

ITU –IPR Overview

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ITU- IPR Overview

PATENTS - POLICY, GUIDELINES AND FORMS FOR ITU-T/ITU-R/ISO/IEC

- Common Patent Policy for ITU-T/ITU-R/ISO/IEC
- Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC (applicable as from 2 November 2018)
- Patent Statement and Licensing Declaration form (2 November 2018)
- General Patent Statement and Licensing Declaration form (26 June 2015)
- Record of revisions to the Patent Policy, the Forms and the Guidelines (2 November 2018)

GUIDELINES RELATED TO THE INCORPORATION OF TRADEMARKS

ITU-T Guidelines related to the inclusion of Marks in ITU-T Recommendations

PUBLICATION ON STANDARD ESSENTIAL PATENTS

Understanding patents, competition and standardization in an interconnected world

ITU-T Guidelines related to the inclusion of Marks in ITU-T Recommendations

- ITU Software Copyright Guidelines (applicable as from 13 April 2012)
- Software Copyright Statement and Licensing Declaration form
- Record of revisions to the Software Copyright Guidelines(13 April 2012)

PATENTS - POLICY, GUIDELINES AND FORMS FOR ITU-T/ITU-R/ISO/IEC

- **Common Patent Policy for ITU-T/ITU-R/ISO/IEC**
- "code of practice"
 - Patents covering, in varying degrees,
 - The subject matters of ITU T Recommendations,
 - ITU-R Recommendations,
 - ISO (International Organization for Standardization) deliverables and IEC (International Electrotechnical Commission deliverables
 - (for the purpose of this document, ITU-T and ITU-R Recommendations are referred to as “Recommendations”, ISO deliverables and IEC deliverables are referred to as “Deliverables”).
- Recommendations | Deliverables are non-binding; their objective is to ensure compatibility of technologies and systems on a worldwide basis. To meet this objective, which is in the common interests of all those participating, it must be ensured that Recommendations | Deliverables, their applications, use, etc. are accessible to everybody.
- It follows, therefore, that a patent embodied fully or partly in a Recommendation | Deliverable must be accessible to everybody without undue constraints. To meet this requirement in general is the sole objective of the code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are left to the parties concerned, as these arrangements might differ from case to case.

- This code of practice may be summarized as follows:
- 1. The ITU Telecommunication Standardization Bureau (TSB), the ITU Radiocommunication Bureau (BR) and the offices of the CEOs of ISO and IEC are not in a position to give authoritative or comprehensive information about evidence, validity or scope of patents or similar rights, but it is desirable that the fullest available information should be disclosed. Therefore, any party participating in the work of ITU, ISO or IEC should, from the outset, draw the attention of the Director of ITU-TSB, the Director of ITU-BR, or the offices of the CEOs of ISO or IEC, respectively, to any known patent or to any known pending patent application, either their own or of other organizations, although ITU, ISO or IEC are unable to verify the validity of any such information.
- 2. If a Recommendation | Deliverable is developed and such information as referred to in paragraph 1 has been disclosed, three different situations may arise:
- 2.1 The patent holder is willing to negotiate licences free of charge with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.
- 2.2 The patent holder is willing to negotiate licences with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.
- 2.3 The patent holder is not willing to comply with the provisions of either paragraph 2.1 or paragraph 2.2; in such case, the Recommendation | Deliverable shall not include provisions depending on the patent.
- 3. Whatever case applies (2.1, 2.2 or 2.3), the patent holder has to provide a written statement to be filed at ITU-TSB, ITU-BR or the offices of the CEOs of ISO or IEC, respectively, using the appropriate "Patent Statement and Licensing Declaration" form. This statement must not include additional provisions, conditions, or any other exclusion clauses in excess of what is provided for each case in the corresponding boxes of the form.

- **Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC (2/11/2018) (3rd version)**
- The Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC are intended to clarify and facilitate implementation of the Patent Policy, a copy of which can be found in Annex 1 and also on the web site of each Organization.
- The Patent Policy encourages the early disclosure and identification of Patents that may relate to Recommendations | Deliverables under development. In doing so, greater efficiency in standards development is possible and potential patent rights problems can be avoided.
- Part I – Common guidelines
 - 1 Purpose
 - 2 Explanation of terms
 - 3 Patent disclosure .
 - 4 Patent Statement and Licensing Declaration Form
 - 4.1 The purpose of the Declaration Form
 - 4.2 Contact information.
 - 5 Conduct of meetings
 - 6 Patent Information database
 - 7 Assignment or Transfer of Patent Rights.
- Part II – Organization-specific provisions
 - II.1 Specific provisions for ITU
 - II.2 Specific provisions for ISO and IEC .
- ANNEX 1: COMMON PATENT POLICY FOR ITU-T/ITU-R/ISO/IEC
- ANNEX 2: PATENT STATEMENT AND LICENSING DECLARATION FORM FOR ITU-T OR ITU-R RECOMMENDATION | ISO OR IEC DELIVERABLE
- ANNEX 3: GENERAL PATENT STATEMENT AND LICENSING DECLARATION FORM FOR ITU- T OR ITU-R RECOMMENDATION

