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# **FIELDS** – Addressing the current and Future skill needs for sustainability, digitalization, and the bio-Economy in agriculture: European skills agenda and Strategy

Patrizia Busato, Remigio Berruto  
DISAFA – University of Turin, Italy

# Four Pillars to Promote Innovation

- Innovation (available)
- **Education** (training for students, farmers, consultants)
- Entrepreneurship (business models)
- **Communication** (dissemination)

# Erasmus+ Sector Skills Alliances

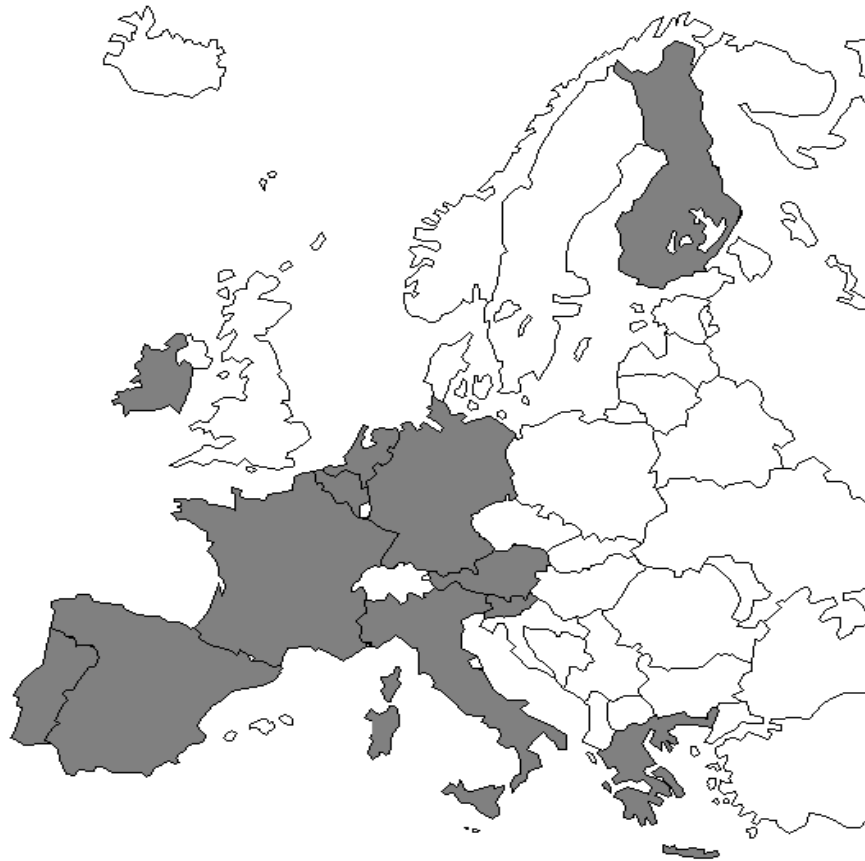
## **Lot 3 – Sector Skills Alliances for implementing a new strategic approach (Blueprint) to sectoral cooperation on skills:**

- This strategy has to lead to systemic and structural impact on reducing skills shortages, gaps and mismatches, as well as ensuring appropriate quality and levels of skills to support growth, innovation and competitiveness in the sector
- The sectoral skills strategy must include a clear set of activities, milestones and well-defined outputs with the goal to match demand and supply of skills to support the overall sector specific growth strategy

# Specific Blueprint Sector: bio-economy, new technologies & innovation in agriculture

- Agricultural sustainability, management of natural resources and climate action
- Digital technologies, digitalization, big data and artificial intelligence
- Bio-economy, circular economy and bio-based products
  
- Duration Project 4 years
- Funding 4 mil EUR

# FIELDS – Partners & Countries



30 partners from 12 countries

CONFAGRI, SCOOP, CONFAGRI pt, GSZ, ICOS, AC3A, CEPI, GAIA, FENACORE represents **agriculture and forestry sector**

AERES, INFOR, WUR, UNITO, UHOH, UCLM, PA, AP, FJ-BLT, LVA, EFB are offering **training** and **services** to farmers and foresters. Two of them (UHOH and UNITO) are involved in the **Kic EIT FOOD**

FIAB, ANIA, ACTIA, SEVT will help to involve also **food industry** in the design of the strategy and training, to make agriculture more aware of what is the demand and opportunities for sustainability, digitalisation and bio-economy from this sector

