the 1925 Geneva Protocol through the use of chemical weapons against Iran in the Iran-Iraq War and the very clear evidence that Iraq had obtained much of the materials for its CW program from the international chemical industry. These countries perceived an urgent need to address the problem posed by the spread of CW and to ensure that their industries were not, either purposely or inadvertently, assisting other States to acquire and use such weapons in violation of international law and norms.

The measures imposed by these governments, however, lacked uniformity in scope or application. It also became apparent that attempts were being made to use this lack of uniformity to circumvent them. This led Australia to propose, in April 1985, that the countries that had introduced licensing for exports might meet in order to try to harmonize the measures taken individually and to enhance cooperation among them on this issue. The first meeting of what subsequently became known as the Australia Group took place in Brussels in June 1985. All participating countries agreed there was benefit in continuing the process, and meetings of the AG are now held in Paris on an annual basis. Likewise, the emergence of increasing evidence of diversion of dual-use materials to biological weapons (BW) programs led the countries concerned in 1990 to take steps to address the increasing problem of the spread of BW. The number of countries participating in the AG has grown from the original 15 in 1985 to 43 at present. The AG meets once a year in Paris with Australia as a chair. (Until 1994, the AG averaged two meetings each year.) The 20<sup>th</sup> anniversary meeting in 2005 took place in Australia.

## **Regime Goal**

The AG aims to limit the spread of CBW through the control of chemical precursors, CBW equipment, and BW agents and organisms. All participating countries have licensing measures covering over 60 CW precursors. Participating countries also require licenses for the export of 1) dual-use chemical manufacturing facilities and equipment and related technology; 2) plant pathogens; 3) animal pathogens; 4) biological agents; and 5) dual-use biological equipment. These items form the basis for the Group's "Common Control Lists," which have been developed during AG consultations and are adjusted from time to time to

ensure their continued effectiveness. The six Common Control Lists cover: 1) CW precursors; 2) dual-use chemical manufacturing facilities and equipment and related technology; 3) dual-use biological equipment; 4) biological agents; 5) plant pathogens; and 6) animal pathogens.

Measures agreed upon by meetings of the Group are applied on a national basis. Also all participants agree they will be more effective if similar measures are introduced by all potential exporters of relevant chemicals, biological agents, and equipment and by countries of possible transshipment. As to the nature of the export licensing measures taken by participating countries, important considerations are 1) the measures should be effective in impeding the production of chemical and biological weapons; 2) they should be reasonably easy and economical to implement, and practical; and 3) they should not impede the normal trade of materials and equipment used for legitimate purposes. In practice, they constitute monitoring and licensing control arrangements for exports: an export is denied only if there is particular concern about potential diversion for CBW purposes.

### **Regime Procedures**

The AG mechanisms include national control laws and procedures; Common Control Lists (precursors, equipment, agents, and organisms); guidelines for the industry to assist in identifying potential CW equipment transactions; and information-sharing among members when suspicious inquiries are received, cases are denied, or information suggests possible international procurement for untoward purposes. In 1989, 50 dual-use chemicals appeared on the AG “warning list” with a suggestion that AG members place controls on them. In 1991, the AG agreed on additional control lists of equipment related to the manufacture of CW precursors; and biological organisms and equipment. AG members agreed to control all 50 (currently 63) precursor chemicals on a worldwide basis.

The AG then considered imposing controls on BW-related dual-use equipment and microorganisms having BW applications. At the May 1991 meeting, Group members developed a dual-use CBW equipment list, which was adopted during the December 1991 meeting. Since the conclusion of the CWC in 1992, meetings of the Group have focused closely on the interaction between Group controls and the nonproliferation and trade encouragement measures, which came into operation when the CWC entered into force.

### **Verification and Compliance**

Participants in the AG do not undertake any legally binding obligations. The effectiveness of the cooperation between participants depends solely on their commitment to CBW nonproliferation goals and the effectiveness of the measures they each implement on a national basis. Key considerations governing these national measures by AG participants are that: 1) the measures should be effective in impeding the production of chemical and biological weapons; 2) they should be reasonably easy to implement, and should be practical; and 3) they should not impede the normal trade of materials and equipment used for

legitimate purposes. Compliance with this regime is reinforced by membership of all AG States to the Chemical Weapons Convention (CWC) and the Biological and Toxin Weapons Convention (BTWC). The group has met privately since 1984 to exchange intelligence information and coordinate export controls for chemical and biological agents and related equipment to countries outside the group.

### **Recent Developments**

2010: On 29 May - 4 June the Australia Group held its 25th Annual Plenary meeting in Paris. During the plenary, group members agreed on measures to enhance and refine licensing and export controls and adopted a number of changes to its chemical and biological control lists. After adopting specific recommendations from its technical advisory group, group members agreed on the need for enhanced vigilance regarding the proliferation risk associated with new and emerging technologies in this area.

The plenary emphasized the necessity of engaging industry and academic sectors that support the prevention of unauthorized transfers of intangible technology, while reaffirming its commitment to ensuring that controls do not hinder legitimate trade and technical cooperation in the chemical and biological sectors. The plenary agreed to continue an active outreach program in 2010-2011. During a state visit to India on November 6-9, U.S. President Barack Obama announced U.S. support for India's entry into the Australia Group.

2011: On 10 June, the Australia Group held an annual plenary meeting in Paris which was co-hosted by the Australian and French Governments. The groups discussed measures to detect and prevent proliferation of dual-use chemical and biological materials and equipment, as well as how to improve licensing and export controls. Syria was mentioned as a country of proliferation concern. The Australia Group made changes to its chemical and biological control lists and reviewed emerging technologies that may be of proliferation concern and should be added to national export control lists. The group approved a new manual for its members dealing with intangible transfers of technology.

During the meeting, the Australia Group emphasized the importance of engaging industry and academia in support of its work. No new members were admitted to the group this year; however, few countries have expressed interest in the membership. The Australian Group intends to continue its engagement with non-member states and international organizations on the adoption of its lists.

2012: On 29–30 March, the Park Conference “The Australia Group: Challenges and Future Directives” was held in the United Kingdom. The outcomes were further discussed at the 2012 annual plenary in Paris. On 15 June, the Australia Group annual plenary meeting was held in Paris and co-hosted by the Australian and French Governments. The Group agreed to amend the Australia Group guidelines to enhance brokering service controls, and there were changes to the Biological Agents and Plant Pathogen control lists.

The Australia Group noted that the Group's control lists were becoming increasingly used as international standards of best practices for controls on dual-use, and chemical and biological materials. Syria was still a State of major concern for the Group, and Members emphasized the importance of careful scrutiny of materials in or out of that country. The Group agreed to continue its engagement with non-members and other international bodies. No new members were admitted in 2012, but several formal applications for membership are under review.

2013: On 12 February, Pakistan held talks in Islamabad with a delegation of the Australia Group that was led by the United Kingdom. This event was part of Pakistan's effort to join the international export control agreements as a recognized nuclear weapon state. While praised for its high standards in export controls, Pakistan is still not a member of the Australia Group. In March the Australia Group made updates to its chemical and biological equipment controls list and to its biological agents list.

On 7 June the Australia Group issued a statement on the evidence of chemical weapon usage in Syria. The statement observed that use of such weapons is a threat to destabilizing the Middle East and a challenge to nonproliferation norms. The Australia Group continued to highlight the threat of dual-use technology and called for increased vigilance. The Group also concluded its plenary meeting in which licensing and enforcement experts shared information to prevent attempts to proliferate dual-use chemicals, biological materials and related equipment. In July, the Australia Group updated its Animal Pathogens for Export Control Core List. Added to the list were new viruses (not including vaccines), bacteria, and genetic elements and genetically-modified organisms. In August, the Australia Group formally announced that Mexico had been added as the 42nd member of the Group.

2014: On 6 June, the Australia Group made a statement from its plenary meeting in Paris. The Group recognized Mexico's recent initiation as a member state, encouraged members to enact stricter adherence to the AG Guidelines, and explained the new amendment to the Guidelines on the subject of "catch-all" controls.

2015: In April, the Australia Group updated its control lists of chemical weapons precursors, biological equipment, as well as human and animal pathogens. On 1-5 June, the Australia Group held its 2015 plenary in Perth, Australia, commemorating its 30th anniversary. In addition to member states, dialogue partners participating in the meeting included Myanmar, China, India, Vietnam, the Philippines and Singapore. Australian Minister for Foreign Affairs Hon Julie Bishop MP delivered a speech addressing the importance and contributions of the Australia Group, as well as the challenges presented by terrorist and extremist groups. Participants acknowledged that "export controls facilitated trade by preventing the diversion of legitimate trade towards weapons of mass destruction." The Group agreed to take action to strengthen nonproliferation, focusing on technical issues and outreach to non-members. In July, the Australia Group updated its control list of biological equipment.

2016: On 10 June, the Australia Group and the European Union met for its 31<sup>st</sup> Plenary in Paris. Group members agreed to measures designed to strengthen their chemical and biological weapon counter-proliferation efforts. These measures include intensifying focus on emerging technologies, sharing approaches to challenges posed by technology transfers and expanding outreach to non-member countries. The Australia Group accepted France's offer to host the 2017 Plenary in Paris. In August, the Australia Group updated its control lists of biological equipment as well as human and animal pathogens.

2017: On 30 June, the Australia Group and the European Union met for its 32<sup>nd</sup> plenary meeting in Paris. Group members reiterated their support for the Chemical Weapons Convention (CWC) on the 20<sup>th</sup> anniversary of its entry into force, and agreed to continue efforts to encourage non-member States to adopt Australia Group export controls as the international standard. Australia Group members agreed to France's offer to host the next plenary meeting in Paris on 4-8 June 2018. In May, the Australia Group updated its control lists for chemical manufacturing facilities and equipment and biological equipment.

2018: On 19 January, India became the 43<sup>rd</sup> member of the Australia Group. From June 4-8, the Australia Group and the European Union met for its 33<sup>rd</sup> Plenary Meeting in Paris, France. The Group published a consensus statement that expressed grave concern over the recent use of chemical weapons in Malaysia, the United Kingdom, Syria, and Iraq. The Group also discussed increasing focus on preventing proliferation of dual-use goods to non-state actors, working collaboratively with non-AG members such as China, and a technical discussion around Novichok agents and their precursors.

### **MISSILE TECHNOLOGY CONTROL REGIME, 1987**

The MTCR is an informal non-treaty association of governments sharing common interests in the nonproliferation of missiles, unmanned air vehicles, and related technologies. The regime consists of the Guidelines and an Equipment and Technology Annex. Established in April 1987, the voluntary Missile Technology Control Regime (MTCR) aims to limit the spread of ballistic missiles and other unmanned delivery systems that could be used for chemical, biological, and nuclear attacks. The regime urges its 35 members, which include most of the world's key missile manufacturers, to restrict their exports of missiles and related technologies capable of carrying a 500-kilogram payload at least 300 kilometers or delivering any type of weapon of mass destruction.

Since its inception, the MTCR has been credited with slowing or stopping several missile programs by making it difficult for prospective buyers to get what they want or stigmatizing certain activities and programs. Argentina, Egypt, and Iraq abandoned their joint Condor II ballistic missile program. Brazil, South Africa, South Korea, and Taiwan also shelved or eliminated missile or space launch vehicle programs. Some Eastern European countries, such as Poland and the Czech Republic, destroyed their ballistic missiles, in part, to better their

chances of joining the MTCR. The regime has further hampered Libyan and Syrian missile efforts. Yet, the regime has its limitations. Iran, India, North Korea, and Pakistan continue to advance their missile programs. All four countries, with varying degrees of foreign assistance, have deployed medium-range ballistic missiles that can travel more than 1,000 kilometers and are exploring missiles with much greater ranges. India is testing missiles in the intercontinental range. These countries, which are not MTCR members except India, are also becoming sellers rather than simply buyers on the global arms market. North Korea, for example, is viewed as the primary source of ballistic missile proliferation in the world today. Iran has supplied missile production items to Syria.

### **How the MTCR Works**

Each MTCR member is supposed to establish national export control policies for ballistic missiles, cruise missiles, unmanned aerial vehicles, space launch vehicles, drones, remotely piloted vehicles, sounding rockets, and underlying components and technologies that appear on the regime's Material and Technology Annex. Members can add items to or subtract them from the annex through consensus decisions. The annex is divided into two separate groupings of items, Category I and Category II. Category I includes complete missiles and rockets, major sub-systems, and production facilities. Specialized materials, technologies, propellants, and sub-components for missiles and rockets comprise Category II.

Potential exports of Category I and II items are to be evaluated on a case-by-case basis. Approval for Category I exports is supposed to be rare. The regime's guidelines, which set out criteria for weighing possible exports, instruct members that "there will be a strong presumption to deny" Category I transfers. No exports of production facilities are to be authorized. MTCR restrictions for Category II exports are less severe, largely because many items in the category also have civilian uses. Members, however, are still asked to exercise caution in making such deals. No member can veto another's exports.

The MTCR identifies five factors that members should take into account when evaluating a possible export of controlled items:

- Whether the intended recipient is pursuing or has ambitions for acquiring weapons of mass destruction;
- The purposes and capabilities of the intended recipient's missile and space programs;
- The potential contribution the proposed transfer could make to the intended recipient's development of delivery systems for weapons of mass destruction;
- The credibility of the intended recipient's stated purpose for the purchase; and
- Whether the potential transfer conflicts with any multilateral treaty.

MTCR members are asked to obtain an assurance from the intended recipient that it will only use the export for the purpose claimed when requesting the deal. Members are also to secure a pledge from the intended recipient that it will not transfer the requested item or any replicas or derivatives to a third party without permission.

Because the regime is voluntary and the decision to export is the sole responsibility of each member, the MTCR has no penalties for transfers of controlled items. However, U.S. law mandates that Washington sanction entities-individuals, companies, or governments (whether they are MTCR members or not)-exporting MTCR-controlled items to certain countries identified as proliferators or potential threats to U.S. security. Sanctions may also be levied if the United States judges the transfer contrary to the MTCR. Typically, Washington prohibits the charged entity from signing contracts, receiving aid, or buying arms from the U.S. government for a period of two years. Sometimes the penalties can be imposed for longer lengths of time or extended to commercial imports and exports as well.

### **Outside the MTCR**

Several countries have pledged to abide by the MTCR without joining it. Israel, Romania, and the Slovak Republic have all committed to maintaining export controls consistent with the regime. After several years of the U.S. curtailing its sale of missiles and missile technologies, China announced in November 2000 that it would not help other countries build ballistic missiles capable of delivering nuclear weapons. Beijing, which was a key contributor to Pakistan's missile development, and has in the past provided sensitive technology to countries like North Korea and Iran, also pledged that it would issue a comprehensive list of controlled items requiring government approval before export. That list, however, was not published until August 2002. In 2004, China applied for MTCR membership, and, at the time, voluntarily pledged to follow the regime's export control guidelines. Although China no longer sells complete missile systems and has tightened its export controls, its membership was rejected due to concerns that Chinese entities continued to provide sensitive technologies to countries developing ballistic missiles, such as North Korea.

In 2008 India voluntarily committed to following the MTCR export control guidelines, since that time the United States has been working to secure India's membership in the regime. India's announcement was made shortly before the Nuclear Suppliers Group granted an exemption to India. New Delhi continues to develop its own ballistic missile program. In June 2015, India formally applied for membership in the regime, but Italy blocked consensus on its application during the October 2015 plenary. Nine other countries applied as well in 2015, none of which were admitted into the regime. India was later admitted in June 2015.

### **Hague Code of Conduct Against Ballistic Missile Proliferation**

MTCR members spearheaded a voluntary November 2002 initiative, the Hague Code of Conduct Against Ballistic Missile Proliferation (formerly known as the International Code of Conduct Against Ballistic Missile Proliferation), calling on all countries to show greater restraint in their own development of ballistic missiles capable of delivering weapons of mass destruction and to reduce their existing missile arsenals if possible. The aim of the initiative is to establish a norm against missiles that could be armed with chemical, biological, or nuclear warheads. As part of the initiative, participating countries are to

annually exchange information on their ballistic missile and space launch vehicle programs, as well as provide advance notice of any launches of ballistic missiles or space launch vehicles. The Hague Code of Conduct has 138 member states, including all MTCR members except Brazil. Brazil has expressed concerns about how the initiative might affect its space program.

### **Background**

Formal discussions on controlling missile proliferation began in 1983 among France, Germany, Italy, the United Kingdom, and the United States. They were later joined by Canada and Japan, and in 1985, an interim agreement to control the proliferation of nuclear-capable ballistic and cruise missiles, including dual-use missile items, was reached. A nuclear-capable missile was defined as one capable of delivering at least 500 kilograms (kg) to a range of 300 kilometers (km) or more. The seven states formally announced the Missile Technology and Control Regime (MTCR) on 16 April 1987.

Since then, membership has expanded to the present 35 States, the additional members being Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Czech Republic, Denmark, Finland, Greece, Hungary, Iceland, India, Ireland, Luxembourg, The Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Russian Federation, South Africa, Spain, Sweden, Switzerland, Turkey and Ukraine. Some other States, including China, India, Israel, Romania, and Slovakia, have pledged to abide by the MTCR Guidelines.

### **Regime Goal**

The regime goal is to limit the risks of proliferation of weapons of mass destruction (i.e. nuclear, chemical and biological weapons) by controlling the transfers that could make a contribution to delivery systems (other than manned aircraft) for such weapons.

### **Regime Guidelines**

The regime guidelines consist of national control laws and procedures; a two-category common control list; information-sharing on any denied cases to ensure no commercial advantage; no impediment to national space programs; no retransfers without authorization of the supplying country; the presumption of denial of transfers of unmanned delivery systems that can carry a payload of 500 kilograms to a distance of 300 kilometers or more; and the presumption of denial of transfers of unmanned delivery systems of any capability if there is reason to believe that they will be used for the delivery of weapons of mass destruction.

### **Equipment and Technology Annex**

Category I items of the Equipment and Technology Annex include complete rocket and unmanned-air-vehicle delivery systems and subsystems. The transfer of Category I items is subject to a strong presumption of denial. The transfer of production technology for Category I items is prohibited.

Category II items include propulsion and propellant components, launch and ground support equipment, as well as the materials for the construction of missiles. The transfer of Category II items is less restricted, but still requires case-by-case review and end-use certification or verification where appropriate.

### **Verification and Compliance**

The MTCR is an informal non-treaty association of governments sharing common interests, and therefore has no formal mechanism to enforce compliance. The implementation of the MTCR is dependent on the resolve of its Member States. The Member States usually deal with the implementation of the MTCR somewhat differently. The United States, being the most ardent MTCR participant, backs the implementation of the MTCR by a sanctions law, whereas other States have used a more low-profile approach. All nine states known or believed to possess nuclear weapons – China, France, India, Israel, North Korea, Pakistan, Russia, the United Kingdom, and the United States – possess missiles of considerable range to deliver them. Iran, Japan, North Korea, Saudi Arabia, South Korea, Taiwan, and Ukraine also possess missiles or satellite launch rockets of substantial range, but do not possess nuclear weapons or other weapons of mass destruction. China's sale of some tens of 3,000-km range DF-3 (CSS-2) missiles to Saudi Arabia in 1988 – the only transfer of missiles having a range greater than 600 km (aside from the US sale of Polaris and Trident missiles to Britain) – caused an international uproar and helped strengthen measures such as the MTCR. No further sales have occurred.

### **Recent Developments**

2010: On 10 September, the United States' Congressional Research Service released a report titled "Conventional Arms Transfers to Developing Nations, 2002-2009." According to the report the United States questions China's commitment to the MTCR due to reports claiming that China sold sensitive missile technology to Pakistan, Iran, and the Democratic People's Republic of Korea (DPRK). The MTCR member states did not hold a plenary meeting in 2010, the next plenary meeting is tentatively scheduled for March 28 to April 1, 2011. During a state visit to India on November 6-9, U.S. President Barack Obama announced U.S. support for India's entry into the MTCR.

2011: On 13-15 April, Buenos Aires, the Missile Technology Control Regime (MTCR) held its 25<sup>th</sup> Plenary Meeting to review and assess its activities and enhance its ability to prevent missile proliferation. The participants discussed the proliferation of WMD, their delivery systems, and means of encouraging countries outside of the MTCR to contribute toward the efforts of the regime. Partners discussed proliferation activities worldwide, concluding that MTCR could have even greater impact on preventing missile proliferation by making additional export control efforts. Partners recognized the significance of UN Security Resolutions 1874 and 1992, among others, to the efforts of the MTCR, and the importance of implementing them. It was emphasized that countries with weak export controls can, without great burden, transfer technology and material useful for missile proliferation.

Members agreed to continue to share information on developments of missile programs and reinforce their efforts to encourage non-partner countries to implement the missile export control mandates under the UN Security Council Resolution 1540 and to collaborate with the 1540 Committee. No consensus was reached amongst the participants on the admission of new members into the group, but it will continue to be discussed in further detail. On 18 November the MTCR updated its Equipment, Software and Technology Annex.

2012: 16 April marked the 25th anniversary of the MTCR. On 17 October the Republic of Korea and the United States agreed to extend the range of the Republic of Korea's ballistic missiles to 800km. This range is beyond the guidelines set down in the MTCR. On 24-26 October, the MTCR held its 26<sup>th</sup> plenary meeting in Berlin. Special concern was given to the issues of rapid technological change, and the role of intangible technology transfers (ITT).

2013: On 28 May Russia announced the sale of the S-300 missile defense system to Syria. On 7 June Russia tested a prototype of a new intercontinental ballistic missile system based on solid-fuel which seeks to replace the Topol-M and Yars missiles. On 1 October it was announced that a Chinese company under sanctions for doing business with Pakistan and Iran will build Turkey's first long-range air defense and anti-missile system. On 14-18 October, the MTCR held its 27<sup>th</sup> Plenary Meeting in Rome, Italy. Members discussed, among other issues, procurement activities and strategies for WMD programs, the risks of intangible technology transfers (ITT), technology trends in missile programs, and catch-all export controls for non-listed items. Members noted that constant updating of export controls by MTCR member states would have a great impact. They also focused on how brokering, transit, and transshipment guidelines are exploited to evade export controls.

2014: On 17 June, North Korea was accused of acquiring a copy of a Russian cruise missile called the KH-35. While the missile itself does not violate MTCR guidelines, it is prohibited by UN sanctions to export cruise missiles to North Korea. From 29 September to 3 October, the MTCR held its 28<sup>th</sup> Plenary Meeting in Oslo, Norway. In addition to reemphasizing commitments to control missile technology exports and the need to prevent missile technology proliferation, partners also discussed various country issues such as DPRK and Iran. Partners also noted with concern the risks of WMD missile-relevant technology proliferation posed by Intangible Technology Transfers (ITT). This topic will be kept on future plenary agendas. With regards to the future, MTCR partners discussed internal operations of the MTCR and a future joint chairmanship between Luxembourg and the Netherlands in 2015-16. On 2 October, the MTCR updated its Equipment, Software and Technology Annex.

2015: On 17-19 February, the 22nd Asian Export Control Seminar was held in Tokyo where the MTCR Chair, Ambassador Roald Næss, delivered a statement. He gave a brief update of the 28<sup>th</sup> Plenary Meeting in Oslo, addressing the importance of the MTCR and the concerns of WMD proliferation and calling for more formalized adherence. On 5-9 October, the

MTCR held its 29<sup>th</sup> Plenary Week in Rotterdam, Netherlands. Reviewing the past years' activities of the MTCR comprised the main purpose of the plenary week. MTCR partners reiterated the threat of WMD proliferation and their delivery systems, reaffirming UNSCR 1540. The plenary meeting issued a public statement. On 17 October, Italy vetoed India's application to join the MTCR.

2016: On 23-25 February, the 23<sup>rd</sup> Asian Export Control Seminar was held in Tokyo where the MTCR Chair, Ambassador Piet de Klerk, delivered a statement. He presented the work of the MTCR, its successes and its limitations. On 27 June, India became a full member of the MTCR after a "deal" was struck with Italy. This marks the first entry into any multilateral export control regime for India. The Chair, Ambassador Piet de Klerk, delivered a statement on the accession of India to the MTCR.

On 17-21 October, the 30<sup>th</sup> Plenary Meeting of the MTCR was held in Busan, South Korea and was chaired by the Director General for Nonproliferation and Nuclear Affairs in the Ministry of Foreign Affairs of the Republic of Korea, Mr. Ham Sang-wook. Members reviewed the activities of the MTCR over the last year and called for the intensification of efforts to prevent the proliferation of unmanned delivery systems. On 20 October, the MTCR updated its Equipment, Software and Technology Annex.

2017: On January 11-12, the MTCR outreach mission made its first trip under Korean Chairmanship to the Islamic Republic of Pakistan. The MTCR delegation updated Pakistan on trends in the Regime and briefed Pakistan's export control system. The MTCR delegation also visited the Pakistan Center of Excellence for Nuclear Security. On 23 February, the MTCR outreach mission to Singapore was held. The MTCR delegation updated Singapore on recent trends in the Regime and was briefed on Singapore's export control system.

On 28 March, the MTCR outreach mission to the Republic of Kazakhstan was held. The MTCR delegation updated Kazakhstan on Regime trends and was briefed on Kazakhstan's export control system and space activities. On 18 May, the MTCR conducted a regular revision of the MTCR Equipment, Software, and Technology Annex. This revision led to several changes in control text such turbofan and turbojet engines, Global Navigation Satellite Systems, and gravity meters.

On 16-20 October, the MTCR held its 31<sup>st</sup> Plenary week in Dublin, Ireland. The main purpose of the Plenary Meeting was to review and evaluate the MTCR's activities over the past year. Partners devoted increased attention to Intangible Technology Transfer (ITT), Unmanned Aerial Vehicles (UAVs), Catch All Controls, Regional Proliferation and strategic outreach to non-MTCR countries. Kazakhstan became the third formal adherent of the MTCR during the Plenary. On 19 October, as part of the 31<sup>st</sup> MTCR Plenary Week, the MTCR Technical Experts Meeting conducted a regular version of the MTCR Equipment, Software, and Technology Annex. This revision led to several changes such as adding gel

propellant rocket motors and modifications to receiving equipment for navigation satellite systems.

2018: On 29 March, an MTCR delegation made an outreach mission to Pakistan. The delegation updated representatives from Pakistan's defense and export control sectors on the outcomes of the 2017 Dublin Plenary and heard from the Pakistani representatives about new export control legislation. On 9 May, the MTCR published a revised version of its Equipment, Software, and Technology Annex. The revision added and updated several technical details, including new controls on the propellant substance hydroxylammonium nitrate (HAN). On 8 July, an MTCR delegation made an outreach mission to Jordan. The delegation met with Jordanian export control and defense representatives in the MTCR's first visit to Jordan since 2007.

On 9 and 10 July, an MTCR delegation made an outreach visit to Israel. The delegation met with Israeli representatives from the defense, foreign affairs, and private aerospace sectors and discussions included proliferation challenges and autonomous drones. In November, the MTCR Technical Experts Meeting revised the MTCR Equipment, Software, and Technology Annex, which included technical control additions as well as editorial changes.

### **WASSENAAR ARRANGEMENT, 1996**

The Wassenaar Arrangement, formally established in July 1996, is a voluntary export control regime whose 42 members exchange information on transfers of conventional weapons and dual-use goods and technologies. Through such exchanges, Wassenaar aims to promote "greater responsibility" among its members in exports of weapons and dual-use goods and to prevent "destabilizing accumulations." Unlike its predecessor, the Cold War-era Coordinating Committee for Multilateral Export Controls (COCOM), which was created to restrict exports to the former Soviet Union and Eastern bloc, Wassenaar is not targeted at any region or group of states, but rather at "states of concern" to members. Wassenaar members also lack veto authority over other member's proposed exports, a power that COCOM members exercised.

To promote transparency, Wassenaar calls on states to make a series of voluntary information exchanges and notifications on their export activities related to weapons and items appearing on the arrangement's two control lists.

#### **For the Munitions List (Conventional Weapons):**

Every six months, members exchange information on deliveries of conventional arms to non-Wassenaar members that fall under eight broad weapon categories: battle tanks, armored combat vehicles (ACVs), large-caliber artillery, military aircraft/unmanned aerial vehicles, military and attack helicopters, warships, missiles or missile systems, and small arms and light weapons. Members added the final category in December 2003 after years of debate.

The ACV, aircraft, and helicopter categories include models designed to perform reconnaissance or conduct command of troops missions.

**For the Dual-Use Goods and Technologies List:**

Tier 1: Basic Items Twice per year, members exchange information on all export licenses denied on proposed transfers to non-Wassenaar members.

Tier 2: Sensitive Items and its subset of Very Sensitive Items

- Within 60 days, members are requested to notify the Wassenaar Secretariat of any export licenses denied on proposed transfers to non-Wassenaar members.
- Twice per year, members exchange information on all export licenses issued or transfers made to non-Wassenaar members.
- For the subset of Very Sensitive items, such as stealth technology materials and advanced radar, members are called on to "exert extreme vigilance" in exports.
- Within 60 days, members are requested to notify the Wassenaar Secretariat of any export license approvals of transactions that are "essentially identical" to transactions that another Wassenaar member denied within the past three years. Wassenaar members are not obligated to deny transfers previously denied by others.

Although Wassenaar has overcome a great deal of growing pains, problems persist. Foremost among the arrangement's difficulties is that members continue to be divided over Wassenaar's scope, primarily whether the arrangement should become more than just a body for exchanging and collecting information. Because Wassenaar operates by consensus, a single country can block any proposal. In earlier years, a few members consistently refused to fully participate in voluntary information exchanges and notifications on dual-use goods, though participation has reportedly improved. In addition, there is no consensus among members on which countries are "states of concern" or what constitutes a "destabilizing" transfer. Another limiting factor is that some major arms exporters, such as Belarus, China, and Israel are not members.

During the arrangement's years of operation, Wassenaar members have reaffirmed their commitment to preventing terrorist groups and individuals from acquiring conventional arms and dual-use goods and technologies, agreed to "exercise maximum restraint" in exports to the Great Lakes region of Africa, gradually expanded the types of weapons exports that information is exchanged upon, and agreed on the importance of "responsible export policies" on small arms and light weapons. At its December 1998 plenary meeting, the members approved a paper of non-binding criteria to help governments determine whether potential arms exports could lead to destabilizing accumulations. Wassenaar members have also agreed on non-binding criteria to guide exports of shoulder-fired, surface-to-air missiles, formally referred to as man-portable air defense Systems (MANPADS), and endorsed voluntary "best practices" for disposing of surplus military equipment, enforcing national export controls, and controlling Very Sensitive dual-use exports. They have also approved

non-binding criteria to guide exports of small arms and light weapons, agreed to exercise greater control on arms brokers, and committed to better regulate exports of dual-use goods purchased by recipients subject to arms embargos if the item is intended for a military end-use.

### **Membership**

Membership is universal and nondiscriminatory for countries meeting the established criteria:

- Produce/export arms or associated dual-use goods and technologies
- Implement national policies that do not permit the sale of arms or sensitive dual-use items to countries whose behavior is a cause for concern
- Adhere to international nonproliferation norms and guidelines
- Implement fully effective export controls

Members of the WA are obligated to maintain rigorous national export control systems analogous to those of the former Coordinating Committee for Multilateral Export Controls (COCOM) countries. In turn, participating States have to be members of or be acting in accordance with the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), Missile Technology Control Regime (MTCR), Chemical Weapons Convention (CWC), and the UN Register of Conventional Arms. The Wassenaar States meet regularly in Vienna, Austria, and make their decisions based on consensus.

### **Structure**

The WA Plenary is the decision-making and governing body of the Arrangement. It is composed of representatives of all Participating States who normally meet once a year, usually in December. Chairmanship of the Plenary is subject to annual rotation among Participating States. The Plenary establishes subsidiary bodies for the preparation of recommendations for plenary decisions and calls ad hoc meetings for consultations on issues related to the functioning of the WA. At present, the WA main subsidiary bodies are: the General Working Group (GWG) dealing with policy-related matters and the Experts Group (EG) addressing issues related to the lists of controlled items. Once a year, a Licensing and Enforcement Officers Meeting (LEOM) is held under the auspices of the GWG.

Vienna Points of Contact (VPOC) are called for periodic meetings under the Plenary Chair to facilitate intersessional information flow and communications between/among Participating States and the Secretariat. A small Secretariat, currently headed by Ambassador Sune Danielsson (Sweden), provides necessary support to WA operations from Vienna where it is located. Every four years, the Arrangement undertakes a wide-ranging review of how effectively it functions as an organization and contributes to international security. The latest of these assessments was concluded in December 2007.

The July 1996 Plenary adopted the WA Initial Elements which outline the purpose and function of the Arrangement and the responsibilities of Participating States. Subsequent

Plenaries have amended this document and approved supplementary guidelines such as best practices and item-specific elements documents to be used as the basis for decision-making at the national level.

### **The Purpose of the Arrangement**

As reflected in the Initial Elements, the purpose of the WA is to contribute to regional and international security by:

- promoting transparency and greater responsibility with regard to transfers of conventional arms and dual-use goods and technologies, thus preventing destabilizing accumulations;
- seeking through national policies to ensure that transfers of these items do not contribute to the development or enhancement of military capabilities that undermine these goals, and are not diverted to support such capabilities;
- complementing and reinforcing, without duplication, the existing control regimes for weapons of mass destruction and their delivery systems, as well as other internationally recognized measures designed to promote transparency and greater responsibility, by focusing on the threats to international and regional peace and security that may arise from transfers of armaments and sensitive dual-use goods and technologies where risks are judged greatest; and
- enhancing cooperation to prevent the acquisition of armaments and sensitive dual-use items for military end-uses, if the situation in a region or the behavior of a State is, or becomes, a cause for serious concern to the participating States.

