

# 40Ready

Interreg Europe



40Ready aims to guide SMEs through the I4.0 digital revolution by understanding their skills and digital technology needs, and identifying what policymakers can do to address them.

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REGIONE  
TOSCANA



An interregional cooperation project for improving SMEs competitiveness policies.

*Project Partners*

## 40READY ACTION PLAN FOR TUSCANY REGION

Project partners: ASEV, Regione Toscana

April 2022

PG05819 - 40Ready

  
SME  
competitiveness

€  
1,16 M  
ERDF

  
Aug 2019  
Jan 2023



European Union  
European Regional  
Development Fund

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ASEV – Agenzia per lo Sviluppo Empolese Valdelsa (Lead Partner).....	<b>Errore. Il segnalibro non è definito.</b>

Regional Government of Tuscany ..... **Errore. Il segnalibro non è definito.**

## Session I – General Information

<b>Project</b>	<b>40Ready - Strengthening SME capacity to engage in Industry 4.0</b>
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### 1.1 - About the 40Ready Project

**Industry 4.0** is the new digital industrial revolution. It concerns automation and data exchange in manufacturing technologies. Industry 4.0 means that everything around manufacturing operations becomes digitally connected.

European regions have a key role to play in Industry 4.0. This change is sweeping across Europe. However, it is new and complex. We are still learning how to achieve it, how to apply it and how to design and implement policies that can allow our regional economies to truly benefit.

This is especially true for support to **SMEs**. As the backbone of our European economy, SMEs need to be ready to understand the relevance and the implication of the technological shift, grasp it and use it to achieve competitiveness and growth. Their staff need to have the capacity to integrate 4.0 into their daily work.

The 4.0 revolution is being integrated into ERDF funding programmes. In the region of Tuscany, for example, it was not explicitly mentioned in the original ERDF POR for 2014-2020 nor in the Smart Specialisation Strategy. It has since been integrated, with a number of funding initiatives and support structures (e.g. the regional platform for 4.0) being set up.

The **European Social Fund** includes measures to support employment and help SMEs to adapt to changes in the economy. However, many of the current ESF ROP at regional level were designed before 4.0 became a reality in their regional economic and political context.



However, if SMEs are to benefit from the move towards an automated, digital system, their **staff need to be ready for it**. Workers need to be aware of 4.0 developments and understand the potential benefits for their company. They need to have the capacity to absorb specialised digital services. This is a cultural and behavioural skill change, as well as a technical change (assets and skills). Therefore, updates to the ERDF funding programme need to be shadowed by parallel updates to ESF programmes, where SMEs are the direct beneficiaries.

This is the context of **40Ready (Strengthening SME capacity to engage in Industry 4.0)**, a European Territorial Cooperation project co-financed by the European Regional Development Fund (ERDF), through the INTERREG EUROPE Programme.

**40Ready** groups **8 partners from 7 EU regions**, who are facing this regional development challenge together. Their overall objective is to improve regional policies that support entrepreneurs and workers to take advantage of the opportunities offered by the new, industrial modernisation era.

40Ready achieves this through **exchanging experiences and good practices** in a framework of interregional activities, communication and stakeholder engagement.

## 1.2 - About the Tuscan 40Ready Action Plan

Each region participating in 40Ready produces one **Action Plan**, providing details on how the lessons learnt from the interregional cooperation will be exploited in order to improve the policy instrument tackled within that region.

**This document is the 40Ready Action Plan for the Tuscany region.** It was drafted by ASEV (Agenzia per lo Sviluppo Empolese Valdelsa) and the Regional Government of Tuscany, Directorate for Education, Training, Research and Work, with the contribution of several public-private stakeholders.

The development of this Action Plan has been based on the principles of:

- i. **interregional cooperation between 40Ready partners:** cooperation was supported by a series of interregional workshops, study visits bilateral exchange of experiences and sharing of good practices,
- ii. **involvement of the key Tuscany stakeholders** dealing with innovation and vocational and educational training. Participation was supported through setting up a regional project Stakeholder Group, which met periodically in order to guide the project results. The group was composed of:
  - *Trade Unions and Employer Associations*, members of the Tripartite Permanent Regional Commission (TPRC), regional consultation body for active employment policies
  - *Representatives of the ITS Foundations*, namely stable alliances, between companies, schools and training bodies, built to update workers' skills and to offer courses for highly specialised qualifications and for the training of managers and entrepreneurs,

- *research organisations* (public and private) dealing with 4.0 technological solutions, 4.0 laboratories and the organisation of training and specialisation courses for entrepreneurs, workers and students,
- *managers, entrepreneurs and vocational training agencies.*

**This document is structured into three parts.**

After this introductory section, the Action Plan is structured as follows:

- the **SECOND session** provides an overview of the policy context, including a summary of the 2 Actions contained in the Action Plan;
- the **THIRD session** provides the detailed description of the ACTIONS envisaged, together with an analysis of their background, planned activities, players involved, timeframe and costs.

Finally, the **official signatures** of the legal representative of the two Tuscany partners, ASEV and the Regional Authority, are provided.

**1.3 - Abbreviations**

<b>BE</b>	Bilateral Exchange
<b>GP</b>	Good Practices
<b>KET</b>	Key Enabling Technologies
<b>I4.0</b>	Industry 4.0 and the regional Strategy for Industry 4.0
<b>ITS</b>	Higher Technical Institute
<b>ITS Foundation</b>	Stable alliance between companies, schools and training bodies in order to organise and manage vocational courses for highly specialised qualifications of students and workers and for the training of managers and entrepreneurs.
<b>IFTS</b>	Higher Technical Education and Training
<b>IW</b>	Interregional Workshop, official project event (at least 1 for semester) part of the interregional learning process, which could also include study visits, seminars, focus groups, etc.
<b>LP</b>	Lead Partner (ASEV agency as 40Ready project coordinator)
<b>PA</b>	Public Administration
<b>PNRR</b>	National (Italian) Recovery and Resilience Plan

<b>RIS3 2014-2020</b>	Tuscany Regional Smart Specialisation Strategy 2014-2020
<b>ROP ERDF 2014-2020</b>	Tuscany Regional Operative Programme 2014-2020 (policy instrument) based on ERDF
<b>ROP ESF 2014-2020</b>	Tuscany Regional Operative Programme 2014-2020 (policy instrument) based on ESF
<b>RT</b>	Tuscany Regional authority
<b>SGs</b>	Stakeholders Group, established at regional level in each participating EU region
<b>TPRC</b>	Tripartite Permanent Regional Commission, regional consultation body (which includes Regional Authority, Trade Unions, Employer Associations) for the decision-making process of labour policies
<b>VET</b>	Vocational and Educational Training

## Session II – The initial context and the development of the action plan

### 2.1 - Policy instrument addressed by the Action Plan

Name of the Policy Instrument(s) addressed:	
Tuscany Regional Operative Programme based on ESF (ROP ESF 2014-2020)	
The Action Plan aims to impact:	
Investment for Growth and Jobs programme	YES
European Territorial Cooperation programme	NO
Other regional development policy instrument	NO

**Tuscany participates in 40Ready project in order to improve its own Regional ESF Operative Programme (ROP ESF 2014-2020).**

ROP ESF 2014-2020 is the regional investment programme for growth, employment, education and training. It includes:

- **Axis A** - Better and sustainable occupation, particularly referring to the activity A4 “Adaptation of businesses, entrepreneurs and workers to change” (measures A4.1.1.a/b-A2.1.8)
- **Axis C** - Professional training & continuous learning, particularly referring to the activity C.3 “Strengthening training systems by making them more relevant to the labour market” (measures C3.1 - 3.2)

Both the axes support continuous training (particularly for Research, Technology Development and innovation), ITS (Technical Institutes) / IFTS (Higher Technical Training and Education) training courses, worker retraining and support for SMEs to adapt to economic change. Final beneficiaries are SMEs and their workforce (young and ageing workers, professionals, managers and entrepreneurs).

The current **ROP ESF was developed before the 4.0 revolution**, so did not make explicit reference to specific skills in this field.

In 2017, the Managing Authority (MA) started to adapt ROP measures/calls to the I4.0 national strategy. However, more work was required, which also led to the submission of 40Ready.

