

EuroGEOSS Showcases: Applications Powered by Europe

# **D5.4**

# First Annual Report on IP and Innovation Office







### **ABSTRACT**

The e-shape project has a strong focus on generating real impact for the user communities and market sectors it involves. To achieve that — and in line with its nature as an Innovation Action — e-shape puts forward a series of measures that aim at supporting the various pilots, but also the EO community at large, in boosting their sustainability potential. One of these measures involves the **design, set-up and operation of the novel "e-shape IP and Innovation Office**". Managed by a combined team of IP, Innovation and EO experts, it constitutes an online resource, through which pilot partners, primarily, and the greater EO community, secondarily, will get access to IP and innovation support. The support will be provided in the form of information but also through on-demand services that can be triggered online. For both information and services, the "e-shape IP and Innovation Office" will be specifically targeting the EO sector.

In that regard, its development has been carried out so that it (i) makes use of best practices associated with existing resources (such as the European IP Helpdesk, the IP Booster, etc) and "translates" them into the operational realities of EO actors, (ii) produces added value to these existing resources by exploiting their outputs, increasing their visibility and generating additional traffic towards them.

Ultimately, the e-shape IP and Innovation office aspires to become a valuable tool for the pilots at first, and the greater EO ecosystem subsequently. The realisation of the full breadth of the e-shape IP and Innovation office offering will be carried out gradually. The progress achieved in reaching that goal will be documented in a series of annual reports, the first of which is the present one. In this report the main focus is placed on contextualising the *raison d'être* for the development of the e-shape IP and Innovation office (chapter 2), positioning it as a complement to existing best practices (chapter 3), constructing a better understanding of community needs (chapter 4), presenting its main features (chapter 5). Building on the projected next steps (chapter 6) and extracted conclusions (chapter 7), subsequent reports will put greater focus on the actual interaction of the e-shape IP and Innovation Office with pilot partners and external EO actors (where applicable).

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# 1 Introduction

Intellectual property (IP) protection can take many forms: patent, trademark, copyright, industrial design, etc, and in all these cases it produces benefits: for inventors, creators, and ultimately the whole society. IP turns otherwise intangible assets into tangible, making them tradable on the marketplace. Whilst itself a result of innovation, IP also serves as an incentive for further innovation. While forms of IP protection have existed and developed for hundreds of years, their role is more important than ever in our current globalised world. This is why IP has been promoted by the European Commission (EC) as an important tool for boosting innovation and creativity, developing employment, and improving competitiveness in the 21<sup>st</sup> century's increasingly knowledge-based economies.<sup>1</sup> This tendency is expected to grow even more, along the development and integration of 3D printing, a wave of 5G networks and enabled devices, and advancements in biotechnology, just to name a few. Patents and other intellectual property rights (IPRs) in these fields are already on the rise.

Against this backdrop, it is important to note that innovation, successful business development and intellectual property (IP) go hand-in-hand. IP is a relatively straight-forward way for companies to create and preserve value. This appears crucial in the context of sustainability and building long-term solutions — a concept which is at the heart of the e-shape project. In that regard, it is often observed that otherwise great R&D ideas don't reach their full potential and a real traction with users or the market because of, *inter alia*, limited knowledge on innovation strategy and IP handling. This applies not only to SMEs involved in R&D activities; it is equally important for public research institutions, in the context of inter-institutional collaboration on research projects (and, for instance, the background IP that comes with it, as well as those produced throughout the collaboration). It also applies simply on the commercialisation of public research through spin-offs and corresponding technology and knowledge transfer activities. In the latter case, it is unjustified, when appropriate, to not create additional value to research funded by public investment, and to not protect as best as possible the already created value.

Recognising this potential of IP to create value has led the European Commission (EC) to launch multiple initiatives allowing SMEs and research institutions to acquire IP solutions and long-term knowledge on where and who can support their IP needs. Some initiatives have been directed at H2020-related and similar projects,<sup>2</sup> where the standard scheme of implementing IP audits a few times throughout the project is often insufficient to realise actual value and reach the full innovation potential of the project. For instance, even in the so called H2020 "Innovation Actions", further innovation is often hindered by lack of interest of some partners to collaborate after the end of the project, and an initial agreement on the matter can prevent and solve such problems. In e-shape, we follow best practices of IP management - used, tested and improved in multiple similar research projects, and take it a few steps further by operating an ad hoc "IP and Innovation office" dedicated to addressing the IP and innovation needs of pilots and partners all through the project. In doing so, this resource will not only support the direct needs of the project partners; instead, it will also serve eshape's role as an innovation-championing flagship project which produces outputs that support the greater EO community. Before delving into the e-shape specifics and how the IP and Innovation Office will operate, it is constructive to review the need for such support and how existing mechanisms are providing it.

<sup>&</sup>lt;sup>1</sup> https://ec.europa.eu/growth/industry/policy/intellectual-property\_en

<sup>&</sup>lt;sup>2</sup> For instance <u>The European IP Helpdesk, The IP SME Helpdesk,</u> <u>The IP Booster</u>. Their services have been considered, among those of other initiatives, in *Chapter 3: Existing best practices*.