- Part I – Common guidelines
- 1 Purpose
 - The purpose being to provide in simple words practical guidance to the participants in their Technical Bodies in case patent rights matters arise.
 - "Patent Policy" was drafted in its operative part as a checklist, covering the three different cases which may arise if a Recommendation | Deliverable requires licences for Patents to be practiced or implemented, fully or partly.
 - Intended to clarify and facilitate implementation of the Patent Policy in Annex 1
 - Encourages the early disclosure and identification of Patents that may relate to Recommendations | Deliverables under development- greater efficiency in standards development is possible and potential patent rights problems can be avoided.
 - The Organizations should not be involved in evaluating patent relevance or essentiality with regards to Recommendations | Deliverables, interfere with licensing negotiations, or engage in settling disputes on Patents; this should be left - as in the past - to the parties concerned.
- 2 Explanation of terms
 - Free of Charge: The words "Free of Charge" do not mean that the Patent Holder is waiving all of its rights with respect to the Patent. Rather, "Free of Charge" refers to the issue of monetary compensation; i.e., that the Patent Holder will not seek any monetary compensation as part of the licensing arrangement (whether such compensation is called a royalty, a one-time licensing fee, etc.).
 - Patent: The word "Patent" means those claims contained in and identified by patents, utility models and other similar statutory rights based on inventions (including applications for any of these) solely to the extent that any such claims are essential to the implementation of a Recommendation | Deliverable. Essential patents are patents that would be required to implement a specific Recommendation | Deliverable.
 - Patent Holder: Person or entity that owns, controls and/or has the ability to license Patents.
 - Reciprocity: The word "Reciprocity" means that the Patent Holder shall only be required to license any prospective licensee if such prospective licensee will commit to license its Patent(s) for implementation of the same relevant Recommendation | Deliverable Free of Charge or under reasonable terms and conditions.

- 3 Patent disclosure
 - As mandated by the Patent Policy in its paragraph 1, any party participating¹ in the work of the Organizations should, from the outset, draw their attention to any known Patent or to any known pending Patent application, either its own or that of other organizations.
 - In addition to the above, any party not participating in Technical Bodies may draw the attention of the Organizations to any known Patent, either their own and/or of any third-party.
 - When disclosing their own Patents, Patent Holders have to use the Patent Statement and Licensing Declaration Form (referred to as the "Declaration Form") as stated in Section 4 of these Guidelines.
 - The Patent Policy and these Guidelines also apply to any Patent disclosed or drawn to the attention of the Organizations subsequent to the approval of a Recommendation | Deliverable.

- 4 Patent Statement and Licensing Declaration Form

- 4.1 The purpose of the Declaration Form
 - To provide clear information in the Patent Information databases of each Organization, Patent Holders have to use the Declaration Form, which is available on the web site of each Organization (the Declaration Form is included in Annex 2 for information purposes). The purpose of the Declaration Form is to ensure a standardized submission to the respective Organizations of the declarations being made by Patent Holders.
 - The Declaration Form gives Patent Holders the means of making a licensing declaration relative to rights in Patents required for implementation of a specific Recommendation | Deliverable. Specifically, by submitting this Declaration Form the submitting party declares its willingness to license (by selecting option 1 or 2 on the Form) /or its unwillingness to license (by selecting option 3 on the Form), according to the Patent Policy, Patents held by it and whose licence would be required to practice or implement part(s) or all of a specific Recommendation | Deliverable.
 - The licensing declaration contained in the Declaration Form remains in force unless it is superseded by another Declaration Form containing more favourable licensing terms and conditions from a licensee's perspective reflecting (a) a change in commitment from option 3 to either option 1 or option 2, (b) a change in commitment from option 2 to option 1 or (c) un-checking one or more sub-options contained within option 1 or 2.

- 6 Patent Information database
 - PID are not certified to be either accurate or complete- reflect the information - communicated to the Organizations. PID may be viewed as simply raising a flag to alert users that they may wish to contact the entities who have communicated Declaration Forms to the Organizations in order to determine if patent licenses must be obtained for use or implementation of a particular Recommendation | Deliverable.
- 7 Assignment or Transfer of Patent Right
 - (see Annexes 2 and 3). By complying with these rules, the Patent Holder has discharged in full all of its obligations and liability with regards to the licensing commitments after the transfer or assignment. These rules are not intended to place any duty on the Patent Holder to compel compliance with the licensing commitment by the assignee or transferee after the transfer occurs.
- Part II – Organization-specific provision
- II.1 Specific provisions for ITU
- ITU-1 General Patent Statement and Licensing Declaration Form
 - Purpose is to give Patent Holders the voluntary option of making a general licensing declaration relative to material protected by Patents contained in any of their Contributions. Specifically, by submitting its form, the Patent Holder declares its willingness to license its Patents.
 - "ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.
- II.2 Specific provisions for ISO and IEC
- ISO/IEC-1 Consultations on draft Deliverables
 - "Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO [and/or] IEC shall not be held responsible for identifying any or all such patent rights.“
 - The holder of this patent right has assured the ISO [and/or] IEC that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ISO [and/or] IEC.
 - ISO/IEC - 3 National Adoptions- no conflict

Annex I, II, III

see PDF file

Guidelines for Implementation of the Common
Patent Policy for ITU-TITU-RISOIEC

PUBLICATION ON STANDARD ESSENTIAL PATENTS

- Standards for the measurement of time, distance and weight were among the first types of standards created, but as humankind has advanced, so has standardization.
- Standards today underpin interconnection, interoperability and the exchange of data such as images and video; they are critical to the functionality of computers, tablets, phones and other ubiquitous information and communication technologies (ICTs).
- International standardization has ensured that modern mobile phones, tablets and other devices are able to create and view interactive Web content using telephone and data networks almost anywhere in the world.
- This cycle – innovate, standardize, innovate, standardize, innovate, standardize – is continuous. – makes it clear that a synergy exists among standards, innovation, and intellectual property. This cycle is not immune to abuse. Opportunities remain for some to upset the cycle in favour of their own interests; however, when properly managed, this cycle of technological progress benefits us all.
- Part I, a good understanding of:
 - – The purpose and impact of standardization in the ICT industry and global economy;
 - – The general taxonomy of standards and standards-setting entities;
 - – The general principles governing standardization processes; and
 - – The possible advantages and disadvantages of technical standardization.

