

# Competing while Collaborating

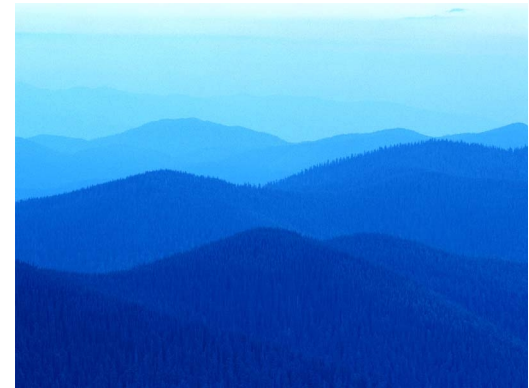
IFCLA Conference, Helsinki June 9 2010

Dr. Petri Kuoppamäki

Vice President Legal & IP, Nokia Corporation

Professor of Competition Law,

University of Helsinki



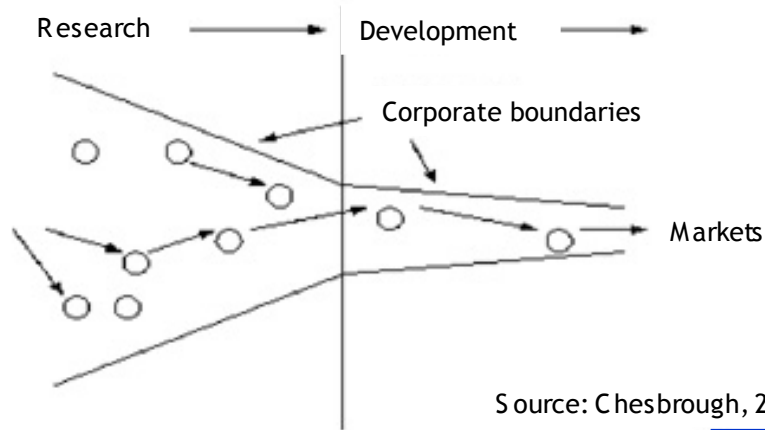
# Overview

- Competing while collaborating (=coopetition)
- Open and proprietary solutions
- Open innovation
- Competition law and proprietary vs. open innovation
- New EU draft horizontal guidelines re. standardization
- FRAND and ex ante
- Conclusions

# Proprietary and Open Solutions

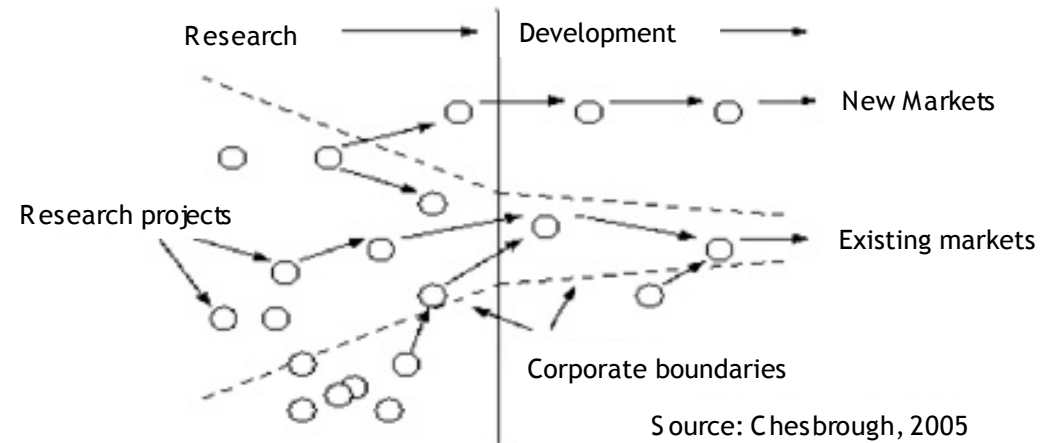
- Proprietary solutions
  - One company drives the innovation and product development
  - Closed ecosystem
  - Exclusion of others
  - Competition for the market: "Winner takes it all!"
- Open solutions
  - Collaboration between several players
  - Shared results, e.g. open source, open innovation
  - Fixing certain common parameters while competing on others
  - Competition in the market
- Hybrid models (= most cases)
  - Closed ecosystems supported by platforms
  - Companies open certain interfaces to gain valuable external inputs while keep other interfaces closed (platform competition)

# Closed Innovation vs. Open Innovation - The Theory



Open Innovation combines internal and external ideas and innovations and internal and external commercialization for promoting new technology development.