<sup>&</sup>lt;sup>3</sup> "Office" should not be understood as a physical space. Instead it corresponds to an online support mechanism operated by IP and commercialisation specialists.



# 2 NEED FOR INNOVATION AND IP SUPPORT

Following the introductory discussion on the importance of IP and innovation support, it is instructive to look first at the bigger picture and then zoom into the community needs (chapter 4). In that respect, the benefits of IP are well known and widely advocated. In concrete terms, a joint study of the Europeans Patent Office (EPO) and the European Union Intellectual Property Office (EUIPO) estimated that in the period 2014-2016 IPR-intensive industries generated almost 45% of the total gross domestic product (GDP) in the EU, valued at €6.6 trillion and translating into 28 % of all jobs in the EU. IP should be considered one of the fundamental pillars of the EU industrial competitiveness and is linked to creating a more competitive economy with higher employment, as IPR-intensive industries pay a wage premium of 47% over other industries.<sup>4</sup>

In small and medium-sized enterprises, IP is a strong tool to both create and preserve value - SMEs exhibit stronger tendency on patenting for purely monetary reasons than big companies. <sup>5</sup> Often called the backbone of the (European) economy, SMEs (including startups) represent 99% of all the businesses in EU<sup>6</sup> and within OECD<sup>7</sup>. A large proportion of the value generated, however, comes from a small number of high growth firms (HGF) -often remarkable in their innovation methods, and a link between the likelihood of becoming an HGF and the IP held has been asserted by EPO.

In academia, on the other hand, IP has a rising but apparently limited role. Its purpose in the field is often, but erroneously, associated exclusively with commercialisation of products - which is rarely the main aim of academic ventures. However, when commercialisation is intended or foreseen, other aspects such as spin-off and technology transfer are more valued, and appropriate offices/departments are created within the research institutions to handle them. A further incentive has been the importance of IP conveyed by the EC throughout the Horizon 2020 and similar programmes for all the participants in related projects, as well as simply handling third-party IP in the framework of ongoing collaborations.

Nonetheless, not everyone has legitimate interest in protecting IP after a due evaluation of benefits and disadvantages. The reasons behind this vary across sectors and across companies or research institutions. It could be reluctancy to disclose information (e.g. to patent a technology vs. keeping it as a trade secret), insufficient funds to assure protection (most often for startups and SMEs), low risk of infringement, or difficulty of enforcing IP rights (e.g. especially in third countries). These are all very valid reasons, as long as the underlying decisions have been taken with the right information at hand. In such a way the progress towards sustainability of innovation and research can be guided by informed decisions. In light of these observations, a critical issue – to be addressed in e-shape too – is **the lack of IP knowledge, or insufficiency thereof**. IP tends to seem "too complicated" and off-putting to someone to whom its benefits are unclear. Therefore, the aim of an IP supporting initiative shall be twofold: i) raising awareness of the general benefits and value produced by IP; ii) helping solve and prevent concrete problems. In this context, several mechanisms have been put in place in order to

<sup>&</sup>lt;sup>4</sup> High-growth firms and intellectual property rights: <a href="https://www.epo.org/news-issues/news/2019/20190521.html">https://www.epo.org/news-issues/news/2019/20190521.html</a>

<sup>&</sup>lt;sup>5</sup> How SMEs exploit their intellectual property assets: Evidence from survey data: https://www.researchgate.net/publication/225859251 How SMEs exploit their intellectual property assets Evidence f rom survey data

<sup>&</sup>lt;sup>6</sup> EPO, supra 4

<sup>&</sup>lt;sup>7</sup> OECD SME and Entrepreneurship Outlook 2019: <a href="https://www.oecd-ilibrary.org/industry-and-services/oecd-sme-and-entrepreneurship-outlook-2019">https://www.oecd-ilibrary.org/industry-and-services/oecd-sme-and-entrepreneurship-outlook-2019</a> 34907e9c-en

<sup>8</sup> Intellectual Property Awareness Survey 2015, UK IPO: 29.59% of the respondents cite "too complicated" as a main reason to not protect their IP. <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/500211/IP\_awareness\_survey\_2015.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/500211/IP\_awareness\_survey\_2015.pdf</a>



raise IP awareness and provide tailored support to SMEs, public research institutions, and others. Such efforts have been extensively studied in the context of e-shape Task 5.1 in order to identify best practices, recognise gaps and inform the design and operation of the IP and Innovation Office in a way that ensures complementarity and induces adding value, both for the recipients of the support, i.e. the SMEs or research institutes, but also for the EU taxpayer funded initiatives themselves (by creating additional traffic/demand for their content). These best practices and common points of successful initiatives are considered in the chapter to follow.

#### **3** EXISTING BEST PRACTICES

The idea of IP/legal helpdesk providing information and support to users is not novel and has already proven to work for both passive and active (on demand) support. Some of the existing best practices are listed below.