**ROP ESF needed to** test and adapt funding measures to support SMEs in training / employing a workforce that can adapt to the technological and organisational innovation changes. In particular, measures should deal with training for employed people, technical education/training courses, continuous training and other initiatives, such as advanced training.

In addition, the ROP ESF needed to become more flexible, enough to support a combination of measures for a smooth integration of I4.0 into the workforce. Moreover, there was a clear need for greater integration and **synergy with the ROP ERDF** programme. The Tuscany **ROP ERDF 2014-2020** is the main regional policy instrument for funding research, technology transfer and innovation. Under its Axis II “Improving access to information and communication technologies” the action 2.3.1 is addressed to “Technological solutions for digital education and inclusion, for acquiring skills (e-skills), for stimulating the dissemination and use of collaboration and open government tools”.

ROP ESF and ERDF are closely linked with the Tuscan Regional Smart Specialisation Strategy (RIS3) 2014-2020 and the **Regional Strategy for Industry 4.0 (I4.0)**. This latter strategy was launched in 2016, when the programming period 2014-2020 was already started. **I4.0** is a **policy instrument entirely addressed to “Industrial modernisation”**. Particularly, it aims to promote technological, organisational and socio-economic content related to industrial modernisation among enterprises and propose technical content for regional actions and interventions finalised towards the introduction of new technologies in enterprises, in line with regional specialisations.

## 2.2 - Overview of regional context

**Tuscany is the fifth largest region in Italy**, with a surface of 22.897 Km<sup>2</sup>, about 3,74 million inhabitants (2018), with a greater number of residents in the metropolitan area of Florence and the major cities (Pisa, Livorno, Pistoia, Arezzo) located in the Arno valley, more than 1,6 million employees (6,8% of the whole Italy, + 3,7% in 2017), around 355.000 active enterprises and a regional GDP of 115 billion of euro that corresponds to 6.7% of the national one, but with a GDP quota per inhabitant (30,75K€) lower than that of other areas of the country (Tuscany is 8°).

**Before the Covid-19 health emergency**, Tuscany covers about 7,5% of Italian exports, of which 48% towards the European Community: particularly Germany (13%), France (10.8%), United Kingdom (7%), Eastern Europe (11%). More than 17% of the goods exported from Tuscany go to the US market (compared to Italy's 11% share). Among the remaining international areas, South America, the Middle East and Japan together account for about 11% of total exports. Tuscan export is mostly based on fashion (textile, clothing, leather) and metalworking, representing the sectors higher export rates, followed by the jewellery and other manufacturing sectors.

Tuscany is a region of **high scientific excellences in research** – with 5 academia located in Pisa, Florence and Siena and several National Research Council institutes - **world-leading brands** operating in fashion (PRADA, GUCCI, FERRAGAMO, DOLCE&GABBANA), yachting (AZIMUT BENETTI, PERINI), ceramics and paintings (COLOROBIA, CROMOLOGY), medicine (MENARINI, GSK, PHILOGEN) and a wide **consolidated manufacturing and craftsmanship**.



**More than 90% of the industrial system is composed by SMEs** (60% of which with fewer than 15 employees). SMEs are generally characterised by specific difficulties to:

- access to new knowledge and technological developments
- invest in innovation and qualification of personnel
- industrially valorise R&D results

Moreover, the **new opportunities offered by the 4.0 revolution are still largely unexplored by most Tuscan SMEs**. While at research and innovation level (ERDF) the I4.0 Strategy is seeing some initial results, on the employment and training level the process has just begun. **A cultural (skill) and behavioural leap is needed** (not only technological) in an extremely short period of time. This needs to be addressed, through actions for raising awareness on I4.0 concepts and solutions, empowerment of entrepreneurial and management skills, continuous training of aged workers and for advanced training (e.g. ITS/IFTTS) for youth.

**I4.0 Strategy** particularly focuses on ICT-related technologies for industry, automation of processes and production, modelling, mechatronics, and robotics up to the production and use of advanced materials. I4.0 requires a greater efficiency of the organisational processes and technical-scientific skills that SMEs cannot easily integrate. Moreover, while digital skills becoming a mandatory requirement for the employability of worker, the technology novelties cause the not full substitution of workers and job categories. In this phase of technological transition, training policies acquire a crucial role to avoid a digital gap between industries (large vs SMEs) and workers (aged vs young).

## 2.3 - Actions summary

The 40Ready Action Plan for Tuscany consists of **two complementary actions** both closely linked within the regional policy framework, within the context of the **Regional Smart Specialisation Strategy (RIS3)** and the regional **Strategy for Industry 4.0 (I4.0)**.

A parallel objective to both of these actions is to **encourage, for the very first time, real synergy between the two main regional framework programmes** for supporting enterprises: the **ESF and ERDF** operative programmes.

### ACTION 1

#### Training of trainers on digital skills

**Supporting the demand for new skills and digital competences in SMEs by strengthening the technical and vocational education of trainers and teachers.**

The focus is on enhancing the ability to identify in advance the skills needed by the different sectors of the industry.

This objective is pursued, together with the main regional Trade Unions, Employer Associations and institutions for the Education and Training, through an update to specific **calls for proposals** within the ERDF/ESF 2014-2020 programme, with all necessary follow-up.

In this context, our policy improvement can be classified as:

- Type 1 *Implementation of new projects* by investing in training initiatives for teachers and trainers and, consequently, improving the quality of courses in secondary technical institutes (for students) and vocational training agencies (for workers).
- Type 2 *Change in the management of the policy instruments*, by creating synergies (now and for the next programming period) between ESF ROP and the ERDF ROP measures.

## ACTION 2

### Open territorial laboratories 4.0

**Strengthening the regional 4.0 VET laboratories and supporting training activities on digital solutions in strategic regional production chains.**

The Action focuses on updating equipment in the laboratories and opening them to the local training agencies and secondary schools for students and workers.

This objective is pursued by strengthening the newly created policy for high sectoral vocational training managed through the ITS Foundations, including a specific **call for proposals** within the ERDF/ESF 2014-2020 programme, with all necessary follow-up.

The Action also includes an INTERREG EUROPE **Pilot Action** to test and prototype methodologies and guidelines, with the end of setting up VET 4.0 laboratories effectively open to the territory.

In this context, our policy improvement can be classified as:

- Type 1 *Implementation of new projects* by the creation, updating or strengthening of high-tech training centres (4.0 laboratories) open to vocational training projects for students and workers (by training agencies and secondary technical institutes);
- Type 2 *Change in the management of the policy instruments*, by creating synergies (now and for the next programming period) between ESF ROP and the ERDF ROP measures.

Policy improvements for both Actions were already achieved in Phase 1 of the 40Ready project (as reported to the programme authorities).

In fact, in 2020 the Tuscan Regional Authority published and launched 2 calls for funding. The call directly leading to our original policy change to the ROP ESF 2014-2020 (ACTION 1) was published in October 2020 (Regional Government Decree n°15815/2020). Its aim was to meet the increased demand of new skills and digital competences, by strengthening technical and vocational education. The call supported training courses for trainers and teachers to acquire knowledge and skills for an effective use of the “open territorial training laboratories” of the Higher Technical Institutes (ITS). This strategic policy change stands alone, with the input gained from the 40Ready project stated in the official decree.

Moreover, this call was published in parallel to a second call. This, funded under ROP ERDF 2014-2020, was published in November 2020 (Regional Government Decree n°17856/2020). Its aim was to strengthen and upgrade the open territorial training laboratories within ITS Foundations (ACTION 2). The call supported i4.0 training activities in strategic regional production chains, through the updating of digital processes and tools (HW/SW equipment and technological process solutions) in the laboratories. The ITS Foundations, as call beneficiaries, must open these labs to territorial vocational training agencies and higher schools, in order to provide courses to students and workers. This call decree also cites 40Ready.

The calls are mutually functional and complementary. For the first time in Tuscany, ROP ESF and ERDF were integrated to fully achieve a common objective. This was one of the main needs identified for Tuscany with the 40Ready project and it was addressed with these two calls, achieving synergy between the two funding measures (improved management).

