

# D1.5 DIH<sup>2</sup> IP and ELS services version 1.0

Public

**Agnieszka Sprońska**

Sieć Badawcza ŁUKASIEWICZ – Przemysłowy Instytut Automatyki i Pomiarów PIAP  
Al. Jerozolimskie 202  
02-486 Warsaw  
Poland

aspronska@piap.pl



<b>Project acronym</b> DIH <sup>2</sup>	<b>Project title</b> A Pan-European Network of Robotics DIHs for Agile Production	<b>Grant agreement No.</b> 824964
<b>Deliverable No.</b> D1.5	<b>Deliverable title</b> DIH <sup>2</sup> IP and ELS services	<b>Version</b> 1.0
<b>Type</b> Demonstrator	<b>Dissemination level</b> Public	<b>Due date</b> M6
<b>Lead beneficiary</b> Sieć Badawcza ŁUKASIEWICZ – Przemysłowy Instytut Automatyki i Pomiarów PIAP		<b>WP No.</b> 1
<b>Main author</b> Agnieszka Sprońska, PIAP	<b>Reviewed by</b> Jesús Pablo González, EURECAT	<b>Accepted by</b> Ali Muhammad, VTT
<b>Contributing author(s)</b> Jakub Główka, PIAP, Karl Ladner, LCM, Konstantinos Ioannidis, CERTH, Panos Bouklis, ED, Roi Rodríguez, FBA		<b>Pages</b> 19
<b>VTT archive code</b> VTT-R-00168-19		<b>Lead beneficiary archive code</b>

### Abstract

This deliverable report is a document accompanying the demonstrator deliverable D1.5 DIH<sup>2</sup> IP and ELS services and describes the online catalogue of IP and ELS experts in the consortium, along with an online voucher application and qualification system that will be used to gather a pool of external experts who can offer specialised services in the IP & ELS domain for the TTE consortia within the voucher mechanism.

The reporting part of the deliverable covers also definition of the application and validation process with their underpinning objectives, including profile required for experts, criteria to validate them and procedure for the validation as well as the overview of the Experts Open Call that will be launched to identify experts in the required domains.

The main and integral part of the hereby deliverable is contained in the Annex I (Excel file D1.5 DIH<sup>2</sup> IP and ELS services\_v1.0.xlsx), which is composed of the Interactive application & validation sheets that specify the functionalities, operational assumptions and entry data for implementation of the online tools.

### Coordinator contact

Ali Muhammad  
VTT Technical Research Centre of Finland  
Tekniikankatu 1, PL 1300, 33101 Tampere, Finland  
E-mail: [ali.muhammad@vtt.fi](mailto:ali.muhammad@vtt.fi)  
Tel: +358400560851

### Notification

The use of the name of any authors or organization in advertising or publication in part of this report is only permissible with written authorisation from the VTT Technical Research Centre of Finland.

### Acknowledgement

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824964



## HISTORY OF CHANGES

Release	Date	Reason for Change	Author	Distribution
0.1	05/04/2019	Creation of Annex I v.01 – Interactive application & validation sheets	Agnieszka Sprońska, PIAP	Consortium
0.2	24.05.2019	Update Annex I v.02	Karl Ladner, LCM Agnieszka Sprońska, PIAP	Consortium
0.3	5.06.2019	Creation of deliverable body text and update of Annex I v.03	Konstantinos Ioannidis, CERTH Agnieszka Sprońska, PIAP	Consortium
0.4	7.06.2019	Contribution to deliverable body text	Panos Bouklis, ED	Consortium
1.0	26.06.2019	Pre-finalisation of the deliverable after the peer-review	Agnieszka Sprońska, PIAP	Consortium
1.0	27.06.2019	Contribution to section 3	Roi Rodríguez, FBA	Consortium
1.0	27.06.2019	Final version	Agnieszka Sprońska, PIAP	Consortium

## ABBREVIATIONS

CERTH	Ethniko Kentro Erevnas Kai Technologikis Anaptyxis
ED	European Dynamics Advanced Systems of Telecommunications Informatics and Telematics SA
ELS	Ethics, legal and social issues
FBA	FundingBox Accelerator Sp. z o.o.
IP	Data protection and privacy (including personal data and IPR)
LCM	Linz Center of Mechatronics GMBH
LE	Legal Entity
PIAP	Sieć Badawcza ŁUKASIEWICZ – Przemysłowy Instytut Automatyki i Pomiarów PIAP
TTE	Technology Transfer Experiment

