European
IPR Helpdesk

IP Management in Horizon 2020

Jörg Scherer
European IPR Helpdesk
CEO Eurice GmbH
Iasi
22/03/2017

Speaker profile: Jörg Scherer

Managing Director of **European Research and Project Office (Eurice) GmbH** – 45 staff members)for international R&I projects with offices in Saarbrücken, Berlin and Brussels

Eurice & Horizon 2020: **22 participations** (project and innovation management, exploitation & dissemination): **Top 3 EU SME Ranking**

Founder of 4 companies; **Evaluator** in EC programmes; Training & Briefing of evaluators/reviewers in H2020; Co-ordinator of Innovation-Related Activities in FP7 & H2020 projects

Involved in European IPR Helpdesk activities since 2005

Eurice – Horizon 2020 Projects

Roadmap

- *Setting the scene – The Framework*
- *The right strategy (Gathering Information/ Putting together)*
- *Recommendations for H2020 Proposal Preparation and Project Implementation*
- *Practical tools*


European Commission
HORIZON 2020
The New EU Framework Programme for Research and Innovation (2014-2020)
HORIZON 2020

Why is it important to consider IP in H2020?

- The Rules for Participant establish **best efforts** commitment of participants to **exploit their own results**.

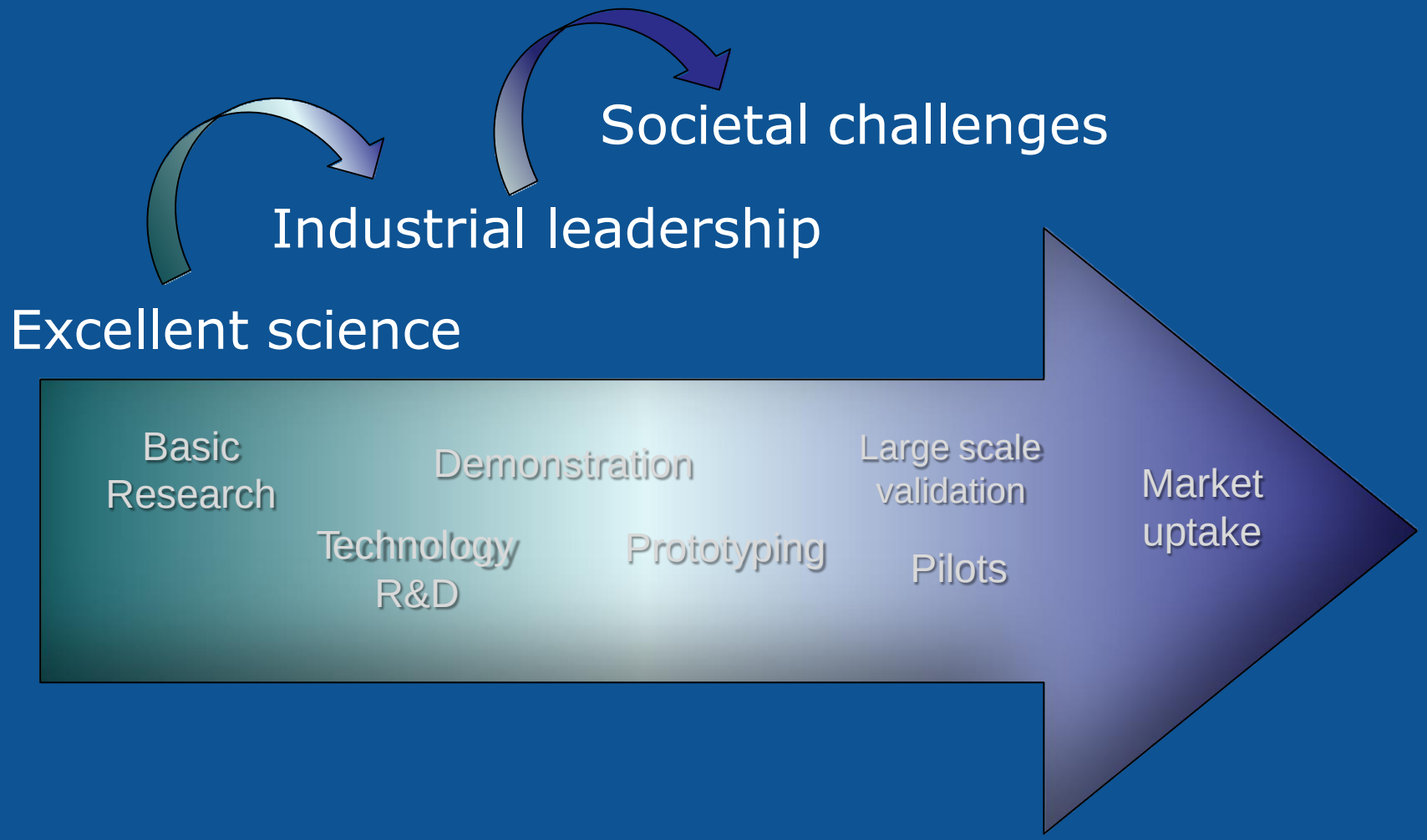
- IP and exploitation issues are subject to evaluation regarding **impact and feasibility** of the proposal.

- A **convincing outline of IP management and exploitation strategies** on individual and consortium level within the proposal is a relevant matter.

- Results of research and development activities require further and often substantial investments to take them to market, which is **appealing** if the results are well protected through **intellectual property**.

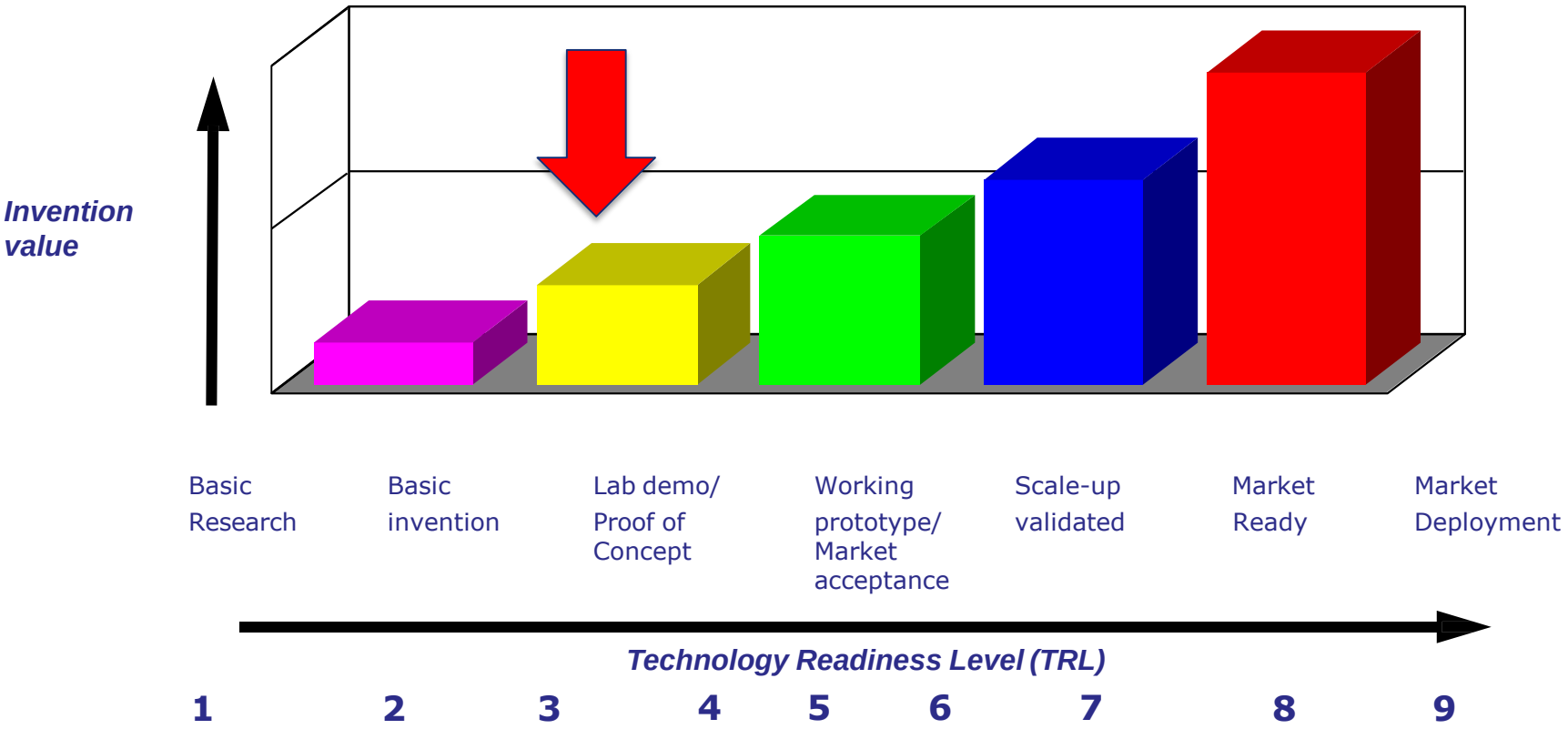
- Properly managing IP in the projects, helps participants to **avoid future conflicts** among the consortium.

