



TMT: SEP & FRAND – from a standards perspective

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

Presented by: **Dirk Weiler,**
ETSI Board and IPR SC Chairman
Nokia Head of Standards Policy,
Bell Labs & CTO

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Agenda

- ✓ Background
- ✓ Standard Essential Patents and IPR policies
- ✓ Challenges and Debates
- ✓ FRAND licensing





Background



Standards for ICT

Not-for-profit organization under French law

Recognized by the EU as a European Standardization Organization

40000+ technical specifications and standards with global application

World-leading Intellectual Property Rights (IPR) Policy

Over 800 members, from micro-enterprises to companies with a trillion \$ market cap, from 68 countries on 5 continents

ETSI's work includes

Radio technologies

Mobile technologies

✓ GSM, UMTS, LTE, 5G, Railway communications...

✓ private/professional land mobile radio systems

Cordless (DECT)

TETRA & other public safety systems

Spectrum matters & electromagnetic compatibility

Wireless Local Area Networks

Broadcast systems

Satellite communications

Short range devices

SDR and CR (Reconfigurable radios)

Aeronautical and marine radio

eHealth and Wireless medical devices

Body Area Networks

Millimetre wave

Telecoms network technologies

DSL, Broadband, Next Generation Networks

Cable distribution systems

Power line telecommunications

Edge Computing

Network Functions Virtualization

Next Generation Protocols

Safety

QoS, Speech quality and speech recognition

Testing

Intelligent Transport Systems

Cyber Security

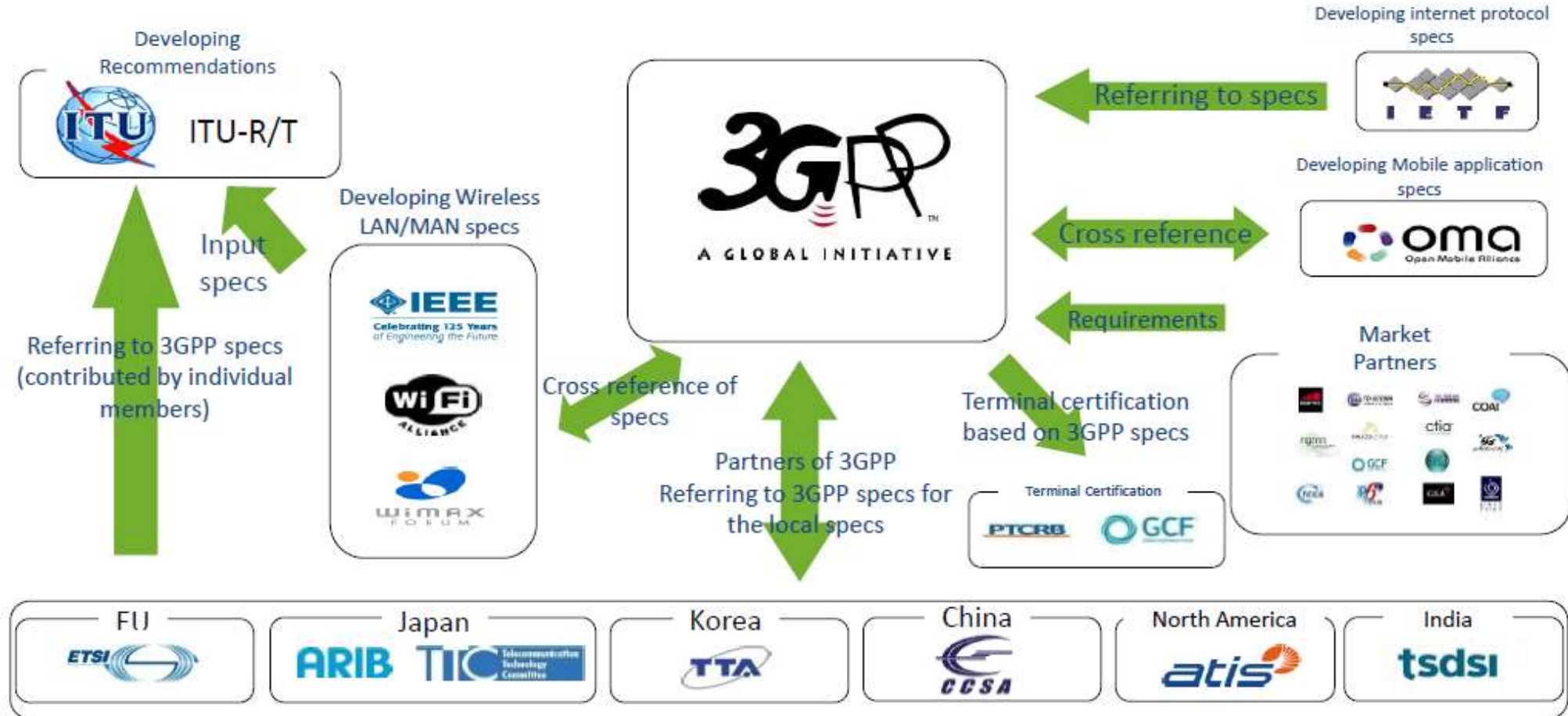
Security algorithms, Quantum Key Distribution

