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INTRODUCTION

The Interoperability Academy workshop took place on 11 December 2019 during the first day of the Interoperability Academy Winter School. The aim of the workshop was to present the work achieved in the inception phase of the [Interoperability Academy action](#) from the ISA² programme. During the workshop, the Project Team presented the activities undertaken in the period from August to December 2019, as well as the first outcomes, and raised key points for feedback and constructive discussions.

This workshop was an opportunity to discuss the ideas and vision behind the interoperability Academy as well as to collect and gather insights from the perspective of the participants. The active participation resulting from the group sessions and discussions has been of great importance in putting the plans for the future phase on the right track.

The purpose of this report is to summarise the feedback received from participants and provide the list of actions to be considered in the future stage of the Interoperability Academy action in order to better meet expectations and needs of the users.

The report contains the description of the workshop, materials developed for this purpose, as well as the summary of discussions. The summary is organised per question/topic discussed, including the main conclusions and a list of potential 'to do' actions.

Further information, including materials used to support the workshop, are available in the [Interoperability Academy solution](#) on Joinup and can also be found further in this report.

1. WORKSHOP METHODOLOGY

The Interoperability Academy workshop consisted of four parallel sessions delivered by the EC Project Officers in charge of the Interoperability Academy Action and by the Project Team from Trasy International. 46 participants from public administrations, similar initiatives, academia, private sector and universities (students) provided their feedback.

Each session was divided into three parts:

- presentation of the Interoperability Academy action and its inception phase;
- work in groups;
- constructive discussion.

The Project Team developed a presentation (Annex 1) and summaries of the deliverables (Annex 2, Annex 3 and Annex 4) for each workshop, as well as an example of the [Catalogue of Educational Training resources](#) and of the [Categorisation](#). All the latter were sent to the participants of the Winter School who subscribed to the Interoperability Academy workshop. Together with the materials, the Project Team sent a set of questions to be used as a basis for discussion at the workshop and for further reflection.

2. SUMMARY OF THE DISCUSSIONS (PER QUESTION)

2.1. TRAINING MATERIALS: WHAT DO YOU THINK OF THE CATALOGUE OF ISA / ISA² MATERIALS? HOW USEFUL IS IT AND ITS PRESENTATION?

The overall conclusion regarding the Catalogue is that having all learning materials gathered in one place is of high importance since it makes the search much easier. Participants were however confusing the Catalogue with training modules and the Project Team had to explain the purpose of the Catalogue and its place in relation to the future training modules. The structure of the Catalogue was positively welcomed and assessed as well built by the participants, although several points could be improved:

- **Introduction**

There are several points raised regarding the introduction:

- a) The term “interoperability” was not understandable to everyone who gave feedback on the Catalogue.
 - b) 'Joinup', 'SEMIC' and other actions should be briefly defined in order to explain what they mean/are. That would help the users to decide whether to click on the links or not.
 - c) Table of contents is good, and helps the navigation by presenting what content can be found, but users are missing some context to fully understand the purpose of the Catalogue.
- ⇒ **TO DO:** Create a paragraph explaining the purpose of the Catalogue.
 - ⇒ **TO DO:** Create a glossary to explain the main terms and concepts such as ‘interoperability’.
 - ⇒ **TO DO:** Consider adding links to the action pages for the users who are not familiar with the latter.
 - ⇒ **TO DO:** Consider creating an introductory training course (foundation courses) on basics of interoperability for non-specialists.

- **Categorisation**

More detailed feedback related to the Categorisation is presented in the section 2.3. below, however, there were several comments, while discussing this question, which tackled the way the Categorisation was introduced on Joinup. Currently, the Categorisation is presented on a [dedicated page on Joinup](#), which is linked to the Catalogue. But many users are skipping this link, and this led to some misunderstandings of the categories used to describe the material (e.g. participants raised the question what is the difference between ‘Broad’ and ‘General public’ in the category ‘Target audience’ although this was explained on the mentioned page). Thus, the Project Team would suggest highlighting the need for checking the Categorisation before going to the specific material in the Catalogue.