## TABLE OF CONTENTS

<b>HISTORY OF CHANGES .....</b>	<b>5</b>
<b>ABBREVIATIONS .....</b>	<b>6</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>8</b>
<b>1 CATALOGUE OF IP AND ELS EXPERTS .....</b>	<b>9</b>
1.1 Experts profiles in the DIH <sup>2</sup> Marketplace .....	9
<b>2 EXPERTS VALIDATION PROCEDURE .....</b>	<b>11</b>
2.1 Validation criteria .....	11
2.2 Validation process.....	11
2.2.1 Application Form .....	13
2.2.2 Pre-scoring.....	14
2.3 Updates and improvements.....	15
<b>3 EXPERTS OPEN CALL &amp; VOUCHERS MANAGEMENT.....</b>	<b>16</b>
3.1 Experts Open Call.....	16
3.2 Vouchers Management.....	16
<b>ANNEX I .....</b>	<b>17</b>
<b>ANNEX II – INITIAL LIST OF INTERNAL (CONSORTIUM) EXPERTS.....</b>	<b>18</b>

## EXECUTIVE SUMMARY

This report is a document accompanying the demonstrator deliverable D1.5 DIH<sup>2</sup> IP and ELS services and describes the online catalogue of IP and ELS experts in the consortium, along with an online voucher application and qualification system that will be used to gather a pool of external experts who can offer specialised services in the IP & ELS domain for the TTE consortia within the voucher mechanism.

The reporting part of the deliverable covers also definition of the application and validation process with their underpinning objectives, including profile required for experts, criteria to validate them and procedure for the validation as well as the overview of the Experts Open Call that will be launched to identify experts in the required domains.

The main and integral part of the hereby deliverable is contained in the Annex I (Excel file D1.5 DIH<sup>2</sup> IP and ELS services\_v1.0.xlsx), which is composed of the Interactive application & validation sheets that specify the functionalities, operational assumptions and entry data for implementation of the online tools.



# 1 CATALOGUE OF IP AND ELS EXPERTS

The main purpose of the catalogue is to provide easy access and matchmaking through the DIH<sup>2</sup> Marketplace between the highly professional practitioners (individuals and legal entities) in the IP and ELS domains and the TTE consortia that may seek support and related services in those domains. At the starting point, the catalogue will be composed of DIH<sup>2</sup> partners appointed representatives, specialised in the respective fields and their initial list is attached to the hereby document as Annex II (deemed CONFIDENTIAL (CO) for personal data protection issues). Those experts will be available to support the DIH<sup>2</sup> community with their expertise in the respective fields as a part of the centralised non-technical services the DIH<sup>2</sup> network is targeted to provide. It is envisaged that the catalogue will be systematically expanded by the experts outside of the DIH<sup>2</sup> consortium – both individuals and legal entities – capable to provide their professional services within the voucher mechanism available for the projects/experiments selected in the framework of the DIH<sup>2</sup> Open Calls. The expansion of the catalogue will be fostered by the Open Call for Experts that will be launched at the early stage of the DIH<sup>2</sup> project and will continue throughout its lifetime.

All the experts (both internal and external) will be validated with regards to their capacity according to the validation procedure described in Chapter 2, while the external experts will be validated with a view on their potential for service provision under the voucher mechanism.

The main online tools serving the implementation of the catalogue will be the Open Call Application Form (with the embedded pre-scoring mechanism), which is based on the specification in the Interactive application & validation sheets (Annex I), as well as the DIH<sup>2</sup> Marketplace, in development under WP1, where the experts profiles will be accessible (Fig. 1).