In closed innovation, new business development and marketing of new products happens within company borders.



# Closed Innovation vs. Open Innovation - The Principles

Principles of Closed Innovation	Principles of Open Innovation
All the best in class work for us.	We work with the best talent both inside and outside of our company.
To profit from R&D we have to develop the innovations ourselves put into our own products.	External R&D can create significant value: internal R&D is needed to take our share of this value.
If we invent it ourselves, we can be first in market.	We don't need to be the first to research and develop to benefit from new innovation.
First in market will win.	A better business model is more important than being first in market.
The one who creates the best ideas will win.	If we make the best possible use of internal and external innovation, we'll win.
We should control our intellectual property in order to stop competitors from gaining from our innovations.	We should create profit from letting others use our intellectual property and we should buy others' intellectual property when it advances our own business.

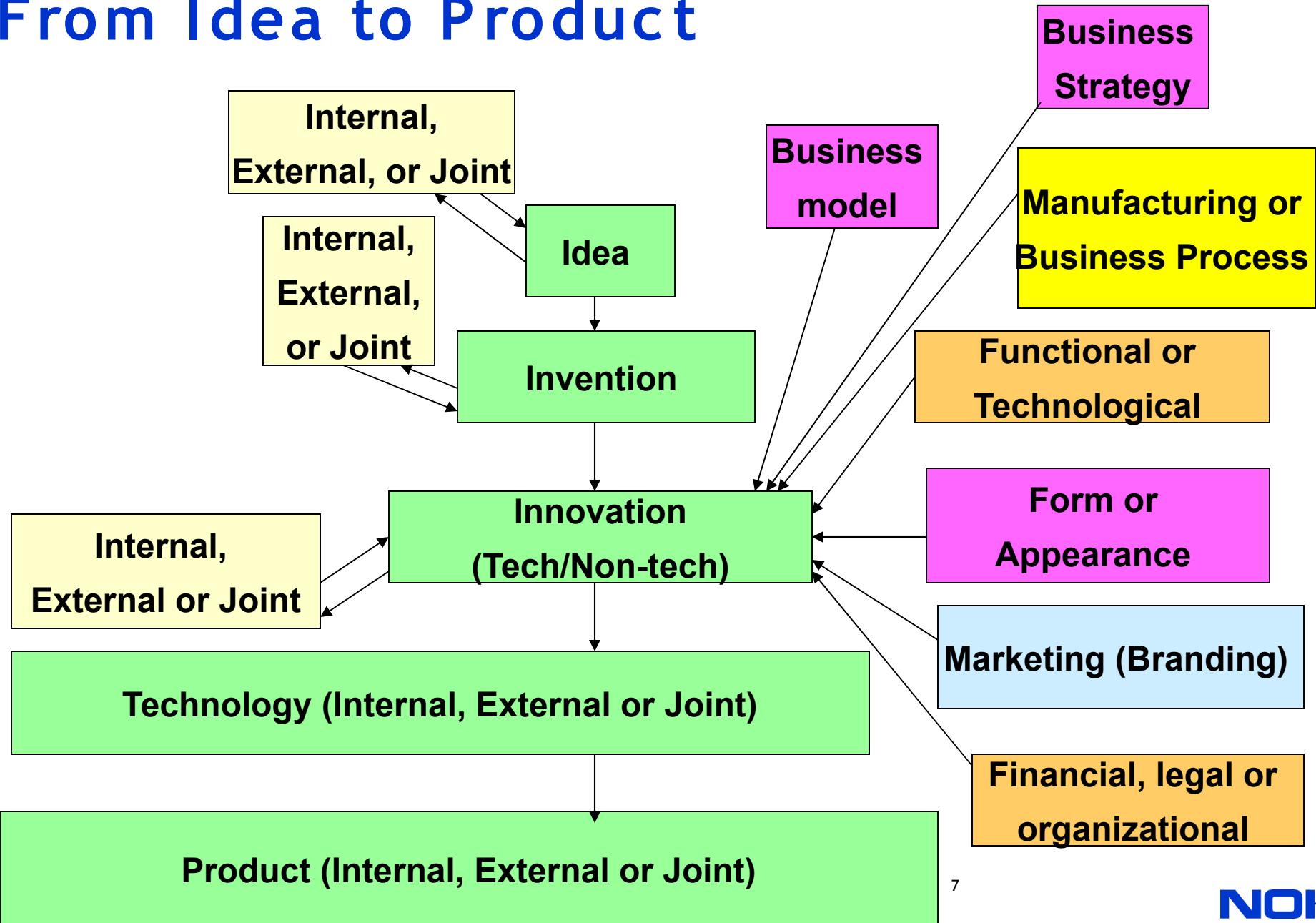
Source: Chesbrough, 2005  
Company Confidential