Both calls were fully successful and all 7 ITS Foundations applied for their labs, completed the process of purchasing new equipment and from September-October 2021, undertook a set-up and fine-tuning phase.

In this context, the Tuscan partners of 40Ready applied for and were awarded a Pilot Action related to Open Territorial Labs. The pilot action was designed to test and model procedures for engagement, access and use required to open up territorial training laboratory to access from a wide range of territorial users. *This is described in detail in Action 2.*

## Session III - Details of the Actions Envisaged

### ACTION 1 - Training of trainers on digital skills

**Supporting the demand for new skills and digital competences in SMEs, by firstly strengthening the technical and vocational education of trainers and teachers.**

Policy Need	Typology of Policy Improvement
<ul style="list-style-type: none"> <li>Supporting <b>technical, cultural and behavioural skill change</b> in SMEs</li> <li>Identifying new <b>skills and digital competences</b> to be transferred to SMEs, functional to the 4.0 revolution</li> <li>Supporting the demand for new skills and digital competences in SMEs, by firstly <b>strengthening technical and vocational education of trainers</b> and teachers</li> <li>Optimising available resources through the creation of <b>synergy between funding programmes</b></li> </ul>	<p><b>Type 1 – New and better projects</b>, by investing in training initiatives for teachers and trainers and, consequently, improving the quality of courses in secondary technical institutes (for students) and vocational training agencies (for workers)</p> <p><b>Type 2 - Change in the management of the policy instruments</b>, by creating synergies (now and for the next programming period) between ESF ROP and the ERDF ROP measures.</p>

### Description of the Action

The digital revolution is radically changing the global social and economic context, requiring strategic public interventions. In recent months, The extent to which digital skills are essential for the growth of the individual as a person capable of moving consciously in the modern technological society has become particularly even clearer in recent months with the advent of the ongoing COVID-19 health emergency.

The **demand for e-skills** will continue to increase in the coming years and this represents the real **challenge for the modernisation** of the region and its capability to compete. It is therefore clear the urgency of structured interventions to overcome the gap between demand and supply of e-skills, also identified as one of the eight European key competences for lifelong learning.

In Tuscany, technical and vocational education is managed mainly through the **ITS Foundations**, that are stable alliances between companies, secondary technical institutes and training agencies. ITS Foundations play a **bridging role between the worlds of education, training and work**. ITS

Foundations are qualified to provide training in digital competences at various levels of complexity, from specialist and technical-professional competences to digital key competences.

The activities carried out by the Foundations focus also on:

- strengthening the regional training system through distance learning tools (for students, workers, entrepreneurs),
- broadening the potential for using the Open Territorial Laboratories (see ACTION 2) that will be available to ITS Foundations, in order to bring innovation to education and training methods and support transitions from school and tertiary education to the labour market.

In order to meet the increased demand for new digital skills and competences needed for employment, personal growth and inclusion, Action 1 focuses on:

1. **Identifying and fostering digital skills** needed to relaunch the regional economy and support competitiveness of SMEs
2. **Supporting training courses for trainers** and teachers, in order for them to acquire the knowledge and skills to make effective use of ITS open territorial laboratories.

**This is the objective of Action 1.** It aims to support the demand for new skills and digital competences in SMEs by **firstly strengthening technical and vocational education of trainers and teachers**. This is achieved through regional calls and follow up related to the measure financed.

This **first call**, funded under ROP ESF 2014-2020, was published in **October 2020** (Regional Government Decree n°15815/2020) to meet the increased demand of new skills and digital competences, by strengthening technical and vocational education. The call supported training courses for trainers and teachers to acquire knowledge and skills for an effective use of the “open territorial training laboratories” of the Higher Technical Institutes (ITSs).

In **March 2021** a **second call** was published (Regional Government Decree n°4705/2021) following the same path and included in the "*Temporary framework for State aid measures to support the economy in the current COVID-19 emergency*". In this case, proposals must be addressed to support the development of digital skills in the Technical and Professional Poles for integrated digital teaching and the set-up of territorial open training laboratories.

In 40Ready Phase 2, the results of the call will be used to retrieve indicators and input, also building on the analysis of the synergies emerging with Action 2, in order to develop recommendations for the new programming period 2021-2027, starting from the merits and shortcomings of the calls.

## Background

### Regional / National input, including input

At the kick-off meeting in Florence, the exchange with the 40Ready partners highlighted, among others, the relevance of addressing the

<p><b>from Stakeholder Groups</b></p>	<p>needs to support and develop open territorial laboratories and “training of trainers” measures, integrated by the need to create synergies between ESF and ERDF funds. On that occasion, stakeholders from the ITS foundations and representing the regional training system were presented and involved in the exchange.</p> <p>The <b>Tripartite Permanent Regional Commission (TPRC)</b>, which represents the main consultation body on ESF policies between Regional Authority, Trade Unions and Employer Associations confirmed the needs identified during the first stakeholder meeting in December 2019, where members from the ITS Foundations and the MA also participated. During the 1st SG and a number of following meetings (25/05/20, 16/06/20, 29/06/20), the regional stakeholder integrated the needs, carrying out an analysis on “Understanding SMEs needs in adaptation to I4.0”, and an analysis on the regional policy context.</p> <p>The analyses were shared through the joint 40Ready methodology document, seeking input from partners in terms of running experiences and good practices, relevant to address the identified needs.</p> <p>In <b>May-July 2020</b>, within TPRC meetings, the launch of the dedicated measures for supporting the training of trainers by the ITS Foundations was approved.</p>
<p><b>Transfer of Good Practices (interregional input)</b></p>	<p>The exchange on the policy needs relevant to Tuscany was constantly progressing at regional and interregional level.</p> <p>Following the comparison on policy needs analysis and regional policy contexts, several bilateral exchanges were held to deepen the Good Practices proposed by the 40Ready partners.</p> <p>Concerning, the need to support the “training of trainers”, several partners provided suggestions and running experiences.</p> <p>This is the case of PP-03 (Public Service of Wallonia). The Good Practice (GP) “<b>Demonstrators4.0</b>” concerns 2 complete “turnkey” workshops, reproducing a production line equipped with I4.0 technologies in a didactic approach, supported through ERDF funding. Within these laboratories open to SMEs, didactic demonstrators are run by the competence centres TECHNOCAMPUS and TECHNIFUTUR, also with the purpose to train trainers. A dedicated web meeting (virtual exchange and study visit) was organised on 5<sup>th</sup> February 2021 starting from the purposes of Action 2 (see below): nevertheless, the exchange with the local representatives - in particular with the university ones of the TECHNOCAMPUS more oriented to training - made it possible to address the problem of training of trainers and benefit from their wider</p>

	<p>experience in targeting the use of demonstrators and laboratories for this purpose as well.</p> <p>A second major experience exchanged concerned the <b>TKNIKA Centre</b>, located in the Basque Country. TKNIKA is a training centre promoted by the Deputy Ministry of Vocational Education and Training of the Education Department of the Basque Government. The Centre develops and implements innovative projects in the area of technology and education. The centre was known to the Tuscan stakeholders just as the best EU experience in training of trainers, also according to the EARLALL network (European Association of Regional &amp; Local Authorities for Lifelong Learning) and for this reason a virtual study visit was facilitated and organised by PP5 (Government of Navarra) on 27<sup>th</sup> October 2020.</p> <p>During a virtual meeting, a representative of TKNIKA described objectives, structures and methodologies of the vocational training centre. Specific points of interest were discussed in a question-and-answer session with 40Ready partners, particularly concerning:</p> <ul style="list-style-type: none"> <li>- methodologies for analysing and scouting innovative disciplines on which to focus training</li> <li>- ways of conducting courses and methodological tools,</li> <li>- opportunities and ways of using 4.0 laboratories for this purpose,</li> <li>- policies and measures for supporting this particular type of training.</li> </ul>
<p><b>Other input from the project (interregional input)</b></p>	<p>Almost all the interregional exchanges, even if not specifically focused on GPs on training of trainers, resulted in useful elements and input for the development of this Action. Among these, we mention in particular:</p> <ul style="list-style-type: none"> <li>- The Virtual Meetings on the respective policy contexts organised in May - June 2020, where the common problems and needs have been laid bare.</li> <li>- The numerous Bilateral Exchange events held between September 2020 and March 2021 to deepen the other GPs proposed by the partnership.</li> </ul>