Coverage of the full innovation chain



Technology Readiness Levels

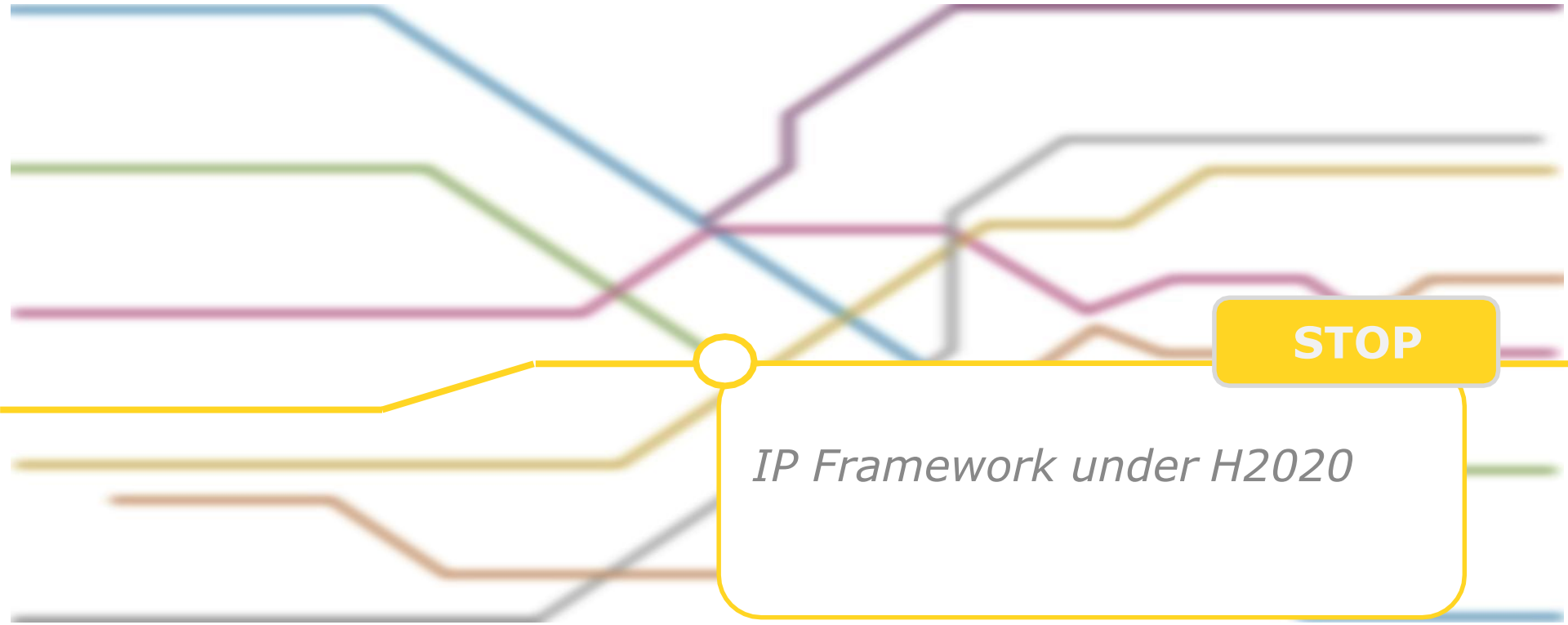
Where are you starting from and where do you want to go?



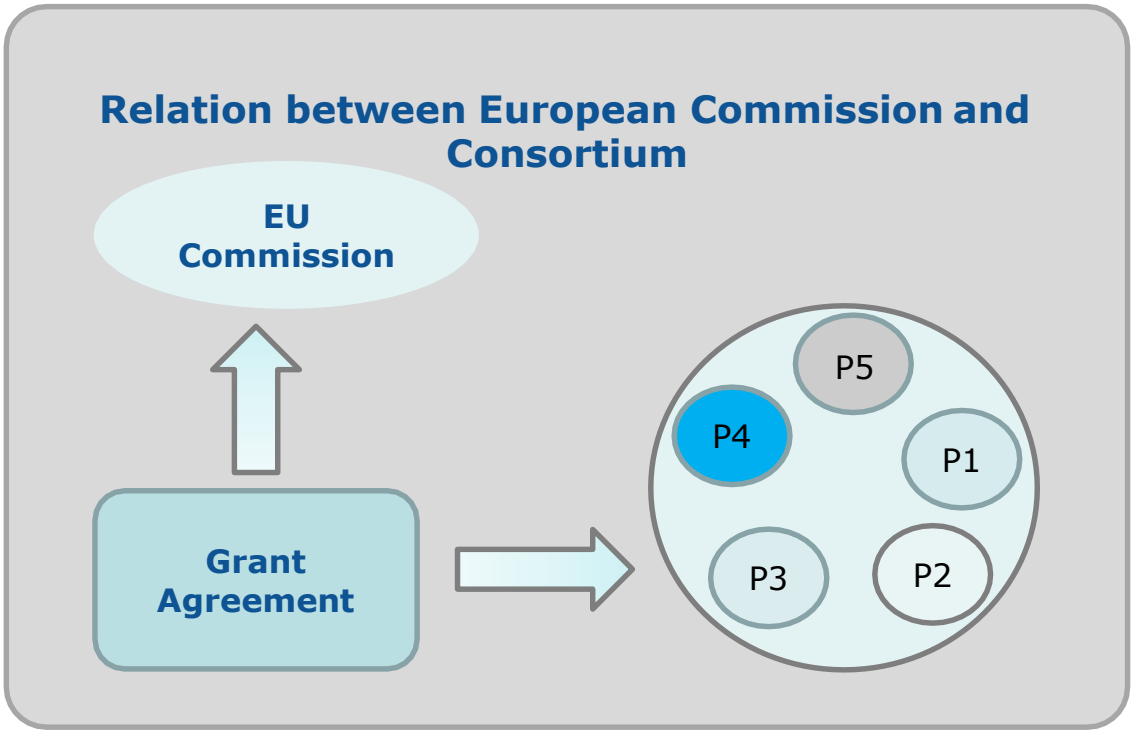
IP downstream route/Steps

- Understanding the scene (Terms, Rules, Model Agreements, etc)
- Setting the scene (Which IP provisions are negotiable?)
- Getting to know the individual interests, motivations and expectations of individual partners regarding IP management and exploitation
- Strategies and Plans to capture, manage and exploit results of H2020 projects on consortium level
- Developing the right innovation management structures
- Definition of appropriate activities and tasks to implement innovation-related activities
- Exploitation pathways, route to market, business models

European
IPR Helpdesk



Grant Agreement (I)