- The European IP Helpdesk is a service funded by the European Commission. It provides free-of-charge, first-line advice and information on IP through passive and active support. The passive support consists in preparation of articles, leaflets, publications and a newsletter. The content explains the importance of IP to whomever approaches IP for the first time, while focusing on different stakeholder groups (SMEs, researchers etc.) The European IP Helpdesk also organises events, periodic webinars and provides basic IP support on request through a helpline.
- The IP SME Helpdesk is another initiative of the European Commission. The Helpdesk supports EU SMEs to both protect and enforce their IP rights in or relating to China, Latin America and Southeast Asia through the provision of free information and services. These take the form of jargon-free, first-line, confidential advice on intellectual property and related issues, plus training, materials and online resources.
- The IP Booster is an EC funded professional IP service supporting European public research organisations looking to exploit their research results through services such as initial IP auditing, patent landscaping, due diligence, negotiation of technology transfer and help with patent and other IP applications. While the two cases above offer occasional support as well, the IP Booster provides services for up to EUR 25k to a number of public research organisations preselected through the calls organised within the project.
- Another interesting instrument was the <u>Virtual Legal Helpdesk</u> of the <u>Keep on track!</u> initiative. The Legal Helpdesk had a thematic focus on Renewable energy and in this competence has provided assistance to national renewable energy associations and consortium members, local and regional policy makers and legislators, as well as other stakeholders and the interested public with the implementation of <u>renewable energy legislation</u> into national law and the creation of a stable and solid legislative framework for the development of renewable energy in the Member States. For the broader public and stakeholders different than those cited, Frequently Asked Questions and other guidance documents and information have been made available online.

Some conclusions on the common characteristics of IP/legal helpdesks can be drawn from these examples:

- These are facilities, which, under one form or another, provide active support, on top of the
  passive one; this means that over and above an on-topic library of materials made available
  to potential users, they also provide a series of services.
- Such Helpdesks are most often a public initiative. This is due to the awareness raising on IP that public institutions (i.e. EC) are championing – mostly, but not exclusively, through support channels aimed at SMEs.
- The **depth of the provided advices**, therefore, stands somewhere between generic passive information and covering in some cases first-stage IP advice. In all instances the advice is non-



binding and does not go as far in specificity as to provide a legal advice a lawyer would. The outcome may however be a recommendation to contact a specialised legal office, but the intermediate step represented by the Helpdesks already makes IP information more accessible for everyone, and for some, it resolves doubts and issues without the need to actually involve a lawyer (e.g. through a more simple, fast and cheap procedure).

• The **scope of audience** however, varies. From generalised support such as the European IP helpdesk, to **specialisation** per type of user (e.g. IP BOOSTER: only public research institutions) or per field of activity (i.e. Keep on track: renewable energy).

Judging from the research on existing best practices, the path to follow would be the creation within e-shape of a **specialised EO-focused IP and Innovation Office**, which will (i) collect queries from a well-defined community (the e-shape partners primarily and subsequently the EO sector at large), (ii) direct some of the queries to existing, applicable and well-functioning generic sources (i.e. the European IP helpdesk) and (iii) provide specialised support when needed, including by pointing to lawyers who can deal with such needs at the right level of complexity. In that regard, it is instructive to see how the e-shape office is positioned vis-à-vis such existing resources.

	The European IP Helpdesk	The IP SME Helpdesk	The IP Booster	Keep on track! Virtual Legal Helpdesk	e-shape IP and Innovation Office
Free of charge for the user	Yes	Yes	Yes	Yes	Yes
Provides materials (passive support)	Yes	Yes	Yes	Yes	Yes
Active on- demand support	Yes	Yes	Yes	Yes	Yes
Webinars	Yes	Yes	No	Unknown	Yes
Restrictions to access resources	Accessible to all	Accessible to all	Public research institutions who have applied through a call	Consortium members and policy makers and legislators involved in the implementation of renewable energy norms	Primary target: Consortium members and pilots – original and onboarded; Secondary target: Greater EO community
Field of focus	Generalised	Geographical focus: China, Latin America, SE Asia	Providing IP services to successful public research institutions	Renewable energy	Earth observation

Table 3-1 Comparison of existing solutions and the e-shape IP and Innovation Office



#### 4 Understanding the community needs

To further inform the creation of the e-shape IP and Innovation Office (e-shape IIPO) and complement the research of existing best practices, we made sure to define in detail the specificities of the EO sector, so to be able to create tailored means for support of IP and innovation, as present in the sector. Rather than judging from solely our experience, we engaged as many stakeholders at possible and gathered their answers and experiences. The paths taken can be enumerated as follows:

- Consulting legal and innovation experts both inside and outside of the project, so that we can gain a perspective on IP and innovation needs at 3 different levels: (i) at a general level, with common IP and innovation rules and tendencies applicable independently of the concrete circumstances, (ii) EO-level, considering IP and innovation trends within the specificities of the fast-growing and evolving European EO sector, and (iii) e-shape level, which allowed to acquire a more specific idea, albeit in a very early stage, of the exploitation and innovation paths to be followed by the pilots. To confirm and deepen the findings of the process, the consultations with experts will be ongoing for the next few months of the project.
- Creating and distributing a survey inquiring on the IP and innovation needs of the e-shape partners and pilots in support of their sustainable growth. Participants have defined the type of needs they expect to require most assistance, the ways these needs are currently addressed, needs and currently used sources of satisfying them, and confidence to use an e-shape IIPO-like source to gather this information in the future. The survey is still open for contribution from e-shape partners, and the feedback has not been finalised. At a further point, the same (or slightly adapted, according to feedback) survey will be open for the whole EO community, as this is the secondary target of the e-shape IIPO (as well as reliable source for confirming needs of the sector, in order to apply such understanding at best within e-shape). Few of the participants in the survey have been selected for further discussion, which allowed the e-shape IIPO team to get access to more details and face-to face-discussions, in line with the venture's philosophy of constant feedback and improvement. The survey can be found in Annex I of the document.

While input is still being collected, through prior knowledge and through the available data from the pre-operational consultation phase of the e-shape IIPO, a few **specificities of the EO sector** have emerged, underlining the required IP and innovation-support needs.

- EO is an **innovation-intensive sector**: innovation has a central role in EO, in terms of software, hardware and algorithms, but also in terms of observing phenomena and processes in a wide variety of sectors using a wide variety of data, techniques and tools. This translates into a need for a substantial IP and innovation support incl. patent and copyright support.
- **Strong reliance on R&D activities:** Many of the successful EO companies in Europe have sprung out of and still rely heavily on research activities (or span out of institutions involved in such). This "journey" from research to the market is often characterised by the innovation and IP decisions the "travelers" (i.e. companies, research institutes) make.
- Very international: thanks, in large part, to the access to Copernicus free, full and open data, small
  EO companies often establish a global footprint very fast, before or without growing. Hence,
  internationalisation of IP needs support, and so would following up on a claim of breach of IP
  coming from a third country.
- Open Culture: Whether looking into Open Data (e.g. Landsat, Copernicus) which lie at the core of
  many applications in the EO sector; or at open source tools (GitLab, Docker, Jupyter), "openness"
  is a central characteristic in the sector (also strongly advocated in certain communities such as



GEO). The e-shape IIPO will provide insights into what "open data" means in these instances and what are the conditions for its (re)use.

- Changing Market Dynamics: From the ongoing vertical integration, whereby data providers are becoming analytics providers, to the increasing cost reduction, whereby access to computing power and storage capacity is becoming cheaper thanks to cloud technologies, legal, IP and innovation issues arise. This, for instance is related to a shift in the underlying legal rights when developing services on cloud-based, multi-layered platforms<sup>10</sup>. The e-shape IIPO will provide clarity on the use of data and the licencing terms, especially important for companies building on such products/services.

# 5 THE E-SHAPE IP AND INNOVATION OFFICE

In e-shape, innovation is an effort **involving multiple partners** within each pilot. These may not only be partners bound by a consortium agreement, but also e.g. data providers or end-users outside of the consortium. This requires suitable best practices in innovation management, but also special attention to defining and ensuring **confidentiality** where needed and sharing of **ownership of results** where applicable.

Means of protecting intellectual property can help create **trust** and reduce barriers to innovation. The **international** setup of e-shape with partners from all over Europe and beyond, and the internationalisation potentials of results add complexity of different legal frameworks. Depending on the nature of assets, the type of organisation and geographical aspects, different means of protection may be considered.

Different pilots are at different stages of their innovation process and all stages, from idea generation to successful market launch, will need to be addressed throughout the project<sup>11</sup>. Beyond legal and IP support, innovation support has a stronger role in the actual development of the product or service as well as the business as such. Depending on the current stage of the innovation process, support needs would typically lie in the analysis of markets, technologies, competitors, and user needs, but also in general guidance in operating a business.

The uniqueness and added value of the e-shape Innovation and IP Office lays in its focus on Earth observation-related problems and close engagement of the key stakeholders. The e-shape IIPO will provide coherent and specialised IP support born from combined EO, legal and innovation experience and expertise, as a part of the "Capacity building activities" within e-shape, and with the aim to support the creation of sustainable innovation and growth. The e-shape IIPO will offer its services to all the interested partners, original and onboarded, hence the aptness to the IP needs of both academia and private sector.

The key feature will be a layered structure enabling efficiency and accuracy in delivering legal and innovation advice to e-shape partners and pilots—the problem will be analysed by both EO and legal experts, which will allow for a tailored business perspective, while maintaining top-level legal input. We find this approach innovative as for the first time, legal processes and procedures will be explained in the relatively narrow context of the EO field of business, hopefully maximising the benefits of participants in terms of both profits and efficiency.

 $<sup>^9</sup>$  Main trends and challenges in the space sector -  $\frac{https://www.pwc.fr/fr/assets/files/pdf/2019/06/fr-pwc-main-trends-and-challenges-in-the-space-sector.pdf$ 

<sup>&</sup>lt;sup>10</sup> Only recently the European Space Agency (ESA) launched a dedicated study on this topic

 $<sup>^{11}</sup>$  It should be noted than none of the e-shape pilots are at "idea generation" level. Most are in more advanced TRLs – based on self-assessment these start from TRL 4.



