Impact and Innovation in H2020 Projects

European IPR Helpdesk
Managing Impact and Innovation in H2020 projects

Dr. Eugene Sweeney
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Get your ticket to innovation.

Roadmap
The Implementation Section of the Proposal

• Practical management of impact and innovation in the project

• Management structures, policies and processes

• Getting the best project outcomes and results
Impact and Innovation in H2020

- H2020 is based on:
  - An **impact orientated** approach
  - **Delivering** strategic technologies that can **drive competitiveness and growth**

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

Understand the landscape
Strategic Intelligence – to plan a route

- WP and Call Challenges, Objectives & Topics
- Technology
- Regulations
- Related Research
- Industry Competitors
- Research Competitors
- Standards
- SOTA
- IP & IPR
- Market Factors
Using the Strategic Intelligence to prepare the proposal

• To select project objectives to maximise impact

• To plan the best route to achieve the objectives
  ▪ R&D strategy, methodology and delivery plan
  ▪ Exploitation (commercial/non-commercial) strategy and plan
  ▪ Dissemination strategy and plan

But how to implement it and manage it?
Implementation

Management structures and procedures to:

• Capture and manage the research results
  ▪ The management framework (who is responsible)
  ▪ The management procedures (how it will be done)
  ▪ Establish good foundations and guiding principles/policies
  ▪ IP management and protection strategies and procedures

• Exploit the research results
  ▪ Assess the opportunities
  ▪ Exploitation strategies and plans
  ▪ Exploit/Extract value from research outputs
  ▪ Dissemination and communication of research outputs

Evaluation Criteria - Implementation

• Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources

• Complementarity of the participants within the consortium (when relevant)

• Appropriateness of the management structures and procedures, including risk and innovation management
Key Issues

- Innovation Management
- IPR Management (including ownership)
- Exploitation Management
- Impact
- Innovation Potential
- Enhancing Innovation Capacity

Innovation management is not IPR Management
is not Exploitation Management
**Idea to Innovation**

- Innovation potential?
- Exploitation strategies and plans
- IP Management and Strategies
- Innovation capacity
- Impact
- Meeting needs and delivering benefits
- Identifying market opportunities and monitoring markets, technologies, and IPR

**Innovation Management**

STOP
Innovation Management
( EC definition)

Overall management of all activities related to understanding needs, with the objective of successfully identifying new ideas, and managing them, in order to develop new products and services which satisfy these needs.

Innovation management starts at the point of capturing the creative works and finishes when it a product or service is deployed.

Innovation Management

- Understanding the market needs and opportunities
- Being responsible for the overall strategic approach
- Continually monitoring the market, IP and technology landscapes
- Steering (adapting if necessary) the development plan to meet the project objectives and market needs
- Ensuring the project’s foundations and management processes and structures (for innovation) are sound and working effectively
The management framework

Strategic and overall project management

Engine room

Work packages and task management

Innovation management

Someone must be responsible for managing all activities related to innovation, from market need through capturing the IP, to market deployment.

Securing the foundations
(at, or before, the start of the project)

- Consortium agreement
- Agree IP access, usage rights and policies (foreground, background, during and after project)
- Agree IP exploitation policies
- IP awareness training for participants (to avoid IP value leakage)
- Ensure good research practice (GRP) training and procedures in place
**IPR management**
Management of the IP used by the project

- Ensuring appropriate access and usage rights for key IP before and after the project

- Monitoring use of 3rd party components (especially licence terms - e.g. Open Source) during and after project
**IPR management**

*Capturing and Managing IP generated by the project*

- Implementing the IP management strategy and plan, based on IP Policy
- Regular reviews of project outputs (IP) to stimulate disclosure
- Securing agreements for foreground IP
  - Ownership
  - Management
  - Access/Use
  - etc

**IPR management**

*Assessing the IP and the opportunities*

- Assessment of foreground IP (once disclosed by creator)
- Prior art search for patentability, overlap, and/or potential partners/collaborators
- Review of alternative technologies
- Assessment of *market opportunities*
- Assessment of *innovation potential*
- Assessment of potential to enhance *innovation capacity*
**IPR management**

**Protecting the IP**

- Review the need for formal protection (if possible) – in line with exploitation strategies
- Pre-publication reviews (for patentable inventions, or for commercially confidential inventions)
- Invest in protecting and securing foreground IP as appropriate
  - Patents, copyright, keep secret, etc
  - Secure proof of creation
  - etc
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

Exploitation Management
Practicalities to address

- How far down "TRL" road to go?
- Is further development needed?
- Do you need to licence in 3rd party components, etc?
- Is more investment needed?
  - what for
  - how much
  - where from?
- Prepare a draft business plan or investment proposition, if appropriate (with financials)
- Prepare a marketing (communication/dissemination) campaign to support exploitation
Dissemination and Communication
To support exploitation

- **Dissemination is not** Exploitation is not Communications

- Prepare coordinated dissemination strategy and plan to support commercial and non-commercial exploitation of the project results.

