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**Methodology and mechanism for  
building HR staff competencies to  
support OI competencies  
development**

## Initial Capacitation Methodology

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## 1. Introduction

Engaging individuals in overcoming skills mismatch and adjusting their competencies to realistic market requirements, especially in case of new areas not covered by traditional educational systems, requires engagement of intermediaries such as employers, HR specialists, employment consultants in building awareness of the new market requirements, direct them toward proper development path and providing guidance and motivation to invest their time and efforts into the learning process (EIB 2019).

Combating skills mismatch issues requires, next to education and training, fostering efficient relocation of skills and jobs by collaborative efforts of job market stakeholders - proactive enterprises, HR agents, employment offices, development organisations, adult educators etc. (Cedefop 2018). From one side, putting themselves in skills mismatch situation can be a result of job seekers poor career choices related with lack or ill-information about job prospects with the best returns on their human capital investment, i.e. lack of information regarding OI as a possible carrier direction. From the other, in terms of the types of jobs currently at the highest risk of layoffs (i.e. due to automation), workers in these jobs were also reported as groups less likely to invest in training and often having limited access to it (Nedelkoska & Quintini 2018).

Therefore, ensuring access to high quality career guidance and support in the area and, in the first place, information about employment prospects in the area, are paramount to fill the gap and allow job seekers and enterprises benefit from it (Cedefop 2018).

Thus, to be able to support the job seekers and employees in engaging in and developing their capacities for open innovation, intermediaries need to be capable to identify critical open innovation mechanisms and competences, be able to spot potential for requalification and opportunities in open innovation areas and encourage and guide individuals through proper upskilling process (EIB 2018). Especially taking into account commonly highly limited understanding of innovation and especially Open Innovation and multiple misconceptions in the area, it is critical to capacitate this professional group to be able to clearly communicate opportunities in the areas, clarify possible misconceptions and guide the job seekers and employees in their development.

For this, OPI project is providing a comprehensive set of labour market-oriented solutions, starting with capacitation of HR professionals **in SMEs** and providing required labour market and competence intelligence among the talent management professionals.

***This specific document represents the Capacitation Methodology developed by OPI consortium in the view of helping HR professionals in SMEs to acquire the necessary competencies to support OI competencies development.***

The Capacitation Methodology includes a detailed **training curriculum**, based on which these competencies will be acquired.

The **training curriculum** provides:

- the training objectives (general and specific) envisaged in relation to the OI training of HR professionals
- the training themes and sessions
- the Learning Outcomes that the trainees will achieve at the end of the training
- the delivery plan (meaning the training themes and allocated delivery hours)
- the assessment methods & techniques for the validation of LOs achievement.

In the next phase of the OPI project's implementation, the present methodology and training curriculum will be used by UPIT and E&D partner organisations as a sound basis for developing the specific training content.

## 2. Needs Assessment: identification of required skills

The needs assessment to identify required skills to be included in this Capacitation Methodology and curriculum for HR experts has been achieved through:

- Desk research (literature review)
- Focus Group with stakeholders

both being activities implemented by all project consortium member organisations in their countries.

All partner organisations have then issued national desk and field-based research reports, from whose compilation and interpretation of results the present methodology was elaborated.

The national research reports are available on project intranet.

The main findings from national research are presented below.

	<b>Romania</b>	<b>Portugal</b>	<b>Spain</b>	<b>Poland</b>	<b>Austria</b>
<b>Literature review</b>	<ul style="list-style-type: none"> <li>- hard skills (e.g. developing a project, examine technology)</li> <li>- soft skills (personal traits, attitudes and interpersonal abilities) (more important for OI than hard skills!)</li> <li>- Interpersonal management skills</li> <li>- Project management skills</li> <li>- Content management skills</li> <li>- Self-management skills (the most important!)</li> <li>- skills for recruitment strategy and workforce planning</li> </ul>	<ul style="list-style-type: none"> <li>- integrating technical skills, with social capital and interactive competencies</li> <li>- specific skills for managing networks and partnerships</li> <li>- ability to work with different professional communities</li> <li>- ability to work in interdisciplinary environment</li> <li>- ability to work in cross-functional teams</li> <li>- managing inter-organisational collaboration processes</li> <li>- networking skills</li> <li>- adaptability and flexibility</li> <li>- ability to share knowledge and ideas internally within organization</li> <li>- ability to share knowledge and ideas externally</li> <li>- communication skills</li> <li>- cultural awareness</li> <li>- personal attributes (motivation, sociability, a techno-business mindset, systems thinking)</li> </ul>	<ul style="list-style-type: none"> <li>- skills for using innovation in technology: ability to use new technology specific for HR field (ATS - Applicant Tracking System; CRM - Customer Interaction Management; NPS – employee NET Promoter Score; Google's G-suit, etc.)</li> <li>- Big Data management skills</li> </ul>	<ul style="list-style-type: none"> <li>- outsourcing talents</li> <li>- upskilling</li> <li>- providing training in terms of HR management</li> <li>- seeking external ideas for introducing innovation</li> <li>- digital competencies that stand for innovation and especially OI</li> <li>- introduction of mechanisms changing the workforce</li> <li>- new communication methods</li> <li>- flexibility connected with the readiness to change (implied as an innovation paradigm)</li> <li>- sense of inquisitiveness and strive to commit to practicing research as a regular activity</li> <li>- creativity</li> <li>- problem-solving</li> </ul>	<ul style="list-style-type: none"> <li>- introspective skills related to the organisation's assessment of opportunities from inside;</li> <li>- extrospective skills related to the organisation's assessment of opportunities from outside;</li> <li>- interactive skills that convey the value, internally and externally, of relations with the world outside the organisation;</li> <li>- technical skills, encompassing all the technical, management and business skills needed to support the first three categories.</li> <li>- self-management (seen as the basis for achieving the central tasks related to OI);</li> <li>- interpersonal management (essential for managing inter-organisational collaboration);</li> <li>- project management (essential for managing the overall innovation process); and</li> </ul>