#### 5.1 Types of support: active and passive

This cooperation will materialise in both areas known from the existing best practices: passive and active support. The passive component of the e-shape IIPO is envisaged as a first-aid kit for those in need of legal help. Sometimes it will be enough, but other times solving the problem will require an *ad hoc* contact with legal or innovation experts – which is the purpose of the active support component.

#### 5.1.1 Passive support

Passive support will be rendered in form of a number of means designed for individual online use. Those means will include:

- Guides
- Country or institution profiles (briefly explaining crucial legal aspects of an entity)
- FAO's
- Webinars and archived e-learning sessions
- Podcasts (both new and re-used)
- Referring to existing best practices, where necessary
- Other

All forms of passive support will be prepared by legal experts in close cooperation with EO market experts, who will participate in the preparatory process either as individual consultants or through surveys (both online and telephone). The goal is to provide a practical and useful knowledge base, reaching above the level of just another aggregation of definitions of legal terms. The provided material will be either sourced from existing helpdesks/resources, inspired by them or complementing them.

#### 5.1.2 Active support

Services planned within the active support component vary depending on the level of engagement required from the experts and can be divided into two major groups:

- An online short query service usually the first-contact form of service, which will include several types: from preparing short answers for legal questions coming from interested parties, through directing them to available passive support resources which will help to resolve the issue, to transferring the query to individual consultations and advice (case by case basis advice).
- Case by case basis advice will essentially be divided into two types of advice: comprehensive, due-diligence analysis of the entity in relation to IP assets and Individual consultations and advice related to specific legal problems or obstacles. Case by case basis advice will be rendered after an issue is transferred from the online query service or after being approached directly with a request for individual consultation through the s-shape Sustainability Booster.

All necessary measures to ensure confidentiality (signing appropriate NDAs with participants) and security (e.g. cybersecurity) of provided information will be taken.

As much as online query service is a rather self-explanatory measure, the core activity within active support component of the e-shape IIPO is the case by case basis advice. Depending on the case, it might involve an initial comprehensive analysis stage or just advice related to a specific problem.

• In comprehensive analysis stage the EO team involved in the e-shape IIPO will deliver an initial IP audit and evaluation of intangible assets of a participant, or conduct a due diligence check when necessary. This exercise will be carried out — at minima — in relation to the Sustainability/Business Plans per pilot (D5.25). Legal professionals, in turn, will use the outcome of this initial evaluation, deepen the analysis of crucial aspects and point out the



strengths, weaknesses and problems within the entity which need solving. This can be followed by a specific advice as to solving these problems.

• In **specific advice stage** a recommendation is prepared, listing actions to be taken in order to achieve the goals of a participant while minimising legal risks. An inherent part of the envisaged procedure is confirming the business viability of the legal recommendation with the EO team. This stage can be preceded by a comprehensive analysis stage or can be the first stage of active support, depending on the interested entity's desire.

#### 5.2 Types of support: categories of legal advice

The aim of the e-shape IIPO is to provide legal advice from the broadly defined **field of intellectual property, tailored to the needs of the EO sector**. This means that all types of IP-related advice will be supported, mainly including fields such as:

- IP auditing & preparing strategies for handling entities' intangible assets
- Patents & utility models
- Trade secrets
- Trademarks
- Designs
- Copyright
- Privacy & personality rights
- Domain names
- Technology transfer

As the e-shape IIPO is designed to strive at providing advice as comprehensive as possible, the array of legal experts will gradually expand to provide legal advice relevant to the EO community also in areas not directly linked to intellectual property, but with strong connection to it and indispensable for crafting and implementing a successful IP protection and development strategies, including:

- Business law
- Company law
- Tax law
- Other

The nature of the project is international, and as entities from all around the EU and beyond are set to participate, there is a natural need to provide legal advice in relation to, at minima, national laws of all Member States, as well as to the European law. This is another innovative aspect of the e-shape IIPO, which shall aim at providing advice in relation to the jurisdictions and legal systems vital to the activity of the participants – whenever and as much as possible (in accordance with its capabilities).

#### 5.3 Types of support: categories of innovation support

The e-shape IIPO aims to identify the pilots' innovation support needs and to offer these customised services for the respective context and stage of each pilot. Support offered would mostly cover business guidance, intelligence, and support in the following categories:

- Guidance for business planning and operations
- Market entry guidance
- Market intelligence (e.g. on market development and trends, competition, user needs)
- Access to finance strategies
- Technology assessment
- Marketing and communication support



The innovation and IP needs of pilots will evolve throughout the project, and so will the services available to them. The planned steps aimed at gradually assuring the path to sustainable innovation will be taken in accordance within the timeline discussed in the next chapter.