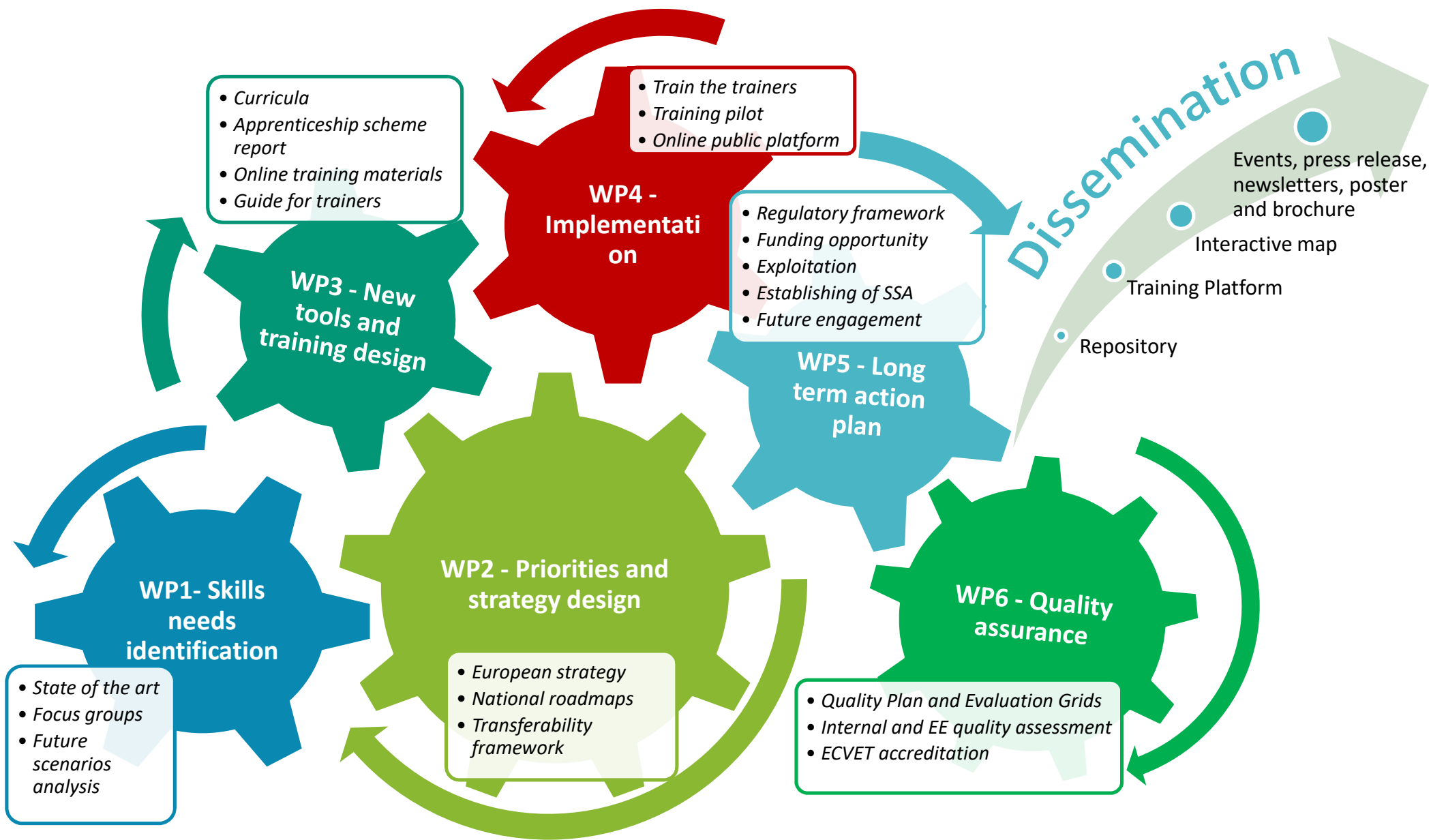
Some of these partners (FDE, CEPI, BIC, ISEKI, EFFAT, LLL-P, EfVET, PlantETP) are **umbrella organisation at EU level**, to provide an outlook at European strategy for agriculture, forestry and agri-food industry, and link to the educational tools and standards provided by the EU

