

40Ready ACTION PLAN
Public Service of Wallonia



General Information

Project	40Ready
Partner organisation	SPW EER – DEFP Public Service of Wallonia - Department of Employment and Vocational Training
Country	BELGIUM
NUTS2 region	Wallonia
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Policy Context

Name of the Policy Instrument(s) addressed:
Action 1: Operational Programme 2014-2020, Axis 6 – Competencies, Measure 1.1 (<i>and follow up with the 2021-27 OP</i>)
Action 2: Digital Wallonia

Type of policy instrument	
Investment for Growth and Jobs programme	YES (for Action 1)
European Territorial Cooperation programme	NO
Other regional development policy instrument	YES (for Action 2)

Details on the regional context
<p>By 2030, there will be 500,000 unfilled jobs in the labour market¹. This shocking job vacancy figure is all the more worrying when we consider that, at the same time, the number of unemployed people is likely to continue to rise if policies remain the same. The mismatch between labour supply and demand is not new. However, in the coming years, the situation will become more acute due to the rise of various advanced technologies in a very short period of time. The workforce is expected to have more qualifications and be more specialised.</p> <p>Moreover, according to the study “Be The Change” (07/11/2019) published by the Belgian Trade Association for the technology industry sector “AGORIA”, by 2030:</p> <ul style="list-style-type: none"> • 1.2 million professionals will need to develop their digital and basic skills • 81,000 people will need reorientation to get a more sustainable job <p>Like other regions in Europe, Wallonia is deindustrialising. Industry 4.0 represents an opportunity to make an economic rebound. Walloon companies need to seize this opportunity to recreate business activity, grow or even relocate in the region.</p> <p>To measure the evolution of this trend towards the digitalisation of Walloon companies, the Walloon Digital Agency assesses every 2 years the digitalisation of companies through its digital maturity barometer. This assessment is based on 4 criteria: digital infrastructure, process digitalisation, digital strategy and human resources management.</p> <p>The 2020 barometer shows recent progress compared to previous edition (2018) such as:</p> <ul style="list-style-type: none"> • Human resources management: 45 (+13)

¹ *Shaping the future of work*, a study by Agoria in collaboration with the VDAB, Le Forem and Actiris, conducted by Roland Berger on behalf of Agoria, September 2018

- Process digitalisation: 21 (+3)
- Digital strategy: 14 (+3)
- Digital infrastructure: 38 (+0)

but also points out some weaknesses:

- The use of advanced technologies is still not very widespread;
- There is little or no automation;
- And, above all, there is still too often a lack of an overarching strategy.

In two years, the overall average digital maturity score of Walloon companies has risen by 5 points and now stands at 30/100. When analysing the overall digital maturity index, we note disparities. There is clearly a correlation between the size of the company and its level of digital maturity. Today, 35% of companies consider that digital is a strategic opportunity to be seized as part of a global business strategy. This figure, which rises to 45% for companies with more than 10 employees, is of course still too low.

It seems necessary to continue the work of raising awareness among both small and large companies. It is also important that management be aware of the issues involved in the digital development of their business.

In parallel with the publication of the barometer, in November 2020 the Digital Agency launched a tool enabling companies to measure their "digiscore" online, i.e. their maturity "score" on the same four axes as the barometer. The interest of this tool also lies in the possibility for the company to compare its individual score with all Walloon companies and in particular companies with the same characteristics (size, sector, export, location, etc.).

Finally, when we talk about Industry 4.0, the focus is on new technologies. However, the human element has more than ever a place to play and, in this context, the training of workers is more than essential. The 2020 barometer shows that 12% (+2) of companies employing staff have trained at least one employee in a digital subject over the last two years. This is far from sufficient in view of the speed of digitalisation of our economy.

Further details on the policy context

In its Regional Policy Declaration 2019-2024, Wallonia explicitly plans to support the digital transition of companies, the emergence and development of an "industry 4.0" ecosystem aimed at supporting the competitiveness of manufacturing companies.

Two regional policy instruments contribute to this aim, in relation to the 40Ready Action Plan.