### **6** NEXT STEPS

The services of the e-shape IIPO will be deployed progressively and with constant readiness to implement incoming feedback from partners and pilots, and to fine-tune services to their innovation and IP needs, as tackling them is the main purpose of the venture. In line with the KPIs tied to Objective 4 of e-shape, i.e. "Enable the long-term sustainability of the numerous pilots, their penetration in public and private markets and support their upscaling", the e-shape IIPO stands ready to support the pilots with 1 complete<sup>12</sup> action around IP and Innovation support for each of them.

At the present moment (M12) the online environment of the e-shape IIPO is in course of finalising its initial setup, and the services it will provide are defined in this document.

Within the following year (M12-M24) the Sustainability booster – of which the e-shape IIPO is part – will become reachable online and will provide passive and some forms of active support.

The year after (M24-M36) the Sustainability booster will progressively include more services and in parallel a structured understanding of the business needs (including IP and innovation) of all the eshape pilots will be triggered through constant communication with them, which will be described in D5.11 First Sustainability or Business Plans per Pilot (M24).

The outcome of this period will be discussed in two deliverables: D5.18 – Annual Report on IP and Innovation Office (M36) and D5.25 Final Sustainability or Business Plans per Pilot (M40). In the last year of the project, the focus for e-shape will be two-fold: (i) continuing to follow closely pilots in their sustainable development, by implementing the plan presented in D5.18 and D5.25, and helping to tackle issues through this period (ii) opening up and providing support to the broader EO community beyond e-shape.

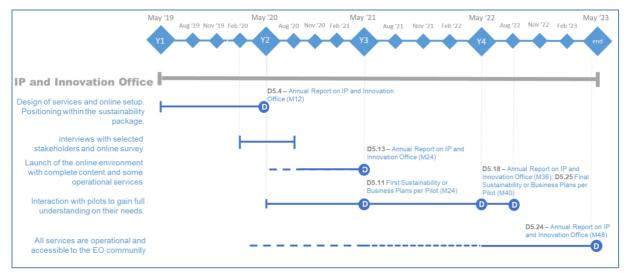


Figure 6-1 Timeline and stages of development of the e-shape IIPO

<sup>&</sup>lt;sup>12</sup> Complete here refers to the full process from raising the issue in passive mode to providing support in both passive and active mode.



#### 7 CONCLUSIONS

The e-shape IP and Innovation Office is designed to be an appropriate mean for maximising the value produced by the project in terms of sustainable innovation. The added value of the tool shall be seen all the way throughout the project, as its core activity is based on multiple and practically continuous interactions with pilots. The ongoing queries and feedback received will help acquire a better understanding of their needs and address them at best. In that regard, the set of services provided by the e-shape IP and Innovation will be tailored to the requirements of the e-shape partners. All along this process, the knowledge gathered by the operation of the IP and Innovation Office and its subsequent fine-tuning, will serve as an invaluable resource to capture, for the first time, information on the IP and innovation needs required for the establishment of a sustainable venture, strictly applicable to the European EO sector. This will, in turn, continuously expand the expertise and the specialisation behind the e-shape IP and Innovation Office and guarantee for constant improvement of the provided services. So, ultimately, the e-shape IIPO will effectively empower the pilots to properly address IP and Legal issues, effectively address sustainability challenges, and, in that sense, maximise their innovation potential.

Moreover, the possibility to open the assistance of the e-shape IIPO to the whole EO community can be a remarkable opportunity for the field, and provide even inspiring EO-entrepreneurs with opportunities they may never have otherwise (i.e. due to insufficiency of funds, knowledge, or even information on where to even acquire such knowledge), which will ultimately boost the competitiveness and potentially benefit the sector as a whole.

#### 8 ANNEX — IP-RELATED SURVEY



EuroGEOSS Showcases: Applications Powered by Europe

# e-shape Sustainability Booster

# Introduction

The e-shape Sustainability Booster aims at ensuring the means for the sustainable uptake and exploitation of the pilots (including those on-boarding during the project) in different markets. It will provide information (e.g. market developments, policy priorities, technology trends) as well as assistance (e.g. business plan support, IPR advice, investment readiness).

To fine-tune the approach based on sustainability support needs, we developed this survey to be circulated within the e-shape community. Depending on the selected support needs, it may take 15-20 minutes to fill. Thank you very much for the effort.

#### Context

How would you characterise the current organisational status of your activities?

- No legal entity, informal group
- No legal entity, group bound by an agreement
- No legal entity, activity within a research institute or university
- Start-up
- SME
- Large Enterprise

What is the size of your organisation?