## ELABORATION of the ACTION 1

*Work carried out in Phase 1*

Activity / Description	Regional/	Timing
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	Interregional	
<p><b><u>40Ready kick-off in Florence</u></b></p> <p>The meeting took place in Tuscany (Florence) in September 2019 and was widely attended by interregional partners and regional stakeholders. In particular, the participants were divided into thematic working groups and for the first time, an in-depth exchange on the issue of "<i>training of trainers</i>" and the identification of European good practices began.</p>	Regional /Interregional	17 <sup>th</sup> - 18 <sup>th</sup> September 2019
<p><b><u>1<sup>st</sup> regional Stakeholder group meeting</u></b></p> <p>The meeting took place in Florence in December 2019. It gathered several stakeholders (e.g. representatives of ITS Foundations, trade unions, employer associations, training agencies), including members of the TPRC. For the first time formalised the target issues of the 40Ready project in terms of Tuscan needs, which were gradually developed into "Actions" in the following semesters.</p>	Regional	4 <sup>th</sup> December 2019
<p><b><u>Virtual Meetings on regional context and highlights</u></b></p> <p>Throughout May-June 2020, in substitution to Interregional Workshop 2 cancelled due to the COVID 19, 3 virtual interregional meetings were held with the 40Ready partners, in order to present and discuss Policy needs analyses, regional Policy Contexts and methodology. During the meetings partners' input was requested and discussed concerning integration of ERDF with ESF funding schemes, training of trainers and open territorial laboratories.</p>	Interregional	5 <sup>th</sup> May 2020, 18 <sup>th</sup> May 2020, 4 <sup>th</sup> June 2020
<p><b><u>Good practices exchange – Templates and requests</u></b></p> <p>Preliminary sharing of Good Practices with partners by filling in dedicated GPs templates. Experiences and solutions were identified on initiative of 40Ready partners (GP proposal) or on request to respond to specific needs (GP on demand).</p>	Interregional	June – Sept 2020
<p><b><u>TPRC meetings – Drafting of the calls' guidelines</u></b></p> <p>During the period May-October 2020 in order to define</p>	Regional	25 <sup>th</sup> May, 16 <sup>th</sup> June, 29 <sup>th</sup> June, 21 <sup>st</sup> July, 29 <sup>th</sup>



guidelines and structure of the dedicated first calls for training of trainers, building on 40Ready input, TPRC representatives cooperated with the MA to draft the calls for funding on training of trainers.		October 2020
<p><b><u>Virtual Study Visit with TKNIKA Centre</u></b></p> <p>In order to deepen potential solutions to tackle the need of training of trainers, as highlighted by the regional stakeholders, a virtual exchange / study visit was organised with the TKNIKA centre, an European best practices for vocational training.</p>	Regional /Interregional	23 <sup>rd</sup> September (preliminary) and 27 <sup>th</sup> October 2020

IMPLEMENTATION of the ACTION 1		
<i>Work carried out in Phase 1 and Planned for Phase 2</i>		
Activity number	Activity description	Timing
<b>Implementation Activities in Phase 1</b>		
A1.1	<p><b><u>Drafting and launch of a FIRST CALL for supporting training of trainers in ITS Foundations</u></b></p> <p>The MA incorporated the recommendations from the regional stakeholders, in drafting the call for funding. The call is designed to meet the increased demand for new skills and digital competences, by strengthening technical and vocational education. In particular, the call funds training courses for trainers and teachers to help them acquire knowledge and skills necessary for an effective use of the “open territorial training laboratories” of the Higher Technical Institutes (ITS) and ITS Foundations.</p>	May - September 2020
A1.2	<p><b><u>FIRST CALL publication</u></b></p> <p>The call was published with Regional Government Decree n°15815/2020. In the official call documentation, the correlation with the interregional learning process of 40Ready is stated.</p>	September 2020
A1.3	<p><b><u>Closure of the call and evaluation of the proposals</u></b></p>	Call deadline: December 2020 – Evaluation period (90 days):

		January-March 2021
A1.4	<b><u>Project development</u></b>	<u>4 months</u> (from the date on which the agreement is signed)
A1.5	<p><b><u>Drafting and launch of a SECOND CALL for supporting training of trainers in Technical and Professional educational Poles</u></b></p> <p>As for the first call, the MA, in drafting the call for funding, incorporated the recommendations from the stakeholder group, building on the results of the project exchange. The call is designed to support the provision of digital skills in the Technical and Professional Poles, necessary for the set-up of territorial open training laboratories and to facilitate integrated digital teaching, particularly relevant during the Covid-19 emergency.</p>	November 2020 – February 2021
A1.6	<p><b><u>SECOND CALL publication</u></b></p> <p>The call was published with Regional Government Decree n°4706/2021. In the official call documentation, the correlation with the interregional learning process of 40Ready is stated.</p>	March 2021
A1.7	<b><u>Closure of the call and evaluation of the proposals</u></b>	<p>Call deadline: 30<sup>th</sup> April 2021 –</p> <p>Evaluation period (90 days): May-July 2021</p>
A1.8	<b><u>Projects development</u></b>	<u>4 months</u> (from the date on which the agreement is signed)
<b>Implementation Activities in Phase 2</b>		
A1.9	<p><b><u>Monitoring of the Call results</u></b></p> <p>Impact assessment of both the calls, including results assessment, feedbacks from stakeholders, beneficiaries, and (when proper)</p>	February 2022 – December 2022

	<p>users, monitoring indicators.</p> <p>This item includes all the activities related to verify the effectiveness of the funded projects and the key elements (strengths, weaknesses) to assess the performance of the policy measure, in order to constitute an improved basis for the next programming period.</p> <p>The activity foresees the discussion with beneficiaries after the closure (technical and administrative audit) of the projects funded through the improved calls for training of trainers.</p>	
A1.10	<p><b><u>Action assessment within the key policy consultation body</u></b></p> <p>Exchange initiatives and contact with regional stakeholders to jointly evaluate the results achieved by the activities of the 40Ready project, the improved calls, and synergies with the Pilot Action (described in Action 2, but also with relevant effects on Action 1, because of their close complementarity), aiming to propose changes/improvements to the funding instrument for the 2021-2027 programming period.,</p> <p>This activity will be carried out in particular within the Tripartite Permanent Regional Commission, but also through direct contacts with stakeholders.</p>	September 2022 – July 2023
A1.11	<p><b><u>Recommendations follow up</u></b></p> <p>Integration into the next programming period measures for the growth strategies of the "Education, Training and Labour Policies" sector of the set of recommendations produced by the prototype methodology for the development of Open Labs 4.0. Again this activity will be carried out in particular within the TPRC members.</p> <p>More precisely, 2 categories of recommendations are relevant to Action 1:</p> <p><u>1 - Positioning indicators of the regional innovation system</u>, in particular referring to the input in terms of identification and training of qualified skills in SMEs, including for trainers and teachers.</p> <p><u>2 - Integrating the different levels of funding measures (ERDF/ESF) for training</u>, in particular increasing the political, administrative and technical coordination.</p> <p>Technological upgrading of SMEs <u>goes hand in hand</u> with skills growth: need for an integrated programming of ESIF funds</p>	April 2022 – July 2023

	(ERDF/ESF), as stated in new RIS3, by taking inspiration from practices by EU cooperation, increasing and multi-level regional coordination (political, administrative, but also technical), promoting integrated approach to RIS3 monitoring/development.	
A1.12	<p><b><u>Paving the ground for the creation of technical exchange table(s) among stakeholders</u></b></p> <p>Analysis of any additional gap emerged during the implementation of the project activities. For example, building on the results of the call on training of trainers, the need to address the fragmentation of the territorial actors in vocational education and training is examined.</p> <p>The calls for the training of trainers were also addressed to other smaller players (such as technical schools and Professional Technological Poles (PTP). In cooperation with these stakeholders, input to instate collaborative relationships with the ITS Foundations and the other instruments of regional training and education policies is sought.</p> <p>A final goal could be extending the technical discussion table between the representatives of the ITS Foundations to the PTPs (see also Action 2).</p>	June 2022 – July 2023
A1.13	<p><b><u>Reporting to EU partnership</u></b></p> <p>Monitoring and verification of implementation activities, using the project monitoring system and periodical (every 3 months) virtual meetings focused on follow up results.</p>	August 2022 – July 2023
A1.14	<p><b><u>Communication</u></b></p> <p>Regional and interregional communication activities about project results and new created opportunities</p>	August 2022 – July 2023