- ⇒ **TO DO:** Add a short introduction of the Categorisation explaining its purpose and the importance of checking it in advance.
- ⇒ **TO DO:** Make this introduction more visible by putting it in a blue box (Joinup feature that appears when using the quotation).

2.2. TRAINING MODULES: IS THERE ANYTHING THAT YOU THINK WOULD BE USEFUL (I.E. WHERE NO TRAINING MODULE CURRENTLY EXISTS)?

Although the aim of this question was to collect the users’ needs and expectations regarding the knowledge and skills to gain through the Interoperability Academy, the workshop participants used this opportunity to reflect on the features they would like to see in the learning platform. Additionally, and due to the above-explained confusion – where participants thought that the Catalogue was a training module, many of the below-presented comments were mentioned in the discussion regarding the Catalogue. Detailed explanations are however available in the section 2.4.

- **Interoperability**

As mentioned in section 2.1, participants expressed the need to have a definition and an explanation on what interoperability is. Therefore, it would be good to have an introductory video/training to explain the concept.

- ⇒ **TO DO:** Create a short ‘training’ video explaining the concept of interoperability. To be decided whether this should be a stand-alone training or an introduction to each of the training modules which will be part of the Interoperability Academy action.

- **Appearance**

When creating training modules, participants emphasised the importance of how the module looks and displays on different devices. It is important to make it visually appealing and adaptable for people with disabilities.

- ⇒ **TO DO:** Make training modules visually attractive and user-friendly on different devices.
- ⇒ **TO DO:** Adapt the training modules to people with disabilities.

- **Searching features**

It was mentioned that search functionality should provide features such as filtering, and that the Categorisation can be very helpful in this context. Hence, those filters created for each category can serve as tags for training modules which contain learning materials from the Catalogue.

- ⇒ **TO DO:** Use different tags to make the search easier.

- **Technical features**

According to the participants, It would be very useful to include analytics such as how many users tested the materials and from which sector/which background they are coming from.

Additionally, many participants expressed the need to have information such as the duration of the module and learning objectives.

- ⇒ **TO DO:** Develop analytics related to training modules, so it shows how many people used it, from which sector, background.
- ⇒ **TO DO:** Include the information about the time needed to complete the module.

- **User testimonials and best practices**

Participants explained that it would be valuable to have user feedback functionality (such as comments/questions on materials used) in addition to user testimonials and best practices to be added to each module, ideally with aggregated analytics next to it. Also, it was mentioned that it would be helpful to have information and concrete examples on how to put in practice the acquired knowledge and skills.

- ⇒ **TO DO:** Include user testimonials and best practices, as well as the place for comments and questions.

2.3. CATEGORISATION: DO YOU FIND THE PROVIDED CATEGORISATION USEFUL? WOULD YOU INTRODUCE ANOTHER CATEGORY? REDUCE SOME OF THE EXISTING FIELDS?

The general impression coming from the participants is that the Categorisation is very useful, and at later stage can serve for 'tagging' of materials in the eLearning platform. However, there were several suggestions for re-definition of the proposed categories or for introduction of new ones. More precisely :

- **Target Audience**

Although the categories are well described in the document (available [here](#) on Joinup), the division of target audience was not clear enough to the majority of participants. For example, 'General public' and 'Broad' were perceived as too

similar.

⇒ **TO DO:** To avoid any confusion the categories 'Broad' and/or 'General public' should be renamed so it makes the difference clearer.

- **Level of specialisation**

The 'level of specialisation' category triggered discussions and many questions, as basic/intermediate/advanced knowledge is not perceived in the same way among users (ie not everyone has the same understanding of what 'basic' means). Hence, we could think of changing the perspective and talk about the content/knowledge that the material will provide. For instance, we have two users, one with technical background and knowledgeable about interoperability and the other with background in social sciences and management, and not very familiar with the concept, but But they both don't know what Joinup is. They never heard of it, or they have never used it. Therefore, the video which we have in our Catalogue which shows «What is Joinup» will give them both basic knowledge of Joinup. Then, the videos showing new functionalities on Joinup will give them some more advanced (intermediate) knowledge.