- 0 1-9
- 0 10-49
- 0 50-249
- 250 or more

What is the status of your product or service?	
□ Idea	
R&D	
☐ Prototype	
☐ Business plan	
☐ Minimum Viable Product (MVP)	
Commercialisation	
Expansion	
E Expansion	
Personal information	
	_
Name	
	_
Company	
	_
Company location	
Afghanistan	
Albania	
Algeria	
Andorra	
Angola	
Antigua and Barbuda	
Argentina	
Armenia	
Australia	
Austria	
<ul> <li>Azerbaijan</li> </ul>	
Bahamas	
Bahrain	
Bangladesh	
Barbados	
Belarus	
Belgium	
Belize	
Benin	
Bhutan	
Bolivia	

0	Bosnia and Herzegovina
	Botswana
	Brazil
0	Brunei Darussalam
	Bulgaria
	Burkina Faso
	Burundi
	Cabo Verde
	Cambodia
	Cameroon
	Canada
	Central African Republic
	Chad
	Chile
	China
	Colombia
	Comoros
	Congo
	Costa Rica
	Côte D'Ivoire
	Croatia
	Cuba
	Cyprus
	Czechia
	Democratic Republic of the Congo
	Denmark
	Djibouti
	Dominica
0	Dominican Republic
	Ecuador
	Egypt
	El Salvador
	Equatorial Guinea
	Eritrea
	Estonia
	Eswatini
	Ethiopia
	Fiji
	Finland
	France
	Gabon
	Gambia
	Georgia
	Germany Ghana
0	Gnana

Greece

- Grenada
- Guatemala
- Guinea
- Guinea Bissau
- Guyana
- Haiti
- Honduras
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Israel
- Italy
- Jamaica
- Japan
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Madagascar
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Mauritania
- Mauritius
- Mexico
- Micronesia
- Monaco
- Mongolia

0	Montenegro
	Morocco
	Mozambique
	Myanmar
	Namibia
0	Nauru
	Nepal
	Netherlands
	New Zealand
	Nicaragua
	Niger
	Nigeria
	North Korea
	North Macedonia
	Norway
	Oman
	Pakistan
	Palau
	Panama
	Papua New Guinea
	Paraguay
	Peru
	Philippines
	Poland
	Portugal
	Qatar
	Republic of Moldova
	Romania
	Russian Federation
	Rwanda
	Saint Kitts and Nevis
	Saint Lucia
	Saint Vincent and the Grenadines
	Samoa
	San Marino
	Sao Tome and Principe
	Saudi Arabia
	Senegal
	Serbia

SeychellesSierra LeoneSingaporeSlovakiaSlovenia

Solomon Islands

Somalia

	South Africa
	South Korea
	South Sudan
	Spain
	Sri Lanka
	Sudan
	Suriname
	Sweden
	Switzerland
	Syrian Arab Republic
	Tajikistan
	Tanzania
	Thailand
	Timor-Leste
	Togo
0	Tonga
0	Trinidad and Tobago
0	Tunisia
0	Turkey
0	Turkmenistan
0	Tuvalu
0	Uganda
0	Ukraine
0	United Arab Emirates
0	United Kingdom
0	United States of America
0	Uruguay
0	Uzbekistan
0	Vanuatu
0	Venezuela
	Viet Nam
	Yemen
	Zambia
	Zimbabwe
Danitia	
Positio	on
Years	of experience in the Earth Observation sector

Ocean / Marine Security Atmosphere & Climate Disasters & Geohazards Land Built Environment Other  Please specify:
In which countries are you operating, i.e. having an office and/or offering your products or services?
What segments does your product or service address?
<ul><li>■ B2B</li><li>■ B2C</li><li>■ B2G</li></ul>
Where would you position your product or service within the EO value chain (Midstream and/or Downstream)?
Midstream
<ul> <li>Data acquisition</li> <li>Data processing</li> <li>Data archiving</li> <li>Data distribution &amp; delivery</li> <li>Other</li> </ul>
Please specify:
Downstream
<ul><li>Data processing</li></ul>

What application fields are you addressing with your products and services?

Value adding services (e.g. Integration with da Consultancy GIS Other	ata fron	n other	source	es)				
lease specify:								
nformation needs								
ow important are the types of information listed belo	ow to w	ou (on	a coal	of O F	5 whor	o E is th	o highos	+\2
ow important are the types of information listed beig		·	I		I		e mgnesi	ι) :
<b>—</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	1	2	3	4	5		
Technological developments and trends  Competition activities	0	0	0	0	0	0		
Investors' activities	0	0	0	0	0	0		
General EO market developments and trends	0	0	0	0	0	0		
Developments and trends in other markets	0	0	0	0	0	0		
Policy & Regulation news and trends	0	0	0	0	0	0		
Upcoming industry events	0	0	0	0	0	0		
Projects	0	0	0	0	0	0		
Tenders and other opportunities	0	0	0	0	0	0		
here do you currently look for such information?								
here do you typically apply insights from such infor	mation	?						
General awareness of market(s) and environm Impulses for innovation Gap analysis of own offerings or competences Spotting opportunities for new business Sourcing of resources (e.g. technology, talent Risk assessment and reduction Other	6	assets	)					