Important support from COPA-COGECA will bring connection with stakeholders

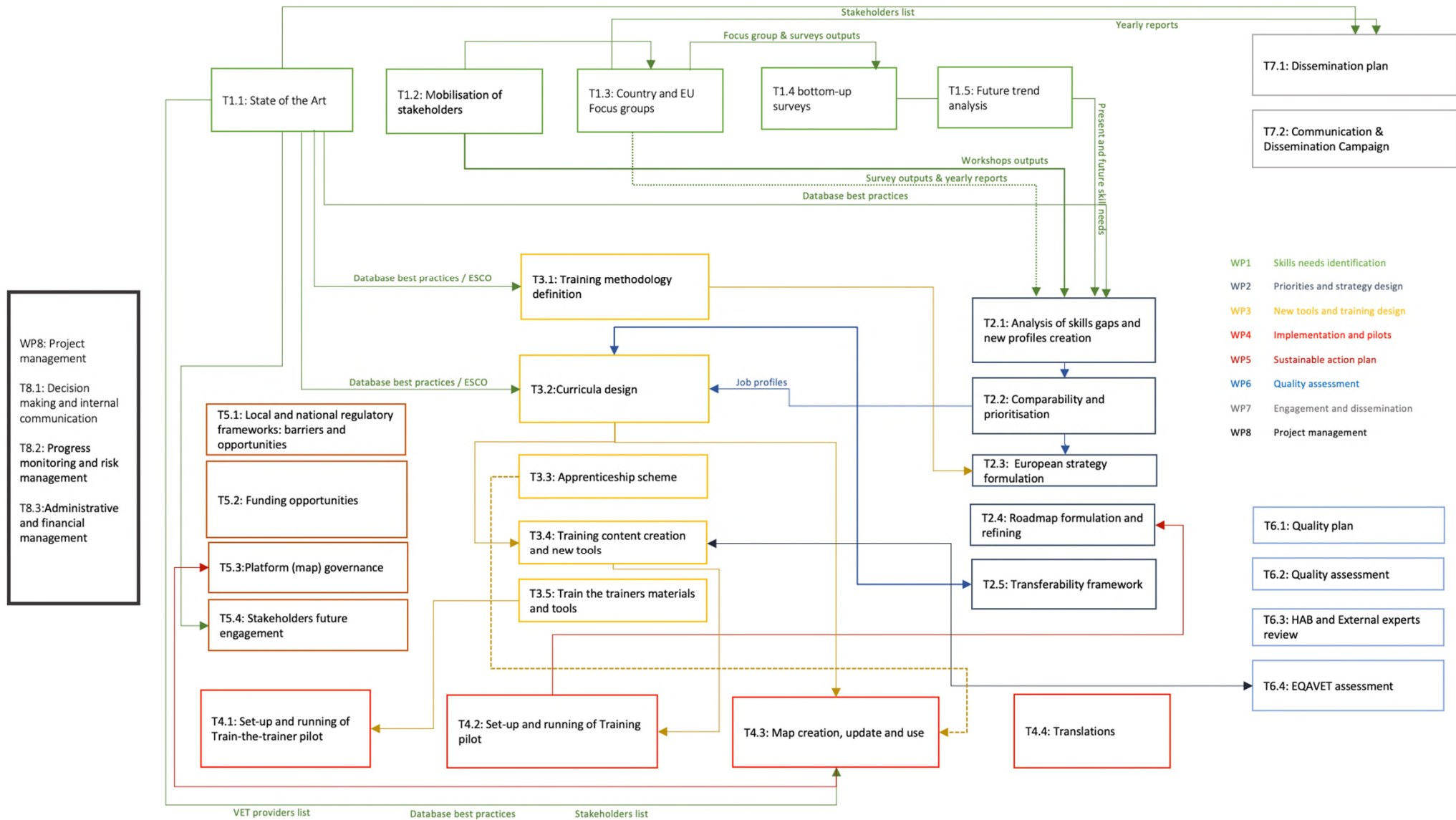
N°	Organisation	Acronym	N°	Organisation	Acronym
1	Univeristà degli Studi di Torino	UNITO	16	Universidad de Castilla-La Mancha	UCLM
2	Confederazione Generale Agricoltura Italiana	Confagri	17	Association des Chambres d'Agriculture de l'Arc Atlantique	AC3A
3	Wageningen University	WUR	18	Spanish Federation about Food and Drink Federation	FIAB
4	ISEKI-Food Association	ISEKI	19	Food Drink Europe	FDE
5	Irish Co-operative Organisation Society	ICOS	20	FENACORE - Spanish Irrigation Consortium	FENACORE
6	Aeres	Aeres	21	Infor Elea	INFOR ELEA
7	AGRAR Plus Beteiligungsges.m.b.H.	AP	22	Federation of Hellenic Food Industries	SEVT
8	University of Hohenheim	UHOH	23	Lifelong Learning Platform	LLL-P
9	Centre for Research and Technology Hellas	CERTH	24	Association Nationale des Industries Alimentaires	ANIA
10	Association de Coordination Technique pour l'Industrie Agroalimentaire	ACTIA	25	European Technology Platform "Plants for the Future" (Plant ETP)	Plant ETP
11	Gaia Epicheirein	GAIA	26	Engineers for Business Ipiresies Technologias Kai Michanikis Anonimi Etairia	EFB
12	Confederação Nacional das Cooperativas Agrícolas e do Crédito Agrícola de Portugal	Confagri PT	27	Proagria	PA
13	Cooperativas Agro-alimentarias de España	SCOOP	28	HBLFA Francisco Josephinum - BLT Wieselburg / Josephinum Research	FJ-BLT
14	Gospodarska zbornica Slovenije Zbornica kmetijskih in živilskih podjetij	GZS-ZKŽP CCIS	29	European Forum of Technical and Vocational Education and Training	EfVET
15	Lebensmittelversuchsanstalt/Food Research Institute	LVA	30	Confederation of European Paper Industries aisbl	CEPI

