Recovery and Resilience Plans

Example of component of reforms and investments –

Equipping the workforce of today and tomorrow with the skills needed in the labour market

Disclaimer

This document was produced by the Commission services. The views expressed in this document do not commit the European Commission.

The document takes into account the Proposal for a Regulation on the Recovery and Resilience Facility (hereafter 'the Proposal') adopted by the Commission on 28 May 2020[1] and the conclusions of the European Council of 17-21 July 2020[2], the Communication on the Annual Sustainable Growth Strategy 2021 (hereafter ASGS)[3] and the Commission's Guidance to Member States on the recovery and resilience plans[4].

The document is intended to help Member States prepare their recovery and resilience plans and ensure coherence with the European flagships proposed by the Commission in the ASGS Communication[5].

The document builds on the template[6] that was issued together with the guidance to Member States on the recovery and resilience plans. Its structure is based on Part 2 of the template, where each component of the recovery and resilience plan needs to be described.Therefore, this document does not cover the information that Member States are expected to include in Part 1 (general objectives and coherence of the plan), 3 (complementarity and implementation of the plan) and 4 (overall impact) of their Recovery and Resilience Plans.

The document contains examples of reforms and investments that Member States could include under a specific component in their recovery and resilience plans, including some examples of the type of information required to describe the expected impact, to fulfil the green and digital tagging of measures and to set out the type of targets/milestones that have to be defined for each reform and investment in order to allow for the tracking of progress. The measures and the related milestones and targets mentioned in this component do not immediately imply that the costs for all elements of the measure can be taken into account as estimated costs of the recovery and resilience plan. For example, the costs for the design and launch of a new programme might be included in the estimated costs, but not the recurrent costs for running the programme.

Given the fictitious nature of these examples, the document should not be regarded as comprising an exhaustive list of the most important reforms and investments in the mentioned area. Member States may cover different and/or broader mix of reforms and investments in their recovery and resilience plans. Furthermore, the description should not be regarded as complete. More details and evidence would be expected in the actual recovery and resilience plans in order to ensure a proper assessment of the measures to be implemented.

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[1] COM(2020) 408
[2] EUCO 10/20
[3] COM(2020)575
[4] SWD(2020) 205
[5] The Commission in the ASGS strongly encourages Member States to include in their recovery and resilience plans investment and reforms in the areas of: renewables, energy efficiency, sustainable transport, broadband connectivity, digital public services, cloud capacities and skills.
[6] SWD(2020) 205 PART 2/2

PART 2: DESCRIPTION OF REFORMS AND INVESTMENTS

A. COMPONENT 1: Equipping the workforce of today and tomorrow with the skills needed in the labour market

[Please note that this example of a component is fictitious. It has been prepared by the Commission's services to provide guidance to Member States on some reforms and investments related to the European flagship 'Reskill and Upskill' that could be included in the national recovery and resilience plans.

To substantiate the intended reforms and investments, the document references specific data sources, data sets and information relating to the baseline scenario, outstanding gaps, envisaged milestones, targets, including green and digital, etc. The references provided should not be regarded as comprehensive, compulsory elements to be replicated in national recovery and resilience plans. Member States can include other/additional details and evidence to clearly describe and justify the importance and coherence of the recovery and resilience plan and its contribution to the green and digital transitions, with a view to satisfy the assessment criteria set out in Article 16 of the Proposal.]

1. Description of the component

Member States are invited to fill in the summary box below.

Policy area/domain: Skills, education and training

Objective: the objective of this component is to provide the workforce of today and tomorrow with skills in line with current and future labour market needs, including in relation to the green and digital transitions. Both 2019 and 2020 CSRs call for addressing challenges related to labour-market relevant skills, including by strengthening adult learning. The actions in this component build on the recently adopted national skills strategy and are closely linked with the national industrial strategy. They are also in line with the European Skills Agenda, the Pact for Skills, the European Education Area, the Digital Education Action Plan and the European Industrial Strategy.

Jobs and Growth: Achieving a better match between skills and labour market needs will ensure that the country's human capital is used to the fullest and will raise labour market participation, also in view of population ageing. Greater and better private and public investments in upskilling and reskilling will strengthen the innovation, competitiveness and growth potential of the economy, support the creation of new jobs, contribute to fighting social exclusion and to addressing both a shrinking working-age population and the increasing old-age dependency ratio.

Twin transition: The component will help young people and the workforce of any age to adjust to the new working methods, perform the new tasks and take up the new jobs emerging from the green and digital transitions. It will contribute to the attainment of the EU targets of equipping

70% of citizens with basic digital skills and reducing the number of students underperforming in computer and information literacy. It will also help reduce the shortage of digital experts, which is impacting business investment decisions, including by encouraging gender balance in access to skills. Investments in upskilling and reskilling for the green economy, including the development of new skills needed in the context of a low carbon economy, will support the green transition.

Social resilience: Upskilling and reskilling support school-to-work transitions, workforce adaptability, ease necessary job transitions and can prevent periods of unemployment/inactivity or reduce their length, thereby strengthening social resilience. This requires special attention to those who need training the most and often have the least access to training opportunities, including low-qualified/skilled adults and people with a migrant background. Likewise, it can help older adults to remain active on the labour market for longer. Digital skills are key to be able to access online services, remote working and distance learning – all elements that support economic and social resilience in the context of the current crisis.

Examples of reforms and investments[7]:

Reforms:

1. Creation of the legal framework for individual entitlements for quality labour market relevant training in the form of individual learning accounts.

2. New legal framework for vocational education and training (VET) aiming at updating and interlinking initial and continuing VET provision with a view to support the digital and green transitions.

3. Develop and update modules and curricula for digital skills in primary and secondary education with a focus on fundamental computing skills and digital media literacy.

4. Development of a national programme of apprenticeships in ICT, including in SMEs.

Investments:

1. Investment in adult training opportunities through inter-company training centres.

2. Setting up of seven Centres of Vocational Excellence.

3. Investing in digital equipment to support the provision of digital learning and skills in schools, VET and higher education institutions.

4. Investment in fostering the digital skills of teachers and trainers and developing digital pedagogical content.

Estimated cost: EUR XX.X million, of which EUR XX.X million (X%) are covered by RRF.

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[7] Including COFOG (General government expenditure by function) classification.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

2. Main challenges and objectives

a) Main challenges

Despite increases in the workforce skills level over time, there is still scope for further improvement. Previous reforms of the education system, including to reduce early school leaving, have increased the education levels among younger cohorts. Yet, 24% of adults and more than half of the long-term unemployed are still low-qualified with wide regional differences (some rural areas reach 60% of low-qualified). The employment rate of low qualified adults is 20 pps below that of the medium-qualified and 40 pps below that of individuals with high qualifications. At present, more than a third of the country's labour force lacks the basic digital skills required in most jobs across sectors. In addition, digital divides related to gender, socio-economic background and urban/rural areas persist.

Businesses indicate the lack of adequate skills as one of the first barriers to expansion. In the latest national entrepreneurship survey (2019), 65% of companies reported lack or inadequacy of skills among recruits as the main barrier preventing them to invest to increase the size of their business. This share has been constantly increasing (it was 58% in 2014) pointing to the existence of skills shortages, gaps and mismatches between the supply and demand of skills. Greater and better incentives are also needed, especially for SMEs and micro firms, to increase private investment in upskilling and reskilling. Only 29.9% of employees in small enterprises took part in training over the past year, in contrast to 42.9% when considering all enterprises. Support is also needed to set-up large-scale multi-stakeholder partnerships in industrial ecosystems and supply chains.

The green and digital transitions are projected to translate into specific skills shortages and mismatches. Some industrial eco-systems in the country will be particularly affected or will face particular needs. In the automotive sector, for instance, it is estimated that about X jobs will be affected by the green transition by 2030. In the energy sector, by 2050, close to XX jobs will have to be converted into new sustainable production. Furthermore, building renovation and modernisation will face a severe skill shortage whilst having a great potential for local job creation and retention. It is estimated that this could lead to up to XX new jobs, but also that XX jobs will be lost or radically changed. At the same time the digital transition is expected to negatively affect low and middle skilled jobs, especially in sectors like manufacturing or retail (reports point to 14% of jobs facing a risk of displacement by computer algorithms, and 18% in the manufacturing sector alone - and to XX million retail and wholesale jobs being at risk of displacement jointly due to the COVID-19 crisis effects and automation).

