

Innovation, Patenting, Standardisation and Licensing

European Commission Conference on Innovation in the European Digital
Single Market: *the Role of Patents*

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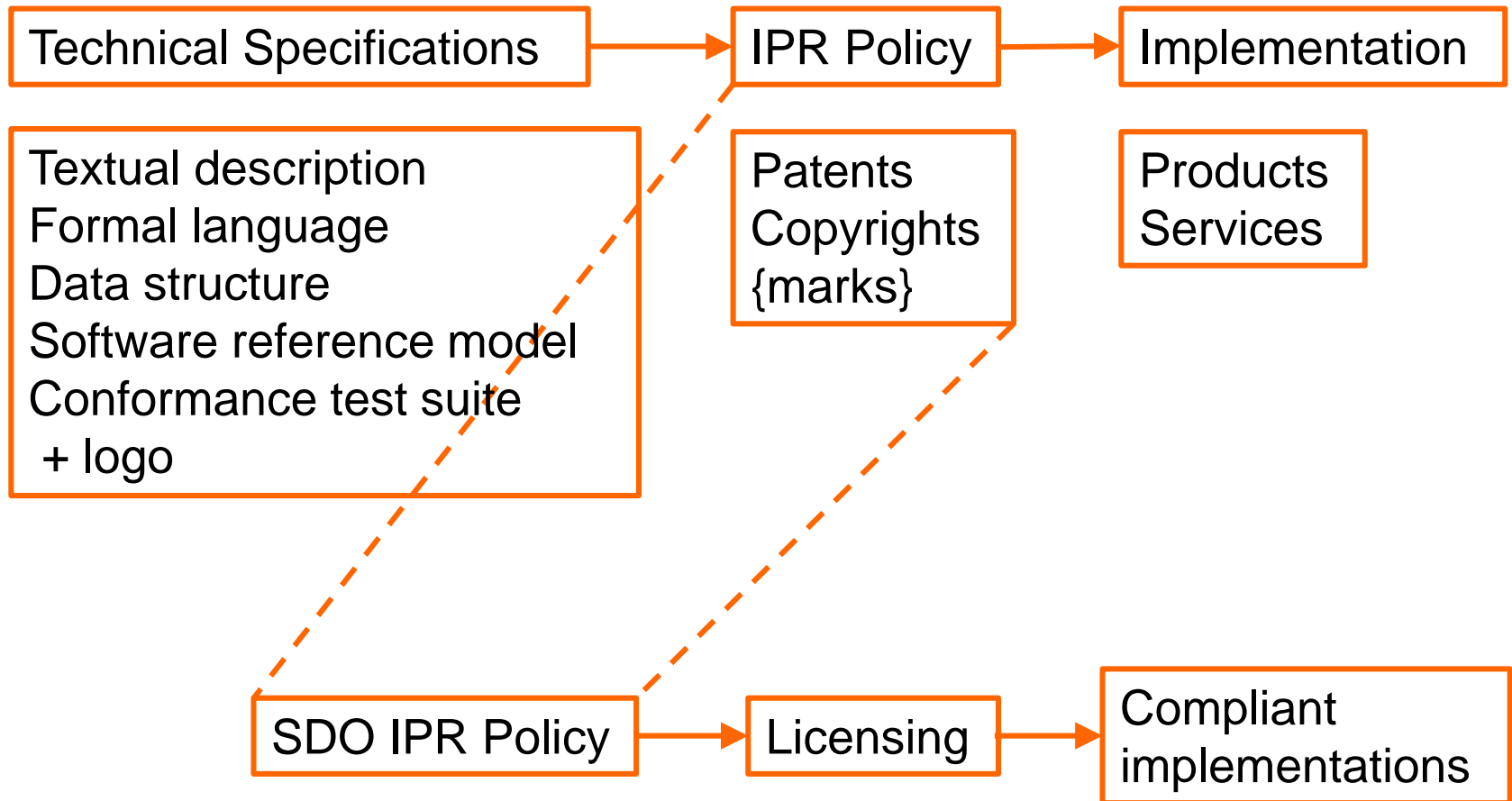
v.1.4 of 15 March 2015