- The types of standards and their increasing importance
 - Vocabulary standards cover glossaries and definitions of terms
 - Measurement standards, as their name suggests, address definitions of measure : length as metre (m), mass as kilogram (kg), time as second (s), electric current as ampere (A), temperature as Kelvin (K), substance as mole (mol) and luminous intensity as candela (cd).
 - Safety standards are standards designed to ensure the safety of products, activities or processes.
 - Management standards cover a diverse range of standards and techniques including inventory management, production management, banking transaction documentation, information technology, logistics, quality management systems and environmental management systems.
 - Product standards
 - Technical standards

How many interoperability standards in a laptop?

A recent empirical study identified 251 technical interoperability standards in a modern laptop computer, and estimated that the total number of standards relevant to such a device is much higher.

Biddle, B., White, A., & Woods, S., How Many Standards in a Laptop? (And Other Empirical Questions). Proceedings of the 2010 ITU-T Kaleidoscope Academic Conference, Pune, India, 13-15 December 2010

Many standards — many standards-setting entities

Modern communications services, and associated devices and equipment, seldom rely on one single standard to satisfy end users' needs. They often depend on dozens if not hundreds of different standards, some of which address very specific technical aspects while others specify broader solutions or systems. These standards often originate from a wide array of standards-setting entities.

Take for example your smartphone. ITU's standardization arm (ITU-T) develops the 'codecs' that provide voice and video, also enabling mobile backhaul with optical transport standards. ITU's radiocommunication arm (ITU-R) manages the radio-frequency spectrum in which it operates. The Third Generation Partnership Project (3GPP) develops standards for the radiocommunications between smartphone and network. The Institute of Electrical and Electronics Engineers (IEEE) develops 'Wi-Fi' standards.* The Internet Engineering Task Force (IETF) maintains the Internet Protocol suite (TCP/IP) and Hypertext Transfer Protocol (HTTP). The World Wide Web Consortium (W3C) is responsible for Hypertext Markup Language (HTML) and Extensible Markup Language (XML), and this is just a sample of the many standards bodies and standards involved.

* Formally, this is called the IEEE 802.11 series of standards. The popular 'Wi-Fi' term was introduced by the Wi-Fi Alliance, an organization that performs interoperability certification and related standardization activities.

Table 3-1 – Different standards-setting entities and their resulting standards

Standards-setting entity	Produces	Examples
Single companies	'Proprietary specifications'.	Standards that evolve from a specific company or vendor.
Formal standards-developing organizations (SDOs)	'Open standards' ¹³ (which can become 'de jure standards' if their implementation is mandated by law).	ITU, ISO, IEC, ETSI, various national standards bodies, etc.
Forums and consortia (quasi-formal SDOs)	Typically, open standards, but may produce closed standards, depending on the organization in question.	IETF, Broadband Forum, W3C, Bluetooth consortium, OASIS, etc.

Fostering development through international standards

“International standards bodies such as ISO, IEC and ITU provide cohesion to a myriad of national and regional standards, thereby harmonizing global best practices, eliminating technical barriers to trade and fostering shared socio-economic advance.”

Message by Klaus Wucherer (President of IEC), Terry Hill (President of ISO) and Hamadoun I. Touré (Secretary-General of ITU), on the occasion of World Standards Day 2013, India, 13-15 December 2010

Transparency and openness

“Standards should be set and adopted in an open and transparent manner at all times. This prevents established players from manipulating the process to keep innovative companies and their technologies on the side-lines. A process that arbitrarily keeps some parties outside may unfairly benefit those that are on the inside. This is especially important in those industries where standards are urgently needed – such as for digital and Internet services.”

Joaquín Almunia, Vice President of the European Commission responsible for Competition Policy, speaking at the International Bar Association Antitrust Conference in Madrid, 15 June 2012, European Commission - SPEECH/12/453.2010

Core principles governing formal standardization processes

- Consensus:
- Transparency:
- Balance:
- Due process:
- Openness:
- **The World Trade Organization's Committee on Technical Barriers to Trade subscribes to these principles**
 - Impartiality:
 - Effectiveness and relevance:
 - Coherence:
 - Development dimension:

Examples of international SDOs (Standards Developing Organizations) and consortia and their standards of relevance to ICTs