Against this background, there is a need to upgrade the skills of young people and adults to make them fit for the labour market, including on computing and informatics. Despite recent improvement, 20% of young adults aged 30-34 did not complete upper secondary education, and a further 15% have a general upper secondary education without a specific vocational or tertiary degree. Both groups are vulnerable to today's increasingly skill-intensive labour market, as shown by significantly lower employment rates as compared to VET or tertiary

graduates (x% vs y% and z% respectively). More than x% of 13-14 year olds that participated in the International Computer and Information Literacy Study did not have a high proficiency level in digital competence. Fewer than x% of students at higher education level are in the process of completing or have recently completed ICT-related programmes, only y% of which are women.

Upskilling and reskilling of adults, both in continuing VET and higher education, needs to be stepped up and updated to address the needs of the digital and green transitions. While the recently adopted national skills strategy provides the framework for better cooperation between VET providers, higher education institutions, public authorities and businesses, for it to be successful, further reforms of education and training provision are needed. Out of 217 higher education institutions in the country, open flexible courses for adults are currently available only in 37. Similarly, there is scope for stronger links between VET providers and business to meet the needs of adult learners. The offer of courses in digital skills for adult learners, both in continuing VET and higher education, is to be increased and needs updating. Moreover, green skills are still not adequately reflected in VET programmes.

While VET has an important role in providing the current and future workforce with the skills to contribute to the digital and green transitions, enrolment is declining. This can be partially explained by concerns about the quality of VET education, including in relation to general skills and participation in work-based learning or apprenticeships.

Stronger provision of digital competences needs investment into the skills of teachers and trainers at all levels of education and training. The majority of teachers in the country (54%) do not feel well or very well prepared for using ICT for teaching. While digital education is now an integral part of the initial teacher education, its content could be further widened and brought up to date with fast technological developments. A growing number of teachers participate in continuing professional development programmes on digital skills, yet only 30% of teachers regularly use digital technologies in everyday teaching practices.

b) Objectives

The component is in line with the **country specific recommendations** (CSRs) for the years 2019 and 2020, which recommended to address challenges on skills, education and training, including by strengthening adult learning. It supports the **European Flagship "Reskill and upskill".** It also contributes to the twin transition by endowing pupils, young people and adults with the skills needed to successfully manage the transition.

The general objective of this component is to ensure that our education and training system provides young people and the workforce with skills in line with the changing labour market needs. This will contribute to strengthening **labour market participation, reducing skills shortages and mismatches and improving innovation, competitiveness and growth potential**. The reduction in skills gaps and mismatches that the reforms and investments proposed in this component can bring is expected to improve **employability, productivity, wages, job quality and living standards**.

The acquisition of digital and green skills through enhanced education and training will **help the current and future workforce adjust to new working methods, perform new tasks and take up new jobs**. It will also support the economy's innovation capacity, helping the adjustment to the twin transition. Ensuring that pupils have access to quality teaching of computational thinking and computer science will importantly contribute to equipping them with the necessary digital skills from an early age, thereby benefitting the workforce of tomorrow.

Stronger initial vocational education and training **supports school-to-work transitions and equips young people with the skills they need to find good quality jobs**. Upskilling and reskilling supports workforce adaptability, eases necessary job transitions and can prevent periods of unemployment/inactivity or reduce their length, thereby contributing to **strengthening economic and social resilience**.

Enhanced adult learning will ensure adults get the training they need to be successful on the changing labour market, including by increasing awareness and reducing barriers in access to training, in particular for under-represented groups (eg. self-employed, non-standard employees, SMEs employees, low skilled, low income earners). Actions included in this component also aim at closing the gaps in the current model of predominantly employer-sponsored employee training by increasing the range of quality training opportunities and ensuring that sufficient funding for training is available.

c) **National strategic context**

[Explain how the component fits in the national strategy.]

3. **Description of the reforms and investments of the component**

The level of detail describing reforms and investments will need to be higher in the RRPs that will be submitted.

a) <u>**Examples of reforms**</u>

1. <u>**Reform 1:**</u> **Creation of the legal framework for individual entitlements for quality labour market relevant training in the form of individual learning accounts.**

Challenges

According to the most recent Adult Education Survey, only 36% of adults aged 25-64 participated in training during the past year (contrasting with the EU-level target of 50% of adults to participate in training every year). Among others, the survey pointed at a lack of awareness of the benefits of upskilling and reskilling. Individuals also faced multiple barriers in accessing training, notably costs and lack of time. This holds true in particular for groups that are currently under-represented in training participation, such as the self-employed, non-standard employees, SME employees and vulnerable groups (such as those with low education and low

income earners). This is also particularly the case for the low-qualified, who need training the most. In XX only 6% of low-qualified adults participated in adult learning. Also, the COVID-19 crisis negatively impacted adult learning participation, due to companies scaling back on expenses, as well as the containment and social distancing measures.

Financial support for individuals to participate in training is currently shared between public employment services, regional authorities, employers, social partners and a range of other stakeholders. This may also contribute to the lack of awareness on available opportunities. In addition, the absence of a legal entitlement to training leave makes it more difficult for employees to seek up- and re-skilling.

Quality assurance of non-formal training, which represents the bulk of continuing training, is to be developed. In recent years, many initiatives (either led by industrial stakeholders or education and training providers) have been adopted to support quality assurance in this field *[examples to be mentioned here]*. However, these are scattered and it is currently difficult for individuals to appropriately navigate and assess the training offer.

Guidance services play an important role in ensuring that individuals make the right training decisions in line with labour market needs. Currently, guidance services are mostly designed to support the unemployed. These services need to be strengthened for the workforce as a whole, in order to support employment and growth.

Currently, skills validation (the process of confirmation by an authorised body that an individual has acquired learning outcomes measured against a relevant standard), is limited to sectors XX and YY. A comprehensive national validation system is needed to increase the returns to training and making it easier for companies to find employees with the right skills.

Objectives:

The general objective of this reform is to address the main barriers to participation mentioned above. While it targets the entire population, it will have a specific focus on those most in need of training, i.e. the low-qualified or early leavers from education and training. It will also contribute to creating pathways for a return to education and training, in particular for early leavers and low-skilled young people.

It will develop and put in place the legal framework for continuing labour market relevant training for working-age individuals. This legal framework will streamline all up/reskilling opportunities into one framework, and complement it with guidance and validation opportunities. It will allow stepping up public funding and crowding in private investment. It will regulate obligatory contributions by the employers (e.g. as a share of the payroll or turnover), voluntary contributions still by the employers (e.g. linked to collective agreements), public contributions (e.g. in the form of top-ups on training entitlements for priority target groups, like the low skilled or the unemployed), as well as contributions by the individuals taking part in the training (e.g. through co-funding requirements depending on income levels, with full exoneration for low income groups). The precise model and level of the different contributions will be determined following a thorough ex ante impact assessment. The impact scenarios will also account for the

effects of the crisis on the private sector and for different options on the timing of the introduction of the new contributions). The impact assessment will also determine if dedicated measures should be introduced to further support take-up by groups which are currently under-represented in learning.

The legal framework will create a system of individual learning accounts, giving individuals training entitlements that can be accessed through a user-friendly digital platform. The individual entitlement (amount to be determined by the impact assessment) will be received once per year and can either be used during the year or be cumulated for a maximum of X years. Individuals will be allowed to spend their training entitlements on quality-assured training, guidance and validation.

The legal framework will set up a regularly updated national registry of quality-assured trainings (including non-formal training). It will finally introduce a right to training leave for all workers, with a specification of the conditions that need to be fulfilled. The duration and compensation of the training leave are to be determined through a thorough and comprehensive assessment to be conducted in the impact assessment study.

By giving the opportunity to everybody to participate in up- and re-skilling activities on a regular basis, this reform will ensure that our workforce has the skills needed by the labour market, including in relation to the digital and green transitions.

Implementation:

Following a targeted consultation of all the relevant stakeholders (currently already ongoing), the Ministries of Labour and Education will set up a working group to develop the legislative proposal for individual entitlements for quality labour market relevant training in the form of individual learning accounts.

The proposal will be based on an impact assessment study, coordinated by the aforementioned inter-ministerial working group. Among others, the study will map the existing financial contributions for training (public funding through public employment services or dedicated programmes, employers' contributions, etc.) and outline options on how they could be streamlined into one fund. It will map the provision of guidance and validation and analyse possible strategies to enhance its widespread use, and it will also outline and analyse existing initiatives for quality assurance of adult trainings, setting out options for a new national registry of quality-assured training.

Based on the findings of this study, the working group will then develop the legislative proposal to address all the elements laid out in the objectives above: a mechanism to share the costs for the training between the different relevant stakeholders; a right to training leave for all workers; a national registry of quality-assured trainings, guidance and validation; and the new framework for guidance and validation. The proposal will follow the national legal adoption process, and will include a public consultation.

