Wallonie

LiEU

LIAISON ENTREPRISES-UNIVERSITÉS

« Renforcer l'impact de la recherche universitaire dans la société »

LiEU Network

Prepared & presented by Eric Wyart
(Réseau LIEU)

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LiEU, a network of KTOs serving the Society

Meeting

Informing

Raising awareness

Collaborating

Detecting

Transfering IP

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LiEU, a strategy to foster innovation

BOOST4IMPACT
Transform the ideas and work of university teams into solutions to economic, societal and environmental challenges

SHARE4IMPACT
Pooling actions with a constant concern for interactions with other Walloon innovation ecosystems

Bring economic, societal, and environmental needs, challenges, and expectations closer to university research teams
CATCH4IMPACT

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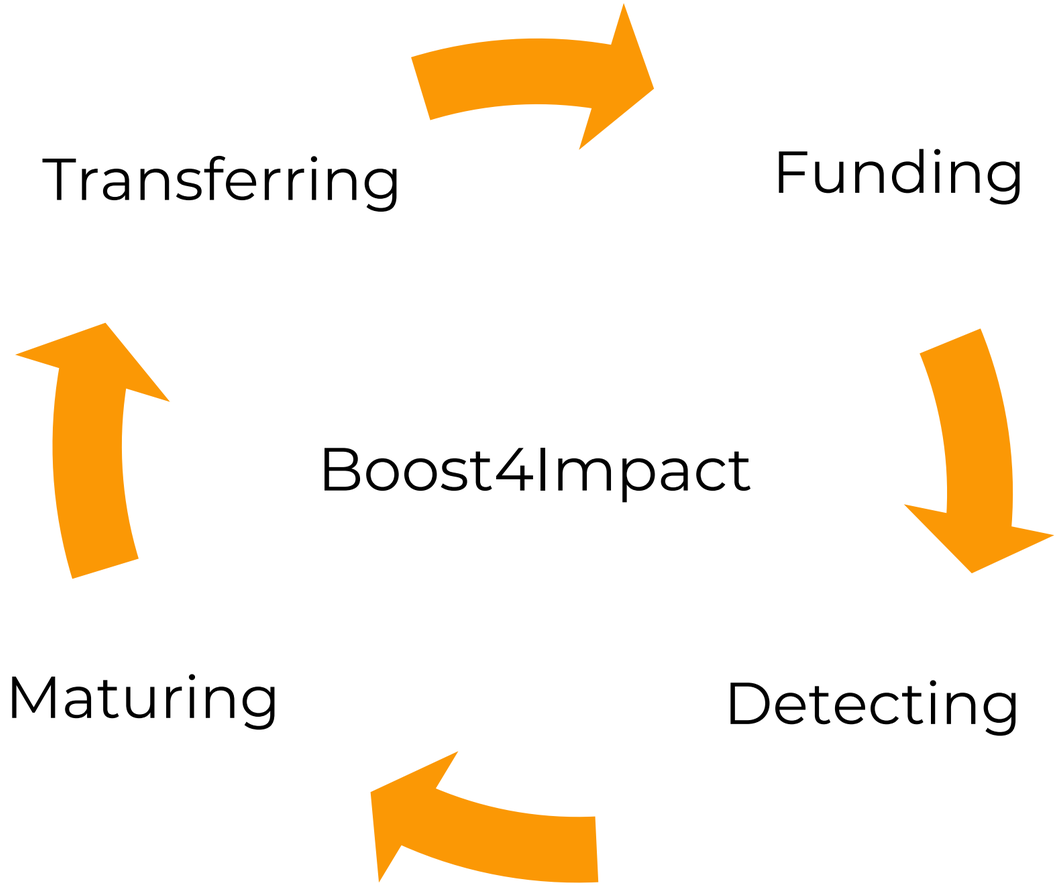
KTO's Strategy
Boost4Impact

Generate research result and give them value for business and society

- Project set-up and follow-up
- Legal aspects
- Confidentiality
- Research results detection
- Protection intellectual properties
- Maturation
- Transfer (licenses, spin-off)
- Societal Impact