Standards body	Type	Technology focus	Notable standards	Standards body	Type	Technology focus	Notable standards
International Organization for Standardization (ISO)	Formal SDO	All technological areas, including but not limited to ICT	ISO 9660 (CD File System); ISO 5800 (photographic film speed); ISO/IEC 11172, 13818 and 14496 MPEG suite; ISO 3166 Country codes; ISO 9000 Quality management; ISO 14000 Environmental management	International Telecommunication Union (ITU)	Formal SDO	Telecommunications ^b	ITU-T E.164 Numbering Plan; xDSL standards for Internet access over copper; Passive optical networks (PONs) for fibre-to-the-home (FTTH) Internet; Synchronous Digital Hierarchy (SDH); Optical Transport Network (OTN); Fax machines (ITU-T T.30 and ITU-T T.4); Video codecs (ITU-T H.264 AVC and ITU-T H.265 HEVC, developed with ISO/IEC MPEG)
International Electrotechnical Commission (IEC)	Formal SDO	Electrical, electronic and related technologies ^a	ISO/IEC 11172, 13818 and 14496 MPEG suite IEC 62196 for plugs and charging modes for electric vehicles	European Telecommunications Standards Institute (ETSI)	Formal SDO	Telecommunications ^c	Various mobile standards including 2G GSM, 3G UMTS/W-CDMA, 4G LTE; ^d Cordless telephony: DECT; Safety communications: TETRA; Car safety: eCall
				Institute of Electrical and Electronics Engineers (IEEE)	Formal SDO	Wide range of electro-technical areas ^e	IEEE 802.3 Ethernet; IEEE 802.11 Wireless Networking ('Wi-Fi'); IEEE 1394 'Firewire'; IEEE 802.15.1 'Bluetooth'; ^f IEEE 802.16 'WiMax' wireless networking; IEEE 802.15.4 'ZigBee' standard for low-distance, low-power communications
				Internet Engineering Task Force (IETF)	Consortium (quasi-formal SDO)	Internet protocols	Internet Protocol suite (TCP/IP); Hypertext transfer protocol (HTTP)
				World Wide Web Consortium (W3C)	Consortium (quasi-formal SDO)	Web-related standards ^h	Hypertext Markup Language (HTML); Extensible Markup Language (XML)
				Organization for the Advancement of Structured Information Standards (OASIS)	Consortium (quasi-formal SDO)	Standards for e-business and Web services	Common Alerting Protocol (CAP); Content Management Interoperability Services (CMIS); Electronic Business using XML (ebXML); Key Management Interoperability Protocol (KMIP); OpenDocument ⁱ

Overview of possible advantages and disadvantages of standards

Possible advantages of standards	Possible disadvantages of standards
Encourage innovation and competition • More suppliers; lower risk for one-supplier dominated markets • More competition later in product lifecycle • Lower prices • Increased network value for users; greater offer and lower prices of complementary goods • Lower switching costs • Less risk of 'tying' • Easier evaluation of offerings • Easier communication between actors	Transfer power to participants in the standardization process • Less diversity between technical approaches, particularly early in product lifecycle • Biased to large vendors • Biased to large purchasers • Higher costs associated with gateways
Facilitate interoperability • Easier combination of products or services • Reduces risk of choosing a future loser • Easier interchangeability of products or services • Facilitates certification	Protect markets by obstructing their access Hamper competition through a reluctance to adopt new or improved standards • Limiting performance or functionality
Increase cost efficiency • R&D resources are combined • Less duplicity	Loss of variety • Fewer products optimized for niche user groups, users with disabilities, etc.
Promote national development • Facilitates market liberalization • Opens access to international markets	

Part II – General concepts of patent law and competition law

- The patent system rewards creativity, and patents can be used as a measure of the rate of innovation or knowledge accumulation. Inventions that meet the requirements of patentability are granted a temporary monopoly by giving innovators the right to exclude others from adopting and profiting from their inventions. In parallel, the publication of patents and patent applications are marks of the creation and further dissemination of new knowledge.³⁴ The patent system of today faces major challenges rooted in the proliferation of patents and its effects on backlog and uncertainty, the quality of patent searches and examinations, and certain strategic behaviour by patent owners.
- Competition law discourages collusive or monopolistic market behaviour that adversely affects competition and innovation. Competition law encourages innovation by prohibiting market behaviour ('conduct') that restricts access to a market or otherwise negatively affects domestic or international trade. Competition law is built on three pillars: (1) prohibiting agreements, collaborations or practices between market players which may restrict free trading or competition between businesses; (2) prohibiting abusive conduct by a dominant market player; and (3) monitoring market concentration and mergers.

- In situations where an agreed standard comes to dominate a market as a result of its widespread adoption, such an agreement would not raise concerns around threats to competition if the following non-exhaustive benchmarks are met:
 - Participation in the standards-development process is unrestricted, with all interested competitors being allowed to participate in the process that leads to the agreement of standards
 - The procedure to agree or approve standards is transparent and, if possible, selected according to objective criteria
 - Standardization agreements do not create any obligation to comply with a standard and all participants and implementers remain free to develop and/or use alternative standards
 - The standard remains accessible to every implementer on royalty-free or otherwise reasonable and non-discriminatory (RAND) terms. This is usually stipulated by an SDO's 'IPR or patent policy', which will require that patent owners wishing to have their patents included in a standard make irrevocable commitments, prior to the agreement or approval of a standard, that they will grant third parties licences to the patents in question on RAND terms

Antitrust guidelines in formal SDOs

To prevent their members from violating competition law, many SDOs and consortia have published guidelines or handbooks that inform their participants of the behaviour allowed or not allowed in their standards-setting activities. The ETSI Guidelines for Antitrust Compliance, for instance, include the following text: ⁵⁶

'Discussions, communications or any other exchange of information in all ETSI meetings, on the edge of all ETSI meetings (e.g.: informal discussions, social gatherings, corridor talks etc.) as well as during any activity in ETSI should not have as their subject matter the following topics, discussion of which (among other things) is prohibited by competition law:

- *pricing strategies or product pricing,*
- *terms and conditions of sale including discounts and allowances, credit terms, etc.*
- *production levels or capacity,*
- *limitation of technical development or investment,*
- *allocation of sales territories, markets or customers,*
- *market shares,*
- *submitted bids or intentions to bid,*
- *preventing anybody from gaining access to any market or customer for goods and services,*
- *refusals to deal or do business with competitors, vendors or suppliers and*
- *ongoing litigation or threatened litigation.*

Even the appearance of any discussion, communication or exchange of information that appears to be leading to restraints on competition of any kind should be carefully avoided.'