Stakeholders involved	
Name of Organisation	Role in Action Plan
Members of the TPRC, including regional Trade Unions and Employer Associations	The members of the main regional consultation body for the decision-making process of labour policies, including Education and Vocational Training (VET) contributed to the identification of the policy needs of major interest at regional level. The TPRC

	will be also involved in the monitoring of the calls' results and feedback loop for the programming period 2021-2027.
<b>Representatives of the ITS Foundations</b>	The representatives of the 7 <b>the ITS Foundations</b> are involved as stakeholders throughout the exchange process with the 40Ready partnership. They supported the LP and the Regional Government of Tuscany in prioritising the policy needs. They also play a relevant role in the monitoring activities.
<b>Research organisations</b>	Providing skills and knowledge on 4.0 technology solutions, supporting MA in identifying the skills needed for each production sector.  Research organisations also include universities cooperating with ITS Foundations in developing training courses.
<b>Regional Institute for Economic Planning (IRPET)</b>	Carrying out analyses and studies on the regional production and employment context, understanding the needs of companies about new technologies and professional skills. IRPET's contribution (previous reports, analyses, studies) was of particular importance in the start-up phase of the project.
<b>Managers, entrepreneurs and vocational training agencies</b>	The final operational beneficiaries of policy measures are involved in the implementation of the projects funded by the 2 calls, and in the monitoring and feedback activities.

### Risk and Contingency Plans

A policy improvement was formally **achieved during Phase 1 (Sem 3)** with the official publication of the call. Therefore, risks and contingency plans mainly concern monitoring and follow-up on results.

Description of Risk	Level of probability	Description of Contingency Plan
<b>Low level of resources available for the two calls</b>	Medium	The calls are a first attempt to solve the needs identified: not all the institutions to which they are addressed are ready to deal with it or take this opportunity. As such, beneficiaries will carry out a work plan that is appropriate to the budget allocated.  The calls are a first sampling of tools to support the challenge, which if it proves successful, can be

		replicated / further developed in the new programming period, on the basis of the monitoring activities.
<b>Lack of adequate tools and equipment in ITSs for developing an effective training of trainers</b>	Medium	<p>With the launch of the parallel call for 4.0 laboratories (see ACTION 2) will be also supported tools/equipment suitable for the training of trainers. In fact, it can be said that the first users of the new instrumentation are the trainers themselves.</p> <p>Synergies with ROP ERDF measures will be further developed from the ex-post analysis, for the programming period 2021-2027.</p>

### Costs and funding sources

Costs	Funding Sources
<p>The overall budget available for the two calls was divided as follows:</p> <p><b>FIRST call:</b></p> <ul style="list-style-type: none"> <li>Budget available: <b>1.285.947,82 euros.</b></li> <li>Each project cost could receive funding between 40-50K€. The Call co-finances 40% of total costs.</li> </ul> <p><b>SECOND call:</b></p> <ul style="list-style-type: none"> <li>Budget available: <b>896.684,92 euro.</b></li> <li>Each project cost could receive funding between 40-50K€. The Call co-finances 40% of total costs.</li> </ul>	<ul style="list-style-type: none"> <li><b>Tuscany ROP ESF 2014-2020, Measure C.1.1.3.A 'COVID-19 emergency interventions. EDUCATION AND TRAINING: digital competences'</b> (call for funding).</li> <li>In-kind resources by use of internal staff by the MA and all the stakeholders involved (implementation activities)</li> </ul>

### Monitoring

Self-defined Performance Indicator		
Indicator	Target	Means of Verification
<i>Number of people (entrepreneurs, SME staff, including aged and young workers) trained through</i>	5.000	<p>Level of interest and territorial participation.</p> <p>The original project indicator has been</p>

<i>the policy measures improved by 40Ready</i>		better articulated with specific indicators for each Action.
<b>Output Indicators</b>		
<b>Indicator</b>	<b>Target</b>	<b>Means of Verification</b>
Launch of the call(s)	Yes/No	Publication of the official acts
N° of educational institutions (ITS) and foundations (ITS Foundations) involved	>10	Effectiveness of the measures: level of interest and territorial participation by educational/training institutions
N° of trainers (people) involved	100	Level of interest for the measure by individual users
N° of project initiatives	>10	Evidence of initiatives in the territory.

## ACTION 2 - Open territorial laboratories 4.0

**Strengthening regional 4.0 laboratories available to ITS Foundations and their stakeholders, with the goal of supporting training activities on digital solutions in strategic regional production chains. The Action focuses on updating the equipment and opening laboratories to local training agencies and secondary schools for students and workers.**

Policy Need	Typology of Policy Improvement expected
<ul style="list-style-type: none"> <li>Supporting <b>technical, cultural and behavioural skill change</b> in SMEs</li> <li>Investing in <b>open territorial laboratories</b>, through pilot projects within strategic training chains Strengthening the <b>regional ITS Foundations</b> system launched in the 2014-2020 programming period</li> <li>Optimising available resources through <b>synergy of ESF and ERDF funding programmes</b></li> </ul>	<p><b>Type 1 – New and better projects</b>, by creating, updating or strengthening high-tech training centres (4.0 laboratories) open to vocational training projects for students and workers (by training agencies and secondary technical institutes)</p> <p><b>Type 2 – Change in the management of the policy instruments</b>, by looking for synergies (now and for the next programming period) between ESF ROP and the ERDF ROP measures</p>

### Description of the proposed Action

The health emergency highlighted the urgency of **digital innovation in training organisations** and the need of public measures aimed at overcoming the digital divide in access to education and vocational training. Moreover, also in Tuscany, the experience of distance learning/training forced by the crisis is widening inequalities between students from different socio-economic backgrounds, not least because of the unequal distribution of the devices needed for access.

In synergy with the previous action - Action 2 aims at strengthening and **developing digital open territorial training laboratories**. The main goal is to reinforce policies supporting centres of excellence for vocational and educational training (VET), in order to confirm the open labs as reference training points for the territory.

The laboratories will be available to **ITS Foundations**, schools, universities and VET organisations in the area, developing innovative teaching practices in tight cooperation with enterprises.

**Objectives** of each laboratory are:

- strengthening lifelong learning** based on strategic regional production chains, in order to



increase economic development and employment

- **provide support for the training of students and workers**, in line with the national Impresa 4.0 plan and the regional 4.0 strategy
- foster the enhancement of learning opportunities on technical and professional skills required by the labour market, and **better qualification of employment**

New digital (4.0) laboratories also represent the environment where the training of trainers can be carried out, in full **synergy with the scopes of the Action 1**.

The objective to consolidate the role played by the open training laboratories, updating the equipment used within them and making the facilities more accessible to the relevant players of the territory, will be sought through:

- ❑ The drafting and launch of a call, funded with ERDF funds, aimed at upgrading the open territorial training laboratories available to ITS Foundations and their stakeholders. **This call** was published in **November 2020** (Regional Government Decree n°17856/2020) to strengthen and upgrade the open territorial training laboratories available to ITS Foundations and their stakeholders. The call supports the updating of digital processes and tools (HW/SW equipment and technological process solutions) in the laboratories that ITS Foundations, as call beneficiaries, must open to the territorial vocational training agencies and secondary schools for deployment of courses for students and workers.
- ❑ Offering to the Regional Authority the opportunity to put into place, for the very first time, synergy **measures between 2 policy instruments**: the Tuscany ROP ESF 2014-2020 and the Tuscany ROP ERDF 2014-2020.

In this context, **Action 2 while addressing objectives specific to the ROP ESF programme, is financially supported by the ROP ERDF.**

The results of the call will be used to retrieve indicators and input, also building on the analysis of the synergies emerging with Action 1, in order to develop recommendations for the new programming period 2021-2027.

