



T1.4. ANNEX 1. Talent Pass Trainings round #1. Trainings blueprint



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Circulation



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the Circular Economy



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FOSTERING EUROPEAN TALENTS FOR WIDENING CIRCULAR ECONOMY, HORIZON-WIDERA-2024-TALENTS-03-01

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Project Management & Digital Skills Trainings Blueprint [March–May 2026]

The Talent Pass training process follows the **route**: needs analysis –trainers’ assignment – trainees’ selection – curricula development – interactive training.

Purpose & Objectives

- To develop a critical mass of human resources by up-skilling, re-skilling, and **transferable knowledge circulation** in the circular economy framework;
- To enhance employability and **sustainable career prospects** within a dynamic innovation ecosystem for R&I talents;
- To enforce research, entrepreneurial, managerial, **up-skilling** and **re-skilling** training.

Target Audience

The training sessions are primarily intended for researchers, innovators, and other R&I talent [management, administrative, technical staff] from widening countries’ partners [ICMPP; ECOIND; IST-ID; NIC; Chimcomplex] and will be delivered by trainers from the non-widening partners [OpenCom, Unismart, Crowdhelix].

Background & Needs Assessment

A recent training needs analysis [234 questionnaires completed by ICMPP; ECOIND; IST-ID; NIC; Chimcomplex staff members] identified **Project management** and **Digital skills** as two priority areas for development, with basic-to-intermediate proficiency levels and a very high interest in up-skilling, re-skilling, and continuous learning.

It underscored the **need for** a phased training strategy tailored to different skill levels and the preference for hybrid formats, short sessions, and active training methodologies.

Training Methodology & Delivery Mode

Instructional approach: instructor-led (inquiry-based, learner-centred) & blended approaches. Tailored, comprehensive, diversified training materials are considered.

Online (at your Home Institution) and **hybrid** (online + on-site, at Unismart, Padova, Italy) formats are foreseen, based on trainers’ and trainees’ selection results and hands-on/flexibility needs.

Timeline:

- Application open for trainee candidates: 4 ÷ 15 March 2026;
- Trainees’ selection: 16 ÷ 20 March 2026;
- Trainings: 14 April ÷ 15 May 2026;
- 2 days per training module; 4 hours/day.

Content Outline & Curriculum Design

The first Talent Pass training round (February–May 2026) addresses the major topics of **Project Management** and **Digital Skills**. The curriculum of each training topic was designed into **several modules**, further broken down into **specific lessons or units**. Their key topics and content outline are presented below.

Project Management

Module R2.0 – Introduction to Project Management

Trainer: Lorenzo Liguoro

Date: 14, 16 April 2026

Format: hybrid

Day 1

Interactive introduction. Framing research as a project

1. Quality as scope and impact architecture

- The triple constraint in research funding
- Theory of change as design backbone
- Scope, impact, and objectively verifiable indicators

2. Time architecture

- From work packages to network logic
- PERT and the critical path method

3. Visual planning

- Gantt as a governance tool
- Integrated exercise

Wrap-up day 1

Day 2

1. Cost and responsibility architecture

- Cost dimension of the triple constraint
- Responsibility assignment matrix
- Budget structuring and budget curve

2. Performance control

- Introduction to the earned value method
- Monitoring quality, time, and cost together
- Integrated simulation

Final reflection and synthesis.

Module R2.1 – Pre-award**Trainer:** Burçak Çullu**Date:** 15, 17 April 2026**Format:** hybrid**Day 1**

Opportunity intelligence & funding landscape

1. Project scouting & matchmaking (Beginner)

- Past call selection behavior analysis
- Overview of Horizon Europe architecture: call reading strategy, topic scope interpretation, TRL alignment, structured scouting matrix
- Structured alignment exercise of a real call topic

2. Funding landscape analysis for environmental sustainability and circular economy projects (Expert Level)

- Funding instruments for environmental sustainability and circular economy
- Group exercise analyzing a selected 2026 Work Programme topic

Day 2

Proposal writing & planning & consortium development (beginner)

- Common weaknesses in unsuccessful proposals
- Anatomy of excellence, impact, and implementation sections
- Simulation lab: design of a simplified project brief

Recommendation: Participants should bring at least one active or planned project idea for application exercises.**Module R2.2 – Post-award****Trainer:** Ivan Brkic**Date:** 22–23 April 2026**Format:** online**Day 1**

1. Grant agreement preparation and kick-off

2. Life cycle, first steps, and contractual management

3. Financial management

Q&A and evaluation

Day 2

4. Monitoring and audits
5. Risk management
6. IPR
7. Communication and dissemination
8. PRAG rules
9. The use of Agile in EU project management
 - Q&A and evaluation

Module R2.3 – Transversal Topics in Research Management**Trainer: Erina Guraziu****Date: 20–21 April 2026****Format: online****Day 1**

Ethics, gender & data management

1. Competence self-assessment
 - Where do I stand?
2. Research ethics & integrity
 - The researcher's dilemma
 - European ethics framework
 - Ethical review simulation
3. Gender equality & inclusion
 - Gender in EU R&I projects
 - Gender audit of a real project
4. Data management: FAIR & GDPR
 - FAIR principles & GDPR in practice
 - Build a DMP for your own project

