



Welcome to the World of Standards



ETSI – FOUNDATION OF A STANDARD-BASED ECOSYSTEM

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The views expressed are personal to the speaker and do not necessarily represent those of ETSI

INNOVATION, INTELLECTUAL PROPERTY, COMPETITION AND STANDARD SETTING IN THE ICT SECTOR

JIRICO conference, New Delhi, August 20 – 21, 2016

ETSI – Foundation of a Standard-Based Ecosystem



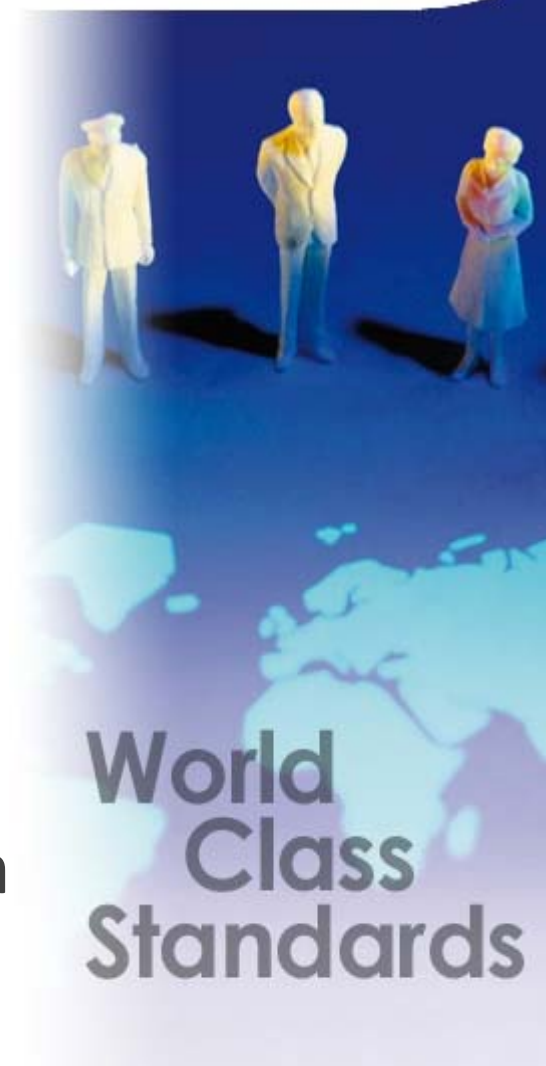
- 🌐 **Standardization**
- 🌐 Decision making in ETSI
- 🌐 Objectives of ETSI's IPR policy
- 🌐 ETSI's IPR policy
- 🌐 New areas



Business considerations



- For-profit organizations prefer monopoly over standard
- Proprietary solution – no need for consensus building
- Economies of scale
- More brain power
- Customer pressure for competition
- Government pressure against lock-in



Some reasons to participate

- 🌐 Ensure interoperability
- 🌐 Drive your technology of choice into the standard
- 🌐 Access to leading-edge ICT knowledge
- 🌐 Opportunities to meet and influence your customers & competitors
- 🌐 Direct insight into critical issues, including regulatory & spectrum matters, and the ability to influence them
- 🌐 Contribute the views of your constituency (e.g. environment, users, social interests, SMEs)



Interests of standard contributors and standard users



Standard contributors

Develop the most suitable standard

Fair and reasonable access to the standard for all interested users

Reward for the investments into developing the standard

Optimum reward

Standard users

Have the most suitable standard available

Fair and reasonable access to the standard for all interested users

Minimum constraints for using the standard

Minimum costs

Contribution of Standardization to GDP



Country	Publisher	Time frame	Growth rate of GDP	Contribution of standards
Germany	DIN (2000)	1960–1996	3,30%	0,90%
France	AFNOR (2009)	1950–2007	3,40%	0,80%
United Kingdom	DTI (2005)	1948–2002	2,50%	0,30%
Canada	Standards Council of Canada (2007)	1981–2004	2,70%	0,20%
Australia	Standards Australia (2006)	1962–2003	3,60%	0,80%

Source: The Economic Benefits of Standardization, DIN, 2011
http://alt.din.de/sixcms_upload/media/2896/GNN_2011_engl_FINAL.pdf

Further information (ISO/IEC)
http://www.standardsinfo.net/info/benefits/benefits_s1.html