Electronic signatures, lawful interception, smart cards

Emergency Telecommunications

IoT & M2M Communications

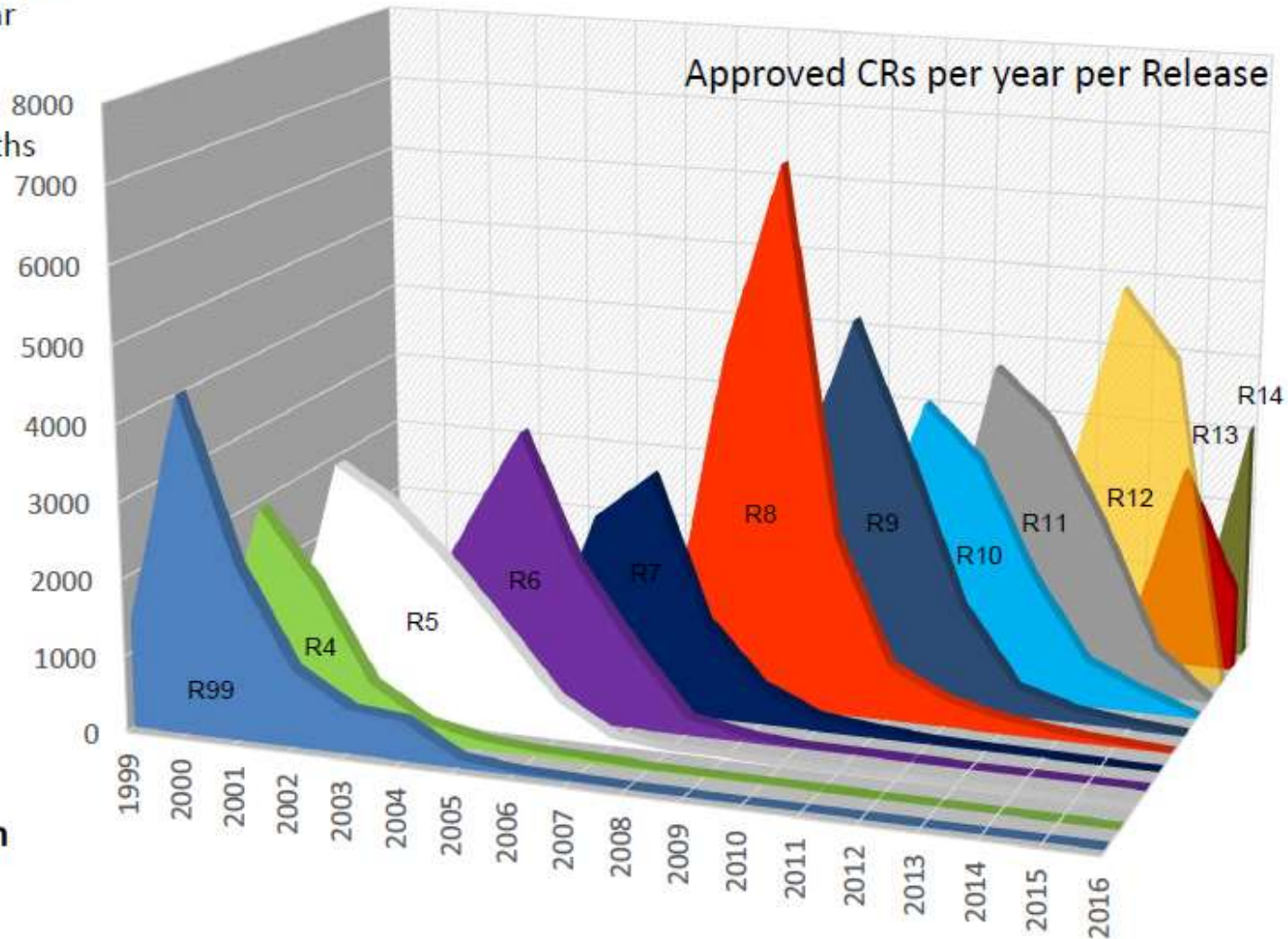
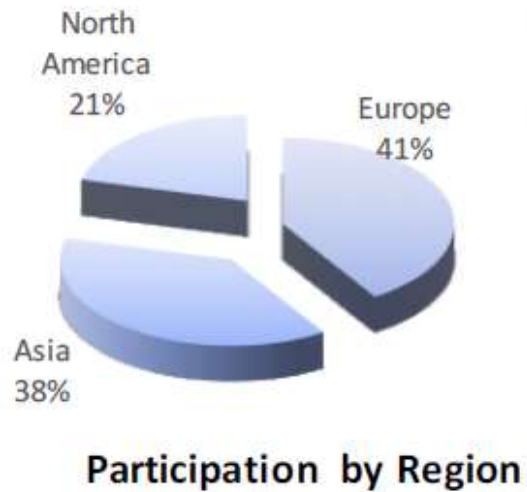
The 3GPP Eco-system