An implementation strategy will accompany the legislative proposal. This will cover, inter alia, the development of the user-friendly digital platform to access the individual learning accounts,

guidance and validation. The strategy will also propose steps to ensure that all trainings accessed through the individual learning accounts are covered by the quality registry. Solid mechanisms for permanent monitoring, evaluation and adjustment will be put in place to ensure efficiency of spending. A communication strategy will also be developed in order to inform all training providers and those interested in accessing trainings of the requirements and benefits of the new registry. At the end of its mandate, the inter-ministerial working group will put forward a proposal on who should be put in charge of monitoring the implementation of the mechanism, either within the two Ministries or via a dedicated new Skills Agency.

State Aid:

To the extent that the reform is limited to setting up a new legal framework for individual entitlements for quality labour market relevant training, there is no transfer of public resources that could lead to an undue advantage to one or more beneficiaries. Moreover, if the training system is financed, implemented and managed by the relevant stakeholders (trade unions, employers etc.) without involvement of the State in funding decisions, there is no imputability to the State of the way in which expenditures are decided. Finally, if the system to be established benefits employees in their individual capacity with no involvement of their present employers, there would not be any direct selective advantage in favour of undertakings. On this basis, the presence of State aid is excluded.

As for the design and set up of individual learning accounts through a digital platform, the proposed measure will be implemented following public procurement rules (open, transparent, non-discriminatory and unconditional tender) and sound financial management principles. This should ensure that the State will pay market prices for the services procured, and thus no State aid would be granted.

Target population: All working-age adults legally residing in the country.

Timeline: The new law will be adopted in T + XX months from the adoption of the RRP.

2. **Reform 2: New legal framework for vocational education and training (VET) aiming at updating and interlinking initial and continuing VET provision with a view to support the digital and green transitions.**

Challenges

The responsiveness of VET to emerging skills needs supporting the green and digital transitions is to be strengthened. Sectors X and Y (e.g. tourism), which occupy a large share (X% and Y%) of the country's working-age population, have been hard-hit by the COVID-19 crisis, with job losses expected especially in sector Y and a need to re-orient displaced workers to other sectors. Also, some industrial eco-systems in the country will be particularly impacted by the green and digital transitions, while new jobs will be created in other sectors and working methods will have to adapt more widely across the economy. In the automotive sector it is estimated that about X jobs will be affected by the green transition by 2030. In the energy sector, by 2050, close to XX

jobs will have to be converted into new sustainable production. The digital transition is expected to impact more significantly on low-skilled jobs in sectors X and Y, while raising the demand for high-skilled workers.

VET graduates' exposure to work-based learning (XX%) has proved to enhance the labour market relevance of VET programmes and needs to be strengthened from current levels. Vulnerable groups have a higher likelihood to drop out before graduating. Gender differences are substantial, with women being less likely to have a VET degree, and those who have a VET degree specialising in different fields than men. In 2017 women represented only 10.2% of learners in the field of engineering, manufacturing and construction, or 14% in the field of information and communication technologies (compared to 13% and 16% in the EU-27). On the other hand, 83% of learners were women in the field of health and welfare. Ensuring enhanced VET quality through the new legislative framework is expected to generally raise its attractiveness, ease access for vulnerable groups, such as people with disabilities, low-skilled persons, minorities, people with migrant background and people with fewer opportunities because of their geographical location and/or their socio-economically disadvantaged situation and address gender-related and other types of stereotypes. Traditionally, VET programmes were seen as preparing individuals for jobs in medium-skilled occupations. However, there is an increasing demand for advanced vocational skills which can be satisfied through the expansion of VET qualifications at higher levels (EQF 5-8), particularly in the areas of ICT and engineering for the green and digital transitions.

The COVID-19 outbreak has put the resilience of our VET system to a test. Practical learning (work-based learning / apprenticeships) was suspended in most sectors. The new law will explicitly recognise the possibility to provide, where appropriate, the work-based component of VET programmes using new technologies (eg. simulators or virtual or augmented reality).

The reform of the key competences component of VET programmes, and on the pathways for reintegration into VET, will be implemented in coherence with the RRP component on Education and Training System Reform.

Objectives:

The new legislative framework will ensure enhanced VET quality in order to support a better match between the skills of the workforce and the skills companies need, also in light of the twin transitions. It is expected to raise VET labour market relevance and flexibility, eventually increasing its attractiveness with beneficial effects for the labour market and the economy.

This new legislation will:

- Increase the legal autonomy of VET providers regarding cooperation with external partners, the curricula and human resources management.
- Restructure the design of VET programmes and qualifications on a modular basis (allowing to build qualifications from interchangeable „building blocks" of learning outcomes). This allows making the qualifications more relevant for the labour market,

simpler to adjust in the future and easier to connect the provision for young people (initial VET) with that for adults (continuing VET).

- Regulate sector-specific modules on green and digital skills for VET programmes (while general digital and green modules will be added across all VET programmes).
- Define an obligation for VET programmes to include work-based learning to better match the skills of the workforce with those the companies need.
- Facilitate access to VET for both young people and adults (e.g. enrolment at any time of the year) with a specific focus on vulnerable groups, addressing gender-related and other types of stereotypes.
- Redesign pathways for reintegration into VET, including through second chance programmes.
- Define financial and non-financial incentives to set up national or regional "Pacts for Skills" in specific sectors, industrial ecosystems or clusters.[8]
- Update the provisions for continuing professional development of VET teachers and trainers, notably in the field of digital tools and training of adults.
- Strengthen international cooperation in VET, including a future VET internationalisation strategy with a strong mobility component for learners, teachers and trainers.
- Strengthen quality assurance mechanisms in VET, including through an accreditation system of public and private VET providers for continuing VET, with a public database for accredited continuing VET programmes.
- Recognise the digital provision of VET by certified VET institutions, including the work-based part of programmes delivered via tools such as simulators, virtual and augmented reality.

Implementation:

National requirements for legislative work will be followed in full. An inter-ministerial working group will be set up between the Ministry of Labour, the Ministry of Education and the Ministry of Economy to prepare the draft VET legislation. The working group will hold consultations with representatives from VET providers, social partners, chambers of commerce, business, local authorities, student organisations and other stakeholders to reflect all relevant views while preparing the draft legal proposal. It will take into account the needs of SMEs. The legal text will also foresee a monitoring and evaluation strategy as well as tools to support outreach and awareness raising. Once the legal text is ready, a public consultation on the new legal framework will be launched.

The Ministry of Labour and Education will establish two new sector skills councils (1. Green and 2. Digital) in line with the Law on Qualifications adopted in 2018. The sector skills councils will be in charge of designing sector-specific digital modules (in sectors X, Y and Z) and sector-

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[8] They will consist of large-scale partnerships of employers, worker representatives, higher education institutions including universities of applied sciences and polytechnics, VET providers, other stakeholders and public authorities and work on concrete commitments to improve skills anticipation, develop training, industry-based certification programmes and digital tools, offer relevant training, as well as work-based learning opportunities and apprenticeships.

specific green modules (sectors W, H and K). These modules will then be deployed across all VET curricula in line with the new legislation, after consultation with the other relevant sector skills councils. These modules are free to use by public and private providers, in particular for upskilling and reskilling programmes of adults. The green and digital sector skills councils will actively cooperate with all relevant stakeholders within national / regional / sectoral "Pacts for Skills" partnerships, set up through the new VET legislation, as well as the National Coalition for Digital Skills and Jobs to promote and support the implementation of the new modules.

State Aid:

As the reform is limited to setting up a new legal framework for VET, there is no transfer of public resources that could lead to an undue advantage to one or more beneficiaries. On this basis, the presence of State aid is excluded.

As regards the financial and non-financial incentives to set up national / regional / sectoral "Pacts for Skills", they aim at facilitating framework agreements and partnerships between several stakeholders, upstream of any actual service provision on the market for training. As such, it appears that the incentives would not aim at conferring an advantage on (specific) undertakings carrying out an economic activity, thus excluding State aid.

In addition, in order to avoid aid to training providers, they will be selected via open and transparent procedures and the advantage, if any, will be passed on entirely to the final beneficiaries, i.e. those receiving the training.

In case of direct funding of training actions for selected sectors or undertakings, public funding may constitute State aid but be exempted from notification if granted in conformity with the General block exemption Regulation (GBER; it applies to aid which does not exceed EUR 2 million per training project – it shall not be granted for training which undertakings carry out to comply with national mandatory standards on training). If the measure constitutes State aid and does not meet the GBER conditions, State aid clearance will be sought following a notification to the Commission.