- The Operational Programme 2014-2020, Axis 6 – Competencies. This axis funds creation and equipment of Competence Centres for Industry 4.0. The ESF OP provides complementary funding for trainers within these Centres. It has funded 3 Competence Centres working in

different sectors on global and additive technologies, automation, robotics and smart maintenance, sustainable development and energy efficiency. From the outset of 40Ready, our ambition was to improve the implementation of these centres, with a more coherent approach to Industry 4.0 and to the engagement of SMEs and other stakeholders. The 2021-27 programme will continue to provide funding for these centres;

- The "Industry of the Future" programme of its Digital Wallonia strategy. The regional framework programme "Industry of the Future" aims at the digital transformation of the 2300 manufacturing companies in Wallonia. With a series of ambitious objectives to be achieved by 2024, the programme has five main focus areas:
 1. Governance: to ensure more consistency across different initiatives and raise their profile thanks to the joint "Industry of the Future 2020-2024" programme.
 2. Awareness-raising and support: to support the manufacturing industry to help companies, especially SMEs, turn themselves into industry of the future.
 3. Organisation and skills: training solutions for this sector in areas connected to the concept of the industry of the future.
 4. The digital sector and Europe: to consolidate links between the digital technology sector and the manufacturing industries.
 5. Communication, inspiration, outreach: to improve the manufacturing industry's image, motivate the manufacturing sector to embrace transformation and spread the word about advanced digital technologies to encourage faster, more extensive adoption.

The 40Ready Action Plan will improve these 2 public policy instruments, by supporting 2 key actions.

Action 1: "Opening regional Demonstrator 4.0 to SMEs" (Policy Instrument Operational Programme 2014-2020, funding Demonstrators 4.0)

Several multi-purpose Industry 4.0 demonstrators are being implemented in Wallonia, with co-funding from EDRF. Two of our Walloon Competences Centers are hosting a Demonstrator 4.0: *Technifutur* in Seraing (Liège) and *TechnoCampus* in Gosselies (Charleroi). They intend to disseminate the concepts and technologies of Industry 4.0 as widely as possible. However, the actual opening to targeted stakeholders, particularly SMEs has not yet been achieved. Action 1 seeks to improve this, with targeted activities to this target audience.

Action 2: Improving the use of "business" vouchers to foster awareness raising and training of consultants on human centred digital transformation (Policy Instrument Digital Wallonia)

To help economic actors, Wallonia has implemented the "Business Vouchers" scheme as part of public support to companies. This vouchers' system has been established since 2017 and is open on a continuous basis. Vouchers include services to enhance digital awareness and integration. However, there is currently a lack of focus on the human and organisational dimensions in digital

transformation plans. This action will add this possible content to the services that can be covered by the vouchers.

ACTION 1

Opening regional Demonstrator 4.0 to SMEs

Policy Need	Typology of Policy Improvement expected
Raising awareness about Industry 4.0 and reaching more directly the target audience of companies (SMEs) and their workers through the services offered by the regional Demonstrator 4.0.	New project: improvement to existing regional projects Industry 4.0 Demonstrators (funded by EDRF).

Description of the proposed Action

Several multi-purpose Industry 4.0 demonstrators are being implemented in Wallonia, with co-funding from EDRF. Two of our Walloon Competences Centers are hosting a Demonstrator 4.0: *Technifutur* in Seraing (Liège) and *TechnoCampus* in Gosselies (Charleroi). They intend to disseminate the concepts and technologies of Industry 4.0 as widely as possible. However, the actual opening to targeted stakeholders, particularly SMEs has not yet been achieved. The pedagogical Demonstrators 4.0 now are mainly used by jobseekers and students on work-link with training. The sessions and the trainings are free of charge for those users.

Action 1 seeks to improve this, with targeted activities to this SME target audience. Companies are indeed a potential target audience for the Competence Centers, designed to ensure that companies have qualified personnel and equipment at their disposal.

The proposed action includes in prior activities to support the development of an around the 4.0 Demonstrators that is capable of supporting their opening to SMEs. It seeks to turn the Demonstrators 4.0 into “meeting places” between companies seeking qualified employees and candidates (collaboration with our stakeholder “Le Forem” - Regional Employment Agency)

The specific objectives are to:

- raise awareness among industrial companies and demonstrate to them by practice, the need to integrate new 4.0 technologies,
- accompany SMEs (and their staff) 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 implementation in companies,
- create an interest to workers wishing to improve their skills and see concretely the transformations of their job and how to appropriate them.

