



The Standards People



Standardization Solutions for Researchers

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For: **COST IRACON**

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Introduction to ETSI

About ETSI

World-leading standards developing organization for Information and Communication Technologies (ICT)

Recognized by the European Union as one of 3 European Standardization Organizations

Technical specifications and standards with global application

✔ 40000+, all available for free download

Over 800 member organizations, big & small, from 60+ countries

✔ Direct participation of interested parties

Independent not for profit organisation

Robust and respected Intellectual Property Rights (IPR) policy

ETSI Clusters – technology domains



ETSI in 3GPP

We are the home of the GSM™ family of standards...

And a founding partner in



ETSI in oneM2M

And now also a founding partner in...



The home of service-layer standards for the Internet of Things



Research Input to Standardization

Why standardize ICT?

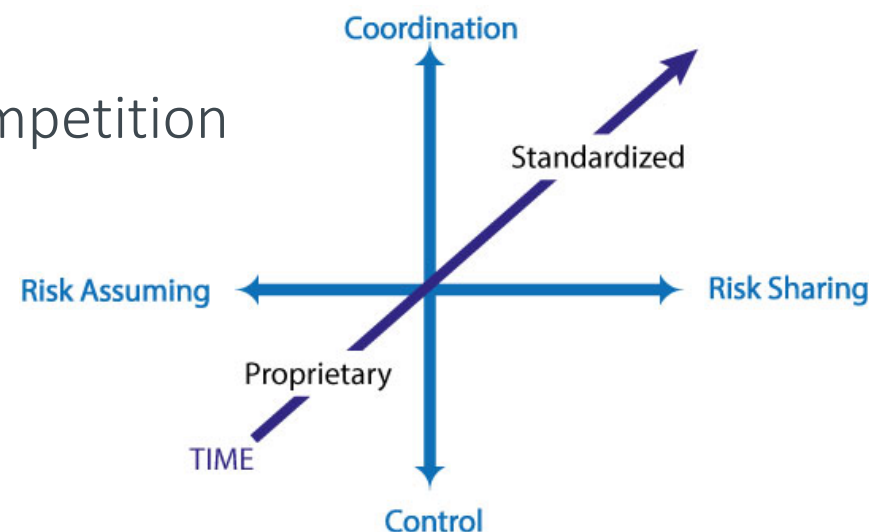
All ICT products implement standardized technologies (de-facto, de-jure,) from several Standards Developing Organizations (SDOs)

New ICT will result in standardization, however, not all the technology needs to be standardized

- ✔ A good standard allows differentiation and thus competition

ICT standardisation is key

- ✔ To innovate
- ✔ To develop markets
- ✔ To be compliant with regulation (and thus allowed to sell)



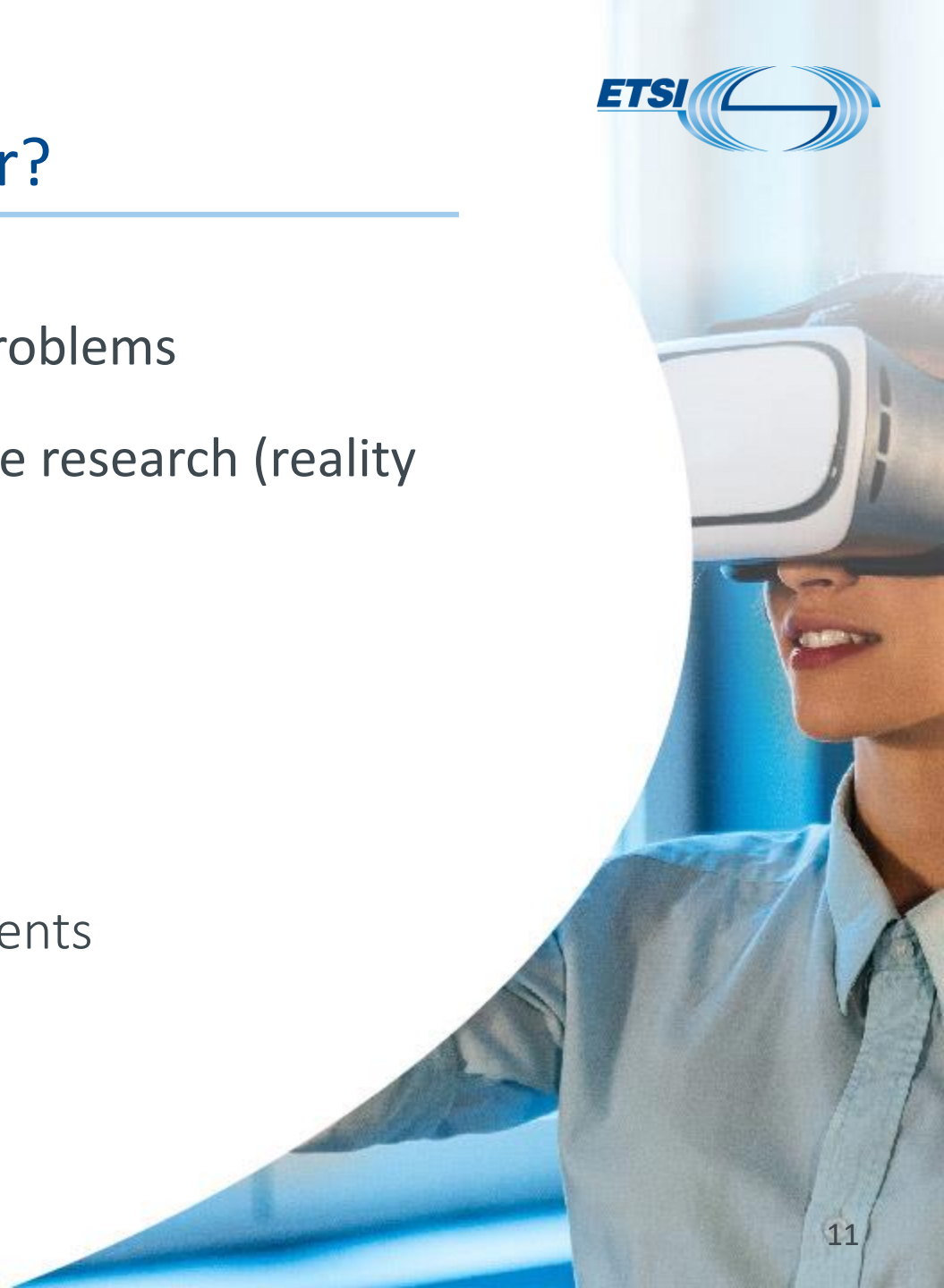
What is in standardisation for a researcher?