- Might include:
  - Targeted prospecting
  - Cold calling
  - Community building (to generate market pull?)
  - Public awareness (to generate market pull?)
  - Seminars/Meetings (to raise awareness)
  - Special events (for hands-on trials) - if appropriate
Recognising the assets

- Intellectual Property, like physical property is an asset which has value and can be traded.
- The creators of the IP (i.e. the researchers) must be made aware of the value of their creations, and the steps they must take to protect its value.

The creators must recognise what they produce and know where to go next
Researchers recognising IP
and then disclosing it
is only the start!

Initial Disclosure
How?

• proactively (at a review meeting)
• Opportunistically (phone call, email, formal project disclosure, etc)
• Usually incomplete information
• Important for "IP Manager" to get as much information as possible at this stage.
**Initial Disclosure**

**Key information needed**

- Clarify ownership – particularly if 3rd parties involved
- Identify ALL relevant IP (software, papers, know-how, etc)
- Inventors’ opinions about competition, technologies and markets
- Check for “hidden traps” (publications, posters, etc), which might affect patentability.
Hidden Traps
which can prevent patentability for technical inventions

- Novelty
- Inventiveness (not obvious)
- Industrially Applicable or Useful

Novelty

Not previously described in "prior art" or publicly disclosed (anywhere in the world)
Common inadvertent disclosures (1)

- Publishing in the literature
- Posting information to the Internet
  - Inclusion in a thesis or other accessible document deposited in a library, including private collections associated with and indexed in the library
  - Oral or written disclosure with a customer, at scientific meetings (including poster sessions) or in any circulated abstract or pre-print of a paper to be read at such a meeting
  - Any talk or demonstration with customers, at an open day, colloquium, lecture or the like

Common inadvertent disclosures (2)

- Disclosing to any visitors in a non-confidential manner, including posters and displays in adjoining corridors
- Leakage of information from experimental public trials or prototypes carried out without taking precautions to avoid this
- Advertisement, sale, use or any form of commercial activity which is public (e.g. to try and "test the market")
Inventiveness... Obviousness
European Patent Office Guidelines

“The term 'OBVIOUS' means that which does not go beyond the normal progress of technology but merely follows plainly or logically from the prior art i.e. something which does not involve the exercise of any skill or ability beyond that to be expected of the person skilled in the art”

Published (or Public) Statements can Defeat Patents

• “Smith and Jones showed X. Therefore we decided to try Y”

• “Because of its structure, this virus seemed a likely choice as a vector of foreign epitopes”

• “We predicted it would happen and these results have confirmed our prediction”

• “Logic dictates that...”

Such statements make it sound obvious to try and obvious that it will succeed
Beware of Hidden Traps!

- The way papers are written
  - before AND after patenting

- Inadvertent Disclosures
  - Email and Internet discussions
  - Research papers
  - Prototypes
  - Conference abstracts and presentations
  - “Internal” presentations
  - discussions in a public place (including open access coffee lounges)
  - etc
Ownership of foreground IP

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

- Involve your institution’s knowledge/technology transfer office (or equivalent) in the project – who will also have access to needed skills.

Ownership!

Who owns what?
(EB rules as default)

Who will manage?

Who will pay for protection? How will costs be shared?

What are the relative contributions to the invention?

How will revenue be shared?
Before any project starts...

- Agree ownership policies. If joint what are relative contributions, and how will they be agreed?
- Agree who will manage – ONE manager
- Agree who will exploit – ONE exploiter
- Agree cost and revenue sharing models
- Agree processes to resolve conflicts, e.g. regarding protection and use in certain territories, sectors or non-use. Flow back options.

Visitors

Ensure IP Policies are agreed to by “non-staff” who might become involved in the project.

- Taught research students
- Visiting academics
- Advisory board members
- etc
Summary

- Impact and Innovation needs to be addressed in **all 3 sections** (excellence, impact and implementation) of a proposal

- It is fundamental to **understand (and monitor) the landscape** (market, technical, IPR, SOTA, Competitors, etc)

- to obtain **strategic intelligence... to justify** the project objectives and to **plan** the best route

- Ensure project results (IPs) and their are **captured and managed** appropriately
Nothing in isolation!

- IPR, Exploitation, Dissemination and Communications Management are all closely interdependent, and all rely on understanding the IP, technical and commercial landscapes.

- They are all an integral part of innovation management – but are different activities.

Thank you. Questions?

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