Target population: VET providers, employers including SMEs, VET teachers and trainers, VET learners (young people, working-age adults), general and higher education institutions, social partners, businesses, industry, research institutes.

Timeline: The new law will be adopted in XX months from the adoption of the RRP.

3. **Reform 3: Develop and update modules and curricula for digital skills in primary and secondary education with a focus on fundamental computing skills and digital media literacy.**

Challenges:

At this moment, digital competences in primary education are addressed as a cross-curricular theme. They are covered as an optional course at lower secondary level and are a compulsory subject in upper-secondary education. However, there is a need for more focus on foundational

knowledge, i.e. informatics and computer science, at all levels, including upper secondary. Only x% of last year secondary education pupils have received some training in coding and the overall level of basic digital skills of pupils remains low in both general and VET schools. This negatively affects the readiness of the workforce of tomorrow for the digital transition, and does not encourage the choice to continue further ICT studies. Although girls performed better than boys in digital skills in the International Computer and Information Literacy Study (ICILS) international skills tests, they veer away from STEM subjects with age.

Objectives:

The objective is to introduce a comprehensive approach on acquiring digital competences in general and VET schools, based on the Digital Competence Framework, through integration of informatics and computer science in curricula and covering all areas: information and data literacy; communication and collaboration; digital content creation; safety and problem solving. This will help equip students with basic digital skills as well as transversal skills such as media literacy, creativity and critical thinking to allow young people become active and creative users of digital technologies. It will lay the foundations for programming skills from a young age and foster further interest in ICT study fields and careers.

This component will also contribute to the Reskill and Upskill Flagship goal of 70% of citizens with basic digital skills and to reduce the share of 13-14 year old students who underperform in computer and information literacy to under 15%.

This reform will be implemented in coherence with the RRP component on Education and Training System Reform, which introduces a national programme to digitise education.

Implementation:

- The qualifications authority will set up stakeholder and expert working groups in order to develop modules for digital competences as a cross-curricular theme at all education levels starting from primary education.
- The qualifications authority will set up stakeholder and expert working groups to develop the curricula and introduce the teaching of digital competences as an obligatory subject from year 5.
- The qualifications authority will set up stakeholder and expert working groups to develop optional courses in advanced computing at lower and upper secondary level.
- The Ministry of Education will propose changes to the legal framework to introduce the modules and ICT as an obligatory subject across lower and upper secondary level, with a stronger focus on programming. To ensure these changes are coherent with the national curricula, they will be implemented in parallel with the RRP component on Education and Training System Reform.

Monitoring, evaluation and revision of the new modules and programmes will be ensured using the standard qualifications authority procedures [*insert brief description of the national arrangements*].

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

State Aid:

Given that there is no transfer of public resources, the presence of State aid is excluded.

Target population: primary and secondary education students.

Timeline: To be completed by the end of 2024.

4. **Reform 4: Development of a national programme of apprenticeships in ICT, including in SMEs.**

Challenges:

There is a need to support the youth in entering the labour market (the number of young people not in employment, education or training stands at X%, well above the EU average of y%; young graduates still looking for a job after K months from graduation). Apprenticeships support the school-to-work transition by enriching curricula with valuable on-the-job experience, which is sought by companies when recruiting young people, and by more generally fostering employability. Apprenticeships can also play an important role in the labour market integration of adults, yet only X% of apprentices are adults.

A significant share of companies (XX%) which tried to recruit ICT specialists reported difficulties in filling such vacancies. There is significant scope for improvement in particular with regard to gender balance: women only hold 12% of tech sector jobs (compared to the 17% average EU-wide). Apprenticeships can provide an additional tool for companies to train potential future employees in this specific domain and therefore help addressing this skills gap.

Objectives:

This reform aims at setting up a national programme of apprenticeships in ICT to support young people and adults who have followed digital skills training in gaining work-based experience in ICT applications. The programme will respond to certain requirements (in terms of duration and content for instance) set out by the Ministry of Labour in consultation with other responsible departments, social partners, VET providers and employers, and in close cooperation with ICT companies. It will lead to a certification upon completion to ensure the experience gained is easily recognisable by other employers and in other Member States. The programme aims at validating learning and digital skills acquired before through non-formal and informal learning.

By complementing digital skills with valuable on-the-job training in the use of ICT applications, the twin objective is achieved of raising the employability of the participants and easing school-to-work and job-to-job transitions, and allowing companies (including SMEs) to train future workers on relevant ICT applications. The programme is expected to be run on a national basis and focus in particular on increasing the participation of women and disadvantaged groups. Once in place, it is estimated that XX apprenticeships in ICT per year could be offered.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

Implementation:

- The Ministry of Labour organises consultations with employers' organisations, trade union representatives and VET providers, in close consultation with ICT companies, to gather expert views on the design of the programme.
- The programme is developed by the national qualifications authority, establishing a minimum level of digital literacy requested to access it and means admitted to prove it, taking into account non-formal/informal learning.
- Ministry for Labour to launch call for companies to indicate their interest to be listed among those participating in the programme.
- Ministry of Labour to launch call to set up a user-friendly web portal where all participating companies can have access and post their digital apprenticeship offers. Interested candidates will be able to apply directly through the portal. The Ministry for Labour will ensure maintenance of the portal.
- Ministry of Labour will launch a public campaign for the promotion of the new digital apprenticeship programme, with a focus on women and disadvantaged groups.
- The apprenticeship programme will be fully integrated into Youth Employment offers under the Youth Guarantee.
- The programme will include a quality assurance mechanism and an evaluation process launched 12 months following the start of the programme.

State Aid:

Given that there will be no transfer of public resources, that all companies can indicate their interest to participate in the programme and that the measure would be addressed directly to citizens to increase their digital literacy levels, the presence of State aid is excluded. Subsidies granted to individuals (non-employees) or general measures open to all enterprises do not constitute State aid.

In case there would be transfer of public resources, and in order to avoid aid to training providers, it will be ensured they are selected via open and transparent procedures and that the advantage, if any, is passed on entirely to the final beneficiaries, i.e. those receiving the training.

Target population: youth population; adults; companies, including SMEs.

Timeline: Programme design to be finalised and call for interest by companies to be launched in Q2 2021. Web portal to be made operational as of Q3 2021.

5. <u>**Investment 1:**</u> **Investment in adult training opportunities through inter-company training centres.**

<u>Challenges:</u>

The limited participation in up- and re-skilling in SMEs limits their innovation capacity and competitiveness. This is closely related to the challenge of participation in adult learning: even though 36% of adults took part in adult education last year, the rate was particularly low (29.9%) for small and medium enterprises.

SMEs are facing several interrelated challenges in this regard, including lack of financial resources related to the cost of training and the loss of revenue for the time spent in training. SME managers may also lack the time to search and organise learning opportunities. This results in a smaller capacity of SMEs to benefit from up- and re-skilling, and limits their readiness to successfully face the green and digital transitions.

Part of the supply constraints also consist in insufficient flexibility in schedule and location of the trainings. This increases the opportunity costs of participating. Additionally, the content of training are often not in line with the needs of companies and their employees. In particular, it is difficult for companies to provide state-of-the-art training on all the job-specific skills that evolve very rapidly.

<u>Objectives</u>:

This investment will strengthen the training opportunities for adults in the country, with a particular focus on SMEs. It will establish local or regional inter-company training centres to address the challenges mentioned above by offering SMEs support with 1) HR management in relation to skills, 2) access to information on upskilling needs and opportunities, and 3) a tailored training offer. The objective is to establish XX inter-company training centres. They will provide quality end-to-end support to SMEs employees in the X, Y region or in the X, Y industrial ecosystem.

The inter-company training centres will offer a comprehensive approach that matches the demand for skilled profiles through targeted end-to-end training. They will identify the companies' needs in terms of skills and their intentions to hire; identify and assess candidates; design targeted short training programmes; deliver training, and provide guidance/mentoring linked with job placement in cooperation with public or private employment services; support with tracking/monitoring and evaluation.

The investment will cover infrastructure and equipment, as well as new digital teaching and learning methodologies, programmes and modules, and trainers' professional development (including engagement of experts from large companies). Through their shared governance structure including sectoral organisations, public authorities and large companies in the region/industrial ecosystem the centres will offer flexible training to match the skills needs of companies.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

The action will also support the adaptation/transformation of large company training centres into inter-company centres open to SMEs in the value chains of the industrial ecosystems. These centres should be also supported in joining the sectoral ''Pact for Skills'', which will be developed in 2021 following its launch on 10 November 2020.