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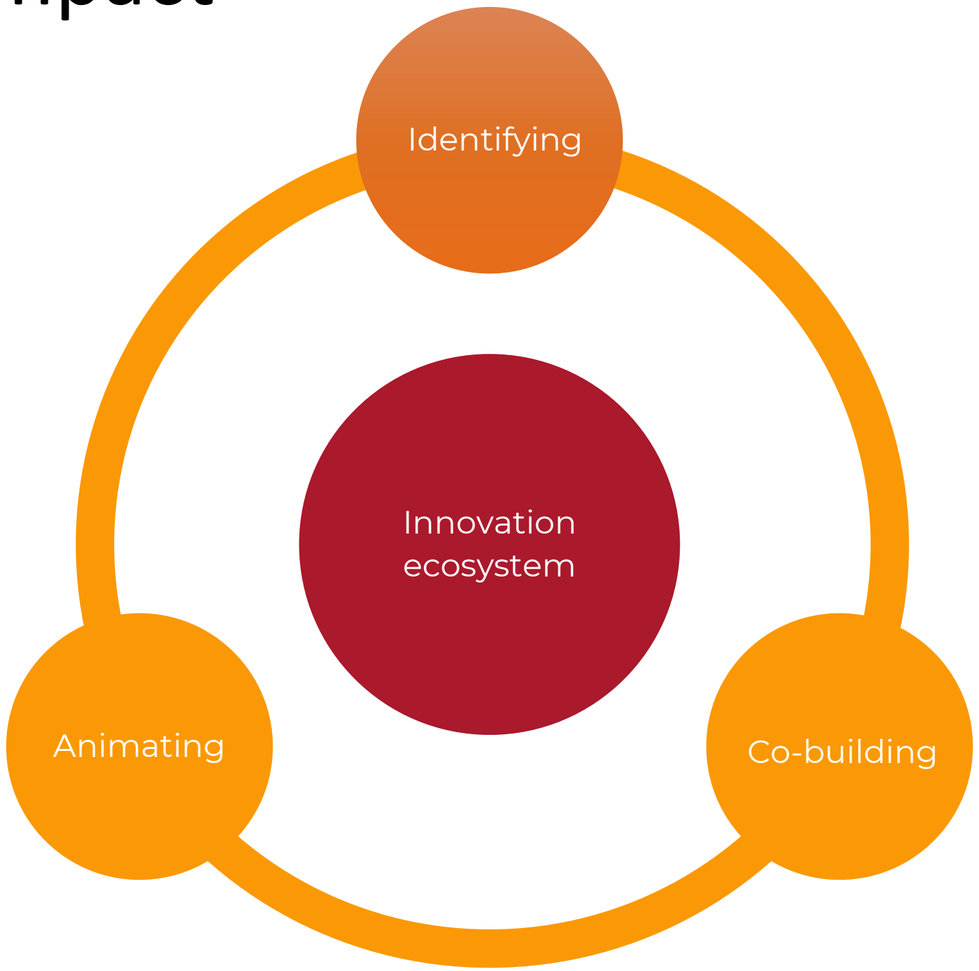
KTO’s strategy
Catch4Impact

Aligning business and societal needs with universities expertise

- Identification of research and innovation partners
- Collaboration with clusters
- Facilitation – animation
- Promotion of competencies and technology offers
- Involvement in the regional initiatives (S3)



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KTO strategy
Share4Impact

Pooling means to maximize the research impact for the society and the economy

- Structuring actions and governance
- Developing professional skills
- Designing and developing common tools
- Representing the KTOs within the ecosystem