Our demonstrators take the form of "turnkey" workshops, reproducing a production line equipped with I4.0 technologies in a didactic approach for a quick and easy handling. The educational demonstrators were acquired under the ERDF 2014-2021 budget and are already quite advanced. This action will ensure that the state-of-the-art equipment is used to train production operators and maintenance operators in 4.0 technologies.

For the 2021-2027 programming period, it is planned that the structural funds (ERDF) will support up to €300,000 (300K) of investment in equipment complementary to the "4.0 Demonstrators" with the aim of opening up the educational demonstrators even more widely to a large public of users in the territory while reinforcing the training offer towards the concept of the global mini-factory. This mini-factory will be equipped with Industry 4.0 technologies (ERP, cloud, energy management, digital twin, artificial intelligence, cobot/robot, online quality control, virtual and augmented reality, etc.).

This investment is also part of our desire to support the development of an ecosystem around "Demonstrators 4.0".

Background	
Regional / National input, including input from Stakeholder Groups	<p>Our 40Ready Local Stakeholder Group, composed among others by representatives of the Competence Centres, functional administration and Structural Funds coordination department, was involved in the drafting of the deliverable "Prospective analysis on development and skills needs for Industry 4.0" produced within the framework of the 4.0Ready project. This analysis report fully contributes to the completion of phase 1 of the project aiming at identifying the digital maturity levels and the needs of companies in terms of Industry 4.0.</p> <p>We can also mention the active participation of representatives of our Local Stakeholder Group in the peer review sessions and the holding of sessions of the working group "opening of demonstrators".</p>
Transfer of Good Practices (interregional input)	<p>Through several exchanges and virtual study visits, relevant GPs were acknowledged, in particular from Silesia and Tuscany.</p> <p>We found practices successfully targeting SMEs as for example EMT Systems from Silesia which favours tailored training profile to the client's needs. We have learned that EMT-Systems specialists identify needs, propose an optimal solution and select the correct training path. Often, the result of consultations is the preparation of a dedicated, tailor-made training that covers the client's training needs to the maximum extent.</p> <p>We also have learned from Tuscan partners' ITS courses that are partially provided internally to SME's and that programs design is</p>

	<p>strongly influenced by enterprises to respond to actual market needs. We also learnt from the fact that the trainings of trainers are supported by the ESF in order to improve the accessibility of laboratories.</p> <p>Those have inspired our LSG to do the same with demonstrators.</p> <p>We also had the opportunity to exchange with the 40Ready partners Tuscany, Silesia during the peer review session on their training implementation conditions and their limits on 16/09/2021. On that occasion, organisation, funding sources and management of the training laboratories of Silesia and Tuscany were discussed. A thorough exchange on the management of training labs was held within the framework of the Pilot Action on 13/12/2021. The meeting provided us with useful additions to the improvement of action 1 “opening of the 4.0 Demonstrators” to the various users of the territory as well as the development of an eco-system around the educational demonstrators. Indeed, we could focus as Tuscany does on different selected sectors according to strategic and economic-social dimension (e.g. life science, energy/environment, agrofood, tourism, ICT etc.)</p> <p>These exchanges have enabled us to envisage the courses of action that we are proposing.</p>
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ELABORATION of the Action
<p>At regional level:</p> <ul style="list-style-type: none"> - Meetings with Competence Centres and ERDF representative to better understand possible / feasible improvements to the demonstrators in relation to SME engagement (improvements related to investment aspects). - Drafting of the deliverable "Prospective analysis on development and skills needs for Industry 4.0". - Identifying relevant projects that could use the demonstrators as an entry point. - Meetings organised to analyse possibilities of synergy between projects. - Setting up of an utilisation rate to measure how much demonstrator are used. <p>At interregional level:</p> <ul style="list-style-type: none"> - virtual presentation of our GP and of the deliverable "Prospective analysis on development and skills needs for Industry 4.0". - peer review sessions with 40Ready Partners. - virtual exchanges and in-depth discussions with the partners involved in the pilot action. - in-depth discussions and exchanges during interregional workshop in Bucharest on the progress of the drafts.