⇒ **TO DO:** for this category, we could think of re-orientating it to be more material-centric.

- **Teaching medium**

In the category 'teaching medium', the participants suggested the inclusion of a filter called 'mixed', in case there will be books/any other analogue materials provided for a workshop/webinar.

⇒ **TO DO:** To adapt for mixed or combined medium - Analogue/Digital.

- **Social inclusion**

Participants also suggested the inclusion of a category dedicated to social inclusion in order to take into account the specific needs of students with disabilities.

⇒ **TO DO:** Filters to be developed and explained for visual, hearing or physical impairments.

2.4. CURRICULUM: WHAT WOULD YOU EXPECT FROM AN INTEROPERABILITY CURRICULUM IN TERMS OF TOPICS AND COURSES? WHAT ARE YOUR MAIN POINTS OF INTEREST / SPECIALISM?

The aim of this question was to collect the general expectations from the audience in terms of topics covered by the curriculum of the Interoperability Academy. The first observations indicated that the audience expects an introductory course on Interoperability. Other topics complementing the discussions were addressed such as:

- **Two different types of curriculum**

Several participants pointed at the importance of differentiating knowledge-building and skills-building. For example, user should get a knowledge on what Joinup is, why is it important and what the users will achieve by using it (knowledge-building), but also practical skill on how to use the platform – how to create a solution or collection, etc. (skills-building).

⇒ **TO DO:** To integrate a differentiation between knowledge- and skills-oriented, being either visual or structural.

- **Building a bridge between knowledge and the practice.**

Linked to the previous point, the participants highlighted the importance of including practical exercises to connect theory to practice.

⇒ **TO DO:** To offer the option to practise after following a course, when applicable.

- **Videos**

As already introduced, videos seem to be a preferential format for quick learning.

⇒ **TO DO:** To create a “video” entry in courses where videos related to the topic can be uploaded.

- **EIF**

Participants encouraged the Project Team to continue alignments with the [European Interoperability Framework](#) (EIF) layers (Interoperability governance; Integrated public service governance; Legal interoperability; Organisational interoperability; Semantic interoperability; Technical interoperability), highlighting that the curriculum should go beyond the technical layer.

2.5. LEARNER PROFILES AND LEARNING PATHS: CAN YOU IDENTIFY WITH ANY OF THE LEARNER PROFILES OR LEARNING PATHS? IF SO – WHICH REPRESENTS YOUR PERSPECTIVE? IF NOT – WHAT IS MISSING?

Following the discussion with the participants on the Learner profiles and Learning paths, the general impression was two-fold: adapting the current approach or proposing a new approach¹.

- **Strategic, legal, operational and business profiles need to be developed**

Taking into consideration the current approach to defining profiles, the audience found that the ones proposed were very complete, but excessively IT-oriented. In addition, it was noted that within the presented profiles, a sub-hierarchy should be established since some project managers, policy managers, etc, might have a different degree of responsibility.

⇒ **TO DO:** To develop other profiles less IT oriented.

⇒ **TO DO:** To define sub-level of profiles (e.g. project Manager lev-1, lev-2 and lev-3)

- **Change-management element**

A new element was proposed, considering which profiles are involved in Change management in order to apply it in a Digital Transformation scheme. The discussed approach was therefore more focusing on the needed responsibilities instead of defining template profiles.

⇒ **TO DO:** To look at profiles involved in change-management activities to define new profiles, based on what is needed.

⇒ **TO DO:** Define the role of an IOP dedicated Officer.