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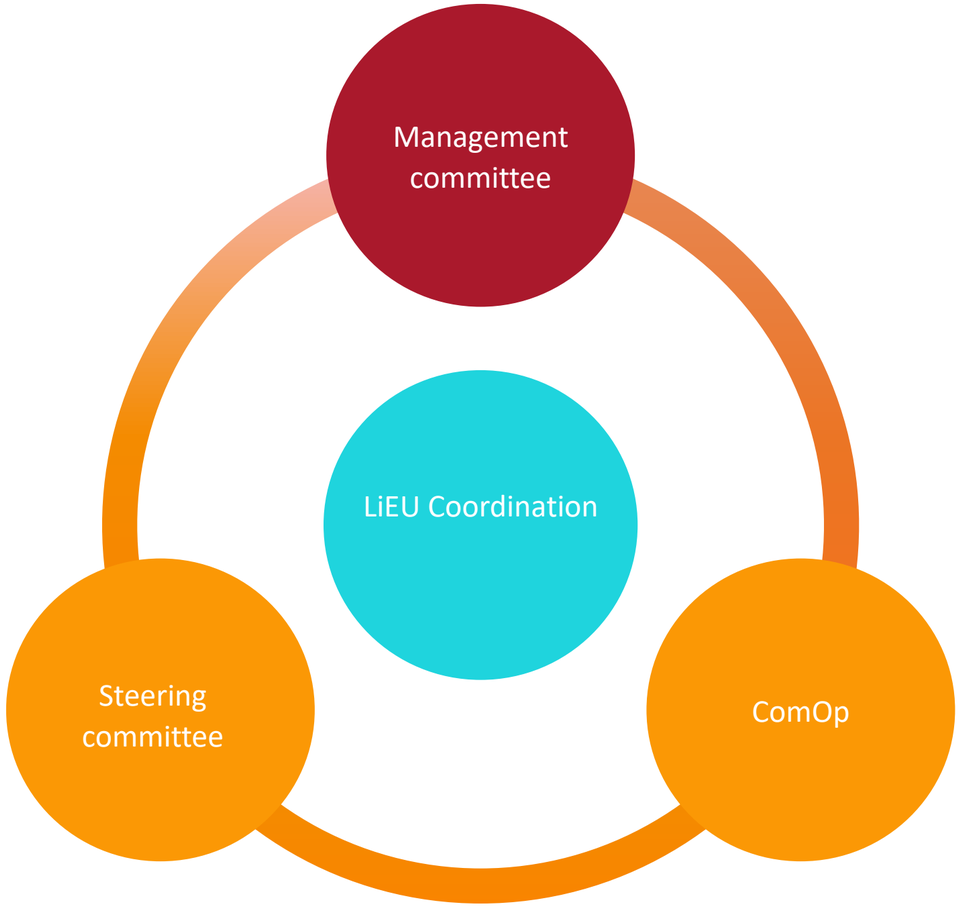
LiEU, a structured organization

- Coordination
  - Operational Director
  - IP advisor (PATLIB)
- Management Committee
  - President
  - Operational Director
  - Research administration & KTO's Directors
  - KTO's representatives
- Operational committee (ComOp)
  - Operational Director
  - KTO's representatives
- Steering Committee
  - Research vice-rectors



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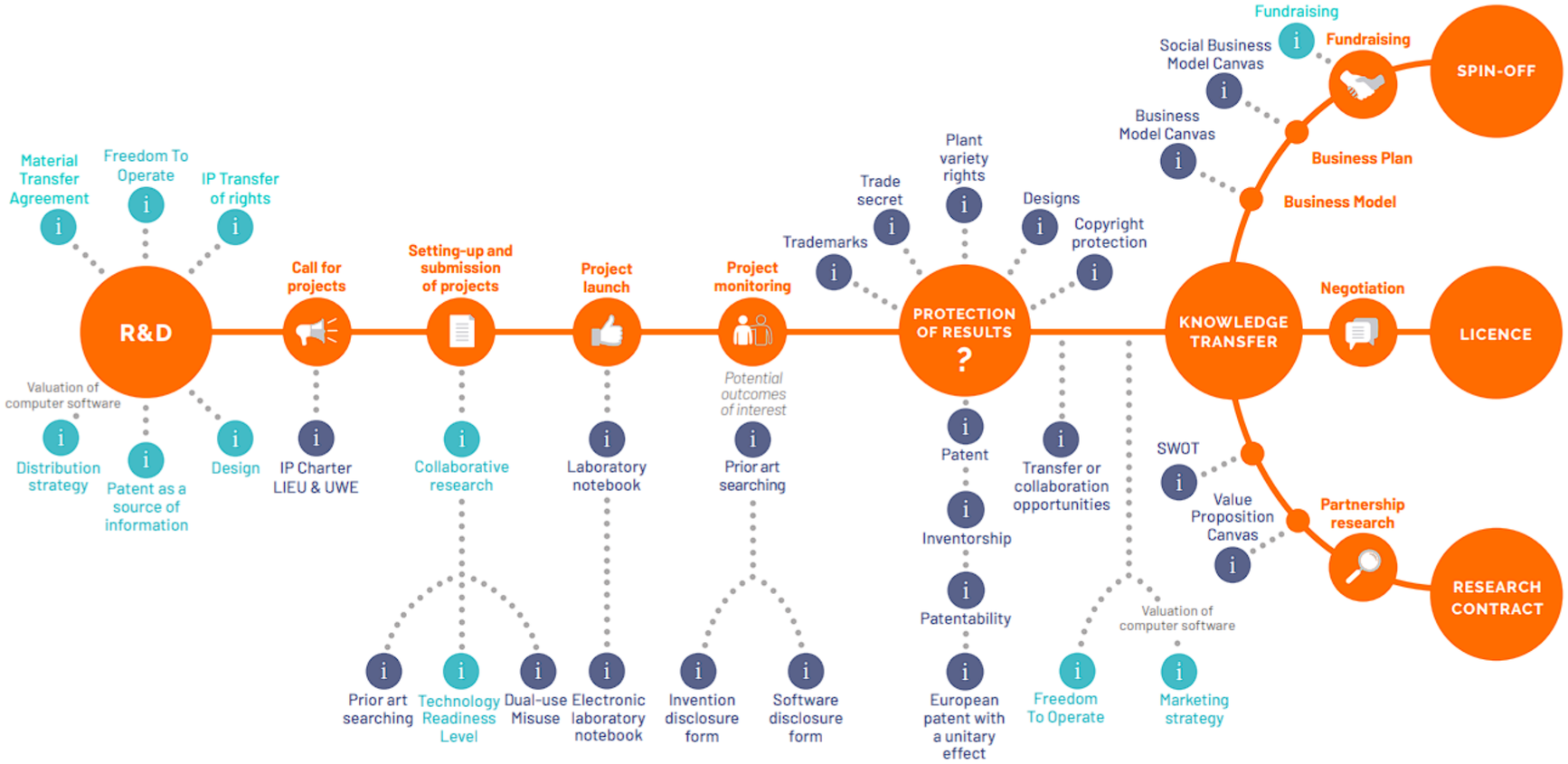
LiEU develops a memo services to researchers