	<i>Romania</i>	<i>Portugal</i>	<i>Spain</i>	<i>Poland</i>	<i>Austria</i>
					<ul style="list-style-type: none"> <li>- content management (essential for creating new knowledge collaboratively)</li> <li>- professional competencies</li> <li>- methodic competencies</li> <li>- social competencies</li> <li>- personal competencies</li> <li>- specific OI <u>skills</u>: IP management; Negotiation; Entrepreneurship; Leadership; Team-working; Multi-tasking; Problem-solving; Virtual collaboration; Internal collaboration; External collaboration; Trust; Communication; networking</li> <li>- specific OI <u>abilities</u>: Technology &amp; business mindset; Project management; Adaptability and flexibility; Managing inter-organisational collaboration processes; Ability to work in interdisciplinary environment; Ability to work in cross-functional teams; Strategic thinking; Creativity; New media literacy; Cultural awareness; Ability to work</li> </ul>

	<i>Romania</i>	<i>Portugal</i>	<i>Spain</i>	<i>Poland</i>	<i>Austria</i>
					with different professional communities; Ability to share knowledge; Risk awareness; Failure tolerance
<b>Best practice examples</b>	<ul style="list-style-type: none"> <li>- Ability to start innovative projects</li> <li>- ability to identify global challenges</li> <li>- skills for searching for innovative ideas and solutions for specific problems</li> <li>- clear and concise communication skills</li> <li>- skills of using correctly the verbal and nonverbal communication</li> <li>- spirit of initiative</li> <li>- innovation abilities</li> <li>- thinking “outside the box” skills</li> <li>- self-motivation</li> </ul>	<p>Part of those from above plus:</p> <ul style="list-style-type: none"> <li>- specific interpersonal and intrapersonal competencies (i.e. self-management or interpersonal management)</li> <li>- mindset and alignment with future organizational strategy and values</li> <li>- being able to apply proper tools and mechanism to align the candidate’s (or contracted human resources) specific interpersonal and intrapersonal competencies with the company’s sustainable innovation strategy</li> <li>- ability to guide human resources through requalification toward the OI positions, based on:               <ol style="list-style-type: none"> <li>1/ building their awareness of OI and OI competencies relevance for modern economy</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>- mastering specific strategies for candidates’ selection (e.g. studying the applicant’s cultural background, focusing on employee’s talents)</li> <li>- training workers’ specific abilities (one of the finest procedures to motivate staff!)</li> <li>- transparency</li> <li>- providing to the applicant a compelling incentive</li> <li>- creating a link between talent and technology (to keep pace with technology advancement)</li> <li>- creating a safe atmosphere</li> <li>- altering and streamlining the hiring processes (when searching for high achievers)</li> <li>- training candidates (one of the best ways to improve an enterprise; student internship program is one</li> </ul>	<ul style="list-style-type: none"> <li>- design thinking (the process to the employees or persons involved – how they should look at problems and what attitude to take towards solutions)</li> <li>- team-working</li> <li>- Corporate Social Responsibility (CSR) (.g. using the You Grow talent management project)</li> <li>- digital competences</li> <li>- talent management</li> <li>- mentoring</li> <li>- creative thinking (e.g. using a laboratory with a pitch room, creative rooms and hosing candidates’ interviewees too)</li> <li>- flexibility</li> <li>- openness to change</li> </ul>	<ul style="list-style-type: none"> <li>- “connect and develop” strategy (the mindset shift from “not invented here” to “proudly found elsewhere”, the creation and management of partnerships, the multi-disciplinarity).</li> <li>- creation of an internal innovative mindset</li> <li>- trust building</li> <li>- coaching</li> <li>- exchanging good practices</li> <li>- fostering inter-organisational collaboration</li> <li>- (structured) upskilling / reskilling</li> <li>- awareness building</li> </ul>



	<i><b>Romania</b></i>	<i><b>Portugal</b></i>	<i><b>Spain</b></i>	<i><b>Poland</b></i>	<i><b>Austria</b></i>
		<p>2/ building their ability to identify critical OI mechanisms and competencies,</p> <p>3/ building their ability to spot potential for requalification based on analysis of individual abilities, especially the inherent and acquired ones,</p> <p>4/ ability to motivate and ensure efficient engagement of individuals in building their OI capacities.</p>	<p>of the finest ways to train staff)</p> <ul style="list-style-type: none"> <li>- creating an environment that encourages the interchange of ideas and information (transparency - a must-have company skill)</li> <li>- implementing 'people management practices'</li> <li>- open communication</li> <li>- selecting candidates motivated by contextual knowledge and devoted</li> </ul>		

In all partner countries, in addition to desk research, Focus Groups (FGs) have been implemented in the aim of the IO2, either online via Skype or Zoom (Romania, Portugal, Spain and Poland) or face-to-face (Austria).