# High Advisory Board

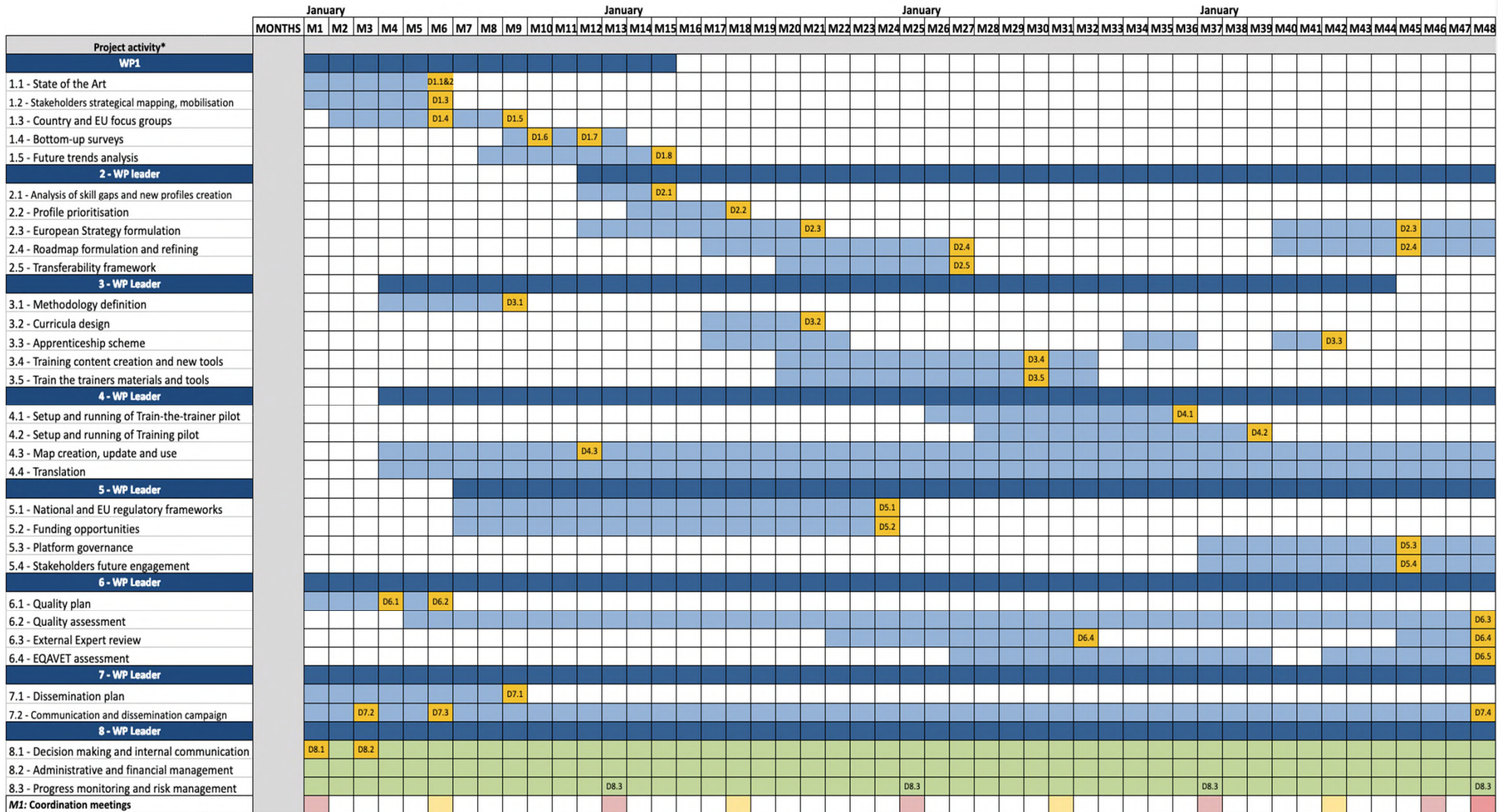
- Oana Neagu, COPA-COGECA
- Gert Mejers, Nestlè, Chair ETP food for life
- Kjell Ivarsson, Swedish farmer federation
- Rob J Hamer, Unilever
- Jochen Weiss, Universitat Hohenheim, Chair Education EIT FOOD
- Rafael Mujeriego, ASERSA, Catalan Water Agency
- Andras Sebok, Camden BRI Hungary