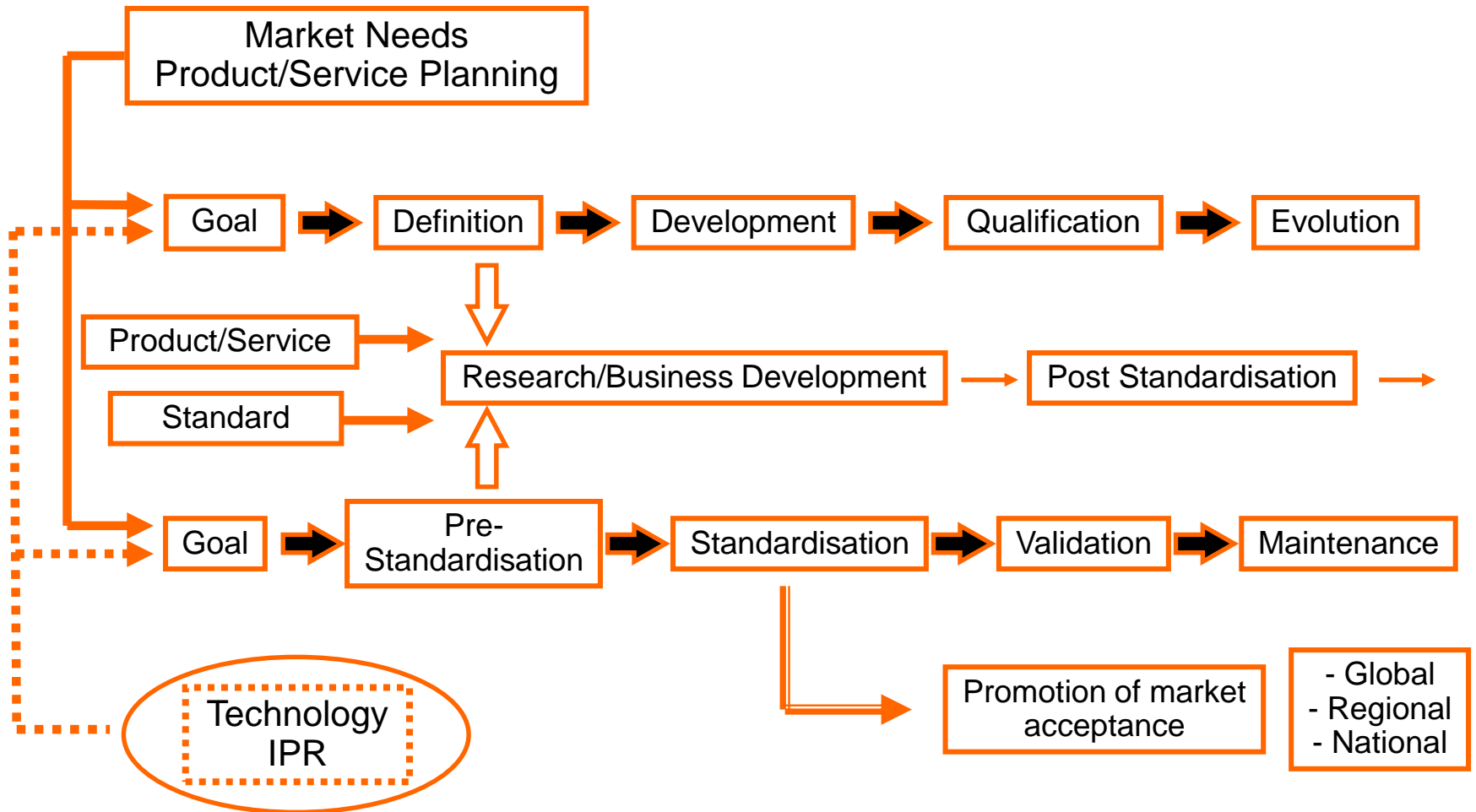
Terminology and familiar concepts (pre-requisite)

1. Intellectual Property Rights (IPR) Policy in a SDO
2. Standard Essential Patent (SEP)
3. Claim chart (claimchart) : tool to prove that a patent claim is essential to a standard
4. Fair, Reasonable And Non-Discriminatory (FRAND) licensing terms and conditions
5. Open Standard