### **Verification and Compliance**

This regime is a voluntary association, not bound by a treaty, and therefore has no formal mechanism to enforce compliance. In a step towards developing confidence-building measures, the Member States agreed in December 2000 at the sixth Plenary Meeting in Bratislava, on “non-binding best practices” regarding the effective enforcement of national export controls; the disposal of surplus military equipment; and the control of exports of items designated as very sensitive.

### **COCOM**

COCOM existed from 1950 to 31 March 1994, and consisted of 17 States (Australia, Belgium, Canada, Denmark, France, Germany, Greece, Italy, Japan, Luxembourg, Netherlands, Norway, Portugal, Spain, Turkey, United Kingdom, and United States). It was a non-treaty, non-chartered organization whose goal was to restrict the export of sensitive items that, if diverted, could contribute significantly to military potential and the proliferation of weapon systems, creating instability and international tension. Historically, targets of constraints were communist States.

In 1990, COCOM began helping Eastern European States adopt controls to stem the proliferation of military technology. COCOM also played a role in coordinating efforts to

prevent “brain-drain,” particularly in the review of projects supported by any member government. The Secretariat comprised about 30 persons, headquartered in an annex of the US Embassy in Paris. The COCOM Cooperation Forum was established in 1992, with the goal of progressive relaxation and elimination of export restrictions, and had its first meeting in Paris in November 1992. Forty-two countries participated in the Forum.

At the U.S.-Russian Summit in Vancouver, Canada on 4 April 1993, the presidents of Russia and the United States agreed that it was necessary to achieve the earliest possible resolution of questions about cooperation in the nonproliferation of missiles and missile technology, in accordance with the principles of existing international agreements. They decided to work together to remove obstacles impeding Russia’s access to the global market in high technology and related services. In November 1993, negotiations among the 17 COCOM Member States began on the structure and objectives of COCOM’s successor organization. Its members agreed to continue implementing technology transfer restrictions pending agreement on the successor organization. Consensus was reached on the new organization, known as the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, on 9 December 1995. COCOM’s proscribed items lists have been altered, with the old Atomic Energy Control List transferred to the Nuclear Suppliers Group (NSG) for administration. In turn, the International Industrial List has been replaced by a narrowly focused dual-use technology “core list,” itself subdivided into “basic,” “intermediate,” and “sensitive” categories. Unique information sharing (among group members), and end-use certification requirements are mandated for each category of technology, with the most sensitive items subject to presumptive denial of transfer requests.

An additional difference between the WA and COCOM is the absence of a veto of revisions of these lists. Whereas under COCOM any member could veto the relaxation (or inclusion) of new technologies on the industrial or munitions control lists, under the new system, national governments enjoy discretion as to whether to adhere to the consensus on transfer restrictions. This fact creates the potential for increasing variations in implementation of controls among the group’s members. The COCOM International Munitions List has been transferred, albeit in a slightly different format, to the WA. In addition, a system of pre-delivery consultations has been implemented, through which weapons exporters liaise with one another on the transfer of arms into regions of high tension or ongoing conflict. This consultative mechanism is designed to increase the transparency of arms and dual-use trade among members, thus reducing suspicions among suppliers, who are also trade competitors, that restrictions are being used for protectionist reasons.

### **INDIA'S EXPORT CONTROL – THE SCOMET LIST**

The Foreign Trade Policy of India ('FTP') which governs the export and import of goods and services provides that exports and imports are free (i.e. without any licensing requirement or governmental approval) unless specifically prohibited or regulated or subject to exclusive

trading through the State Trading Enterprises. Over the years, trade in majority of the cases has been free, in some cases regulated, and in very few cases prohibited. Prohibition can be basis a country (Iran / Democratic People's Republic of Korea), product (charcoal from Somalia), organization or individual (individuals or entities associates with Al Qaida). In such environment of unrestricted international trade, there exists the regulated export of SCOMET items that are listed in Appendix 3 of Schedule 2 of Indian Trade Classification (Harmonized System) ['**ITC(HS)**'] Classification of Export and Import Items.

### **Regulatory framework of India's Foreign Trade**

The Foreign Trade (Development & Regulation) Act, 1992 ('**FTDR Act**') provides for the development and regulation of India's international trade. The FTDR Act has been enacted with an intention to provide a framework for the development and standardization of India's foreign trade by the way of facilitating imports into enhancing exports from India and all the other matters related to the same. The FTDR Act empowers the Government of India to enact the FTP.

The FTP is a detailed policy statement on India's international trade and facilitates the exports from and imports into India. The FTP also contains within its ambit the Handbook of Procedures ('**HBP**') along with the item-wise export and import policy called the ITC(HS) which is notified by the Directorate General of Foreign Trade ('**DGFT**'). Under the FTP, import into and export from India is 'free,' unless specifically 'restricted', i.e., subject to a license, permit or authorization or, 'prohibited.' The policy restrictions under the FTP are contained in the Schedules appended to the ITC(HS). Schedule 1 of the ITC(HS) pertains to the Import Policy, whereas, Schedule 2 of the ITC(HS) pertains to the Export Policy. Further, the DGFT is the authority responsible for the effective implementation of the FTDR Act as well as the FTP as amended from time to time.

### **The SCOMET List**

As discussed above, SCOMET is an acronym for Special Chemicals, Organisms, Materials, Equipment and Technologies. This list contains goods which are considered as dual-use items, i.e., goods, technology, chemicals, organisms etc. which potentially have both, civil as well as military applications and are capable of being deployed as weapons of mass destruction. The SCOMET list of items was notified under Section 5 and Section 14A of the FTDR Act of 1992. In 2010, the FTDR Act of 1992 was amended and a new Chapter IV-A was introduced. This newly inserted chapter deals with controls on exports of specified goods, services and technologies and empowers the Central Government to monitor and amend the list of such goods, services and technologies.

The SCOMET list is included in Appendix 3 of Schedule 2 of ITC (HS). The export of the items under the SCOMET list is restricted and subject to an authorization/license. The SCOMET items are classified under 9 distinct categories:

- i. Category 0: Nuclear materials, nuclear related other materials, equipment and technology
- ii. Category 1: Toxic chemical agents and other chemicals
- iii. Category 2: Micro-organisms, toxins
- iv. Category 3: Materials, Materials Processing Equipment and related technologies
- v. Category 4: Nuclear-related other equipment and technology, not controlled under
- vi. Category 5: Aerospace systems, equipment including production and test equipment, related technology and specially designed components and accessories thereof
- vii. Category 6: Munitions list
- viii. Category 7: Reserved
- ix. Category 8: Special Materials and Related Equipment, Material Processing, Electronics, Computers, Telecommunications, Information Security, Sensors and Lasers, Navigation and Avionics, Marine, Aerospace and Propulsion.

It has been further clarified that the SCOMET list also includes used items falling under the list, non-controlled items containing one or more controlled component(s) where the controlled component(s) is the principal element, as well as technology which is required for the development, production or use of items controlled under Category 8 of the SCOMET items.

### **Multilateral Export Control Regimes and India**

The Multilateral Export Control Regimes are informal groups of like-minded supplier nations which seek to protect their interests and regulate the export of sensitive dual-use items so that such items do not fall into the hands of non-state actors and terrorists. Today, there exists four such Multilateral Export Control Regimes, which are:

- i. Missile Technology Control Regime for the control of rockets and other aerial vehicles capable of delivering weapons of mass destruction;
- ii. Wassenaar Arrangement on export controls for conventional arms and dual-use goods and technologies;
- iii. Australia Group for control of chemical and biological technology that could be weaponized; and
- iv. The Nuclear Suppliers Group, for the control of nuclear related technology.

India has recently become a part of three of the above mentioned export control regimes, the only exception being the Nuclear Suppliers Group, to which India is adherent. Upon becoming a member of these regimes, India has aligned its SCOMET list with them thereby enabling it to better monitor and control the export of dual-use items. It also enables the Government and industry to ensure that Indian exports are not accessed by proliferators, terrorist groups and non-state actors. Further, it enables Indian exports to become a part of the global supply chains wherein India's trading partners prefer adherence of Indian exports to the highest international standards.

### **Consequences of Exporting SCOMET Items without Authorization**

In a case where any of the items falling under the SCOMET list are exported without the proper authorization or license, penal provisions under the FTDR Act and the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005 may be attracted. The penalties, inter-alia, include:

- i. Suspension or cancellation of the Importer- Exporter Code ("IEC");
- ii. Imprisonment for a period of not less than 5 years, which may extend to imprisonment for life along with a fine.
- iii. Fine of not less than INR 3 lakhs which may extend up to INR 20 lakhs or five times the value of the items exported.

### **Recent Developments**

The global economy today is more inter-connected than ever before. Accordingly, it is imperative that a nation's export-control framework, an indispensable component of its trade-facilitation measures, keeps track of an ever changing global economic and regulatory landscape. The DGFT, on its part, has been open to listening to the concerns of the industry, take into consideration the best practices from existing export control frameworks of other countries and make suitable amendments/ revisions to India's SCOMET policy to reflect such international best practices. The following summarizes few recent developments in this regard.

- i. The DGFT has introduced Global Authorization for Intra-Company Transfers ('GAICT') for granting an advance bulk license for re-export of SCOMET items to overseas group companies availing license exception for original exports of such items to India. The scheme, which requires a case-to-case basis pre-export authorization, applies to re-export of all SCOMET items other than SCOMET items falling under Categories 0 (Nuclear materials), 1B, 1C (Toxic chemicals, to the extent re-exports to States not party to CWC), 3A401 (Prescribed high explosives, etc.), 5 (aerospace systems, etc.) and 6 (Munitions List), subject to the specific conditions prescribed by the DGFT.
- ii. The DGFT has permitted export of certain chemicals (Chloropicrin: Trichloronitro-Methane and Methyldiethanolamine) to State Parties to the Chemical Weapons Convention without an export authorization but subject to the condition that the exporter must notify such export in the prescribed format along with the End-Use Certificate to the National Authority, Chemical Weapons Convention, Cabinet Secretariat; the Ministry of External Affairs (D&ISA); the Department of Chemicals and Petro-chemicals and the DGFT within 30 days of such export. The exporter is also required to submit a copy of the bill of entry into the destination State Party to the DGFT within 30 days of delivery.
- iii. The DGFT has amended certain provisions in the HBP pertaining to the export of SCOMET items for (i) repair/ replacement abroad and subsequent return; (ii) repair/ replacement of indigenously produced SCOMET items in India and subsequent re-

export; and (iii) export of imported SCOMET items to the same entity, or any authorized entity abroad after repair in India.

### **Challenges**

Notwithstanding the aforementioned developments, some challenges continue to exist for Indian exporters/ industries with regard to export of SCOMET items. A few of them are highlighted as under:

- i. An application for authorization of export of any item under the SCOMET list pertains to a specific export and does not provide any blanket authorization for export of such items by an exporter, if the item is not covered under GAICT. This makes the to and fro exchange of information not possible for development of software/technology at beta stages. This is likely to affect the software and IT industry.
- ii. Export of specified chemicals (included in the SCOMET list) to certain countries is allowed without authorization subject to fulfillment of prescribed procedural conditions. However, such exemption has not been extended to software and technology pertaining to such chemicals.

In light of the above, it is imperative that the DGFT and industry continue to work together to iron out such remaining challenges so as to enable India to simplify its export framework, facilitate international trade and continue to be a significant player in the region.



# **MODULE-IV**

## **DEFENCE ACQUISITIONS**



Defence acquisition is a complex task, involving expertise in military, technology, industry, contract/project management, and policy-making. Besides, it involves a significant amount of national resources running into billions of dollars. Efficiency in acquisition not only leads to higher defence preparedness but also provides value for money, impetus to industrial competitiveness and other economic benefits. With this in view many advanced countries, such as the US, UK and France, among others, have undertaken reforms in their defence acquisition structures and procedures. Although reforms in these countries have taken different form, some countries like the UK and France have moved towards an integrated acquisition structure, with relevant expertise under one roof and under one controlling authority, to oversee the entire process of acquisition, right from the planning process to the final disposal of the weapon/platform.

In India, the Ministry of Defence (MoD) has taken a series of reform measures, with the Defence Procurement Organisation in place since 2001. The Defence Procurement Procedure (DPP), which sets out detailed rules and procedures for capital acquisition, is revised at regular interval in a move to streamline the acquisition process. The DPP 2011, which is in vogue since January 2011, lays added emphasis on speedy acquisition and transparency and probity in defence procurement. The reform measures notwithstanding, there have been some problems affecting the modernisation process of the armed forces. One indication of lack of expeditious procurement is the recurring under-utilisation of resources earmarked under the capital budget. As the defence budget for 2009-10 reveals, nearly 15 per cent of previous year's capital budget (Rs. 480 billion) remained under-utilised at the stage of revised estimate. This together with an upward moving trend in the surrender of funds, observed in past few years, reveals certain inadequacies in the capital acquisition system that needs to be addressed to ensure that the armed forces are fully prepared.

### **Need and Object of Defence Acquisition**

Defence equipment in India is procured from a variety of suppliers and Original Equipment Manufacturers (OEMs) ranging from our own Defence Public Sector Undertakings and the Ordnance Factory Board, to private Indian industry and foreign Governments as well as foreign industry. Even taking into account the global nature of defence business and the fact that most major companies are system integrators and procure sub-systems and components from other sources world wide, we do not find such a variety in most major countries as we have in India. In USA, defence acquisitions by the US Government are almost entirely from private American companies based in USA. In Europe, defence procurements are largely from western companies, either European or American, which are also largely in the private sector. If we look at Russia, their procurements are mostly from their own industry. The business philosophies, the pricing practices and the regulatory and legislative framework of each of these segments are very distinct.

In India, we have the benefit of equipment being on offer from all major OEMs/vendors of defence equipment worldwide. This creates its own challenges as any procedural framework for defence acquisitions by India has to take into account the differing requirements and regulations governing procurements from different countries so as to ensure an enabling framework that allows all to effectively participate on an equal footing. Not to do so would only result in narrowing the vendor base and perhaps denying the Services the best value for money. Before we can define an optimal procedural framework, we need to define the objective of defence acquisition procedures. The objective of our Defence Procurement Procedure is to ensure expeditious procurement of the approved requirements of the Armed Forces within the stipulated time frame and ensure optimal utilization of the allocated budgetary resources. The key tenets are thus (a) expeditious procurement of approved requirements, (b) timely procurements, and (c) optimal utilization of allocated funds. The defence procurement procedure must also reflect (a) the national policy of progressive self-reliance in defence equipment, (b) transparency and accountability, and (c) fair competition.

The above may seem to be basically common sense but their implementation often gives rise to contradictory impulses that have to be balanced and reconciled. For example, promotion of self reliance may mean not only offsets but could also mean giving preference to procurement from indigenous sources even where the specifications of the equipment under consideration may not be the best available. Questions then arise of to what extent this compromise with operational capabilities can be acceptable to the user? There can be issues of time frame for delivery and even to what extent it is actually indigenous. It can be argued that if we are to eventually reach the desired level of technical sophistication in designing and manufacture of major defence platforms and equipment and reduce dependence of imports, then compromises at the initial stages may be inevitable. The counter argument may be that the operational requirements or security imperatives do not allow the luxury of such compromises. The point is that these become relevant while stipulating guidelines for framing of Service Qualitative Requirements and in categorisation of proposals that are the first steps in the procurement process. Similarly, provisions relating to transparency and accountability often entail additional costs. It is however obvious that we cannot forgo such stipulations. The issue then is to have stipulations that fulfil the requirement of ensuring transparency and accountability without unduly stifling the process or burdening it with unacceptable costs. Each of these competing aspects as well as others has to be taken into account while establishing a framework or guidelines for defence acquisitions.

A procurement framework has to be in consonance with the institutional framework that either exists or can be established. There is little use in designing a framework or stipulating guidelines unless there are matching institutional mechanisms that can effectively implement them. It could also be that an optimal procedural framework requires a wholesale re-look at the existing institutional framework and contemplation of a substantially different institutional framework for effective implementation.

Ideally speaking, given the complexities involved in defence procurements, the skill sets required for evaluation of procurement proposals and conduct of negotiations and the magnitude of public funds involved, there should be a separate professional organisation for undertaking procurement of defence equipment for the Services. Many of the issues relating to the quality and credibility of the procurement processes and concerns relating to delay in procurements arise out of complicated procedures. Several levels of decision making could be substantially addressed by setting up such a separate professional and fully equipped organisation, drawing personnel from different wings of government (both civil and uniformed) who are equipped with the required skills and knowledge base. The setting up of the acquisition wing was an initial first step in this direction. But the acquisition wing remains a part of the administrative structure of the Department of Defence and is not really a separate organisation. Hence, the procedures that are discussed or suggested in subsequent paragraphs take into account this reality of an acquisition wing within the Department of Defence.

### **Classification of Defence Capital Acquisitions**

Capital Acquisition schemes are broadly classified as, 'Buy', 'Buy and Make' and 'Make'. Under the 'Buy' scheme procurements are categorised as 'Buy (Indian - IDDM)', 'Buy (Indian)' and 'Buy (Global)'. The three categories under the 'Buy' scheme refer to an outright purchase of equipment. Under the 'Buy and Make' scheme, the procurements are categorised as 'Buy and Make (Indian)' and 'Buy and Make'. The two categories under 'Buy and Make' scheme refer to an initial procurement of equipment in Fully Formed (FF) state in quantities as considered necessary, from the appropriate source, followed by indigenous production in a phased manner through comprehensive Transfer of Technology (ToT), pertaining to critical technologies as per the specified range, depth and scope.

In decreasing order of priority the procurement of defence equipment, under this procedure are categorised as follows:-

- (a) Buy (Indian - IDDM)
- (b) Buy (Indian)
- (c) Buy and Make (Indian)
- (d) Buy and Make
- (e) Buy (Global)

In addition to the above listed categorisation, the 'Make' categorisation, aims at developing long-term indigenous defence capabilities. Depending upon factors such as Indian industry's capability, access to technology, time frame required and available for development, the 'Make' category of procurement would be pursued in isolation, in sequence or in tandem with any of the five categories under 'Buy' or 'Buy and Make' classifications, with a separate heading under Services Capital Acquisition Plan (SCAP) and Annual Acquisition Plan (AAP).

## **Definition of Acquisition Categories**

### **Buy (Indian-IDDM)**

‘Buy (Indian-IDDM)’ category refers to the procurement of products from an Indian vendor meeting one of the two conditions: products that have been indigenously designed, developed and manufactured with a minimum of 40% Indigenous Content (IC) on cost basis of the total contract value; Or products having 60% IC on cost basis of the total contract value, which may not have been designed and developed indigenously. Apart from overall IC as detailed above, the same percentage of IC will also be required in (a) Basic Cost of Equipment; (b) Cost of Manufacturers’ Recommended List of Spares (MRLS); and (c) Cost of Special Maintenance Tools (SMT) and Special Test Equipment (STE), taken together at all stages, including FET stage.

The onus of proving that the equipment design is indigenous, rests with the vendor and such vendor claims will be verified by a committee comprising scientists from DRDO and representatives from SHQs, based on documents issued by authorised agencies and presented by the vendors. The process of verifying the availability of indigenous design and development should be completed prior to fielding of Statement of Case (SoC) for categorisation; guidelines pertaining to the same have been issued by Acquisition Wing vide MoD ID No 5(3)/D(Acq)/16 dated 30 Nov 2016.

### **Buy (Indian)**

‘Buy (Indian)’ category refers to procurement of products from an Indian vendor having a minimum of 40% IC on cost basis of the total contract value. Apart from the overall IC as detailed above, the same percentage of IC will also be required in (a) Basic Cost of Equipment; (b) Cost of Manufacturers’ Recommended List of Spares (MRLS); and (c) Cost of Special Maintenance Tools (SMT) and Special Test Equipment (STE), taken together at all stages, including FET stage.

### **Buy and Make (Indian)**

‘Buy & Make (Indian)’ category refers to an initial procurement of equipment in Fully Formed (FF) state in quantities as considered necessary, from an Indian vendor engaged in a tie-up with a foreign OEM, followed by indigenous production in a phased manner involving Transfer of Technology (ToT) of critical technologies as per specified range, depth and scope from the foreign OEM. Under this category of procurement, a minimum of 50% IC is required on cost basis of the Make portion of the contract. This implies that in the Make portion of the contract, minimum 50% IC will be required in the total of (a) Basic Cost of Equipment; (b) Cost of Manufacturers’ Recommended List of Spares (MRLS); and (c) Cost of special Maintenance Tools (SMT) and Special Test Equipment (STE). The proportion of MRLS to be made/assembled in India, if any should be specified at the time of AoN. Acquisition under this category can also be carried out without any initial procurement of equipment in FF state.

### Buy and Make

‘Buy & Make’ category refers to an initial procurement of equipment in Fully Formed (FF) state from a foreign vendor, in quantities as considered necessary, followed by indigenous production through an Indian Production Agency (PA), in a phased manner involving Transfer of Technology (ToT) of critical technologies as per specified range, depth and scope, to the PA. With a view to maximise indigenous production in each procurement case, the AoN according authority would approve either an appropriate ratio of Fully Formed (FF), Completely Knocked Down kits (CKD), Semi Knocked Down kits (SKD) and Indigenous Manufacture (IM) kits; or a minimum percentage of IC on cost basis for the ‘Make’ portion of acquisitions under ‘Buy and Make’ category. Acquisition under this category can also be carried out without any initial procurement of equipment in FF state.

### Buy (Global)

‘Buy (Global)’ category refers to outright purchase of equipment from foreign or Indian vendors. In case of procurement through foreign vendors, Government to Government route may be adopted, for equipment meeting strategic/long term requirements.

### Make

Acquisitions covered under the ‘Make’ category refer to equipment/system/ sub-system/assembly/sub-assembly, major components, or upgrades thereof, to be designed, developed and manufactured by an Indian vendor, as per procedure and norms detailed in Chapter III of this DPP.

### Definition of Indian Vendor

Unless specifically provided for in a clause/section/ chapter or elsewhere of the DPP, an Indian Vendor by whatever nomenclature when referred to means - for defence products requiring industrial license, an Indian entity, which could include incorporation/ownership models as per Companies Act, Partnership Firm, Proprietorship and other types of ownership models including Societies as per relevant laws, complying with, besides other regulations in force, the guidelines/licensing requirements stipulated by the Department of Industrial Policy and Promotion (DIPP) as applicable; and for defence products not requiring industrial license, an Indian entity registered under the relevant Indian laws and complying with all regulations in force applicable to that industry.

### **Procurement Planning Process**

Proposals for acquisition of capital assets flow from the defence procurement planning process, which will cover the long-term, medium-term and short-term perspectives as under:-

- (a) 15 years Long Term Integrated Perspective Plan (LTIPP).
- (b) 5 years Services Capital Acquisition Plan (SCAP).
- (c) Annual Acquisition Plan (AAP).

Based on the Defence Planning Guidelines, Headquarters Integrated Defence Staff (HQ IDS), in consultation with the Service Headquarters (SHQs), would formulate the 15 years LTIPP for the Armed Forces. The Five Year Defence Plans for the Services would also be formulated, by HQ IDS, which would include requirements for the next five years under the SCAP. The SCAP should indicate the list of equipment to be acquired, keeping in view operational exigencies and the likely availability of funds. The planning process would be under the overall guidance of the Defence Acquisition Council (DAC); its decisions, as approved by the Raksha Mantri, will flow down for implementation to the Defence Procurement Board (DPB). While LTIPP and SCAP would be approved by the DAC, the AAP, which is a subset of SCAP, would be approved by the DPB.

It is important to share the future needs of Armed Forces with the industry; hence based on the LTIPP, HQ IDS will bring out the Technology Perspective and Capability Roadmap (TPCR), covering details of the acquisition plans for a period of 15 years, for use by the industry. This document will be made available on MoD website.

HQ IDS/SHQs as the case may be, through regular and structured interactions, will share the details of such schemes, which are considered suitable for 'Make' procedure with the industry; the industry may even be involved at the feasibility stage itself. Draft Preliminary Services Qualitative Requirements (PSQRs), indicative time frame, envisaged quantities of schemes which are to be included as 'Make' schemes in SCAP may also be shared with the industry, to the extent actionable by it.

### **Annual Acquisition Plan (AAP)**

AAP of each Service would consist of two sections: (a) a two year roll on plan for capital acquisitions and would consist of the schemes from approved SCAP. (b) a two-year roll on plan for schemes under the 'Make' category. Each section of the draft AAPs would be prepared in two parts. Part A would comprise of carry over schemes from the AAP of previous year and schemes for which AoN has been accorded during the year. Part B would include the cases likely to be initiated for seeking AoN in the forthcoming year.

The draft AAPs would be circulated to respective AM/TM/FM in the Acquisition Wing and thereafter forwarded to HQ IDS by 31st of December each year, by SHQs, after clarifying the observations of the Acquisition Wing. HQ IDS will allot a unique identification number to each case and would obtain approval of final AAP from DPB by 15th April of the relevant Financial Year. Part A would be the working document for Acquisition Wing for issue of RFP and subsequent monitoring of the progress of each case. Inclusion of fresh schemes to Part A from Part B of AAP, after accord of AoN, would be a regular process. Proposal not listed in the SCAP may only be processed after due approval of the DAC.

In consonance with schemes likely to be included in AAPs, HQ IDS would work out the annual requirement of funds for capital acquisitions of each service taking into account

committed liabilities and anticipated cash outflow likely to be incurred on account of the fresh schemes, during the ensuing financial year.

The DPB may also carry out amendments to the AAP, if considered necessary, on account of national security requirements, operational urgencies, budgetary provisions or any other exigency based on recommendations made by SHQ/HQ IDS/Department of Defence/Defence (Finance). All proposals that need to be included in the AAP for reasons stated above should be put up to DPB for approval prior to inclusion in the AAP. The Acquisition Wing will process all acquisition proposals incorporated in the AAP under the overall guidance of the DPB.

### **Stages of the Procurement Process**

The broad stages of defence procurement are as follows:

- (a) identification of operational capabilities and requirements, translation of operational requirements into definitions of equipment and framing and approval of Service Qualitative Requirements (SQRs);
- (b) approval for procurement of the equipment;
- (c) framing of requests for proposals;
- (d) technical evaluation of proposals received;
- (e) commercial evaluation of proposals received;
- (f) approval of the competent financial authority and conclusion of contract; and
- (g) post contract management and monitoring.

Despite the defence offsets are connected to and arise from defence procurements, the aspect of offsets and their administration has been excluded from the ambit of this paper since it is a separate topic.

### **Determination of Operational Capabilities and Framing of SQRs**

Operational capabilities and requirements flow from policy directives arising from an analysis of the security environment and the security and foreign policy objectives of the Government. This is not really within the domain of the procurement procedure per se but it is the starting point. It is for the Government of the day to decide the national policies in this regard which is then conveyed to the Services. Based on these policy directives, the Services would frame the operational capabilities required for operationalizing or implementing the policy directions indicated by the Government.

In India, defining operational capabilities and requirements are the domain of the Services. This is closely linked with translation of operational requirements into definitions of equipment. There is a point of view that such defining of operational capabilities and its translation into equipment required should not be left entirely to the Services and there should be a separate mechanism that would undertake this activity albeit in consultation with

and taking into account the view of the user Service. The reason put forth is that the user service often tends to exaggerate the operational capabilities required and seek the most high end and best equipment available, which may not actually be required. Issues of ensuring a wide vendor base and a widest possible vendor participation, promoting self reliance by favoring procurement from indigenous sources and budget issues are not given the significance that they deserve in this process. In some countries, determining the operational capabilities required and framing of Service Qualitative Requirements (SQRs) that are really translation of capabilities into specifications of equipment is done by an agency separate from the user Services.

The counter argument would of course be that it is the user Service that is best placed to assess their operational requirements given the challenges that they have been tasked to cater for. They cannot be expected to unduly compromise their operational requirements in the name of ensuring wider vendor participation, development of indigenous industry, etc. It is argued that these may in fact endanger the men in the field or undermine their ability to fulfill missions assigned to them that was unacceptable.

Framing of operational requirements requires knowledge and understanding of the security imperatives, military strategy and tactics and available weapons technology. It should be accepted that the user Service must have a dominant voice in such decision-making. At the same time, one must also acknowledge the natural tendency of any Service to seek the best available without giving adequate importance to other factors.

The Defence Procurement Procedure (DPP) 2011 stipulates that the Service Qualitative Requirements (SQRs) should be broad based and realistic. The SQRs must express the user's requirements in terms of capability desired with minimum verifiable functional characteristics and its formulation must not prejudice the technical choices by being narrow and tailor made. The SQRs should be of contemporary technology available widely in the world and indigenous market. It mandates the requirement for issue of a Request for Information as well as seeking information from as many sources as possible while framing SQRs. The SQRs are approved by the Staff Equipment Policy Committee (SEPC), which should assess that the SQRs would result in a multi vendor situation. If a single vendor situation is likely to arise, then the reasons for formulation of such SQRs need to be recorded. The DPP further stipulates that if certain state-of-the-art equipment being manufactured by only one vendor is to be procured, then such a case should be specifically debated by the Defence Acquisitions Council after a technology scan is carried out by HQ IDS in consultation with the Defence Research and Development Organisation (DRDO).

The DPP thus actually recognizes both the streams of thought stated above in that it entrusts framing of SQRs to the Service Headquarters but simultaneously mandates them to consider all the relevant factors.

The present structure of the acquisition wing does not incorporate the expertise required to independently or autonomously assess SQRs. The DPP already provides that the draft SQR will be circulated inter alia to the technical manager who is a part of the acquisition wing and his inputs will be taken into account by the SEPC. If there is to be an independent framing of SQRs, it can be done only if and when we have an entirely separate adequately equipped and empowered organisation devoted to defence acquisitions and covering the entire defence acquisition process from initiation to conclusion.

Inclusion of non-government institutions, agencies or academia in the decision making process, often recommended by some, may not be appropriate given the extremely sensitive nature of the information that is involved. However, this does not certainly preclude the Service from seeking relevant inputs from these institutions while framing the SQRs. In fact, it may be worthwhile for them to do so. Taking all the above factors into account and given the present institutional dispensation, the determination of operational capabilities required and the framing of SQRs should be left to the user Service as at present.

However, the SEPC needs to scrutinize the proposed SQRs keeping in view the stipulations of the DPP. This is something that is not fully evident in every case at present. Further, though the DPP is quite clear on this aspect, it needs to be reiterated that there should be no change necessary in the SQRs once they have been framed and certainly once RFPs have been issued. Hence it is imperative that the SQRs are diligently and professionally formulated taking into account both the anticipated delivery period as well as the operational period of the equipment being procured. There should be no changes necessary subsequently in the name of advancements of technology or additional operational requirements. This would indicate inadequate due diligence at stage of framing of SQRs and is at times the reason for withdrawal of RFPs and consequent delays in procurement. SQRs have to be properly determined and fixed. Advancements in technology should be catered for through an upgrade process after due approvals and not through ad hoc revisions in SQRs. In other words, the procedural framework stipulated in the DPP 2011 is considered appropriate. We just have to work it better.

#### Approval for Procurement of Equipment

Under the extant Defence Procurement Procedure, there is a three stage process for approval for procurement of equipment viz. the Services Capital Acquisition Plan Categorisation Committee (SCAPCC), the Services Capital Acquisition Higher Categorisation Committee (SCAPCHC) and the Defence Procurement Board (DPB) or the Defence Acquisitions Council (DAC). The Categorisation Committees and subsequently the DPB/DAC accord 'Acceptance of Necessity' (AON) for the procurement of the equipment. By very definition, consideration of 'AON' covers the entire gamut of factors relevant for procurement of equipment including looking at the SQRs, the source of the procurement, whether it should be single vendor or can it be multi vendor, etc. This is arguably the most critical stage of the

procurement process as all subsequent activities are essentially implementation of the decisions taken at this stage. The Categorization Committees as well as DPB/DAC include representatives of all the stake holders involved i.e. the Services, MoD (Finance), HQ IDS, DRDO, Department of Defence Production and the acquisition wing.

These are high-level committees that should have the conclusive word in respect of the proposed procurement. However, the experience has been that issues that fall within the domain of these committees and that have been considered and dealt with by them are again raised ab initio at subsequent stages of the approval process. This not only delays the procurement process but also dilutes the authority of these committees. The argument of fresh or independent ab initio examination of cases cannot be taken to the extent of re-opening issues decided by the empowered high-level committees. In that case, the very existence of these committees is rendered superfluous. There must be finality to deliberations at each stage before the next stage is initiated and unless there are grave and apparent omissions or commissions or gross irregularities, decided issues should not be raised again and again particularly since the benefit of the information that was available to the committee may not be equally available to the authority raising the questions. This only delays the procurement without adding any real value. The committees and those servicing them must be responsible and accountable for their recommendations and decisions and subsequent scrutiny should be aimed at ensuring that the actual procurements are strictly in accordance with the approvals accorded.

It is felt that while there is no requirement for any change in the stipulated procedure for categorisation and approval of procurement proposals, we need to accord a greater degree of finality to the decisions of the DPB/DAC as it is on these decisions that the entire procurement process is based. If it is felt that the composition of the committee i.e. the DPB or the DAC should have outside representation e.g. of Ministry of Finance, in order to lend greater credibility and acceptability to its decisions, it should be considered.

#### Issue of Request for Proposals

The DPP is quite clear as to the process of framing of Requests for Proposals (RFPs) and their approval and issue. The RFPs are based on the SQRs and the approvals accorded by the DPB/DAC. They are framed by the user Service Headquarters, examined by the technical manager concerned in a collegiate manner together with the finance manager and the acquisition manager and thereafter submitted to the director general (acquisitions) for approval before issue. There should be no change in the terms or specifications of the RFP after its issue—this is particularly important in multi vendor procurements. The RFP constitutes the first legal document of the procurement process of the equipment concerned.