Mobile Communication



Mobile connections, including M2M
Aug 2016

7,785,707,832

▲ 4.70%

Unique mobile subscribers
Aug 2016

4,763,050,363

▲ 4.76%

Revenue/year
FY 2015

\$1.06T

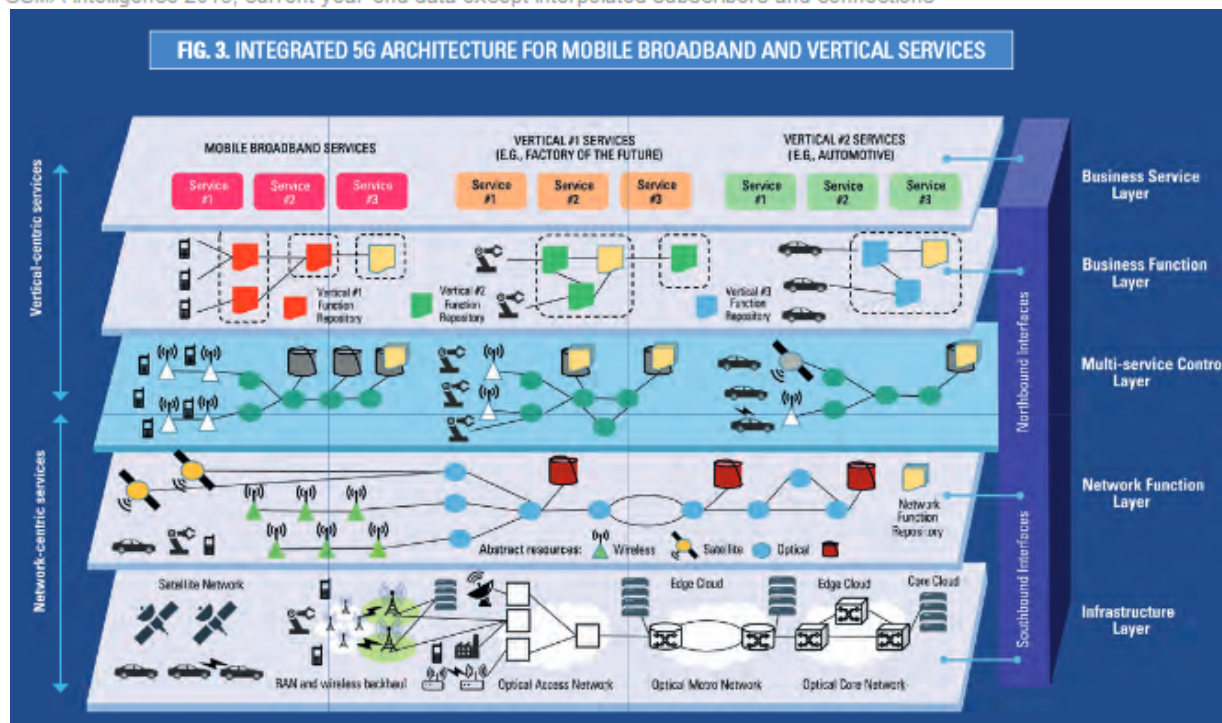
▲ 2.18%

Source: GSMA Intelligence 2016, current year-end data except interpolated subscribers and connections