Finally, within the context of Action 2, the funding of a Pilot Action is requested to the Interreg Europe Programme, with the goal of measuring and improving the openness of the training laboratories. In fact, the accessibility of the facilities cannot simply be guaranteed by an update of Hardware/Software equipment, but to this end also specific aspects in terms of management are to be taken into consideration. Procedures for engagement, access and use of the laboratories have in fact technicalities and requirements that must be evaluated by the Managing Authority prior to funding and then monitored.

The general objective of the pilot action is to identify a prototype methodology of open laboratory and to test it at one ITS Foundation, used as a case study. The prototype could then be funded at a larger scale in the future calls (2021-2027).

## Background

### Regional / National input, including input from Stakeholder Groups

Since its conception, the Tuscany 40Ready Action Plan aims to make a qualitative leap in current policies for supporting technological VET of entrepreneurs, workers and students.

**Action 1 and 2 are complementary and interlinked**, therefore the exchange of stakeholders with the aim of identifying the specific policy needs to address **followed the same steps** one of Action 1.

Along the process that went through the TPRC meetings, the discussion at the 1st project SG meeting, the bilateral and multilateral interregional exchanges, the Tuscan stakeholders pinpointed that, in order to develop and deploy an integrated approach to i4.0, a pivotal policy need is to foster **synergies between ESF/ERDF**.

The consolidation of the 4.0 training laboratories was identified as a great opportunity to do that.

The Tuscan **ROP ESF 2014-2020** is the main policy instrument for VET policies and addressed by 40Ready. Axis A (*“Better and sustainable occupation”* including *“Adaptation of businesses, entrepreneurs & workers to change”*) and Axis C (*“Professional training & continuous learning”* including *“Adapting training systems to the labour market”*) both support continuous training (particularly for RTD and innovation), ITS / IFTS training courses.

ROP ESF also include the concept itself of the ITS Foundations, **but its measures cannot fund laboratories** (facilities and equipment).

On the contrary, the Tuscany **ROP ERDF 2014-2020** is the main regional policy instrument for funding research, technology transfer and innovation (not VET), and can also fund equipment for research laboratories, under its Axis II *“Improving access to information and communication technologies”*. Its action 2.3.1 was recently updated to *“Technological solutions for digital education and inclusion, for acquiring skills (e-skills), for stimulating the dissemination and use of collaboration and open government tools”*, becoming suitable to support ITS 4.0 laboratories.

Moreover, while developing Action 2, a **weakness** to be better analysed **was identified by the regional stakeholders**. In fact, while it’s quite easy to launch a call for purchasing hardware/software (HW/SW) equipment for the laboratories, it is more complex to monitor whether the laboratory is **actually “open and accessible”** to the territory. This means being open to the wide range of potential users, such as training

	<p>agencies, secondary technical institutes and their students, enterprises and their staff. Indeed, the procedures for engagement, access and use of the laboratories has technicalities and requirements that must be considered by the MA prior to funding and then monitored.</p> <p>At this purpose, in cooperation with regional stakeholders, and in particular the representatives of the ITS Foundations, the need to investigate specific aspects of accessibility, as well as testing a real case scenario in order to develop recommendation for the MA was identified. To address it, a <b>phase 1 pilot action</b> was requested focused on the organisational and management problems faced by ITS Foundations in making labs accessible to territorial stakeholders.</p> <p>Finally, activities and interest from regional stakeholders were also strongly motivated by the parallel development, at national level, of the new <b>National Recovery and Resilience Plan (PNRR)</b> following the health emergency. The new PNRR, in fact, aims to allocate around EUR 1.5 billion to ITS Foundations, which is equivalent to 20 times the amount invested in a normal pre-pandemic year. These investments should be used to increase the number of students enrolled in ITS from around 20,000 to at least 100,000. In this context, PNRR aims to:</p> <ul style="list-style-type: none"> <li>• Increase the number of ITS Foundations</li> <li>• Develop laboratories with 4.0 technologies</li> <li>• Train teachers to be able to adapt training programmes to the needs of local companies.</li> <li>• Develop a national digital platform for job offers for students with professional qualifications.</li> </ul>
<p><b>Transfer of Good Practices (interregional input)</b></p>	<p>Action 2 arises from <b>several exchange activities</b> carried out on the topics: <i>“how to support high technical (4.0) training”</i> for entrepreneurs, workers and students and <i>“how should be organised the training environments”</i> (4.0 laboratories and demonstrators).</p> <p>Within these, <b>2 successful cases</b> (good practices) were identified and “virtually” exchanged, during the interregional learning process. They represent the result that Tuscany would like to achieve with the ITS Foundations within the next 2-3 years, from an <b>organisational</b> (management, administration, relations with the territory), <b>functional</b> (management of higher education courses, training of trainers, access to entrepreneurs, workers, students) and <b>technological</b> (equipment, demonstrators) point of view:</p> <ol style="list-style-type: none"> <li>1. <b>Demonstrators 4.0 (Wallonia)</b> - Several multi-purpose I4.0</li> </ol>

	<p>demonstrators are being implemented in Wallonia. They intend to disseminate the concepts and technologies of Industry 4.0 as widely as possible. The objectives are to:</p> <ul style="list-style-type: none"> <li>• raise awareness among industrial companies and demonstrate by practice, the need to integrate new 4.0 technologies,</li> <li>• accompany SMEs in their technological and digital transformation by enabling them to carry out technological tests on a test bench, to acquire new skills and to facilitate and accelerate technological implementation in companies.</li> </ul> <p>The demonstrators take the form of two complete "turnkey" workshops, reproducing a production line equipped with I4.0 technologies in a didactic approach for a quick and easy handling.</p> <p>Information about the GP were first exchanged in autumn 2020, while on 5th February 2021 a web exchange was organised including presentation and virtual visit to two competence centres (<a href="#">TECHNOCAMPUS</a>, <a href="#">TECHNIFUTUR</a>), where the demonstrators are located. The 2 demonstrators are also planned to be visited by partners and stakeholders during the Interregional Workshop to be held in Namur on 29 – 30 March 2022.</p> <p><b>2 - EMT- Systems (Silesia) - <a href="#">EMT-Systems</a></b> is an award-winning, largest and most comprehensive technical training centre in Poland. It is specialised in providing training courses for employees of production and maintenance departments, including automation, mechanical, energy, technical and design and construction departments. The proprietary EMT-Systems engineering staff training system consists of over 170 training courses that meet the needs of the Polish industry. EMT has a modern infrastructure, has innovative training laboratories equipped with proprietary teaching stations and actual machines and industrial devices from various manufacturers. EMT-System training is a pioneering activity in the field of spreading knowledge about the i4.0 revolution through free workshops and conferences.</p> <p>Information about the GP were first exchanged in autumn 2020, while on 11th February 2021 a web exchange with local stakeholders was organised including a virtual visit of the facilities.</p>
<p>Other input from the project (interregional input)</p>	<p>In general terms, all interregional exchanges provided useful elements and information for the development or the fine tuning of this Action. Among these, the following are mentioned:</p> <ul style="list-style-type: none"> <li>• The Virtual Meetings on the respective policy contexts organised in</li> </ul>

	<p>May - June 2020, where the common problems and needs have been laid bare.</p> <ul style="list-style-type: none"> <li>• The numerous Bilateral Exchange events held between September 2020 and March 2021.</li> <li>• The physical project IWs held in Bucharest (October 2021) and Walloon region (March 2022)</li> </ul>
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**ELABORATION of the ACTION 2**  
Work carried out in Phase 1