While framing RFPs, care has to be taken to ensure that vendors from across the spectrum are enabled to participate. The effort must be to encourage the widest possible participation and the RFP should reflect that.

It is important that draft RFPs are circulated at the formulation stage to all concerned directorates and agencies including maintenance wings and agencies proposed to be entrusted with production (in cases of license production and/ or with transfer of technology) or maintenance (in cases involving maintenance transfer of technology) so as to ensure that their requirements are incorporated and reflected in the RFP. It is also important that these agencies give serious attention to these draft RFPs at this stage. It has been the experience that adequate attention is not paid by all concerned at the stage of drafting of RFP with the result that changes or deviations are sought or necessitated at the later stage of technical evaluations or contract conclusion. This is neither desirable nor as a general rule permissible under the procurement procedures.

One issue that is often raised is whether maintenance and support for the life-time of the equipment being procured can or should be catered for and decided at the time of the procurement contract itself. There is logic as to why this should be done. Any equipment or weapon platform that is procured needs to be maintained over its life-time. The standard terms of contract only obligate the seller to provide product support for a maximum period that is to be stipulated. However, once equipment is procured and inducted into service, vendors may over-price spares and support services and there is limited leverage available with the Buyer at that stage to insist on reasonable costs due to operational imperatives. Thus, if life support could be negotiated at the time of the procurement itself, then obviously value for money could be better ensured. The problem, however, is that since the technical or operational life of any equipment can be even 20 or more years, how does one fix costs? One way is an index-linked formula assuming one can agree on the indexes to be adopted. However, given the dynamic nature and uncertainties in global economies and finances and the huge variations in costing philosophies and methods of calculating escalation factors and indices, predicting requirements as well as costs over such an extended period is inherently subjective.

The solution would perhaps emerge with new technology and maintenance philosophies and practices. For example, modern aircraft do not require the standard maintenance procedures necessary for older generation of aircraft. They are now on 'on condition' basis. Integrated logistics support and maintenance programs that have evolved and that can be contracted for extended periods also address this issue and mitigate some of the concerns. These could be asked for as part of the RFP for the procurement itself. Nevertheless, it may not be realistic to expect that support and maintenance for the entire technical or operational life of the equipment can be comprehensively and completely addressed at the procurement stage itself.

There have been instances of withdrawal of RFPs that are often cited as examples of deficiencies in the procurement process. Broadly speaking, withdrawal of RFPs have occurred where they have elicited inadequate response from vendors resulting in either no-bid or single bid situation or where there has been an error in the RFP necessitating its withdrawal and re-issue. All such instances need to be viewed very seriously as they not only result in delay in procurement of equipment required by a Service but also have the potential of resulting in increase in cost of the equipment being procured. No-bid or single bid situations arising after issue of RFPs indicate an inadequate appreciation of the available equipment in the world or indigenous markets or of framing of narrow or unrealistic technical specifications or stipulating unrealistic delivery schedules—all aspects that should have been properly examined prior to framing of SQRs as specifically stipulated in the DPP. Errors in technical specifications incorporated in RFPs often come to light during the pre-bid exchanges between the Service Headquarters and vendors necessitating withdrawal of the RFP. These are issues of lack of due diligence or insufficient in-depth study before framing of SQRs rather than of any procedural infirmity. They need to be dealt with as such.

#### Technical Evaluation of Proposals

Under the DPP, technical evaluation of proposals received in response to a RFP is conducted in two stages viz. (i) technical evaluation based on the documentation furnished by the vendors and (ii) field evaluation of the equipment offered by vendors. The entire technical/field evaluation process is validated by the technical oversight process that is conducted in selected procurement cases of over RS'300 crores in value. The rules and procedures are quite well defined in the DPP and what is required is scrupulous adherence to them. In order to enhance transparency and ensure a level playing field, the DPP 2011 mandates that the Trial Methodology for checking the SQRs are formulated and indicated upfront as an annexure to the RFP. All equipment on offer is evaluated in accordance with this methodology.

A question that is often raised is whether there should be a ranking of technical compliance in order to take into account equipment that may be technologically superior to another on offer while both meet the technical requirements stipulated in the RFP. The argument in favor of such a proposal is that it may enable acquisition of the technologically best equipment. However, the problem with such a proposal is the element of subjectivity that is introduced. Though we may have field evaluation teams and a staff evaluation process thereafter, what is the best is always a matter of judgment and differs from team to team and from individual to individual. Earlier, there was a concept of “Essential Parameters” and “Desirable Parameters” for technical evaluation of equipment. But even this was subsequently done away with since there were subjectivities in assessment that impinged upon a transparent determination of L1 vendor. Given our past experience, an important concern is the maintenance of transparency and fair play in defence procurements and this has to be maintained even if it reduces to some extent the possibility of better equipment

through a more flexible procurement process. It may be added that much of the concerns of appropriate levels of technology in equipment being procured can be mitigated if we ensure a proper assessment and study of what is available and likely to be available and tailor it to our specific needs at the time of framing of SQRs and subsequently RFPs. We need not always aspire to have the best equipment. What we should procure is what we realistically need to counter the threat perceptions that we may have and the security contingencies that we may need to provide for.

Another related issue is whether a field team can evaluate and suggest optional equipment that in its view would enhance the operational utility of the equipment being procured. It is argued that it is not always possible to foresee all that may be available or the most optimal solutions or everything required at the stage of formulation of technical specifications and SQRs. Here again, the position has to be viewed through the twin glasses of maintenance of transparency and fair play in the procurement process and the established process of assessing what is actually sufficient to meet the operational objective for which the equipment is being procured. Any significant change in specifications of equipment may have cost implications and amounts to modification of the SQRs that have been formulated through an established process and approved by the SEPC. It thus has the potential of vitiating the level playing field. Given the level of due diligence envisaged in the DPP and the professional knowledge and competence that exists at each Service Headquarters, it can be reasonably expected that the SQRs as finally framed and approved by the SEPC captures all that is required for the equipment that is being procured. There can always be refinements or better equipment. This does not mean that they need necessarily to be procured. Hence, such changes should not be allowed.

Much of the time taken in finalisation of procurement cases is in the technical and field evaluations. Since equipment has to be brought into the country for trials and these have to be undertaken in different geographical and often climatic conditions, it inevitably takes a long time. However, it could be examined whether the system of hot weather and cold weather trials that is prevalent in procurements particularly of the Army is relevant for all type of procurements even today. If such year-long trials can be limited to only that equipment where it is essential, the time taken for trials and consequently the procurement process as a whole can be significantly reduced.

#### Commercial Evaluation of Proposals

Like for the technical evaluation process, the procedure for commercial evaluation of proposals is laid down in the DPP. It envisages commercial evaluation, determination of L1, discussions as maybe necessary and finalisation of contract in a collegiate manner by the Contract Negotiation Committee (CNC). The commercial evaluation is of the equipment that has been sought in the RFP and as evaluated and found compliant in the technical or field evaluation. There should normally be no addition of equipment or enhancement of

capabilities at this stage. Nor should there be any change from the standard terms of the contract particularly in case of those that has an impact on costing of the proposal.

The unique situation referred to earlier arising from procurements being made from vendors used to different costing and contractual terms gain prominence at this stage. The DPP requires the contract to be based on a firm and fixed price. Given the fact that the typical period for implementation of major procurement contracts ranges from five to seven years, many vendors would prefer a cost based on a base year, which is thereafter to be escalated as per an agreed escalation formula. Even if an escalation formula is considered, there are often different perceptions as to the appropriate indices to be adopted. Some vendors seek changes or additions to the standard contract terms stipulated in the DPP. These include, as illustrative examples, those relating to effective date of commencement of contract, applicability of laws and national jurisdictions, arbitration mechanisms and limitation of liability. Many of these discussions arise from what they consider standard commercial practice or global best practice or statutory requirements that they maybe subject to in their home countries.

Contracts relating to defence procurements in India are entered into by a sovereign Government on one hand and a commercial entity on the other. It is not a simple commercial contract and thus not all the considerations and situations that govern commercial contracts apply. A primary consideration in defence procurements is that the contracting party must be held responsible for the performance of the contract under pain of stringent penalties for nonperformance. This is so because non-performance is not just a matter of commercial liabilities but also impinges on the defence preparedness of the country. Hence, contract terms may inevitably be biased in favor of the Government. It maybe added that certain safeguards and leverages are essential particularly in the Indian context since the procurements are from foreign companies based outside India. Hence, clauses seeking to enforce full and proper performance like liquidated damages, warranty clauses, performance guarantees, product support clauses, rights to terminate, etc. should not be diluted.

Furthermore, a sovereign Government has certain inherent powers that should not be abdicated through contractual provisions. An example would be to blacklist the company or decided not to do future business with it in case of default, persistent default or allegations or proven criminal or civil misconduct. However, all such exercise of sovereign prerogatives as well as invoking of penal clauses of contracts has to be within the realms of settled law and the principles of natural justice and these provide a balance to the contract and assurances against arbitrariness to the vendor.

Dealing with such issues requires knowledge of contract laws both in India as well as abroad. Under the present dispensation, the acquisition wing does not have an integral arrangement for legal advice or vetting of contracts particularly where there are issues requiring changes in the standard terms. This necessitates recourse to a rather elongated and time consuming process of reference to the Ministry of Law represented by the legal advisor (defence) who in

turn may not be entirely familiar with the intricacies of contracts or the details of the particular procurement case. This delays finalisation of procurement cases. Under the present dispensation, it is envisaged that the acquisition managers would have the benefit of cost inputs from the advisor (costs), statistical inputs as to market trends and escalation indices from the statistical advisor and finance inputs from MoD (finance) while determining benchmarks and evaluating costs and assessing their reasonability. In practice, the inputs received are rather rudimentary and do not reflect the depth of analysis or the quality of input that should reasonably be expected given the huge volume of expenditures that are being dealt with. The offices of the advisor (cost) and statistical advisor are severely handicapped by lack of adequate personnel and it is not unusual to find the advisor (cost) personally hopping from one Contract Negotiation Committee (CNC) to another, providing whatever inputs he best can.

This lack of adequate legal backing as well as insufficient financial and costing inputs is a major deficiency in the present system. We clearly need procedures as well as institutional mechanisms whereby such inputs are provided to the acquisition managers so that they are not at a disadvantage when negotiating with representatives of vendors who are, more often than not, well qualified professionals in their respective fields.

In the firmament of Government, such expertise exists and needs to be tapped. The acquisition wing needs to be supplemented by personnel possessing the requisite skills and knowledge for benchmarking, cost analysis and financial analysis. Each acquisition manager should have dedicated personnel who would be part of the contract negotiation committees. Furthermore, the acquisition wing should have a dedicated legal advisor conversant with contractual law and relevant international law who can provide the requisite legal support to the acquisition managers.

#### Approval of the Competent Financial Authority and Contract Conclusion

Approvals of the competent financial authority, and grant of expenditure sanction, are not only governed by the DPP 2011 but more so by the delegation of financial powers and the transaction of business rules of the Government of India. Broadly speaking, procurement proposals costing up to Rs 500 crores are sanctioned by the Defence Minister, from Rs 500 crores to Rs 1000 crores by the finance minister in consultation with the defence minister and beyond Rs 1000 crores by the Cabinet Committee on Security.

Given the extant rules that are actually beyond the purview of the Ministry of Defence, there is not much that can be suggested so long as the acquisition wing remains within the confines of the Ministry of Defence. However, one issue that is often seen as a factor delaying finalisation of procurement cases and conclusion of contracts is the observations on procurement proposals mainly from finance wing or the Ministry of Finance when finalized

proposals reach them for comments/concurrence. While it would certainly neither be fair nor accurate to hold finance responsible for delays, it is an issue that merits some deliberation.

The MoD (finance) headed by the Secretary (defence finance) exercises the financial check on all defence expenditure including of course procurement proposals. In addition, before a proposal can be considered by the cabinet, it has to be sent to the Ministry of Finance for comments and concurrence. It must be recognized that there is an inherent value in terms of checks and balances in scrutiny of expenditure proposals by an independent agency like the Ministry of Finance that should not be discounted.

The financial advisor (acquisitions) along with the finance managers are an integral part of the acquisition wing and are involved in the executive decision making at every stage of the procurement process from grant of 'AON' to seeking expenditure sanction of the competent financial authority. The whole acquisition process is envisaged to function in a collegiate manner with continuous and simultaneous scrutiny from finance point of view at every stage. The views and concerns of Finance are to be attended to and addressed at each stage of this process. Hence, it should be reasonably expected that all major financial issues are resolved before a proposal reaches the stage of seeking expenditure sanction of the competent financial authority. Thus, if major observations relating to finance issues remain unresolved at the late stage of seeking expenditure sanction, then it perhaps indicates a need to strengthen the financial scrutiny at the earlier stages of the procurement process.

Further, we need to acknowledge not only the existence and scrutiny of the Defence Finance Department but also the fact that issues of operational capabilities, usage, justification, etc. are considered by bodies like the DPB and the DAC headed by the Defence Secretary and Defence Minister respectively at the stage of initiation of the procurement process itself. The Secretary (defence finance) is a member of the DPB/DAC. Hence, generally speaking, observations by M/O Finance should be only in respect of issues of the cost of the proposals, reasonability of costs, adherence to all the stipulated procedures, etc. and should not normally extend to operational issues or questions of justification for the proposal itself which has been appropriately dealt with at the 'AON' stage.

#### Post Contract Management and Monitoring

The DPP stipulates that while responsibility for contract administration and management would be that of the Service Headquarters concerned, post contract monitoring would be conducted by the acquisition wing. While simple projects involving one time off the shelf buys without any design and development shall be reviewed by the acquisition manager or equivalent service officer in the Service Headquarters, complex projects that require design, development and testing with likely transfer of technology should be reviewed by a steering committee headed by the director general (acquisitions) or principal staff officer at the Service Headquarters.

Contracts are signed by the acquisition manager and essentially post contract administration and monitoring is the joint responsibility of both the Service Headquarters and acquisition wing. Contracts are to be implemented as per the terms and specifications of the contract. Where the contract represents the culmination of a diligently prepared procurement proposal, a comprehensive RFP and a well-managed technical and commercial evaluation process, there are generally no problems in implementation of the contract. Issues arise when either party to the contract seeks to deviate from the terms and specifications stipulated therein. This needs to be strongly discouraged unless there are extremely compelling circumstances necessitating change.

### **SELF-RELIANCE THROUGH SMART ACQUISITION**

It is a well-known fact that defence acquisition is a complex process which involves multiple stake-holders having expertise in threat scenarios, military affairs, technology, operational requirements, national policies, industry capability and potential, financial management, and contract and project management. Stakeholders belonging to different departments and organisations are having their own policies, procedures and priorities. This sometimes leads to working for cross-purposes and, hence, gives rise to potential conflict of interests. Thus, there is a need for synchronising the policy and procedures of different departments and organisations with the Defence Procurement Procedures (DPP) for effective defence acquisitions.

Procedures for defence procurements, initially laid down in 1992, were comprehensively reviewed and a revised Defence Procurement Procedure was introduced in December 2002. The refinements in these procedures have been undertaken periodically amendments and additions incorporated in 2003, 2005, 2006, 2008 and 2009, and the DPP-2011 is now currently in vogue. Despite several refinements in the procedures for defence procurements, the aim of achieving greater self-reliance in defence acquisitions and to establish a level playing field for the Indian defence industry (both public sector and private sector), is still some distance away. Similarly, expediting decision-making and simplification of contractual and financial provisions has been achieved only partially.

In 2005, the Kelkar Committee had studied all aspects related to defence acquisitions and after interacting with all stakeholders had made comprehensive recommendations. The Committee had also recorded the perspectives of various stakeholders. In the succeeding paragraphs, the present status of the Kelkar Committee Recommendations have been noted. After that the current perspectives of all stakeholders have been reviewed to identify likely reasons for the slow progress made in this area. It is felt that now the time has come to go through a “paradigm shift” in the defence acquisition process to move faster towards achieving the goal of self-reliance. The current focus of “Buy Global” has to make way for the “Make” category acquisition. This will require major changes in the thinking and in the approach of all the stakeholders including the users leading to certain procedural changes.

These aspects are examined in the succeeding paragraphs and certain changes to the procedures have been recommended, which would accelerate the self-reliance process.

**Table 1: Status of Progress on Implementation of Kelkar Committee Recommendations**

| Sl. No. | Kelkar Committee's Recommendation                                                                                                                                                                                                                                                                                                          | Status of Implementation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | <b>Information sharing of requirement of Armed Forces with the Industry.</b><br>Armed Forces to prepare a public version of "Technology Perspective and Capability Roadmap (TPCR) to be put on the MoD Website.                                                                                                                            | Till date no TPCR document has been made available. After 2002, no new Long Term Integrated Perspective Plan (LTIPP) has been made available. Thus, DRDO's 5- year Plans are based on day-to-day Interactions with the Services and DRDO's understanding of the Services' requirements.                                                                                                                                                                                                                                                                                                                                                                                              |
| 2(a)    | Entry Points for the Industry in the Acquisition Process <ul style="list-style-type: none"> <li>- Participation in SCAPCC and SCAPCHC.</li> <li>- Consult for ToT and MToT purpose at RFP stage.</li> <li>- Allow all identified industries to be able to contribute in finalising the RFP for both "Buy" and "Buy &amp; Make".</li> </ul> | Currently, industry participation is ensured by the following: <ul style="list-style-type: none"> <li>- Services issue RFI prior to finalising SQRs.</li> <li>- Industry bodies, like CII, FICCI, ASSOCHAM, DPSUs, OFB are invited to make presentations to the SCAPCC prior to deliberations on proposals by SCAPCC.</li> <li>- Views expressed by the reps of the industries are thoroughly debated, and have helped in appropriate categorisation in some cases.</li> <li>- Pvt industries currently are not consulted regarding ToT and MToT or formulation of RFP for "Buy" and "Buy &amp; Make". However, the concerned DPSU or OF is consulted for ToT &amp; MToT.</li> </ul> |
| 2(b)    | Amend constitution of Defence Production Board in order to have representation of the industry incorporated.                                                                                                                                                                                                                               | Not implemented by DDP so far. DDP does not have any dedicated JS representing the interests of Pvt sector.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2(c)    | Provide level playing field to private sector industry and gradually move away from the process of nomination.                                                                                                                                                                                                                             | This aspect is being kept in view during the deliberations of SCAPCC, SCAPCHC and DAC. But, DPSUs and OFs still enjoy preferential treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 3       | <b>Raksha Udyog Ratna (RURs).</b>                                                                                                                                                                                                                                                                                                          | - RURs identified but not                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|   |                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                           |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>- Participation of Indian industry at the level of design, development and production of major weapon systems and platforms by firms of proven excellence and having adequate technical, managerial and financial strength.</li> </ul>                                                                                                  | <p>implemented so far.</p> <ul style="list-style-type: none"> <li>- However, industry bodies (CII, FICII and ASSOCHAM) are getting opportunity to showcase their capability through response to RFIs from the services and also through presentation to SCAPCC. This has brought some qualitative change in the categorization process.</li> </ul>                        |
| 4 | <b>Promoting Participation by SMEs.</b> <ul style="list-style-type: none"> <li>- Setting up a “Defence Technology Product Development Fund (DTPDF)” to fund SME’s design and development work.</li> <li>- Provide institutional support to the SMEs to reduce transaction cost while tendering.</li> <li>- Framework for RURs to promote SMEs on transparent basis.</li> </ul> | <ul style="list-style-type: none"> <li>- DTPDF has not really been utilised as was intended.</li> <li>- On the other hand, DRDO has involved SMEs in large number of DRDO projects. As on date, there are more than 500 industry partners who have actively participated in DRDO R&amp;D projects both at development and production stages.</li> </ul>                   |
| 5 | <b>R&amp;D in Defence</b> <ul style="list-style-type: none"> <li>- Inclusion of reps of CSIR and ISRO in Def R&amp;D Board.</li> <li>- Periodic external review of the functioning of DRDO by an independent high-level committee.</li> </ul>                                                                                                                                  | <p>Yes, implemented DRDO took the initiative for constitution of Prof Rama Rao Committee by MoD for reviewing the functioning of DRDO. The Government has accepted a large number of the recommendations of Prof Rama Rao Committee, which are under implementation.</p>                                                                                                  |
| 6 | <b>Procedure for acquisition of “Make” category.</b> <ul style="list-style-type: none"> <li>- IDS to expedite the formulation by procedure for “Make” category.</li> <li>- Setting up a committee to examine the proposal for establishing a professional agency for acquisition in MoD.</li> </ul>                                                                            | <ul style="list-style-type: none"> <li>- The “Make (by Industry)” procedure has been incorporated in the DPP and refined periodically. However, it has not succeeded in achieving the desired result. Only a few proposals of the Services have been categorized as “Make (by Industry)”.</li> <li>- MOD is having a relook on procedure for “Make” proposals.</li> </ul> |
| 7 | <b>R&amp;D Support for Industry.</b> <ul style="list-style-type: none"> <li>- In medium and low technology areas, DRDO should off-load as much as possible to industry</li> <li>- MoD should adopt a DARPA</li> </ul>                                                                                                                                                          | <ul style="list-style-type: none"> <li>- As laid down in DPP, DRDO is concentrating on “Strategic, Complex and Security—sensitive” areas. DRDO has also worked out lists of Systems and</li> </ul>                                                                                                                                                                        |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                          |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <p>like model for giving R&amp;D work for higher technologies to the private sector and other scientific institutions.</p> <ul style="list-style-type: none"> <li>- Upgrades of existing Platforms (in service) which have adequate leadtime should be done preferably by indigenous industry.</li> <li>- Policy on "Shared Development Costs" in "Make" Category among Armed Forces, R&amp;D Organization, both public and private industry.</li> <li>- Accepting the principle of acquiring at least a minimum quantity to sustain the financial viability, provided the developer adheres to the required quality and time schedule.</li> </ul> | <p>Products, which can be developed by the industry directly.</p> <ul style="list-style-type: none"> <li>- Policy on "Shared Development Costs" in "Make" Category was proposed, but did not find consensus.</li> <li>- Concept of Minimum Order Quantity (MoQ) is now being accepted, but, however, with preconditions.</li> </ul>                      |
| 8  | Placing funds for R&D work with Service HQ.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Funds have been made available.                                                                                                                                                                                                                                                                                                                          |
| 9  | Strengthening of IDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Achieved to a great extent.                                                                                                                                                                                                                                                                                                                              |
| 10 | <p>Life Cycle Cost and Training of Officers dealing with procurement and acquisition.</p> <ul style="list-style-type: none"> <li>- At College of Military Mgmt, Hyderabad.</li> <li>- Establishment of a National Defence University.</li> <li>- Creation of an autonomous body for Aero Space Development.</li> </ul>                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>- Training of officers is being organized at various institutions.</li> <li>- Training is also being imparted through seminars and workshops.</li> <li>- Life cycle cost is being assessed in selected high cost acquisition proposals.</li> <li>- Indian National Defence University is being set up.</li> </ul> |
| 11 | <p><b>Offset Policy.</b></p> <ul style="list-style-type: none"> <li>- For all acquisitions from foreign vendor above Rs 300 Crores, Offset at 30 per cent rate.</li> <li>- Defence Production Board to monitor implementation of offset agreement.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>- Offsets are being implemented.</li> <li>- Review is under progress. It is expected that acquisition of technology through offsets will be included and enforced to get significant benefits.</li> </ul>                                                                                                         |
| 12 | <p><b>Defence Exports.</b></p> <p>In connection with defence exports, the committee has recommended.</p> <ul style="list-style-type: none"> <li>- Maintain licensing regime and reexamine the concept of</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                | Govt is moving cautiously.                                                                                                                                                                                                                                                                                                                               |

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|  | negative list.<br>- Export control regime on case-by-case basis for exports to countries in India's strategic neighborhood.<br>- Set-up an export marketing organisation and explore alliances with DESO in UK and DGA in France.<br>- Allow marginal cost pricing to DPSUs and OFs. |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

### **Perspective of Stakeholders in Defence Capital Acquisition**

The major stakeholders are:

- Users (Services)
- DRDO
- Production Agencies (both public and private)
- Other S&T bodies

### **Users' Perceptions**

Generally, Users worldwide are highly focused about their modernisation needs to keep pace with the rapid technological advancements in military weapon systems and platforms. They demand immediate results and expect fast track speed of acquisition processes. They do not want to wait for indigenously developed systems, which require longer development periods followed by detailed trials (many times more than one iteration). This causes delays in their modernisation process. Some users argue that the operational urgency of their requirements are not understood by other stakeholders and their proposals do not progress with the speed they want. A majority of users feel that most of the complex weapon systems and platforms must be imported to hasten up the modernisation process. They also add that even after completion of development and trials, the lead-time taken for 'productionisation' by the industry is very high due to technology gaps and capacity limitations. There is further delay in establishing world-class quality, which comes through streamlining production over numbers. Users framework encompasses the following:

- (a) Quality—World class.
- (b) Time Frame—As per their operational requirement and modernisation needs.
- (c) Cost—Competitive to global market.
- (d) Quantity—Users are not able to forecast their long term requirement, but production capacity limitation is not acceptable.
- (e) Users generally lack "ownership" of an item under development, though they exhibit strong bond with the equipment, once inducted.

### **Perspectives of Manufacturing Industry (both public and private)**

The industry is generally focused on profits, risk-free business, large volume orders, contract for annual maintenance and regular repeat orders to keep their production lines running smoothly. Public sector industry avoids open competition with the private industry and demands protection from the Government. Many times, this protective approach may be justifiable based on the facts of technical expertise, available infrastructure, under-utilized installed capacity and reasons of security sensitive nature of systems. However, if the nomination of the production agency is done for even those items for which the Pvt Industry has the capability to produce, then it acts as a disincentive to the private industry and for subsequent projects. The domestic industry (both public and private), in general are also facing problems related to “quality control” and “inadequate capacity” in areas like heavy engineering, armament and missiles. Private industry hesitates to make investments in infrastructure and production capacity, unless large volume orders are assured. They do make claims about their capability to develop and produce even complex and security-sensitive systems; despite they sometimes are not able to demonstrate proof of their expertise and technical capability. The Pvt industry keeps complaining about not being provided a “level playing field” vis-à-vis the public sector. However, the public sector industry feels that the private industry are being pampered, despite not having the necessary technical expertise and infrastructure.

### **Perspectives of R&D Organisations**

R&D organisations feel that users find it expedient to take the “Buy Global” route for all complex weapon systems and platforms without thoroughly examining the “Make” route well in advance. Due to lack of long term joint planning, neither R&D organisations nor the industry (private and public) are able to plan in advance, ways of meeting users’ requirements in time. Many times, major requirements of the users become known at a very late stage. R&D organisations feel that, for indigenously developed systems, MK I (at 80 per cent acceptance level) should be inducted and order placed to the industry for certain minimum quantity, while R&D organisations continue to improve further to meet total QRs. R&D organisations are playing a major role in enabling the industry (both in public and private sectors) and in enhancing production capability and capacity.

### **Limitations of Collegiate Decision-making**

Decisions on AoN and categorization are taken in a collegiate manner in categorization committees. The views of the technical and financial experts do not necessarily get the weight-age deserved by them. Many times, the decisions are arrived by the majority deciding against technical/financial inputs on the grounds of operational urgency. Since, for three decades (early 70’s to late 90’s), there has not been much defence capital acquisition, almost all the capital acquisition proposals from the Services are labeled as “Operationally Urgent” to fill the void. This may be true on ground, however, a via-media approach of “Buy” 50 per

cent and “Make” 50 per cent could simultaneously meet the Services’ immediate requirements, as well as help the cause of “Self-Reliance in Defence through Indigenous Development”.

### **“Defence Acquisition” vs “Defence Procurement”**

The “Defence Procurement Procedure” document lays down procedures for “defence procurement”, but does not cover all aspects of “defence acquisition” in a holistic manner. It will be appreciated that “defence acquisition” is much more than “defence procurement”. “Procurement” is focused on getting a particular system or equipment for operational use, whereas “acquisition” is supposed to be focused on acquiring the system equipment along with the capability to carry out product-improvement, design and development of Mark II and futuristic products. Thus, it is “acquisition” that aims at “self-reliance” in real terms, whereas “procurement” results merely in “meeting an emergent need”, while the dependence on the OEM continues forever. This aspect can also be better understood by applying similar logic to R&D and production:

- (a) “Technology” is much more than “manufacturing and assembly”. “Technology” encompasses design know-why, know-how, tools & jigs, documentation, processes and expert personnel, which can be used for future product development independently. Whereas, “manufacturing and assembly” is only part of what all goes in realizing a specified product and has very limited utility for designing and developing a new product.
- (b) “R&D” is much more than “Design and Development” (D&D). While in research one needs to horizontally integrate innovation and fundamental research on one side and engineering and manufacturing on the other end of D&D. Thus, D&D is a subset of R&D. Thus, for empowering industry, what is required is “acquisition” rather than “procurement”, and total participation of R&D and manufacturing entities.

### **“SMART” Acquisition**

SMART here is used as an acronym and is used to provide a more comprehensive definition for goal-setting:

S—Specific—to meet operational needs

M—Meaningful—to get maximum mileage out of Acquisition

A—Acceptable—to all branches of Users

R—Realistic—QRs

T—Time-bound—deliveries

Urgently what is required to be done is that all stakeholders (users, R&D organizations and industry) come together shedding narrow perspectives of individual organizations and set a common goal for self-reliance through indigenous R&D and empowering of the industry.

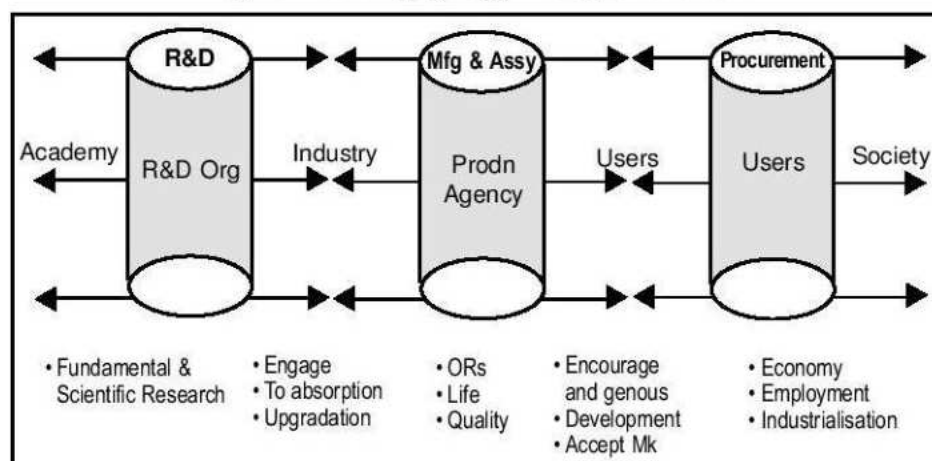
“SMART” principles that are to be applied to ensure “acquisition” must meet the following requirements:

- (a) Very specific terms with no ambiguity, but meeting QRs.
- (b) Meaningful terms to leverage maximum benefits.
- (c) Acceptable—Quality, capabilities and features for all stakeholders within users.
- (d) Realistic and pragmatic QRs.
- (e) Time-bound deliveries.

This is the most important aspect, which may seem very difficult to achieve in the existing environment with diverse policies, priorities and view-points among various stakeholders. However, an initiative can be undertaken to bring all stakeholders together to make a beginning synergistically in the direction of “SMART Acquisition” for empowering of the industry to achieve self-reliance.

Concerted efforts have to be put to jointly identify “Make” projects and implement the same expeditiously. Once a decision about mode of acquisition is arrived at, all stakeholders should remove their blinkers and display “Total ownership” by very closely working together with understanding for each- other’s problems and assist with a helping hand to find solutions. It is felt that this would show desired results and the dream of self-reliance in the defence could be fulfilled to a great extent. Also, ToT absorption through “Buy and Make (Global)” is required to be made successful by serious interest by the industry for getting the technology despite passive attitude of the foreign OEMs after bagging the Order. Furthermore, all stakeholders should come out of their respective silos, expand understanding, get-together, synchronize their own individual organization’s policies, priorities and perceptions with those of the other stakeholders (Fig. 1).

**Figure 1: Building Synergy Among Stakeholders**



## **Conclusion**

In this module, it has been highlighted that despite the several refinements in the procedures for defence procurements, the aim of achieving greater self-reliance in defence acquisitions and also to establish a level playing field for the Indian defence Industry (both public sector and private sector), through expediting decision making, simplification of contractual and financial provisions has been achieved only partially. The progress made on various important recommendations of the Kelkar Committee in 2005 on defence acquisition has been reviewed and the perspectives of the various stakeholders has been analysed. It has been highlighted that divergent policies, views and priorities of various stakeholders sometimes work at cross-purposes to the goal of self-reliance in defence acquisition. Furthermore, the difference between “acquisition” and “procurement” has been explained, highlighting the fact that what is happening today is more of “procurement” rather than “acquisition”, and thereby the lagging in self-reliance. Similarly, more of D&D is happening rather than covering innovation, research, engineering and manufacturing. As far as technology is concerned, it is limited to manufacturing and assembly rather than encompassing “technology” per-se. Furthermore, it has been recommended that all stakeholders should get together, synchronizing their own individual organization’s policies, priorities and perceptions with those of the other stakeholders and also apply the principles of “SMART Acquisition” to work synergistically to achieve the national goal of “self-reliance” in defence acquisition. Some changes to the existing procedures have been suggested in this module, which if implemented, will expedite the process of self-reliance in defence.

## **DEFENCE ACQUISITION SYSTEM IN THE UNITED STATES**

In the US, the Department of Defence (DoD) is responsible for providing effective, affordable and timely systems to the armed forces. Within the system, every acquisition programme is a directed and funded effort that provides a new, improved or continuing war-fighting capability in response to an approved need. Most importantly, the US investment strategy is designed to ‘support not only today’s force, but also the next force and future forces’.