Demographics of HR staffs participating in the FGs are summarised in the table below:

	<i>Romania</i>		<i>Portugal</i>		<i>Spain</i>		<i>Poland</i>		<i>Austria</i>	
<b>No. of participants</b>	4		2		4		4		4	
<b>Gender split</b>	1 F	3 M	2 F	-	1 F	3 M	-	4 M	Not specified	Not specified
<b>Age (years)</b>	38, 36, 49		Approx. 45		52, 33, 54, 42		---		28, 45, 51, 32	
<b>Years of experience as HR</b>	5, 10, 25, 10		Huge experience		Not specified		Over 20		Not specified	
<b>Field of activity of the HR professionals (incl. HR recruiters)</b>	<ul style="list-style-type: none"> <li>- production of plastic components for cars</li> <li>- car manufacturing</li> <li>- technical checks and services for trucks and other vehicles</li> <li>- household and professional appliances producer</li> </ul>		<ul style="list-style-type: none"> <li>- national public employment and VET agency</li> </ul>		<ul style="list-style-type: none"> <li>- supermarket commerce</li> <li>- banking sector</li> <li>- pharmaceutical business</li> <li>- refrigeration facilities</li> </ul>		<ul style="list-style-type: none"> <li>- professional advisor in career advisory</li> <li>- HR management / IT</li> <li>- IT company</li> <li>- start-up introducing new analytical solutions to the European stock exchange market</li> </ul>		<ul style="list-style-type: none"> <li>- Start-Up, highly connected with externals</li> <li>- large company in IT sector</li> <li>- Austrian Federal Economic Chamber</li> <li>- Training Institute</li> </ul>	

Main findings from FGs are rendered below.

### **Being familiar with OI concept:**

#### Romania

Most of the participants are not familiar with the OI term, however they consider that in the activity they carry out, innovative competencies and skills are needed in order to be able to add value to the tasks to be performed.

#### Portugal

The OI term and concept is not familiar to the participants. It makes them think about novelty and “something different” in terms of how companies operate and innovate. It also makes them think about a “change of mindset at top management level”.

#### Spain

OI is a new way to understand new strategies regarding enterprises development and their way of work. This means matching internal and external expertise to drive strategy and R&D projects forward.

#### Poland

Most of the participants are not familiar with the OI term, however, they understand that it is about the integration and application of internal and external ideas, as well as the processes of implementing innovations to the market.



### Austria

The OI term and concept is familiar to all participants. They think about “opening the company’s R&D to others”. Focus seems to be more on the development part (might be due to the selection of candidates which all have limited “research”).

### **Relevance of OI for modern economy:**

#### Romania

At the level of management positions, new knowledge and the update of high-performance information and software are constantly needed, while for other employees, the need for such competencies is strictly related to the job profile and work requirements.

#### Portugal

High relevance for the competitiveness of companies in the modern economy. Based on the previous reflexions, participants believe that there might be a need of a certain level of readiness (from people looking for jobs) to undertake a training in OI. Yet, it all needs to start with the company management.

#### Spain

OI competences are crucial for modern economy.

#### Poland

The development of innovative competences is a key activity in the new approach to education, presented in the lifelong learning strategy.

#### Austria

All participants underline the importance today and see increasing importance for the future.

### **Types of OI-related skills required from the interviewees searching for employment:**

#### Romania

For the execution functions are required competencies and practical skills: teamwork, taking over new tasks, adaptability, flexibility. For management functions are required communication skills and teamwork, collaboration and openness to innovation and application of new software and knowledge, collaboration with people with different expertise, adaptability, establishing team connections.

#### Portugal

The set of soft skills of candidates. This can be seen according two perspectives: 1/ the pool of soft skills the IEF technician identifies in each candidate, 2/the pool of soft skills the technician would like to find. Among the majority of job candidates with whom IEF works there’s still lack of these soft skills.

#### Spain

- Creative and innovation skills.
- Absorptive capacity.
- Feel like constant learning.

#### Poland

- self-development and continuous learning;
- creative thinking;
- problem solving skills;
- all abilities related to communication!

## Austria

- Soft skills are more important than hard skills, especially in this area. Especially skills in leading / working in groups, open communication and creativity are often missing.
- We need to train people from the very beginning to be able to work in groups.

## **News skills relevant for HR staffs in relation to the recruitment criteria and process:**

### Romania

The most needed are: collaboration with people with different types of expertise, ability to work in multifunctional teams, collaboration to develop new products or ideas, availability to work on different projects and availability to establish connections with people from other companies or organizations, good communication skills (to collaborate in a team and to take on tasks in the development of new products and technologies).

### Spain

OI skills.

Ability to work across various projects.

Teamwork skills.

### Poland

Good communication skills (as it is the basis of all entrepreneurship and, of course, innovation processes).

## **The most important/relevant skill for OI competencies development:**

### Romania

Flexibility and adaptability.

### Portugal

Communication is considered a crucial skill – to be a good communicator and to be able to interact with others.

Sociability (networking, ability to communicate and interact, etc.) and open mind for new learning (including the openness for long life learning).

### Spain

being able to work across various projects.

### Poland

Good interpersonal skills (are especially important in IT, where the success of a project is usually determined by a well-coordinated team, not even outstanding individuals) / working in team not individually.

### Austria

- communication
- team work.
- open mind set
- adaptability
- availability to learn
- share knowledge and experiences

## **Other important OI-related skills in the recruitment process:**

### Romania

Basic professional knowledge in line with the intended job are important, as professional training follows to be provided after hiring, at the workplace.

#### Portugal

Adaptability, availability to learn, availability and open mind to learn and share knowledge & experiences and team work.

#### Poland

- Willingness to learn and develop
- Openness to change
- Knowledge transfer
- Ability to accept criticism
- Independence
- Confidence
- Motivation to work and commitment
- Initiative

#### **Individual abilities used in analysing the staff's requalification potential:**

##### Romania

Adaptability and the desire to show openness for learning new things.