Work plan - IMPLEMENTATION of the Action		
<i>Activities initiated in Phase 1 and planned for Phase 2</i>		
Activity Number	Activity Description	Timing
1	<p>Increase awareness-raising work to support the development and training ecosystems around the 4.0 Demonstrators.</p> <p>Identification of the actors to be mobilised to make the ecosystems more dynamic.</p> <p>Definition of training programmes to be supported within the ecosystems.</p> <p>Communication support, mailing to target audience, dissemination of content produced by stakeholders</p>	<p>Continued contacts and meetings during end of Phase 1</p> <p>Phase 2 (sept22-june23)</p>
2	<p>Support synergies with the "Made Different" method developed in the Walloon "Industry of the Future" programme and the implementation of training programmes within the ecosystems around the Demonstrator 4.0 equipment.</p> <p>Communication support, mailing to target audience, dissemination of content produced by stakeholders</p>	<p>Continued contacts and meetings during end of Phase 1 & Phase 2 (sept22-june23)</p>
3	<p>Activities designed to increase the role of Demonstrators 4.0 as “meeting places” between companies seeking qualified employees and candidates.</p> <p>Organisation of a meeting day and jobday focusing on the skills acquired in 4.0.</p> <p>The jobday, hosted in the Demonstrator has the advantage of bringing together the public of trainers, workers, entrepreneurs and job seekers while encouraging the development of an ecosystem around the demonstrators.</p> <p>Communication support, mailing to target audience, dissemination of content produced by stakeholders.</p>	<p>Continued contacts and meetings during end of Phase 1</p> <p>Implementation during Phase 2 (sept22-june23)</p>
4	<p>Ongoing monitoring of actions designed to engage</p>	<p>Implementation during</p>

	<p>SMEs, with a view to providing recommendations to direct 2021-27 ERDF funding for competence centres open to SMEs.</p> <p>Monitoring includes quantitative and qualitative feedback from SMEs and members of the ecosystem.</p>	<p>Phase 2 (sept22-june23)</p>
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Stakeholders involved	
Name of Organisation	Role in Action Plan
<p>Le Forem (regional Agency for Employment and Vocational Training)</p>	<p>Action 1 Responsible for the organisation of the jobday and in charge of the political follow-up</p>
<p>Competence centres “TechnoCampus” & “Technifutur”</p>	<p>Action 1 Action 1 actors for on-site reception of target audiences, managers of training programme development</p>
<p>Walloon Digital Agency</p>	<p>Action 1 Responsible for the development & the implementation of the “Made Different” method</p>

Risk and Contingency Plans		
Description of Risk	Level of probability (High, Medium, Low)	Description of Contingency Plan
<p>Mobilization or turn-over of human resources of stakeholders providing expertise</p>	<p>Low</p>	<p>Le Forem (regional Agency for Employment and Vocational Training) capable of activating wide network of experts</p>

Costs and funding sources	
Costs	Funding Sources
<p>Action 1: € 100.000</p>	<p>Walloon budget Co-funding for Demonstrators 4.0 from ERDF 2014-20. This will be further integrated with funding from the 2021-27 OP.</p>

Monitoring		
Self-defined Performance Indicators		
Indicator	Target	Means of Verification
Number of competence centres with adapted/new training curriculum to better engage SMEs	2	Documentation from Competence Centres
Output Indicators		
Indicator	Target	Means of Verification
Number of Jobdays organised (Enterprises, workers, jobseekers)	1	Documentation from Competence Centre & Le Forem on organisation of Jobday
Number of companies mobilised:	450	
Number of companies registered to the job day	55 (with at least 50 participating)	

ACTION 2 – Title
Improving the use of “business” vouchers to foster awareness raising and training of consultants on human centred digital transformation

Policy Need	Typology of Policy Improvement expected
<p>Overcome the lack of consideration by accredited consultants of the human aspects in digital transformation plans of manufacturing companies.</p> <p>Include human dimension in digital transformation plans & improving the use of "business" vouchers.</p>	<p>New projects (integration to the existing voucher scheme, with possibility to fund new projects including the human centred dimension)</p>