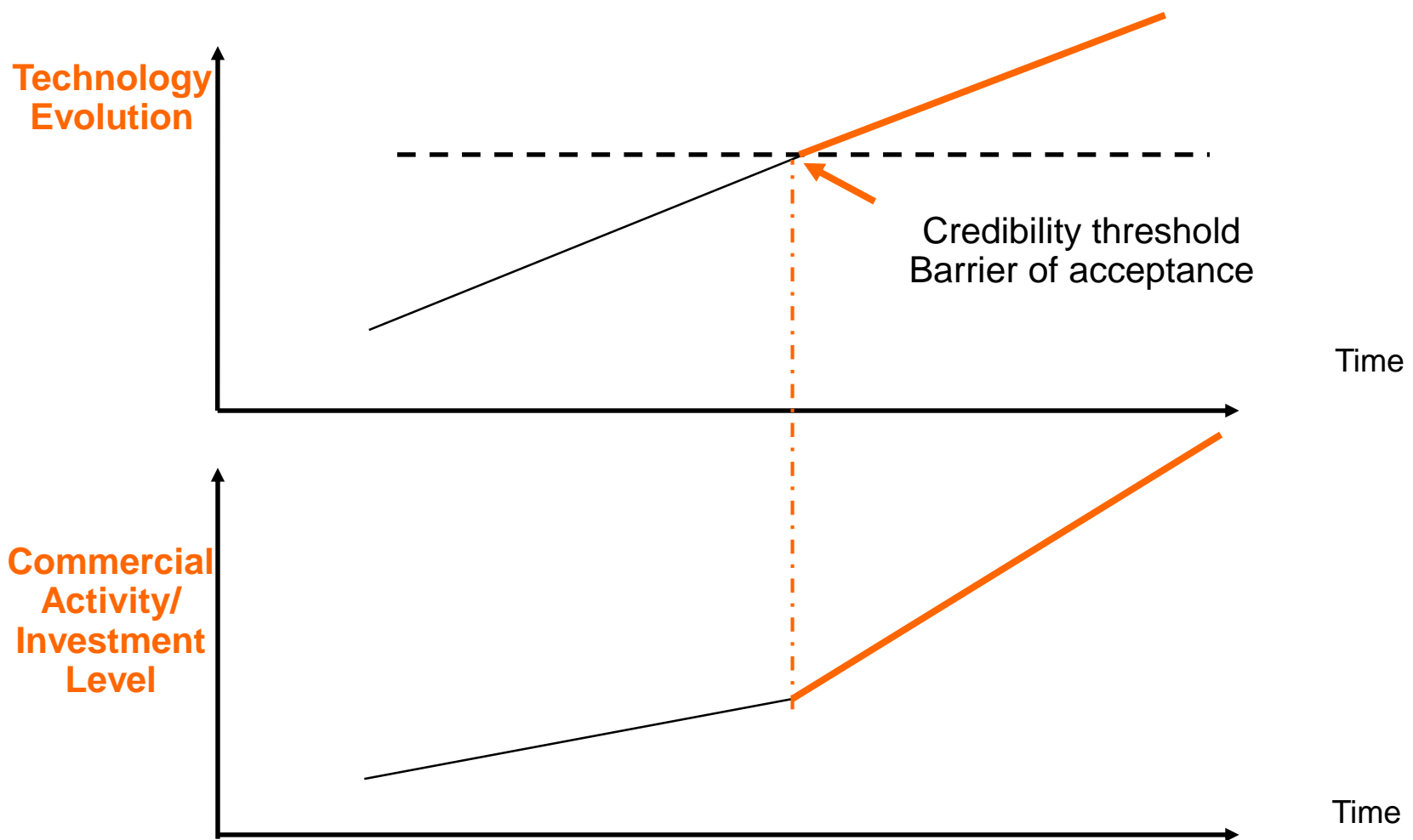
The definition process of a standard in a SDO



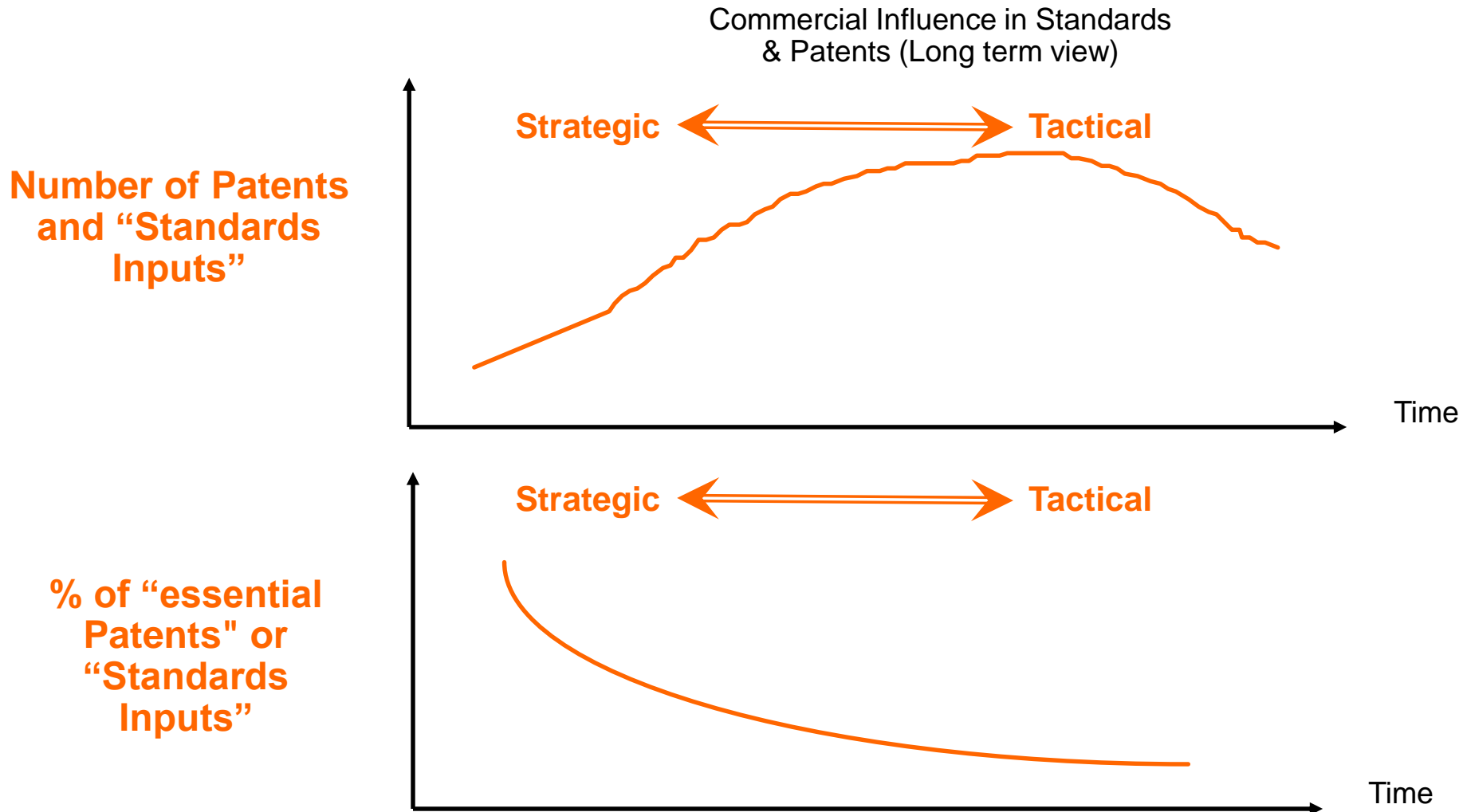
IPR, Standards and the Product LifeCycle