Implementation:

- The national Agency for Enterprise Development (supervised jointly by the Ministries of Education, Labour and Economy) will be mandated to define (in cooperation with the Sector Skills Councils and the inter-ministerial expert group with representatives of ministries X and Y) the call for setting up the inter-company training centres.
- The Agency will launch the call for VET providers, large companies and SMEs (or their partnerships) to develop and manage inter-company centres. The call will lay out:
  o the sectors/areas where the centres should be developed as a priority (in line with regional/national needs) and
  o additional tasks they should implement (among others, all centres will need to support the acquisition of digital skills).
- The beneficiaries will be tasked to develop the inter-company training centre/s (including the infrastructure); regularly identify companies' needs in terms of skills and their intentions to hire; identify and assess candidates (learners); design targeted short training programmes; deliver training, and provide guidance/mentoring linked with job placement in cooperation with public or private employment services; support with tracking/monitoring and evaluation.

State Aid:

Specific training programmes for skills needed in designated sectors or companies may involve State aid to undertakings but be exempted from notification if granted in conformity with the GBER (Article 31 GBER applies to aid which does not exceed EUR 2 million per training project – it shall not be granted for training which undertakings carry out to comply with national mandatory standards on training). Since the beneficiaries would be SMEs, the maximum aid intensity can go up to 60% of the eligible costs (for medium-sized enterprises) and 70% of the eligible costs (for small enterprises). If the measure constitutes State aid and does not meet the GBER conditions, State aid clearance will be sought following a notification to the Commission.

Inter-company training centres will be selected following public procurement rules (open, transparent, non-discriminatory and unconditional tender) and sound financial management principles, thereby ruling out the presence of State aid to these centres.

Target population: companies, particularly SMEs; people of working age, with focus on SMEs employees; VET providers; regional and local authorities; sectoral organisations; employment services, chambers; social partners.

Timeline: Establishing the governance structure by QX 2021. Launch of the first centres by QX 2022.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

6. <u>**Investment 2:**</u> **Setting up of seven Centres of Vocational Excellence.**

Challenges:

The reform of the VET legislative framework will set the foundation for higher quality VET, more labour market relevant and adapted to the green and digital transitions. The comprehensive nature of the reforms creates a need for regional level support to VET providers and partners. There are two particular challenges.

First, the reform introduces a number of new concepts for which the schools will need support. The modular approach to programmes, greater school autonomy and more flexible delivery of programmes (enrolment at any time of the year), all create significant organisational challenges. This creates a need, in addition to the support provided at the national level, to provide peer advice in a regional VET provider reference centre.

Second, the VET reform envisages stronger contacts with VET partner organisations, such as employers, innovation centres or trades. Moreover, individual schools rarely have sufficient resources to manage the placement of their pupils, just as SMEs would not have sufficient resources to maintain regular contacts with many different schools. A regional centre for a "skills ecosystem" that can build and maintain a network of VET schools, employers and stakeholders in particular sectors is very useful for this purpose.

In order for VET to provide high-quality skills and competences for an innovative, digital and sustainable economy, VET centres must collaborate with high-technology businesses, academia, research organisations and SMEs. To ensure an efficient use of resources, these centres should be established at the regional level and bring together the best capabilities in a particular sector.

Objectives:

Centres of Vocational Excellence (CoVE) can address the above mentioned challenges by acting as hubs bringing together partners[9] that co-create regional "skills ecosystems" adapted for the digital and green transitions, to the benefit of the regional community, contributing to economic and social development, innovation, and smart specialisation strategies in the region. The CoVEs will, in particular, serve as reference points in their regions for the digital provision of VET, including the work-based part of programmes delivered via tools such as simulators, virtual and augmented reality (introduced through reform 1).

Investments will help establish the seven CoVEs and support the initial set-up of the innovative elements required for their operation. The investment will cover infrastructure and equipment (e.g. new learning facilities, laboratories for applied research projects, incubators for start-ups of VET learners, simulators, IT tools and instruments), as well as intangible investments such as

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[9] These partners include initial and continuing VET providers, higher education institutions including universities of applied sciences and polytechnics, research institutions, science parks, innovation agencies, companies, chambers and their associations, social partners, social enterprises, sectoral skills councils, professional/sector associations, national and regional authorities and development agencies, employment services, qualifications authorities, as well as social inclusion and reintegration organisations.

new digital teaching and learning methodologies, programmes and modules, and teacher and trainer professional development, particularly in the light of supporting the twin transition.

The RRF funding will complement national and regional funding (as part of VET provision), and also create the conditions for attracting fresh private investment in VET through the provision of services to local companies within the innovation hub. The CoVEs will also attract in-kind and financial contributions from partners, and participate in competitive calls, including at EU level (e.g. Erasmus+). The RRF funding will be used in particular to support disadvantaged groups and addressing the gender bias in access to programmes.

The objective is to establish seven Centres of Vocational Excellence in regions X, Y and Z. They will provide systemic reference points for sector-specific training for initial and continuing VET, as well as for national and international cooperation on best practices, applied research projects, and the exchange of VET learners, teachers and trainers. The CoVEs will ensure provision of high-quality vocational skills, support to entrepreneurial initiatives of their learners (e.g. through incubators), diffusion of innovation, and they will act as knowledge and innovation hubs for other VET schools and for companies (particularly SMEs).

Developing digital platforms for teaching and learning can reduce overall VET provision costs, and initial investments for infrastructure and equipment for applied research projects, has the aim of developing a new set of services, that if effective provide an added value to the business environment which can be self-financed in the future, i.e. once companies value the service that has been set-up they should be willing to contribute to its further development.

Through their shared governance structure, CoVEs will be closely embedded in the local innovation ecosystems, acting as catalysts for local business investment and ensuring supply of high-quality skilled workers that will support the digital and green transitions. They will offer flexible training matching the skills needs of companies in their regions.

Implementation:

- The specifications for a call of interest for the Centres of Vocational Excellence will be adopted by Q1 2021. Focus will be put on future-proof technology adaptation (e.g. batteries, hydrogen, connected and automated technologies, industry 4.0, new entrant technologies and new business models). The call will detail the mission and activities of the Centres. The model is already under development in a dedicated stakeholder committee, based on a pilot CoVE project funded by the Erasmus+ Programme.
- The call for interest will be launched for regional authorities to put forward proposals, together with local VET providers, for setting up CoVEs, indicating proposed location, the type of skills ecosystem the initiative would target, partners that would join the initiative, type of activities envisaged for the Centre, as well as synergies with the EU initiative on CoVEs. Structural mechanisms for monitoring and evaluation will have to be embedded in the projects.
- An inter-ministerial committee with the Ministries of Labour, Economy and Education will be set up to scrutinise the proposals and select the best proposals.
- The selection of the proposals will be finished by QX 2021.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

State Aid:

As CoVEs would generally not perform economic activities, State aid rules would not apply at the level of the entity operating the CoVE insofar as it does not perform economic activities. If the skills to be developed are of general application and/or participants are not enterprises, there are no State aid concerns either. Specific training programmes for skills needed in designated sectors or companies may involve State aid to undertakings. In that case, the GBER conditions will be met, or otherwise the measure will be notified to the Commission for individual assessment.

Target population: VET providers; companies, including SMEs; VET learners; research centres; regional and local authorities; employment services, chambers; social partners.

Timeline: A call for interest will be launched by QX 2021 for regional authorities to put forward proposals for CoVEs. "W" number of CoVEs will be created in major urban centres within X months of the launch of the call with a particular focus on green urban development, and a further Z in regional centres by the end of 202x associated to the regional industrial cluster strategies.

Investment 3: Investing in digital equipment to support the provision of digital learning and skills in schools, VET and higher education institutions

Challenges:

X% of the workforce have very low levels of basic digital skills, which makes them vulnerable to the digital transition. More than 50% of the adult population can carry out only the simplest set of computer-based tasks (e.g. writing an email or browsing the web), or have no digital skills. There is a lack of ICT and data analyst graduates.

In order to provide digital skills learning, education and training institutions need access to digital equipment and connectivity. A number of schools, VET and higher education institutions still lack adequate digital equipment. Currently only one third of students attend schools for which their principal considered the availability of digital devices sufficient (OECD, PISA). In addition, VET was particularly affected by the COVID crisis and faced difficulties in maintaining the work-based learning part in companies, without alternative digital solutions in place yet.