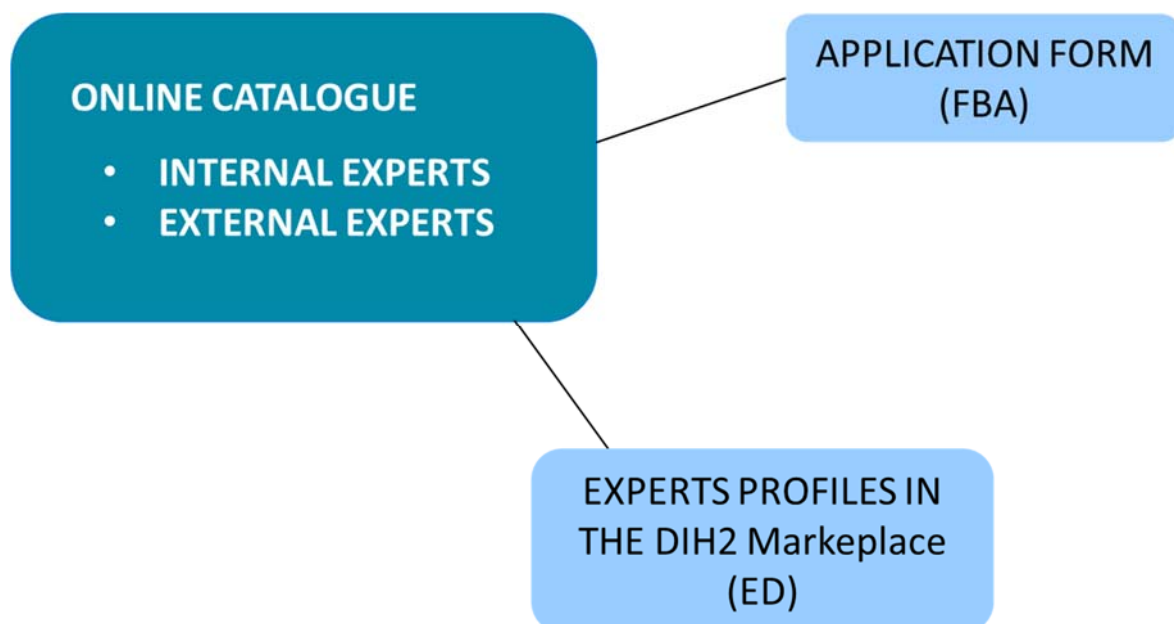


Fig. 1. Online tools implementing the catalogue.

## 1.1 EXPERTS PROFILES IN THE DIH<sup>2</sup> MARKETPLACE

Once validated the experts will be offered a professional profile highlighting the services they provide to be included in the DIH<sup>2</sup> Marketplace.

The profile will contain the following information:

- For individuals: the industries that the expert has an experience with, the list of value-added services offered by the expert, main education reference, short description of the professional background and experience, contact form;
- For legal entities: the industries that the expert organisation has an experience with/operates in, the list of value-added services offered by the expert organisation, contact form.

Since the DIH<sup>2</sup> Marketplace and the catalogue online tool is still under development/refinement, the expert profile mock-up images for the Marketplace v1.0 are included in Fig. 1. The user experience design of the Marketplace is ongoing, therefore an enrichment of the profiles design is expected in the follow-up versions.

**John Doe**
✕

---

**Industries**  
Chemicals, Electrical Equipment, Furniture, Rubber and plastic

**Value-added services**  
Technical consulting, Access to finance, Networking, Courses, Design, Data protection

**Studies**  
Acme University of Doe, Lorem

**Background and experience**  
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur sodales tincidunt nisi, non iaculis massa molestie condimentum. Fusce vitae eros quis augue bibendum varius. Donec nec hendrerit elit. Nam ac enim nec ante porta tincidunt.

Already worked with them?
▼

**Contact:**

Send

Cancel

**Organisation**
✕

---

**Industries**  
Chemicals, Electrical Equipment, Furniture, Rubber and plastic

**Value-added services**  
Technical consulting, Access to finance, Networking, Courses, Design, Data protection

Already worked with them?
▼

**Contact:**

Send

Cancel

*Fig. 2. Beta version of the experts' profiles in the DIH<sup>2</sup> Marketplace.*

## 2 EXPERTS VALIDATION PROCEDURE

The experts validation procedure is aimed at ensuring that all the IP and ELS issues that may emerge in the projects/experiments funded under the DIH<sup>2</sup> FSTP mechanism and/or in the consortia executing them can be solved efficiently and to the highest professional standards. Whether offered by a consortium member or an external expert the services should be easily accessible, tailored, reliable and based on best practices and experience in solving similar problems in the related fields and industries.