R&D: link with Standards/Patents (1/4)



R&D: link with Standards/Patents (2/4)



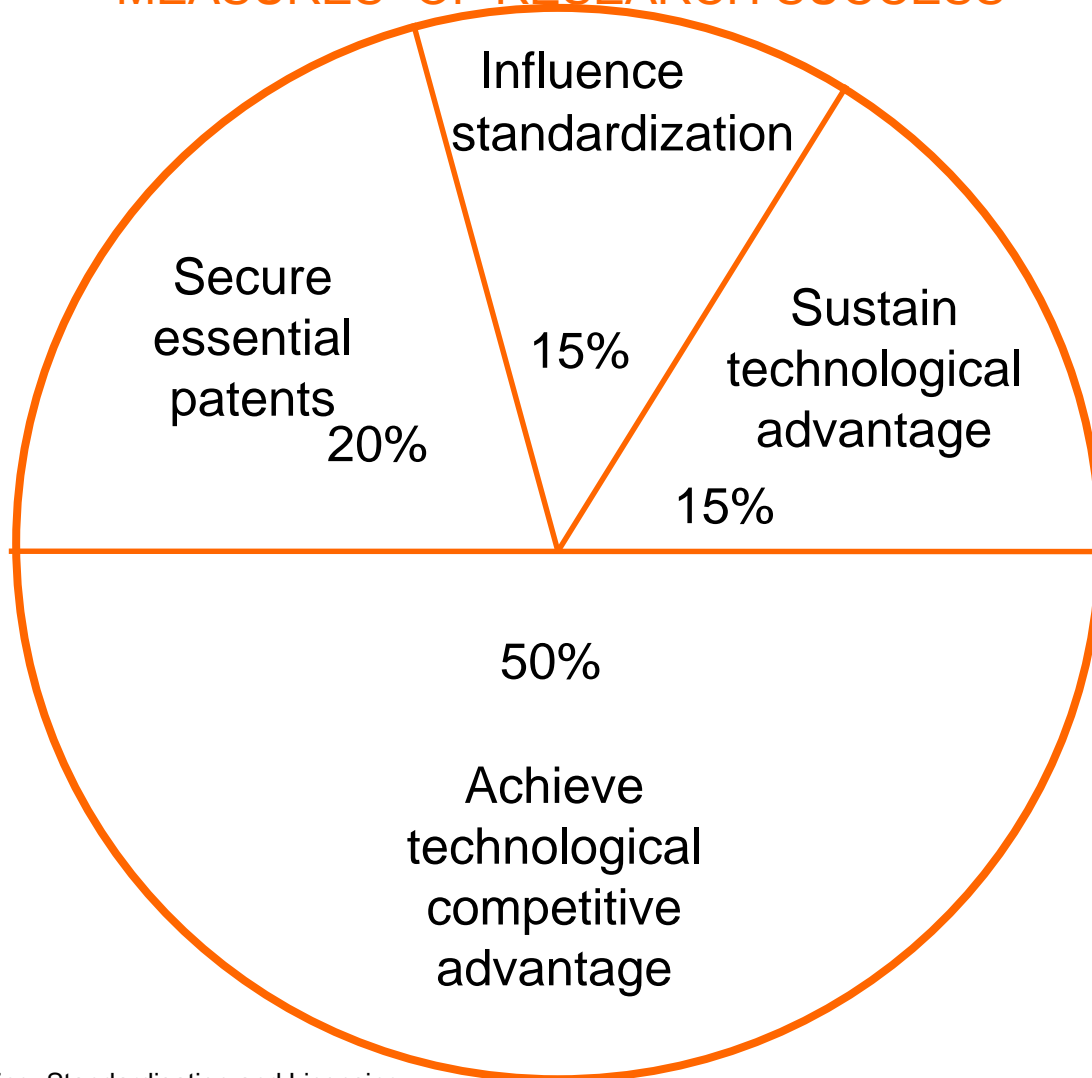
R&D: link with Standards/Patents (3/4)