# Closed Innovation vs. Open Innovation - IP comparison

IP in Closed Innovation	IP in Open Innovation
IP used for market exclusion	IP <u>licensing</u> on FRAND terms including standardization, used to prevent patent hold up while allowing <u>income</u> . Value created through comparative benefit and licensing income.
IP used for market exclusion	IP used to generate <u>new businesses</u> outside of existing businesses, through, for example, spin offs or sale.
Conflicting claims lead to patent fight.	Conflicting claims may indicate an <u>opportunity for collaboration</u> .
IP is acquired for protecting own business only	Participation in <u>markets</u> for intellectual property (i.e. patent auctions)

# From Idea to Product



# Competition Law and Proprietary Solutions

- Competition for the markets may lead to (super) dominant position that is abused to exclude more efficient competitors from the market, ripe supra-competitive profits and slow down technological development to the detriment of consumers
- Access to an "essential facility"; offensive and defensive "leveraging"
- Four part test of the EU Court in Magill/IMS /Microsoft cases:
  1. Indispensability of the information/IPR that is refused for activity on an adjacent market
  2. Elimination of (all) **effective** competition on that market
  3. Refusal prevents appearance of a new product or service or **new feature** for which there is potential consumer demand
  4. Lack of objective justification

# Competition Law and Open Innovation

- Generally a positive view of regulators if no bottlenecks are created
- Fixing of too many parameters between competitors may be problematic
- Can forcing of dominant open source licensing terms lead to exclusion of proprietary solutions?
- The current EU R&D block exemption (2659/2000 to be renewed by end of 2010) is rather restrictive by forcing a joint access /utilization of results (except in case of research institutes). What is the economic reasoning behind that approach and is it still valid?

# Competition Law and Standardization

- Standards create complementarity benefits and can accelerate the dispersion of new technologies
- Elimination of certain parameters of technology competition by a group of competing firms is accepted by antitrust law because of substantial efficiencies relative to harm, provided certain safeguarding conditions are met
- Standards create a lock in to selected technologies and can lead to market power by holders of (claimed) essential patents that can be abused
- To ensure benefits outweigh risk of harm; Standardization Organizations typically impose specific obligations on members:
  1. Obligatory ex ante disclosure of essential patents
  2. Commitment to license on royalty-free or fair, reasonable, and non-discriminatory (FRAND) terms
  3. There is a more lenient view towards ex ante disclosure/discussion of royalty terms

# Draft EU Horizontal Guidelines

- Scope of Application
- General Exemption Requirements
- Possible Efficiencies
- How standards may limit competition
- Examples of Prohibited Restrictions by Object
- Assessment of the Restrictive Effects
- Unrestricted Participation and Decision-making
- Transparency
- Requirements on IPR Policies
- FRAND Commitment
- Fair and Reasonable Value of Essential Patents
- Ex Ante Disclosure of the Most Restrictive Terms
- Inclusion of Substitute Technologies
- Competing standards vs. one standard