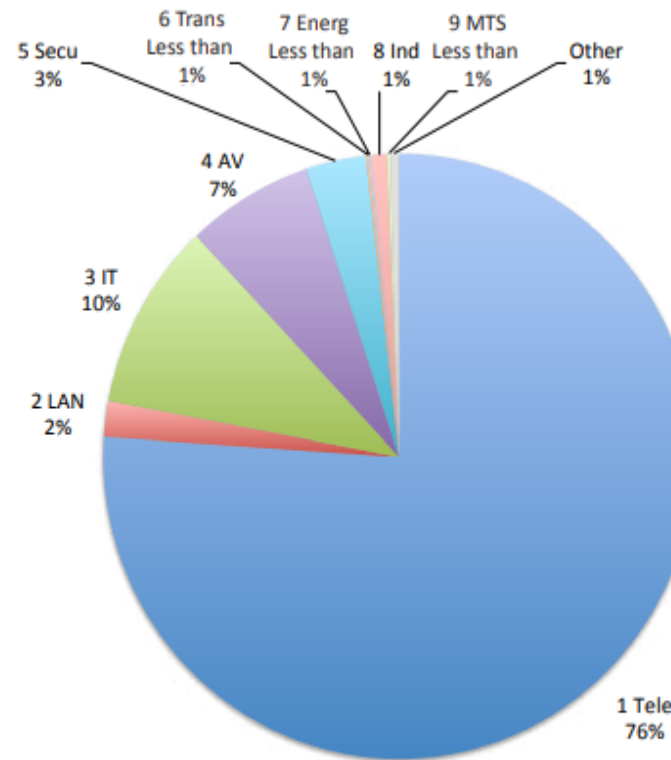
Interplay between patent law and competition law

- At first glance, it might appear that patent law and competition law are at cross-purposes. Intellectual property laws protect the exclusive rights of an innovator to the benefits stemming from an invention. Patent law can thus pose legal barriers to third parties' use of protected inventions and, in this sense, intellectual property rights can serve to restrict free-market competition.
- Intellectual property law and competition law share the aim of creating a regulatory environment that promotes innovation and economic development, rewarding innovators and protecting market competition.
- **The intersection of patent law, competition law and the standardization ecosystem results in the collision of arguably very different concepts:**
 - Standards are developed through the collaboration of technical experts, often representing competing commercial interests, to address marketplace needs such as interoperability or data exchange.
 - Patent law grants innovators sole rights to benefit from their inventions for a limited period of time, seeking to preserve incentive for companies to invest in the research and development (R&D) that results in innovation by providing an assurance that such investment will yield fair return.
 - Competition law is designed to protect marketplace competition and is thus closely related to patents and standards in that both instruments affect competition in a variety of ways.

The challenging relationship between patents and standards

- The complex relationship between patents and standards is the subject of heated debate worldwide. Although the patent and standardization systems both aim to support and incentivize innovation and technological progress, the intersection of these two mechanisms may give rise to various tensions and conflicts. The standardization system is based on the assumption of commonalities, creating an even playing field for competition by granting stakeholders equal access to innovative solutions. Conversely, the patent system is based on the award of temporary monopolies borne of IPR holders' ability to exclude others from implementing protected technologies. The contrasting principles of the inclusivity of standards and exclusivity of IPR do not meet without complexity.
- A standard-essential patent (SEP) is one that is indispensable to the implementation of a standard

Figure 8-1 – Disclosed SEPs by technology class⁶⁵



Technology area legend:

1 Tele	Telecommunications via public networks
2 LAN	LAN/PAN/BAN networks, wired and wireless
3 IT	Information technology and Internet
4 AV	Audio/video systems, coding and compression, broadcasting, home systems, home entertainment
5 Secu	Security, identification, cryptography, biometrics
6 Trans	Transport, logistics, aerospace, intelligent transport systems (excl. areas in the above categories)
7 Energ	Energy generation and distribution and storage, fuel cells, power electronics
8 Ind	Industrial equipment, manufacturing, production
9 MTS	Measurement, testing, safety standards, language standards
Other	[A wide variety of topics that do not fit into the above categories]

Table 8-1 – The 24 standards that have 100 or more patent statements⁶⁶

Standard	Description	Total disclosure statements (both specific patent statements and blanket declarations)*
ETSI grouping 3G	Standard for 3G mobile telecommunications, a.k.a. UMTS, W-CDMA and 3GPP ⁶⁷	16007
ETSI grouping 2G	Standard for 2G mobile telecommunications, a.k.a. GSM and DCS-1800 ⁶⁸	7458
ETSI project LTE	Standard for 4G mobile telecommunications	3876
ITU-T H.264 & ISO/IEC JTC1 14496	Standard for video compression, aka MPEG-4 Part 10, Advanced Video Coding. Developed as collaboration between ISO/IEC JTC1 and ITU. Used in many devices including Blu-ray players, game consoles, computer software, etc.	1682
ISO/IEC JTC1 18000	Standard for RFID technologies	1107
IEEE 802.11	Standard for wireless Local Area Networks, popularly known as 'Wi-Fi'	449
ITU-T H.222 & ITU-T H.626 & JTC1 ISO/IEC 13818 and	Standard for video compression, aka MPEG-2. Parts 1 and 2 of MPEG-2 were developed in collaboration with ITU-T. Used in many devices including DVD players, computer software, etc.	381
IEEE 802.16	Standard for wireless Metropolitan Area Networks., popularly known as 'WiMax'	335
ETSI grouping DVB	Standard for digital television broadcast ⁶⁹	270
ITU-T G.992	Standard for ADSL, for delivering internet services to residential homes via telephone cables	229

Table 9-1 shows the licensing commitments called for by the IPR policies of twelve standards bodies.