CONCLUSIONS

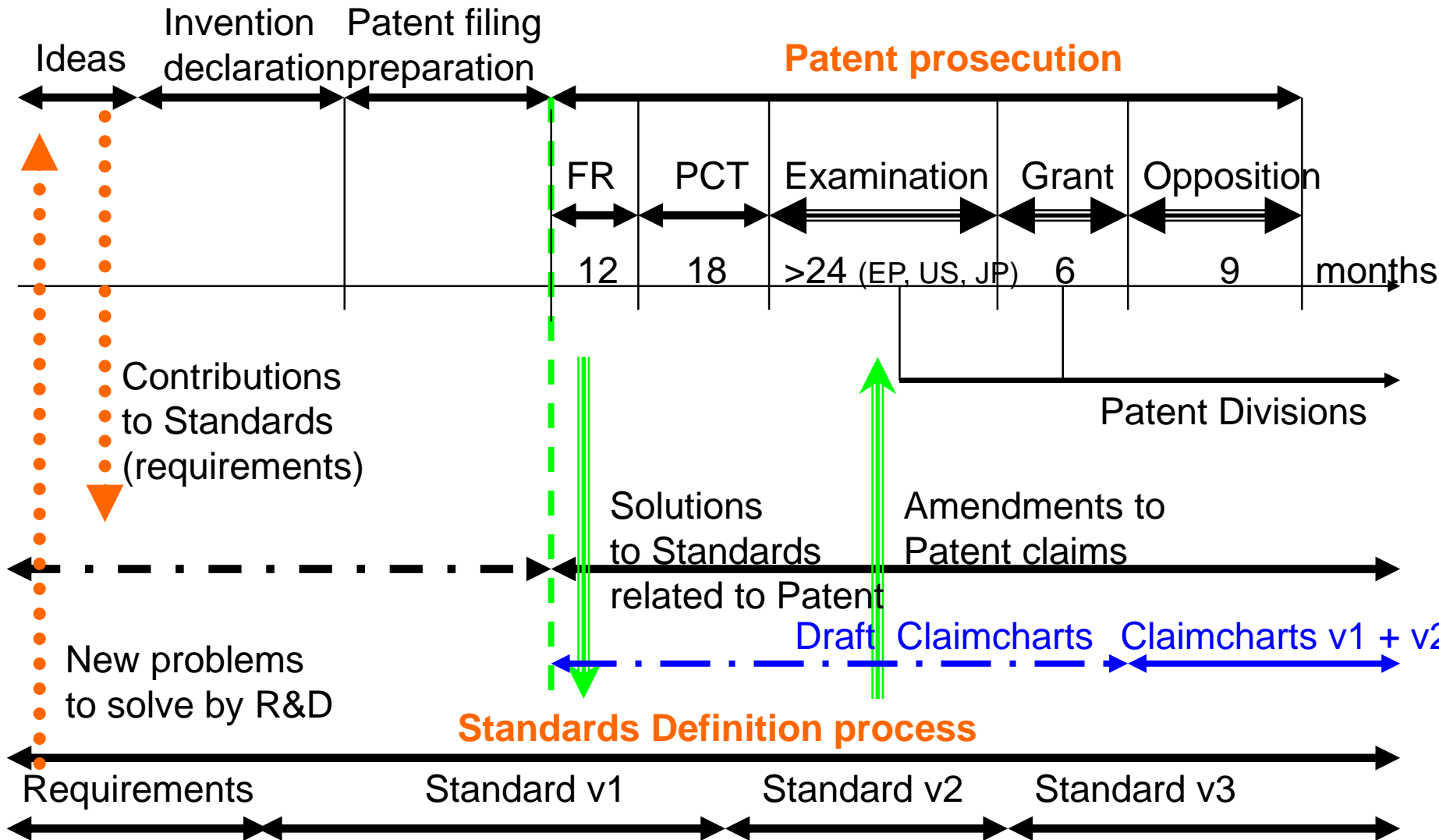
- “Essential Patents” obtained during early part of technology life cycle (can be 5 - 10 years before product launch)
- Early “Standards Inputs” determinant in making/influencing strategic choices and orientations (e.g. choice of technology, principal interface, architecture)

R&D: link with Standards/Patents (4/4)