https://reseaulieu.be/wp-content/uploads/2024/04/Memo_-_service_aux_chercheurs_LIEU_FR_2024.pdf

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LiEU offers facilitating tools

Foster collaboration between researchers and innovation actors

idea CREATE

Bring out innovative and creative solutions of a multidisciplinary group

idea VIEW

Define a prospective view that structures the long-term operational development plan of a research department/unit and generates team support

idea LiEU

CHALLENGE YOUR IDEAS FOR MORE IMPACT

idea GOAL

Design, challenge and validate a concrete solution proposal as a group, with a smart objective

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« Renforcer l'impact de la recherche universitaire dans la société »

Open Innovation: A key enabler of success

Prepared by Eric Wyart (Réseau LIEU)
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What does « Open Innovation » mean ?

R&D strategy involving partners outside the company to develop new products and/or services by sharing knowledge and active collaboration

The partners can be private or public

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Open Innovation: some examples

- Procter & Gamble has published a list of technical problems on its website that their team has been unable to solve or did not solve in time and has issued a call to the entire community to find solutions

- Lego is a pioneer on the path of Open Innovation. Its various programs (MindStorms, Lego Ambassador, Lego Factory, …), involve fans in the evolution of its product lines

- General Electric has launched the Ecomagination Challenge program, an initiative aimed at encouraging innovation and the search for sustainable solutions in the field of energy and the environment. The program was designed to bring together innovative ideas from entrepreneurs, startups, technology experts, and the global community to address challenges related to energy, water, energy efficiency, and other environmental areas

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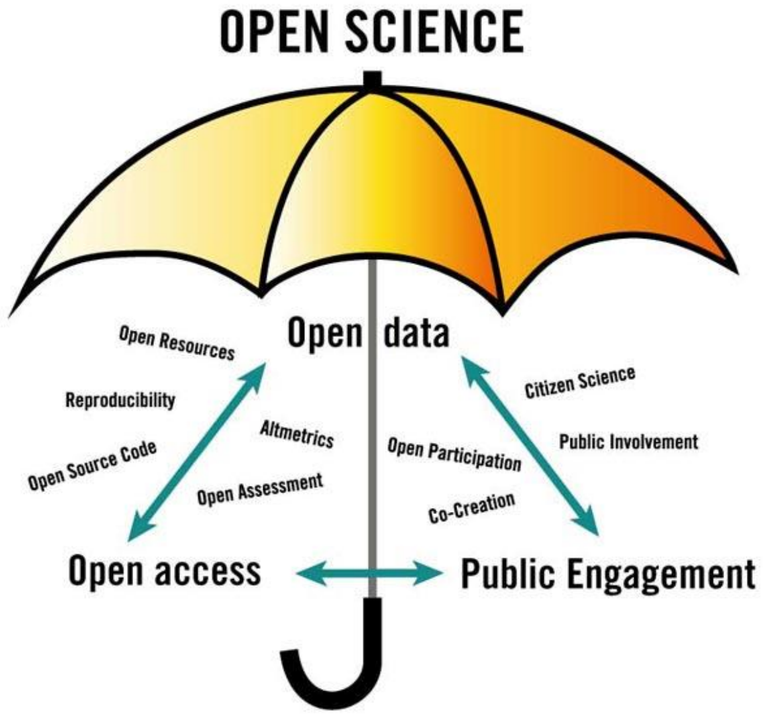
What does « Open Science » mean ?