The validation procedure is not targeted to rank the experts, it is rather of the community building nature – the community of trusted partners and collaborators. The internal experts will offer the respective services as a part of their work in the DIH<sup>2</sup> consortium, the external ones will be validated as 'eligible' for the vouchers, but not specifically selected under the validation procedure, so to avoid any favouritism or discrimination and to enable free matchmaking between the service providers and projects/organisations seeking support via the DIH<sup>2</sup> Marketplace. Thus, the pre-scoring given during the process of application & validation (as described in sub-chapter 2.1) will be performed mainly with an aim to reject false/misguided applications as well as limit the applications from individuals/entities having a poor experience and/or background, which could put under a risk their tasks potentially undertaken in the framework of the vouchers.

The next subchapters outline the assumptions for the validation process and criteria, which were embedded in the Annex I to the hereby, composed of the Interactive application & validation sheets that specify the functionalities, operational assumptions and entry data for implementation of the online tools.

### 2.1 VALIDATION CRITERIA

The validation process is underpinned by the objective to find well-experienced practitioners – individuals, companies and institutions - in the field of ethics, data protection and cybersecurity, who will provide specialised services for the winning consortia in the ICT/robotics/agile production domains. Therefore, the validation criteria have been based on a combination of these two main qualities:

- **Experience in providing IP/ELS services** (incl. proposals/projects evaluations, advisory/consultancy services for SME etc.)
- **Background/knowledge** (incl. education, professional experience, project participation, etc.) in robotics/agile production and related fields

The first set of qualities as defined above has been broken down into more detailed categories of choice by the partners involved in this task (PIAP for ethics, LCM for privacy and data protection and CERTH for cybersecurity), while specification of the second set was based on the European Commission's reference lists of areas of expertise for selection of experts assisting in evaluation of proposals in the H2020 calls.

Additionally, the categories were adjusted to two types of experts: individual and institutional, since some categories (such as education) are not relevant to both.

Detailed description of the categories are embedded in the respective data sheets in the Annex I, namely:

- Ethics\_expertise\_I
- Ethics\_expertise\_LE
- Data\_Protection\_expertise\_I
- Data\_Protection\_expertise\_LE
- Cybersecurity\_expertise\_I
- Cybersecurity\_expertise\_LE
- Bckg\_expertise keywords\_I
- Bckg\_expertise keywords\_LE

### 2.2 VALIDATION PROCESS

As a strategic business decision was made to close the public registrations to the DIH<sup>2</sup> Marketplace<sup>1</sup> (branded as RAMP – Robotics and Automation MarketPlace), the validation process has been defined differently in two phases:

- Phase I, while public registrations are closed
- Phase II, while public registrations are open

<sup>1</sup> Users that will be registered will be only the consortia of L4MS and DIH<sup>2</sup> projects, their application experiments selected in open calls and the validated experts, eligible for voucher.

The validation process while public registrations are closed (Phase I) will be performed in the following steps (Fig. 3):

1. The expert accesses the Open Call portal through one of DIH<sup>2</sup>'s dissemination channels (DIH<sup>2</sup> Marketplace homepage, project website, social media, personalised invitations etc.)
2. The expert fills in and submits the Application Form in the Open Call platform (and accepts the Voucher Agreement template\*)
3. The Application Form is pre-validated (pre-scored) automatically (as described in sub-chapter 2.2.2)
4. If the pre-scoring is above the threshold, the Application Form is being "sent" (made accessible in a read-only mode) to the APPROVER (representative of the respective partner – PIAP for Ethics, LCM for Data Protection & Privacy, CERTH for Cybersecurity)
5. The APPROVER checks the form for consistency and approves or rejects the application
6. If the expert is approved, a Marketplace profile is created by the DIH<sup>2</sup> team, and user credentials are shared with the expert. A visual indicator "Voucher ready" is added to their profile. This can be also used as a criterion for filtering the experts in the Marketplace catalogue.
7. The expert logs in the Marketplace to change their credentials and refine their profile. The profiles are continuously monitored by the DIH<sup>2</sup> team for consistency and quality.