“MEASURES” OF RESEARCH SUCCESS



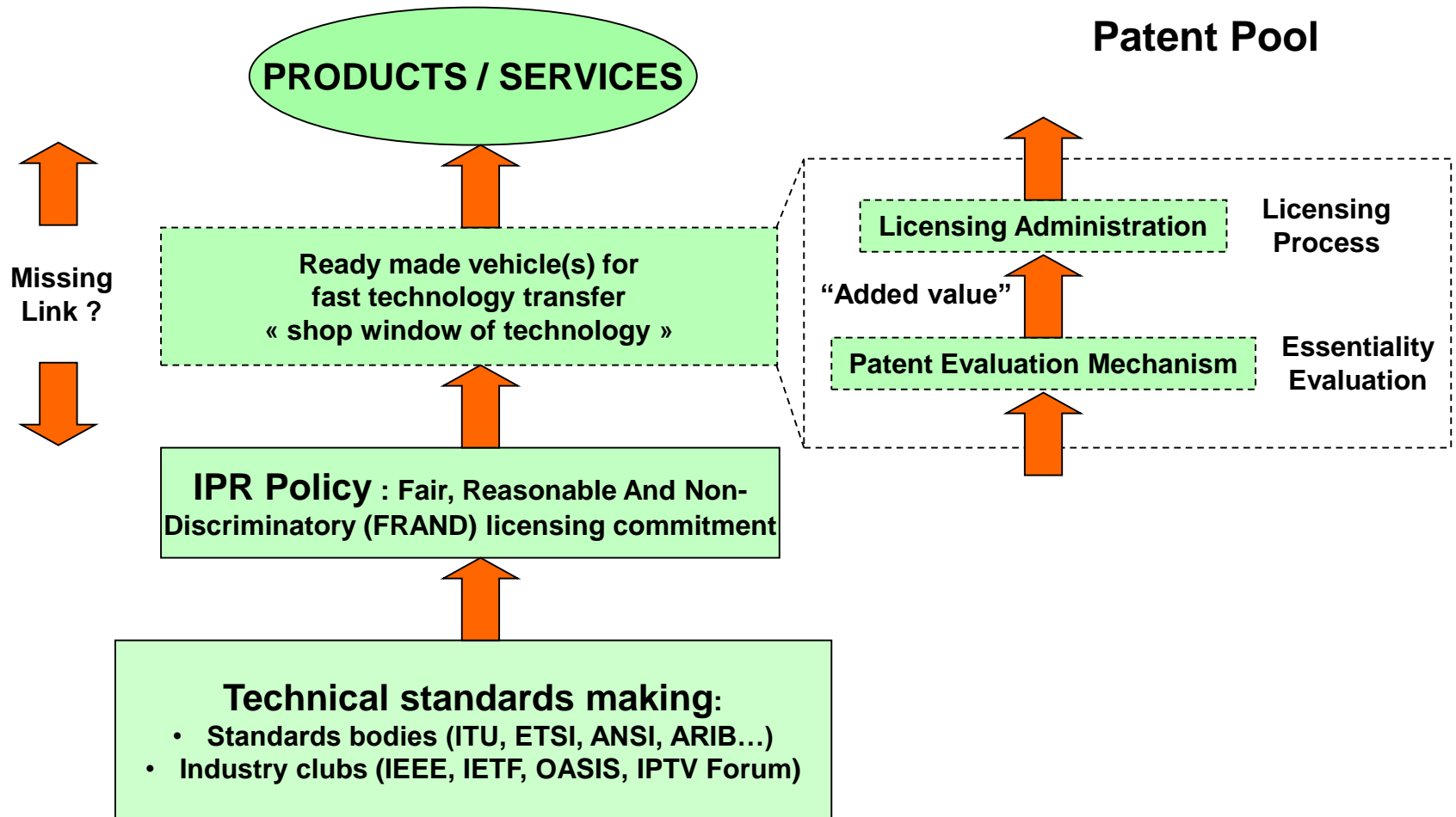
R&D, Patent and Standard setting processes