3GPP Facts and Figures



- ~400 Companies from 39 Countries
- 50.000 delegate days per year
- 40.000 documents per year
- 1.200 specs per Release
- New Release every ~18 months



*Annual report 2017: EUR 23.1bn net sales / 103 000 employees / 130 countries /
EUR 4.9bn R&D investment, 37,000 R&D professionals
EUR 119 billion on R&D over 20 years*

We create the technology to connect the world

N O K I A

Megatrends are changing the world, and the ways we connect with it



Network,
compute
& storage



Internet
of Things



Augmented
intelligence



Human
& machine
interaction



Social & trust
economics



Digitalization
& ecosystems

Unrivalled track record of innovation

1300+

Patent applications
(in 2017)

8

Nobel Prizes

3

Turing Prizes

2

Grammys

2

Emmys

1

Oscar



Standard Essential Patents and IPR policies

Standard Essential Patents (ESSENTIAL IPR)

(ETSI IPR policy chapter 15 Definitions)



6 “**ESSENTIAL**” as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR...

7 “**IPR**” shall mean any intellectual property right conferred by statute law including applications therefor other than trademarks...

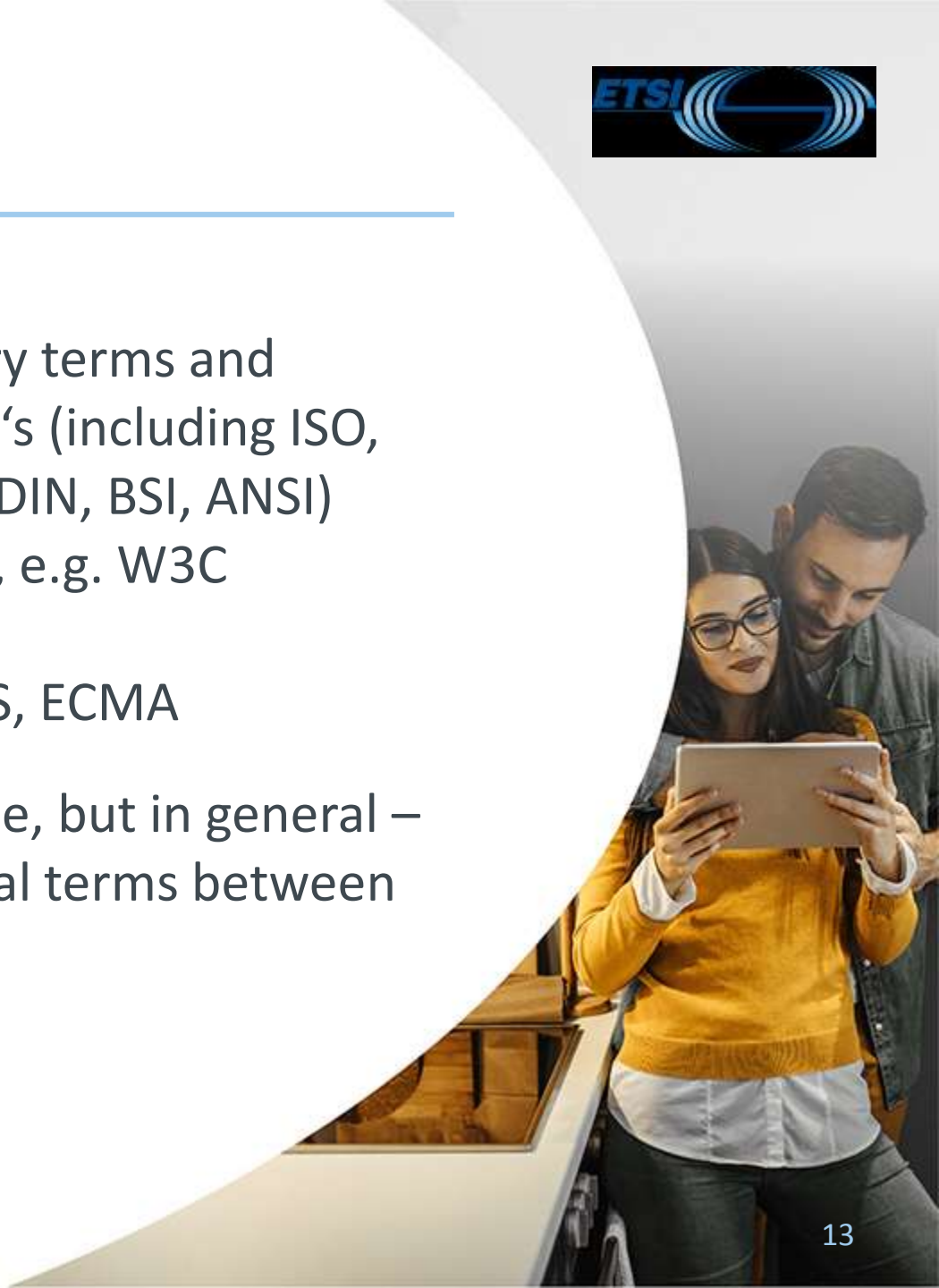
13 “**PATENT FAMILY**” shall mean all the documents having at least one priority in common, including the priority document(s) themselves.

Diversity of IPR policies

Diverse organizations – diverse IPR policies

- [F]RAND ([fair], reasonable and non-discriminatory terms and conditions): The policy of choice of all formal SDO's (including ISO, IEC, ITU, CEN, CENELEC, ETSI, national bodies like DIN, BSI, ANSI)
- RF (royalty free terms): certain fora and consortia, e.g. W3C
- Non-assertion terms
- Choice of the above modes per project: e.g. OASIS, ECMA

Great varieties in the details, even for the same mode, but in general – SDOs stay away from any licensing issues (commercial terms between the parties)



Purpose of the IPR Policy

Source: [ETSI IPR Guide](#)