- IEEE-Institute of Electrical and Electronics Engineers.
- ETSI-The European Telecommunication Standards Institute
- ANSI-American National Standards Institute
- IETF-The Internet Engineering Task Force
- OASIS-The Organization for the Advancement of Structured Information Standards
- VITA-Virginia Information Technologies Agency.
- W3C-World Wide Web Consortium
- NFC Forum-The Near Field Communication

Table 9-1 – Licensing or non-assertion modes explicitly specified by the policy⁷⁷

	ITU/ ISO/IEC	IEEE	ETSI	ANSI	IETF	OASIS	VITA	W3C	HDMI Forum	NFC Forum
F/RAND (may be royalty-bearing)	Yes	Yes	Yes	Yes	(Yes) ^a	Yes	Yes			Yes
RF, F/RAND-RF, or F/RAND on other restricted terms as specified by the policy	Yes	Yes		Yes	Yes	Yes		Yes		Yes
Non-assertion		Yes			Yes	Yes	Yes		Yes	

^{a)} Although royalty-bearing F/RAND is formally an option in the IETF IPR policy, it is uncommon for working groups of this body to agree on standards which include patented technology that is not available on RF terms.

Participation-based IPR policies =Commitment-based IPR policies

Participation-based IPR policies = Commitment-based IPR policies

- Disclosure is important for at least three different reasons:
 - It can serve to ‘trigger’ requests to SEP holders that they make SEP licensing commitment.
 - It ensures that an expert group drafting a standard can make informed decisions regarding the inclusion of patented technologies, judging each case on its own merits.
 - It also yields information of relevance to prospective standards implementers in that SEP disclosures indicate which companies may have SEPs (as some SEP owners typically will seek RAND licenses and others will not, as they may generally use their SEPs for defensive purposes only). This information may be of value in assessing what would be a ‘reasonable’ SEP licensing fee to target in their negotiations with SEP owners.
- Standards bodies’ disclosure rules vary considerably, in line with different approaches to issues such as:
 - The exact situations triggering disclosure obligations.
 - Individuals participating in a standard’s development are often required to disclose the existence of any SEPs of which they have knowledge, regardless of whether or not the owners of those SEPs are participating in a standard’s development (i.e. members of a standards body not participating in the development of a particular standard are in principle not subject to disclosure obligations in relation to that standard). Given the difficulties associated with following all standards being developed in a large standards body, such bodies’ IPR policies usually do not require participants in the specific technical committee to perform patent searches.
 - Exactly what information needs to be provided in SEP disclosures.
 - At which point in the standards development process these disclosures should be made.
 - To whom the disclosed SEP information will be made available

Examples of recent transactions involving large patent portfolios

- 2011: Motorola sells its Motorola Mobility division to Google including a large patent portfolio valued at approx. USD 5.5 billion
- 2011: Nokia sells '2 000+ patents' to Mosaid
- 2011: Nortel Networks sells '6 000 patents and patent applications' to a consortium including Apple, EMC, Ericsson, Microsoft, Research In Motion and Sony, for a total of USD 4.5 billion
- 2012: Interdigital sells 1 700 patents specifically related to 3G, LTE and 802.11 technologies to Intel for USD 375 million
- 2012: Adaptix was sold to Acacia, along with its portfolio of what were believed to be LTE 'essential' patents
- 2012: Eastman Kodak sells its imaging patents portfolio to a consortium led by Intellectual Ventures and RPX Corp for USD 525 million
- 2012: IPWireless sells '500 patents including essential concepts in LTE, LTE-Advanced and 3G/4G technologies' to Intellectual Ventures and NVIDIA
- 2012: Nokia sells '450 patents including 300 SEPs' to Sisvel
- 2012: Nokia sells '500 patents' to Vringo
- 2013: Ericsson sells '2 185 US and international patents and patents pending' to Unwired Planet (formerly Openwave).

ITU-T GUIDELINES RELATED TO THE
INCLUSION OF MARKS IN ITU-T
RECOMMENDATIONS Issue 2.0 – November
2005

- Purpose
 - To provide guidance to ITU-T Study Groups in their consideration of the use of trademarks, service marks and certification marks in ITU-T Recommendations. Included is some general information on the issues to be addressed when considering the use of one or more marks, and some guidance on actions to be taken should the Study Group decide to reference any such marks.
- Trademarks, Service Marks and Certification Marks as Forms of Intellectual Property
 - A “trademark” is any word, name or symbol (or any combination thereof) that is used to distinguish the trademark owner’s products from competing ones, in large measure by serving as an indication of the source of those products.
 - A “service mark” is virtually the same except that it is used to identify the source of services and distinguish the service provider’s services from those of its competitors.
 - A “certification mark” is a mark used by a person or entity other than the owner of the mark. Usually such person or entity seeks to use the mark to indicate that its product or service meets the necessary criteria for which the mark stands.
- It should be noted that statutes and regulations on marks, including trademarks, differ from country to country.
- In the context of ITU-T Recommendations, marks often can be referenced legitimately without acknowledging the mark or seeking prior permission from the mark’s owner. If referenced properly, marks rarely (if ever) will constitute an essential intellectual property right vis-à-vis a Recommendation that would require the ITU or those seeking to implement the Recommendation to obtain a license from the mark’s owner in order to implement the Recommendation. However, certain non-referential uses of a mark may require permission or a license from the mark’s owner.
- A trademark license is generally required when Party A’s mark indicates sponsorship, authorization, certification, approval, or some other association with Party B’s product or service.
 - For example, a license is probably required if Party B’s product displays Party A’s compatibility logo, or if Party B’s product name includes Party A’s trademark. However, if Party B is using Party A’s mark merely to refer descriptively to Party A’s technologies — not Party B’s — then a trademark license is generally not required in connection with such a referential use of the mark. For example, a license is generally not required for Party B to say in advertising text that its product is compatible with Party A’s Widget® software, so long as Party B does not use Party A’s Widget Compatible Logo® to make that statement