# Requirements on IP Policies in SSO's

- There should be no bias in favour or against *royalty free standards*, depending on the relative benefits of the latter compared to other alternatives (para 278)
- SSO rules must seek to avoid the misuse of the standardization process through hold-ups and the charging of abusive royalty rates by IPR holders.
  - These objectives should be ensured through rules which are binding on the members (para 280)
  - This requires a clear and balanced IPR policy (para 281)
- The IP policy should require
  - good faith *ex ante* disclosure of those IPRs that might be essential (inc. patents and patent applications) (para 281)
  - that the IPR holders make reasonable efforts to identify existing and pending essential IPR (para 281)
- SSO rules should not exclude or discriminate against specific groups of IPR holders (para 278).
  - that all holders of essential IPR in technology which may be adopted as part of a standard provide an irrevocable commitment in writing to license their IPR to all third parties on fair, reasonable and non-discriminatory terms ("FRAND commitment") (para 283)
  - That all IPR holders who provide such a commitment take all necessary measures to ensure that any undertaking to which the IPR owner transfers its IPR (including the right to license that IPR) is bound by that commitment (para 287)

# FRAND Commitment

- The aim of FRAND commitments in the context of standard-setting is to ensure that patented technology incorporated in a standard is accessible to the users of that standard on fair, reasonable and non-discriminatory terms and conditions (para 283)
- FRAND commitments are intended to prevent IPR holders from making the implementation of a standard difficult by refusing to license or by requesting unfair or unreasonable fees (in other words excessive fees) after the industry has been locked-in to the standard and/or charging discriminatory royalty fees (para 283).
- An abuse of the market power gained by virtue of IPR being included in a standard constitutes an infringement of Article 102 (former Article 82). (para 284)

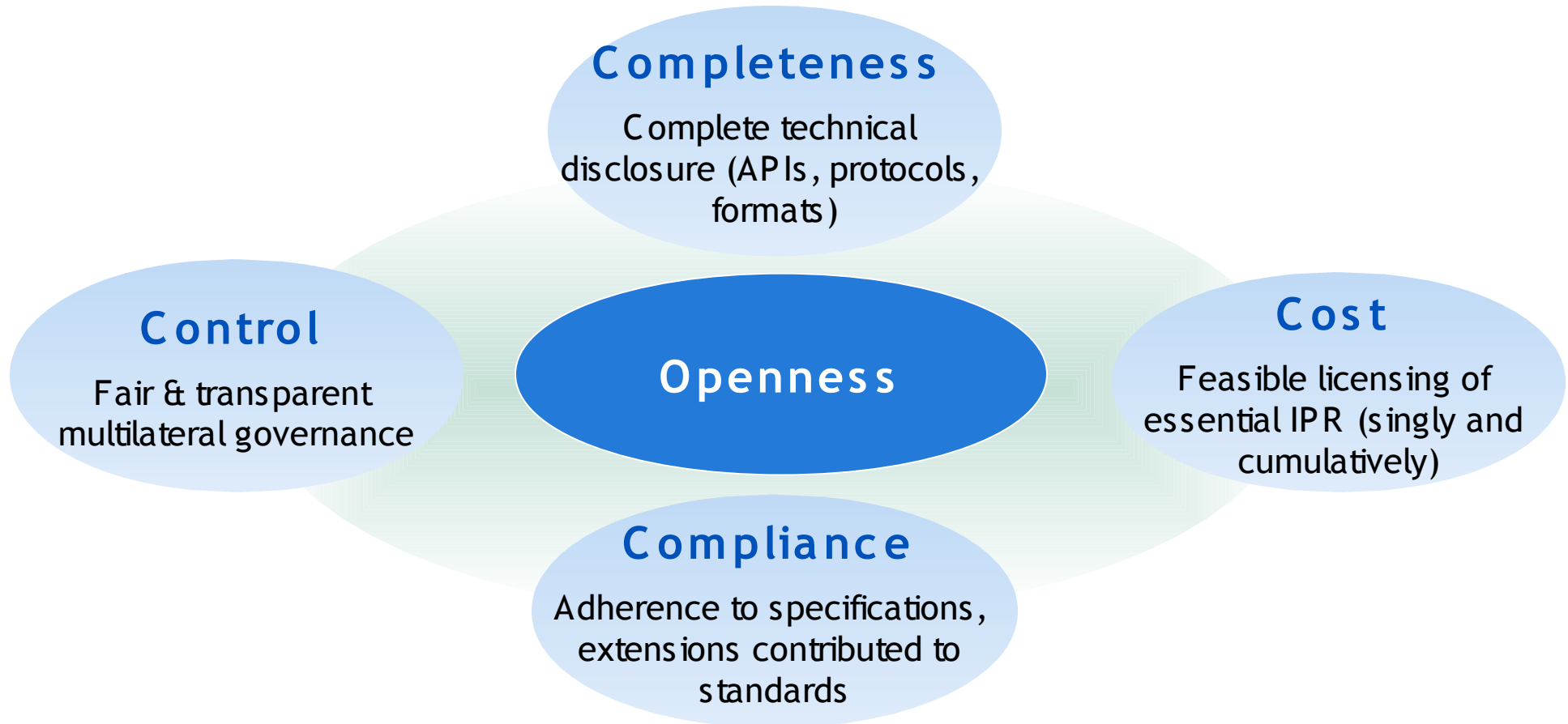
# Assessment of FRAND according to the Draft Guidelines