##### Portugal

The openness to change (e.g. to be open to skills requalification, and acquisition of new learning) – to be open to abandon comfort zones with no fear for the change.

##### Spain

Absorptive capacity of individual.

##### Poland

The ones mentioned at the above question.

##### Austria

- New requalification paths are one important topic.
- OI skills should also be trained in school and dual education.
- Creativity is generally not trained enough.
- The participants had different opinions on the use of psychological tests – agreed that interview is most important.

#### **Methods and tools applied to analyse the staff's requalification potential:**

##### Romania

Modelling and simulation tools for structures and work teams are currently used.

##### Portugal

The only method used is interview. Other tools such as motivation test had previously been used but are, currently, no longer in use.

##### Spain

Analysing the willingness to learn of the candidates.

Training (new skills can be also identified during the training process).

##### Poland

There no methods and techniques in use to access OI competences. According to the participants everything is based on the intuition and strength of experience of HR.

##### Austria

- still too unstructured
- clear guidelines are missing

- participants from industry did not know about the national OI strategy
- currently different problems on the labour market (COVID related)
- not all sectors have the same importance – OI more in IT and R&D companies, less in e.g. gastronomy and tourism. But the mentioned soft skills are also important there.

### **Identification of critical OI mechanisms and competencies by HR staff:**

#### Romania

So far there is no mechanism in place at the interviewed organisations for identifying OI competencies.

#### Portugal

There no methods, approaches or techniques in use to access OI competences.

#### Spain

The ability to create visionaries who are open to new innovation ideas, implementing risk - reward policies and having an external focus for skills.

### **Current practical means to motivate and guide the individuals needing requalification or job seekers, in the view of building their OI capacities:**

#### Romania

The trainings are done internally with their own specialists; unfortunately, companies do not address their training needs to universities, even if there are complex training programs offered by university training centres.

#### Portugal

Within IEFP there are some mandatory training sessions that candidates need to attend that already address some skills development (eg, Entrepreneurial competences and Communication training courses).

#### Spain

At the moment we do not know the practical means for this.

#### Poland

Unfortunately, at the moment participants do not know the practical means to motivate and guide the individuals.

### **Best solutions to provide advice and career guidance to unemployed or at-risk adults, with a view to improving their skills in the field of OI:**

#### Romania

Multidisciplinary training programs, which offer also communication skills in addition to specific professional skills, but especially skills that prepare the employee, from a psychological point of view, to cope with technological change, implicitly developing the OI component.

#### Portugal

More appealing training course, leading people to think about their own soft skills and competences. Attractive and “light” contents (in opposition to theoretical contents). Activities promoting interaction between trainers and trainees.

#### Spain

Training in OI is fundamental, in this case even more so, as it is a discipline that not everyone is familiar with.

#### Poland

The most common response was an interactive learning tool, preferably for self-study  
Austria

Show them how it will improve their employability.

**The most useful topics that should be addressed in a course for HR staffs about OI skills and development of OI competencies:**

Romania

Communication, Personal presentation, Motivation, Teamwork, Stress management at workplace, Management of change.

Portugal

Awareness raising for the topic of OI and its relevance for HR professionals.

Leadership and management.

Participants consider that is crucial, for the success and impact of a training course, the recognition of its value by the company management.

Spain

Building risk and reward policies, use of training material for HR staff and managing emotional intelligence to apply it to candidates' needs.

Poland

- Willingness to learn and develop
- Openness to change
- Knowledge transfer
- Ability to accept criticism
- Independence
- Confidence
- Motivation to work and commitment
- Initiative

**Recommendations to the OPI Project consortium:**

Romania

Universities should provide training programs, conducted with qualified staff, through HR offices, to implement solutions to develop OI skills to employees.

Portugal

The change and awareness must start at the level of the top management. The importance of OI skills must be, first, recognized by the top management in order to recognize the value of these skills among job candidates.

On the other side, change can also be promoted, inside a company, by HR owning OI skills.

Austria

- change management
- facilitator skills
- link to sustainable development

## 3. Curriculum for building HR staff competencies to support OI competencies development

### 3.1. Objectives

Based on the findings obtained from research, we could formulate the following learning/training objectives for HR professionals in relation to OI competencies development:

	Specific Objectives (SOs)		
General Objectives (GOs)			
<b>G.O.1. Building awareness of OI and OI competencies relevance for modern economy</b>	S.O.1.1. Emphasizing the necessity of OI competencies for modern economy	S.O.1.2. Promoting active attitude towards including OI competencies at work place	
<b>G.O.2. Achieving the ability to identify critical OI mechanisms and competencies</b>	S.O.2.1. Showcasing competencies that are critical for OI	S.O.2.2. Presenting and describing methods and tools to identify critical OI mechanisms and competencies	
<b>G.O.3. Developing skills for identifying employees'/candidates' requalification potential</b>	S.O.3.1. Endowment with specific psychosociological tools and methods for identifying employees' individual abilities	S.O.3.2. Analysing and mapping the identified individual skills in relation to the employee's requalification potential	S.O.3.3. Shaping individual requalification pathways
<b>G.O.4. Developing skills to motivate and guide employees during building their OI capacities</b>	S.O.4.1. Showcasing effective motivational techniques and tools	S.O.4.2. Adapting motivational approaches to the specificity of employees and to job profile	S.O.4.3. Guiding the employees in building their OI capacities based on specific individual needs



## 3.2. Training themes and sessions

The IO2 training for HR staffs to acquire the necessary competencies to support OI competencies development will take form of highly practical asynchronous e-learning solution and will be integrated into the OPI project e-learning platform in the specific section targeted to HR staffs.