Objectives:

The investment will support the purchase and installation of digital equipment and software and initial-operation training. Institutions at all levels of education and training (primary and secondary schools, higher education institutions, adult learning institutions – including VET providers and other entities involved in work-based learning, e.g. business organisations, trades and crafts associations) will be eligible for the investment for the purpose of supporting training. This will enable these institutions to strengthen the digital content of their programmes providing their learners with the digital skills that are necessary to succeed in the labour market and fully

participate in society. A special focus will be placed on investing in the digital infrastructure of education and training providers in disadvantaged areas, including rural areas.

Implementation:

X% of total financing will be divided among the regions proportionally to the number of schools and VET providers and Y% will go to higher education institutions. A Z% will serve as a top-up for institutions in disadvantaged areas, which will be identified at the national level on the basis of GDP per capita below W%.

For schools and VET providers, the regions – which are legally in charge of disbursing the funds - will draw the lists of all eligible education and training providers and ensure a swift allocation of funds. X% of the investment will be allocated to lump sums for entities providing work-based learning and apprenticeships for the purchase of digital equipment necessary for training.

Since higher education institutions are autonomous in operating their budgets, the Ministry of Education will disburse investments as lump sums.

Investments improving the digital equipment of education and training providers will be complementary to the same type of investment financed by the European Social Fund Plus in other segments of the education and training system *[explain the division of interventions between the different funds]*. Technical specifications for the digital equipment investment will follow the criteria set in the national Digital Education and Training Strategy adopted in 2019.

State Aid:

Generally no presence of State aid. For higher education, no State aid involved if the higher education institutions are part of the public education system and financed mainly by the State, as this would not constitute an economic activity subject to State aid rules. The amounts of the lump sums will not exceed EUR 200 000 per beneficiary (schools, VET providers, higher education institutions, adult learning institutions) over any period of three fiscal years (including other types of support for the same eligible costs), so they will be *de minimis* and thus deemed as no aid.

Entities providing work-based learning and apprenticeships will be eligible for a lump sum investment for purchase of digital equipment necessary for training. The lump sum will not exceed EUR 200 000 per beneficiary over any period of three fiscal years, including other types of support for the same eligible costs.

Target population: schools, VET providers (schools, adult learning institutions), higher education institutions, entities involved in work-based learning.

Timeline: to be implemented gradually by end 2023.

7. **Investment 4: Investment in fostering the digital skills of teachers and trainers and developing digital pedagogical content.**

Challenges:

The rapid expansion of distance learning during the COVID crisis accelerated the use of digital tools to temporarily replace traditional teaching. A more systematic use of digital technologies for teaching and learning can also be expected in the longer term. Yet, teachers and trainers often have limited experience in using digital pedagogical sources in an innovative way, for example to promote collaboration and creativity, and support interest in ICT irrespective of gender. The 2018 TALIS survey showed that teachers are not adequately prepared to use online tools for distance learning (x% expressed need for additional ICT training). Teaching practical components in VET has been a particular challenge. This requires more focus on the professional development of teachers, trainers and school leaders, and a strategic approach to technology integration in education, suitable curricula and assessment approaches and the development of digital pedagogical content.

Teachers and trainers play an essential role in supporting the take-up of ICT careers for girls. Although girls performed better than boys in digital skills in the International Computer and Information Literacy Study (ICILS) international skills tests, only 29% have taken up ICT programmes in tertiary education.

Objectives:

The objective is to boost the digital skills and competences of educators in all sectors of education and training. The action will revise the curricula of initial and continuing teacher education, building on the European Framework for the Digital Competence of Educators (DigCompEdu). The action will also implement a large-scale continuing professional development (CPD) campaign for teachers, trainers, educators and school leaders and support the digital capacity building of schools, VET providers and higher education institutions. For VET, this includes the skills to use digital tools such as simulators, virtual / augmented reality and artificial intelligence. The investment will also support the development and sharing of digital pedagogical resources on an online platform.

To ensure stronger gender balance, the programmes will also provide the competences teachers and trainers need to engage, motivate and inspire female pupils to consider further studies or careers in the digital sector.

Implementation:

The qualifications authority will set up a stakeholder and expert working group (including university representatives) which will be tasked to update the curricula for initial and continuing teacher education.

In line with the legal regulations, the CPD campaign for teachers, trainers, educators and school leaders will be implemented by the regional teacher training institutes. The funding will be provided directly to these institutes, with the beneficiaries being the staff of school and VET

providers in their region. The campaign will provide upskilling of teachers and trainers in digital skills according to the new curricula. In the future, after the end of RRF financing, CPD programmes will be offered as part of the regular CPD schemes for teachers and trainers funded from the national budget.

For continuing professional development and digital capacity building in higher education, in line with the legal provisions on higher education, the Ministry of Education will allocate a lump sum to each institution. The lump sum will not exceed EUR 200 000 per beneficiary over any period of three fiscal years, including other types of support for the same eligible costs.

The development of online pedagogical resources will be supported through an open, transparent and unconditional tender, coordinated by the Ministry of Education. These resources will be available to all providers through a newly established online platform procured by the Ministry. The platform will also provide online courses for teachers and trainers and support them through sharing of experiences and expertise (so-called i-coaches[10]).

The European Social Fund Plus will provide complementary investment in improving the quality, inclusiveness and effectiveness of education and training systems through developing of teacher and trainer competences beyond digital skills as well as developing monitoring and evaluation of education and training. The European Regional Development Fund will additionally provide relevant infrastructure and equipment *[explain the division of interventions between the different funds]*.

State Aid:

Generally no presence of State aid. The amounts of the lump sums will not exceed EUR 200 000 per beneficiary (school, VET provider or higher education) over any period of three fiscal years (including other types of support for the same eligible costs), so they will be *de minimis* and thus deemed as no aid.

Target population: Teachers, trainers, educators; schools, higher education institutions, adult learning institutions; organisations involved in developing pedagogical content; publishers.

Timeline: The investment should be implemented gradually by end 2023.

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[10] The platform will support the work of I-coaches, who support teachers and trainers to build the bridge between ICT and education, fostering the improvement of digital skills and the creation of a learning community among teachers and trainers.

4.   **Green and digital dimensions of the component**

a) Green Transition

The (proposed) Regulation COM(2020) 408 establishing a Recovery and Resilience Facility sets a binding target of at least 37% of the plan's total allocation to contribute to the green transition or to the challenges resulting from it[11].

The proposed measures will ensure the continuous adjustment of skills of the workforce and provide, on an ongoing basis, the right skills to accompany the green transition. This includes the capacity to adjust to changing working methods and practices in current jobs as well as to take up new jobs the transition will create. Upskilling and reskilling of people for green jobs can help speed up the transition to a climate neutral economy.

While traditional sectors X and Y are expected to be particularly affected by the green transition, new occupations will be emerging in sectors such as renewable energy, building renovation, circular economy and sustainable construction, for example, with an increasing demand for new job profiles such as specialists in deep building renovation, installers for advanced technological solutions, or Building Information Modelling managers. Occupational groups for which the transition will considerably change the task profiles include but are not limited to construction workers, electro-engineering workers, drivers and vehicle operators, retail and wholesale workers, farmworkers, machine and plant operators, other manufacturing workers, handicraft and printing workers, production and specialised services managers, researchers and engineers, science and engineering technicians as well as investment and (re) insurance, green finance.

High-quality and adaptable vocational education and training is essential for giving the working-age population a relevant and timely setting for developing, maintaining, and changing the skillset enabling them to face the challenges and exploit the opportunities that come with the green transition. This contributes to making such transition just and ensuring wide support for it. The component will enhance the green skills required in existing businesses that will be transformed through emerging circular systems and low carbon technologies, and develop new skills for circular business models (e.g. remanufacturing, repair, re-use, services and dematerialisation). *[On the basis of Table 1, describe what % climate and environmental expenditures are comprised in the component. Where relevant, provide more details on how the expenditures of each investment/reform relate to the climate target and broader environmental objectives, including an explanation for the intervention fields chosen in Table 1].*

In addition, the proposed measures contribute to the green transition, taking into account the six environmental objectives as defined in Regulation (EU) 2020/852 (Taxonomy Regulation). *[Provide more details, justification and evidence on how exactly the measures contribute to the environmental objectives as defined in Regulation (EU) 2020/852 (Taxonomy Regulation)].*

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[11] Communication COM(2020)575 on the Annual Sustainable Growth Strategy 2021 sets out a climate target of 37% for each national Recovery and Resilience Plan, to follow the commitment of the European Council of July 2020. This is reflected in the 7th compromise proposal put forward by the German Presidency on the proposal for a Regulation COM(2020)408 as a Council negotiating mandate.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

There are clear commitments and mechanisms in each of the reform and investment to ensure that the *do no significant harm* principle is respected and effectively implemented for the other environmental objectives as defined in the EU Taxonomy Regulation. *[Further details, evidence and justification needed to explain how each reform/investment relates to the 'do no significant harm' principle defined in Regulation 2020/852 (Taxonomy Regulation).]*

b) *Digital Transition*

The (proposed) Regulation COM(2020) 408 establishing a Recovery and Resilience Facility sets a binding target of at least 20% of the plan's total allocation to contribute to the digital transition or to the challenges resulting from it[12].