The US acquisition system follows an evolutionary approach wherein capabilities are imparted to the armed forces in increments with inbuilt provisions for future enhancements. The evolutionary strategy relies on a spiral development process. Spiral development is defined as: “an iterative process for developing a defined set of capabilities within one increment. This process provides the opportunity for interaction between the user, tester and developer. In this process, the requirements are refined through experimentation and risk management, there is continuous feedback and the user is provided the best possible capability within the increment. Each increment may include a number of spirals”. Such an approach facilitates rapid induction and exploitation of mature technologies. The key to

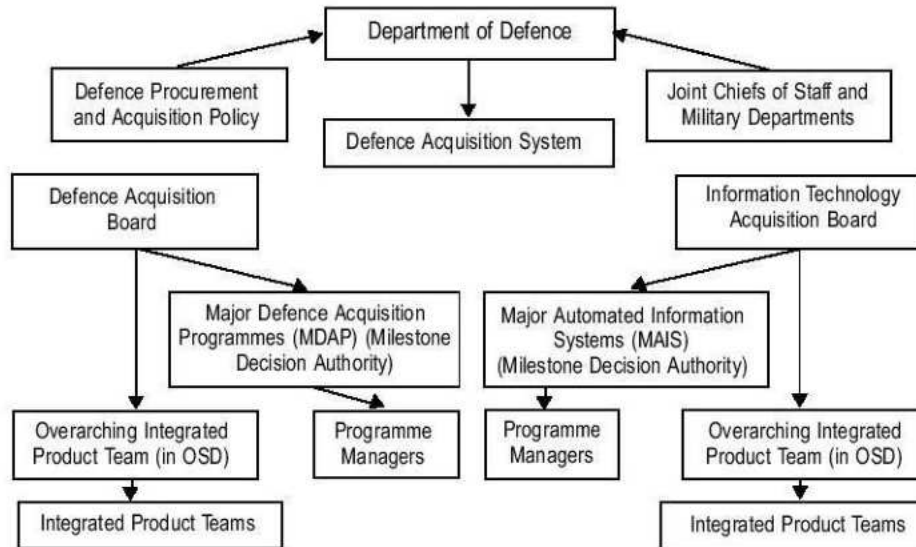
success in this approach is regular and close cooperation between various stake holders—industry, acquisition officials and the armed forces.

The US defence acquisition system is governed by the DoD Directive Number 5000.01 that describes management principles and the overarching policy in detail. Salient policy guidelines include flexibility, responsiveness, innovation, discipline and streamlined management. The Directive mandates constitution of Integrated Product Teams (IPTs) for ensuring continuous and effective communication amongst different agencies involved in acquisitions.

## Structures

The operation of the Defence Acquisition System has been described in DoD Instruction 5000.02. The Office of the Under Secretary of Defence for Acquisition, Technology and Logistics, USD (AT&L)}, is the nodal agency and the overarching authority tasked to oversee the complete defence acquisition process. It is assisted by Joint Requirements Oversight Council (JROC) in reviewing programmes and Functional Capabilities Board (FCB) in assessing capability gaps and proposals. Contract support is provided by the Defence Contract Management Agency (DCMA) and logistic support by Defence Logistics Agency (DLA).

**Figure 1: Schematic View of Defence Acquisition Structures**

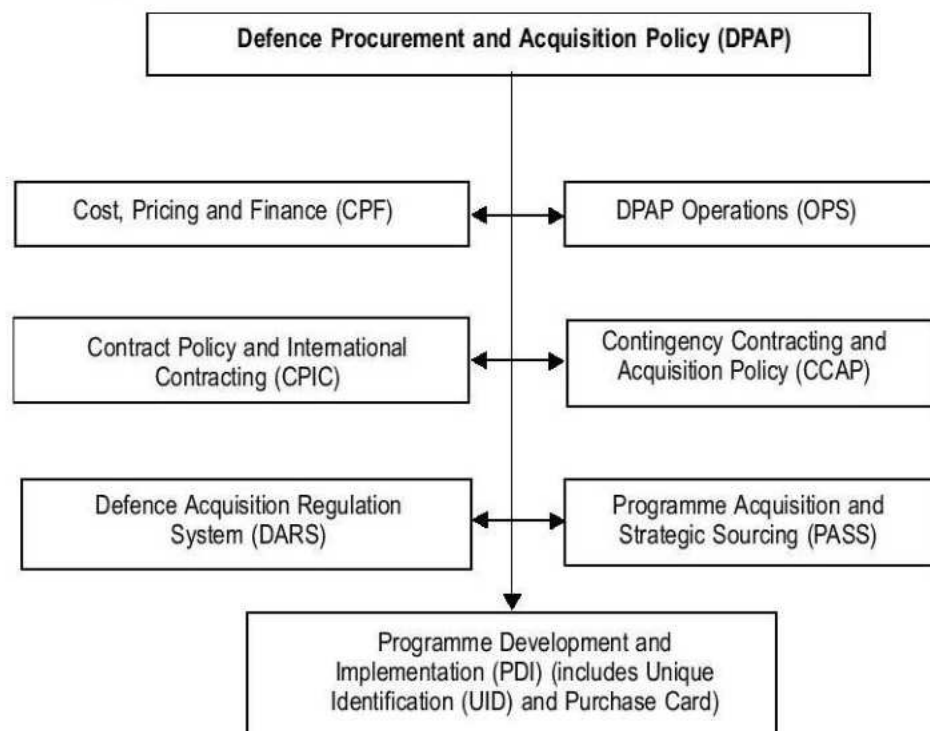


Defence Procurement and Acquisition Policy (DPAP) is responsible for all acquisition and procurement policy matters. The Defence Acquisition Board and Information Technology Acquisition Board are senior advisory boards for defence acquisitions for Major Defence Acquisition Programmes (MDAP) and Major Automated Information Systems (MAIS) respectively.

## Defence Procurement and Acquisition Policy (DPAP)

The DPAP office serves as the principal advisor to USD (AT&L), the Defence Acquisition Board and Information Technology Acquisition Board on acquisition and procurement strategies for all major weapon systems programmes, major automated information systems programmes and services acquisitions. DPAP is composed of seven Directorates—DPAP Operations; Cost, Pricing and Finance; Contract Policy and International Contracting; Defence Acquisition Regulation System; Contingency Contracting and Acquisition Policy; Programme Acquisition and Strategic Sourcing, and Programme Development and Implementation.

Figure 2: Organisation of Defence Procurement and Acquisition Policy



## The Defence Acquisition Board and Information Technology Acquisition Board

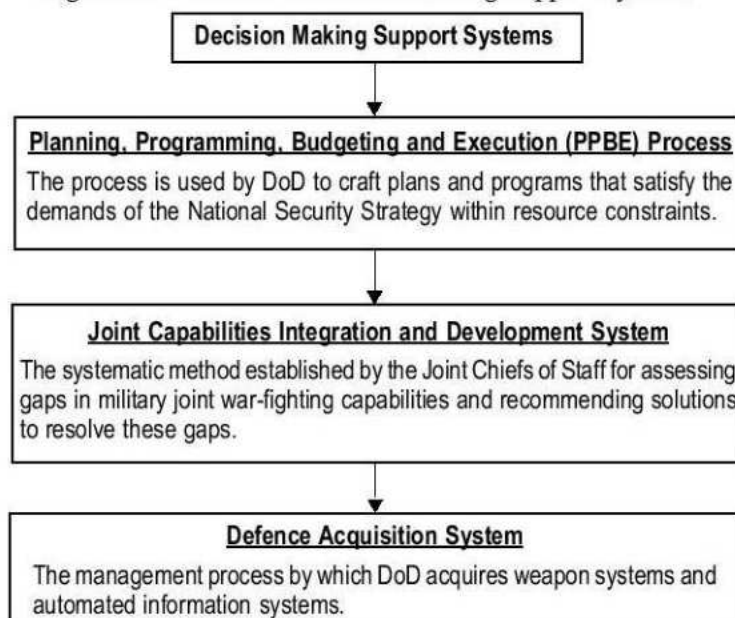
The Defence Acquisition Board (DAB) and the Information Technology Acquisition Board (ITAB) are manned by senior officials from the Joint Staff, the Military Departments, and staff offices within the Office of the Secretary of Defence (OSD). The Boards include Vice Chairman of the Joint Chiefs, the Service Secretaries and a number of Under Secretaries of Defence. DAB is responsible for approving Major Defence Acquisition Programmes (MDAP) and ITAB approves Major Automated Information Systems (MAIS). Both the Boards are further supported by subordinate groups in OSD known as Overarching Integrated Product Team (OIPT). Each OIPT facilitates communication and vets issues before the Boards' respective meetings. In this facilitator's role OIPT charts working-level Integrated Product Teams (IPT) for each review and manages their activities. At the Milestone Decision

Point, the OIPT leader provides DAB or ITAB members with an integrated assessment of programme issues gathered through the IPT process as well as various independent assessments.

Procedure: DoD has three principal decision-making support systems, all of which were significantly revised in 2003. These systems are as follows:

- a) **Planning, Programming, Budgeting and Execution (PPBE) Process.** It is really the starting point wherein the Secretary of Defence establishes policies, strategy and prioritised goals for DoD. The PPBE process consists of planning, budgeting and execution phases.
- b) **Joint Capabilities Integration and Development System.** It is a systematic method established by the Joint Chiefs of Staff for assessing gaps in military joint war-fighting capabilities and recommending solutions to resolve these gaps.
- c) **Defence Acquisition System.** It is the management process by which DoD acquires weapon systems and automated information systems.

**Figure 3: Flow Chart of Decision Making Support Systems**



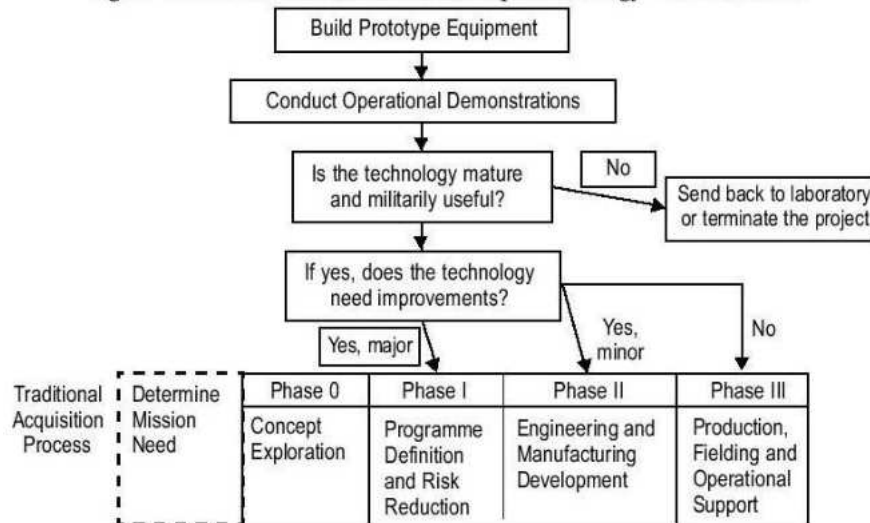
## **Advanced Concept Technology Demonstration**

With a view to expedite acquisition process, Advanced Concept Technology Demonstration (ACTD) was introduced in 1994. The concept aims at offering comparatively stabilised technologies to the defence forces and let the commanders ascertain their suitability in operational environment. Thus, it is left to the commanders to determine whether the equipment offered meets their requirement in its current form or further developmental work is required. In this methodology, advantage is taken of the nation's technological prowess to tell the military as to what equipment can be made available with the technologies mastered.

Thus, time taken to develop new technologies as per the military's requirements is eliminated.

Salient Features: Being the largest purchaser of defence equipment and the most advanced nation in military technology, US has an elaborate acquisition regime in place. Through the system of nominating Programme Managers, it follows a system of single point of accountability for accomplishing programme objectives for total lifecycle systems management, including sustainment. It is characterised by centralised policies and principles and decentralised and streamlined execution of acquisition activities.

Figure 4: Flow Chart of Advanced Concept Technology Demonstration



## **DEFENCE ACQUISITION SYSTEM IN GERMANY**

Germany is a key military player of Europe. As emergence of new tasks needs matching capabilities and identification of key capability gaps, it has been striving to fine-tune its defence acquisitions procedure to meet urgent demand for the acquisition and introduction of newer equipment. 'New Procedural Provisions for Identifying and Meeting Bundeswehr Needs' was issued in May 2004. It aimed to clarify misconceptions, resolve contradictions and reformulate individual stipulations. Recently, the German Ministry of Defence issued Defence Policy Guidelines on 27 May 2011. It spells out its equipment vision as follows:

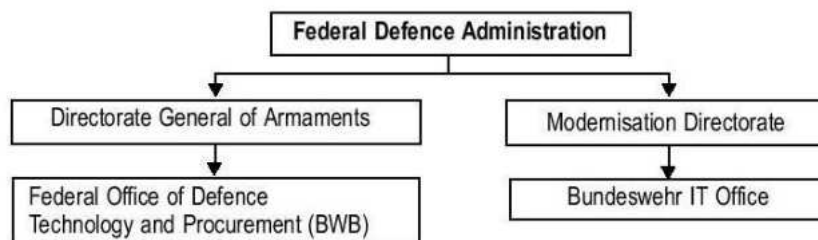
- Capabilities for probable operations in the future would require regular modifications and upgrades of equipment in terms of quality and quantity.
- The role of the defence industry is to serve the Bundeswehr. The German defence industry will continue to make a significant contribution to providing modern and powerful equipment as well as to in-service support. Bundeswehr and the defence industry alike will have to react flexibly to changing levels of ambition.
- Germany will procure what is required and affordable; it will not procure what people would like to have or what is offered. Priority is to be given to commercial off-the-

shelf solutions. Short-term responses to urgent operational requirements must be guaranteed.

The Policy Guidelines finally conclude that it is necessary to restructure the procurement system against the backdrop of changed security challenges and with regard to increased efficiency.

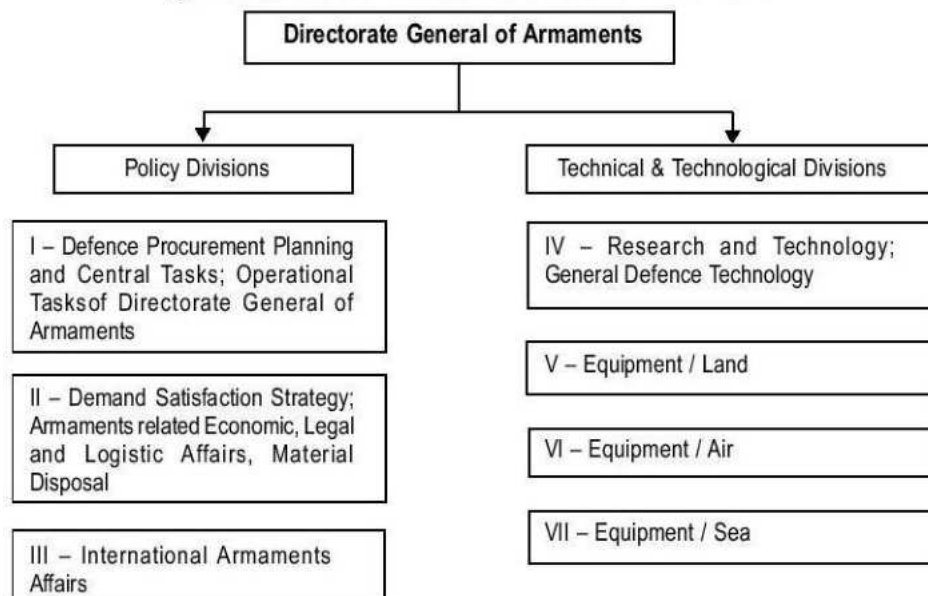
Structures: There are four organizations involved in defence acquisitions under Federal Defence Administration. They are Directorate General of Armaments; Federal Office of Defence Technology and Procurement; Modernization Directorate; and Bundeswehr IT Office.

Figure 5: Structure of Federal Defence Administration



**Directorate General of Armaments:** It is responsible for defence research and the planning of equipment and weapon systems (excluding IT) including their induction into the armed forces. Directorate General of Armament has seven divisions. Three divisions (1 to 3) are engaged in policy tasks and four divisions (4 to 7) are oriented along technical and technological lines.

Figure 6: Structure of Directorate General of Armaments

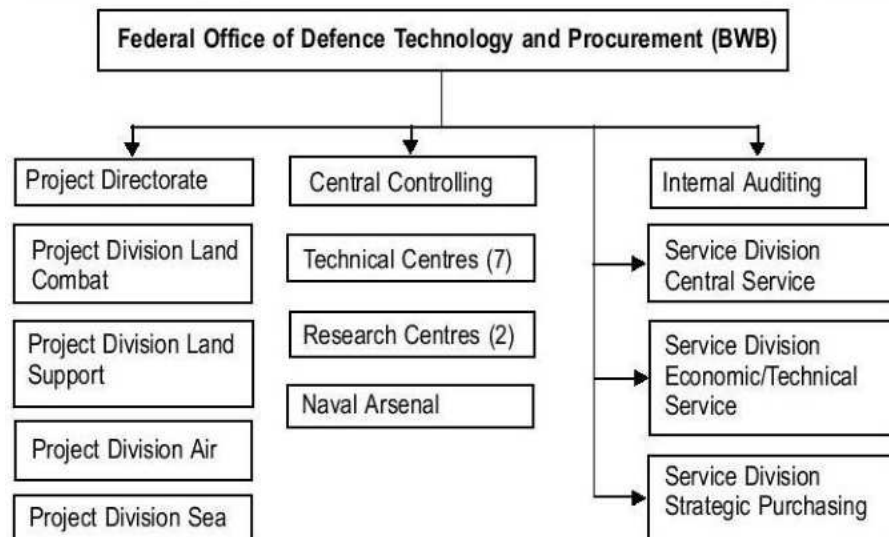


Division I handles armament planning and central affairs. It is responsible for organisation and supervision of the armament sector (less IT); operational tasks of the Directorate; armaments planning and situations, and development-planning proposals for development and procurements annual programmes. Division II deals with economic, logistic and legal armaments affairs and disposal. The charter of duties of Division III relates to international armaments cooperation including multilateral bodies and equipment aid. Division IV deals with research and technology and general defence technology. Divisions V to VII are organised to handle land equipment, air equipment and sea equipment respectively.

### **Federal Office of Defence Technology and Procurement (BWB)**

BWB is the largest technical authority in Germany. Its task is to ensure that Bundeswehr's demands are met by supplying state-of-the-art technology and modern equipment at economic conditions. It has the central responsibility for the management of all armament projects (excl IT). It has four project Divisions—Land Combat, Land Support, Air and Sea—and is responsible for:

**Figure 7: Structure of Federal Office of Defence Technology and Procurement**



- Management of complex projects.
- Systems engineering and integration.
- Research and technology.
- Technical/economic aspects of in-service support management.
- Contract and price negotiations.

BWB is also the supervisory body for seven technical centres and two research centres, which are mainly responsible for:

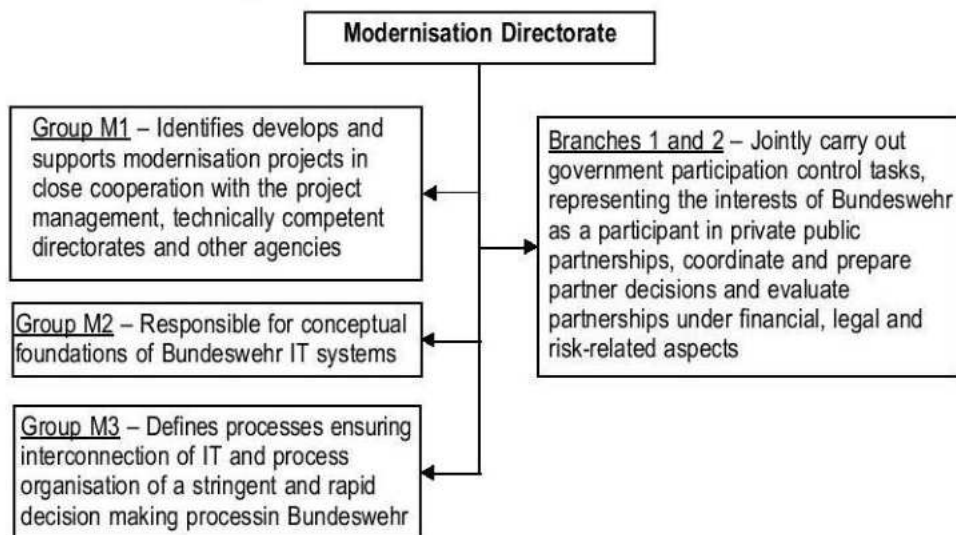
- Technical consultation and support of the project management for components and equipment,
- Performance of studies, research and technology tasks,
- Performance of experiments and analyses.

In addition to the above, BWB has three service divisions—two deal with central administrative tasks and general technical and economic matters, the third service division is responsible for innovative, holistic procurement processes in the fields of operational procurement (case by case basis), strategic purchasing by means of interdepartmental contracts and complex service contracts.

### Modernisation Directorate

The Directorate acts as a service provider oriented towards overall Bundeswehr interests—providing support services in a most cost effective way. It manages modernisation activities in terms of strategic corporate management. The Directorate provides active support for all modernisation projects, extensive provision of innovative, effective and secure information technology, direct management of private-public partnerships as well as the advancement of cooperation with trade and industry to improve economic efficiency and effectiveness of the Bundeswehr.

Figure 8: Structure of Modernisation Directorate



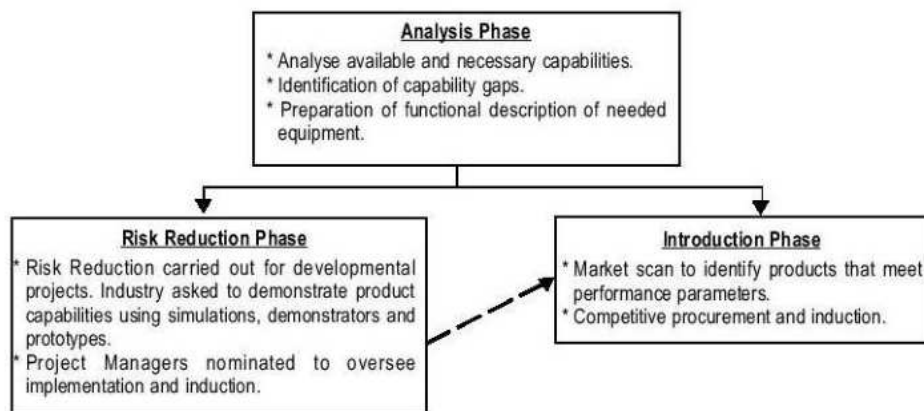
### Procedure

A major initiative was taken in 2001 when Customer Product Management (CPM-2001) procedure was issued for the identification and fulfilment of military requirements. It was a top down approach wherein system capability and functional requirements are derived from the military capability needed. Thereafter, contract is awarded to a prime contractor who translates performance requirement into equipment profile. It is for the prime contractor to identify and develop sub-vendors for sub-systems.

The defence acquisition procedure has been under regular review. Its latest version “Organisation, Procedures and Contracting” was issued in Sep 2010. The complete planning-cum-acquisition process has been divided into three broad but somewhat overlapping phases, as follows:

- Phase 1—Analysis Phase. This is really a part of the planning process. Four ‘Integrated Capability Analysis Working Boards’ are constituted under the Chief of Staff of Bundeswehr to analyse available and necessary capabilities for the entire German armed forces. Based on this comprehensive capability analysis, capability gaps are identified and solutions are investigated in five planning categories—personnel, operations, organisation, infrastructure and armaments. For armaments, a functional description is prepared for those requirements, which are essential for eliminating the deficit.
- Phase 2—Introduction Phase. A market scan is carried out and products that meet required performance parameters are identified and procured in a competitive manner for introduction into the service.
- Phase 3—Risk Reduction Phase. In case it is decided to have a new product developed, a risk reduction is carried out after the Analysis Phase. In Risk Reduction Phase, industry is asked to provide a demonstration of product capabilities using simulations, demonstrators and prototypes. Before committing resources, it is ensured that the envisaged product would meet all performance requirements. Once a go-ahead is given, Project Managers are appointed. They are assigned responsibility to oversee complete implementation during the Risk Reduction and Introduction Phases.

**Figure 9: Planning and Acquisition Process**



### **Salient Features**

Germany considers strategic partnership between Bundeswehr and trade and industry indispensable for maintaining modern and efficient armed forces. The industry is respected for its high speed of innovation. Contracts may be awarded to the industry for the following:

- Study and research contracts in the Analysis Phase.

- Development Contracts or contracts covering co-use of products/ facilities in Risk Reduction Phases.
- Development contracts, purchase contracts and contracts for work and services in the Introduction Phase.
- Contracts in the in-service phase.

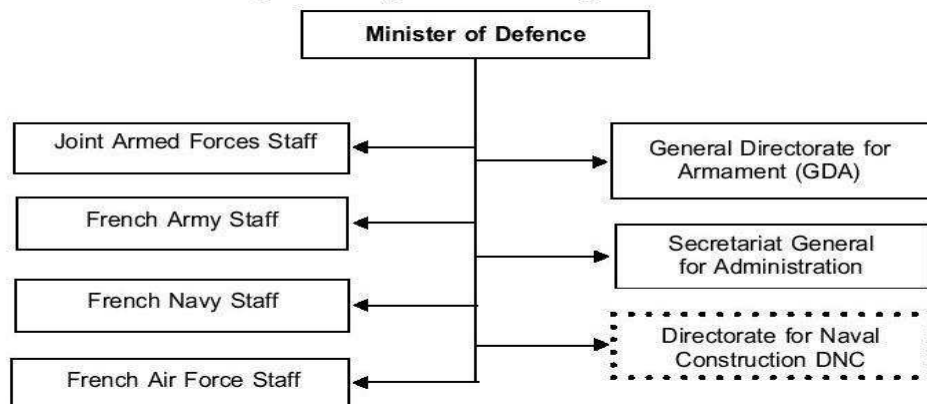
Finally, the underlying philosophy of the German defence acquisition regime, as aptly summarised by the German Defence Minister in March 2010, is based on three questions: 'What is being required?'; 'Which are the alternatives?'; 'Which of the alternatives is economically priced while still providing the required performance?'

### **DEFENCE ACQUISITION SYSTEM IN FRANCE**

With the objective of making itself self-reliant in defence production, France adopted a centralised system of defence acquisitions in 1961. The French model is unique and is considered highly successful. Like India, France follows five-year defence plans (the "Loi de programmation"). The plans are quite exhaustive in detail and include equipment procurement schedules with required resource allocation. Within the overall budgetary estimates of the plan period, the Government allocates a yearly budget.

For conducting all facets of armament programmes, an empowered overarching authority has been put in place under the Ministry of Defence. A corps of highly competent and technically qualified individuals has been created to oversee the requirement of modern war systems by the French armed forces, analyse various options, identify the most appropriate route, facilitate development and ensure induction.

**Figure 10: Higher Defence Organisation**



Special attention is being paid to ensure adherence to timelines and cost estimates. It was analysed that failure to stick to them was primarily due to the lack of necessary expertise with the acquisition functionaries, involvement of multiple agencies in oversight functions and the cost-plus contracting system that provided loopholes to contractors to inflate costs. Necessary reforms were initiated. Acquisition functionaries were trained and equipped to

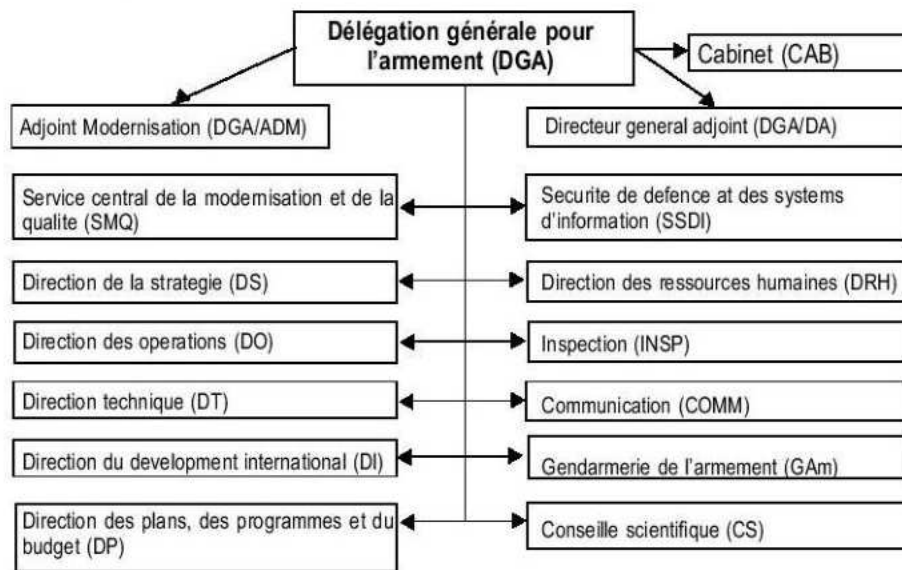
perform their assignments. Innovative techniques have since been developed for estimating realistic cost and risk potentials, thereby ensuring cost containment. Additionally, an element of accountability has been introduced. Persons responsible for cost overruns are held answerable.

## Structures

General Directorate for Armament (Direction générale de l'armement), or DGA in short, is the government agency responsible for programme management, development and procurement of weapon systems for the French armed forces. It manages about 80 percent of defense equipment budgets with the balance being utilised by the military services.

DGA has a three-pronged mission. One, it is responsible for the design, acquisition and evaluation systems that equip the armed forces. Its work covers the entire life of these programmes. Two, it prepares for the future, anticipating threats and risks, preparing the technological and industrial capabilities. Finally, it actively contributes to promoting exports. Additionally, DGA provides overview of the weapon systems to ensure their global coherence; possesses an ability to manage risks to drive complex projects; and has mastered unique ways to survey and test systems. DGA is a large organisation consisting of 12,000 employees at 20 locations in France.

Figure 11: Structure of General Directorate for Armament (DGA)



DGA is a major catalyst in the economic development and exports of French defence companies. Whereas it placed 9.114 billion euros worth of orders on the French industry, French defence exports exceeded 4.2 billion euros in 2010. It invested 635 million euros in research contracts notified to the industry in 2010 and currently has 80 weapons programmes in progress. It has developed highly fruitful public/private partnerships and evolved innovative financing methodology.

DGA has a central corps of armament engineers providing leadership for the organisation. An array of military and civilian personnel provides the necessary technical and operational expertise. Integrated Programme Teams consisting of DGA and the military officers manage programmes. DGA functions through its directorates. They carry out the following responsibilities:

- Monitor research activities, conduct common technology development and prepare programmes for development, ensuring technical consistency within the forces' systems.
- Oversee design and development of land, naval, aeronautical and tactical missiles programmes.
- Management of funds including budget preparation with responsibility for procurement, quality and logistics support.
- International armaments cooperation with European and NATO countries.
- Support development of French defence industry.
- Coordination of development and implementation of export strategy and promotion and control of French armament equipment exports to foreign markets.
- Provision of technical expertise and skills needed by programme managers and other agencies.

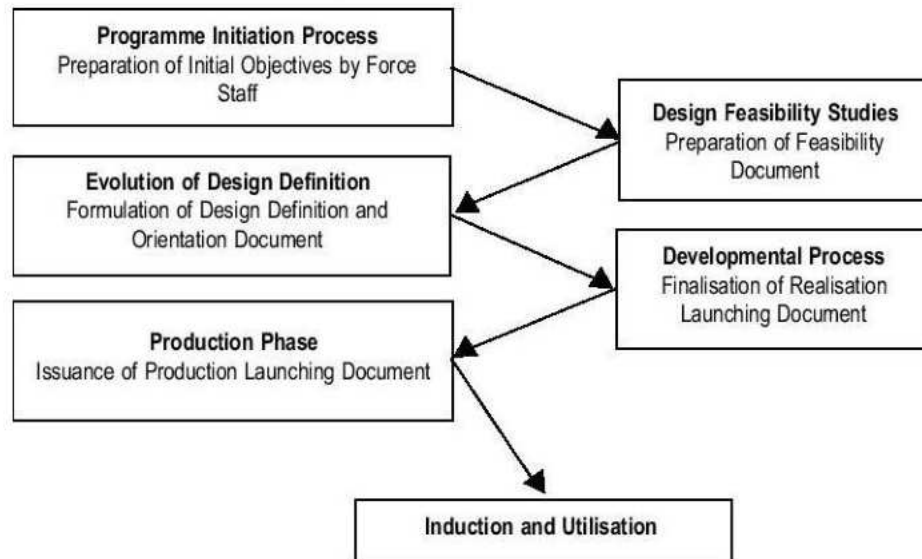
In addition to managing research, development, production and testing of weapon systems, DGA oversees the functioning of government's industrial entities like shipyards and repair depots. DGA also undertakes testing and assessment of equipment and military technologies through a vast network of test centres that function under it. In addition, DGA supervises engineering schools like École Polytechnique that function under the aegis of the Ministry of Defence.

**Procedure:** The acquisition process is divided into the following broad phases, characterized by the types of work involved:

- (a) Preparation Phase. Operational requirements are outlined, with possible solutions evaluated with a look at their risk, cost effectiveness and life cycle cost implications.
- (b) Feasibility Phase. To move into the feasibility phase, a feasibility file is prepared and gets approved by the Minister of Defence after it has gone through the Permanent Executive Committee. It searches for possible answers and their assessment, in terms of the degree of satisfaction they can bring to the military requirements—still expressed in general terms.
- (c) Definition Phase. In this phase the responsibility passes to the Programme Manager. This phase is entered when one or more approaches appear to meet the military need and can be selected for a more thorough examination. During this phase the military requirements (including the need for support, environment and training, technical specifications, schedules, costs and industrial conditions) are refined.