The IO2 training will have a total duration of **48 hours**, of which **16 hours** of self-directed learning via the OPI online platform and **32 hours** for further reading.

As shown above, trainees will be HR professionals, meaning professionals with realistic impact on the career guidance/decisions of the adults in need for/high potential for upskilling for OI positions. That will include employees of HR agencies, employment offices, but also Job market supporting NGOs, and internal company staff related with training/upskilling decisions and guidance.

The IO2 training curriculum will be tested via the e-platform of the project in the framework of Intellectual Outcome no. 6 “OPI online platform”, by 15 pilot users in each partner country.

The training modules as presented in the application and the indicative topics as identified from the desk and based research (highly compatible with the application) are the following<sup>1</sup>:

### 1. Building awareness of SMEs on Open Innovation and Open Innovation competencies for modern economy

- Open Innovation: definition, conceptual delimitations and characteristics (S.O.1.1.)
- Why Open Innovation? (*OI benefits/advantages for SMEs and the need for OI for modern economy*) (S.O.1.1.)
- Challenges and barriers of Open Innovation (S.O.1.1.)
- How to apply Open Innovation in SMEs? (OI framework/methods) (S.O.1.1.)
- How to promote OI competencies at workplace (*creating a modern workplace through OI culture*) (S.O.1.2.)

### 2. Ability to identify Open Innovation mechanisms and competencies

- Individual skills in support of OI (S.O.2.1.)
  1. *Willingness to learn and develop*
  2. *Openness to change*
  3. *Knowledge transfer skills*
  4. *Ability to accept criticism*
  5. *Autonomy*
  6. *Trust and self-confidence*
  7. *Motivation to work and commitment*
  8. *Spirit of initiative*

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<sup>1</sup> Between brackets, we emphasized the correlation of the topics with the training Specific Objectives.

9. *Failure tolerance*
10. *Creativity*
11. *New Media Literacy*
12. *Risk awareness*
13. *Entrepreneurial skills.*

- Professional competencies in support of OI (S.O.2.1.)
  1. *Self-management (e.g. organization; goal setting; time management; self-motivation; stress management; accountability; self-protection; self-care).*
  2. *Interpersonal management (e.g. 1. Cultural awareness; 2. Ability to work with different professional communities; 3. Ability to share knowledge and ideas internally/within an organisation; 4. Ability to share knowledge and ideas externally; 5. Ability to work in an interdisciplinary environment; 6. Ability to work in internal cross-functional teams, including team working skills; 7. Communication skills; 8. Networking skills; 9. Adaptability and flexibility; 10. Managing inter-organisational collaboration processes; 11. Innovative team work (Multi-tasking skills, Problem solving skills); 12. Leadership skills; 13. Trust-building skills; 14. Innovation process competency; 15. Negotiation skills; 16. Technology and business mindset)*
  3. *Project management (e.g. Methodical skills and competencies (strategic thinking, knowledge and experience in the field of project management, organizational skills, knowledge of project management tools, etc.); Specialty skills and competencies (competency in the basic activity of a project, general knowledge about the projects' content, etc.); Social skills and competencies (leadership experience, teamwork skills, communication skills, ability to motivate staff, ability to resolve conflicts, loyalty and honesty, critical thinking, incorruptibility, etc.); Personal, communication and relational skills (communication skills, public presentation skills, moderation, creativity, integrity, self-confidence, etc.); Other specific skills (digital skills to manage digital tools for project management; risk management skills, quality management skills)).*
  4. *Content management (e.g. information and data organization, creation, storage, workflow, editing/versioning, publishing, removal/archives but also IP management skills and Enterprise Content Management skills)*
- Scales for OI competencies measurement (S.O.2.2.)
- Competency Models for OI and areas of expertise/processes (S.O.2.2.)
- How to develop a Competency Model for OI (S.O.2.2.)

### **3. How to spot potential for requalification based on individual abilities, especially inherent ones**

- Psycho-sociological tools and methods for identifying employees' individual abilities (*i.e. Myers-Briggs personality tests, 'Curiosity Profile' test,*

*'Are You in Danger of Becoming Obsolete?' assessment, 'A Tool to Help You Reach Your Goals in 4 Steps', 'Is it time to rethink your career', etc.) (O.S.3.1.)*

- Skills audits: tools to identify talent (European Commission) (S.O.3.1.)
  1. *Skills audits supporting self-development of the individual*
  2. *Skills audits supporting educational advancement of those wishing to (re)integrate education and training*
  3. *Skills audits supporting labour market integration of those outside employment or in transition*
  4. *Skills audits supporting talent management within an organisation*
- Skills needs identification: why and how (S.O.3.2.)
  1. *Skills anticipation*
  2. *Skills mismatches*
  3. *Matching*
  4. *Measures to gauge the existence of skills mismatches (e.g. skills gap analysis, models for competency mapping and measurement, surveys of employers and individuals, job evaluation studies, etc.)*
- How to create requalification pathways for employees: input factors and practical ways to do it (S.O.3.3.)

#### **4. Motivating and guiding individuals through building Open Innovation capacities**

- Motivational techniques for the workplace: types and examples (S.O.4.1.)
- Employee motivation tools (i.e. TINYpulse, Kudos, HighGround, etc.) (S.O.4.1.)
- How to tailor motivation approach to meet employees' individual needs and have a motivation strategy (S.O.4.2.)
- Advices to implementing OI approach in your organisation (S.O.4.3.)
- Supporting and guiding team members to come up with innovative problem solutions (S.O.4.3.)