# FIELDS - Gantt



# WP1 – Skills needs identification (ISEKI), M1-M15

This Work Package lead by ISEKI aims at establishing a general overview of the labor market in agriculture, forestry and related sector (including the bio-economy) in order to define present and future skills needs.

This will be accomplished through:

- Analysis of the state of the art, both on content and on EU instruments for skills transferability (ESCO, ECVET, ECTS), with a database incorporated in the webpage of the project. We will look also at CEDEFOP resources for this task – should we share this info with them?
- Analysis of the state-of-the-art in terms of training content, related to agriculture and forestry
- Mobilisation of all relevant stakeholders following a multi-actor approach
- Participation of stakeholders to focus groups to define future trends and skills needs
- Multiplication of the focus groups outputs through bottom-up surveys
- Analysis of the future trends in the topics of the call: Sustainability, Digitalisation and Bioeconomy through scenarios and forecasting analysis

# WP1 – Tasks & Deliverables

- **T1.1 State of the Art M1-M6 [UNITO, All]**
  - *D1.1: Stakeholders strategic plans and analysis report (M6)*
  - *D1.2: Repository of previous projects, results and best practices (M6)*
- **T1.2 Stakeholders strategic mapping and mobilisation (M1-M6) [LLL-P, All]**
  - *D1.3: VET list and classification (M6)*
- **T1.3 Country and EU focus groups (M2-M9) [ISEKI, All except Confagri PT]**
  - *D1.4: Focus group guideline (M6)*
  - *D1.5: Focus group analysis (M9)*
- **T1.4 Bottom-up surveys (M9-M12) [ICOS, All]**
  - *D1.6: Web-based questionnaire (M10)*
  - *D1.7: Survey analysis (M12)*
- **T1.5 Future trends analysis (M8-M15) [WUR, UNITO, CONFAGRI, ISEKI, ICOS, AERES, AP, UHOH, CERTH, ACTIA, GAIA, CONFAGRI PT, SCOOP, UCLM, AC3A, FIAB, FDE, FENACORE, INFOR, SEVT, LLL-P, ANIA, Plant ETP, PA, FJ-BLT, EFVET, CEPI, EFFAT, BIC]**
  - *D1.8: Scenarios analysis (M15)*

# WP2 – Priorities and strategy design (CONFAGRI), M12-M48

This Work Package lead by CONFAGRI aims to:

- Perform an analysis of the skill gaps in innovation in agriculture and forestry, related to three areas: Sustainability, Bioeconomy and Digitalisation, by considering also the soft skills
- Compare and prioritize the skills in these domains
- Develop a general EU strategy to transfer these skills to agriculture and related sectors
- Develop 7 specific national road maps
- Mobilise knowledge around EU with a transferability framework by matching the national road maps with EU tools (CEDEFOP, ESCO, ECVET, ECTS)
- Establish a link with suggested EU tools (CEDEFOP, ESCO, DG AGRI, EIP AGRI)

# WP2 – Tasks & Deliverables

- **T2.1 Analysis of skill gaps and new profiles creation M12-M15** [AC3A, UNITO, CONFAGRI, ISEKI, ICOS, AERES, AP, UHOH, CERTH, ACTIA, GAIA, CONFAGRI PT, SCOOP, GZS, LVA, UCLM, FIAB, FDE, FENACORE, INFOR, LLL-P, ANIA, PlantETP, EFB, PA, FJ-BLT, EFVET, CEPI, FJ-BLT]
  - *D2.1: Detailed baseline of occupational profiles (M15)*
- **T2.2 Profiles prioritisation (M14-M18)** [Confagri PT, UNITO, CONFAGRI, WUR, ISEKI, ICOS, AERES, AP, UHOH, SCOOP, GZS, UCLM, AC3A, FIAB, INFOR, ANIA, EFB, FJ-BLT, CEPI]
  - *D2.2: Prioritised profiles (M18)*
- **T2.3 European Strategy formulation (M12-M48)** [WUR, All]
  - *D2.3: European strategy (M21 & M45)*
- **T2.4 Roadmap formulation and refining (M17-M48)** [CONFAGRI, All]
  - *D2.4: national roadmaps (M27 (Confidential draft) & M45 (public))*
- **T2.5 Transferability framework (M20-M27)** [LLL-P, INFOR, AERES, AP, UNITO, EfVET]
  - *D2.5: Open transferability framework (M27)*