UNESCO defines Open Science as “an inclusive construct that combines various movements and practices aiming to make multilingual scientific knowledge openly available, accessible and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community.



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Open Innovation with Open Science

- OpenAI started as an organization dedicated to developing artificial intelligence in an open and collaborative manner. While OpenAI has evolved its model to include more proprietary development due to the competitive nature of AI technology, it still contributes to the open science ecosystem by publishing research papers and sharing knowledge.

- DATS 24, the fuel supplier company in Belgium, is known for its commitment to sustainable energy solutions. It has engaged in open innovation and open science initiatives to develop and implement new sustainable technologies.

- ONTOFORCE, a Belgian startup, develops linked data technology to enable smart data integration and search. It has a commitment to open science, providing platforms that help scientists and researchers to access, integrate, and analyze data from various sources.

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What are the funding schemes ?

Bilateral funding

Private-Public funding

- European programmes
  - Horizon Europe, ERDF, ERA-NET, Interreg …
- National programmes
  - BELSPO
- Regional programmes

Depending on the funding scheme, rules related to ownership and licensing are different
(as it will be explained later)

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What are the funding schemes ?

Open innovation IS NOT Subcontracting

In case of subcontracting, the company owns all IP produced by the subcontractor – NO licence needed

Open Innovation = Active collaboration and Sharing of benefits/risks

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Consortium agreement: IP issues

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What about IP ?

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Main Intellectual Property (IP) toolbox

IP rights	Scope	Duration	Registration
Patent	Technical invention	20 years (if payment of annual fees)	Application to national or international office
Industrial design (2D or 3D)	External aspect of a product	• 5 years with 4 possible renewals (=> max. 25 years) • 3 years for Unregistered Community Design	• Application to national or international office • None (automatic upon disclosure)
Trade-mark	Distinctive sign	10 years with unlimited renewals	Application to national or international office
Copyright	Literary, artistic and scientific work (includes software)	• unlimited for moral rights (authorship, …) • 70 years after author's death for economic rights (commercial use of the work)	None (automatic upon the creation of the work)
Database	Systematic arrangement of independent data, individually accessible	• If copyrighted : 70 years after author's death • *sui generis* (content if substantial investment) : 15 years	None
Plant variety	Stable plant variety	• 30 years for trees, vine, potatoes, asparagus, … • 25 years for the other plant varieties (if payment of annual fees)	Application to national or international office
Know-how/Trade secret	Confidential business information	Unlimited (as far as the secret is kept)	None but needs trackability and reasonable measures to keep the secret

Useful link : https://intellectual-property-helpdesk.ec.europa.eu/system/files/2021-01/european-ipr-helpdesk-your-guide-to-ip-in-europe.pdf
https://economie.fgov.be/fr/themes/propriete-intellectuelle

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IP characterization vs project phase

- Background IP is the IP rights as of before the beginning of project
- Foreground IP is the IP generated within the collaborative project
- Sideground IP is the IP that can be of interest and obtained during the project by any partners outside the project
- Postground IP is the IP that can be of interest and obtained after the project ends
- Access rights during and after the project must be detailed in the consortium agreement

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How to state the IP management rules ?

- IP rules to be detailed in the Consortium Agreement (CA) (Collaborative project) or Contract (bilateral project)

- Public funded projects
- Legal statements
- Programmes rules
- States aids rules/ De minimis rules
- Consortium Agreement template

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IP access right & exploitation

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How to access background/sideground IP?

- During the project
- If previous agreements exist, it prevails
- In certain cases, free access to the necessary background (no transfer of ownership) in the framework of the project. The license terms must be detailed

- After the project, it must be negociated to grant the future exploitation of the results

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IP access rights during the project

- Licensing to others can be for limited use of IP
- Licensing terms define the scope, duration, and conditions of use
- Licensing agreements can be exclusive or non-exclusive

- Balance between protecting IP and encouraging innovation is essential
- Properly managed IP access rights can incentivize innovation and facilitate knowledge sharing

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Who owns the results ?