### 3.3. Learning Outcomes Matrix

At the end of the training, the trainees should be able to:

Modules ↓ Learning Outcomes <sup>2</sup> →	KNOWLEDGE	SKILLS	COMPETENCIES
<b>Module 1</b> Building awareness of Open Innovation and Open Innovation competencies for modern economy	K.1.1. Define OI K.1.2. List and describe characteristics of OI K.1.3. Have knowledge of OI methods K.1.4. Explain how OI methods can be applied K.1.5. Emphasise the internal and external drivers for OI culture	S.1.1. Compare/contrast ‘closed’ and ‘open innovation’ S.1.2. Categorise and explain types of OI based on levels of inclusion and purpose of use S.1.3. Provide examples of OI S.1.4. Justify the need for OI for modern economy S.1.5. Argue the benefits/advantages of OI S.1.6. Discuss challenges and barriers of OI S.1.7. Express the six principles of OI S.1.8. Indicate strategies to support OI	C.1.1. Act independently when applying OI methods C.1.2. Assume responsibility for creating a modern workplace through OI culture

<sup>2</sup> We use the following colour code:

- In red: LOs for learning/training S.O.1s
- In green: LOs for learning/training S.O.2s
- In blue: LOs for learning/training S.O.3s

Modules ↓ Learning Outcomes <sup>2</sup> →	KNOWLEDGE	SKILLS	COMPETENCIES
		<p>S.1.9. Present the steps of the process for selecting the right OI method</p> <p>S.1.10. Outline the steps to promote a culture of OI and creativity at workplace</p> <p>S.1.11. Suggest own ways to promote OI competencies at workplace to generate OI culture</p>	
<p><b>Module 2</b> Ability to identify Open Innovation mechanisms and competencies</p>	<p>K.2.1. List the individual skills in support of OI</p> <p>K.2.2. List the professional competencies in support of OI</p> <p>K.2.3. Describe the approach for developing a competency model for OI</p> <p>K.2.4. Provide examples of Competency Models for OI</p> <p>K.2.5. Recognize scales for OI competencies measurement</p> <p>K.2.6. Select scales for OI competencies measurement appropriate to own organisation</p>	<p>S.2.1. Classify individual skills in support of OI based on different criteria (<i>e.g. introspective, extrospective, interactive and technical</i>)</p> <p>S.2.2. Clarify the meaning/significance of the skills in each category (<i>e.g. 'are communication skills that convey the value of any relationship with the external world to both internal and external participants'</i>)</p> <p>S.2.3. Justify usefulness/applicability of individual skills in support of OI</p> <p>S.2.4. Describe the professional competencies in support of OI</p> <p>S.2.5. Justify the practical usefulness/applicability of</p>	<p>C.2.1. Instruct trainees to acquire individual skills in support of OI</p> <p>C.2.2. Instruct trainees to acquire professional competencies in support of OI</p> <p>C.2.3. Assume responsibility for implementing Competency Model(s) for OI</p> <p>C.2.4. Assume responsibility in applying (own) scales for OI competencies measurement</p>

Modules ↓ Learning Outcomes <sup>2</sup> →	KNOWLEDGE	SKILLS	COMPETENCIES
		<p>professional competencies in support of OI</p> <p>S.2.6. Generate own scales for OI competencies measurement</p> <p>S.2.7. Efficiently apply (own) scales for OI competencies measurement</p> <p>S.2.8. Interpret/analyse results of scales for OI competencies measurement</p>	
<p><b>Module 3</b> How to spot potential for requalification based on individual abilities, especially inherent ones</p>	<p>K.3.1. Know about the existence of psycho-sociological tools and methods for identifying employees' individual abilities and name such tools</p> <p>K.3.2. Categorise skills envisaged for skills audits</p> <p>K.3.3. Describe the stages of skills need identification (e.g. skills anticipation; skills mismatches; matching)</p> <p>K.3.4. Present the major factors influencing the employees' requalification</p>	<p>S.3.1. Judge the suitability of psycho-sociological tools to own workplace context</p> <p>S.3.2. Transform psycho-sociological tools and methods to fit own workplace context</p> <p>S.3.3. Develop new (customized) psycho-sociological tools to assess employees' requalification potential</p> <p>S.3.4. Plan and organise skills audits to identify talent for OI</p> <p>S.3.5. Practice skills needs identification in own organisation</p> <p>S.3.6. Substantiate the need for skill identification</p>	<p>C.3.1. Act independently when applying measures to gauge the existence of skills mismatches</p> <p>C.3.2. Monitor work processes for skills needs identification</p> <p>C.3.3. Assume responsibility in shaping and implementing individual requalification pathways for employees</p>



Learning Outcomes <sup>2</sup> → Modules ↓	<b>KNOWLEDGE</b>	<b>SKILLS</b>	<b>COMPETENCIES</b>
		S.3.7. Describe measures to gauge the existence of skills mismatches S.3.8. Use/apply measures to gauge the existence of skills mismatches S.3.9. Describe practical ways for creating requalification pathways for employees S.3.10. Analyse the identified individual skills in relation to the employee's requalification potential S.3.11. Create customised requalification pathways for own employees	
<b>Module 4</b> Motivating and guiding individuals through building Open Innovation capacities	K.4.1. Name types of motivational techniques for the workplace K.4.2. Identify employee motivation tools K.4.3. Explain/describe what motivation strategy means	S.4.1. Provide examples of motivational techniques for the workplace S.4.2. Practice motivational techniques for the workplace S.4.3. Choose the appropriate tools to motivate employee S.4.4. Modify selected motivational approaches to the	C.4.1. Act independently when using motivational techniques for the workplace C.4.2. Lead the team to come up with innovative problem solutions