Activity / Description	Regional/ Interregional	Timing
<p><b><u>40Ready kick-off in Florence</u></b></p> <p>The meeting took place in Tuscany (Florence) in September 2019 and was widely attended by interregional partners and regional stakeholders. The participants were divided into thematic working groups and for the first time, an in-depth exchange took place on the issue of "4.0 laboratories/VET centres" and the identification of European good practices began.</p>	Regional /Interregional	17 <sup>th</sup> - 18 <sup>th</sup> September 2019
<p><b><u>1<sup>st</sup> regional Stakeholder group meeting</u></b></p> <p>The meeting took place in Florence in December 2019. It gathered several stakeholders (e.g. representatives of ITS Foundations, trade unions, employer associations, training agencies), including members of the TPRC, and for the first time officially identified the Tuscan needs, that later were targeted to improve the regional policies.</p>	Regional	4 <sup>th</sup> December 2019
<p><b><u>Virtual Meetings on regional context and highlights</u></b></p> <p>Throughout May-June 2020, in substitution to Interregional Workshop 2, cancelled due to the COVID 19, 3 virtual interregional meetings were held. During these, regional Policy Contexts analysis, needs and methodology presented and discussed with the partnership. During the meetings, input from the</p>	Interregional	5 <sup>th</sup> May 2020, 18 <sup>th</sup> May 2020, 4 <sup>th</sup> June 2020

<p>interregional partners was requested on “4.0 VET Laboratories”, to be discussed with regional stakeholders later on.</p>		
<p><b><u>Good practices exchange – Templates and requests</u></b></p> <p>A preliminary exchange of Good Practices was carried out with partners, by filling in and sharing dedicated GPs templates. GPs were identified on initiative of the partners (GP proposal) or on request to respond to specific issues (GP on demand).</p>	<p>Interregional</p>	<p>June – September 2020</p>
<p><b><u>TPRC meetings – Drafting of the call guidelines</u></b></p> <p>During the period May-October 2020, the TPRC members met in several occasions, to define guidelines and structure for the call for funding to support the development of the 4.0 Laboratories in ITS Foundations</p>	<p>Regional</p>	<p>25<sup>th</sup> May, 16<sup>th</sup> June, 29<sup>th</sup> June, 21<sup>st</sup> July, 29<sup>th</sup> October 2020</p>
<p><b><u>Dedicated Bilateral Exchange with 4.0 Demonstrators</u></b></p> <p>Building on the request of the Tuscan stakeholders, a virtual exchange was organised with the TECHNIFUTUR and TECHNOCAMPUS centres representatives, stakeholders of the partner Public Service of Wallonia. The exchange covered also issues related to the Walloon 4.0 laboratories and VET initiatives.</p>	<p>Regional /Interregional</p>	<p>5<sup>th</sup> February 2021</p>
<p><b><u>Dedicated Bilateral Exchange with EMT System</u></b></p> <p>Building on the request of the Tuscan stakeholders, a virtual exchange + study visit was organised with the EMT System representatives, stakeholder of the partners Marshall’s Office of Silesia. The exchange covered also issues related to EMT 4.0 laboratories and VET initiatives.</p>	<p>Regional /Interregional</p>	<p>11<sup>th</sup> February 2021</p>
<p><b><u>2<sup>nd</sup> and 3<sup>rd</sup> 40Ready Interregional Workshop</u></b></p> <p>Relevant content to feed into the AP elaboration was also retrieved in several exchanges had with 40Ready partners. In particular, input and relevant experiences were exchanged during study visits to the local facilities and training laboratories.</p>	<p>Interregional</p>	<p>Bucharest 11<sup>th</sup> – 12<sup>th</sup> October 2021, Namur 29<sup>th</sup> – 30<sup>th</sup> March 2022</p>

<b><u>Phase 1 Pilot Action</u></b>	Regional /Interregiona l	<b>May 2021 – January 2022</b>
<p>In cooperation with regional stakeholders, and in particular with the representatives of the ITS Foundations, it was decided to complement main objective of Action 2, with an analysis and testing of further measures to strengthen the open training laboratories.</p> <p>More precisely, a <b>phase 1 pilot action</b> was requested in order to identify and codify the organisational, functional and technological features and requirements, necessary for a VET 4.0 laboratory to be “<i>actually open and accessible</i>” to the territorial users.</p> <p>The general objective of the pilot action was to <b><u>identify a prototype methodology of open laboratory and to test it at one ITS Foundation, used as a case study</u></b>. The prototype could then be funded at a larger scale in the future calls (2021-2027). Results would allow the Managing Authority to define in future calls the necessary requirements to receive funding for an open laboratory. The prototype open laboratory will have to test activities and costs necessary to ensure the openness of the laboratory by:</p> <ul style="list-style-type: none"> <li>• identifying requirements to be met by the supported laboratories (from the beginning or by the end of the funding period),</li> <li>• codifying activities, organisational structure, internal functions, personnel and additional equipment (beyond 4.0 HW/SW) with which the laboratory must be equipped, and which may be co-funded by the calls.</li> </ul> <p>The development of the Pilot Action proposal concurred to the elaboration and implementation of the present Action Plan. , Its result can in fact contribute to:</p> <ul style="list-style-type: none"> <li>• a better monitoring and evaluation of the results achieved with the development of the laboratories funded by the call</li> <li>• a further development of the related policies for advanced VET laboratories in the upcoming ESF/ERDF 2021-2027 ROP frameworks</li> </ul> <p>Below, the key activities are summarised.</p>		
<p><b>Pilot Action – Interregional Kick-off</b></p> <p>Steering committee with 40Ready partners aimed to define roles and activities.</p>	Interregional	10 <sup>th</sup> June 2021
<p><b><u>1<sup>st</sup> Pilot regional SG meeting</u></b>, in which ITS Foundations representatives were operatively involved in the pilot activities for the first time Activities were presented and objectives discussed.</p>	Regional	13 <sup>th</sup> July 2021

<p><b><u>ITS Foundation interviews</u></b></p> <p>The 7 ITS Foundations operating at the time were interviewed, in order to examine the current state of development of the Laboratories and to gain understanding on how the openness of the facilities to the territory is managed.</p>	Regional	Late July 2021
<p><b><u>2<sup>nd</sup> Pilot regional SG meeting</u></b>, in which a preliminary release of the prototype methodology for “open” laboratories was presented. Proposals and suggestions were gathered from participating stakeholders.</p>	Regional	27 <sup>th</sup> October 2021
<p><b><u>Testing activities were run</u></b>, including on-site assessments in an ITS Foundation selected as case study.</p>	Regional	November – December 2021
<p><b><u>Pilot Action Exchange meeting on Open Labs</u></b>. A specific exchange event was organised with the EU 4.0 laboratories in Wallonia (TECHNIFUTUR and TECHNOCAMPUS) and Silesia regions (EMT System). The goal was to deepen the key issues addressed by the Pilot, gathering input how these are dealt with in partners’ facilities.</p>	Interregional	13 <sup>th</sup> December 2021
<p><b><u>Methodology fine tuning and recommendations</u></b>. The regional partners and stakeholders cooperated to complete the methodological document, output of the Pilot Action.</p>	Regional	31 <sup>st</sup> January 2022
<p><b><u>3<sup>rd</sup> Pilot regional SG meeting</u></b>, to present to the regional stakeholders the final release of the prototype methodology, report and recommendations.</p>	Regional	22 <sup>nd</sup> February 2022
<p><b><u>Interregional Workshop 3</u></b>. The final results obtained by the Pilot Action are shared with the interregional partners. Feedback is gathered and eventual further steps for exchange planned.</p>	Interregional	29 <sup>th</sup> -30 <sup>th</sup> March 2022

## IMPLEMENTATION of the ACTION 2

*Work carried out in Phase 1 / Planned for Phase 2*

Activity number	Activity description	Timing
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B2.1	<p><b><u>Drafting and launch of a CALL for supporting the purchase of equipment and the setting up of 4.0 laboratories at ITS Foundations</u></b></p> <p>The MA incorporated the recommendations from the regional stakeholders, in drafting the call for funding. The call is designed to strengthen and upgrade the open territorial training laboratories available to ITS Foundations and their stakeholders. The call supports 4.0 training activities in strategic regional production chains, through the updating of digital processes and tools (HW/SW equipment and technological process solutions) in the laboratories. ITS Foundations, as call beneficiaries, must open the facilities to the territorial vocational training agencies and secondary schools for deployment of courses for students and workers.</p>	May - October 2020
B2.2	<p><b><u>CALL publication</u></b></p> <p>The call was published with Regional Government Decree n°17856/2020. In the call documentation, the close correlation with the interregional learning process of 40Ready is officially mentioned.</p>	November 2020
B2.3	<p><b><u>Closure of the call and evaluation of the proposals</u></b></p>	Call deadline: 12 <sup>th</sup> December 2020 – Evaluation period (90 days): December 2020- March 2021
B2.4	<p><b><u>Projects development</u></b></p>	12 months (up to 30 <sup>th</sup> April 2022). Extension of up to 2 months possible
<b>Implementation Activities in Phase 2</b>		
B2.5	<p><b><u>Monitoring of the Call results</u></b></p> <p>Impact assessment of the call, including results assessment, feedbacks from stakeholders, beneficiaries, and (when proper) users, monitoring indicators.</p> <p>This item includes all the activities related to verify the effectiveness of the funded projects and the key elements</p>	March 2022 – December 2022