- In a bilateral funding scheme the ownership are detailed in the contract

- In a public funding scheme the (co-) ownership rules must be detailed in the Consortium Agreement and respect the program rules and legal statements
- ➔ /!\ the state aids rules must be respected /!\

- <u>Very often:</u>
- Owner = the one who produces the result
- Co-owner = all the contributors to the actions which lead to the produced results

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IP exploitation

- Establish well-defined ownership and usage rights through legal contracts
- Define the way the background and sideground IP can be used
- Develop flexible licensing models, e.g., exclusive, non-exclusive, territorial, time-limited
- Determine the value of IP assets to aid fair negotiation and mutual gains
- Implement mechanisms to monitor IP usage and enforce agreements

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Licensing & IP valuation

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What are the different types of license ?

- **Exclusive License**
  The licensor grants the licensee the sole right to use the IP for a specific purpose within a defined geographic region and timeframe. Even the licensor cannot use the IP for the designated purpose during the license period
- **Non-Exclusive License**
  The licensor grants the licensee the right to use the IP, but the licensor can also license the same IP to other parties. Multiple licensees can exist simultaneously
- **Sublicensing**
  This type of license allows the original licensee to further sublicense the IP rights to other parties
- **Field-of-Use License**
  The licensee is granted the right to use the IP within a specific industry or application. The licensor retains the rights to license the IP in other fields
- **Royalty-Free License**
  The licensee is not required to pay royalties or ongoing fees to the licensor. The fee for using the IP is usually paid upfront
- **Royalty-Bearing License**
  The licensee is required to pay ongoing royalties or fees to the licensor based on a predefined agreement, such as a percentage of sales
- **Patent Pooling**
  Multiple companies join forces to share their patents in a single pool. This allows licensees to access a broader range of technology without needing to negotiate individual agreements with each patent holder

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IP Valuation Methods

- **Cost approach** – the cost to develop or obtain another asset of similar use and quality
- **Market approach** – Identify M&A, investment and licensing deals which involve similar or comparable IP. Can be referred to as the comparator approach
- **Income approach** – determine the risk adjusted net present value (rNPV) of the cash flows arising from commercialisation of the IP. Also referred to as the royalty-relief approach

Wellspring, 2023

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IP Valuation Methods

- **Cost Approach:**
  - Can be useful for certain types of IP e.g. software
  - Generally significantly under-values patented IP
  - Can be useful as a bottom line starting point to test other valuation model outputs

- **Market Approach:**
  - Can be useful in areas where there are lots of similar deals (e.g. pharmaceutical licensing)
  - LES, AUTM surveys, RoyaltyStat etc

- **Income Approach:**
  - Generally accepted as the most useful way to value earlier stage companies and their IP
  - Value assumptions built on future income potential, not past performance

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Way forwards

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When starting discussion ?

- The success of the project and the exploitation of the results depends on the IP access and exploitation right

- Starting discussions on IP and licensing early in the open innovation project is essential to avoid misunderstandings and set a clear path for collaboration. By addressing these matters from the beginning, you can ensure that all parties are aligned and focused on achieving successful outcomes

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How the KTOs may help you ?

- Guidance on IP rights, patents, and copyrights associated with the technologies you're interested in.
- Facilitation during the licensing
- Collaboration facilitation and collaboration agreement to ensure smooth cooperation
- Assessments of the technology maturity: TRL, CRL, IRL, market analysis
- Access to various resources within the institution, such as laboratories, research facilities, and expertise
- Funding opportunities identification
- Legal assistance in drafting contracts, licensing agreements, and other legal documents necessary for collaborations and licensing.

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Concluding remarks

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Benefits of the open innovation framework

- Organizations can leverage each other's strengths and expertise to create innovative solutions
- Shared IP can enable easier access to new markets and customer bases
- Partners can pool resources, reducing the risks and costs associated with R&D
- IP exploitation can accelerate technology adoption and diffusion

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Be Aware

- Open innovation (with open science or not) requires effective management of intellectual property, appropriate collaboration agreements, and an understanding of challenges related to data confidentiality and security.
- However, when these challenges are addressed correctly, the benefits of open innovation (with open science or not) can be substantial for companies engaged in research and development.

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Take-away messages

- **Open innovation as a strategy**
  Leverage of the intellectual property assets by granting others the right to use, develop, and commercialize their innovations
- **Start discussion in the early stage of the project set-up**
  What do you bring to the project ?
  What are the conditions to use it during the project ?
  How the (co-)ownership is defined ?
- **Think about the post-project phase**
  What do you need to exploit the result ?
  How do you see the future of the collaboration ?

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Thank you !

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