The digital transition is supported by the majority of reforms and investments in this component. Higher levels of digital skills are a key pre-condition to support the digitalisation of the economy (and the related increase in innovation capacity and productivity) and of the public administration (with related efficiency gains). Ensuring a wide access to digital skills is a necessary precondition to support the inclusive nature of the transition. Greater investment in digital equipment is instrumental as envisaged in some of the actions proposed, with a particular attention to disadvantaged areas that need support to improve their digital capacity.

Access to digital learning environments will be aligned with the government-wide introduction of the e-ID initiative, presented in the public administration component.

By comprising X% digital expenditures (see Table 1 below) this component contributes significantly to the 20% digital target set out in Article 15(3)(c) of the (proposed) Regulation COM(2020) 408 *[where relevant, provide more details on how the expenditures of each investment/reform relates to the digital target, including an explanation for the choices made in Table 1, in particular if you choose to increase the coefficients for support to the digital objective from the values set out in Annex III of the (proposed) Regulation COM(2020) 408 as amended by Council].*

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[12] Communication COM(2020)575 on the Annual Sustainable Growth Strategy 2021 proposes setting a 20% digital target for each national Recovery and Resilience Plan. This was endorsed by the European Council of 1-2 October. It is reflected in the 7th compromise proposal put forward by the German Presidency on the proposal for a Regulation COM(2020)408 as a Council negotiating mandate. See Article 15(3)(c1) which sets out the 20% digital target, based on a methodology for digital tagging set out in Annex III.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

[Please fill in Table 1 from the template on the contributions of the measures to the green and digital transitions. Please note that when relevant investments/reforms contribute to the mutually reinforcing goal of the twin transition, Member States can simultaneously associate those to both one green intervention field and one digital intervention field. The table is only provided for illustrative purposes and does not reflect the ongoing work for the definition of a common methodology to track digital expenditures.]

Table 1. Green and digital impact

Please indicate if 0%, 40% or 100% of the reform/investment contributes to the objective. For reforms/investments and the climate objective, Member States should use the methodology for climate tracking applied for cohesion policy funds, in particular as set out in Table 1, Table 4 and Table 6 of Annex I to [Common Provision Regulation COM(2018) 375] and justify their choice, in particular for reforms. For reforms/investments and environmental objectives, they are invited to follow the same methodology. In both cases, please indicate the relevant intervention field for every reform/investment by choosing the most appropriate one. If several ones can be applied, the Member State should motivate why they choose the selected one. For green objectives, Member States are invited to indicate that the do not significant harm (DNSH) principle is respected defined in Regulation 2020/852 (Taxonomy Regulation).

Short title	Green objectives				Digital objectives		Transition challenges	
	Climate Tag	Environmental Tag	Intervention fields	DNSH			Green	Digital
Reform 1: Create the legal framework for individual entitlements for quality labour market relevant training in the form of individual learning accounts	0%	0%	103	yes	0%			
Reform 2: New legal framework for vocational education and training (VET) aiming at updating and interlinking initial and continuing VET provision with a view to support digital and green transitions	0%	0%	016	yes	40%			
Reform 3: Develop and update modules and curricula for digital skills in primary and secondary education with a focus on fundamental computing skills and digital media literacy	0%	0%	108	yes	100%			
Reform 4: Development of a national programme of apprenticeships in ICT, including in SMEs	0%	0%	108	yes	100%			
Investment 1: Investment in adult training opportunities through inter-company training centres	0%	0%	109	yes	0%			
Investment 2: Setting up of seven Centres of Vocational Excellence	0%	0%	016	yes	40%			
Investment 3: Investing in digital equipment to support the provision of digital learning and skills in schools, VET and higher education institutions	0%	0%	012	yes	100%			
Investment 4: Investment in fostering digital skills of teachers and trainers and developing digital pedagogical content	0%	0%	108	yes	100%			

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

5. **Milestones, targets and timeline**

Member States are invited to indicate those milestones and targets that will reflect the progress on implementing reforms and investments and will be tied to disbursements.

Examples of milestones and targets to measure progress in implementation:

Reform 1

- Publication of impact assessment study on the new legal framework and the result of the stakeholder consultation by: QX 2021.
- Adoption of the implementation and communication strategy on quality assurance by: QX 2021.
- Adoption of the new legal framework by: QX 2022.
- Launch of integrated online platform to open individual learning accounts by: QX 2022.
- Evaluation report on the first year of operation published by: QX 2024.
- Number of training offers in the registry: XX by YY.
- Number of individual learning accounts activated: XX by YY.
- Number of training participants financially supported through new provisions: XX by YY
- Number of users of new guidance and validation IT tools: XX by YY.

Reform 2

Reform 2 is presented in detail in the table below.

Reform 3

- Law adopted to update the national programme with the digital competences as a cross-curricular module and an obligatory subject (in general, ICT and advanced computing courses) by end of 2021.
- Revised curricula published for primary and secondary education by 2022.
- Updated curricula in secondary education implemented by 2023.
- ICT introduced as an obligatory subject in primary education from year 5 from 2023.
- Share of pupils studying ICT as a subject at primary level: 50% by QX 20XX, 90% by QY 20XX.
- Share of pupils studying ICT as a subject at secondary level: 50% by QX 20XX, 90% by QY 20XX.
- Share of secondary pupils participating in courses on advanced computing: XX % by YY.

Reform 4

- Programme design to be finalised and call for interest by companies to be launched by QX 2021.
- Web-portal fully operational by QX 2021.
- XX digital apprenticeships offered by QX 2122.
- At least X% of female participants in digital apprenticeships by 202X

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

Investment 1

- Call for inter-company training centres by Q4 2021.
- Evaluation of the first year of operation by QX-202X.
- Number of SMEs benefiting from the offer provided by the inter-company training centres by XX.
- Number of employees benefiting from the offer provided by the inter-company training centres by XX.
- Number of large companies cooperating with the inter-company training centres by XX.

Investment 2

- Launch of the call for interest for regional authorities to set up a Centre for Vocational Excellence by QX 2021.
- Selection of received proposals by QX 2021.
- First W centres of vocational excellence set up and running by QX 2021.
- The remaining Z regional centres to be set up and running by QX 2022.
- Evaluation of the first year of operation by QX-202X.
- Share of pupils from a lower socio-economic background taking part in COVEs at X% by 202X [at least at the group's average share among VET pupils]
- XX start-up projects supported by XX.
- XX business – education partnerships established for apprenticeships, internships, sharing of equipment, exchanges of staff and teachers between companies and VET centres cooperating within the Centre of Vocational Excellence by XX.
- XX applied research projects launched with the involvement of VET learners and staff in the Centres of Vocational Excellence by XX.