Meet the industry and understand their technical problems

Meet the industry to understand the relevance of the research (reality check)

Disseminate and exploit research results

- ✔ Present and discuss research results
- ✔ Improve existing standardised technologies
- ✔ Propose alternative technologies as solution elements
- ✔ Anchor a patent as essential IPR in a standard



Radio standardization at ETSI

- ✔ Founding partner in 3GPP
- ✔ TC ATTM: Access, Terminals, Transmission and Multiplexing
- ✔ TC BRAN: Broadband Radio Access Networks
- ✔ TC DECT: Digital Enhanced Cordless Telecommunications
- ✔ TC ERM: EMC and Radio Spectrum Matters
- ✔ TC ITS: Intelligent Transport Systems
- ✔ TC RRS: Reconfigurable Radio Systems
- ✔ TC RT: Railway Telecommunications
- ✔ TC TCCE: TETRA and Critical Communications Systems
- ✔ TC SES: Satellite Earth Stations and Systems
- ✔ TC SmartBAN: Body Area Networks
- ✔ ISG MWT: Millimetre Wave Transmission

ETSI Industry Specification Groups (ISG)

ISG mechanism can specifically address the needs of a forum or consortium

✔ Also ideal for Pre-Standardization, Bringing research results into Standards

Fast and easy to set up

✔ Minimum 4 ETSI members necessary, approved by Director General

Flexible and adaptive

✔ An ISG has its own operating rules (including voting rules)

✔ ISGs rely on the well proven ETSI IPR policy

The ETSI Secretariat will provide basic support free of charge

Specifications from an ISG are official ETSI deliverables, permanently in ETSI publications catalogue

How to get involved (1)

Use ETSI publications for state of the art analysis

Check the ETSI IPR database for patented technical solutions as part of state of the art analysis

Check the ETSI work programme for ongoing work (WIs, TRs, GSs, TSs)

Ask for ETSI support in funded projects (preparation, execution, exploitation phases)



How to get involved (2)

Attend ETSI workshops/conferences and present research results

- ✔ Published as eProceedings

Contribute to ongoing standardisation work alongside Project/ETSI members

- ✔ Contribute to feasibility studies to prepare for standardising the best solution (pre-standardisation)

- ✔ Contributions to specifications of implementable technology for interoperable solutions

Create a new standardisation task/group/committee

- ✔ New work item (requires 4 ETSI Members)

- ✔ New Working Group, Industry Specification Group or Technical Committee

Bring product prototypes to Plugtests, engage in demonstrations of interoperability or Proof-of-Concept (PoC)

Development of Teaching Materials for Education on Standardization with a Focus on ICT



Initiated by ETSI and supported by the European Commission and EFTA Secretariat, a team of experts in standardization research and practice developed a comprehensive course on ICT standardization

- ✓ Set of 380+ slides
- ✓ Accompanying textbook (“Understanding ICT Standardization: Principles and Practice”) with case studies, quizzes, examples and images

Modular design to suit different higher education levels and different study programs

All teaching materials resulting from this action will be made available for free from the ETSI website at

<http://www.etsi.org/standardization-education>

Takeaways

All ICT products implement standardised technologies

Exploitation of research results (not only dissemination) must result in contributions to standardisation

Research input is needed especially;

- ✓ to go beyond the limitations of existing standardised technologies

- ✓ to assess the technical feasibility of alternative solutions

Research input in pre-standardisation phase is crucial to standardise the ‘best’ solution

ETSI supports projects to disseminate and exploit results through standardisation

ETSI has all tools to meet the standardisation needs of diverse stakeholder groups

Contact ETSI

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