H2020 – Annotated Model Grant Agreements

- **General Model Grant Agreement**

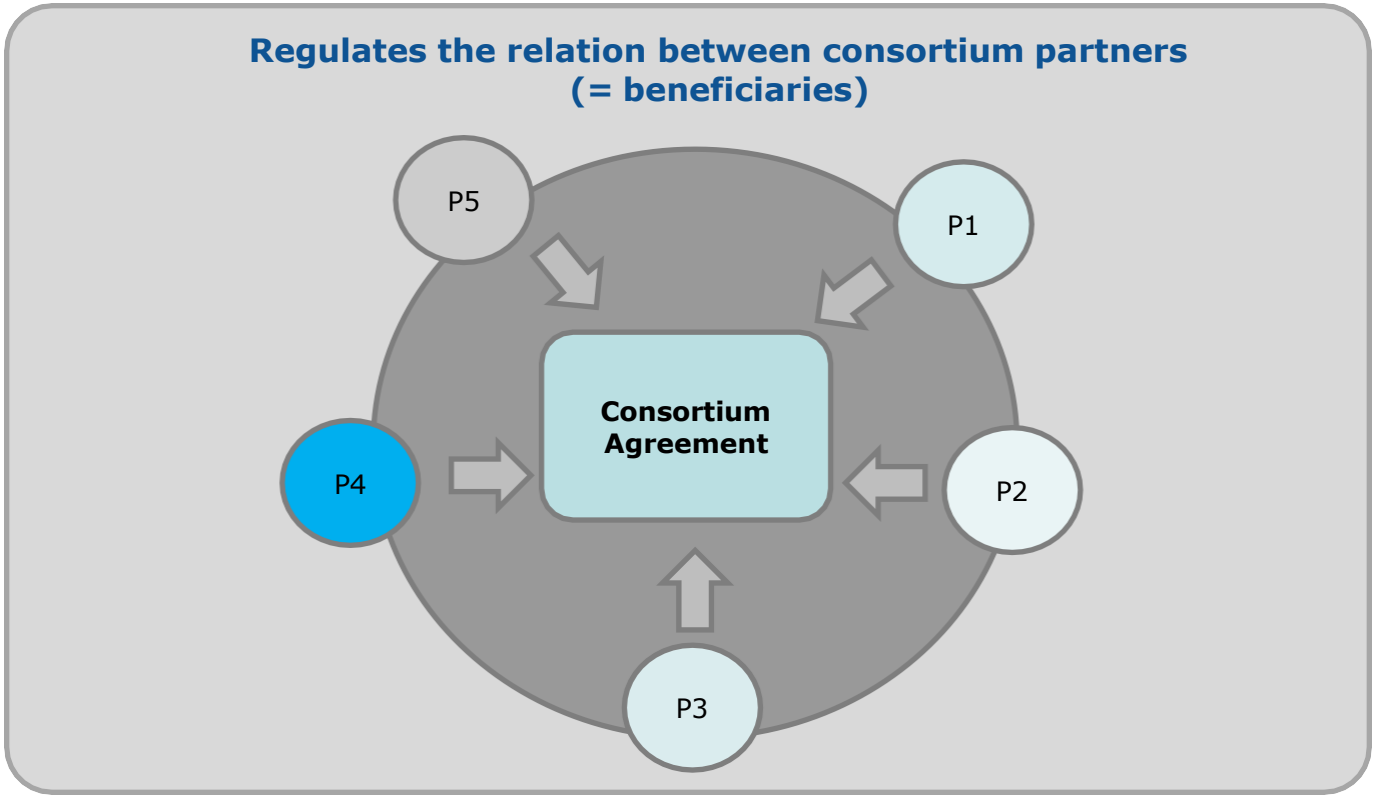
Section 3 adressing „Rights and Obligations related to Background and Results"

Structure:

- Core text with relevant articles
- Annotations to articles
- Examples, best practices, lists and procedures,exceptions

The document will be periodically updated with new examples and explanations, based on practical experience and on-going developments

Consortium Agreement (CA)



Consortium Agreement (II)

- A legal document that regulates the internal work of the Consortium

- Mandatory for the majority of projects
- Legal basics: Grant agreement (+ Annexes)/ RfP
- Implements the provisions of the Grant Agreement/programme rules
- May in no way contradict the prerequisites laid out in the EU Agreement/programme rules; the latter always take precedence!
- The CA should be worked out during the *"time to grant"* at the latest ; be prepared!
- Consortia are responsible for set up the governing rules;
  the Commission has no binding model, but… *see* participant portal

– **DESCA** (Development of a Simplified Consortium Agreement) model;
Different options/modules, i.e. related to software development
MCARD-2020 - ICT industry; **EUCAR** – Automotive industry; **IMG4** - Model Consortium Agreement for the Aeronautics projects

http://www.desca-2020.eu/

Where are the rules regarding IP in Horizon 2020 to be found?

Intellectual Property rules

The IP rules in Horizon 2020 can be found in:

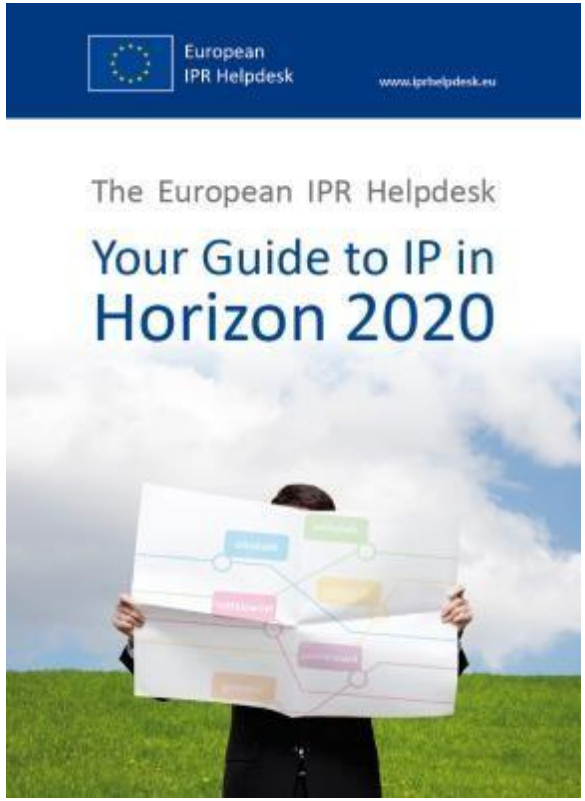
(i) the **Rules for Participation**
(ii) the (model) **Grant Agreement**
(iii) the applicable **work programme (topic description)**

How to find: **Participant Portal**

European
IPR Helpdesk

Intellectual Property rules

Guide to IP in Horizon 2020



Vocabulary

Key terms in the context of Horizon 2020 projects are:

- Background
- Results
- Exploitation
- Dissemination
- Access rights

Definitions (I)

Background
Tangible or intangible input (data, knowhow, information) which is held by the project partners prior to their accession to the agreement. Includes IP as copyright, patents/ patent applications (filed prior to access to agreement).

Examples: *prototypes; cell lines; database rights, licences with the right to sublicense*

Project partners must identify their background in writing

Results
All results which are generated under the project – whether or not protectable. Such results may include copyrights, design or patent rights, trademarks or others, and belong to the partners who have generated them.

Definitions (II)

Access rights
User rights (incl. licenses) to results or background of project partners.

Exploitation
Utilisation (direct/indirect) of results in research activities, which are **not** part of the project, as well as utilisation for further development, creation and marketing of a product or process.

Dissemination
Means trough which research results are presented to the public. Official publications (e.g. patent applications) are not considered as dissemination.

Ownership of Results

- **In Horizon 2020, generally the grant agreement establishes that the results of the project belong to the participant generating them.**

- It is advisable to take appropriate measures to properly manage ownership issues, such as keeping laboratory books or other kinds of documentary evidence (e.g. a properly completed Invention Disclosure Form)

- Given the collaborative nature of most projects, some results can be jointly developed by several participants. Hence, situations of joint ownership might arise.

> **Joint Ownership Agreements** (i.e. defining specific conditions for granting licenses or issues related to costs of protection and sharing of potential revenues); Default rule in Consortium Agreement ..

Access Rights (I)

- Each project partner has the right to **request access rights** to the other project partner's background and results as long as it needs them in order to carry out its work under the project or to use its own results (these are **minimum access rights**).
- Shall be made in writing.
- To avoid conflicts, it is recommended that beneficiaries agree (e.g. in the consortium agreement) on a common interpretation of what is "**needed**"
- Are to be requested/granted throughout the duration and up to 1 year (or as otherwise agreed in the CA) after the end of the project for exploitation needs; Once requested, access rights may be exercised as long as they are needed for exploiting the results (e.g. until the background patent expires).
- Access rights do **not** confer the right to grant sub-licences.

Access Rights (II)

Granting of Access Rights

	Access to background	Access to results
Project implementation	Royalty-free	Royalty-free
Use of results	Royalty-free, or on fair and reasonable conditions	Royalty-free, or on fair and reasonable conditions

General obligation to protect

Each beneficiary must examine the possibility of protecting its results and must adequately protect them — for an appropriate period and with appropriate territorial coverage — if:

(a)the results can reasonably be expected to be commercially or industrially exploited and

(b) protecting them is possible, reasonable and justified (given the circumstances).

When deciding on protection, the beneficiary must consider its own interests and the interests (especially commercial) of the other beneficiaries.

General obligation to exploit

Each beneficiary must — **up to four years after the project completion** take measures aiming to ensure '**exploitation**' of its results (either directly or indirectly, in particular through transfer or licensing by:

(a) using them in further research activities (outside the action);

(b) developing, creating or marketing a product or process;

(c) creating and providing a service, or

(d) using them in standardisation activities.

Routes for use/exploitation

Basic options

- Use for further research
- Developing and selling own products/services
- Spin-Off activities
- Cooperation agreement/Joint Ventures
- Selling IP rights/Selling the (IP based) business
- Licensing IP rights (out-licensing)
- Standardisation activities (new standards/on-going procedures)

European IPR Helpdesk

Impact and Innovation in H2020 proposals

- Getting the information for the proposal
- Developing the proposal to maximise impact
  - **Excellence**
  - **Impact**
  - **Implementation**

Innovation

A **new** (or improved) entity (creation), which when **used** produce tangible **benefits,** satisfying needs and wants.