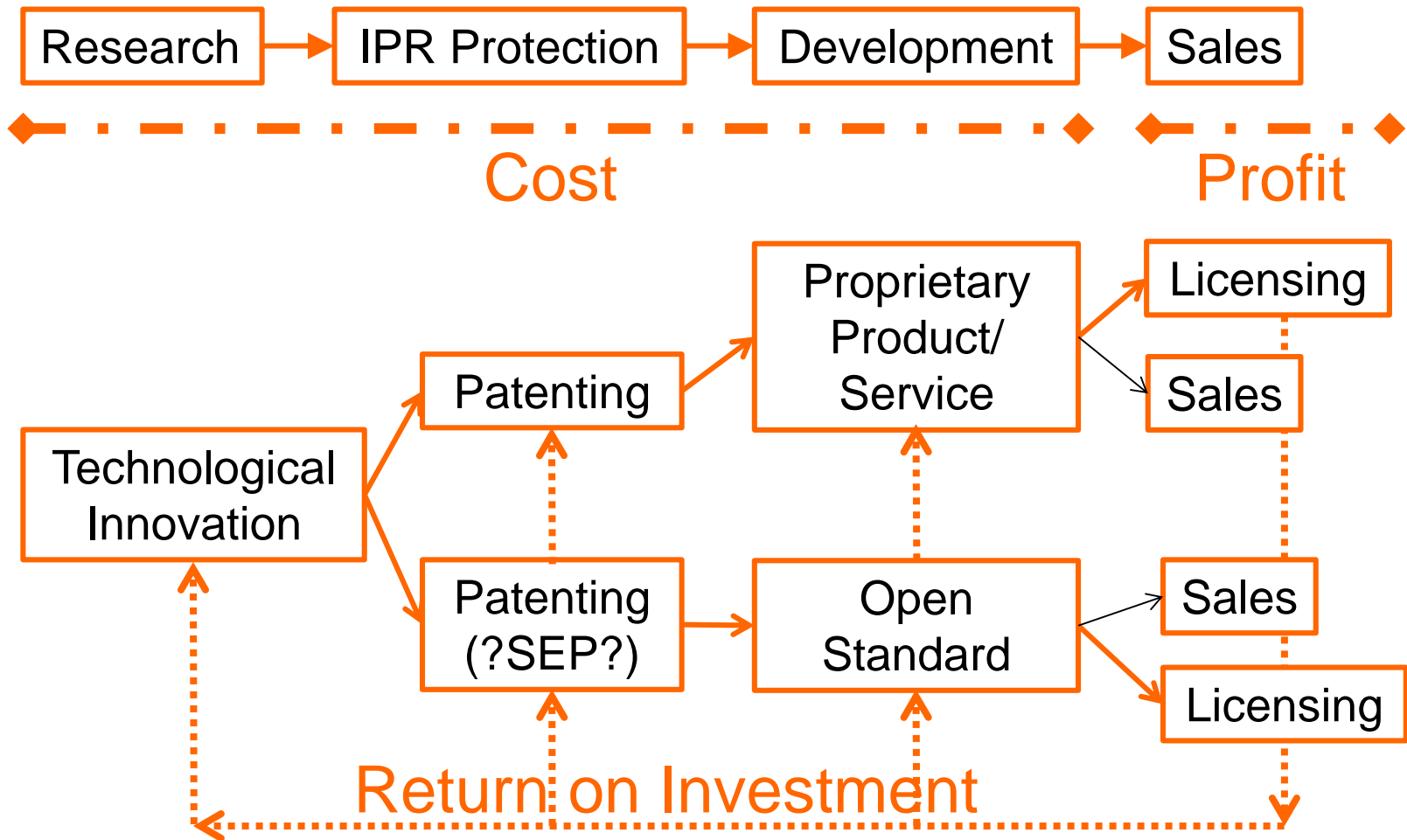
Possible SEP licensing means

- **Direct licensing** 1:N
 - N licenses required (no reciprocal license needed)
- **Cross-licensing** N:N
 - $\frac{1}{2} * N * (N-1) = \frac{1}{2} * (N^2 - N)$ licenses required
- **Collective licensing** M:N
 - Joint License Agreement M:N
 - N licenses required
 - Patent Pool 1:N
 - N licenses required from the Patent Pool comprising M Licensors

Patent Pool: technology transfer to market



Innovation, Patenting, Standardisation and Licensing: Return on Investment closes the loop



Thank you

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Annex

References:

- ETSI IPR Policy: http://www.etsi.org/images/etsi_ipr-policy.pdf
- GSC10/Closing(05)12: http://www.itu.int/dms_pub/itu-t/oth/21/01/T21010000040011MSWE.doc
- OASIS IPR Policy: <https://www.oasis-open.org/policies-guidelines/ipr>
- Study on the Interplay between Standards and Intellectual Property Rights (IPR), 04/2011:
http://ec.europa.eu/enterprise/policies/european-standards/standardisation-policy/policy-activities/intellectual-property-rights/index_en.htm