Investment 3

- Mapping of digital infrastructure needs for education and training providers completed by QX 2021.
- Regions drawing the lists of education and training providers entitled to funding and also identification of those entitled to top up as included in disadvantaged areas by: QX 2021.
- Funding disbursed by regions to schools, VET providers and higher education institutions by QX 2021.
- Increase share of highly digitally equipped schools, VET providers and higher education institutions to X by Y.
- Increase share of highly digitally equipped schools, VET providers and higher education institutions in disadvantaged areas to X by Y.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

Investment 4

- Update of curricula of initial and continuing teacher education completed by Qx 2022.
- Continuing professional development campaign rolled out to support teachers and trainers in digital education by XX.
- Funding disbursed to higher education institutions by Qx 2021 (X%) and Qx 2023 (Y%).
- Online platforms to share pedagogical materials up and running by Qx 202x.
- Share of teachers / trainers who declare being well prepared to use digital technologies to X by Y.
- Share of teachers / trainers using regularly digital tools in teaching practices to X by Y.
- Increased share of teachers/trainers/school leaders participating in continuous professional development on digital skills to X by Y.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

[Only one example of a reform shown here for illustrative purposes]

Table 2. Milestones and targets										
Related reform or investment	**Milestone or target name & number**	**Qualitative indicators (for milestones)**	**Quantitative indicators (for target)**			**Timeline for completion (indicate the quarter and the year)**	**Data source /Methodology**	**Responsibility for reporting and implementation**	**Description and clear definition of each milestone and target**	**Assumptions/ risks**	**Verification mechanism**
			Unit of measure	Baseline	Goal						
Component 1											
Reform 2 New legal framework for vocational education and training (VET) aiming at updating and interlinking initial and continuing VET provision with a view to support digital and green transitions.	Milestone 2.1. Inter-ministerial working group set up and first report published	Inter-ministerial working group set up and started operation, with relevant expert and stakeholder representation, including representatives of X, Y and Z.	n/a	n/a	n/a	Q1/2021 (before RRP adoption)	Register of government working groups; web sites of responsible bodies	Ministry of Education and Labour	Nomination of members of the group based on a call for expression of interest addressed to the main VET stakeholders. Composition of the working group agreed between Ministries of Labour, Economy and Education, and made public.	Insufficient experience of employers, trade unions, business representatives in formulating skills needs	Minutes from meetings, report with analysis, Proposal for draft law published.
	Milestone 2.2. Public consultation on the draft law finalised	Online public consultation finished and main conclusions and recommendations implemented into the draft	n/a	n/a	n/a	Q3/2021 (t+6 months)	National public consultations portal	Ministry of Education and Labour	The public consultation will be launched on the national public consultations portal.	Participation in online public consultation has not always been consistent; a communication campaign will be implemented to raise awareness.	Report from the National public consultations portal
	Milestone 2.3. Legal framework adopted	The legislation will be adopted in line with the national legislative procedure and address the specific topics outlined in the column "clear definition of milestone".	n/a	n/a	n/a	Q1/2022 (t+10 months)	Published in the Official Journal - Draft law proposed by Ministry of Education and Labour	National legislator	Adoption of legal provisions addressing greater autonomy of VET providers, modular basis for VET programmes, work-based learning, flexible access to VET, digital apprenticeships, Centres of Vocational Excellence, incentives for "Pacts for Skills", professional development of VET teachers and trainers, national internationalisation strategy for VET, quality assurance in VET, digital provision of VET.	The legislative process can lead to departures from the public consultation, leading to a loss of support from key stakeholders. The general election planned for April 2021 may delay the adoption of the proposal: wide stakeholder involvement will help manage this risk	Official Journal.
	Target 2.4. Set up of two green and digital sector skills councils to develop sector-specific digital and green modules	n/a	Number of green and digital sector skills councils	0	2	Q3/2022 (t+15 months)	Registry of sector skills councils	Ministry of Education and Labour	Two new sector skills councils (1. Green and 2. Digital) are established using the existing Qualifications Act methodology that ensures expert and stakeholder representation. They have the mandate to develop sector specific digital modules (in sectors X, Y and Z) and sector-specific green modules (sectors W, H and K). The green and digital sector skills councils actively cooperate with all relevant stakeholders within national / regional / sectoral "Pacts for Skills" partnerships, set up through the new VET legislation, to promote and support implementation of the new modules.	Delays in setting up sector skills councils\n\nInsufficient experience of employers, trade unions, business representatives in formulating skills needs\n\nLack of qualified teachers and trainers	Minutes from meetings of the sector skills councils.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

Related reform or investment	Milestone or target name & number	Qualitative indicators (for milestones)	Quantitative indicators (for target)			Timeline for completion (indicate the quarter and the year)	Data source /Methodology	Responsibility for reporting and implementation	Description and clear definition of each milestone and target	Assumptions/ risks	Verification mechanism
Table 2. Milestones and targets											
			Unit of measure	Baseline	Goal						
Component 1											
	Target 2.5. Development of sector-specific digital and green modules	n/a	Share of target sectors for which green and digital modules have been developed	0	100%	Q3/2022 (t+17 months)	Registry of VET programmes	Ministry of Education and Labour	These modules are free to use by public and private providers, in particular for upskilling and reskilling programmes of adults. Before completion, these modules will undergo consultation with all other relevant sector skills councils.	This is based on assumption that the development of modules is based on a mapping of relevant future skills needs, is done in a cooperation with all relevant stakeholders and validated by national qualification authority (Ministry of Education/Labour)	Validation of new ,modules by the national qualification authority.
	Target 2.6. Introduction of new digital and green sector modules into VET programmes	n/a	Share of modules per VET programmes	X%	95%	75% (by Q3 2024) 95% (by Q3 2025)	Registry of VET programmes	Ministry of Education and Labour	The Ministry of Education will launch the update of VET programmes in line with the approved law.	This is based on assumption that the introduction of new modules is accompanied by a continuing professional development programme for VET teachers and trainers as a pre-condition for a successful implementation.	A check of the registry of VET programmes that modules are included in the VET programmes
	Target 2.7. Redesigned modules published for free public access.	n/a	Share of new modules publicly available online	0%	100%	Q1/2023 (t+23 months)	Registry of VET programmes	Skills Agency	The updated modules will be published online for free public access, in line with the usual practice for all public curricula and programmes.	Publication of public curricula and programmes is a routine procedure.	A check of the registry of VET programmes
	Target 2.8. Exposing learners in vocational education and training to work-based learning	n/a	Share of recent graduates from VET /having benefitted from exposure to work-based learning during their vocational education and training	40%	60%	Q3/2025	Eurostat Labour Force Survey, This will cover the age group 20-34, having left education and training 1-3 years ago. The indicator will use LFS data defined in the variable identifier "HATWORK" in the Commission Implementing Regulation (EU) 2019/2240.	Ministry of Education and Labour	The new legislation will be implemented from October 2022. To allow time for pupils to graduate in the revised work-based learning programmes, the initial increase is assumed to be 20%. This refers to all forms of work based learning at a workplace. This refers to work experiences at a workplace in a market or non-market unit (i.e. in a company, government institution or non-profit organisation) that were part of the curriculum of the formal programme that led to the highest level of education successfully completed. If a respondent had several work experiences, the cumulative duration of all work experiences should be considered. The work experiences should be expressed in full-time equivalents.	The level can be reached if companies engage actively in provision of work-based learning for VET learners. It is also assumed that the health situation gets back to normal and there are no restriction of learners gaining practical learning experience in a workplace	Data collected via Eurostat LFS with its own quality assurance system.

Component example: 'Equipping the workforce of today and tomorrow with the skills needed in the labour market'

Table 2. Milestones and targets										
Related reform or investment	Milestone or target name & number	Qualitative indicators (for milestones)	Quantitative indicators (for target)			Timeline for completion (indicate the quarter and the year)	Data source /Methodology	Responsibility for reporting and implementation	Description and clear definition of each milestone and target	Assumptions/ risks	Verification mechanism
			Unit of measure	Baseline	Goal						
Component 1										
	Target 2.9. Increase share of VET learners benefitting from a transnational mobility experience	n/a	Share of VET learners with a transnational mobility experience	X%	8%	8% by Q3/2025	Erasmus+ programme data / national mobility programmes data if available	Ministry of Education and Labour	This will be measured as the share of mobile learners in a calendar year, as a proportion of a cohort of VET graduates in the same year. The indicator will be based on the mobility data sourced from Erasmus+ data and VET graduate data sourced from the UNESCO-OECD-Eurostat.	The achievement of target depends on an assumption that the health situation allows for international mobility / travelling of VET learners.	Where available and only if the data provided is comparable to Erasmus+ data, including the duration of mobility, data from national mobility programmes could also be used to complement the data from Erasmus+. In case data from national authorities is included, it should be displayed in a transparent manner.

6.   **Financing and costs**

[Member States should provide information on the total estimated cost of the component, backed up by appropriate justification. This should be complemented by the appropriate detailed justification on the plausibility and reasonability of the estimated costs, as explained in the guidance. The justification can be annexed to the RRP. While the table is introduced directly in the text, actual RRPs should include this information in the Excel files attached to the template.]

Table 3. Estimated cost of the plan																
Component (name)	Investment/Reform (short description or cross-reference)	Relevant time period	Total estimated costs for which funding from the RRF is requested (mn/bn national currency, e.g. mn EUR)	If available: Total estimated cost by year (mn/bn national currency/EUR)							Funding from other sources (as requested by Art. 8 in the Regulation)			COFOG level 2 category / or type of revenue (if relevant, e.g. tax expenditure)
				2020	2021	2022	2023	2024	2025	2026	*from other EU programmes*	*from the national budget*	*Other sources (please specify)*	