- (d) Realisation and Development Phase. Once the system has been sufficiently identified, it enters this phase. At this point the DGA may also commit to production or partial production. This phase terminates with delivery of the complete product, along with the necessary training and support system.

Figure 12: Acquisition Process



**Salient Features of the System:** French defence acquisition system has certainly been an unrivalled success. Creation of a unified and centralised monolith DGA in 1961 to oversee all facets of weapon development, procurement and induction was a bold and inventive step. The model has become a subject of frequent studies by other countries.

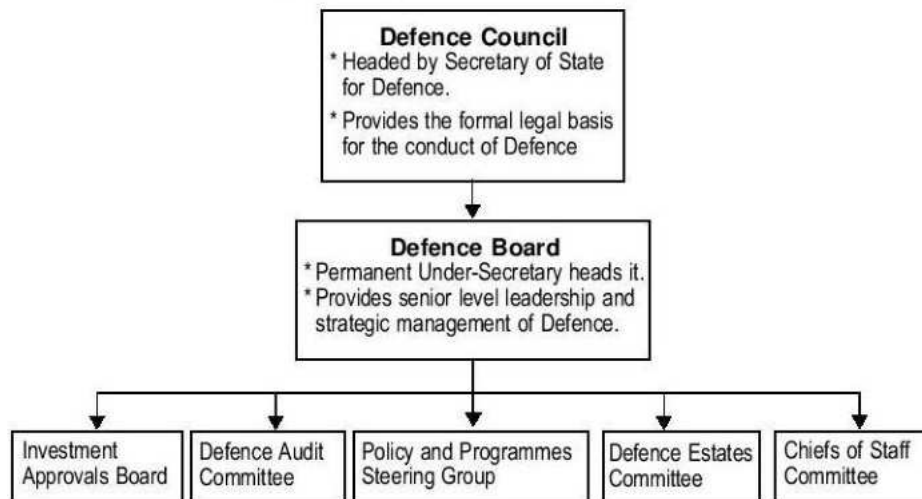
The French system is characterised by the extraordinary technical competence of the acquisition staff of DGA. DGA recruits the best talent and grooms it through prolonged exposure and extended tenures. It is often said that DGA staff know more about emerging technologies than the scientists and producers of equipment. Such technical skills help DGA in close monitoring of developmental timelines and cost overruns. The industry is fully aware of the fact that DGA functionaries cannot be bluffed. Resultantly, French system has been able to keep a good check on cost escalations.

### **DEFENCE ACQUISITION SYSTEM N UNITED KINGDOM**

The stated purpose of the British defence acquisition regime is to provide needed capability for defence, ensure value for money for the taxpayer and sustain a responsive defence industrial base. Its defence acquisition translates industrial capacity into effective military capability and provides the British Armed Forces with the battle-winning equipment, support and infrastructure they need to defeat the enemies—current and potential. The Defence

Council is the senior departmental committee. It provides the formal legal basis for the conduct of defence in UK.

**Figure 13: Higher Defence Organisation**



The Defence Council is chaired by the Secretary of State for Defence. The Permanent Under-Secretary chairs the Defence Board (DB). The DB is the main corporate board of the Ministry, which provides senior level leadership and strategic management of defence. Its role is to deliver the Defence Aim set out in the Public Service Agreement. There are three main strands to the Defence Programme:

- (a) The procurement of new capability (whether new equipment or major upgrades) is managed through the Equipment Procurement Plan, which is 30 years long.
- (b) Provision of equipment support, which is planned 10 years in advance through the Equipment Support Plan.
- (c) Planning for investment in equipment which are not for military use (predominantly IT projects and infrastructure) are made by the Central Defence Resources Team and are included in the Non-Equipment Investment Plan, which is also 10 years long.

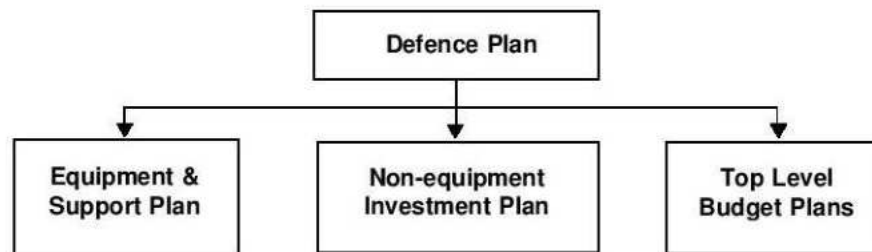
A planning process, known as the Planning Round, is used to support construction of the Defence Plan which comprises three key sets of forward plans—the Equipment and Support Plan; the Non-Equipment Investment Plan; and Top Level Budget Plans.

The acquisition community is large and diverse, and is supported by other Government Departments. Within the Ministry of Defence (MOD), the acquisition community includes:

- The Capability Sponsor (Deputy Chief of Defence Staff (Capability) (DCDS(Cap))
- The User who generates the Force elements
- Delivery teams who contract for equipment, infrastructure and services
- Finance and Planning teams

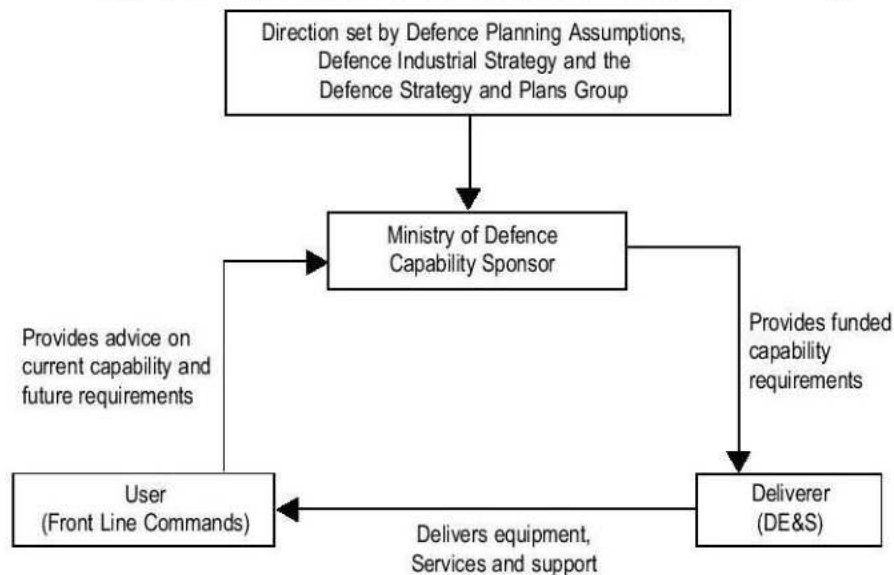
- Research and Development teams
- Commercial teams
- Technical Support teams
- People Services teams.

Figure 14: Planning Round



**Structures:** Two structures play dominant roles in the British acquisition process—the Joint Capabilities Board (JCB) and Defence Equipment and Support (DE&S). JCB performs the role of key Capability Sponsor and DE&S is the implementing authority.

Figure 15: Tripartite Structure of Equipment Procurement Planning

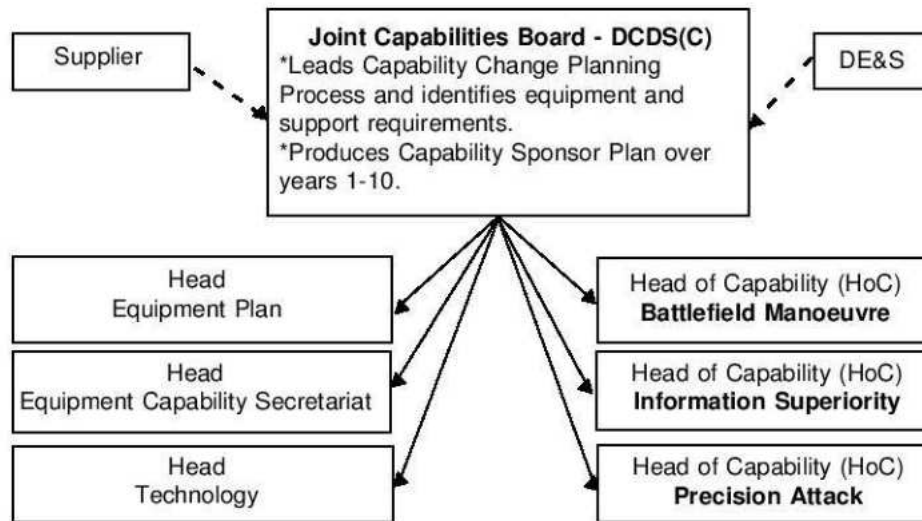


**Joint Capabilities Board (JCB)—the Capability Sponsor:** JCB provides strategic leadership and direction, in order to deliver a balanced, coherent and affordable Capability Sponsor Plan to meet MOD policy requirements. It makes high-level investment decisions within and across the organisation's three capability areas:

- Battlefield Manoeuvre
- Information Superiority
- Precision Attack

JCB is headed by the Deputy Chief of Defence Staff (Capabilities), or DCDS(C) for short. Its role is to decide what capabilities the forces need and work alongside the supplier and DE&S to deliver the required equipment or systems. Heads of Capability (HoC) act as Programme Sponsors of new and enhanced equipment programmes.

Figure 16: Capability Sponsor



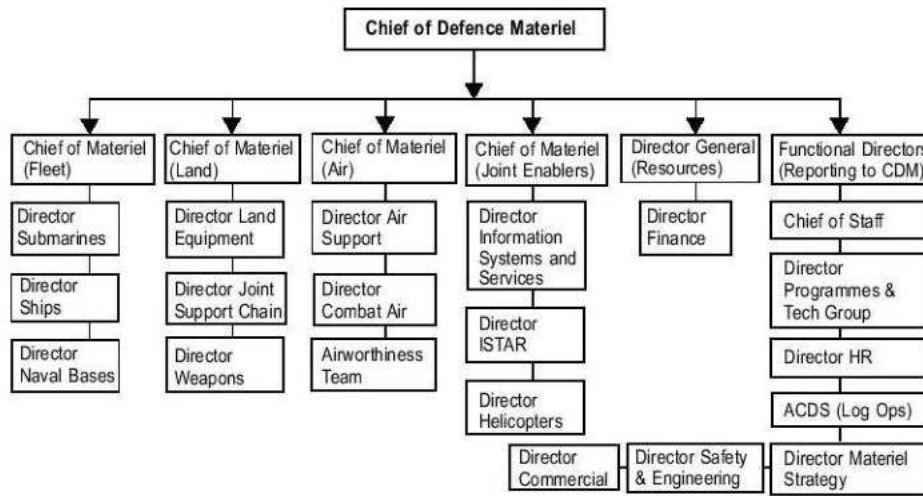
There are three other key areas within the Capability Sponsor—Head of Equipment Plan, Head of Equipment Capability Secretariat and Head of Technology.

### Defence Equipment and Support (DE&S)

The Defence Procurement Agency and the Defence Logistics Organisation were merged in April 2007 to create a single Defence Equipment and Support organisation (DE&S). It is responsible for delivering the 10 year equipment and-support plan, managing resources in-year to meet the needs of the sponsor and the military front line users who have delegated responsibility for years 1- 4 of the support element of the plan.

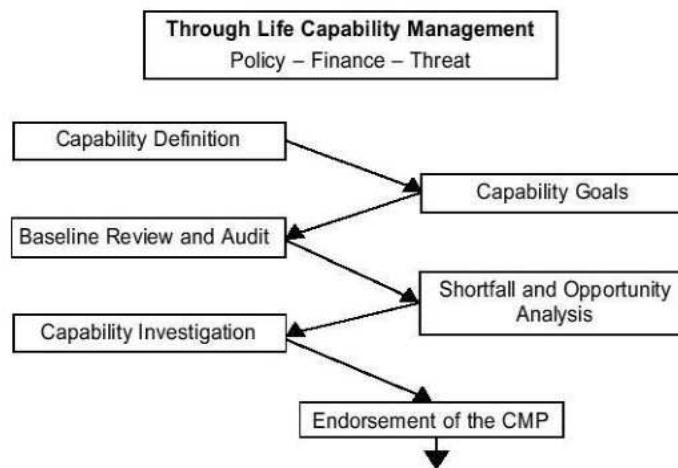
DE&S meets the needs of the sponsor by analysing the stated performance requirements, availability of matching market capability and degree of maturity of related technology. Solutions are presented with a clear understanding of financial and commercial risks. DE&S manages delivery of these solutions by planning and managing projects, services and assets to ensure that equipment and support is delivered and sustained through life. This includes working with front line users and sponsors to shape the concept of use, forward plans and deployment options for equipment and support.

Figure 17: Defence Equipment and Support Organisation Chart



**Procedure:** The services are asked to provide basic Cardinal Points Specifications (CPS) only. These are operational parameters specifying performance requirements in very broad terms. It helps in studying the projections in detail and decide on ‘make’ or ‘buy’ decision in consultation with the research and development agencies and the defence industry. Even the procurements are carried out on the basis of CPS, which are made known to all the producers.

Figure 18: Capability Planning Process



It is a very ingenious method, in which the producers while conforming to CPS can introduce innovative techniques and ideas. All products, which comply with CPS, are trial evaluated by the services to identify the most suitable one for introduction into service. This also provides a common platform to judge different technologies for futuristic adaptation and further research. Capability planning translates the requirements of defence policy (and the strategic challenges) into an approved programme which defines the capabilities UK requires through

life. There are four basic variants on the acquisition lifecycle—Sequential, Incremental, Evolutionary and Combination. The key factors in determining the long-term success of a military capability is the selection of the appropriate lifecycle and the development of the most appropriate Acquisition Strategy.

These options might include the procurement of new military equipment or services, upgrades to existing equipments or services, or changes to the support arrangements. Performance, cost and time are traded to optimise capability. This process produces a Capability Management Plan (CMP) for each capability area which adopts a through life view, seizing opportunities to reduce whole life cost, and with flexibility to respond to changing threats and opportunities.

Following Ministerial decisions on resources and priorities, CMPs are incorporated into a single integrated 10-year equipment and support plan. This brings together the plans for capital investment in new equipment, with the support consequences for both current and future equipments. Defence Science and Technology is responsible for the Defence research programmes to provide the scientific understanding and the new technologies to meet this key need.

### **Special Features**

The British defence procurement regime is characterized by continuous reforms. Defence Acquisition Change Programme (DACP) was a major initiative to ‘bring about a step change improvement in acquisition performance—in the delivery of capability to the Front Line and value for money for the taxpayer—through creating a more agile acquisition organization system and managing capability through life’. Although DACP formally closed on 31 March 2009, reforms are underway to implement the programme.

Another aspect is early engagement of the industry for greater realism. National Defence Industries Council (NDIC) is the forum in which MOD and the industry meet to discuss important issues and develop policy and practice through a range of joint activities.

# **MODULE-V**

## **DEFENCE START-UPS**



Building a successful start-up is rewarding, and there are many challenges to be faced as the start-up moves towards becoming profitable. A start-up will transform and morph as it escalates through the different stages of growth, each having unique financial needs and financing options. The stages of development include seed, start-up, early-stage development, growth and maturity. Securing funding early on is one of the most challenging endeavors a start-up undertakes. It is understandable that a start-up with limited capital may view obtaining IP rights as waste of precious funds. This perception often leads start-up companies to the presumption that it is more affordable and a better business strategy for the start-up to utilize first-mover advantage to monetize newly developed technology, rather than bother with obtaining IP protection.

The rich literature on entrepreneurship, has studied the implications of the characteristics of the entrepreneur (e.g., gender, age, education) for ventures' performance, but not startups' alliance strategy and its performance implications. Except for a few studies, most studies in the extensive literature on strategic alliances have not looked beyond individual alliances to the performance implications of broader alliance strategy including alliance portfolio characteristics. The void left by these streams of research is surprising since alliances can be a fruitful strategy for startups. Through alliances, startups can access key resources controlled by their partners. Mere proliferation of alliances without a coherent strategy may not be sufficient however since startups are constrained by their limited resources and experience to successfully implement a comprehensive alliances strategy and hence might expose themselves to opportunism by their partners.

### **PROCESS OF START-UP CREATION**

Variously referred to as a journey from conception to birth, start-up, preorganization, organization in vitro, gestation entry, start-up companies are currently seen as engines of innovation in society and as a means of entering new markets. It is clear that start-up creation requires a series of actions. To create a start-up, therefore, relies on actions based on an idea or opportunity. A typical founder of a start-up or new venture, i.e. the entrepreneur, is mostly focused on his/her idea. This concentration might lead to mismanagement or failure of the start-up. Most start-up founders miss some points or critical stages, and this could increase the rate of failure. Thus, although rational economic man is always criticized in real world situations, taking a series of actions in a logical sequence should lead to a higher rate of success.

Moreover, there is currently a surfeit of theories and models that attempt to explain new venture (start-up) creation. Yet, the existing theories and models are in their embryonic stage, and the evidence is fragmented. Thus, on the one hand, there is a limited common understanding of the concept, and scholars have paid attention to different aspects of the phenomenon, while on the other, these entities are drawing the attention of entrepreneurs, intended individuals, businesspeople, investors, and even policy makers, as there is a

growing need to define them and propose conceptual frameworks for their study. “Creation of a start-up company is:

- i. A process
- ii. that starts with a venture idea or opportunity
- iii. followed by an intended individual entrepreneur
- iv. who organizes a series of activities, creates competency, and mobilizes resources
- v. using his/her networks
- vi. in an environment
- vii. in order to create value

**Stage 1-** Ideation, opportunity (venture idea) recognition: (A new venture idea or an opportunity initiates the process of new venture (startup) creation and motivates the intended individual or entrepreneur to start a start-up company). The concept of entrepreneurial opportunity is the core concept in entrepreneurship. However, few suggest New Venture Idea (NVI) as a more appropriate concept. Thus, though individual-opportunity nexus is still a main concern, NVI is “becoming” a main driver of entrepreneurship. Moreover, research on new venture creation and start-up companies, confirms the importance and effect of venture idea. There are a large number of research works that support the possibility of creating a new venture without a new venture idea or an opportunity to be exploited. Moreover, the literature suggests that when a new venture idea or an opportunity exists, it motivates the intended entrepreneur to start a new venture (start-up).

**Stage 2-** Shaping the entrepreneurial intention: (Shaping the entrepreneurial intention affects the process of new venture (startup) creation). Shaping the entrepreneurial intention is another dilemma. There are many new venture ideas which never come into existence, or would fail if introduced by someone who does not have enough intention to follow the idea though. He or she will start the process, but would be likely to fail, since entrepreneurial intention might not exist.

**Stage 3-** Preparation: (Entrepreneurial intention motivates the intended individual or entrepreneur to mobilize resources, create competence and organize activities). As mentioned earlier, research on entrepreneurial intention is a factor that motivates entrepreneurs to organize a series of activities, create competence and mobilize resources. It signifies the importance of entrepreneurial intention. “Entrepreneurial intention is defined as the commitment to starting a new business”. Indeed, starting a business needs resource mobilization, creating competence, and activity organization. Here, the mentioned three elements, i.e. resource mobilization, creating competence, and activity organization, are called “preparation”. There are activities to be undertaken by the entrepreneur in order to prepare for business start-up. He calls these activities “pre-start activities”.

**Stage 4-** Networking: (Networking affects the process of new venture (start-up) creation. Preparation makes the intended individual or entrepreneur ready to initiate networking).

Networking is another requirement to initiate a successful business. On the one hand, networking without preparation might lead to failure in the very early stage of new venture creation, since the potential entrepreneur might fail to make relevant and useful connections based on his or her potentials, needs and requirements. Also, he or she might waste time on irrelevant networking activities. On the other hand, networking can help the intended individual or entrepreneur to enter the market and create value.

**Stage 5- Entry:** (Entry affects the process of new venture (start-up) creation. Networking helps the intended individual or entrepreneur to enter the market). After the preparation stage, and networking, start-up companies try to offer their products or services to the market. This is called entry. Entry is a critical stage, which affects the success or failure of the new venture (start-up). While entry strategies for different start-ups might differ, a successful entry is vital for any start-up. Some argue that the, Entry barriers constrain the new venture (start-up) creation, and do not let them take advantage of available opportunities.

**Stage 6- Value creation:** (Value creation affects the process of new venture (start-up) creation). Value creation, which lies at the heart of entrepreneurship, is an integral part of new venture (start-up) creation. The more a new venture creates value, the more successful and valuable it will be.

**Stage 7- Exit:** (Value creation helps the intended individual or entrepreneur to exit). Once a start-up company offers its new products and enters the market, if not before, it is time to make a serious decision about the best exit strategy? Created value, both economic and social, generated in the entry stage helps the entrepreneur choose an efficient and effective exit strategy. Generally exit strategies are merger and acquisition, initial public offering (IPO), family business succession, etc. However, it is important to think about an exit strategy at the outset and before the business is formally launched.

### **Start-ups and small scale industries:**

Start-ups are small companies created for the purpose of developing and bringing an innovative product or service to market, and to benefit from economy of scale. Even though start-ups share many characteristics with small and medium enterprises, start-ups are different due to the combination of challenges they face. Start-ups are characterized by high risk, uncertainty, lack of resources, rapid evolution, immature teams, and time pressure among other factors. However, start-ups are flexible to adopt new engineering practices, and reactive to keep up with emerging technologies and markets. Start-up companies rely on external funding to support their endeavors.

### **Entrepreneurial Ecosystem for Start-ups: Concept and Importance**

An entrepreneurial ecosystem is defined as “a set of entrepreneurial actors (both potential and existing), entrepreneurial organizations (firms, venture capitalists, business angels,

banks) institutions (universities, public sector agencies, financial bodies) and entrepreneurial processes (e.g. business birth rate, number of high growth firms, levels of blockbuster entrepreneurship, number of serial entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition), which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment”. A start-up ecosystem is formed by people, start-ups in their various stages and various types of organizations in a location, interacting as a system to create new start-up ventures. The ecosystem for start-ups is dynamic. From time to time, ecosystems change in terms of people, organizations and environments.

Start-ups that are nurtured in a structured and vibrant regional entrepreneurial ecosystem have a higher probability of success relative to those that are not so nurtured. This is because supportive entrepreneurial ecosystem is found to have a positive impact on start-up fertility, stability and growth. A vibrant entrepreneurial ecosystem will have the ability to innovate, build exceptional enterprises and create jobs. Therefore, the world’s most dynamic areas are focusing on supporting a pro start-up environment. Given this, it is important to understand the structure and key components of an entrepreneurial ecosystem for start-ups and the factors that determine or contribute to its vibrancy.

### **Structure and Components of Entrepreneurial Ecosystem:**

The emergence of entrepreneurial ecosystems for start-ups in different parts of the world is a recent phenomenon; it has become visible only since the early 2000s. It is important to note these ecosystems focus on specific areas/sectors and present different characteristics and dynamics. Therefore, each ecosystem has its own path of evolution over time. The two often cited benchmarks for a vibrant entrepreneurial ecosystem are Silicon Valley (SV) and Israel, which are uniquely identified for their success in entrepreneurship development and for generating in one year more successful start-ups than other nations could create in years or decades. Both SV and Israel are not identical but distinct in their respective ambiances. However, they seem to contain a combination of variables in their ecosystem that encourages the entrepreneurial activity to blossom.

This implies that although different nations can have different economic environments, it is possible to build their own entrepreneurial ecosystems that can encourage successful business concerns. There is no exact formula for creating an entrepreneurial economy; there are only practical, if imperfect, road maps. This brings out the fact it is not possible to replicate either a SV or an Israel by simply replicating the characteristics of their entrepreneurial ecosystems. Rather, what is more important is to identify the key benchmark elements of an entrepreneurial ecosystem and promote them. There are certain critical elements, components or stakeholders that are essential for a blossoming, healthy and structured entrepreneurship ecosystem, which need to be identified at the outset if they are to

be promoted appropriately. Isenberg (2011)<sup>51</sup> identifies them as the domains of entrepreneurship and suggests they would comprise (i) policy, (ii) finance, (iii) culture, (iv) supports, (v) human capital and (vi) markets. These generic domains interact in highly complex and idiosyncratic ways, and each ecosystem emerges under a unique set of conditions and circumstances.

As previously stated, the entrepreneurial ecosystem for start-ups is dynamic in nature. The pool of people resources varies from year to year, building up during downturn for bigger companies and crashing as they gear up their recruiting. Longer term changes also shape ecosystem processes—where the larger start-up companies eventually make big exits, releasing capital and talent to the start-up ecosystem. That is why start-up ecosystems in similar environments but located in different parts of a country can end up doing things differently simply because they have a different entrepreneurial culture and resources pool.

The goal for any start-up ecosystem is to develop a self-sustaining network of talent and resources that seek to solve issues affecting the wider entrepreneurial community. To do that, ecosystems must have some critical components such as (i) entrepreneurs with technical skills because it is a basic requirement in technology development, (ii) availability of a variety of sources of funding because it is an important element in a good startup ecosystem for innovative ideas and (iii) a favorable government regulation because it is an important determinant of the success of up-coming and existing start-ups. Government regulations are in terms of taxation, support, funding, incentives, education and training. Thus, the presence of entrepreneurs, funding, investors and all the major stakeholders make an ecosystem for start-ups. If an ecosystem is to become effective, it is crucial for the government to address these needs adequately to promote such an ecosystem.

There are three important stakeholders in an entrepreneurial ecosystem. The central focus of the start-up ecosystem is of course on the entrepreneurs. Entrepreneurs view three areas of an entrepreneurial ecosystem as being of pivotal importance: (i) accessible markets, (ii) human capital/workforce and (iii) funding and finance. However, entrepreneurs themselves can play multiple important roles in the build-up of an entrepreneurial ecosystem such as mentorship, inspiration, investment, new founders and new employees. The second important stakeholder is large companies who have the potential to provide important leverage for early-stage companies in their growth and development. The third important stakeholder is the government, which can influence the ecosystem through its regulatory policies. These are viewed by entrepreneurs as both potential growth accelerators and potential growth inhibitors. If major differences exist in the entrepreneurial ecosystem from one region to

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<sup>51</sup> Isenberg, D (2011). The Entrepreneurship Ecosystem Strategy as a New Paradigm for Economic Policy: Principles for Cultivating Entrepreneurship. Babson College, Babson Park, MA: Babson Entrepreneurship Ecosystem Project.

another, it is primarily because of government policy differences because governments often adopt a strong country/regional focus in their entrepreneurial ecosystem promotion policies.

Some authors have identified other vital components for start-up ecosystems like there must be dedicated space for tech clusters, favorable government policies, a network of universities and research institutes as the breeding grounds of innovation and agents of interaction with firms, markets to enable the scaling up of startups, a fairly big talent pool, adequate numbers of Angel Investors (AIs)/Private Equities (PEs)/Venture Capital Funds (VCFs) and a significant presence of enterprising spirit and prospective entrepreneurs.

### **TECHNICAL DEBT IN START-UPS**

Technical debt is a metaphor to describe not quite right engineering solutions in a product that adds friction to its further development and maintenance. The extra effort associated with this friction, i.e. the “interest”, needs to be paid every time a sub-optimal solution is touched. Over time, the cumulative interest may exceed the effort needed to remove the debt, i.e. the “principal”. The compound effects of sub-optimal solutions can reduce development team efficiency and overall quality. However, there is the belief among start-ups that any amount of technical debt can be written off if a feature or the whole product is not successful in the Market.

The strategy to accumulate technical debt can backfire if a startup survives long enough and fails to put its technical debt under control. An unstable and difficult to maintain product adds risk to the company, for example, by limiting the ability to quickly enter into new markets or to launch new innovative features. Technical debt has been extensively studied in the context of established companies and in relation to software maintenance. Dimensions describe different types of technical debt, e.g. documentation, architecture, or testing debt. Outcomes refer to consequences of having excess technical debt, such as impaired productivity or quality.

While technical debt is a liability, development teams should manage it and use it as a leverage to attain otherwise unattainable goals. In the start-up context, the concept of technical debt is explored only superficially. Few scholars in this area argue that the need for speed, cutting edge technologies and uncertainty about a product’s market potential are the main precedents for cutting corners in product engineering. However, if a start-up survives past its initial phases, management of technical debt becomes more and more important.

### **START-UP AND INNOVATIONS**

Globally, there are over 100 million new businesses, which are launched every year. Considering the statistics, it translates into roughly 11,000 startups launched every hour! In this fast paced environment, it is essential for startups to keep innovating, if they want to survive. With thousands of new companies being launched every day, startups can't afford to

rest on their laurels and take the chance to not experiment or innovate. They need to keep their eyes and ears firmly on what is happening around them in the market and keep a check on what their competitors or new players are doing. Considering the pace at which technology gets obsolete today, one new or disruptive technology is all it could take to wipe out a complete business overnight, thus leading to a complete waste of all the resources, time and effort invested in building the business. So, there's little chance you can count on 'so-called' innovative product to keep your startup going, if you don't continue to make innovation your priority on a day-to-day basis. Here are some of the biggest advantages any business can derive from innovation:

Gives you a competitive edge: Innovating gives startups an edge over their competition and helps them become and remain a market leader. Many companies have managed to grab a new market or niche by launching a totally disruptive or new technology, but failed to retain their edge later since they were unable to keep up with the pace of innovation in the market. Take for instance the case of Apple Inc., which has remained the industry leader since its launch nine years back, but is now witnessing a decline in revenues due to lack of innovation in its latest smartphones. On the other hand, Uber, which completely disrupted the cab sharing industry, has managed to remain a market leader as it is constantly innovating. Right from ride sharing to premium cars, the company has grabbed a foothold in every market it operates in. To take things a notch higher, Uber is doing a pilot run with its autonomous cars in Pittsburg. The company is thinking ahead, and focusing on the latest technology and innovation to remain the industry leader.

Makes start-ups more efficient: If innovation is the lifeblood of your business, it makes it easier to solve problems as well as huge challenges. With every mind in the organization focused on bettering the end product or the process they are associated with, it will eventually witness greater efficiency with regard to systems, processes and products/services, which can be a huge advantage for the business. Did you know, Google assigns a special hour or day in each office for people to experiment and innovate! Rather than looking outside for new companies, the Internet giant has created a monopoly in the online space by encouraging employees to innovate from within. It has also set up an in-house incubator to nurture ideas that have merit. Many of its innovative products like Hangout, Maps, etc. have all been a part of its in-house born ideas.

Creates entry barriers for competitors: Being an innovator or a disruptor is the best way to stay at the top and become an industry leader. However, one good idea leads to a thousand followers! And some of them may even be good. So if you want your company to remain the leader, it is ideal to keep thinking about the next step, the next level of innovation and experiment. This will ensure that you stay far ahead of your competitors.

Compete with larger well established companies: Big companies have more resources at their disposal and can easily implement and adopt new technologies. Large-scale companies have

access to bigger platforms, which startups may take years to build. Big companies can out-innovate startups by adopting a systematic approach to innovation and learning. In order to compete with them, start-ups need to be a step ahead and adopt a culture of innovation. 95% of startups fail within their first year due to lack of any new ideas. So clearly, every startup needs to make innovation a part of its DNA, if it wants to get ahead of competitors and retain that position. Innovators should be encouraged and rewarded, so that each and every individual in the organization is inclined to solve problems and experiment without having to worry about failing, since ultimately this will make the startup more efficient and give it an edge over others. When every single person on your team is focused on innovating, there is no way anyone can stop you from reaching the top and staying there.

### **INCUBATORS:**

Business incubators are designed to nurture small, fledgling businesses during the start-up phase by providing business development support and encouraging the business to flourish and grow at its own pace. A cluster of quasi-related burgeoning businesses make up a business incubator. These businesses share a workspace where they can all operate harmoniously. Incubators provide the businesses with services and access to office equipment, telecommunication/Internet services and reception services. Incubators also provide participants with an extensive network of well-connected professionals, experienced mentors and an array of specialized experts in the relevant technology field.

In order to participate in an incubator, the small business must apply and be selected for participation in the incubator. Although incubators can vary greatly according to their specific goals or “mission”, some application criteria may include:

- The breadth and depth of the start-up company’s business plan.
- The composition and quality of the members of the business’s management team.
- The likely capitalization capacity of the company’s idea, and
- The estimated time to commercialization.

Typically applicants are selected based on whether the applicant business is compatible with the other businesses in the incubator and the space that is available for use. Other considerations are also taken into account, such as whether special permits are required for the applicant business to operate, whether specialized equipment and or laboratory space is needed, etc. Once admitted to the incubator, participant companies typically stay for a period of 1–3 years although this duration may be significantly more or less depending upon the incubators.

There are a variety of benefits available to the participants of a business incubator. For example, the incubator environment is highly conducive to networking and professional development. Participant businesses are provided with numerous opportunities to connect with other professionals, entrepreneurs and mentors. Inexperienced entrepreneurs can gain

exposure to new ideas, garner tried-and-true business advice from successful serial entrepreneurs, and are encouraged to make connections and business contacts that they otherwise could never possibly establish. Business incubators also offer educational programming for those businesses that are participating in the incubator. Entrepreneurship educational programming often includes seminars, workshops, lecture series and panel discussions on various topics including strategies for approaching funding sources, pitching ideas to investors, managing intellectual property portfolio, media relations, the importance of marketing, and how to manage growth of the company.

The reduced costs associated with participating in an incubator are substantial as well. The work space is offered to the business at a reduced rental rate. Furthermore, the incubator participants share overhead expenditures for the facility and split the cost of basic business operation essentials (electricity, Internet, utilities, etc.). Incubator participants also benefit from any volunteer initiatives instituted by the incubator. Many incubators have volunteer initiatives where professionals in the business community offer their time and expertise to incubator participants free of charge. Businesses within the incubator can receive targeted advice and professional services (such as legal, accounting or IT services) and the opportunity to make connections with these professionals as they work with the incubator participants to build a successful business.