The experts that have not been APPROVED (under the threshold, false/inconvincing data in the references etc.) receive a kind note that their profile does not match the required criteria, but they still can be a part of the DIH<sup>2</sup> network by registering themselves to the DIH<sup>2</sup> Marketplace when registrations are open.

When registrations in the Marketplace are open for the public (phase II), the following changes in the process are planned:

- The experts will first need to sign up to the Marketplace, before applying to the Open Call.
- No further registration will be needed to apply in the Open Call – the user will be directly able to use the Open Call platform with their Marketplace account through a single sign on mechanism.
- The user profile will be available in the Marketplace catalogue. Only those who apply to the Open Call and are validated will have a visual indicator "Voucher ready", which can be also used as a criterion for filtering the catalogue.

\*External experts only. In order to facilitate the process of future execution of Vouchers the template of the Voucher Agreement will be enclosed in the Application Form for the expert to either accept its terms and conditions or send comments/questions. The acceptance of the template does not conclude the contract, but it will allow to speed up the Voucher execution if a DIH<sup>2</sup> beneficiary/ies would like to use the services of the given expert under the Voucher Mechanism. The detailed scope of the services will need to be agreed with the beneficiary/ies requesting them before the actual conclusion of the contract. If the agreement template is accepted, the experts profile at the DIH<sup>2</sup> Marketplace will be marked as "Voucher Ready", ie. no further discussions over the contract template are needed in case the expert is selected to provide a service. If the expert does not accept the template and leaves any questions or comments (obligatory in case of no acceptance), the respective partner responsible for Voucher Agreements (FBA) will contact her/him/them directly for clarifications. The expert profile in DIH<sup>2</sup> Marketplace will be released irrespective of the Voucher Agreement acceptance, but the expert will be considered "Voucher Ready" only once the terms and conditions of the (potential) Voucher Agreement are agreed.

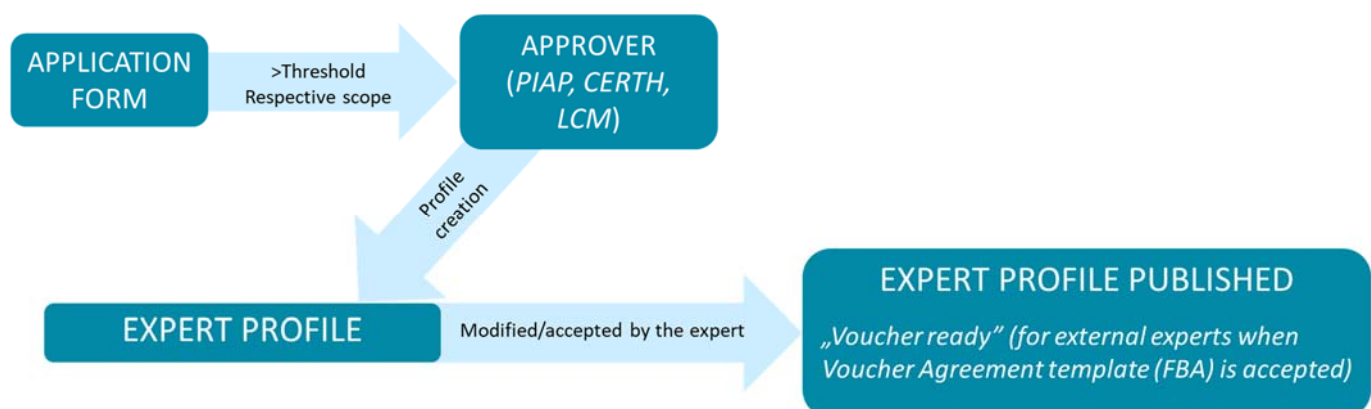


Fig. 3. Experts validation process.

### 2.2.1 APPLICATION FORM

The Application Form has been designed originally in a form of the Interactive application & validation sheets (Annex I) with embedded functionalities (Excel links and formulas) to encompass the specification of the automated part of the validation process and facilitate its efficiency as well as to visualise a concept for a user-friendly interface that can be both easy to fill in by the expert and smoothly validated later by the APPROVER. The application forms were adjusted to two types of experts: individual and institutional, since some categories are not relevant to both. Therefore, there are two Application Forms per each domain: Ethics, Data protection&privacy and Cybersecurity.