Please specify:
Name your 5-10 top keywords of interest:
What do you/would you consider as important factors when choosing an online resource for such information?
Support needs
What type of support do you require to perform your innovation and/or business activities?
Business Guidance (business planning, business operations)
Market entry (entering new countries, new sectors)
<ul> <li>Market Intelligence</li> <li>Access to Finance</li> </ul>
Access to Education and training
<ul><li>Access to technology, infrastructure, or tools</li><li>Marketing</li></ul>
☐ IP & Legal Guidance
Other
Please specify:

aspects?
<ul> <li>Getting a first client</li> <li>Reaching profitability level with your first product or service</li> <li>First access to a foreign market (internationalisation)</li> <li>Assistance in technical development</li> <li>Forming partnerships</li> <li>Other</li> </ul>
Please specify:
What type of customised service would you consider getting from a business support mechanism?
<ul> <li>Market Analysis</li> <li>Competitor Analysis</li> <li>User Need Analysis</li> <li>Business Plan</li> <li>Technology Assessment</li> <li>Legal (incl. IP) services</li> <li>Other</li> </ul>
Please specify:
What kind of information or support would you require in order to finance the development of your product or service?
<ul> <li>Raising private funding (angel, seed or venture capital)</li> <li>Public funding programmes to choose</li> <li>Pitch coaching</li> <li>Business plan training</li> <li>Other</li> </ul>
Please specify:

Having developed a new product or service, you would need guidance regarding which of the below

How important are the following IPRs and their protection to your business (on a scale of 0-5 where 5 is the highest)?

	0	1	2	3	4	5
Patents	0	0	0	0	0	0
Trade secrets	0	0	0	0	0	0
Trademarks	0	0	0	0	0	0
Designs	0	0	0	0	0	0
Copyright	0	0	0	0	0	0

What type of assets/property do you have that is suitable for IP protection (e.g. software, invention)?
Has your company ever protected assets through any of the below?
<ul> <li>Patents</li> <li>Trade secrets</li> <li>Trademarks</li> <li>Designs</li> <li>Copyright</li> <li>Confidentiality agreements</li> <li>Overseas protection</li> </ul>
Has your company ever gained IP protection abroad?
<ul> <li>Worldwide (e.g. through WIPO)</li> <li>Europe wide (e.g. through OHIM, EPO)</li> <li>Specific EU Members state(s).</li> <li>Other</li> </ul>
Please specify:
Where and how?

Does your business have an IP you have chosen not to protect, and if yes why?
■ No unprotected IP
Because it is costly
Because it is complicated
Because of the low risk of infringement
Because of the low value of the IP
Other
Please specify:
Does your company have experience with IP litigation?
Been a party in IP litigation caused by a breach of licence agreement
Been a party in IP litigation caused by a breach of an NDA (Non-disclosure agreement)
Been a party in another IP litigation
Been involved in IP breach that did not lead to court (e.g. cease and desist letter)
Other
Please specify:
How often does your company seek for IP advice/services?
Never
Less than once per month
Around once per month
Multiple times within a month, but less than once per week
<ul> <li>Around once per week</li> <li>Multiple times per week</li> </ul>
o Multiple times per week
Typically, what type of services are those?
General advice on IP law issues
Consulting specific IP legal problems
Drafting contracts and other IP documents
Conducting legal proceedings (filing for patents/trademarks/designs/etc., other official proceedings)
<ul> <li>Dealing with violations/infringements of IP rights, enforcement, litigation</li> </ul>

Other
Please specify:
Where has your company sought for IP advice?
On our own (no help from legal professionals)
In-house lawyers
In-house IP lawyers
Outside law firm that we work with on a regular basis
<ul><li>Outside law firm that we work with on an occasional basis</li><li>Other</li></ul>
Please specify:
What is your company's experience with the use of online IP legal resources?
None
Passive support: consulting resources
Active support: personalised answers to specific queries
Which are these resources?

What is your level of satisfaction with these services (on a scale of 0-5 where 5 is the highest)?

	0	1	2	3	4	5
Passive support	0	0	0	0	0	0
Active support	0	0	0	0	0	0

What, if any, is your company's experience with The European IPR Helpdesk?

None

Which were the services	s that y	ou hav	ve use	d?								
Vhat is your level of sat	isfactio	on with	these	serv	ices (	on a so	cale of	0-5 wł	nere 5 i	is the	highest)?	
	0	1	2	3		1 5	5					
Passive support	0	0	0	0	0		)					
Active support	0	0	0	0	0		)					
ighest)?					0	1	2	3	4	5		
Reputation of the	organi	sation	behind	lit	0	0	0	0	0	0		
Personalisation of	the re	spons	es		0	0	0	0	0	0		
Faster than asking a lawyer						0	0	0	0	0		
Less commitment than asking a lawyer						0	0	0	0	0		
Lower costs than	going t	o a lav	vyer		0	0	0	0	0	0		
Other					0	0	0	0	0	0		
Please specify:												
Given the below options product or service and re					-				-		-	our
									thin the		Outsourced	We do not.

Passive supportActive support

Communication strategy development	0	0	0
Branding and visual identity development for your company and/or product or service	0	0	0
Developing communication and marketing instruments (e. g. infographics, animations)	0	0	0
Developing and ensuring online presence (website, social media, specialised platforms)	0	©	0
Campaigns aimed at maximising the user uptake	0	0	0
Outreach and stakeholder engagement	0	0	0
Organisation of workshops or events linked to the product or service	0	0	0
Other	0	0	0

ie	ase	ase specify:										