Invention IS NOT Innovation

Project outputs **Innovation**

Impact

The benefits derived from the innovation. The larger the benefit – the larger the impact

European IPR Helpdesk

Understand the landscape

Strategic Intelligence – to plan a route

WP and Call Challenges, Objectives & Topics; Expected Impact

Market issues

Ethics, security, privacy

Regulations

Other technologies or solutions

Societal and environmental

Industry competitors

Standards

Existing knowledge and State of the Art

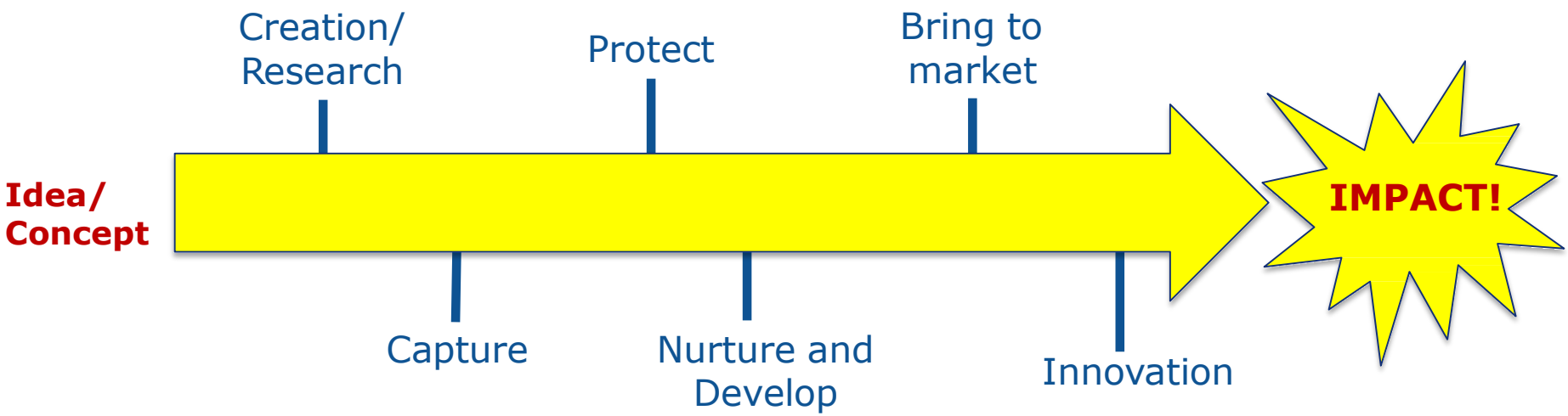
IPR

Related research projects

Research Competitors

Source: E.Sweney, 2016

Idea to Impact!



H2020 - Evaluation Criteria on IP Management

How to address ?

- "**Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR)"**
- **"Appropriateness of the management structures and procedures, including risk and innovation management".**

European IPR Helpdesk

IP Management in H2020 – Four pillars

- IP **used** by the project (background and 3rd party)
  - access and usage rights for IP before, during, **AND after** the project
- IP **generated** by the project (results)
  - Capture, ownership, management, pre-publication reviews for technical inventions, etc
- IP **assessment and protection**
  - prior art, market opportunities, value of IP protection, IP audit, FTO-analysis
  - Type of IP protection
- IP **dissemination and exploitation (telling and use!)**
  - Targets, messages, measures, etc

Only with use of the results will the challenges of the call be addressed, and the expected impacts be achieved

Recognise and Capture the IP

- Proactive monitoring of research outputs - regular reviews
- Facilitating IP disclosure (to IPR Manager)/standard "disclosure forms"
- Initial Disclosure – **Key information needed**
  - Identify **ALL** relevant IP (software, papers, know-how, etc)
  - **Clarify ownership** – particularly if 3rd parties involved
  - **Check for "hidden traps"** (publications, posters, etc), which might affect patentability for technical inventions
  - Secure evidence of creation (date, people involved, etc)

Ownership!

- Who owns the IP?
- **Are there procedures in place to decide:**
  - How will relative contributions to the invention be agreed?
  - Who will pay for protection?
  - How will protection and management costs be shared?
  - Who will **manage** the process, the IP and IPRs, and their exploitation?
  - How will revenue be shared?

Does the Consortium Agreement address this?

How to draft fair Joint Ownership Agreeements?

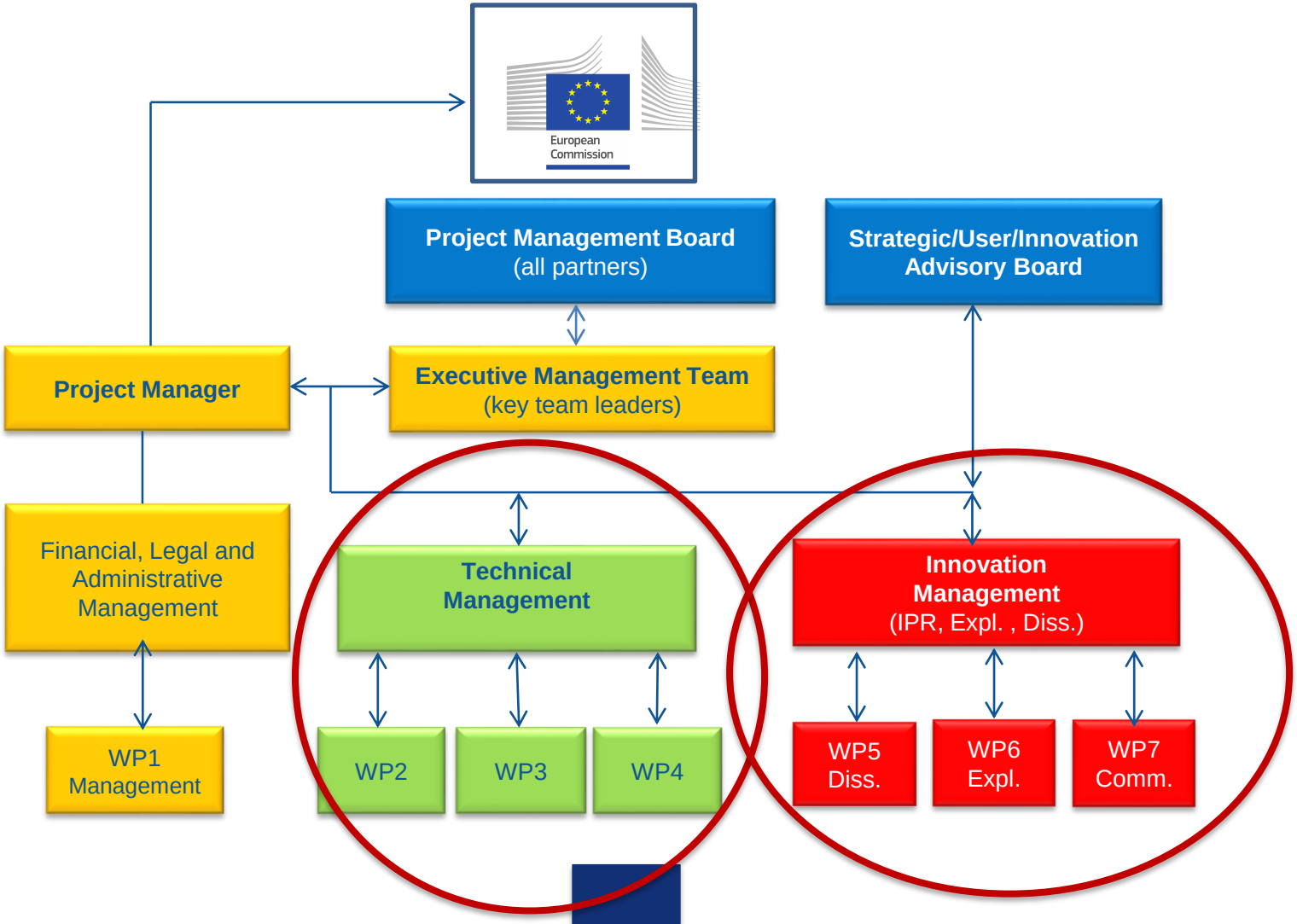
Legal Ownership of EC Supported foreground IP is with the Institution – so institution involvement is crucial for issues such as IP ownership, cost and revenue sharing, access and use.

Establish Good Practice

- Encourage the recording of research activity to secure proof of creation (Good Research Practice)
- Establish procedures for pre-publication reviews to avoid value leakage (before a decision on protection is made)
- Establish procedures to manage public disclosures such as in emails, posters, internal seminars, etc. (before a decision on protection is made)
- Establish procedures and conditions of participation for visitors, visiting researchers, advisory board members, students, etc.