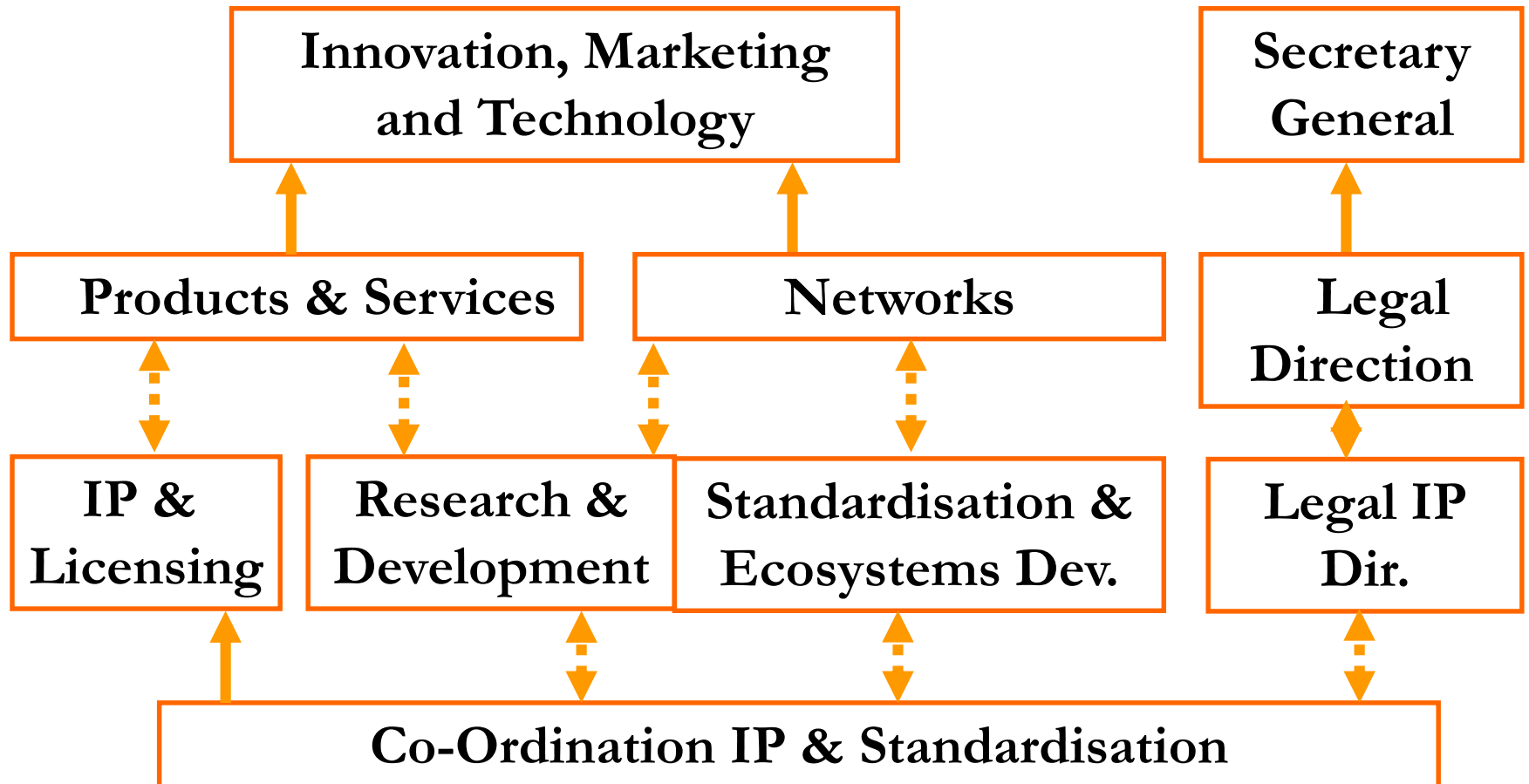
Further reading

- ITU Workshop on Standards and Intellectual Property Rights (IPR) Issues, 19-20/12/2011, <http://www.itu.int/ITU-T/worksem/ipr/201112/>
- ITU Patent Roundtable, 10/10/2012, <http://www.itu.int/en/ITU-T/Workshops-and-Seminars/patent/Pages/default.aspx>
- Review of Patents Declared Essential to LTE and SAE (4G Wireless Standard) Through June 30, 2009, <http://www.frlicense.com/LTE%20Final%20Report.pdf>
- Technology Patent Licensing, 06/2004, <http://www.aspatore.com/store/bookdetails.asp?id=326>

Backup Slides

Backup Slides

Orange internal organisation



Standards Defining Organizations (SDO)



Standard Essential Patents (SEP): a definition

No single definition, however

- **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. (...)

[Definition 6 of Clause 15 of the [ETSI IPR Policy](#), Annex 6 of the Rules of Procedure, 22 November 2000]

- The standard contains **mandatory requirements for all** implementers **≠** the patent grants **exclusivity** to its owner
→ **SEP must be licensed for compliance with the standard**

Open Standards definition

Global Standards Collaboration (GSC) recognise an Open Standard when all the fundamental elements are included:

1. the standard is developed and/or approved, and maintained by a collaborative consensus-based process;
2. such process is transparent;
3. materially affected and interested parties are not excluded from such process;
4. the standard is subject to **RAND/FRAND Intellectual Property Right (IPR) policies which do not mandate, but may permit, at the option of the IPR holder, licensing essential intellectual property without compensation**; and
5. the standard is published and made available to the general public under reasonable terms (including for reasonable fee or for free). [[GSC10/Closing\(05\)12](#)]

SDO IPR Policy: FRAND vs. RF: *as simple as that ?*

FRAND = Fair, Reasonable And Non-Discriminatory

RF = Royalty-Free (i.e. royalty value = 0)

- **FRAND does not imply** a royalty value >0 (RF is OK too)
- **Royalty-Free does not imply** that other terms and conditions are FRAND (e.g. non-monetary compensation)
- IPR Policies are usually different from one SDO to another
 - Competing element between SDO
 - Exception of ITU-T, ITU-R, ISO and IEC: Common Patent Policy
- Example: **OASIS IPR Policy** is defined per Technical Committee:
 - **RAND mode**, RF mode with **RF on RAND terms** or **RF on limited terms**; and **Non-Assertion mode**.