### **BUSINESS ACCELERATORS:**

Incubators and accelerators share similar characteristics, such as offering business development services and professional advice and guidance to start-up participants. Also, businesses that participate in an accelerator, like an incubator, have a myriad of opportunities to network with others in the field. The major difference between incubators and accelerators is time and the amount of pressure that the start-up is put under. Business accelerators are intense, time-compressed programs designed to assist start-ups in getting up and running in a matter of months.

A business accelerator is intended for start-ups that are focused on reducing their time to market. Application to an accelerator is often open to anyone. Once selected as a participant in an accelerator, the process moves very rapidly and is focused on team success, rather than individual development or mentoring. Accelerators are particular when choosing prospective participant companies. The primary focus of an accelerator is to provide participant companies with exposure to potential investors, and by the same token, provide investors with what can be considered quality, promising new start-ups worth investing in.

### **IPR AND START-UPS**

With the rapid increase in the globalization and opening up of the new vistas, the "Intellectual Capital" has become one of the key wealth drivers in the present era. There are different country specific legislations, as well international laws and treaties that govern IP rights.

Every startup has IP Rights, which it needs to understand and protect for excelling in its business. Every startup uses trade name, brand, logo, advertisements, inventions, designs, products, or a website, in which it possesses valuable IP Rights. While starting any venture, the startup also needs to confirm that it is not in violation of the IP Rights of any other person to save itself from unwarranted litigation or legal action which can thwart its business activities. Further, startup ventures should be proactive in developing and protecting their intellectual property for many reasons like improving the valuation of its business, to generate better goodwill, to protect its competitive advantage, to use intellectual property as a marketing edge and to use the IP Rights as a potential revenue stream through licensing.

#### Intellectual Property License:

Licensing IP can be used to learn about and use others' technology. IP-holders may exclude others from using their protected IP. Licensing agreements are effectively grants made by the IP-holder to others that grant access to the protected technology and trade secret information, while creating a revenue stream for the IP-holder. For example, a high-technology consumer electronics company may need to license proprietary manufacturing equipment from others. Conversely, a company may consider licensing its product along with a trade name and marketing campaign to a third party to create a larger distribution network and generate revenue from a larger market. Finally, IP rights can be licensed or, in some cases, cross-licensed to resolve litigation.

An IP license is a contract between two parties allowing the licensee to use at least a portion of the licensor's intellectual property in exchange for some consideration. Some examples of what the licensor receives are: a lump sum, multiple payments, royalty stream, goods, services, a cross-license to the licensee's IP, or combinations thereof. Where there are multiple payment types due during the term of the license, the payments may be tied to the sale of goods or services provided or sold (e.g., as a percentage of gross or net revenue for a product that the licensee is selling). Technology transfer agreements, which are often used by universities to capitalize on research and development, often involve an up-front minimum payment as well as a stream of royalty payments.

#### Cross Licensing:

Cross licensing occurs between two or more parties with symmetrical interests: A firm needs its competitor's patent just as badly as its competitor needs its patent. For example, the semiconductor industry utilizes cross-licensing frequently, with mutually beneficial results for the parties involved because the industry consists primarily of a limited number of players that produce similar products and hold similar IP portfolios. The same is true of the cell phone technology industry. Major players, such as Apple, Microsoft, Samsung, Motorola, Nokia and Research-in-Motion, are frequently in the news because of their newest IP portfolio cross-licensing deal.

Grant-back provisions in a cross-licensing agreement require the licensee to disclose and transfer back to the licensor any and all improvements that result from the licensee's use of the licensed technology during the licensing period. If there is no grant-back provision in the license agreement, the licensee could file improvement patents of its own, rendering the licensor's technology obsolete. It would be possible for the licensee to block the licensor from commercializing its own product if the licensee attempts to incorporate the licensor's improvements into the product.

Grant-backs can be exclusive, non-exclusive or an assignment. Under an exclusive grant-back, the licensor is granted the exclusive right to use or sublicense any improvements created by the licensee. Conversely, the licensee retains merely a non-exclusive right to practice the improvements that it creates. In a nonexclusive grant-back provision, the licensee retains the title and rights to his or her improvements, but the licensor is allowed to practice the improvement as well. Under an assignment grant-back provision, the licensee must assign all rights and title of any improvements to the licensor. However, the licensee still retains a nonexclusive right to practice the improvement it was responsible for creating.

## **STRATEGIES FOR PROTECTION AND EXPLOITATION OF IPR FOR STARTUPS**

- **Make Intellectual Property protection a priority:**  
Start-ups cannot afford the complete protection available under the intellectual property regime. The first step for any startup is to evaluate and prioritize the IP Rights involved in its business. Depending upon the type of industry involved, IP Rights play an important role. Failure to identify or prioritize IP Rights, is likely to create problems for startup's business, especially during negotiations with future investors or exiting its business. Sometimes IP Rights are the only asset available with a startup.
- **Register Intellectual Property Rights:**  
It is important to note that certain IP Rights like patents and designs are required to be registered before claiming any protection under the respective statutes. On the other hand, certain IP Rights like trademark and copyright need not be mandatorily registered for protection under. Nevertheless, a registered IP Right carries a greater value and acts as evidence of use of the IP Rights before courts as well as enforcement agencies;
- **Due Diligence of IP Rights:**  
For any startup, it is indispensable that it does not violate IP Rights of any other person. This will ensure safety from unwarranted litigation or legal action which can thwart its business activities. This makes it even more important for startups to make careful IP decisions in the initial phase and conduct proper due diligence of IP Rights, which it is using or intends to use.
- **Implement clear and effective policies and strategies for protection of IP Rights:**

It is in the long term interest of startups to have an Intellectual Property Policy for management of various IP rights which may be presently owned, created or acquired in future by startups. The aim of such a policy is to ensure that there are no inter-se dispute between the promoters of the startups, which remains till date to be one of the main concerns for failure of startups.

- **Agreements related to Intellectual Property:**

It is pertinent to note that having proper documentation in the form of agreements like non-disclosure agreements, agreements with employees or independent contractors, can make all the difference between the success and failure of startups. Usually, intellectual property is created either by the founders or some key employee or a third party. The intellectual property so created, must be protected through a proper agreement between the founder or key employee or a third party, as the case may be and the startup. If the agreement, with founders or employees or a third party, , under which a novel idea was/is created, is overlooked, it could create bottlenecks later after such idea becomes successful. Accordingly, the startups need to ensure that anything created on behalf of the startup, belongs to the startup and not the Employee or a third party. Further, it is advisable to enter into elaborate assignments, licensing or user agreements, and care should be taken to make provisions for all post termination IP Right issues.

### **START-UPS IN INDIA**

The economic policy of the Government of India aims at promoting several new entrepreneurs to set up companies to facilitate investments in High Growth sectors such as defence, agriculture and related industries, software, electronics, service, engineering, infrastructure, pharmacy etc. Post 1990's witnessed a changed legal regime that facilitated trade and economic growth of India. Over last two decades, the legal regime was liberalised in a phased manner to facilitate trade domestically and internationally. The laws governing trade in India as it stands today have been designed to not only provide for a regulation of the business, but also provide for a rehabilitation and revival scheme for sinking companies which operated in adherence with law.

#### **Why Start-up India?**

In the words of Prime Minister Narendra Modi, the Start-up idea is 'to convert India into a nation of job creators from a nation of job-seekers'. Fostering a fruitful culture of innovation in the country is a long and important journey which India has taken up to make itself a hub of innovation, design and start-up. The 19-point Action Plan, organized by the Department of Industrial Policy & Promotion (DIPP), focuses both on restricting hindrances and promoting faster growth by way of: Simplification and Handholding, Funding Support and Incentives and Industry-Academia Partnership and Incubation. In order to provide funding support to

start-ups, the government will set up a fund with an initial corpus of Rs 2,500 crore and a total corpus of Rs 10,000 crore over four to five years.

There are no fixed parameters on the type of company that can be identified as a start-up. Those in the business and policymakers explain the concept of start-up from being ‘a state of mind’ to ‘a culture and mentality of innovating on existing ideas to offer solutions’. The term is more frequently used for high-tech companies that are employing cutting-edge technology to solve critical problems, as it is commonly believed that without the essential element of ‘technology’, those companies are just traditional businesses.

### **START-UP INDIA ACTION PLAN AND POLICY:**

On 15th August, 2015 Independence Day, the Prime minister of India announced that the Government intended to launch an initiative titled “Start-up India, Stand up India” to encourage entrepreneurship among the youth. As the first step to this initiative, a full action plan for Start-ups in India was launched by the Prime Minister on January 16th, 2016 (“Action Plan”) in New Delhi. This Action Plan set the stage for wide ranging reforms which are expected to give an impetus to the fast burgeoning start-up culture in India. The Prime Minister whilst announcing the Action Plan, once again reiterated his Government’s intention of ‘less government more governance’ where he attempted to reduce the regulatory hurdles for starting up a business in India. The launch has garnered an overwhelming response from the start-up community and the investors alike. While the Action Plan and subsequent changes brought by the Government under various legislations has laid down a road map for wide ranging reforms to give a boost to the start-up culture in India, there are various additional steps which the Government will need to take to truly bring about a change in the start-up culture in India.

The action plan is intended to build a strong ecosystem for nurturing innovation in India as an engine for both economic growth and employment generation. The impetus is to move beyond IT and service segment start-ups to the ones in manufacturing, food and agriculture, health, education, defence and the social sector. This would include sector-specific incubators, tinkering labs and seed-funding under the Atal Innovation Mission. For instance, the Department of Biotechnology and the Biotechnology Industry Research Assistance Council participating in the Bharat Innovation Fund to support innovative start-ups. Similarly, the EDF, an initiative of the Department of Electronics & Information Technology, is formulated as a ‘Fund of Funds’ to participate in ‘Daughter Funds’.

With this Action Plan the Government hopes to accelerate spreading of the Startup movement:

- From digital/ technology sector to a wide array of sectors including agriculture, manufacturing, social sector, healthcare, education, etc.; and
- From existing tier 1 cities to tier 2 and tier 3 cities including semi-urban and rural areas.

The Action Plan is divided across the following areas:

- Simplification and Handholding.
- Funding Support and Incentives.
- Industry-Academia Partnership and Incubation.

These programs in above areas are managed by a dedicated Start-up India Team, which reports to the Department for Industrial Policy and Promotion (DPIIT). Its objective is to reduce the regulatory burden on Start-ups, thereby allowing them to focus on their core business and keep compliance costs low.

Definition under the Action Plan:

Start-up means an entity, incorporated or registered in India not prior to five years, with annual turnover not exceeding INR 25 crore in any preceding financial year, working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property. Provided that such entity is not formed by splitting up, or reconstruction, of a business already in existence. Provided also that an entity shall cease to be a Startup if its turnover for the previous financial years has exceeded INR 25 crore or it has completed 5 years from the date of incorporation/registration. Provided further that a Startup shall be eligible for tax benefits only after it has obtained certification from the Inter-Ministerial Board, setup for such purpose.

**PROPOSED SCHEMES AND INCENTIVES UNDER 2016 ACTION PLAN:** As mentioned above the Action plan provides schemes in the following areas.

**I. Simplification and Handholding:**

- i. Compliance Regime based on Self-Certification:

Objective:

To reduce the regulatory burden on Startups thereby allowing them to focus on their core business and keep compliance cost low.

Details:

Regulatory formalities requiring compliance with various labor and environment laws are time consuming and difficult in nature. Often, new and small firms are unaware of nuances of the issues and can be subjected to intrusive action by regulatory agencies. In order to make compliance for Startups friendly and flexible, simplifications are required in the regulatory regime.

Accordingly, the process of conducting inspections shall be made more meaningful and simple. Startups shall be allowed to self-certify compliance (through the Startup mobile app) with 9 labor and environment laws (refer below).

In case of the labor laws, no inspections will be conducted for a period of 3 years. Startups may be inspected on receipt of credible and verifiable complaint of

violation, filed in writing and approved by at least one level senior to the inspecting officer.

In case of environment laws, Startups which fall under the ‘white category’ (as defined by the Central Pollution Control Board (CPCB)) would be able to self-certify compliance and only random checks would be carried out in such cases.

List of labour laws and environment laws under these benefits are –

- The Building and Other Constructions Workers’ (Regulation of Employment & Conditions of Service) Act, 1996
- The Inter-State Migrant Workmen (Regulation of Employment & Conditions of Service) Act, 1979
- The Payment of Gratuity Act, 1972
- The Contract Labour (Regulation and Abolition) Act, 1970
- The Employees’ Provident Funds and Miscellaneous Provisions Act, 1952
- The Employees’ State Insurance Act, 1948
- The Water (Prevention & Control of Pollution) Act, 1974
- The Water (Prevention & Control of Pollution) Cess (Amendment) Act, 2003
- The Air (Prevention & Control of Pollution) Act, 1981

ii. Startup India Hub:

Objective:

To create a single point of contact for the entire Startup ecosystem and enable knowledge exchange and access to funding.

Details:

Young Indians today have the conviction to venture out on their own and a conducive ecosystem lets them watch their ideas come to life. In today’s environment we have more Startups and entrepreneurs than ever before and the movement is at the cusp of a revolution. However, many Startups do not reach their full potential due to limited guidance and access.

The Government of India has taken various measures to improve the ease of doing business and is also building an exciting and enabling environment for these Startups, with the launch of the “Startup India” movement.

The “Startup India Hub” will be a key stakeholder in this vibrant ecosystem and will:

- Work in a hub and spoke model and collaborate with Central & State governments, Indian and foreign VCs, angel networks, banks, incubators, legal partners, consultants, universities and R&D institutions.
- Assist Startups through their lifecycle with specific focus on important aspects like obtaining financing, feasibility testing, business structuring advisory, and enhancement of marketing skills, technology commercialization and management evaluation.

- Organize mentorship programs in collaboration with government organizations, incubation centers, educational institutions and private organizations who aspire to foster innovation.

To all young Indians who have the courage to enter an environment of risk, the Startup India Hub will be their friend, mentor and guide to hold their hand and walk with them through this journey.

### iii. Rolling-out of Mobile App and Portal:

#### Objective:

To serve as the single platform for Startups for interacting with Government and Regulatory Institutions for all business needs and information exchange among various stakeholders.

#### Details:

In order to commence operations, Startups require registration with relevant regulatory authorities. Delays or lack of clarity in registration process may lead to delays in establishment and operations of Startups, thereby reducing the ability of the business to get bank loans, employ workers and generate incomes. Enabling registration process in an easy and timely manner can reduce this burden significantly.

Besides, Startups often suffer from the uncertainty regarding the exact regulatory requirements to set up its operations. In order to ensure that such information is readily available, it is intended that a checklist of required licenses covering labour licensing, environmental clearances etc. be made available.

Towards these efforts, the Government shall introduce a Mobile App to provide on-the-go accessibility for:

- Registering Startups with relevant agencies of the Government. A simple form shall be made available for the same. The Mobile App shall have backend integration with Ministry of Corporate Affairs and Registrar of Firms for seamless information exchange and processing of the registration application.
- Tracking the status of the registration application and anytime downloading of the registration certificate. A digital version of the final registration certificate shall be made available for downloading through the Mobile App.
- Filing for compliances and obtaining information on various clearances/ approvals/ registrations required.
- Collaborating with various Startup ecosystem partners. The App shall provide a collaborative platform with a national network of stakeholders (including venture funds, incubators, academia, mentors etc.) of the

Startup ecosystem to have discussions towards enhancing and bolstering the ecosystem.

- Applying for various schemes being undertaken under the Startup India Action Plan.

iv. Legal Support and Fast-tracking Patent Examination at Lower Costs:

Objective:

To promote awareness and adoption of IPRs by Startups and facilitate them in protecting and commercializing the IPRs by providing access to high quality Intellectual Property services and resources, including fast-track examination of patent applications and rebate in fees.

Details:

Intellectual Property Rights (IPR) are emerging as a strategic business tool for any business organization to enhance industrial competitiveness. Startups with limited resources and manpower, can sustain in this highly competitive world only through continuous growth and development oriented innovations; for this, it is equally crucial that they protect their IPRs. The scheme for Startup Intellectual Property Protection (SIPP) shall facilitate filing of Patents, Trademarks and Designs by innovative Startups. Various measures being taken in this regard include:

- Fast-tracking of Startup patent applications: The valuation of any innovation goes up immensely, once it gets the protective cover of a patent. To this end, the patent application of Startups shall be fast-tracked for examination and disposal, so that they can realize the value of their IPRs at the earliest possible.
- Panel of facilitators to assist in filing of IP applications: For effective implementation of the scheme, a panel of “facilitators” shall be empanelled by the Controller General of Patents, Designs and Trademarks (CGPD TM), who shall also regulate their conduct and functions. Facilitators will be responsible for providing general advisory on different IPRs as also information on protecting and promoting IPRs in other countries. They shall also provide assistance in filing and disposal of the IP applications related to patents, trademarks and designs under relevant Acts, including appearing on behalf of Startups at hearings and contesting opposition, if any, by other parties, till final disposal of the IPR application.
- Government to bear facilitation cost: Under this scheme, the Central Government shall bear the entire fees of the facilitators for any number of patents, trademarks or designs that a Startup may file, and the Startups shall bear the cost of only the statutory fees payable.

- Rebate on filing of application: Startups shall be provided an 80% rebate in filing of patents vis-a-vis other companies. This will help them pare costs in the crucial formative years.

v. Relaxed Norms of Public Procurement for Startups:

Objective:

To provide an equal platform to Startups (in the manufacturing sector) vis-à-vis the experienced entrepreneurs/ companies in public procurement.

Details:

Typically, whenever a tender is floated by a Government entity or by a PSU, very often the eligibility condition specifies either “prior experience” or “prior turnover”. Such a stipulation prohibits/ impedes Startups from participating in such tenders.

In 2016, Central Government, State Government and PSUs have to mandatorily procure at least 20% from the Micro Small and Medium Enterprise (MSME).

In order to promote Startups, Government shall exempt Startups (in the manufacturing sector) from the criteria of “prior experience/ turnover” without any relaxation in quality standards or technical parameters. The Startups will also have to demonstrate requisite capability to execute the project as per the requirements and should have their own manufacturing facility in India.

vi. Faster Exit for Startups:

Objective:

To make it easier for Startups to wind up operations.

Details:

Given the innovative nature of Startups, a significant percentage fail to succeed. In the event of a business failure, it is critical to reallocate capital and resources to more productive avenues and accordingly a swift and simple process has been proposed for Startups to wind-up operations. This will promote entrepreneurs to experiment with new and innovative ideas, without having the fear of facing a complex and long-drawn exit process where their capital remain interminably stuck.

The Insolvency and Bankruptcy Bill 2015 (“IBB”), tabled in the Lok Sabha in December 2015 has provisions for the fast track and / or voluntary closure of businesses.

In terms of the IBB, Startups with simple debt structures or those meeting such criteria as may be specified may be wound up within a period of 90 days from making of an application for winding up on a fast track basis. In such instances, an insolvency professional shall be appointed for the Startup, who shall be in charge of the company (the promoters and management shall no longer run the company) for liquidating its assets and paying its creditors within six months of such appointment. On appointment of the insolvency professional, the liquidator

shall be responsible for the swift closure of the business, sale of assets and repayment of creditors in accordance with the distribution waterfall set out in the IBB. This process will respect the concept of limited liability.

## **II. Funding Support and Incentives:**

- i. Providing Funding Support through a Fund of Funds with a Corpus of INR 10,000 crore:

Objective:

To provide funding support for development and growth of innovation driven enterprises.

Details:

One of key challenges faced by Startups in India has been access to finance. Often Startups, due to lack of collaterals or existing cash flows, fail to justify the loans. Besides, the high risk nature of Startups wherein a significant percentage fails to take-off, hampers their investment attractiveness.

In order to provide funding support to Startups, Government will set up a fund with an initial corpus of INR 2,500 crore and a total corpus of INR 10,000 crore over a period 4 years (i.e. INR 2,500 crore per year) . The Fund will be in the nature of Fund of Funds, which means that it will not invest directly into Startups, but shall participate in the capital of SEBI registered Venture Funds.

Key features of the Fund of Funds are highlighted below:

- The Fund of Funds shall be managed by a Board with private professionals drawn from industry bodies, academia, and successful Startups.
- Life Insurance Corporation (LIC) shall be a co-investor in the Fund of Funds.
- The Fund of Funds shall contribute to a maximum of 50% of the stated daughter fund size. In order to be able to receive the contribution, the daughter fund should have already raised the balance 50% or more of the stated fund size as the case maybe. The Fund of Funds shall have representation on the governance structure/ board of the venture fund based on the contribution made.
- The Fund shall ensure support to a broad mix of sectors such as manufacturing, agriculture, health, education, etc.

- ii. Credit Guarantee Fund for Startups:

Objective:

To catalyze entrepreneurship by providing credit to innovators across all sections of society Details In order to overcome traditional Indian stigma associated with failure of Startup enterprises in general and to encourage experimentation among Startup entrepreneurs through disruptive business models, credit guarantee comfort would help flow of Venture Debt from the formal Banking System.

Debt funding to Startups is also perceived as high risk area and to encourage Banks and other Lenders to provide Venture Debts to Startups, Credit guarantee mechanism through National Credit Guarantee Trust Company (NCGTC)/ SIDBI is being envisaged with a budgetary Corpus of INR 500 crore per year for the next four years (2016-2020).

iii. Tax Exemption on Capital Gains:

Objective:

To promote investments into Startups by mobilizing the capital gains arising from sale of capital assets.

Details:

Due to their high risk nature, Startups are not able to attract investment in their initial stage. It is therefore important that suitable incentives are provided to investors for investing in the Startup ecosystem. With this objective, exemption shall be given to persons who have capital gains during the year, if they have invested such capital gains in the Fund of Funds recognized by the Government.

This will augment the funds available to various VCs/AIFs for investment in Startups.

In addition, existing capital gain tax exemption for investment in newly formed manufacturing MSMEs by individuals shall be extended to all Startups. Currently, such an entity needs to purchase “new assets” with the capital gain received to avail such an exemption. Investment in ‘computer or computer software’ (as used in core business activity) shall also be considered as purchase of ‘new assets’ in order to promote technology driven Startups.

iv. Tax Exemption to Startups for 3 years:

Objective:

To promote the growth of Startups and address working capital requirements.

Details:

Innovation is the essence of every Startup. Young minds kindle new ideas every day to think beyond conventional strategies of the existing corporate world.

During the initial years, budding entrepreneurs struggle to evaluate the feasibility of their business idea. Significant capital investment is made in embracing ever-changing technology, fighting rising competition and navigating through the unique challenges arising from their venture. Also, there are limited alternative sources of finance available to the small and growing entrepreneurs, leading to constrained cash funds.

With a view to stimulate the development of Startups in India and provide them a competitive platform, it is imperative that the profits of Startup initiatives are exempted from income-tax for a period of 3 years. This fiscal exemption shall facilitate growth of business and meet the working capital requirements during the

initial years of operations. The exemption shall be available subject to non-distribution of dividend by the Startup.

v. **Tax Exemption on Investments above Fair Market Value:**

**Objective:**

To encourage seed-capital investment in Startups.

**Details:**

Under The Income Tax Act, 1961, where a Startup (company) receives any consideration for issue of shares which exceeds the Fair Market Value (FMV) of such shares, such excess consideration is taxable in the hands of recipient as Income from Other Sources. In the context of Startups, where the idea is at a conceptualization or development stage, it is often difficult to determine the FMV of such shares. In majority of the cases, FMV is also significantly lower than the value at which the capital investment is made. This results into the tax being levied under section 56(2) (vii)(b).

As in 2016, investment by venture capital funds in Startups is exempted from operations of this provision. The same shall be extended to investment made by incubators in the Startups.

### **III. Industry-Academia Partnership and Incubation:**

i. **Organizing Startup Fests for Showcasing Innovation and Providing a Collaboration Platform:**

**Objective:**

To galvanize the Startup ecosystem and to provide national and international visibility to the Startup ecosystem in India.

**Details:**

A pivotal component for growth of Startups is regular communication and collaboration within the Startup community, both national as well international. An effective Startup ecosystem can't be created by the Startups alone. It is dependent on active participation of academia, investors, industry and other stakeholders.

To bolster the Startup ecosystem in India, the Government is proposing to introduce Startup fests at national and international stages. These fests would provide a platform to Startups in India to showcase their ideas and work with a larger audience comprising of potential investors, mentors and fellow Startups.

As part of "Make in India" initiative, Government proposes to:

- Hold one fest at the national level annually to enable all the stakeholders of Startup ecosystem to come together on one platform.
- Hold one fest at the international level annually in an international city known for its Startup ecosystem.

The fests shall have activities such as sessions to connect with investors, mentors, incubators and Startups, showcasing innovations, exhibitions and

product launches, pitches by Startups, mentoring sessions, curated Startup walks, talks by disruptive innovators, competitions such as Hackathon, Makerspace, etc., announcements of rewards and recognitions, panels and conferences with industry leaders, etc.

ii. Launch of Atal Innovation Mission (AIM) with Self-Employment and Talent Utilization (SETU) Program:

Objective:

To serve as a platform for promotion of world-class Innovation Hubs, Grand Challenges, Startup businesses and other self-employment activities, particularly in technology driven areas.

Details:

The Atal Innovation Mission (AIM) shall have two core functions:

- Entrepreneurship promotion through Self-Employment and Talent Utilization (SETU), wherein innovators would be supported and mentored to become successful entrepreneurs.
- Innovation promotion: to provide a platform where innovative ideas are generated.

The main components proposed to be undertaken as part of the mission include:

Entrepreneurship promotion:

- Establishment of sector specific Incubators including in PPP mode (refer #14 of this Action Plan).
- Establishment of 500 Tinkering Labs.
- Pre-incubation training to potential entrepreneurs in various technology areas in collaboration with various academic institutions having expertise in the field.
- Strengthening of incubation facilities in existing incubators and mentoring of Startups.
- Seed funding to potentially successful and high growth Startups.

Innovation promotion:

- Institution of Innovation Awards (3 per state/UT) and 3 National level awards.
- Providing support to State Innovation Councils for awareness creation and organizing state level workshops/conferences.
- Launch of Grand Innovation Challenge Awards for finding ultra-low cost solutions to India's pressing and intractable problems.

iii. Harnessing Private Sector Expertise for Incubator Setup:

Objective:

To ensure professional management of Government sponsored / funded incubators, Government will create a policy and framework for setting-up of incubators across the country in public private partnership.

Details:

India currently lacks availability of incubation facilities across various parts of the country. Incubation facilities typically include physical infrastructure, provision of mentorship support, access to networks, access to market, etc. Of all these features, physical infrastructure entails large capital investments which can generally be facilitated by the Government. However, requisite skills for operating an incubator are pivotal as well, for which expertise of the private sector needs to be leveraged. Considering this, Government shall encourage setting up of:

- 35 new incubators in existing institutions. Funding support of 40% (subject to a maximum of INR 10 crore) shall be provided by Central Government for establishment of new incubators for which 40% funding by the respective State Government and 20% funding by the private sector has been committed. The incubator shall be managed and operated by the private sector.
- 35 new private sector incubators. A grant of 50% (subject to a maximum of INR 10 crore) shall be provided by Central Government for incubators established by private sector in existing institutions. The incubator shall be managed and operated by the private sector.

The funding for setting up of the incubators shall be provided by NITI Aayog as part of Atal Innovation Mission (refer #13 of this Action Plan). Participating departments and agencies for setting up of new incubators shall be Department of Science and Technology, Department of Biotechnology, Department of Electronics and Information Technology, Ministry of Micro, Small and Medium Enterprises, Department of Higher Education, Department of Industrial Policy and Promotion and NITI Aayog.

Each of the above mentioned departments/agencies would enter into a standard MoU with identified private sector players for creation of academia-industry tie-ups for nurturing innovations in academic institutions.

iv. Building Innovation Centres at National Institutes:

Objective:

To propel successful innovation through augmentation of incubation and R&D efforts.

Details:

In order to augment the incubation and R&D efforts in the country, the Government will set up/ scale up 31 centres (to provide facilities for over 1,200 new Startups) of innovation and entrepreneurship at national institutes, including:

- Setting-up 13 Startup centres: Annual funding support of INR 50 lakhs (shared 50:50 by DST and MHRD) shall be provided for three years for encouraging student driven Startups from the host institute.
- Setting-up/ Scaling-up 18 Technology Business Incubators (TBIs) at NITs/IITs/IIMs etc. as per funding model of DST with MHRD providing smooth approvals for TBI to have separate society and built up space.

| Startup Centres      |                       | Technology Business Incubators |               |                    |
|----------------------|-----------------------|--------------------------------|---------------|--------------------|
| RGIIM Shillong       | NIT Goa               | MANIT Bhopal                   | IISER Bhopal  | NIT Warangal       |
| NIT Delhi            | NIT Agartala          | NIT Rourkela                   | IIM Rohtak    | MNIT Jaipur        |
| MNIT Allahabad       | NIT Silchar           | NIT Jalandhar                  | IIT Mandi     | NITTiruchirappalli |
| VNIT Nagpur          | IIT Bhubaneswar       | IIM Udaipur                    | IISER Mohali  | IIT Patna          |
| IIITDM Kancheepuram  | NIT Patna             | NIT Calicut                    | IIT Roorkee   |                    |
| PDPM-IIITDM Jabalpur | NIT Arunachal Pradesh | IIT Ropar                      | IIM Kozhikode |                    |
| ABVIITM Gwalior      |                       | IISER Thiruvananthapuram       | IIM Raipur    |                    |

- v. Setting up of 7 New Research Parks Modeled on the Research Park Setup at IIT Madras:

Objective:

To propel successful innovation through incubation and joint R&D efforts between academia and industry.

Details:

- The Government shall set up 7 new Research Parks in institutes indicated below with an initial investment of INR 100 crore each. The Research Parks shall be modeled based on the Research Park setup at IIT Madras.

Research Parks:

IIT Guwahati; IIT Hyderabad; IIT Kanpur; IIT Kharagpur; IISc Bangalore; IIT Gandhinagar; IIT Delhi.

- The IIT Madras Research Park endeavors to enable companies with a research focus to set up a base in the Park and leverage the expertise of IIT Madras. The Research Park breaks down the traditional, artificial barriers of innovation through its connectivity and collaborative interaction. This

helps industry to create, integrate and apply advancements in knowledge. It leverages best practices from successful Research Parks such as those at Stanford, MIT and Cambridge.

The guiding principles behind the park include:

- Creating a collaborative environment between industry and academia through joint research projects and consulting assignments.
- Creating a self-sustaining and technologically fertile environment.
- Encouraging and enabling R&D activities and Startups that are aligned to potential needs of the industry.
- Providing world class infrastructure for R&D activities and incubation.
- Enabling development of high quality personnel and motivating professional growth for researchers in companies through part time Masters and PhD Programs.

vi. Promoting Startups in the Biotechnology Sector:

Objectives:

To foster and facilitate bio-entrepreneurship.

Details:

The Biotechnology sector in India is on a strong, growth trajectory. Department of Biotechnology endeavors to scale up the number of Startups in the sector by nurturing approximately 300-500 new Startups each year to have around 2,000 Startups by 2020. In order to promote Startups in the sector, The Department of Biotechnology shall be implementing the following measures along with its Public Sector Undertaking Biotechnology Research Assistance Council (BIRAC).

Bio-incubators, Seed Fund and Equity Funding:

- 5 new Bio-clusters, 50 new Bio-Incubators, 150 technology transfer offices and 20 Bio-Connect offices will be set up in research institutes and universities across India.
- Biotech Equity Fund – BIRAC AcE Fund in partnership with National and Global Equity Funds (Bharat Fund, India Aspiration Fund amongst others) will provide financial assistance to young Biotech Startups.

Encouraging and leveraging global partnerships:

- Bengaluru-Boston Biotech Gateway to India has been formed. Letter of Intent has been signed between DBT, GoI and Department of IT, Government of Karnataka for the same. Through this initiative, a range of institutes in Boston (Harvard/ MIT) and Bengaluru will be able to connect to share ideas and mentor the entrepreneurs especially in the areas of Genomics, Computational Biology, Drug Discovery and new vaccines.

- Amplification of Bio-entrepreneurship through BIRAC Regional Entrepreneurship Centres (BREC). The BREC aims to impart bio-entrepreneurs with the necessary knowledge and skills required for converting innovative ideas into successful ventures. Department of Biotechnology shall set up 5 Regional centres or Mini-BIRACs in the next 5 years.

vii. Launching of Innovation Focused Programs for Students:

Objective:

To foster a culture of innovation in the field of Science and Technology amongst students.

Details:

In order to promote research and innovation among young students, the Government shall implement the following measures:

- Innovation Core. Innovation Core program shall be initiated to target school kids with an outreach to 10 lakh innovations from 5 lakh schools. One lakh innovations would be targeted and the top 10,000 innovations would be provided prototyping support. Of these 10,000 innovations, the best 100 would be shortlisted and showcased at the Annual Festival of Innovations in the Rashtrapati Bhavan.
- NIDHI: A Grand Challenge program (“National Initiative for Developing and Harnessing Innovations) shall be instituted through Innovation and Entrepreneurship Development Centres (IEDCs) to support and award INR 10 lakhs to 20 student innovations from IEDCs.
- Uchhattar Avishkar Yojana: A joint MHRD-DST scheme which has earmarked INR 250 crore per annum towards fostering “very high quality” research amongst IIT students. The funding towards this research will be 50% contribution from MHRD, 25% from DST and 25% from industry. This format has been devised to ensure that the research and funding gets utilized bearing in mind its relevance to the industry. Each project may amount to INR 5 crore only. This scheme will initially apply to IITs only.

viii. Annual Incubator Grand Challenge:

Objective:

To support creation of successful world class incubators in India.