# WP3 – New tools and training design (UNITO), M4-M45

This Work Package lead by UNITO aims at creating relevant educational contents and curricula to answer the skill gap identified in WP1 and WP2:

- Perform an analysis of the methodologies used during the training
- Provide the outline of the curricula that will be later implemented at country level
- Develop the apprenticeship scheme, for the work-based period that involves agriculture, agri-food and forestry
- Develop the training content for online session
- Develop the training content for trainers and in-class activities

The material will be carefully designed to provide EQF level 4 training in the domains of sustainability, bio-economy and digital skills, to enhance innovation uptake in agriculture, forestry and bio-economy.

The training materials will have a common part related to soft skills, and a regional part to match the skills needed by different countries that will carry the training in Europe

# WP3 – Tasks & Deliverables

- **T3.1 Methodology definition M4-M9** [UNITO, ISEKI, ICOS, AERES, AP, UHOH, LVA, UCLM, INFOR]
  - *D3.1: Training methodologies (M9)*
- **T3.2 Curricula design (M17-M21)** [ICOS, UNITO, CONFAGRI, ISEKI, AERES, UHOH, CERTH, ACTIA, GAIA, GZS, LVA, AC3A, FIAB, FENACORE, INFOR, SEVT, EFB, EfVET, CEPI]
  - *D3.2: Curricula (M21)*
- **T3.3 Apprenticeship scheme (M17-M45)** [AERES, UNITO, CONFAGRI, FENACORE, LLL-P, LVA, SEVT, FIAB, AP, EFB, CONFAGRI PT, ACTIA, GAIA, ICOS, SCOOP, UCLM, GZS, ANIA, INFOR, AC3A, UHOH, PA, EfVET, CEPI]
  - *D3.3: Apprenticeship scheme report (M42)*
- **T3.4 Training content creation and new tools (M20-M32)** [UCLM, UNITO, CONFAGRI, ICOS, AERES, AP, UHOH, CERTH, ACTIA, LVA, AC3A, FIAB, FENACORE, INFOR, EFB, PA, FJ-BLT]
  - *D3.4: Online training materials (M30)*
- **T3.5 Train the trainers materials and tools (M20-M32)** [WUR, UNITO, CONFAGRI, ICOS, AERES, AP, UHOH, CERTH, ACTIA, LVA, UCLM, AC3A, FIAB, FENACORE, INFOR, LLL-P, EFB, PA, FJ-BLT, CEPI]
  - *D3.5: User guide for trainers and train the trainers' session material (M30)*



# WP4 – Implementation (AERES), M4-M48

This Work Package lead by AERES aims at putting into practice the training content created in WP3, through train-the-trainer and trainees pilots, and implementing the platform ade in T1.1 able to display all projects outputs in a friendly manner for future use and uptake at EU level

This WP also contains the translation of all relevant materials that need to be used nationally

Both trainers and trainees will be selected with a fair procedure that will be established by the partners in WP3

Farmers, foresters, professional will be able to follow only the modules they are interested in. The people interested in the initial vocational training have to follow all the modules defined in the curricula they are following so as to get accreditation at national and EU level.

The content providers (GAIA, FENACORE, ACTIA, AERES, UNITO, INFOR, EFB, UCLM, CEPI, UHOH, CERTH, PA, ICOS, AP, LVA, CONFAGRI) will provide support on technical issues related to the content during the activities of WP4

12 teachers will follow the trainer's toolkit while 70 learners will follow the training. The trainers are first trained and then teach the modules to the trainees

# WP4 – Tasks & Deliverables

- **T4.1 Setup and running of Train-the-trainer pilot M26-M36** [AP, UNITO, CONFAGRI, ISEKI, AERES, UHOH, ICOS, ACTIA, CERTH, GAIA, CONFAGRI-PT, GZS, LVA, UCLM, AC3A, INFOR, EFB, PA, CEPI]
  - *D4.1: Feedbacks from trainers (M36)*
- **T4.2 Setup and running of Training pilot (M28-M39)** [AERES, UNITO, CONFAGRI, ISEKI, ICOS, AP, CERTH, UCLM, AC3A, INFOR, EFB, PA, FJ-BLT, CEPI]
  - *D4.2: Report and analysis of the training experimentation (M39)*
- **T4.3 Map creation, update and use (M4-M48)** [UNITO, All]
  - *D4.3: Online public platform and map (M12)*
- **T4.4 Translation (M4-M48)** [CONFAGRI, UNITO, WUR, ICOS, AP, UHOH, CERTH, ACTIA, CONFAGRI PT, SCOOP, GZS, LVA, UCLM, AC3A, FIAB, FENACORE, INFOR, ANIA, EFB, PA, FJ-BLT]