Facilitate standards making process within ETSI

Technical Bodies not involved in legal discussion on IPR

Main characteristics of the Policy:

Members entitled to benefit from any owned IPRs (including refusal to grant licenses)

ETSI's objective: Create Standards based on solutions best meeting technical objectives

- Policy seeks balance between needs of standardization and rights of IPR owners
- Policy seeks to reduce risk that investment in preparation, adoption and application of standards wasted as a result of an Essential IPR for being unavailable

Therefore, knowledge of existence of Essential IPRs required as early as possible, especially if licenses are not available under FRAND terms and conditions

Policy intended to ensure that IPRs are identified in sufficient time to avoid wasting effort on the elaboration of a Deliverable which could subsequently be blocked by an Essential IPR

Declaration

ETSI's IPR policy offers the choice for a patent holder to declare its willingness to be prepared to grant licenses on FRAND terms or not prepared to license.

Extract from the policy:

4.1 Subject to Clause 4.2 below, each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely fashion. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.

FRAND licensing commitment

6.1 When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory (“FRAND”) terms and conditions under such IPR to at least the following extent:

- MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;
- sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- repair, use, or operate EQUIPMENT; and
- use METHODS.

The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.

[6.1bis Transfer of ownership of ESSENTIAL IPR]

ETSI IPR INFORMATION STATEMENT AND LICENSING DECLARATION (OPTION: PREPARED TO GRANT LICENSE)



(Mandatory use of the Form, which is part of the policy)

IPR INFORMATION STATEMENT: In accordance with Clause 4.1 of the ETSI IPR Policy the Declarant and/or its AFFILIATES hereby informs ETSI that it is the Declarant's and/or its AFFILIATES' present belief that the IPR(s) disclosed in the attached IPR Information Statement Annex may be or may become ESSENTIAL in relation to at least the ETSI Work Item(s), STANDARD(S) and/or TECHNICAL SPECIFICATION(S) identified in the attached IPR Information Statement Annex.

IPR LICENSING DECLARATION: In accordance with Clause 6.1 of the ETSI IPR Policy the Declarant and/or its AFFILIATES hereby irrevocably declares the following:

To the extent that the IPR(s) disclosed in the attached IPR Information Statement Annex are or become, and remain ESSENTIAL in respect of the ETSI Work Item, STANDARD and/or TECHNICAL SPECIFICATION identified in the attached IPR Information Statement Annex, the Declarant and/or its AFFILIATES are (1) prepared to grant irrevocable licences under this/these IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy; and (2) will comply with Clause 6.1bis of the ETSI IPR Policy.



ETSI IPR ONLINE DATABASE, implemented 2011

<https://ipr.etsi.org/>



ETSI IPR Online Database allows electronic online access to Information Statements and Licensing Declarations received by ETSI.

- ETSI has not checked the validity of the information, nor the relevance of the identified patents/patent applications to the ETSI standards and cannot confirm, or deny, that the patents/patent applications are, in fact, essential, or potentially essential;
- no investigation or IPR searches have been carried out by ETSI and therefore, no guarantee can be given concerning the existence of other IPRs which are, or may become, essential;
- potential licensees should use the information in this database at their discretion and should contact the patent holder, for example to establish the status of a disclosed patent family, prior to making a patent licensing decision.

Linked with EPO-Database (e.g. identification of patents, patent families)

Status May 2018:

- 2337 declarations relating to 25367 patent families
- 267 declaring companies, 10258 standards and 420 ETSI projects.



FRAND licensing

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

FRAND licensing challenges

SEPs are patents, with the same rights as any other patents, SEP holder is prepared to grant licenses on FRAND terms.

SEP licensing faces many challenges similar to licensing of other patents.