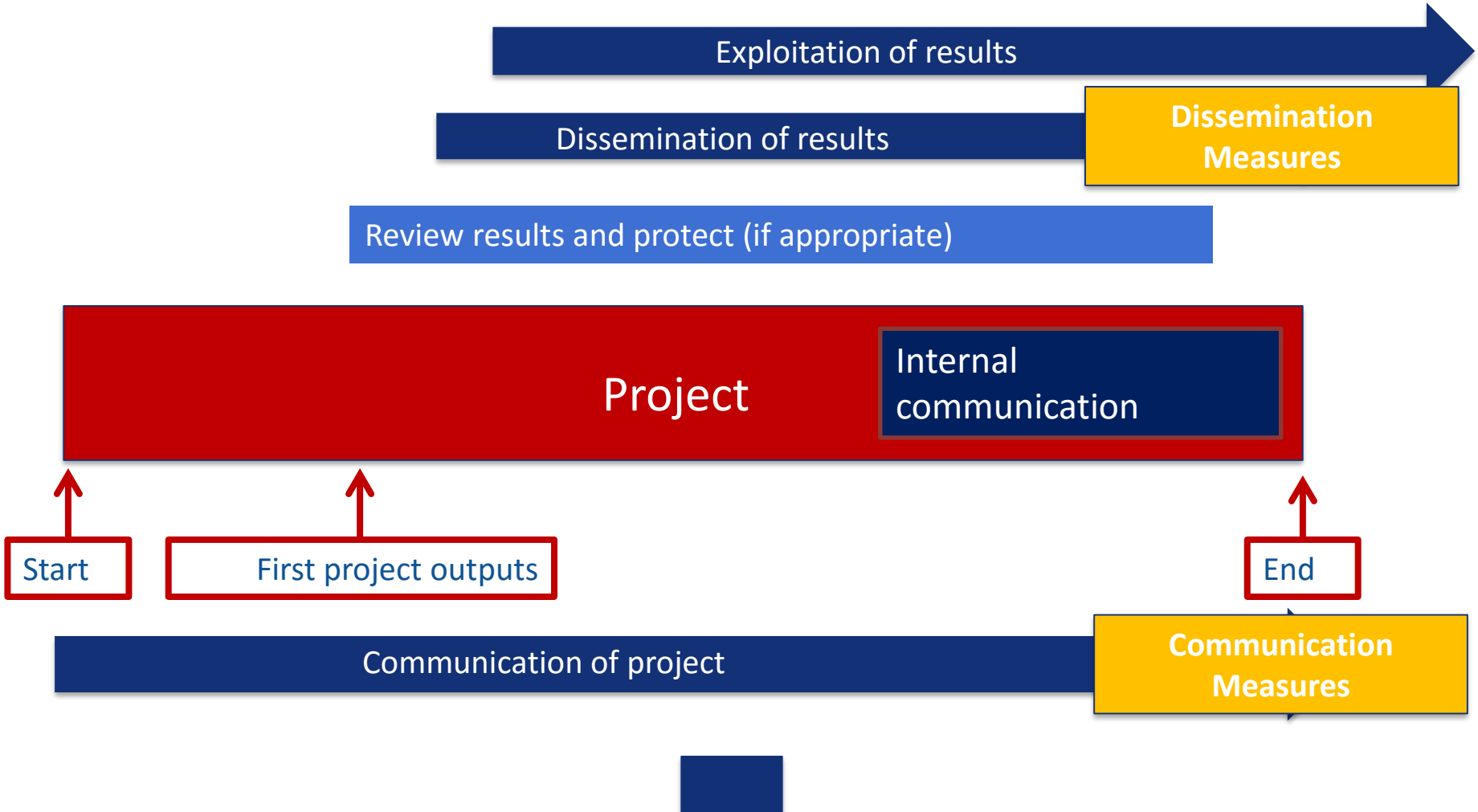
European IPR Helpdesk

Typical Management Structure



European IPR Helpdesk

Communication, Dissemination and Exploitation



What's special about project results?

- Project outputs are often early stage (and not fully market ready)
  - **so more work might be needed before investors can be convinced (overcoming the "valley of death")**

- Many research groups are working on the same challenges (no one has a monopoly on invention!)
  - **so you might need to collaborate with others, or licence in technology, to build a credible package**

Impact and Innovation in H2020

- Impact and Innovation must be addressed in **all sections** of a proposal, **NOT JUST** the impact section

- Impact and Innovation must be managed in **all stages** of a project, **NOT JUST** during exploitation

Exploitation Management

Policies and strategies – the exploitation roadmap

- Exploitation might be **commercial or research**
- Preparation of exploitation and commercialisation strategies (and plans, if appropriate) - **including the project results as a whole**
- Coordination of individual partner's exploitation plans to avoid conflicts
- Preparation of more detailed strategies and plans during the project
- Adapting to changes and trends in market and technologies

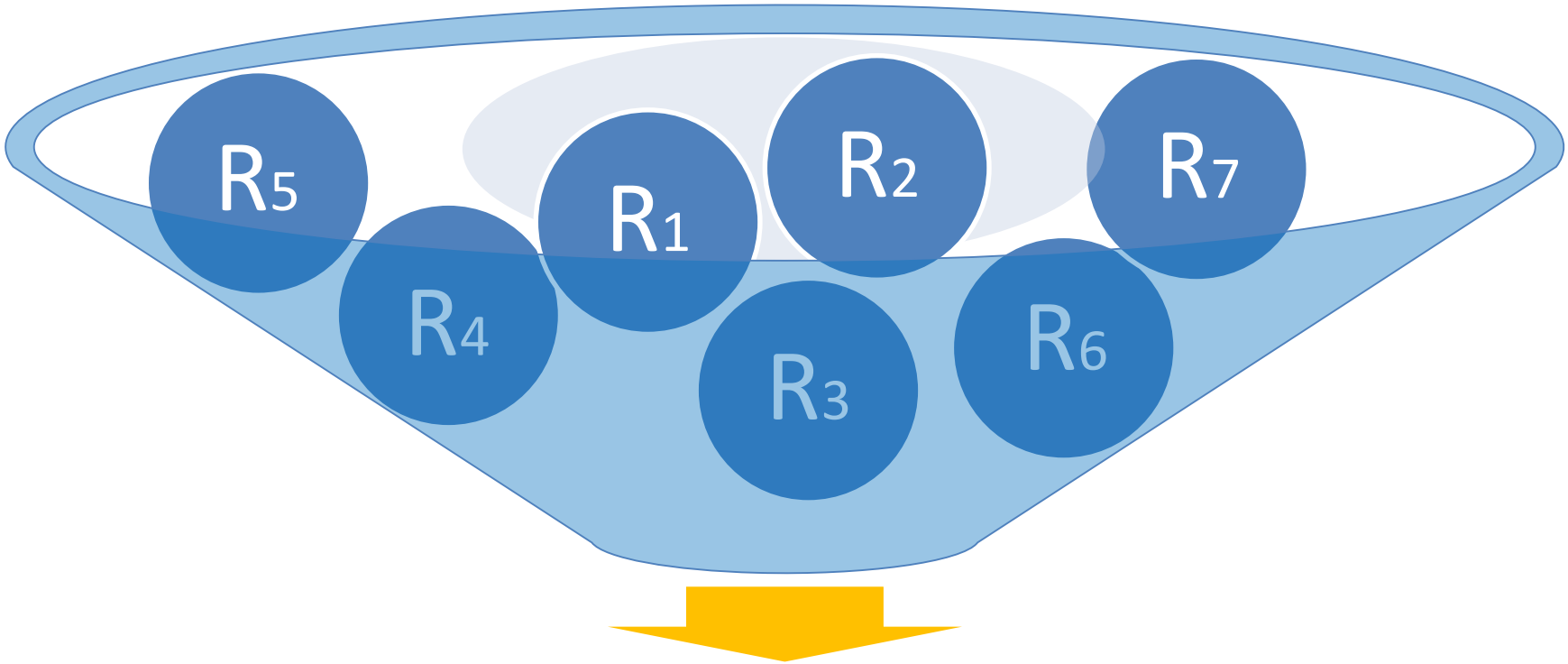
Monitor Upcoming results

- **Avoid early disclosures/novelty spoilers** in general: NEW
- Set up a **dissemination strategy**, make sure partners know about other partners' potential conflicting dissemination activities and may block them.