Continue

- In any event, confusion should be avoided in the use of a mark. If the intended audience of a document might be confused into thinking that there is an association between a mark and a certain product, service or technology, the use of that mark in that fashion must be reconsidered. Similarly, confusion may stem from the use of a name or an acronym that is similar to an existing mark.
- The primary concern relating to the use of a mark in a Recommendation is whether it would appear as if the Recommendation is endorsing one particular proprietary product or service over competing ones.

SOFTWARE COPYRIGHTS - GUIDELINES AND FORMS

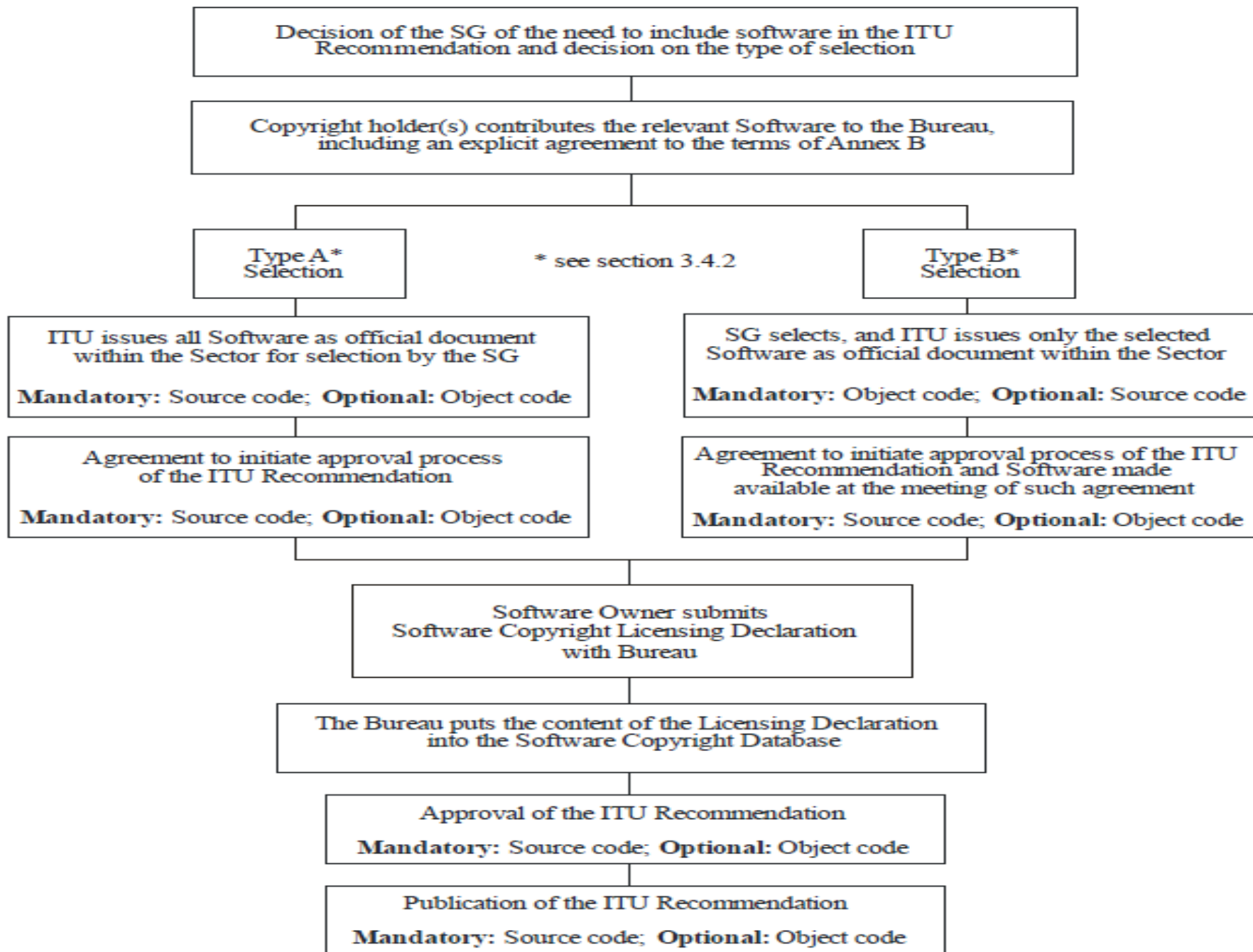
- Background & Purpose
 - The ITU shall make available original Software developed collaboratively as part of the standardization process and/or accept contributions of Software to be included in ITU Recommendations. This Software may serve as a useful tool for evaluation, testing and product implementation purposes, but it shall never be required that the Software be included in any implementation in order for that implementation to conform to the Recommendation.
 - These Guidelines set forth the different scenarios and licensing considerations associated with the inclusion of Software in ITU Recommendations.
 - Clarification that a license for Software that describes data structures, data streams, schema, ASN.1, etc. is not needed, even if an implementer wants to voluntarily include such Software in its implementation. This is also true of Software all of which is originally developed and maintained collaboratively as part of the standardization process to the extent no externally developed Software is included.
 - If an implementer wants to voluntarily include in its implementation Software that is included in a Recommendation, then such implementer should consult the database containing information about submitted Software Copyright Statement and Licensing Declaration forms to ascertain under which option the Software Copyright Holder is willing to provide licenses.
 - All Software included in an ITU Recommendation can be evaluated, and used for evaluation and testing purposes, for free under the prescribed license provided for in Annex B.