In the first page of the Application Form the expert is being asked to choose whether she/he applies as an individual or representing an organisation (legal entity) and which domain is the main for her/his expertise/services (Ethics, Data protection&privacy and Cybersecurity). Based on her/his choice the relevant set of questions are displayed.

For internal experts, the parts related with the Voucher Agreement are discarded once they choose the appropriate option at the beginning of the form (“Are you an employee of any of the DIH<sup>2</sup> project partners?” for individual form and “Are you a DIH<sup>2</sup> project partner?” for legal entity form).

Detailed design of the Application Forms is included in the respective sheets in the Annex I, namely:

- General\_Application\_Form
- Ethics\_Individual\_Application
- Ethics\_Legal\_Entity\_Application
- Data\_Protection\_Individual\_Application
- Data\_Protection\_Legal\_Entity\_Application
- Cybersecurity\_Individual\_Application
- Cybersecurity\_Legal\_Entity\_Application

Since the online Application Form tool is still under development/refinement to be fully implemented, the image of the Beta version is included in Fig. 4 & 5. The beta version can be accessed through [this link](#).



DIH<sup>2</sup> is a network of 26 DIHs, with a target to reach over 170 DIHs. The network is led by Teknologian tutkimuskeskus VTT Oy and is in total composed of 37 European partners (see annex 4).

DIH<sup>2</sup> 's ultimate goal is to establish a **sustainable network of robotics DIHs**, endowed with tools and procedures, to facilitate the **commercialisation and broad uptake of Agile Production** by Manufacturing SMEs/Slightly bigger.

DIH<sup>2</sup> project offers several benefits:

**A Common Open Platform Reference Architecture for Agile Production** which can be instantiated to serve the needs of any Manufacturing SME by means of selecting and integrating a set of Robotic-based Open Standard Enablers [ROSE-AP].

**A Technology Transfer Program** bringing support to the best in class Technology Transfer Experiments.

*Fig. 4. Beta version of the Application Form on the FBA platform. Main site access where the links to the 3 application forms can be seen.*

The screenshot shows a web browser window displaying the 'Application' form on the FBA platform. The form is in a 'Draft' status and contains seven numbered sections, each with a red asterisk indicating it is required. The sections are: 1. Contact information\*, 2. Ethics related expertise\*, 3. Background/knowledge\*, 4. References\*, 5. Services\*, 6. Keywords\*, and 7. Processing of personal data\*. Each section has a red 'Fill' button. A 'Delete this application' button is located below the sections. A cookie consent banner is visible in the bottom left corner.

Fig. 5. Beta version of the Application Form on the FBA platform. Application form details.

## 2.2.2 PRE-SCORING

The Application Form is envisaged to include a pre-scoring system aimed to reject false/misguided applications as well as to limit the applications from individuals/entities having a poor experience and/or background, which could put under a risk their tasks potentially undertaken in the framework of the vouchers and to facilitate the efficiency of the validation process.

The pre-scoring system has been embedded by the means of active Excel formulas in the respective sheets in the Annex I, namely:

- Ethics\_Validation\_I\_LE
- Data\_Protection\_Validation\_I\_LE
- Cybersecurity\_Validation\_I\_LE

The pre-scoring values have been also put next to the expertise categories and timeframes selection in the respective sheets:

- Ethics\_expertise\_I
- Ethics\_expertise\_LE
- Data\_Protection\_expertise\_I
- Data\_Protection\_expertise\_LE
- Cybersecurity\_expertise\_I
- Cybersecurity\_expertise\_LE
- Bckg\_expertise keywords\_I
- Bckg\_expertise keywords\_LE

The general strategy behind the scoring is to put the most value to the practical experience of the experts, optimally a well-established one in terms of the timeframe. For that reason, previous/ongoing activities such as services provision, project participation and other active roles are awarded 0,5 point higher than purely educational/academic knowledge (including publications). A real life reference to each declared activity is requested - each reference is scored by its type according to the above mentioned rule. This concerns both the main domain of expertise and the background/knowledge. Also, the timeframes of experience are pre-scored and the long, well established experience is awarded over a shorter one with 0,5 point. The threshold has been set to 10 points (min. 2/max. 44), since, as mentioned before, the validation procedure is not targeted to rank the experts, only to extract the ones capable to perform work basing on their knowledge and previous practical experience.