- Adopt a solid **invention disclosure form** for the research team

European IPR Helpdesk

Identify Key Exploitable Results

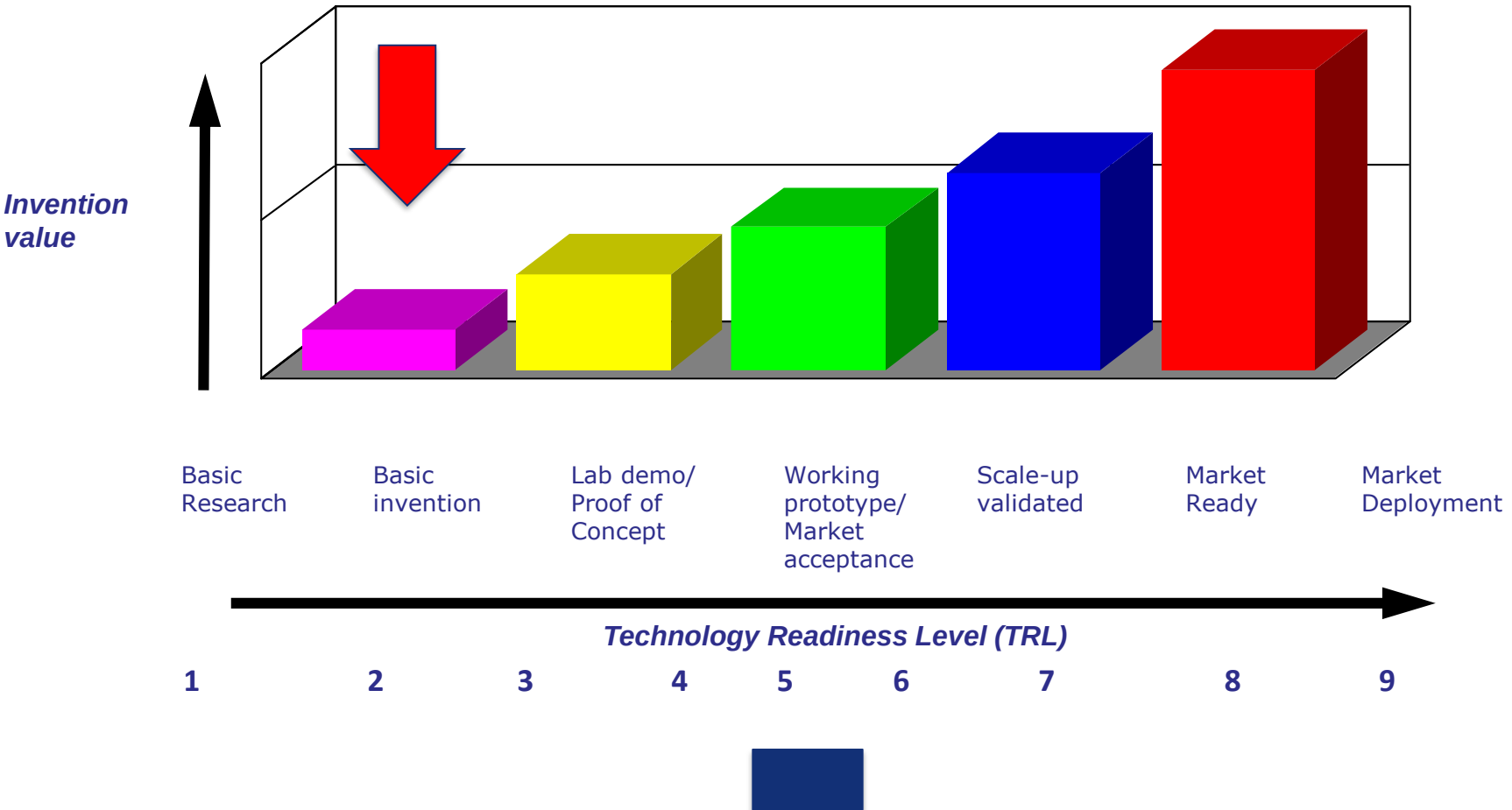


Key + Exploitable + ResultS

KERs:

- **Questionnaires to partners**
- **Exploitation workshops** based on the results of the questionnaires

Projects with low Technology Readiness Level:



Access to market is too premature…

- **What potential of further development does my technology have?**

1. Researchers/ research institutions, , universities active in the research field?

2.What are the best dissemination strategies to be carried out?

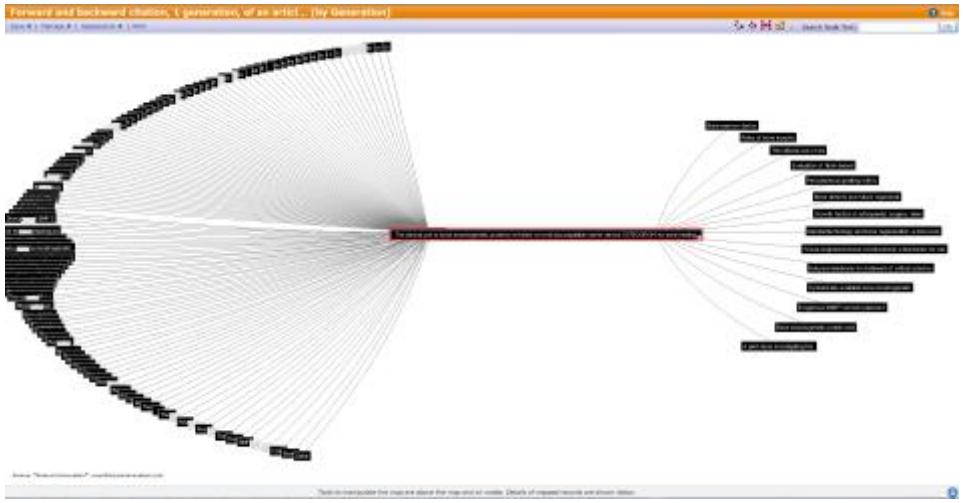
Best Practice Example: Monitoring ongoing related research

A **Themescape map** shows a general overview of the current state of the art in different fields of research:

- Create a overview of all the research fields that might be connected
- Check possible collaboration pathways

Source: Creating Values GmbH , Thomson-Reuters

In depth analysis of interesting research fields



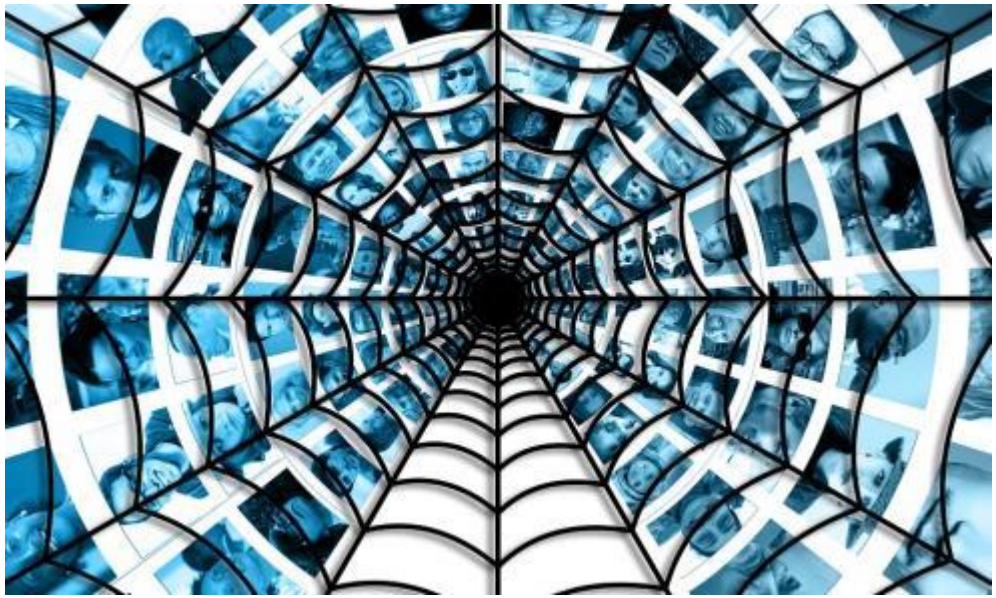
- Look for every possible citation of your work, both in background activities as well as for results.