¹ It needs to be noted that many participants misunderstood the purpose of Learner Profiles: some of them thought that the profiles were something that would be built into the platform that they could choose to represent themselves when they log in. This is why they suggested for many more to be created. However, this is not the case: learner profiles have been created for UX purposes only: to help develop user requirements and functional specifications and are simply representative of broad user types. However, based on feedback, it still may be useful to develop more profiles to help with requirements gathering.

- **Level (size) of the public services**

Taking into consideration the different sizes of public services (municipalities, local/regional level, etc.) can help bringing nuance to the existing profiles, and to also establish new ones. For example, a municipality from a small town may not even have a system architect.

- **A self-assessment tool to define the user's profile**

The option to use a tool to define a user's profile was raised during the workshop.

⇒ **TO DO:** To build a questionnaire for self-assessment (questions that user will answer to define which profile is the most suitable) to define a user's profile based on its needs, specialisations, interests, etc.

2.6. LMS STANDARDS: CAN YOU RECOMMEND AN EXISTING LMS PLATFORM, WHAT ARE ITS STRENGTHS?

The following LMS were presented and discussed between participants :

- **Ilias²** : ILIAS is an open-source web-based learning management system. It supports learning content management (including SCORM 2004 compliance) and tools for collaboration, communication, evaluation and assessment. The software is published under the GNU General Public License and can be run on any server that supports PHP and MySQL.

Together with Moodle, Ilias seemed to provide the best service. It is open-source, based in Germany and has an active community.

⇒ **TO DO:** To consider alignment with Ilias standards when building the LMS for the Academy.

- **Moodle³** : Moodle is a free and open-source learning management system (LMS) written in PHP and distributed under the GNU General Public License.[3][4] Developed on pedagogical principles, Moodle is used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors.
- **Coursera⁴** : Coursera is an American online learning platform founded by Stanford professors Andrew Ng and Daphne Koller that offers massive open online courses (MOOC), specialisations, and degrees.
- **Udemy⁵** : Udemy is an online learning platform aimed at professional adults and students, developed in May 2010. The platform has more than 30 million students and 50,000 instructors teaching courses in over 60 languages. There have been over 245 million course enrolments. Students and instructors come from 190+ countries and 2/3 of students are located outside of the U.S. Udemy also has over 4,000 enterprise customers and 80% of Fortune 100 companies use Udemy for employee upskilling (Udemy for Business).
- **Canvas⁶** : Canvas Network is a platform hosting training courses online, derived from learning software freely licensed Canvas. Canvas Network is an open space for educators to share, experiment, analyse, and create
- **Edx⁷** : edX is a massive open online course (MOOC) provider. It hosts online university-level courses in a wide range of disciplines to a worldwide student body, including some courses at no charge. It also conducts research into

² <https://www.ilias.de/en/about-ilias>

³ <https://moodle.org>

⁴ <https://www.coursera.org>

⁵ www.udemy.com

⁶ <https://www.canvas.net>

⁷ <https://www.edx.org>

learning based on how people use its platform. EdX is a non-profit organisation and runs on the free Open edX open-source software platform

3. CONCLUSION

In the future phase of the Interoperability Academy action, Project team needs to develop its work focusing on user needs and expectations discussed during the workshop:

- Catalogue and categorisation need to be revised to include additional categories and its purpose better explained.
- Number of Learner profiles need to be expanded in order to include all relevant profiles.
- When developing curriculum, attention needs to be paid to both knowledge-building and skills-building.
- LMS standards need to be further analysed in order to keep the balance between the latest trends in e-Learnig and having standards which can be adaptable/used on different platforms.

In order to validate the future outputs, Project team recommends organising similar exercises with representatives of similar initiatives, as well as with potential users, complemented with interviews and testing of training modules.

4. ANNEXES

Annex 1 - Workshop presentation



Interoperability
Academy workshop_p

Annex 2 – Lerner Profiles



Lerner Profiles_Part
I.pdf

Annex 3 – Learning Paths and Curriculum



Learning Paths and
Curriculum_Part II.pdf

Annex 4 – Requirements for the IOP Academy



Requirements for the
IOP Academy.pdf