# WP5 – Long term action plan (ICOS), M7-M48

This Work Package lead by ICOS aims at ensuring the long term sustainability of the strategy and training materials, , its future use and the national roadmaps implementation, as well as the curricula uptake by external VET providers

These aims will be reached with:

- provision of national and EU regulatory frameworks for training and innovation opportunities
- provision of national and EU funding opportunities
- design of sustainability plan and future use of the platform, with exploitation of project results
- plan for future engagement of the stakeholders

# WP5 – Tasks & Deliverables

- **T5.1 National and EU regulatory frameworks M7-M24** [CONFAGRI, WUR, ICOS, AERES, UHOH, GAIA, SCOOP, LVA, AC3A, FIAB, FDE, FENACORE, INFOR, ANIA, GZS, CEPI, LLL-P, FJ-BLT, EfVET]
  - *D5.1: Regulatory framework list (M24)*
- **T5.2 Funding opportunities (M7-M24)** [LLL-P, CONFAGRI, WUR, ICOS, AERES, AP, UHOH, CERTH, ACTIA, GAIA, AC3A, CONFAGRI PT, GZS, LVA, FIAB, FDE, INFOR, SEVT, EFVET, CEPI]
  - *D5.2: Funding opportunity (M24)*
- **T5.3 Platform governance (M27-M48)** [PA, UNITO, CONFAGRI, ISEKI, ICOS, ACTIA, GAIA, SCOOP, LVA, SEVT]
  - *D5.3: Exploitation Plan (M 45)*
- **T5.4 Stakeholders future engagement (M37-M48)** [ISEKI, All except EFB, FJ-BLT, PlantETP]
  - *D5.4: Future engagement plan and Memorandum of understanding (M45)*

# WP6 – Quality assurance (CERTH), M1-M48

This Work Package lead by CERTH aims to ensure the quality of the outputs of the project, be it the skills profiles, trend scenarios, job description, curricula, training material, the in-class training pilots, the strategy or the roadmaps. Within the quality plan, a risk assessment and risk management plan will be made and will be followed during the project

The Steering Committee will also act as a Quality Committee

The external validation of the created content will be carried at specific moments during the development of the project. In addition external high profiles experts, reunited in an Advisory Board will give the partners their feedback yearly on the project strategies, curricula and training content and activities

As part of the quality assessment, Task 6.4 is dedicated to get the ECVET accreditation of some of FIELDS's initial training

# WP6 – Tasks & Deliverables

- **T6.1 Quality plan (M1-M6) [CERTH, UNITO, ISEKI, ICOS, AERES, ACTIA, CONFAGRI, INFOR]**
  - D6.1: Quality Plan (M4)
  - D6.2 Evaluation Grids (M6)
- **T6.2 Quality assessment (M5-M48) [EFB, UNITO, ISEKI, ICOS, AERES, ACTIA, CONFAGRI]**
  - D6.3. Internal quality assessment (M48)
- **T6.3 HAB and External Expert review (M22-M48) [EFB, UNITO, CONFAGRI, ISEKI, ICOS, AERES, CERTH, ACTIA, UCLM, CEPI, INFOR, High Advisory Board, External Experts]**
  - D6.4. EE quality assessment (M32&M48)
- **T6.4 EQAVET assessment (M37-M48) [INFOR, ICOS, AERES, AP, UCLM, AC3A, PA, EFVET]**
  - D6.5: ECVET accreditation report (M42)

# WP7 – Dissemination and communication (ACTIA), M1-48

This Work Package lead by ACTIA aims to ensure to reach the largest possible target audience while advertising the project results. ACTIA, with its extensive experience in project dissemination will coordinate this WP. In this WP, the network of the associated partners (EFFAT, BIC) and of the entity supporting the project (COPA-COGECA, see letter of support in the annex) will also be used for a wider reach of farmer association and cooperatives

First, a website will be developed to present the project and to promote the project results  
Dissemination plan will be developed by ACTIA with the help of the partners to support the outreach of the project to the target audiences in the participating countries and following successful validation to other countries. National and EU stakeholders will also be included

The stakeholder engagement and dissemination plan will be carried out through different means and channel for promotion, with the deployment of many activities in the dissemination campaign that will consider: Facebook, Twitter, newsletters, participation at dissemination events, press releases, distribution of leaflets, YouTube videos and AdWords campaign