- Optimize dissemination and communication activities in order to foster the use of results

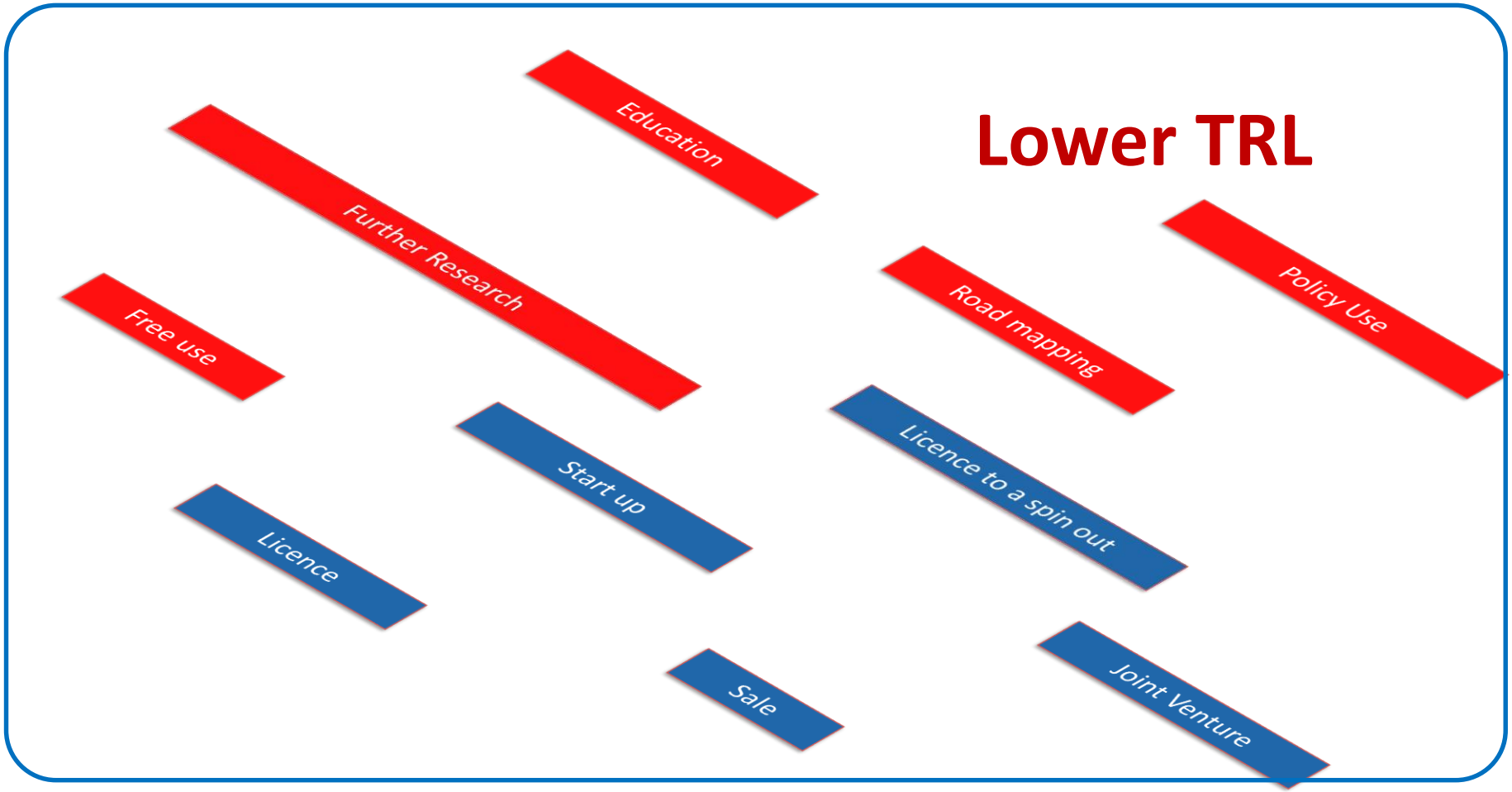
In depth analysis of interesting research fields (II)

- Find collaborating institutions (third parties involved in the action)
- Prepare for further research actitivities

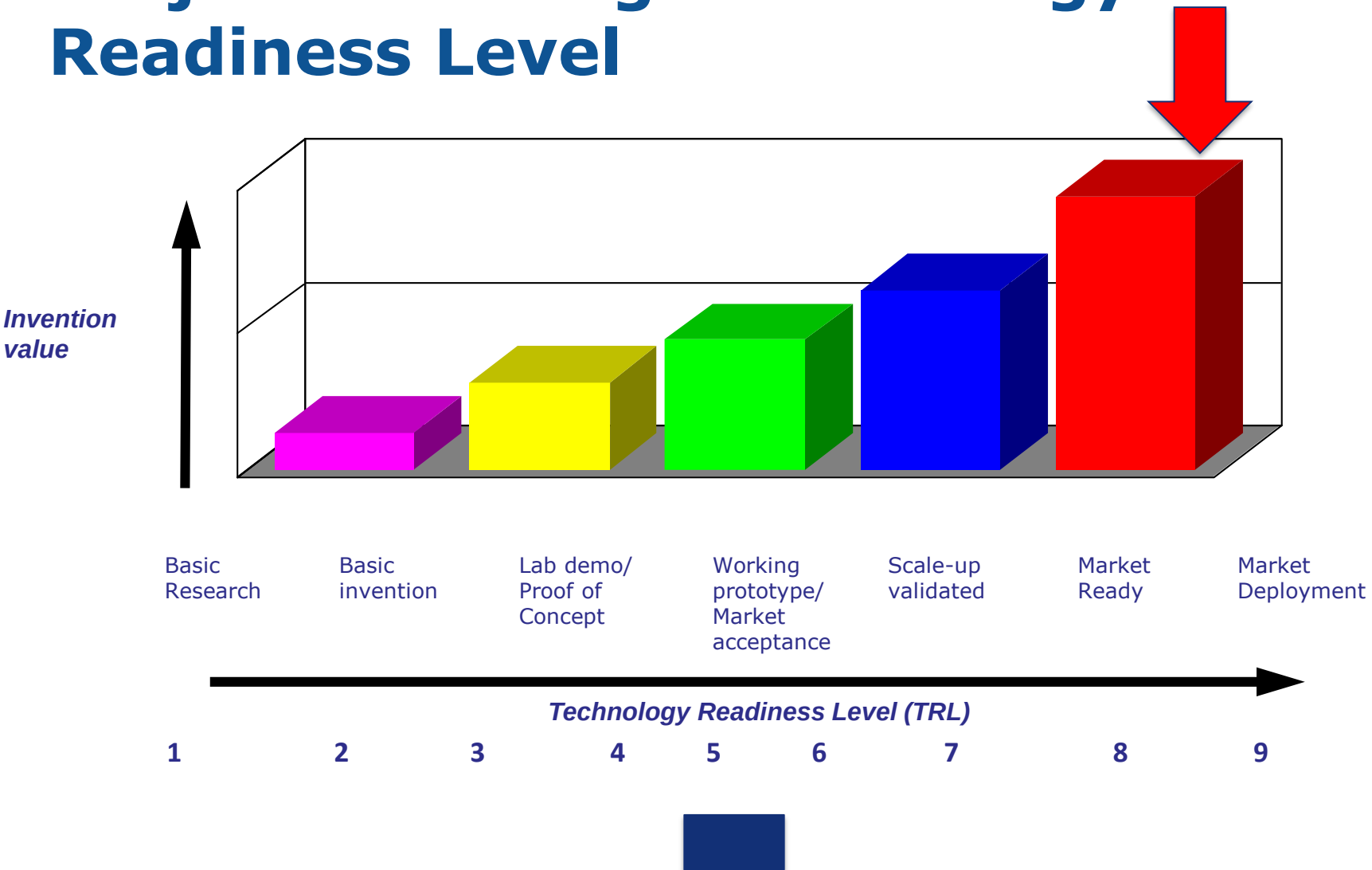
(Stimulating further research is an exploitation activity)



Exploitation Models



Projects with high Technology Readiness Level



Looking at market opportunities

1. Market analysis
   - Who are my competitors?
   - Potential strategic collaboration partners
2. What are the risk concerning existing IP rights?
3. Possible exploitation pathways

Market analysis:

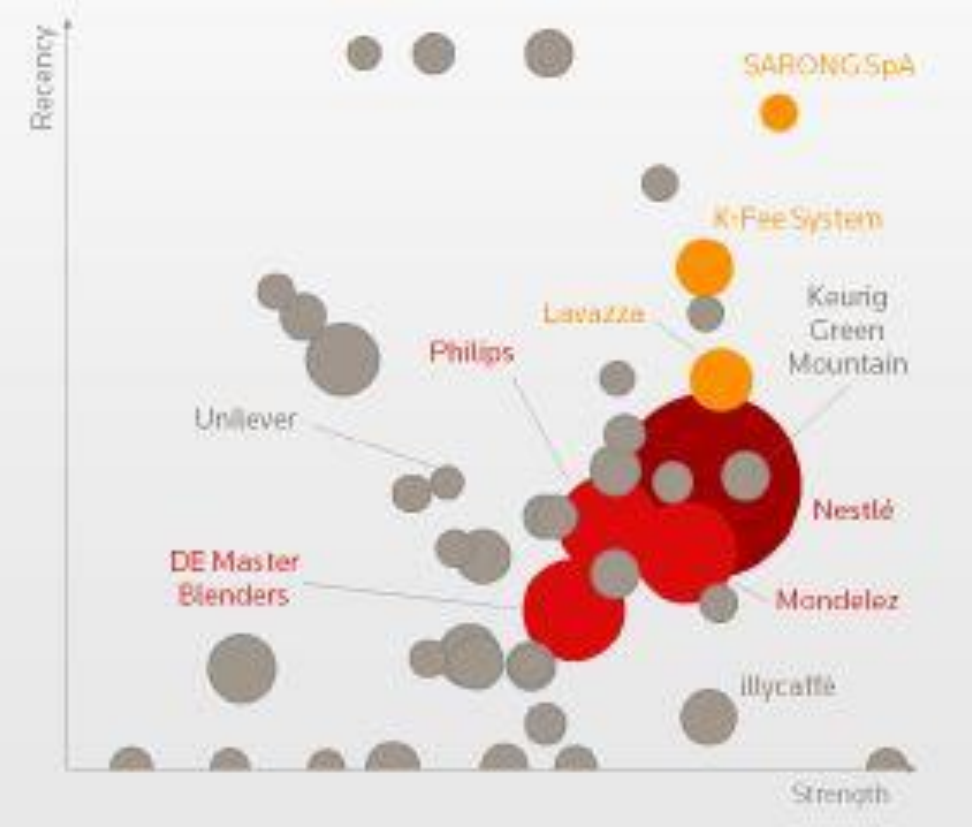
A **Themescape map** shows a general overview of the current state of the art markets in which the technology could be commercialized.

Sometimes technologies may be relevant for companies and markets very far away from the initial target market.

Look for the most innovative companies in the field

Patent analysis. Useful for:

- Knowing other innovators;
- Not committing patent or TM infringements
- Look for possible exploitation ways



Other innovators:

- How big are they?

A patents search indicates how big patent portfolios of other companies are;

< Patents means:
Less risks, younger technology.
> Patents means:
More risks, more mature technology

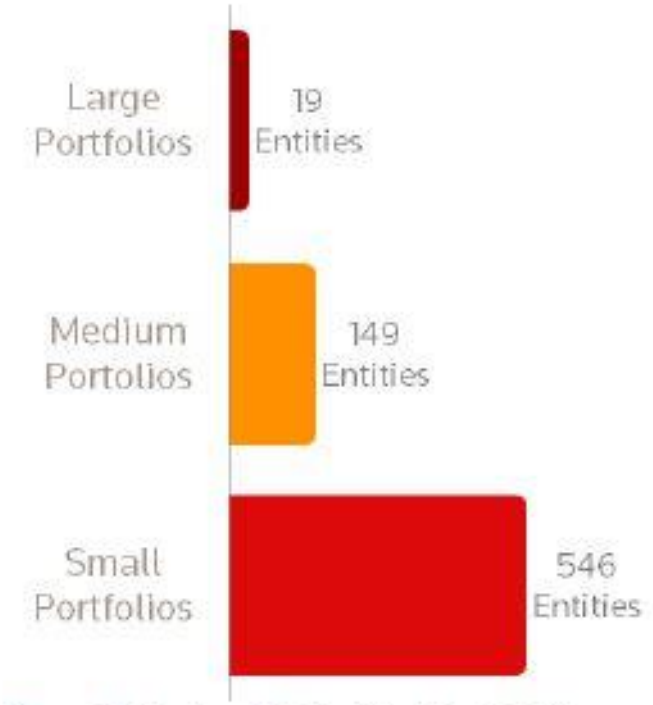


Figure 7 - Number of Patent Applicant Entities per Portfolio Size Tier

Other innovators (II)

- Where are they?

A patent grants a right to its owner only in territories in which the title has been registered

Patent Authorities with > 100 Inventions from Medium Applicants

Figure 11 - Global View of Major Filing Locations for medium volume (3-19 inventions) patent applicants

European IPR Helpdesk

How valuable are patents currently existing in the field?

Sometimes patent portfolio are very large but not valuable.

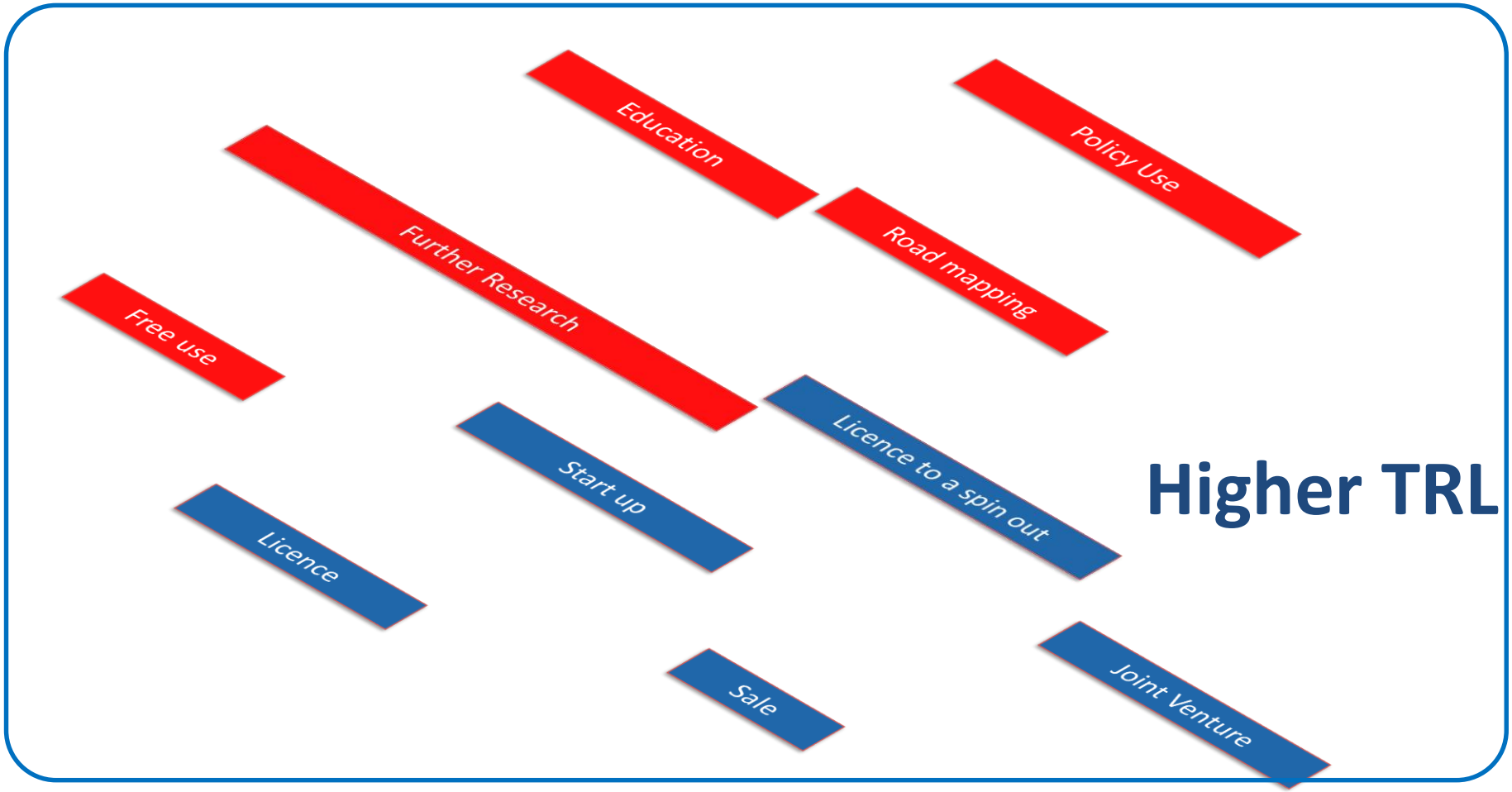
- Check patents' status

N.B. You cannot breach an expired patent !!!!!

Dissemination activities

- Contact potential interested companies.

Exploitation Models



Useful prgrams to carry out an adit analysis:

- IP Navigator (focus on H2020 results)
- IP score
- Espacenet
- TM view
- Thomson Data Analyzer

Europäisches Patentamt
European Patent Office
Office européen des brevets

TMview

Clarivate Analytics

Thank you.

We look forward to getting in touch with you!

For further questions and general IP advice, please contact our Helpline team:

service@iprhelpdesk.eu

Phone +352 25 22 33-333 (Helpline)

Fax + 352 25 22 33-334 (Helpline)

www.iprhelpdesk.eu

For questions related to our training activities, please send us an email at:

training@iprhelpdesk.eu