	<p>(strengths, weaknesses) to assess the performance of the policy measure in order to constitute an improved basis for the next programming period.</p> <p>The activity foresees the discussion with beneficiaries after the closure (technical and administrative audit) of the projects funded through the call for supporting the purchase of equipment and the setting up of 4.0 laboratories at ITS Foundations.</p>	
B2.6	<p><b><u>Action assessment within the key policy consultation body</u></b></p> <p>Exchange initiatives and contact with regional stakeholders to jointly evaluate the results achieved by the activities of the 40Ready project, the improved calls and the Pilot Action to propose changes/improvements to the funding instrument for the 2021-2027 programming period.</p> <p>This activity will be carried out in particular within the Tripartite Permanent Regional Commission, but also through direct contacts with stakeholders.</p>	September 2022 – July 2023
B2.7	<p><b><u>Recommendations follow up</u></b></p> <p>Integration into the next programming period measures for the growth strategies of the "Education, Training and Labour Policies" sector of the set of recommendations produced by the prototype methodology for the development of Open Labs 4.0.</p> <p>More precisely, 4 categories of recommendations are relevant to Action 2:</p> <p><u>1 - Positioning indicators of the regional innovation system</u>, in particular referring to the input in terms of identification and training of qualified skills in SMEs;</p> <p><u>2 - Integrating the different levels of funding measures (ERDF/ESF) for training</u>, in particular increasing the political, administrative and technical coordination;</p> <p><u>3 - Opening territorial laboratories as 'collaborative platforms'</u>, to anticipate and intercept technological changes and necessary skills;</p> <p>ITS need of <u>greater territorial rooting</u>: ITS laboratories must become <u>opens spaces</u> where a plurality of actors (universities, schools, industries), themes and technologies converge, shared</p>	April 2022 – July 2023

	platforms (tools, procedures) are developed as well as open procedures. ITS (and related policies) must invests in the ability to anticipate/intercept technological changes and the necessary skills, including training of trainers.  <u>4 – Consolidating management and organization of the laboratories</u>	
B2.8	<b><u>Consolidation and coordination of the exchange within the ITS technical table</u></b>  Consolidate the technical table of the ITS Foundations network created within 40Ready, to discuss, exchange and provide input to improve the governance of the training regional system.	April 2022 – July 2023
B2.9	<b><u>Reporting to EU partnership</u></b>  Monitoring and verification of implementation activities, using the project monitoring system and periodical (every 3 months) virtual meetings focused on follow up results.	August 2022 – July 2023
B2.10	<b><u>Communication</u></b>  Regional and interregional communication activities about project results and new created opportunities.	Whole project period

Stakeholders involved	
Name of Organisation	Role in Action Plan
<b>Members of the TPRC, including regional Trade Unions and Employer Associations</b>	The members of the main regional consultation body for the decision-making process of labour policies, including Education and Vocational Training (VET) contributed to the identification of the policy needs of major interest at regional level. The TPRC will be also involved in the monitoring of the call results and feedback loop for the programming period 2021-2027.
<b>Representatives of the ITS Foundations</b>	Representatives of the <b>ITS Foundations</b> are involved as stakeholders throughout the exchange process with the 40Ready partnership. They supported the LP and the Regional Government of Tuscany in

	<p>prioritising the policy needs. They also play a relevant role in the monitoring activities.</p> <p>ITS Foundations were directly involved in all the steps of the Pilot Action, from the elaboration throughout the roll-out, as the main beneficiaries of the policy measures for the 4.0 Laboratories also in the next programming period.</p>
<b>Research organisations</b>	<p>Providing skills and knowledge on 4.0 technology solutions, supporting MA in identifying the skills needed for each production sector.</p> <p>Research organisations in Action 2 particularly include universities cooperating with ITS Foundations in developing training courses.</p>
<b>Students, entrepreneurs and vocational training agencies</b>	<p>Final operational beneficiaries of policy measures are involved in the implementation of the projects funded by the call, and in the monitoring and feedback activities.</p>

### Risk and Contingency Plans

The main result of the policy improvement was formally **achieved during Phase 1** with the official publication of the call. Risks and contingency plans, therefore, concern monitoring and follow-up of results.

Description of Risk	Level of probability	Description of Contingency Plan
<b>Low level of resources available</b>	Low	The call represents a first attempt to tackle the problem. New resources are planned for the next programming period in ESF/ERDF programmes.
<b>Lack of a clear vision of what is really needed to make the laboratory “actually” open and accessible to the territory.</b>	Medium	Policies for higher VET through ITS Foundations are relatively “young” and will be fully developed in the next programming period, thanks to the monitoring activities linked to the Phase 1 Pilot Action.
<b>Unaffordable costs to maintain and update</b>	High	In the next programming period, the issue of continuity and financial self-sufficiency of laboratories

equipment in laboratories		will be crucial. The methodology put in place in the Pilot Action and its results could be used to evaluate performances and provide recommendations.
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Costs and funding sources	
Costs	Funding Sources
<p>The overall budget of the call and key requirements are summarised below:</p> <ul style="list-style-type: none"> <li>▪ Budget available: <b>3.600.000 euro.</b></li> <li>▪ Beneficiaries: ITS Foundations</li> <li>▪ Project costs between 300 K€ -1M€. Call finances 100% of the total investment, up to 514.285K€</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Tuscany ROP ERDF 2014-2020,</b> Action 2.3.1 Technological solutions for digital inclusion and e-skills (call for funding)</li> <li>• In-kind resources by use of internal staff of the MA and all the stakeholders involved (implementation activities)</li> </ul>

Monitoring		
Self-defined Performance Indicator		
Indicator	Target	Means of Verification
<i>Number of people (entrepreneurs, SME staff, including aged and young workers) trained through the policy measures improved by 40Ready</i>	5.000	<p>Level of interest and territorial participation.</p> <p>The original project indicator has been better articulated with specific indicators for each Action.</p>
Output Indicators		
Indicator	Target	Means of Verification
Launch of the call	Yes/No	Publication of the official acts
N° of ITS Foundations participating	7 (all running Foundations at the date of publication of	Effectiveness and size of the measures: level of interest and territorial participation by educational/training institutions

	the call)	
N° of developed laboratories	1 for ITS Foundation	Evidence of the realisation

**Official Signatures**

**ASEV – Agenzia per lo Sviluppo Empolese Valdelsa (Lead Partner)**

<b>Date:</b>	25 <sup>TH</sup> MAY 2022
<b>Organisation (Italian)</b>	ASEV – Agenzia per lo Sviluppo Empolese Valdelsa
<b>Organisation (English)</b>	ASEV – Agency for the Development of the Empolese Valdelsa
<b>Name</b>	TIZIANO CINI
<b>Signature</b>	<p>Sign and stamp of the organisation (if available)</p> <p style="text-align: center;">   <b>AGENZIA PER LO SVILUPPO</b>  Via delle Fiascaie, 12  50053 EMPOLI (FI)  Partita I.V.A. 05181410480 </p>

**Regional Government of Tuscany**

<b>Date:</b>	
<b>Organisation (Italian)</b>	Regione Toscana - Direzione Istruzione, Formazione, Ricerca, Lavoro
<b>Organisation (English)</b>	Regional Government of Tuscany – Directorate for Education, Training, Research, Employment
<b>Name</b>	FRANCESCA GIOVANI
<b>Signature</b>	Sign and stamp of the organisation (if available) 