<https://www.gsmaintelligence.com/>



FIG. 3. INTEGRATED 5G ARCHITECTURE FOR MOBILE BROADBAND AND VERTICAL SERVICES



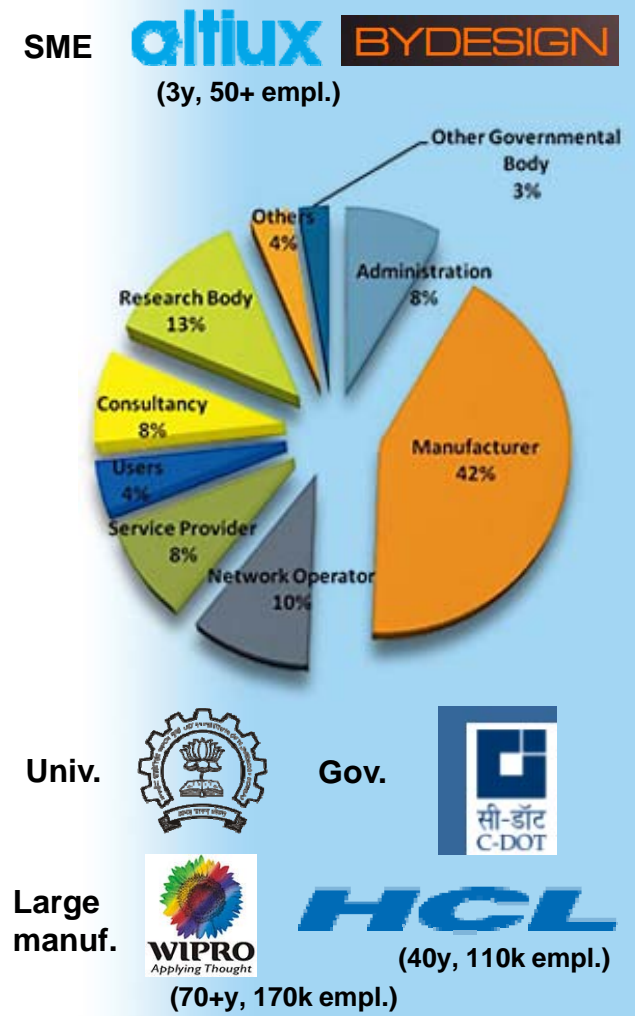
https://5g-ppp.eu/wp-content/uploads/2016/02/BROCHURE_5PPP_BAT2_PL.pdf

ETSI Membership





- 800 members, big and small, from 64 countries on 5 continents
- Manufacturers, network operators, service and content providers, national administrations, ministries, universities, research bodies, consultancies, user and societal organizations

A powerful and dynamic mix of skills, resources and ambitions



ETSI is the home for many diverse technologies



- Mobile Communication (in )
- M2M and IoT (in SmartM2M and )
- E-Accessibility
- DECT
- Smart cards
- Electronic signatures
- Content delivery, e.g. HbbTV
- Speech Quality
- Intelligent Transport
- E-Health
- Public Safety
- Cable Networks
- Network Functions Virtualization
- Mobile Edge Computing
- eCall
- ...



[Annual report](http://www.etsi.org/images/files/AnnualReports/etsi-annual-report-april-2016.pdf) (<http://www.etsi.org/images/files/AnnualReports/etsi-annual-report-april-2016.pdf>)

[Work program](http://www.etsi.org/images/files/WorkProgramme/etsi-work-programme-2016-2017.pdf) (<http://www.etsi.org/images/files/WorkProgramme/etsi-work-programme-2016-2017.pdf>)

Standards for Mobile Communication



7 Organizational Partners (OPs):



- 508 Individual Members (IM) of 3GPP are bound by the IPR policy of the organizational partner through which they participate
- IPR policies of the seven OPs are compatible

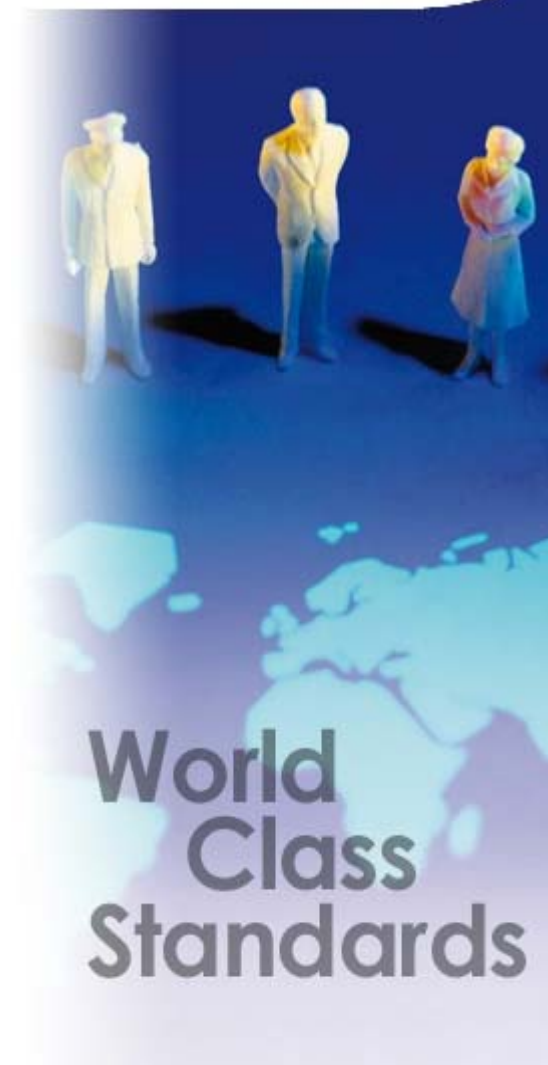
15 IM via TSDSI:



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Decision making in ETSI



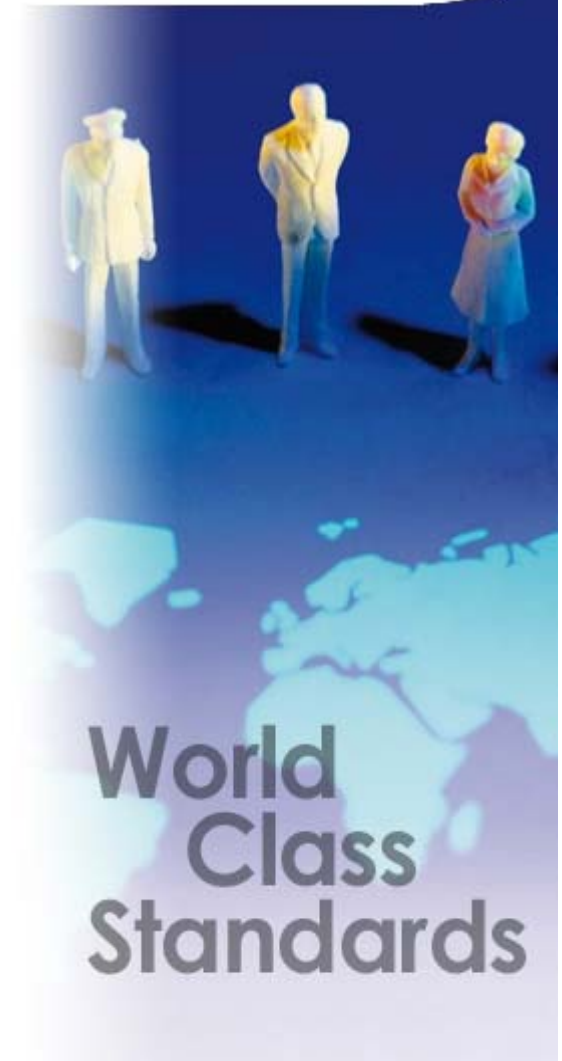
- Consensus is the fundamental principle for any type of decision making in ETSI
- “In all decisions, members shall endeavor to reach Consensus. If *Consensus* cannot be achieved, the Chairman can decide to take a vote.”
- “**Consensus**: General agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interest and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments (see ISO Guide 2:1991).”
- Statutes and Rules of Procedures including the IPR policy of ETSI can only be changed by the membership in the General Assembly by consensus or weighted national voting.



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ETSI's IPR policy objectives, basically unchanged during the past 20+ years



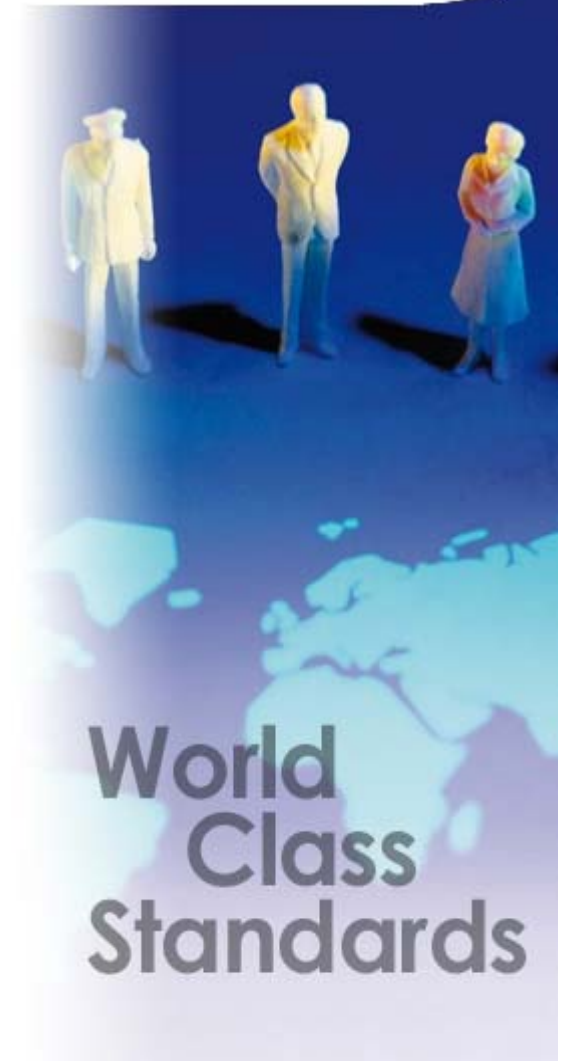
- 3.1 It is ETSI's objective to create STANDARDS and TECHNICAL SPECIFICATIONS that are based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS and TECHNICAL SPECIFICATIONS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
- 3.2 IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS.
- 3.3 ETSI shall take reasonable measures to ensure, as far as possible, that its activities which relate to the preparation, adoption and application of STANDARDS and TECHNICAL SPECIFICATIONS, enable STANDARDS and TECHNICAL SPECIFICATIONS to be available to potential users in accordance with the general principles of standardization.