Learning Outcomes <sup>2</sup> → Modules ↓	<b>KNOWLEDGE</b>	<b>SKILLS</b>	<b>COMPETENCIES</b>
		<p>specificity of employees and to job profile</p> <p>S.4.5. Efficiently apply the selected tools to motivate employee</p> <p>S.4.6. Conduct/guide employees in in building their OI capacities based on motivation and specific individual needs</p> <p>S.4.7. Describe the steps of tailoring motivation approach to meet employees' individual needs</p> <p>S.4.8. Illustrate advices and recommendations for implementing OI approach in your organisation</p>	



### 3.4. Delivery Plan

Modules	Self-directed learning via OPI e-platform	Further reading	Total
1. Building awareness of Open Innovation and Open Innovation competencies for modern economy	4 hrs	8 hrs	12 hrs
2. Ability to identify Open Innovation mechanisms and competencies	4 hrs	8 hrs	12 hrs
3. How to spot potential for requalification based on individual abilities, especially inherent ones	4 hrs	8 hrs	12 hrs
4. Motivating and guiding individuals through building Open Innovation capacities	4 hrs	8 hrs	12 hrs
<b>TOTAL</b>			<b>48</b>

### 3.5. Assessment methods & tools

All modules will contain at the end a tool to assess trainees' acquisition of Learning Outcomes.

The assessment tools will be applied at the end of training to all trainees who completed the training. Like the training, the tests will be administered online, via the OPI e-platform.

Thus, for each module, the assessment tool will be in the form of an online test with 9 multiple-choice valuation items. The test will be designed by module developers, according to the learning/training objectives and envisaged Learning Outcomes of the module.

Each test for module evaluation will contain:

- Methodical instructions<sup>3</sup> for trainees on how to perform the test (description of items type, procedure to solve each item, test duration, test delivery, test score).
- 9 multiple-choice evaluation items
- Correct answers list (at the end of the test)
- Feedback to trainee (if necessary)

Each evaluation item will consist of a statement (the 'stem' or 'stake') and 4 answer-options, of which only one is correct (the other 3 are distractors). Answer-options like 'all of the answer-options', 'none of the answer-options' will be avoided!

The difficulty level of the items does not have to be a high one (a medium/moderate difficulty scale is recommended).

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<sup>3</sup> UPIT suggestion is to use the same common text for the instructions for trainees, in all modules. UPIT volunteered to elaborate the afferent text (the text may be found within the final evaluation test template).

Each item correctly solved values 1 point. Thus, the maximum possible score per test is 9 (nine). 1 additional point (*ex officio*) will be added, in order to work in one of the most common European evaluation scales, namely from 1 to 10 (a score of 1 to 4 means failure, 5 to 10 means success).

Duration of the test will be of 15 minutes (90 seconds per item, plus the required time to read instructions and quickly check the selection of the answers).

Additionally, to the module's evaluation final test (which is mandatory), developers can create/include in their module any other evaluation tools that they consider appropriate and relevant for the training performance (worksheets, practical exercises in H5P, structured essays, reflections and feedback on the read materials, etc.)

Developers will strictly use the evaluation test template provided under section 4.2.

## 4. Guidelines for development of the training content

### 4.1. Instructions for developers

Modules 1 and 2 will be developed by E&D.

Modules 3 and 4 will be developed by UPIT.

All other partners will provide feedback on this methodology, curriculum and developed modules.

When designing the learning content and supporting tools of the modules, developers should take into account that the delivery of the curriculum (training) will be achieved online, via the OPI e-platform, through a self-directed learning approach and not through a face-to-face approach. Thus, knowledge contents and activities to be implemented by trainees should be self-standing, without requiring the physical presence and support of a trainer. Towards this end, contents should meet the following criteria and features:

- To be learner-driven (give learners choices in their learning materials)
- To be goal-oriented (ask learners to make goals)
- To involve active learning (build learner knowledge through problem-solving and discussion questions)
- To provide opportunity for deliberate practice (break the skills down for learners and align with practice activities)
- To foster communities of practice and make learners benefit from them (self-directed learning by nature is independent, but it doesn't need to be done in isolation)

As the training will be delivered online, for creating successful online learning environment, developers should envisage the following aspects:

- To structure and organize the learning content

- To design student-content interactions
- To present learning content with multimedia
- To design learning activities
- To provide assessments

In order to facilitate understanding and support the skills & competencies acquisition, the learning contents for all modules will be highly enriched with supporting tools (examples, graphics, cases, exercises, educational audio-video resources, etc.).

Each module will have total duration of 12 hours (4 hrs for self-directed activities, 8 hrs for further reading activities). Each module will contain 4 activities (with 2 parts or sub-activities: one meant for self-directed learning, the other for further reading), with total duration 3 hours each activity (1 hr for self-directed learning, 2 hrs for further reading). Assessment activities are not included in the learning/training hours (assessment time is outside of the learning/training time).

Developers will strictly use the module/activities development template provided under section 4.2.