Most IPR policies do not define/codify FRAND (IEEE an exception)

Patent holders for many years have designed licensing programs accepted by the industry: Negotiated portfolio licenses on a global basis

Still today most licenses are negotiated and agreed between the parties

In case of disagreements courts have to decide

Some companies complain about patent hold-up (licensor asks for excessive royalties)

Some companies complain about patent hold-out (implementer claims to be willing licensee but never agrees on license conditions)



European antitrust aspects

● [Article 101 of the Treaty](#) prohibits agreements between two or more independent market operators which restrict competition. This provision covers both horizontal agreements (between actual or potential competitors operating at the same level of the supply chain) and vertical agreements (between firms operating at different levels, i.e. agreement between a manufacturer and its distributor). Only limited exceptions are provided for in the general prohibition.

● [Article 102 of the Treaty](#) prohibits firms that hold a dominant position on a given market to abuse that position, for example by charging unfair prices, by limiting production, or by refusing to innovate to the prejudice of consumers.

● Examples: Commission decisions based on article 102 TFEU [Samsung](#), [Motorola](#)

● [CJEU Judgement Huawei/ZTE](#)

History of ETSI IPR policy discussions and developments (1)

Long tradition of CONSENSUS



1994 – Joint Agreement on ETSI IPR Policy

2003 – 30 Recommendations of ETSI GA AHG on IPR

- Guidance on timely IPR declaration
- Update Policy for IPR database

2006 – 16 Recommendations of ETSI IPR Review AHG

- Clarification on selection of the best technical solution
- Activities outside of ETSI: Patent Pools, IPR landscaping, Alternative dispute resolution, Negotiation of Licenses

2008 – 8 Recommendations des ETSI IPR SC

- Patent Families
- FRAND commitment is irrevocable
- Collaboration with EPO (Prior Art Documentation & Availability)
- Forms mandatory

2013 – Transfer Ownership Policy "2.0" (Encumbrance & Contractual Provisions)

History of ETSI IPR

1994 – No Consensus on Commercial Terms & Conditions during Drafting of the IPR Policy

2003 – ETSI GA AHG – 30 Recommendations

- No Consensus on Definition of FRAND

2006 – ETSI IPR Review AHG

since 2012 – No Consensus on various aspects of FRAND in the ETSI IPR SC

- Injunctions
- Reciprocity
- Royalty Base / Compliant Implementation
- Licensing Process / "Safe Harbour" / Good Faith / Code of Conduct
- Portfolio Licensing / Global v National Licensing

Standard-Essential Patents: an EU Framework

Why an EU framework?

- SEPs underpin the roll-out of the Internet of Things and 5G (potential gains of € 110 billion revenue per year)
- No comprehensive EU framework yet
- Global competition

Key objectives of the SEP Communication:

- **Balance** (taking account of needs of SEP holders and implementers, with a specific focus on newcomers /SMEs)
- **Holistic approach** (focus on entire 'ecosystem')

Source: EC DG GROW F.5

Standard-Essential Patents: an EU Framework

Transparency



Improve SEPs databases of SDOs

- User-centric
- On-line declarations
- Up-to-date and complete information (link to patent databases)

Pilot on essentiality checks

Awareness-raising (in particular for SMEs)

Fostering patent pools

Standard-Essential Patents: an EU Framework

General principles for FRAND licensing



High level principles to guide negotiations and avoid abuses on both sides

No one-size-fit-all: Parties negotiating in good faith are best placed to define FRAND; sector-based discussions are encouraged

Deepening of expertise via an expert group

Standard-Essential Patents: an EU Framework

A balanced and predictable enforcement regime



Communication offers guiding principles

Support ADR

Monitor possible abuses (e.g., by Patent Assertion Entities)

Standard-Essential Patents: an EU Framework

Open source and Standardization



Ongoing study on the interaction between open source and FRAND licensing

The Commission will continue to collaborate with stakeholders, OS communities and SDOs to promote an effective relationship between standardisation and open source (DG CNECT leadership)

Council Conclusions on IPR Enforcement

Support the holistic and balanced approach of the SEPs

Communication

Stress the importance of improving transparency

Support the establishment of common licensing practices based on the IP valuation principles set out in the Communication



Contact

Dirk.weiler@nokia.com

Questions?