- **Definitions**
- Object Code: “Object Code” is a set of instructions in binary form which can be directly run by a computer. Object code is not intended to be human-readable, and generally can be used only on a subset of computers or systems.
- Software
 - A set of instructions written in any programming language (including pseudo code and reference implementations) that either directly, or when further compiled or transformed, could perform a complete function when executed by hardware that manipulates data according to instructions,
 - Data and stream structure definitions, such as ASN.1, TTCN, or XML data representations, and
 - Schema examples, such as SDL diagrams and data flow charts
- Software Copyright Holder
 - “Software Copyright Holder” shall refer to a contributor of Software to an ITU Recommendation.
- **General Rule- Software Copyright issues**
- Software generally should not be included in any ITU Recommendation. Recommendations should provide a description of features from which competing and interoperable implementations can be developed and shall not serve as an endorsement for a particular solution. Because ITU Recommendations often can be written around copyrighted material using performance-based requirements or creating a new expression of the underlying idea within the technical process.
- The only technically appropriate uses are:
 - To enhance the description of functionality required to be implemented in products or services for those products or services to conform to the Recommendation.
 - As an example of how required functionality might be achieved
 - To test an implementation for conformance with the required functionality.
 - To describe data structures, schema, ASN.1, EBNF grammar specifications, etc.

- Study Groups shall not accept Software contributions that, if included in a Recommendation, will require implementers to be subject to a third-party Software license that does not meet the licensing requirements set forth herein. None of the required licenses and licensing commitments set forth in Annexes A (the Software Copyright Statement and Licensing Declaration form), B and C herein shall be modified. If option 3 on the Software Copyright Statement and Licensing Declaration form is selected, then the Software shall not be included in the Recommendation.
- A Software Copyright Holder shall submit a copy of a signed Software Copyright Statement and Licensing Declaration in connection with any contribution of Software before such contribution is included in a Recommendation.
- Software in an approved Recommendation shall be in Source Code. This Source Code shall be written in a standard programming language (e.g., ANSI C) agreed to by the Study Group and shall contain all the files necessary to generate, adapt or modify, install and execute the Software, including the scripts to control those operations.
- Software being included in ITU Recommendations shall be made available for free for implementers for evaluation purposes, and also to describe functionality, serve as an example of how required functionality might be achieved, or to test an implementation for conformance purposes.
- the Software Copyright Holder shall agree to license the copyright in its Software for free under the terms specified in Annex B.
- Software that describes data structures, data streams, schemas, ASN.1, etc
 - This category includes Software such as data structures, data streams, formal description techniques (e.g., ASN.1, GDMO, MSC, SDL, TTCN). The copyright for these is treated in the same way as normal contributed text. Such Software has no restrictions for the purposes of:
 - Permitting the normal distribution of this material for discussions within the appropriate groups and possible use, in whole or in part, in any resulting ITU Recommendations which are published by the ITU, and
 - Permitting implementers to use the material in their implementation free from any copyright assertions.
 - Accordingly, no specific license is needed.

- Software developed collaboratively by the Study Group without contributed code
 - Such Software has no restrictions for the purpose of permitting implementers to use the material in their implementation free from any copyright assertions and can be used in revisions of the specific, original Recommendation and in other ITU Recommendations.
- Software developed collaboratively by the Study Group with contributed code
 - In this situation, the regular contribution process applies. The Software Copyright Holder shall include the following statement in the contribution from the time such Software is first contributed to the Study Group: “The Software Copyright Holder hereby agrees to the terms set forth in Annex B of the Software Copyright Guidelines”. This process shall be followed even if the contribution may subsequently be modified as part of the collaboration process.

Study Group procedures for including software in Recommendations



- Decision to incorporate Software-on whether to incorporate Software in a Recommendation are addressed in Section 2 of these Guidelines
- Selection process-decide whether the selection of the Software for the Recommendation is to be done in a Type A or Type B manner
- Type A selection- all Software, which shall include Source Code, shall be made available to Members for evaluation under the license set forth in Annex B prior to the selection tests. Section 3.5.3 shall apply to such Members.
- Type B selection- no Source Code is made available by the ITU to Members until after the testing is completed, a selection is made, and agreement is reached to initiate the approval process. At this point, the Source Code of the successful candidate shall be made available to Members for evaluation under the license set forth in Annex B. Section 3.5.3 shall apply to such Members.
- Copyright Notices to accompany the Software
 - For all sales and distribution of a Recommendation resulting from this process, the Software, and the relevant copyright notices (as set forth in Annex C) shall be packaged together (e.g., in a zip file). In addition, the ITU shall maintain an on-line Software Copyright and Licensing Declaration database containing the received Declarations by the contributors at <http://itu.int/ipr/>.

Annex A, B & C
see PDF ITU Software guideline