# WP7 – Tasks & Deliverables

- **T7.1 Dissemination plan (M1-M9 [LVA, UNITO, CONFAGRI, ACTIA, FIAB])**
  - *D7.1: Dissemination Plan (M9)*
- **T7.2 Communication and dissemination campaign (M1-M48) [FIAB, All]**
  - *D7.2: Public Website (M3)*
  - *D7.3: Project leaflet and poster (M6)*
  - *D7.4: Report on dissemination action (M48)*



# WP8 – Project Management (UNITO), M1-M48

With a large consortium of 32 partners, the FIELDS management WP will be very important to ensure an efficient, smooth and regular management of the project. It aims at ensuring a proper implementation of all tasks while monitoring and mitigating risks. It will also make sure all financial aspects are well managed according to the Erasmus rules and with the best value for money

This WP will implement the tools and structures to reach these goals and will be led by UNITO

# WP8 – Tasks & Deliverables

- **T8.1 Decision making and internal communication (M1-M48 [UNITO, All])**
  - *D8.1: Consortium Agreement (M1)*
  - *D8.2: Intranet CMS (M3)*
- **T8.2 Administrative and financial management (M1-M48) [UNITO, All]**
  - Each Task leader is responsible of the preparation of the associated deliverables of its task

# Expected results 1/2

- A growth strategy clearly defined
- The state of the art of the training and education methods in the sector
- An analysis of the sector best practices in education and training
- A database of the VET providers and their palatability for partnership (30 within the first year and 90 at the end of the project)
- A detailed analysis of focus group and survey about skill gaps and needs
- Results of the scenarios analysis and its linked potential occupational profiles
- A set of 10 prioritized occupational profiles (set of skills, competences, knowledge and qualification)
- A set of methodologies depending on the target group
- Detailed curricula to obtain the skills, competences and knowledge for the identified occupational profiles and their related methodologies
- A framework for transferability of the curricula, an apprenticeship database and framework per country
- Full functional open source learning management system. The platform will contain materials and tools to monitor and assess learners' participation, performance and satisfaction in 7 languages.
- Complete training made of 4 modules available through the open learning platform: 1) Common skills and soft skills, 2) sustainability, 3) Bio-economy and 4) digitalization, translated and prepared for 7 countries and languages, complete training material for the trainers in 7 languages

# Expected results 2/2

- 12 trainers will follow the training
- 90 trainees from 7 countries will be trained during the experimentation phase.
- ECVET accreditation material for the FIELDS training when possible, following EQAVET guidelines
- European sectoral strategy for skills, seven national roadmaps
- Exploitation Plan, funding opportunity report, regulatory framework
- A dissemination campaign with Google AdWords
- 1 website to communicate about the project and the training
- 20000 visitors in the home page of the website
- 6000 leaflets will be distributed among interested people at the dissemination events, 8/10 press releases at national and European level
- 8 newsletters translated in 12 country languages and disseminated through the country network.
- At least 20 participation/organisation of professional events and conferences
- 9 posters to be presented at professional events/fairs
- Educational material will be made available in an open repository for schools and other institutions, during and after the end of the project;
- Improvement of the employability of the trainees, promotion of IT technologies in education, available on the platform, during and after the end of the project

# Project expected impact: Regional/National scale

- On the short term, 70 trainees from the partners' countries will be trained. The skills will allow trainees to tackle newly identified needs in the digitalisation, bio-economy and sustainability fields
- The content created in the project, will also be made available and allow external VET providers or HEI to create content in the frame of the curricula designed by FIELDS. It is foreseen that at least 10 VET or education providers implement such course based on FIELDS curricula

# Project expected impact: European/International scale

- The availability of the content in English, will facilitate its translation for national use when needed. The expected impact on farmers and farm advisors is an awareness of the skills needed in the future and the creation of specific training in short modules to gain those skills
- As FIELDS will spread, the online platform will host new versions of the programme in other languages. The targeted audience is very broad as the knowledge provided by the training focus on highly demanded skills identified by the project analysis
- The Objective is to have 4 new countries within 4 years after the end of the project to follow/offer the training program

# Milestones

To meet the ambitious objectives of FIELDS, performance indicators followed-up in W6 and 2 milestones corresponding to the main steps of FIELDS will be assessed:

- M1: Future trends analysis performed (M15)
- M2: Completion of training content (M30)



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Thank you for the attention!

for info:

[patrizia.busato@unito.it](mailto:patrizia.busato@unito.it)

[remigio.berruto@unito.it](mailto:remigio.berruto@unito.it)