Source: [ETSI IPR policy http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf](http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf) (emphasis added)

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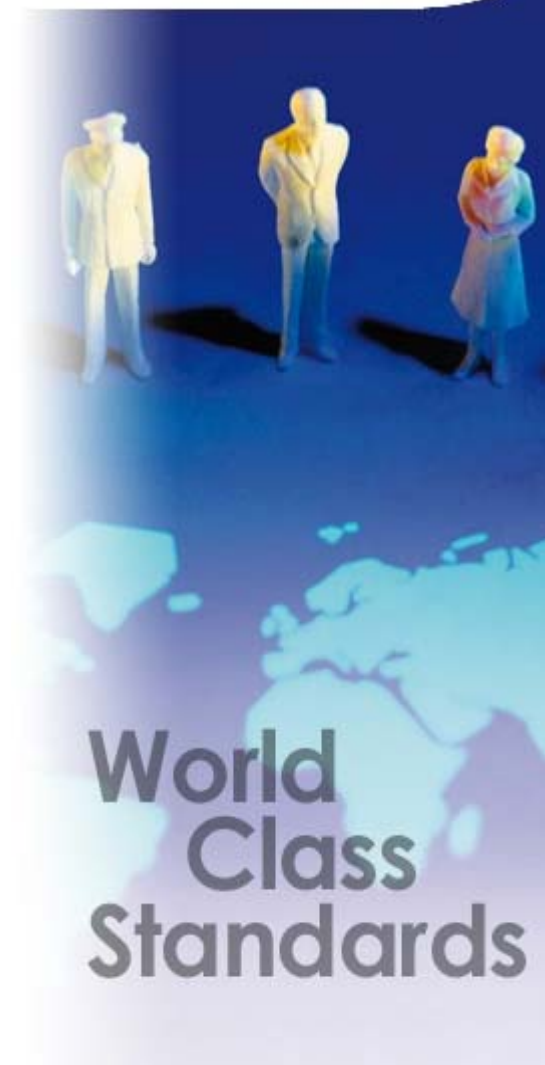


- Focus on the most suitable technology for the standards.
- Early identification and disclosure of essential IPRs, especially in cases where the holder of essential IPR is not prepared to grant licences under FRAND terms and conditions.
- Ensuring the future applicability of the standards in full respect of the rights of the IPR owner by requesting irrevocable FRAND licensing undertaking.
- No involvement of ETSI in any commercial discussion on IPR matters (*i.e.*, terms and conditions of the licenses to be determined by the parties of the agreement).

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- FRAND concept basis for most formal SDOs, including ISO, IEC and their national members
- FRAND concept also basis for funded research in Europe (Horizon2020)
- 5G standards based on the most suitable technologies
- Need for open minded discussions between ICT and other industries, understanding different business models
- Relationship between Standards and Open Source
[ETSI WS Sept. 16](http://www.etsi.org/news-events/events/1114-workshop-on-open-source-and-standardization-legal-interactions) <http://www.etsi.org/news-events/events/1114-workshop-on-open-source-and-standardization-legal-interactions>

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ETSI IPR: <http://www.etsi.org/about/how-we-work/intellectual-property-rights-iprs>

Questions?

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Thank you!