Details:

For a new idea to become a successful commercial venture, adequate support and mentoring at various stages of the business lifecycle is required. Incubators play an important role in identifying early stage Startups and supporting them across various phases of their lifecycle. In order to build an effective Startup ecosystem, it is imperative that world class incubators, adopting leading industry practices, are setup in the country.

The Government is proposing to make forward looking investments towards building world class incubators. In its first phase, the aim is to establish 10 such incubators. To enable this, GoI shall identify and select 10 incubators who have the potential to become world class. These incubators would be given INR 10 crore each as financial assistance which may be used for ramping up the quality of service offerings. The incubators shall also become reference models for other incubators aspiring to offer best-in-class services. Video interviews of these incubators would be showcased on the Startup India portal.

An “Incubator Grand Challenge” exercise shall be carried out for identification of these incubators. The exercise shall entail:

- Open invitation of applications from incubators.
- Screening and evaluation based on pre-defined Key Performance Indicators (KPIs).

The Incubator Grand Challenge shall be an annual exercise.

### **Business Reform Action Plan (BRAP) 2017:**

The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, in partnership with the World Bank Group, released the Business Reform Action Plan (BRAP) 2017 for implementation by States/UTs on 13.04.2017. The BRAP includes 405 recommendations for reforms on regulatory processes, policies, practices and procedures spread across 12 reform areas, that is, labour regulation enablers; contract enforcement; registering property; inspection reform enablers; single window system; land availability and allotment; construction permit enablers; environmental registration enablers; obtaining utility permits; paying taxes; access to information and transparency enablers and sector specific reforms spanning the lifecycle of a typical business.

DIPP will carry out a comprehensive business-to-government (B2G) feedback exercise this year whereby feedback will be taken from businesses on the quality of implementation of the reforms claimed by the States and UTs. For each State/UT, the scores will be aggregated over all the surveys conducted to yield an overall score for the State/UT. The feedback scores will be used to generate a ranking of States/UTs in terms of reform implementation. Such a ranking will be different from the last year’s ranking, which was a ranking of de jure reforms (or reforms based on evidence submitted by States). The Telangana State Industrial Project Approval and Self-Certification System (TS-IPASS) Act, 2014 was enacted by the Telangana government under the Business Reform Action Plan under which not only where the online approval and self-certification system were developed. The online system also aims for transparency, more accountability and faster approvals.

**ATAL INNOVATION MISSION (AIM):** The Atal Innovation Mission is a flagship initiative setup by the NITI Aayog to promote innovation and entrepreneurship in the

country. Its objective is to create a facilitating environment for transformation of ideas into innovative and impactful solutions at schools, Universities, research institutes, MSME and industry levels across the country. The programs under AIM are –

1. Atal Tinkering Labs-Creating problem solving mindset across schools in India.
2. Atal Incubation Centers-Fostering world class startups and adding a new dimension to the incubator model.
3. Atal New India Challenges-Fostering product innovations and aligning them to the needs of various sectors/ministries.
4. Mentor India Campaign- A national Mentor network in collaboration with public sector, corporates and institutions, to support all the initiatives of the mission.
5. Atal Community Innovation Center- To stimulate community centric innovation and ideas in the unserved /underserved regions of the country including Tier 2 and Tier 3 cities.
6. ARISE-To stimulate innovation and research in the MSME industry.

**Government e Marketplace (GeM):** Government e Marketplace (GeM) is an online procurement platform for government ministries and departments, and the most widely used channel for public procurement in India. MSMEs, DPIIT recognised startups and other private companies can register on GeM as sellers and sell their products and services directly to government entities. GeM Startup Runway is a new initiative launched by GeM to allow startups to reach out to the universe of government buyers by offering innovative products that are unique in design, process and functionality. Benefits for DPIIT Recognised Startups on GeM:

- Requirement Exemptions:  
Startups are exempted from otherwise stringent selection criteria such as Prior Experience, Prior Turnover and Earnest Money Deposits
- Pilot Projects  
It provides start-ups the chance to work on trial orders with the Government, making them more likely to take chances on a new product.
- Feedback Mechanism  
Buyers can rate your product or service on GeM. Given the large scope of public procurement, this can help start-ups to finetune and adapt your product for scale.
- Flexibility  
No more restrictive categories on GeM, meaning that new & innovative products to be published on the platform.

### **CPPP and its benefits:**

Central Public Procurement Portal (CPPP) is Government of India's portal that facilitates all the Central Departments, State Departments, PSUs & PSBs to publish their tender related queries, contract award details and corrigendum.

The primary objective of this portal is to provide a single point access to the information on procurements made across various Ministries / Departments and all the organizations under them. Startups can now register and become Preferred Bidders in all Public Orders and get exemptions on prior experience, prior turnover and earnest money deposit requirements on eprocure.gov.in. A free and fair environment provides the startups with a level playing ground amongst other competitors. Through CPPP portal, access to following notifications is provided -

- e-tenders
- e-procure
- Defence e-procurement
- IOCL e-tenders

**The legal framework regulating Start-up business in India:** To establish a start-up in India, the law governing investments, incorporation of company, labour laws, IPR laws, environmental laws, etc gain prominence for successful functioning of a start-up. This part introduces the laws governing the start-ups.

## **BUSINESS REGULATIONS**

### **The Companies Act**

Companies incorporated in India and foreign corporations with a branch or liaison office in India are regulated by the provisions of the Companies Act. The Registrar of Companies (“RoC”) and the Company Law Board (“CLB”) are responsible to ensure compliance with the provisions of the Companies Act. Once the National Company Law Tribunal (“NCLT”) is set up it will take over the functions of the CLB.

As stated earlier in this Guide, companies in India may broadly be classified as public or private companies. A company can also be registered as a guarantee company where the profits are not distributed to its members but are retained to be used for the purposes of the company. Shares of companies are either equity shares (common stock) or preference shares (preferred stock). Capital issued by publicly listed companies need to comply with the ICDR and other regulations issued by SEBI.

The management of a company is entrusted to its Board of Directors (“Board”) who, subject to the Articles of Association, have full powers to act on behalf of the Company within the provisions of the Companies Act. A company can appoint executive, non-executive and independent directors. An executive director can be a managing director or a whole time director. There is no restriction on appointing foreign nationals as directors. All directors regardless of nationality or residence must obtain a Directors Identification Number (“DIN”). All listed companies are required to appoint up to half or one third of the Board, as the case may be, as independent directors and every public company with a paid-up capital of ` 50

million is also required to have an audit committee. The Companies Act requires companies to hold a minimum of four board meetings and at least one shareholders' meeting as an Annual General Meeting ("AGM") in a calendar year.

### **Competition Law**

The main objectives of the Competition Act, 2002 ("Competition Act") are to promote and sustain competition in markets in India, to protect the interests of consumers and to ensure freedom of trade for market participants. The Competition Act prohibits anti-competitive agreements and abuse of dominance; regulates acquisitions, mergers and amalgamations of a certain size; establishes Competition Commission of India ("CCI") and sets its functions and powers. The substantive provisions of the Competition Act dealing with anti-competitive agreements and abuse of dominant market positions have been made effective since May 2009. The provisions of the Competition Act governing acquisitions, mergers and amalgamations have been made effective since June 1, 2011.

Anti-Competitive Agreements: In terms of the Competition Act, agreements with respect to production, supply, distribution, storage, acquisition or control of goods, or provision of services, which cause or are likely to cause an appreciable adverse effect on competition in a relevant market in India may be considered to be anti-competitive. Horizontal agreements i.e. agreements entered by persons operating at the same level of the production chain (i.e. competitors) are presumed to be anti-competitive. This presumption is however rebuttable. Vertical agreements i.e. agreements entered by persons operating at the different stages of the production chain are subject to the Rule of Reason<sup>12</sup>.

Abuse of Dominant Position: The Competition Act proscribes enterprises from abusing their dominant positions. "Dominant Position" means the position of strength enjoyed by an enterprise in the relevant market in India, which enables it to operate independently of competitive forces prevailing in that relevant market, or affects its competitors or consumers or the relevant market in its favour. It is pertinent to note that the Competition Act does not prohibit an enterprise from acquiring a position of dominance as such; it prohibits the abuse of such dominance.

Combination: The merger control provisions of the Competition Act have introduced the concept of 'Combination'. The provisions of the Competition Act prohibit any Combination, which causes, or is likely to cause, an appreciable adverse effect on competition within the relevant market in India. A 'Combination' includes an enterprise formed by an acquisition of control, shares, voting rights, or assets of an enterprise, a demerger of an undertaking or the merger or amalgamation of enterprises. To classify as a 'Combination' the transaction must exceed the prescribed thresholds of assets and turnover.

The Competition Act authorizes the CCI to investigate anti-competitive agreements, abuses of a dominant position by initiating *suo moto* inquiries; or upon receipt of a complaint from

any person; or upon a reference made to it by the GoI or a State Government or a statutory authority. In cases of Combinations, parties are required to seek notify the CCI, seeking mandatory prior approval for the consummation of the Combination. The Competition Act also empowers the CCI to scrutinize Combination within one year from the date the Combination has come into effect. The CCI would be empowered to launch an investigation on its own initiative or in response to information received from any person. The CCI has powers to pass, among others, all or any of the following orders in case of an adverse finding:

- Orders to cease and desist;
- Orders that impose very substantial penalties ;
- Orders directing the modification of agreements;
- Orders that an acquisition, acquiring of control and merger or amalgamation shall not be given effect to or should be modified;
- Orders directing the break-up of a dominant entity.

Appeals may be filed before the Competition Appellate Tribunal (“COMPAT”) and thereafter to the Supreme Court of India. It may be pointed out that given the nascent stage of the competition regime jurisprudence under the Indian competition regime is yet to evolve and certain ambiguity about certain key aspects still exist.

### **Mergers and Acquisitions**

Mergers and amalgamations are the subject matter of the Companies Act. The power to approve amalgamations, mergers and de-mergers rests with the High Courts of India of each state for both listed and unlisted companies. This power is proposed to be transferred pursuant to the Companies (Second Amendment) Act, 2002, to the National Company Law Tribunal (the “NCLT”). The GoI may order the amalgamation of two or more companies if it believes this to be in the public interest. The Board for Industrial and Financial Reconstruction ( “BIFR”) can issue orders under the Sick Industrial Companies (Special Provisions) Act, 1985 ( “SICA”), for the amalgamation of a sick industrial company with another company.

SEBI regulates takeovers and substantial acquisitions of shares of a listed company vide the SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011 (“SEBI Takeover Regulations”) as amended from time to time. The SEBI Takeover Regulations provide for acquirers to make disclosures of encumbrances and holding of shares and public announcements and launch open offers in cases of acquisition of shares or voting rights beyond a certain threshold percentage, consolidation of holdings and acquisition of control over a company. The SEBI Takeover Regulations also contain certain exemptions where an open offer need not be made. The regulations also provide for bail out takeovers i.e. the substantial acquisition of shares in a financially weak company in pursuance of an approved scheme of rehabilitation.

### **Foreign Exchange Laws**

The Foreign Exchange Management Act, 1999 (“FEMA”) consolidates the law relating to foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of the foreign exchange market in India. FEMA, along with the rules and regulations framed under it, governs foreign exchange transactions in and from India. FEMA places all foreign exchange offences under the purview of civil law, thus subjecting them only to monetary penalties in contrast with their categorization as criminal offences under the previous regime.

## **TAX FRAMEWORK**

### **Tax Structures and Incentives**

India has a federal structure and a well-developed three-tier tax framework, comprising of taxes levied by the Central Government, the State Governments and the Local Authorities. Power to levy taxes and duties is distributed among the three tiers, in accordance with the provisions of the Constitution of India. Further fiscal revenue is shared between the Central Government and the State Governments.

The principle taxes and duties that the Central Government is empowered to levy are, Income Tax (which is a direct tax, levied on earning of income), Customs duty, Central Excise, Central Sales Tax (hereinafter “CST”) and Service Tax (which are indirect taxes, levied on consumption of goods and services). The principal taxes levied by the State Governments are, Value Added Tax (hereinafter “VAT”), Stamp Duty, State Excise duty (levied on the manufacture of alcohol, alcoholic preparations, and narcotic substance), Land Revenue, Entertainment tax and Tax on professionals. The Local Authorities are empowered to levy tax on immovable properties, octroi, tax on markets and tax or user charges for utilities such as water supply and drainage.

In order to encourage savings, investments and to provide incentives for industrial growth and development, both Central and State Governments offer a number of concessions to an investor in India from time to time. India’s main tax incentives are directed towards setting up new industries particularly in the infrastructure, mining and energy sectors.

### **Corporate Taxation**

In case of resident companies, tax is levied on their gross global income less allowable deductions. These deductions include expenditures for materials, wages, salaries, bonuses, commissions, rent, repairs, insurance, royalty payments, interest, lease payments, depreciation, expenditures for scientific research and contributions to scientific research associations. A company is deemed to be a resident company if it is incorporated in India or control and management of its affairs is situated in India. A resident company is not only

taxed at a lower rate but is also entitled to additional incentives and rebates. Corporate tax rate for a resident company is 30% (plus applicable surcharge and education cess). A Foreign Company means a company which is not a domestic company (resident company). Foreign companies are subject to Indian income tax in respect of income derived from Indian sources or deemed to be so derived. Tax applicable to business income earned by a foreign company in India is 40% (plus applicable surcharge and education cess).

A branch of a foreign company is liable to corporate tax on the profits attributable to such branch at the rate applicable to a foreign company. Further the rules on deductibility of expenses remain the same as those for resident companies for computing taxable income. The taxable income of companies is computed as profits or gains in business, capital gains and income from other sources. Corporate tax rates have decreased in recent years, in keeping with the Central Government's aim to widen tax base and ensure greater compliance.

### Capital Gains

Long-term capital gains (hereinafter "LTCG") on disposal of shares held in a company for more than one year and all other assets held for more than three years are computed by deducting cost, adjusted for cost inflation index in case of all assets, other than bonds or debentures, at the prescribed rates, from net sale proceeds. LTCG arising from transfer of listed securities, on which Security Transaction Tax ("STT") is paid, are exempt from tax. LTCG from sale of a long-term capital asset are exempt from capital gains tax where amount of such capital gains is reinvested in certain specified financial products and assets within a specified period.

In case of non-residents, capital gain on transfer of shares or debentures of an Indian company is calculated by converting asset cost and transfer expenses into the foreign currency in which they were purchased and the computed capital gain is then converted back into ₹. The computation is carried out in the above manner in order to shield such transfers from exchange fluctuations. However, recently a tax rate of 10% (plus applicable surcharge and education cess) on long-term capital gains arising from sale of shares in an unlisted company by a non-resident without allowing any adjustment for foreign exchange fluctuation and cost-inflation has been provided. Buy-back of shares by a company is subject to capital gains tax in the hands of the shareholder concerned. Short term capital gains ("STCG") i.e. gains arising from transfer of capital assets held for not more than three years or shares and other specified securities held for not more than one year are charged at normal rates applicable for personal or corporate taxation. India follows a progressive slab rate of tax on individual income. Peak rate of taxation applicable on income of an individual and corporate tax rate is 30% (plus applicable surcharge and education cess). However, STCG arising from transfer of listed securities are charged at a lower rate of 15% (plus applicable surcharge and education cess) subject to payment of STT. STCG on sale of listed shares sold by a non-resident otherwise than on stock exchange without payment of STT or on sale of shares of an

unlisted company by a non-resident is subject to tax at 40% (plus applicable surcharge and education cess). With respect to capital assets held as business assets any excess amount realized over the written down value of such a block of assets is treated as short term capital gains and is taxed at normal rates applicable to business profits.

*Dividend Distribution Tax:* A company is liable to pay Dividend Distribution Tax (hereinafter “DDT”) on the amounts declared or distributed as dividend at the rate of 15% (plus applicable surcharge and education cess). Since DDT is paid by the company at the time of declaration or distribution of dividends, such dividends are not taxed in the hands of recipient (irrespective of the fact that whether dividends are paid to a resident or non-resident shareholder). As a result withholding tax is not payable on dividends distributed by an Indian company.

*Withholding Tax:* Indian tax law provides for deduction of tax at source on various types of income commonly known as “Withholding Tax”. It may be noted that generally, all amounts payable to non-residents such as royalties, technical services fees and interest on loans are subject to withholding tax. Further the tax withheld is required to be deposited by person deducting such tax with the Central Government

*Minimum Alternate Tax:* In case tax liability of a company is less than 18.5% of its book profits, such book profits are deemed to be ‘taxable income’, and such company is liable to pay a Minimum Alternate Tax at 18.5% (plus applicable surcharge and education cess).

*Loss relief:* Losses arising from business operations in an assessment year may be carried forward and set off against future business profits over the next eight assessment years. However unabsorbed depreciation may be carried forward indefinitely. Business losses may be carried forward only where tax return is filed by the due date. In case of a closely held company such as a private limited company, carrying forward and setting off of losses will not be permitted unless shares of such company carrying not less than fifty-one per cent of the voting power were beneficially held by same persons both in the year in which losses were incurred and the year in which the losses are sought to be set-off.

*Re-organizations:* Indian Income-tax laws contain special provisions for facilitating amalgamations and mergers. It specifically exempts transfer of a capital asset in a scheme of amalgamation by the amalgamating company to the amalgamated company subject to certain conditions. In a cross border transaction when a foreign holding company transfers its shareholding in an Indian company to another foreign company as a result of a scheme of amalgamation, such transfer of capital asset, i.e. shares in the Indian company, is also exempt from capital gains tax in India, subject to certain conditions.

In case of a merger, relinquishment of shares of the amalgamating company held by shareholders is not regarded as a transfer of shares and is exempt from capital gains tax subject to certain prescribed conditions. In the case of a de-merger transfer of assets by the

de-merged company to the resulting (Indian) company is exempt from capital gains tax subject to the fulfillment of certain prescribed conditions.

*Double Taxation Avoidance Agreements:* India has comprehensive double-taxation avoidance agreements in force with several countries. Most of such agreements allow relief from double tax by the credit method or by a combination of the credit and exemption methods. Accordingly domestic companies are allowed credit against Indian income tax of the aggregate income tax paid overseas. Further credit is limited to lesser of actual tax paid on foreign income and Indian tax applicable to such income. Tax rates applicable on various transactions involving payment of royalties, fee for technical services, interest are also governed by such agreements.

*Transfer Pricing:* Income-tax laws provide for transfer pricing regulations (“TPR”) which are applicable on ‘international transactions’ between ‘associated enterprises’. Recently, TPR have been applied to few specified transactions entered into between domestic parties as well. Indian tax authorities are empowered under the provisions of TPR to make adjustments to income generated from an international transaction if, among other things, in their opinion the price charged is not on arms length basis (“ALP”) determined in accordance with the most appropriate method. Appropriate documentation is required to be maintained to establish adequacy of ALP. Recently, a scheme in relation to unilateral, bilateral and multilateral advance pricing arrangements has been notified.

### **Indirect Taxes**

Apart from the above mentioned taxes, companies in India are also subject to indirect taxes which are levied both by the Central Government, the State Government and the Local Authorities. In the past few years, indirect taxes have been steadily lowered and their structure and complexity has been rationalized.

#### *Excise duty*

Excise duty is levied by the Central Government on the manufacture of goods in India at the rates and on the basis of classification under the Central Excise Tariff Act, 1985 (the “Excise Tariff”), which is aligned with the harmonized system of nomenclature. Further the Central Government provides for concessional rates or exemption from excise duty, by way issue of notifications which may be conditional or un-conditional.

Presently most goods are chargeable at a peak rate of excise duty of 12% ad valorem. The basis for determining the excise duty payable is the transaction value or Minimum Retail Price after allowing permissible deductions for each product liable to excise duty with reference to the MRP. Certain goods are liable to specific rates of excise duty irrespective of sale price. Excise duty is payable by the manufacturer and is collected from the customer as a part of the sales consideration.

### Customs Duty

The Central Government levies customs duty on import and export of goods at the rates and on the basis of classification under the Customs Tariff Act, 1975. A downward trend in customs duty rates has been seen over the past few years and presently most goods are liable to customs duty at the rate of 10% ad valorem. Customs duty on import comprises of the following:

- Basic Customs Duty (“BCD”);
- An “Additional Customs Duty”, also known as Countervailing Duty (“CVD”) which is equivalent to Excise Duty leviable on like goods produced or manufactured in India, calculated either on the total of transaction value of the products plus BCD or on the basis of MRP.
- Additional duty of customs, also known as Special Additional Duty to counter-balance sales tax / VAT, local tax or other charges leviable on articles on its sale, purchase in India.

Service Tax: In 1994, the Central Government introduced the levy of a Service Tax on notified services in terms of Chapter V of the Finance Act. Generally, Service tax is payable at the rate of 12% plus education cess (effectively 12.36%) on the value of services by service provider and may be collected as part of consideration from the recipient of services. However in case where the services are imported from outside India, the recipient of services is liable to pay service tax. Export of services is exempt from service tax in the hands of the service provider subject to meeting certain specified conditions. A Negative List concept for taxation of services was also introduced. Services specified in the ‘Negative List’ will remain outside the tax net. All other services would thus be chargeable to service tax except those specifically exempted.

Cenvat Credit: To avoid the cascading effect of taxes, the Central Government has introduced a scheme allowing credit of excise duty, CVD and service tax to be paid on inputs, specified capital goods and input services used in or in relation to the manufacture of excisable goods or for providing taxable services to be set off against excise duty or service tax liability. The scheme of Cenvat credit is codified under the Cenvat Credit Rules, 2004.

VAT or CST: VAT is a state government levy and is collected under the authority of the respective states VAT Act. However, while CST is leviable under the Central Sales Tax Act, 1956, it is administered by the State VAT authorities. VAT or CST is payable on a sale of goods transaction depending upon the nature of transaction. In case of intra-state sales transaction VAT is payable and in case of inter-state sales transaction, CST is payable. Further, input credit of VAT paid on purchase of the goods is available to be set off against the VAT or CST liability of the dealer. However input credit is not allowed on CST paid on purchases.

*Entry Tax:* In addition to VAT, some states also levy entry tax on entry of goods in the State, which is allowed to be set off against VAT or CST liability of the dealer under specified conditions.

### **Tax Administration**

*Other Taxes:* States in India levy moderate taxes on motor vehicles and freight traffic; municipalities charge taxes on services and levy professional fees. Financial instruments and transactions in India attract stamp duties that are levied at the federal and state levels. All taxpayers, including foreign companies are required to follow a uniform financial year from April 1 to March 31 for the purposes of filing tax returns. The law requires that the taxpayer companies must file their prescribed periodical returns tax returns on or before a due date specified in the respective legislations.

If tax authorities can prove concealment of income or duty / tax evasion, penalties between 100 to 300 percent may be levied on the tax evaded. The Central Board of Direct Taxes and the Central Board of Excise and Customs in the Ministry of Finance of the Government of India are the nodal administrative bodies for administration of direct taxes and federal indirect taxes, respectively. VAT and CST are administered by the respective State's tax administration departments

### **Recent Developments**

The GoI is proposing a complete revamp of the extant income tax laws provided by Income-tax Act 1961 by replacing it with Direct Tax Code ("DTC"). Presently, DTC Bill 2010 is under consideration at Indian Parliament and is expected to be passed in next few years. The GoI is also looking at revamping indirect tax regime by introduction of Goods and Service Tax ("GST") at Centre and States level. GST will subsume many indirect taxes at Centre and State level. GST involves amendment of Indian Constitution for re-distributing powers of taxation among Centre and State Governments. GST will be introduced in next few years.

In an effort to curb tax avoidance and evasion, the Government has introduced general anti-avoidance rules ("GAAR") by inserting Chapter X-A in the Income-tax Act, 1961. As indicated in the Finance Bill, 2013 GAAR is due to come into effect on April 1, 2015. Once GAAR comes into effect as proposed on April 1, 2015, GAAR will empower tax authorities to declare an arrangement as impermissible avoidance arrangement if it was entered into with the objective of obtaining a tax benefit. GAAR empowers the Indian tax authorities to examine commercial substance of an arrangement.

## **LAW GOVERNING START-UP COMPANIES BUSINESS OPERATIONS IN INDIA:** **AN GENERAL OVERVIEW**

**Prelude to Law & the New Economic Policy:** The economic policy of the Government of India aims at promoting several new entrepreneurs to set up companies to facilitate investments in High Growth sectors such as software, electronics, service, engineering, infrastructure, pharmacy etc. Post 1990's witnessed a changed legal regime that facilitated trade and economic growth of India. Over last two decades, the legal regime was liberalised in a phased manner to facilitate trade domestically and internationally. The laws governing trade in India as it stands today have been designed to not only provide for a regulation of the business, but also provide for a rehabilitation and revival scheme for sinking companies which operated in adherence with law.

The legal framework regulating business in this country can be broadly discussed understood in 5 different aspects, namely;

- (i) Incorporation and establishment of Company.
- (ii) Labour Policy
- (iii) Free and Fair competition/ Protectionist regime
- (iv) Scheme of rehabilitation and Revival
- (v) Dispute Resolution

- 1 **Incorporation and establishment of Company:** Laws such as the Indian Companies Act, 2013 (read with relevant provisions of Indian Companies Act, 1956), Partnership Act, 1932 and the Limited Liability Partnership Act, 2008 provide a legal framework of commencing a business through various structures. Further the said laws also lay down the regulations and the rules that have to be adhered to by the incorporated entities to conduct their business. One of the key features to conduct business in accordance with law is to operate within the framework of regulations laid under aforesaid laws.
- 2 **Labour Policies:** A sound labor policy would facilitate removal of inequalities in profit sharing and wealth distribution. In furtherance of insuring a good labor police, laws such as the Factories Act 1948, the Industrial Disputes Act, 1947, the Minimum Wages Act, 1948, the Employees State Insurance Act, 1948 etc have been enacted to protect the interest of the labors.
- 3 **Free and Fair competition/ Protectionist regime:** Free and fair market can be established only by regulation of law and not otherwise. To uphold and implement this principal, laws such as the Competition Act, 2002, the laws protecting IPRs (Patents, Copyrights, Trade Mark), Consumer Protection Act, 1986, Real Estate (Regulation and Development) Act, 2016 etc have been enacted and put to force to curb unhealthy trade practices that would hamper free and fair trade.

- 4 **Revival:** Mere regulation of business would not suffice to foster the growth of trade, unless a scheme is provided to secure and revive a sinking company which strictly operates within the work of law. To further this need, organizations such as Board of Industrial and Financial Reconstruction and laws such as Micro, Small and Medium Establishments Act, 2006 and Sick Industrial Companies Act, 1985 have been enacted to give an opportunity to Companies alternative solutions to revive itself.
- 5 **Dispute Resolution:** To ensure efficient bargain there is a need for creating an effective dispute settlement mechanism to resolve all disputes arising between companies doing business in India. A sound judicial setup has been created in form of Courts (Judicial & Quasi Judicial) to resolve issues arising out of trade. Acts such as Arbitration and Conciliation Act, 1996 which was enacted during the liberalized phase of Indian economy, played an important role by providing expeditious alternate dispute resolution mechanism to resolve all trade disputes.

### **Financing Models for Start-ups in India**

In the Indian context, the early stage financing of a start-up company happens in two ways, namely, equity financing and debt financing.

#### **Equity Financing**

Equity financing is regulated by the Securities and Exchange Board of India. The SEBI (Alternate Investment Funds) Regulations, 2012 describes the two primary forms of equity financing, viz. angel investors and/or venture capital/ private equity investors.

#### **Venture Capitalist/Private Equity**

As per the SEBI (Alternate Investment Funds) Regulations, 2012, a venture capital fund is a fund that primarily makes investments in unlisted securities of start-up companies or emerging venture capital undertakings. These undertakings are mainly involved in developing and manufacturing new goods and services, advancements in technology or intellectual property, novel business models, etc. A private equity firm is also a popular kind of venture capital fund which invests primarily in equity or equity linked instruments of new companies or dying companies.

As a pre-condition to investment, the investing firm and the start-up company must ideally perform a mutual analysis of the risks involved. If the investment seems prima facie feasible after a preliminary assessment, the investor and the start-up company will enter into a non-binding offer document. The next step is here the investor fund performs a thorough

financial, legal and technical due diligence of the start-up company.<sup>52</sup> The criteria for deciding the profitability and risk of the investment for an investor fund are as follows- the growth potential is exponential, the attractiveness of the industry, the level of sustainable advantage in the platform, receptiveness of the owners to involvement of outsiders such as the investors, the profit sharing ratio between the investor and the owners and the availability of exit alternatives (4-7 years out). Once the due diligence report approves of the investment, the offer is finalized and the start-up must secure some form of written commitment from the venture capital fund. The venture capital fund will then release its fund into the company and help the company grow and become profitable and then sell its stake and exit the company.

Upon finalization of the investment, the following three transaction documents must be executed between the investors and start-ups: First, there must be a term sheet or commitment letter or memorandum of understanding that sets out the basic commercial understanding between the investor and investee.<sup>53</sup> It must also include all the legal terms and provisions for the subsequent final agreements to incorporate the results of the due diligence. Second, the parties must enter into a Share Subscription Agreement or a Debenture Subscription Agreement which details the issuance of shares in the share capital or debentures at subscription amount. This amount is calculated based on the valuation of the start-up as per the due diligence report; The agreement essentially lists the condition precedents to completion of transaction or conditions subsequent to be completed within the agreed time frame after the completion date. It also contains the representations and warranties and provisions on indemnification of losses resulting from due-diligence exercise or otherwise, etc. Finally, the parties must sign a Shareholders' Agreement that provides for important rights and liabilities such as nomination/representation rights for the investor, reporting rights of the investors disclosure obligation of investee company, rights to redeem the investor's debentures or preference shares other right such as pre-emption, right of first refusal or right of first offer, lock-in-period for the investor or promoter's holding, put and call options, affirmative vote rights on certain reserved matters, anti-dilution provisions, etc. It also provides for the exit options available to the investor after the mandatory lock in period.

### Angel Investors

Angel investors are usually individuals or a group of industry professionals who are willing to fund the start-up company at a very early stage in return for a stake in the equity shareholding of the company. Under the SEBI (Alternative Investment Funds) Regulations,

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<sup>52</sup> Nishith Desai Associates, START-UPS: WHAT YOU NEED TO KNOW, NDA (June, 2016) available at: [http://www.nishithdesai.com/fileadmin/user\\_upload/pdfs/Research%20Papers/Start\\_-\\_Ups\\_What\\_You\\_Need\\_To\\_Know.pdf](http://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research%20Papers/Start_-_Ups_What_You_Need_To_Know.pdf)

<sup>53</sup> Vinay Vaish, *Financing Options Available for Start-Ups in India*, MONDAQ (Jan 7, 2016) available at: <http://www.mondaq.com/india/x/456326/Securities/Financing+Options+Available+For+Startup+Companies+In+India>

2012 which was subsequently amended in 2016, SEBI has made certain restrictions applicable to angel funds investing in an Indian company.<sup>54</sup>

As per the original form of the Regulations, angel funds can only invest in a company which is within 3 years of its incorporation. However, the SEBI (AIF) Amendment Act, 2016 has expanded this to allow investment into companies within 5 years of their incorporation. Second, the company should not be listed on the floor of a stock exchange. It must also have a turnover of less than INR 250 million and not be promoted by or related to an industrial group (having a total group turnover of over INR 3 billion). The original regulations stated that the size of the investment by the angel fund was required to be less than 50 lakhs and not more than 5 crores. However, the minimum investment has been relaxed from 50 lakhs to 25 lakhs by the 2016 Amendment. It was earlier required that an angel fund investment shall be locked-in for a period of at least 3 years, however, the 2016 amendment has reduced this period to 1 year.

Furthermore, certain documents such as the information memorandum or business plan, draft term sheet and a copy of charter documents must be executed and shared with both parties involved to finalize the investment.

### **Debt Financing**

Loan from Banks & NBFCs: Loans from banks and NBFCs help finance the purchase of inventory and equipment, besides securing operating capital and funds for expansion. More importantly, unlike a VC or angels, which have an equity stake, banks do not seek ownership in your venture. However, there are several drawbacks of such funding option. Not only do you pay interest on loan but it also has to be done on time irrespective of how your business is faring. They require substantial collateral and a good track record, besides the fulfilment of other terms and conditions and a lot of documentation as follows:

- a. Application for loan sanction by borrowers;
- b. Issue of sanction letter by the Bank;
- c. Agreement of Loan;
- d. Security/collateral documentation, such as (i) Deed of Mortgage; (ii) Deed of Hypothecation; (iii) Deed of guarantee; (iv) Share pledge agreement; (v) Memorandum of Entry; etc.

External Commercial Borrowings: External Commercial Borrowings (ECB) in form of bank loans, buyers' credit, suppliers' credit, securitized instruments (e.g. non-convertible, optionally convertible or partially convertible preference shares, floating rate notes and fixed rate bonds) can also be availed from non-resident lenders to fund the business requirement of

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<sup>54</sup> Anon, "SEBI relaxes rules for angel funds to boost start-up funding", LIVEMINT (Jan 5, 2017), available at: <https://www.livemint.com/Companies/19CkYgiOzpdNXvjJslcK/Sebi-relaxes-rules-for-angel-funds-to-boost-startup-funding.html>

a company. ECB can be accessed under two routes, viz., (i) Automatic Route; and (ii) Approval Route depending upon the category of eligible borrower and recognized lender, amount of ECB availed, average maturity period and other applicable factor.

ECB raised has also certain end use restrictions such as that it cannot be used for (a) on lending or investment in capital market; (b) acquiring a company in India; (c) real estate sector etc. Under ECB also the borrower needs to create certain charge on immovable assets, movable assets, financial securities and issue of corporate and / or personal guarantees in favour of overseas lender / security trustee, to secure the ECB raised by the borrower, subject to compliance of certain conditions as prescribed under ECB guidelines framed by Reserve Bank of India. The documentation on similar lines as mentioned under bank loan section above will need to be executed.