## 4.2. Templates

### 4.2.1. Module development template for self-directed learning

Module title: .....			
Designed by: .....(name and acronym of the partner institution)			
Aim of the Module	<i>Please write here....</i>		
TOTAL Learning time of which:	Self-directed learning	Further reading	Assessment
<b>12 hours 15 min</b>	<b>4 hrs</b>	<b>8 hrs</b>	<b>15 min<sup>4</sup></b>
Title of activity A.1.1 E.g. <b>Introducing Open Innovation</b>	1 hr	2 hrs	15 min
Title of activity A.1.2.	1 hr	2 hrs	15 min
Title of activity A.1.3.	1 hr	2 hrs	15 min
Title of activity A.1.4.	1 hr	2 hrs	15 min
<b>LEARNING OUTCOMES OF THE MODULE</b>			
On successful completion of this Module, trainees (HR professionals) will be able to:			
<b>Knowledge*</b>	K.1.1. K.1.2. .....		
<b>Skills*</b>	S.1.1. S.1.2. .....		

<sup>4</sup> If in addition to the mandatory final test at the end of the module, you will include other assessments as well, please modify accordingly and adjust the allocated time to fit to all assessments.

<b>Competencies*</b>	C.1.1. C.1.2. .....
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\*Please select your LOs from the LO Matrix provided under section 3.3 starting on page 19

Activity Code	Activity Title	Activity type (self-directed learning)	Learning Outcomes to be achieved through this activity	Learning Time for this activity (min)
<b>A1.1</b>	E.g. Introducing Open Innovation	Self-directed learning	E.g.: K.1.1. K.1.2. S.1.4. C.1.3.	1 hour
<b>Overview of Content</b>	<p><i>Please describe very clearly here what the trainee should do, what materials (annexes) s/he should read/use and how. For example<sup>5</sup>:</i></p> <ul style="list-style-type: none"> <li>• The trainee is welcome by an introductory text, emphasizing that this Module is developed in the framework of the OPI project, briefly presenting the module and announcing the learning objectives of this activity (e.g. Annex 1, slides 1-3) (5 min)</li> <li>• The trainee reads the main concepts on e.g. Open Innovation which are introduced by the help of e.g. Annex 1, slides 6-12. (10 min)</li> <li>• The trainee reads Task 1, introduced by the worksheet in Annex 2. (2 min)</li> <li>• The trainee performs/solves Task 1. (15 min)</li> <li>• While s/he works, if s/he needs additional explanations on the topic in the task, s/he should read (or watch, if it is a video) the additional resource at the link <a href="http://XXXX">http://XXXX</a> (3 min)</li> <li>• At the end of the time allotted to Task 1, the trainee uploads the accomplished task (file or result) on the e-platform. (5 min)</li> <li>• The trainee reads the advantages of Open Innovation for modern economy which are presented in Annex 1, slides 13-20 and in the chart from Annex 3 (5 min)</li> <li>• The trainees resolve Exercise 1 shown in Annex 1, slide 21 (10 min)</li> <li>• The trainee reads the takeaways from this activity and reflects on them (5 min)</li> </ul>			
<b>Content delivery methods</b> (lecture (if pre-recorded PPT or video) or reading, literature review, problem-solving, etc.)				
E.g. Reading				

<sup>5</sup> This is just a brief example with informative aim on how you can develop your learning/training content. Other types of tasks and activities may be also utilized, like for example, literature review and online search, comparisons between various concepts or definitions, critical thinking, design of processes, development of materials and resources, etc....

Individual work Reflection
<b>Didactic Materials Required</b> (worksheet, charts, handouts, didactic video, excerpt from books/manuals, mind maps, etc.)
E.g. OPI_IO2_Module1_A.1.1_Annex 1.pptx OPI_IO2_Module1_A.1.1_Annex 1_Annex 2.doc OPI_IO2_Module1_A.1.1_Annex 1_Annex 3.pdf http://XXXX as shown above, under section “Overview of Content”.
<b>Assessment method</b>
E.g. By evaluating the task completed in the worksheet (Annex 2). By taking the test at the end of the module
<b>References</b>
xxx

*Note to developers: please multiply the above table when you design your modules' activities, thus to have one table for each activity.*

#### 4.2.2. Materials and resources for further reading

For each module, the developers will provide:

- Introduction about the module (title, topics, LOs) (1/2 page)
- 4 key readings (PDF documents) - for self-study (4 hours)
- 1 link to a related video, TEDx talk or equivalent (available on YouTube) – 2 hours (watching + reflection + rendering one-page essay presenting own perspective on the issue)
- 2 links to existing resources on the internet (e.g. related EU projects, etc.) for self-study (2 hours)

#### 4.2.3. Final evaluation test template (1 test per module)

##### **Final evaluation test for Module X**

##### **Methodical instructions:**

- ➔ Each item consists of a statement (the ‘*stake*’) and 4 answering options, of which only one is correct.
- ➔ Read the text of each item carefully and identify the correct option.
- ➔ Tick the correct option (  ). This option represents the solution of that item.
- ➔ Recommended total time per test: 15 minutes.
- ➔ Possible maximum score = 9 points. Each item correctly solved values 1 point.
- ➔ FINAL GRADE = Score + 1 point *ex officio*.

1. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
2. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
3. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
4. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
5. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
6. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
7. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
8. **Statement:**
  - (a) Answer-option 1;
  - (b) Answer-option 2;
  - (c) Answer-option 3;
  - (d) Answer-option 4.
9. **Statement:**

- (a) Answer-option 1;
- (b) Answer-option 2;
- (c) Answer-option 3;
- (d) Answer-option 4.

Correct answers list (for trainers only):

.....

Example of item:

**1. An entrepreneur exhibits innovation by:**

- (a) Being unique and original in his/her solution;
- (b) Using existing products or services;
- (c) Ignoring the new ideas;
- (d) Buying from other and re-selling new products.

Example of correct answers list (for trainers only):

1. a
2. c
3. d
4. b
5. b
6. d
7. a
8. c
9. a