Description of the proposed Action
<p>The objective of Action 2 is to include human dimension in digital transformation plans supported notably by “Business Vouchers” scheme.</p> <p>To help economic actors, Wallonia has implemented the "Business Vouchers" scheme as part of public support to companies. This vouchers' system has been established since 2017 and is open on a continuous basis. The business vouchers aim to support companies from creation to growth to boost their competitiveness and ensure their continuity, through a financial support for consultancy. By activating the "Growth" and "Digital" vouchers, companies can activate consultancy missions to analyse and plan digital transformation plans.</p> <p>Several vouchers are available. Some are clearly dedicated to enhance digital awareness and integration (operational excellence - growth, digital transformation and cybersecurity). The cost covers digital maturity audit and/or diagnosis to identify company's needs, cybersecurity audit (leads to label the processes) and services aimed at developing an action plan (following the audit) and monitoring its implementation.</p> <p>The improvement that we foresee with this action 2 is to make up for the lack of consideration of the human and organisational dimensions in digital transformation plans by adding these dimensions to the possible contents of the consultants' assignments</p> <p>The aim will also be to propose changes in the consultants' practices by removing the dichotomy between hard skills and soft skills, by promoting initiatives that make soft skills and hard skills complementary and by encouraging collaboration and the exchange of good practices between peers (i.e. the consultants).</p>

Background

<p>Regional / National input, including input from Stakeholder Groups</p>	<p>Several companies, designated "Factory of the Future" by an independent jury of the Walloon consortium "Made Different", following the digitalisation of their processes, strongly argue that it is essential to combine the added value of people with the possibilities offered by digital technologies.</p> <p>Feedback from the field analysed by our regional stakeholders' indicated a tendency for digital transformation plans to focus on technical aspects.</p> <p>Moreover, as emerged within the discussion with the 40Ready regional stakeholder group, it was found out that the business vouchers are used by many beneficiaries but only from the point of view of a technological approach.</p>
<p>Transfer of Good Practices (interregional input)</p>	<p>Inspiration and influence was taken from the Navarra partner regarding the Itinerarios 4.0 initiative, which funds technological audits carried out by specialised audit companies. The final output of the audit process is a Digital Transformation Plan.</p> <p>Following bilateral exchanges held on 10/12/2021 and 29/01/2021 with the Navarra partner, we realised also as them that there was a lack of consideration by accredited consultants of the human aspects in the digital transformation plans of manufacturing companies. Until now, the vast majority of consultants have only dealt with the technological aspects.</p> <p>In addition to the GP exchange, representatives of Navarra explained during peer review session, held on 16/09/2021, that an analysis made concerning human centred aspects in Digital Transformations Plans, relatively to the call Itinerarios 4.0, was carried out and that consultants were motivated by regional authorities to improve aspects linked with the support to human dimension. The method and objectives of involving the consultancy sector was discussed with the partner on that occasion, with regards to activities to engage consultants and to regulatory criteria to be included into call for funding.</p>
<p>Other input from the project (interregional input)</p>	<p>During the workshop held in Bucharest (12/10/2021), we had the opportunity to exchange with our partner from Helsinki on the integration of the human dimension in the digital transformation of companies. This partner increasingly observes, as we do, that successful examples of digital transformation very quickly include human and organisational transformation aspects in the transformation plans.</p>

ELABORATION of the Action

In 2020, a "Prospective analysis on the development and needs in skills for Industry 4.0" was commissioned by Wallonia in the framework of the "4.0Ready" project.

The primary aim of the prospective analysis was to take stock of the needs in terms of trades and skills (upgraded or even entirely new) as well as the requirements implied by the "Industry 4.0" concept.

The skills concerned are both technological and digital, according to a variable granularity of expertise (programming, IT, network management, analytics, simulation, automation, integration, etc.), but also organisational, operational, managerial and even relational/social.

The objective is to erase the dichotomy between hard skills and soft skills.

The report also shows that among the many new skills that are needed or will be needed are - and increasingly so - "soft skills" and cross-cutting skills such as analysis and problem solving, communication with various stakeholders, flexibility, innovation, the capacity for creativity, adaptability, collaboration with others...