**CGTMSE Loans:** Under the Credit Guarantee Trust for Micro and Small Enterprises scheme launched by Ministry of Micro, Small & Medium Enterprises (MSME), Government of India to encourage entrepreneurs, one can get loans of up to 1 crore without collateral or surety. Any new and existing micro and small enterprise can take the loan under the scheme from all scheduled commercial banks and specified Regional Rural Banks, NSIC, NEDFi, and SIDBI, which have signed an agreement with the Credit Guarantee Trust.

### **Initial Public Offer (IPO)**

One of the most common modes of exit options for private equity firms and venture capital funds is an offer for sale or Initial Public Offer of the company's equity. Most Start-ups in India are private limited companies. To be eligible for an IPO, the start-up company is required to be restructured into a Public Company, i.e., it must be authorised by its constitutional documents to have more than fifty shareholders and have no restrictions on the transferability of its shares.

The two main laws governing the process of an IPO are the Companies Act, 2013 and the SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009 (ICDR Regulations). The main pre-conditions that the company has to satisfy at the time of filing offer document for public issue are listed in Chapters II and III of the ICDR Regulations.<sup>55</sup> Importantly, before an IPO, the start-up company must meet all the eligibility criteria listed in five sub-regulations to Regulation 26 which are as follows:

- It must have net tangible assets of at least INR 3 crore for three full years.
- It must have reported distributable profits in at least three years.
- It must have had a net worth of at least INR 1 crore in the last three years.
- The issue size must not exceed five times the pre-issue net worth.

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<sup>55</sup> Rebecca Furtado, *Pre-conditions for doing an IPO in India*, iPleaders, (Aug 17, 2016) available at: <https://blog.ipleaders.in/pre-conditions-ipo-india-start/>

- If there has been a change in the company's name, at least 50 per cent of the revenue for preceding one year should be from the new activity denoted by the new name.

In case the company is a new start-up that has not been in existence for three years or does not meet certain financial strength tests, it must allot at least 50% of the shares forming part of the IPO to retail and institutional investors. It must also meet certain other conditions<sup>56</sup> such as-

- As per Regulations 2 and 4 of the ICDR Regulations, neither the company nor its affiliates must be barred from accessing the capital market by SEBI or any other authorities; It must also ensure that none of the promoters, directors or persons in control of the company are acting in such capacity for any other company which is barred from accessing the capital market, under any order or directions made by SEBI.
- The promoters must submit an application for listing of the specified securities in at least one recognised stock exchange having nationwide trading terminals.
- As per Regulation 5, the company must also ensure to appoint one or more merchant bankers, at least one of whom shall be a lead merchant banker and shall also appoint other intermediaries such as depositories, in consultation with the lead merchant banker, to carry out the obligations relating to the issue.
- The company must ensure that it does not go ahead with an IPO if the number of prospective allottees is less than 1000.
- As per Regulation 4, it must mandatorily pay up or forfeit all existing partly paid-up equity shares of the company.
- As per Regulation 26(6), the company must also ensure that the equity shares offered for sale to public have been held by the sellers for a period of at least one year prior to the filing of draft offer document with the Board subject to the statutory exemptions.
- As per Regulation 36, the promoters of the company must mandatorily contribute 20 percent of the total capital being offered. This is known as 'minimum promoter's contribution' and is locked-in for three years since the issue. The provision also requires that the contribution of non-promoter entities, e.g. investors, is locked-in for a period of 1 year. However, venture capital funds that are registered with SEBI are exempted from the lock-in period requirement.
- The company is also required to obtain a credit grading for the IPO from one or more credit rating agencies registered with SEBI.
- Lastly, the company must ensure that the corporate governance compliances are met as required by the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015.

Once the above compliance requirements are met, the Start-up must conduct an alteration of its memorandum and articles of association of the company as per Sections 13 and 14 of the

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<sup>56</sup> KPMG, *IPO SEBI and ICDR Listing Obligations Checklist*, KPMG Online, (Feb 16, 2018) available at: <https://home.kpmg.com/in/en/home/insights/2017/03/sebi-icdr-and-listing-regulations.html>

Companies Act, 2013 and the Companies (Incorporation) Rules, 2014. Next, the SEBI will scrutinize these documents and conduct its investigation / background checks and call for further documentation as required. Upon completion of formalities, the Registrar shall consider the application for change in class of company, close the existing registration and issue a fresh certificate of incorporation as per Section 18 of the Companies Act, 2013 and the IPO process can be implemented.

### **Unconventional Modes of Financing Options Which are Popular In India**

Crowd Funding: This is recent phenomena being practiced for getting seed funding through small amounts collected from a large number of people (crowd), usually through the Internet. Now we have companies existing in India which are specializing in "Crowd Funding". The entrepreneur can get money for his venture by showcasing his idea before a large group of people and trying to convince people of its utility and success. Wishberry and Catapult are a few among many such forums operating / present in India. The entrepreneur needs to put up on a portal his profile and presentation, which should include the business idea, its impact, and the rewards and returns for investors. It should be supported by suitable images and videos of the project. SEBI in 2014, even rolled out a 'Consultation Paper on Crowd funding in India' proposing a framework in the form of Crowd funding to allow start-ups and SMEs to raise early stage capital in relatively small sums from a broad investor base. The Consultation Paper defined Crowd funding as *solicitation of funds (small amount) from multiple investors through a web-based platform or social networking site for a specific project, business venture or social cause*. However SEBI till now has not issued any further regulations in this regard.

Incubators: These set-ups precede the seed funding stage and help the entrepreneur develop a business idea or make a prototype by providing resources and services in exchange for an equity stake ranging from 2-10%. Incubators offer office space, administrative support, legal compliances, management training, mentoring and access to industry experts as well as to funding through angel investors or VCs. These are usually government-supported institutes like the IIMs or IITs, technical institutes or private business incubators run by industry veterans or companies. The incubation period can be 2-3 years and admission is rigorous. Some of the top options in India include IIM-Bangalore NSRCEL, Microsoft Accelerator and IIT-Kanpur SIIC and the famous Sriram College of Commerce (SRCC).

T-HUB: To set up a co-working space, an incubator, which will ensure innovation, was vision and funded by the state government of Telangana. What started off as a project to support innovation has now, two years later, become India's largest start up incubator. T-Hub was launched in November 2015 with the idea of helping technology-related start-ups by giving them a working space and access to mentorship, networking opportunities, and workshops for a nominal fee. A start up in itself, T-Hub has grown leaps and bounds from being a co-working space for start-ups to creating an ecosystem involving start-ups,

corporates, investors and academia not just from Hyderabad, but from across the globe. The extension of that is the growth stage when more people pay for it and there is organic growth coming in terms of traction and revenue. T-Hub now focuses on helping these start-ups scale and take their product or solution to the next level.

## **START-UPS AND LABOUR LEGISLATIONS**

### **Genesis of application of Labor Laws to Start-ups**

Over the past decade, India has seen a rapid growth of vibrant new start-ups in different sectors, where young entrepreneurs are dominating the start-up scene with their new age and innovative businesses. Though these ideas as well as the promoters are of new age, all the business enterprises in India have to comply with a wide variety of laws and statutes, especially labour laws, that specifically deal with the employer-employee relationship, compensations, working conditions, medical benefits, discrimination and retirement benefits. One of the many challenges faced by any entrepreneur or organization is the prevalence of year old laws governing labour employment such as benefits and terminations, even though the working culture and economy has progressed with time. While most of the legislations have undergone amendments as per to suit the convenience of present day businesses, for example Companies Act 2013, there still exists a need for a labour law framework which shall be suitable for present day start-ups and MSMEs.

Due to decentralization of power in India, there are various Central and State level labour and employment legislations which govern the conditions of employment, social security, health, safety, welfare, wages, trade unions and industrial disputes, etc. Many of these statutes become applicable only upon fulfilment of prescribed thresholds, such as number of employees in the organisation, wages of an employee(s), etc, while other legislations may be applicable only to specific/specified industries or to certain types of employees. This implies that a start-up needs to be on a constant vigil regarding the compliance with the central and the state legislations, including the stage at which any one or more statutes may become applicable. Some non-compliances may pose a limited financial risk as well as loss of goodwill and may become a source of continuous inconvenience due to inspections by the concerned authorities and actions as a result thereof.

Another important problem that poses inconvenience to start-ups is the lack of uniformity in some of the common terms used across different labour and employment legislations applicable to an organisation. For example, a large number of labour legislations have different applicability criteria, definition of 'employee', definition of 'wages' and also what is included and excluded from the wages and manner of calculation of wages. Further, some of the basic aspects, such as the components that need to be taken into consideration while computing wages for the purposes of identifying provident fund contributions, could be different from components taken into account while accounting bonus entitlement of an

employee, etc. Another issue that arises is with respect to the relationship matters of an enterprise. Currently, most of the start-ups not only hire employees on their payrolls, but until they are certain of their growth and business needs, also use independent consultants, direct or indirect contract employees and various other vendors, etc., to meet with their manpower needs. In absence of labour laws governing and addressing each manpower arrangement, enterprises will depend upon professional guidance to ensure that any such arrangement does not expose it to the risk of claims or demands of compensation or/and permanent employment. Thus, there is an urgent need for laws that allow start-ups to agree short or long-term arrangements or engagements with individuals, without being worried about the possibility of such individuals making burdensome demands.

### **RECENT DEVELOPMENTS IN THE COMPLIANCE FRAMEWORK FOR THE START-UPS**

#### **Recommendations for relaxation of compliance requirements**

In 2016, the Ministry of Labour and Employment issued an advisory to all states, union territories and the central labour authorities recommending that there could be implemented a compliance regime for start-ups based on self-certification under different labour legislations.<sup>57</sup> Further, there would also be restrictions imposed on inspections that could happen under such labour laws. This initiative of the Government has been aimed at promoting the development of start-up companies in India and incentivizing entrepreneurship.

#### **Laws applicable to a start-up**

| Statute                                                | Scope & Application                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><i>Factories Act, 1948</i></b>                      | <b>Factories Act embodies the law relating to regulation of labour in factories. It prescribes the terms of health, safety, working hours, benefits, overtime ad leave. This Act has been enforced by state governments in accordance with the state specific rules as framed under the Factories Act.</b>                               |
| <b><i>Shops and Commercial Establishments Acts</i></b> | <b>These are state specific statutes, regulating the conditions of work and employment in shops, commercial establishments, residential hotels, restaurants, eating houses, theatres, places of public amusement/ entertainment and other establishments located within the state. These statutes prescribe the minimum condition of</b> |

<sup>57</sup> PRESS INFORMATION BUREAU, GOVERNMENT OF INDIA, Notification dated 25 April 2016, Available at – <https://www.pib.nic.in/newsite/PrintRelease.aspx?relid=14119>.

|                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                  | services and benefits for employees, including working hours, rest intervals, holidays, overtime, holidays, leave, termination of service, rights and obligations of an employer and employees, etc.                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <i>Payment of Wages Act, 1936</i>                                                                | The Act regulates the conditions of payments of wages and is applicable to factories, railways, tramways, motor transport services, docks, wharves, jetty, inland vessels, mines, quarries and oil fields, workshops, establishments involved in construction work and other establishments as notified by the appropriate state governments.                                                                                                                                                                                                                                                                             |
| <i>Maternity Benefit Act, 1961</i>                                                               | The Act prescribes conditions of employment for women employees, before and after childbirth and also provides for maternity benefits along with other benefits. The Act is applicable to all shops and establishments in which 10 or more persons are employed; and factories, mines, plantations and circus.                                                                                                                                                                                                                                                                                                            |
| <i>Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013</i> | This Act aims to provide protection to women against sexual harassment at the workplace and prescribes guidelines to be adhered by the employers and employees for the prevention and redressal of complaints of sexual harassment. The Act applies to both organized and unorganized sector, including government bodies, public and private sector organizations, non-governmental organizations and organizations carrying on commercial, vocational, educational, etc. activities. It also applies to all the places visited by the employee during the course of employment or for reason arising out of employment. |
| <i>Minimum Wages Act, 1948</i>                                                                   | The Act provides for fixing and revision of minimum wage rates by the respective state governments periodically for both organized and unorganized sectors.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <i>Payment of Bonus Act, 1965</i>                                                                | Thee Act provides for payment of bonuses under certain defined circumstance, thereby enabling the employees to share the profits earned by the establishment. The Act applies to every factory and establishment in which 20 or more persons are employed on any day during an accounting year.                                                                                                                                                                                                                                                                                                                           |

## **Labour Laws exempting Start-ups**

Since the labour and environment law compliances are time consuming and cumbersome in nature and that the start-ups are often caught unaware as to the issues pertaining to such laws, the Government has proposed a self-certification mechanism for certain compliances as mentioned before. Under this initiative the Government has set up a mobile application as well as a dedicated web portal where start-ups can complete this self-certification process. After the self-certification process, it is proposed that there will be no inspection for a period of 3 years, unless instances of specific violations are reported. Even in such a case, prior approval from a senior officer would be required for any inspection.

Following are the labour laws legislations from which the start-ups are exempted from-

| <b>Statute</b>                                                                  | <b>Scope and Application</b>                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><i>Industrial Employment (Standing Orders) Act, 1946</i></b>                 | <b>The Act is applicable to factories, railways, mines, quarries and oil fields, tramway or motor, omnibus services, docks, wharves and jetties, inland steam vessels, plantations and workshops, where 100 or more persons are employed. It mandates every employer to lay down clear terms and conditions of service which is to be certified by the concerned labour department and thereafter enacted.</b> |
| <b><i>Trade Unions Act, 1926</i></b>                                            | <b>Trade Unions Act provides for the registration of trade unions and lays down the law relating to registered trade unions.</b>                                                                                                                                                                                                                                                                               |
| <b><i>Industrial Disputes Act, 1947</i></b>                                     | <b>The Industrial Disputes Act prescribes and governs the mechanism of collective bargaining and dispute resolution between employer and employees. The Act contains provisions related to unfair labour practices, strikes, lock-outs, lay-offs, retrenchment, transfer of undertakings and closure of business.</b>                                                                                          |
| <b><i>Employees' State Insurance Act, 1948</i></b>                              | <b>The Act applies to all factories, industrial and commercial establishments, hotels, restaurants, cinemas and shops. Employees drawing wages below Rs. 15,000 per month are eligible for benefits under the Act. The Act provides for benefits in cases of sickness, maternity and employment injury and certain other related matters.</b>                                                                  |
| <b><i>Employees' Provident Funds and Miscellaneous Provisions Act, 1952</i></b> | <b>It is an important social security legislation, providing for an institution of provident funds, pension fund and deposit-linked insurance fund for employees in factories and other prescribed establishments. The Act applies to establishments having at least 20 employees, the basic salary of the employee should be less than Rs. 15,000 per month or who has an existing provident fund</b>         |

|                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                               | membership based on previous employment arrangement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <i>The Payment of Gratuity Act, 1972</i>                                                                      | The Act is applicable to every factory, mine, oil field, plantation, port, railway company, shop and commercial establishment where 10 or more persons are employed or were employed on any day of the preceding 12 months. Employees are entitled to receive gratuity upon cessation of employment, irrespective of the mode of cessation. The eligible employee should have completed a ‘continuous service’ of at least 5 years (interpreted to mean 4 years and 240 days) at the time of employment cessation.                                      |
| <i>Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996</i> | The Act applies to establishments employing 10 or more building workers in any building/ construction work and regulates the conditions of employment and service of the workers and imposes obligations on the employer, with respect to health, safety and welfare of the construction workers.                                                                                                                                                                                                                                                       |
| <i>Contract Labour (Regulation and Abolition) Act, 1970</i>                                                   | The Act applies to all establishments employing 20 or more persons (or that have employed 20 or more persons) on any day of the preceding 12 months and contractors employing (or have employed) 20 or more workmen on any day of the preceding 12 months. The Act regulates the conditions of employment of contract labour, the duties of a contractor and principal employer and provides for abolition of contract labour in certain circumstances. It does not govern establishments where work of a casual or intermittent nature is carried out. |
| <i>Inter-State Migrant Workmen (Regulation of Employment &amp; Conditions of Service) Act 1996</i>            | The Act applies to all “establishments” that have been defined under section 2(1)(d) of the Act. It prohibits the employment of inter-state migrant workers in the establishment without having registered the establishment and prescribes protection to level the playing field between local workers and migrant workers.                                                                                                                                                                                                                            |

## **DEFENCE START-UPS**

### **Recent and Historic international efforts to engage with startups and innovators:**

The concept of a small team, with external support, moving rapid for technological advancement and establishment is not a new one. There are many successful examples of such enterprises globally.

The most recent and relevant defence related illustration of this conceptual framework can be found in the United States of America. The US Secretary of Defense in 2015 realized the dangerous trend of commercial technology severely out-pacing the military and established the Defense Innovation Unit experimental (DIUx) in the Silicon Valley to counter this. While the initial efforts of this organization were less than spectacular, they were able to adopt the Silicon Valley approach of “Fail fast and recover faster”. Learning from their initial mistakes, this small outfit, headed by a small group of technologists has gone on to give the US military 12 viable projects including autonomous indoor drones to support Special Forces, cyber security software and a novel way for soldiers to communicate over radio without loss of surrounding awareness. The group is known for cutting through the meeting culture of the bureaucracy, having a direct link with the top brass of the US military and having a favorable reputation in the Silicon Valley landscape.

Israel is another prime example of the entrepreneurship model in the defence establishment. An entire defence startup ecosystem exists in the country with the government, the military and the various defence companies and startups being stakeholders of the system. The three largest industrial entities in this ecosystem are the government-owned Israeli Aerospace Industry<sup>12</sup>, Israeli Military Industries<sup>13</sup> and the Rafael Arms Development Authority<sup>14</sup>. The Maf’at<sup>15</sup>, which is a joint administrative body of the Israeli Ministry of Defense<sup>16</sup> and Israel Defense Forces<sup>17</sup> coordinates between the Israeli MoD, the IDF and the military industries and startups. Israel also has the Yozma<sup>18</sup> program, which is a fund of funds to invest in local venture capital funds. The Israeli Defense Forces (IDF) actively encourages innovation in its units. Military veterans of the IDF use their acquired experience to launch their own technology start-ups for defence sector. This essentially forms “a feedback loop” in the entire Israeli defence sector. Two prime examples of IDF divisions known for innovation are –

- Lotem, which is the IDF’s largest technological unit and provides command and control (C2) systems for the armed forces.
- Unit 8200, which provides cyber security and intelligence services to the IDF and whose alumni have launched so many startups, that the unit is nicknamed “the startup machine”.

Many defence startups, led by the veterans of these units have thrived and innovated in the Israeli defence ecosystem. Examples include Team8, Elbit Systems, mPrest, Indegy, etc.

Other countries are also wising up to this approach of including small to medium scale innovation in the military industrial complex. The European Defense Action Plan, 2016 lays a sharp focus on engagement with and investment in SME"s, startups and midcaps for the defence industry.

Historically, major defence innovations have been made by small, empowered teams. In 1940, the President of the United States received a plan for National Defense Research Council, which lead to the creation of the MIT Rad Lab. This organization was a small research outfit with government support looking into development of technologies for detection of aircraft and ships. Over a period of the next five years, the Rad Lab developed and inducted into the US armed forces, ground breaking technologies like airborne bombing radars, shipboard search radars, harbor and coastal defence radars, gun-laying radars, ground-controlled approach radars for aircraft blind landing, interrogate-friend-or-foe beacon systems, and the long-range navigation (LORAN) system. The outfit is especially credited for the creation of the microwave earlywarning (MEW) radars, which saved London from the V-1 threat and the air-to-surface vessel (ASV) radars, which helped protect Allied shipping from the U-boat menace.

The Xerox Corporation in 1970 established a smaller separate innovation center in Palo Alto, California with the aim of revitalizing the company"s product line. This Xerox PARC, as it came to be known became the birthplace of many key modern computing concepts and elements like the GUI with windows and icons, incorporating the mouse as an input device for the GUI, ethernet, the concept of objective oriented programming, etc. In fact, an indirect measure of its achievements came in the form of the number of its employees that were poached by companies like Apple. PARC now functions as a fully formed subsidiary of the Xerox Corporation with about four decades of innovations under its belt.

### **DEFENCE START-UPS IN INDIA:**

One of the first aims of India as a nation since Independence has been to achieve self - reliance in the field of defence and defence production. However, this goal is yet to be achieved. India is the world"s largest defence equipment importer and is expected to spend around USD 220 Billion in the coming decade to modernize its armed forces. Around the world, recent years have been marked by rapid technological innovation, in a variety of sectors such as telecom, information technology &connectivity and their impacts are being seen in our daily lives.

In the recent years, the government of India has initiated various schemes like Make In India, Startup India, Atal Innovation Mission (AIM), etc. to encourage innovation and entrepreneurship in the Indian commercial ecosystem, which includes higher manufacturing in defence. This has also made increasingly evident that achieving the goal of self - sufficiency for the Indian military will require a means to incorporate innovation rapidly in

the weapons procurement process. Ministry of Defence aims to create an ecosystem which fosters innovation and encourages technology development in Defence by engaging R&D institutes, academia, industries, startups and even individual innovators. For any corporate, government, or philanthropy, engaging with innovators has become an imperative in recent years, to avoid being disrupted by faster, more agile and responsive competitors. For State functions and public services, the risk of being outcompeted in the market is not as stark as in the private sector due to natural monopolies, but National Defence cannot afford to be behind the country's potential adversaries in capabilities, which are often multiplied by new technologies.

The rates of adoption of innovation for different sectors vary, due to several factors such as applicability, absorption capability of the systems, etc. A special effort is required to reach out and engage the smaller enterprises, start-ups and innovators, which have the flexibility and adaptability to supply the Indian military with innovative and ingenious technological solutions. Such a system will be needed to encourage development of innovative technologies for the defence sector by roping in the nation's industry, start-ups, MSMEs, R&D institutes, academia and even the individual inventors.

#### **Defence Innovation Fund (DIF):**

The Government has approved a Scheme of Defence Innovation Fund (DIF), aimed at creating an eco-system to foster innovation and technology development in defence by engaging R&D institutes, academia, industry including MSMEs, start-ups and even individual innovators and provide them award based grant/ funding to carry out innovative development, which has good potential for future commercialization. The Scheme is proposed to be implemented through a 'not for profit' company under section 8 of the Companies Act, namely Defence Innovation Organisation (DIO). DIO has been registered with Bengaluru as its headquarter. The DIO would be funded by two Defence Public Sector Undertakings (DPSUs), namely Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL).

The maximum corpus fund raised by HAL and BEL for DIO shall be Rs. 100 crore, Rs. 50 crore each from HAL and BEL. To start with, HAL and BEL will contribute Rs. 5 crore each. Subsequently, public or private entities, which are 'not for profit' organisations and are ready to promote and fund innovation programmes of this nature, would be invited to join the organisation.

#### **Innovations for Defence Excellence (iDEX):**

Innovations for Defence Excellence (iDEX) launched by the Government in April 2018, primarily aims at creation of an ecosystem to foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, start-ups, individual innovators, R&D institutes & academia, and provide them grants/funding and other support

to carry out R&D which has good potential for future adoption for Indian defence and aerospace needs. iDEX will be funded and managed by a 'Defence Innovation Organization (DIO)' which has been formed as a 'not for profit' company as per Section 8 of the Companies Act 2013 for this purpose, by the two founder members i.e. Defence Public Sector Undertakings (DPSUs) - HAL & BEL. iDEX will function as the executive arm of DIO, carrying out all the required activities while DIO will provide high level policy guidance to iDEX.

### **Objectives, Functions, and Activities of DIO-iDEX:**

The establishment of Defence Innovation Fund (DIF) and iDEX is aimed at creation of an ecosystem to foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, start-ups, individual innovators, R&D institutes and academia and provide them grants/funding and other support to carry out R&D development which has good potential for future adoption for Indian defence and aerospace needs. The core objectives of setting up the Defence Innovation Fund are to:

1. Facilitate rapid development of new, indigenized, and innovative technologies for the Indian defence and aerospace sector, to meet needs for these sectors in shorter timelines.
2. Create a culture of engagement with innovative startups, to encourage co-creation for defence and aerospace sectors.
3. Empower a culture of technology co-creation and co-innovation within the defence and aerospace sectors.

Adoption of innovation requires execution of three critical functions:

1. Co-Innovation/co-creation: Discovery and exploration of existing technologies, or development of relevant technologies.
2. Piloting of candidate technologies in important platforms, with quick feedback to the innovators.
3. Indigenization of various defence and aerospace related platforms being manufactured in the country based on ToT.

The iDEX structure will need to perform all these three functions, in partnership with other competent stakeholders. iDEX will function as the executive arm of DIO, carrying out all the required activities. To execute the above functions, the iDEX team will undertake the following activities:

- a) Setting up and managing of the iDEX network in form of Independent Defence Innovation Hubs.
- b) Communicate with innovators/startups through the Defence Innovation Hubs regarding defence and aerospace needs.
- c) Organizing various challenges/hackathons to shortlist potential technologies for defence and aerospace use.

- d) Evaluate technologies and products coming from innovators/startups in terms of their utility and impact on the Indian defence and aerospace setup.
- e) Enable and fund pilots, using innovation funds dedicated to the purpose.
- f) Interface with the military (Army/Navy/Air force) top brass about key innovative technologies and encourage their adoption into the defence establishment with suitable assistance (financial if required).
- g) Facilitate scale-up, indigenization and integration in manufacturing facilities for successfully piloted technologies.

The Defence Innovation Organization with its iDEX team will enable creation of channels for innovators to engage and interact with the Indian defence production industry. The long term effect to be realized by the group is establishment of a culture, where enlisting the effort of innovators by the Indian military is commonplace and frequent.

#### Composition of iDEX:

1. Tech experts - The iDEX will create a roster of experts in core areas and engage them as per the requirement of Defence Innovation Hubs.
2. Tech deployment experts - Deployment of technologies is a growing discipline, with individuals who understand the dynamics of integrating tech in complex institutions and environments. These will include system integrators, user interface experts, design experts, etc.
3. Innovation stakeholders - Co-creation and adoption of innovation are now an advanced discipline and require specialized skills. Experts with these skills will be an integral part of the team, to be able to successfully connect tech. innovators and users in the armed forces.

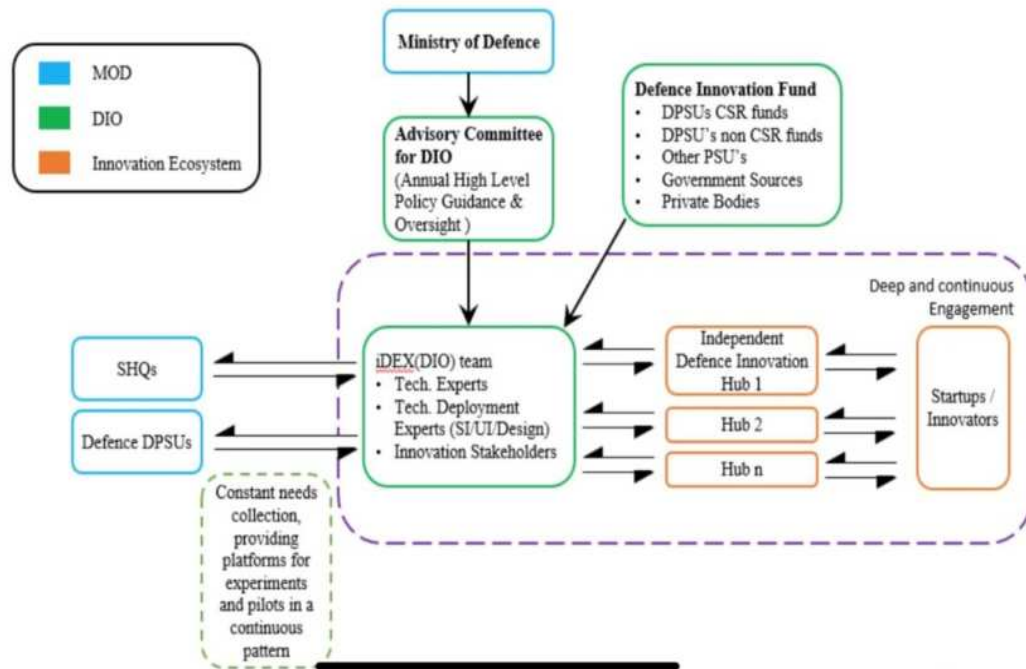
#### Constitution of the DIO:

- a) Secretary (Defence Production) : Chairman
- b) Secretary (R&D) : Member
- c) Secretary (Def Fin) : Member
- d) Additional Secretary (Defence) : Member
- e) VCOAS : Member
- f) VCAS : Member
- g) VCNS : Member
- h) CISC : Member
- i) Representative, HAL : Member
- j) Representative, BEL : Member
- k) Representative, OtherDPSUs/OFB : Member
- l) CEO, iDEX : CEO, DIO
- m) Representative, Dept of Science & Technology : Member
- n) Representative, DIPP : Member
- o) Representative, Atal Innovation Mission/ NITI Aayog : Member

The main functions of the DIO will be:

- Receive periodic reports from iDEX team on the projects.
- Provide high level policy guidance regarding the effort's direction and execution.

#### STRUCTURE OF DIO (iDEX):



#### Defence India Start Up Challenge:

Taking the iDEX initiative further, Defence India Startup Challenge has been launched by Ministry in partnership with Atal Innovation Mission, aimed at supporting Startups/MSMEs/Innovators to create prototypes and/or commercialize products/solutions in the area of National Defence and Security. The vision of the Challenge is two-fold:

- i. Help create functional prototypes of products/technologies relevant for national security (prototyping), and spur fast-moving innovation in the India defence sector;
- ii. Help new tech products/technologies find a market and early customer (commercialization) in the form of the Indian Defence Establishment.

#### Who can apply:

- i. Start-ups, as defined and recognized by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India.
- ii. Any Indian company incorporated under the Companies Act 1956/2013, primarily a Micro, Small and Medium Enterprises (MSME) as defined in the MSME Act, 2006.
- iii. Individual innovators are also encouraged to apply (research & academic institutions can use this category to apply).

#### Support to selected applications in the Challenge:

The selected applications will be funded up to Rs. 1.5 crores in the form of equity/other relevant structures. The funds will be disbursed in tranches based on the milestones decided by a high-powered selection committee.

Apart from the fund, selected applicants may also be given entry to accelerator programs run by iDEX partners, where they will be supported in technology and business development through mentorship under the innovation and entrepreneurship experts. The selected applicants may also be supported in terms of access to defence testing facilities and experts for their product/technology development.

#### Eligible expenditure for grant money under the Challenge:

Since the focus of the program is to facilitate creating of prototypes and bringing of products/technologies to market (defence or otherwise), applicants will be encouraged to spend on:

- a) Research & Development
- b) Prototyping
- c) Pilot Implementation
- d) Market Assessment

#### **LIST OF GOVERNMENT SCHEMES APPLICABLE FOR DEFENCE START-UPS:**

- Modified Special Incentive Package Scheme (M-SIPS) - Headed By: Department of Electronics and Information Technology (DeitY)
- NewGen Innovation and Entrepreneurship Development Centre (NewGen IEDC) - Headed By: NewGen Innovation and Entrepreneurship Development Centre (NewGen IEDC)
- Atal Incubation Centres (AIC) - Headed By: Atal Innovation Mission (AIM)
- Atal Tinkering Laboratories (ATL) - Headed By: Atal Innovation Mission
- Scale-up Support to Establishing Incubation Centres - Headed By: NITI Aayog
- Enhancement of Competitiveness in the Indian Capital Goods Sector - Headed By: Department of Heavy Industries (DHI)
- Assistance to Professional Bodies & Seminars/Symposia - Headed By: Science and Engineering Research Board (SERB)
- High Risk-High Reward Research - Headed By: Science and Engineering Research Board (SERB)
- Technology Development Programme (TDP) - Headed By: Science and Engineering Research Board (SERB)
- National Science & Technology Management Information System (NSTMIS) - Headed By: Science and Engineering Research Board (SERB)
- Extra Mural Research Funding- Headed By: Science and Engineering Research Board (SERB)

Few defence start-ups which are recognised by the forces and are active in the production for assistance to defence and security forces are -

- Aadyah Aerospace is one of the defence startup which builds electro-mechanical actuators, control actuation systems and electro-optics systems for missiles and launch vehicles.
- According to International laws, India's maritime forces have to monitor some 1.67 lakh sq km — the size of Andhra Pradesh state. Pruthvi, developed by Saankhya Labs, helps the small and big vessels in the Indian waters regarding real-time monitoring, tracking and reporting. This is done through a Pruthvipowered system installed in the boats for monitoring purposes.
- Other start-ups like Samhams Technologies, Idea Forge and Omnipresent Robotics are also exploring the sector by creating better quality drones that could be used even in clouds and fog.
- Axiostat is a sterile, single-use haemostatic dressing intended to be used for temporary control of moderate to severe bleeding wounds due to on-field injury. Made of 100 per cent Chitosan Haemostatic bandage, the product has been supplied to close to 100 battalions in India alone.
- With the advancement of cyber technology and use of technology, it appears that the third world war will be fought in cyberspace and not on the field. To counter the hackers and surveillance by hostile countries, Tarun Wig and Abhishek Sharma co-founded Innefu Labs which takes care of the cyber-space security of the Defence systems. Innefu Labs is in the process of making a customized product for the government and BSF (Border Security Force) by the name 'Prophecy Octopus'. This product is built on Palantir's model. It works on artificial intelligence and use that data to predict any mishap that could happen in the near future to the client. It analyse the behaviour of the consumers, form a pattern and then work on what should be worked upon.