Day 2

The use of AI in research/project management

1. AI for research scouting & proposal drafting
 - Your AI experience map
 - AI-assisted research workflows

- Lab 1 – Drafting a proposal section with AI
2. AI for project planning & responsible use
 - AI for planning, risk & limitations
 - Lab 2 – Project planning + stress-testing AI
 - Build your personal AI Toolkit
 3. Closing & final reflection

Digital Skills

Module 10.1 – Basic Data Analysis and Dashboarding for Sustainability Metrics and Ecodesign

Trainer: Juraj Dončević

Date: 7–8 May 2026

Format: online

Day 1

1. Why do we need data for sustainable economic development and ecodesign?
2. How do we store data?
 - Why isn't a spreadsheet sometimes enough?
 - What other types of data storage are used in day-to-day business?
 - Reflect on attendees' profiles (files, data types, ...)
 - Why structure our data?
3. Relational databases for data storage
 - How do we design databases?
 - Conceptual, logical, physical model
 - Introducing a short story about green energy and getting a conceptual diagram.
 - Tables, columns, rows, relationships
 - Short introduction to querying
 - No details, just show that it's complicated (will be made simple with BI tools)
4. Data warehousing
 - OLTP vs OLAP
 - Extract-transform-load and variants (just a contextual overview)
 - Star schema: Facts, dimensions
 - Report tables

Project for independent work after the lecture: Explain your professional domain through a conceptual diagram. Draw the diagram.

Day 2

5. What is BI, and how can it help when designing or supporting a sustainable ecosystem

- Queries, reports, dashboards
- Who uses and creates them?

6. Introduction to Metabase

- Allowing attendees to sign in
- Connections, queries, reports, dashboards

7. Querying in Metabase

- Querying with projection
- Querying with filters
- Querying with aggregation
- Joining tables
- Visualization
- Creating a dashboard

8. Getting meaning from the data in Metabase

- Try to find places to improve the existing system from which the underlying data has been extracted (context of circular and sustainable economic development)

Project for independent work after the lecture: prepare your own dashboard in Metabase by using a provided database.

Module 10.2 – Artificial Intelligence and Machine Learning in Circular Economy

Trainer: Stefano Marchesin

Date: 12–13 May 2026

Format: hybrid

Day 1

AI and ML for sustainability initiatives

Introduction: Sustainability as a computational and data-driven challenge

1. Computational modeling of complex systems

- Optimization and prediction in dynamic environments
- Data availability, quality, and system constraints

2. Machine learning for decision support

- Forecasting and pattern recognition in environmental data
- Trade-offs between accuracy, scalability, and efficiency

3. Responsible AI

- Computational cost and energy efficiency
- Validation, monitoring, and lifecycle management

Generative AI and professional workflows

Introduction: Generative AI as a computational paradigm

1. Foundations of generative systems

- Representation learning and language modeling
- Pretraining and adaptation concepts
- Human-AI interaction models

2. AI as a development and analysis assistant

- Supporting data exploration and structuring problems
- Code assistance and documentation support

3. Reliability and responsible use

- Verification and validation strategies
- Human oversight and iterative refinement

Day 2

Advanced data analysis & visualization for AI outputs

Introduction: From model output to interpretable information

1. Interpreting and validating AI results

- Performance metrics and uncertainty
- Error analysis and bias awareness
- Transparency and explainability principles

2. Data representation and visualization

- High-dimensional data interpretation
- Diagnostic visualization for model behavior

3. Robustness and system integrity

- Common vulnerabilities in AI systems
- Monitoring and auditing AI systems

Emerging AI technologies

Introduction: AI as a component of larger computational ecosystems

Systems integration principles

- Real-time processing constraints

- Scalability and architectural considerations

From prototype to production

- Testing, validation, and deployment pipelines
- Performance optimization and resource management
- Maintaining and updating AI systems

Knowledge transfer and technical collaboration

- Open standards and reproducibility
- Continuous learning and system evolution

Module 10.3 – Advanced Digital Skills for Sustainable Competitiveness

Trainer: Pier Paolo Tricomi

Date: 14–15 May 2026

Format: hybrid

Day 1

1. Blockchain for transparent circular economy tracking

- Foundations of distributed ledger technologies
- Applications in supply chain traceability and circular value chains
- Digital Product Passports (DPP)

2. Artificial Intelligence and Metaverse applications in sustainability

- AI applications for resource management
- AI and digital tools for eco-design
- Industrial Metaverse and digital twins

Wrap-up Day 1

Day 2

Cybersecurity fundamentals for protecting digital assets in research/innovation, including secure collaboration on platforms

- Core principles of cybersecurity
- Protection of data and intellectual property
- Secure collaboration and risk awareness in innovation projects
- Ability to deliver applied training in digital tools, collaborative platforms, and emerging technologies for R&D
- Digital collaboration tools for research teams
- Project and data organisation practices
- Practical exercise on integrating digital tools into R&D activities

Wrap-up Day 2

Post-training Details

Feedback Mechanism

A feedback mechanism will be implemented for both trainers and trainees to identify training improvement pathways in response to the evolving needs of the community. It will use targeted, mid- and/or post-session tools: (i) direct and informal interaction tools; (ii) targeted, online, anonymous surveys (10-15 questions).

Accreditation

Each trainee who completes training on a specific topic (including all modules) will receive a **certificate of participation**.

Each trainee who completes a specific training module will receive a proof letter confirming their participation.