## 2.3 UPDATES AND IMPROVEMENTS

Once the online tools will be fully implemented and functional the first batch of internal experts (as assigned by the partners and listed in Annex II) will be validated and the IP&ELS expert Catalogue will be made available on the DIH<sup>2</sup> Marketplace. It will then be updated every 6 months on the basis on the Open Call, as described in the next chapter.

Moreover, the validation procedure and voucher service will be continuously improved and updated (if needed) at least 2 times within the project, once after each round of experiments to incorporate lessons learned.

### 3 EXPERTS OPEN CALL & VOUCHERS MANAGEMENT

After the transition to Phase II is and opening the public registrations an Open Call for Experts will be launched to invite the external experts that can be considered for the Voucher mechanism.

#### 3.1 EXPERTS OPEN CALL

Once the online tools are fully in operation the Open Call for Experts will be announced via the DIH<sup>2</sup> dissemination channels. The call text will be prepared and included in the DIH<sup>2</sup> Marketplace, it will cover an invitation to apply, short description of the desired scope of competences, possible benefits of becoming a member of the catalogue of validated experts and information on the Voucher mechanism.

#### 3.2 VOUCHERS MANAGEMENT

The ELS Vouchers budget is part of the FSTP Budget. The total budget is €156,000, so each of the 26 beneficiaries will have €6,000 to spend in ELS services. This budget can be divided among the three different type of services the beneficiaries can receive: Ethics, Data Protection & Privacy and Cybersecurity.

There are two ways of managing this budget, the consortium did not decide yet which of the two ones will be used so we present both below:

1) FSTP Management. If the vouchers budget is under FSTP budget, as it is now, only the best experts' proposals will be selected and therefore will provide the services to the beneficiaries of the program. Following this option will imply:

- The beneficiaries of the Technology Transfer Program will only be able to work with the best proposals selected after the validation process and therefore will limit them the experts they can work with.
- Furthermore, in the validation process a final ranking should be prepared to select the best experts and therefore the providers that will get the FSTP budget that will become the beneficiaries of the FSTP ELS Vouchers budget.
- The €6,000 should be divided among the 3 different type of services, in tokens of €2,000 for example.

2) Transfer the FSTP Budget to one partner. Another possibility is that beneficiaries of the program ask for three different offers to receive a specific service (Ethics, Data Protection & Privacy and Cybersecurity). And that they select the best value for money offer out of this three quotations. Of course, the offers could only be asked to providers validated and part of the marketplace. In this case:

- The beneficiaries of the Technology Transfer Program would be able to work with any expert, as they can ask the experts they want to work with to apply to the ELS call to be validated.
- The ELS Vouchers budget could not be managed as FSTP, it should be transferred to one of the partners of the consortium. The partner with the budget should transfer the ELS amount to each of the beneficiaries of the program once the offer is accepted.
- The agreement with the experts will not be signed by DIH<sup>2</sup> and the expert, but by the beneficiary of the program and the expert.
- This model is much more flexible and allows beneficiaries of the program to spend the vouchers budget as they wish.
- This will imply changes in the FSTP budget and therefore an amendment of the DoA.

In the following months DIH<sup>2</sup> will decide which is the best option to follow.



## ANNEX I

[D1.5 DIH<sup>2</sup> IP and ELS services v1.0.xlsx](#)

## ANNEX II – INITIAL LIST OF INTERNAL (CONSORTIUM) EXPERTS

Name	Organisation	Ethics	Data Protection	Cybersecurity
Micheál Cassidy	Irish Manufacturing Research	Yes	Yes	Yes
André Zúquete	PRODUTECH-Uni. Aveiro		Yes	Yes
Rolando Martins	PRODUTECH-INESC TEC			Yes
Sebastian Steinbuss	IDSA		Yes	
Ontiu Nicolae	ARIEST		Yes	
Alessandro Giusti	CyRIC	Yes		
Róbert Németh	PBN		Yes	
Pavle Vuletic	ETF			Yes
Zarko Stanisavljevic	ETF		Yes	
Janika Miettinen	VTT	Yes		



*H2020 Innovation Action – This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 824964*