- The assessment of whether fees imposed for patents are unfair or unreasonable, will be based on whether the fees bear a reasonable relationship to the economic value of the patents.
- Various methods to assess
  - Cost-based methods are not well adapted to this context because of the difficulty in assessing the costs attributable to the development of a particular patent or groups of patents.
  - Possible to compare the licensing fees *charged* by the undertaking in question for the relevant patents in a competitive environment before the industry has been locked into the standard (ex ante) with those charged after the industry has been locked in (ex post). This assumes that the comparison can be made in a consistent and reliable manner.
  - Possible to obtain an independent expert assessment of the relevant IPR portfolio's objective quality and centrality to the standard at issue.
  - It may also be possible to rely on previous unilateral ex ante disclosures of most restrictive licensing terms. This also assumes that the comparison can be made in a consistent and reliable manner.
- These guidelines do not seek to provide an exhaustive list of appropriate methods to assess whether the royalty fees are excessive.

# Ex ante Disclosure of most restrictive terms

- To allow parties involved in the selection of a standard be fully informed not only as to the available technical options and the associated IPR, but also as to likely cost of that IPR, the SSOs can require, or allow, IPR holders to individually disclose their *most restrictive licensing terms*, including the *maximum royalty rates* they would charge, prior to the adoption of the standard.
- This will not lead to a restriction of competition as long as the rules do not allow for the joint negotiation or discussion of licensing terms in particular royalty rates.
- Such unilateral ex ante disclosures of most restrictive licensing terms would be one way to enable the SSOs to take an informed decision based on the disadvantages and advantages of different alternative technologies, not only from a technical perspective but also from a pricing perspective.

# True Interoperability



Multivendor environment is a permanent characteristic of an open environment -

**I<sup>3</sup> = Independent Interoperable Implementations available**

# Conclusions

- There is no bright line test between proprietary and open business models or closed and open innovation; most business models in practice are hybrids
- The traditional competition law criticism of closed, proprietary models relates to abuse of dominance that leads to the exclusion of smaller albeit more efficient competitors to the detriment of consumers
- The traditional competition law risk of open models relates to "too much cooperation" between rivals; the practical necessities of network industries have alleviated these concerns at least to some extent
- While standardization is based (mostly) on open model, without necessary safeguards it can lead to similar (or worse) bottlenecks than proprietary models
- New EU Horizontal guidelines expect that Standardization Organizations have/enact IPR guidelines that aim to prevent abused of hold up positions and patent ambush and contain provisions relating to assessment of FRAND
- Standards aim to create true interoperability by cooperation of industry players