In addition, in order to better define the problem, we conducted a survey of 634 accredited consultants "Analyse of human dimension in 4.0", approved for the Walloon "business cheques" scheme to verify the level of consideration given to human and organisational aspects in companies' digital transformation plans. The goal was to determine the needs of consultants concerning human and organisational aspects. The conclusions of our survey clearly showed us that investment in the human and organisational capital essential to the success of a digital transformation is currently under-invested.

Several recommendations were made with a view to their integration into our regional action plan. These include increasing and accelerating awareness raising, identifying "Human & Organisational Capital" experts and increasing consultants' awareness of human challenges.

The work at regional level to identify the policy needs to address was carried out in parallel and enriched by the exchange of experience had at interregional level with 40Ready partners. Content and methodological input, in particular coming from the partner Government of Navarra, was gathered on several occasions, e.g. bilateral GPs exchanges, peer review and Interregional Workshops.

Building on these two levels of exchange, the objectives and the operational steps of action 2 were defined.

Work plan - IMPLEMENTATION of the Action		
<i>Activities planned for Phase 2</i>		
Activity Number	Activity Description	Timing
1	Strengthen interactions between “technical” actors and “more specialised human/organisational” support actors to promote the "human-technology" alliance and to foster the creation of a community of practice Series of 3 meetings (Workshop & peer learning) supporting the discovery and/or the use of tools such as EntreComp (Cross-cutting competencies and soft skills), DigComp (digital competences), digital maturity tools. These should provide input to the content of the modified voucher scheme.	Phase 2 - (sept22-dec22)
2	Establishment of a drafting committee of the most relevant stakeholders to improve the content of the mission definition "implementation of an Industry 4.0 process" foreseen in the "business" vouchers. The content will include the Human Centred element. Validation by the Walloon Stakeholder Committee of the new content for the voucher scheme and subsequent administrative steps to prepare the modified voucher content.	Phase 2 - (sept22-gen23)
3	Communication on the new voucher content (as integrated into the scheme, where applications for vouchers can be presented on a continuous basis), selection of applications and monitoring of progress.	Phase 2 - (first quarter - ongoing)
4	Evaluation of participation and impact in the adapted voucher call with focus on human-centred digitalisation. Eventual update of content and recommendations for continuation/changes in ongoing voucher scheme.	Phase 2 - (ongoing until Sep 2023)

Stakeholders involved	
Name of Organisation	Role in Action Plan
AdN (Walloon Digital Agency)	Implementing body of the Walloon Digital Strategy
Le Forem (regional Agency for Employment and Vocational Training),	Sub-Action 2

Transversal Projects Directorate – Walloon Public service	Sectors of the policy making organising involved (with different roles) in the Industry of the Future" programme
Office of the Minister for Employment and Vocational Training	
Office of the Minister for Enterprise and Digital Affairs	

Risk and Contingency Plans		
Description of Risk	Level of probability (High, Medium, Low)	Description of Contingency Plan
Lack of SME participation in the new voucher scheme	Low	Participation has been high until now. Targeted communication activities will be run

Costs and funding sources	
Costs	Funding Sources
€ 10.000,00 for the implementation of 3 Workshops and peer learning sessions	Digital Wallonie – Industry of the Future" programme
Costs funding new vouchers (amount depending on number of applications / approved)	

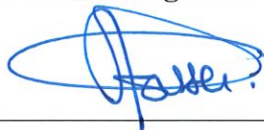
Monitoring		
Self-defined Performance Indicators		
Indicator	Target	Means of Verification
Number of adapted/new training curriculum	1 (content of voucher scheme)	Official documentation related to the adapted voucher scheme
Output Indicators		
Indicator	Target	Means of Verification
Number of consultants trained	30	Participation in the sessions
Number of companies made aware and informed of the improvement of the mission covered by the "business"	450	mailing

vouchers		
Number of companies participating in the voucher scheme, with increased human-centred dimension	100	Documentation from voucher scheme

Date 11/05/2022

Name of the organisation(s) – SPW EER-Department of Employment & Vocational Training

Signatures of the relevant organisation(s)



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