TOWARDS SOCIALLY FAIR GREEN-DIGITAL TRANSITIONS IN EUROPE

PRIORITIES OF THE EUROPEAN CONFEDERATION OF INDEPENDENT TRADE UNIONS (CESI)

TTTT

TTTTT



The European Confederation of Independent Trade Unions (CESI) is a confederation of more than 40 national and European trade union organisations from over 20 European countries, with a total of more than 5 million individual members. Founded in 1990, CESI advocates improved employment conditions for workers in Europe and a strong social dimension in the EU. CESI represents public and private sector workers.

- I. Why should workers be involved? $^{
 m 22}$
- II. How are workers affected? 4
- 1. Employment and labour markets 4
- 2. Working conditions 5
- 3. Skills and training 🍃
- III. What should be done? 🬀
- 1. Strengthened information, consultation and co-decision ${\it T}$
- 2. Decent employment and working conditions T
- 3. Access to training and skills 🔒
- 4. Adequate social protection 🔒
- IV. Conclusions ᠑
- V. Annex: Sector and industry studies 10
- 1. The automotive sector and industry 10
- 2. The transport sector and industry 11

This discussion paper was developed by CESI's Working Group on the Future of Work, led by Sara Rinaudo (Confsal-Fismic), and endorsed by the Presidium of CESI

Photos: CESI, shutterstock.com (Indypendenz, Juice Flair, Master1305, noomcpk, Rido, Oliver Sidorov)

ABSTRACT

The green-digital twin transition can lead to cleaner production, provide a boost to economic sustainability and create new jobs. However, it will also lead to large numbers of jobs being eliminated, substituted or transformed. There is also a risk that job quality and working conditions in 'new' jobs will be lower than in 'old' jobs. The consequences of the twin transition for labour markets, employment and working conditions are enormous and span all economic sectors.

In this dynamic time of profound and rapid transformation, it is vital that workers and their representatives – trade unions – are involved, engaged and have their voices heard in change management at all levels and at a very early stage. They need to ensure that the green-digital twin transition is not only geared towards climate neutrality and economic competitiveness but also towards social fairness. In an integrated process, they need to make sure, together with social partner counterparts and policy makers, that the transitions will leave no one behind and that there will be balance between the economic, the environmental and the social.



I. WHY SHOULD WORKERS BE INVOLVED?

Climate change and the digital revolution are facts and affect our daily lives; and this includes labour markets, employment and working conditions. To help deliver a just green-digital transition across Europe, the imple-mentation of respective transformation processes needs to take due account of the needs of affected workers and their families, guaranteeing their social justice and economic sustainable development at the same time.

Green and digital policies dominate the political agenda of the EU and the Member States more than ever. At the European level, the EU's landmark Recovery and Resilience Facility (RRF) has been designed to render European economies and societies more sustainable, resilient, and better prepared for the challenges and opportunities that the green and digital transitions represent. It is a key tool in implementing the EU's Digital Strategy and European Green Deal: the EU's political agenda to become a digital and climate-friendly global frontrunner. The RRF, financing reforms and investments in Member States until at least 2026, offers an unprecedented opportunity to speed up the post-Covid recovery in the Member States and reinforce their twin transition to fully-fledged green and digital economies, as outlined by the EU's Digital Strategy and European Green Deal.

The goals and objectives of digital and climate policy interact with many policy fields in many ways, not only economic, industrial and security policy but especially also employment and social policy. Disruptive changes affect many sectors and industries, labour markets, employment and working conditions, including the organisation of work. Given the magnitude of the twin transition and its potential impact on labour markets, jobs and working conditions, there is a risk of far-reaching social disruption if green-digital transformation processes are ill-managed. The success of the twin transition depends on the scope and effectiveness of the social dimension of the EU's Digital Strategy and European Green Deal, and its implementation vehicles such as the RRF.

Social and labour policies have to keep pace with the digital-green transition, and workers and their representatives must have a central voice in the designing, planning, and implementing of green-digital policies and the EU's RRF in particular. Impacts on employment and jobs must be managed to take account of the needs of workers. Working conditions and social protection must be fair and stable for all. In terms of pay and working conditions, skills and training opportunities, social protection provisions, equal opportunities and non-discrimination, health and safety, and, above all, trade union recognition and efficient interest representation, jobs that are created as a result of these transitions must be just as good (or even better than) those that may be lost.

One of the roles of a trade union is to ensure, together with policy makers and social partner counterparts, that adverse negative impacts are balanced and mitigated as much as possible, that challenges are converted to opportunities, that no one is left behind, that transitions are inclusive, reduce inequalities and generate both progress and protection. The green-digital transformation must be a just transition. It must be done 'with' the workers and not 'to' them. Otherwise, it will not be sustainable.

The transition to an ecologically, digitally and socially sustainable economy necessitates social management of the world of work together with workers and unions in particular in relation to:

- the emergence of new green jobs, industries and sectors, which must provide decent, quality work;
- ★ the adaptation of existing jobs and occupations to new skills and practices, to keep as many workers in their workplaces as possible;

★ the disappearance of jobs, industries and sectors, which must be accompanied by strong social flanking measures.

Social management together with workers and their representatives is all the more important in regions as well as in sectors, industries and among disadvantaged groups and communities that are adversely affected in a disproportionate way.

As suggested in the 'Guidelines for a just transition towards environmentally sustainable economies and societies for all' of the International Labour Organisation (ILO),¹ this will require "a country-specific mix of macroeconomic, industrial, sectoral and labour policies that create an enabling environment for sustainable enterprises to prosper and create decent work opportunities by mobilising and directing public and private investment towards environmentally sustainable activities". This is also true for the digital transition.

This paper therefore:

- * addresses, in the following sections II, consequences and action pointers for a just green-digital transition concerning:
 1. employment and labour markets;
 - working conditions;
 - 3. and skills and training.
- ★ sketches, in the ensuing section III, concrete demands for fair green-digital transition processes in terms of:
 - 1. strengthened information, consultation and co-decision processes;
 - 2. decent employment and working conditions;
 - 3. access to training and skills;
 - 4. adequate social protection.
- ★ Showcases in a last section the above findings in selected sector and industry studies on:
 - 1. the automotive sector and industry;
 - 2. the transportation sector and industry.
- 1 https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/publication/wcms_432859.pdf



II. HOW ARE WORKERS AFFECTED?

1. EMPLOYMENT AND LABOUR MARKETS

Green and digital policies will reshape labour markets and create new opportunities as well as risks for workers. Different policies and instruments have different consequences on labour demand across regions, sectors and industries, and categories of workers. During transition processes, where new jobs are created, others may be lost: or the other way round. Certain industrial activities will close, and others will open. Plants, factories or services that are converted mean job losses. New professions or specialisations will replace existing 'old' ones. Not every blue-collar worker will become a green collar worker, because the transition to the net zero economy will lead to job losses, for instance in carbon intensive sectors and industries, and not all analogous jobs can simply become digital jobs. But the need for new green and digital jobs will emerge. Aggregate statistics and forecasts on green-digital policies should not hide such individual dislocations and disruptions for affected workers.

Moreover, interlinkages between green and digital transformations must be considered in conjunction with broader economic trends and risks: ranging from lasting impacts of the Covid pandemic to long-term consequences of the war in Ukraine. The climate crisis and digitalisation expose to further risks a world of work which is already being frequently and heavily affected by broader social, economic, political and health crises.

If well conducted, the green-digital transition could generate new opportunities for development and growth for the economies, labour markets and societies in countries that are able to grasp them and channel them towards innovation and the creation of new businesses and more qualified jobs, accompanied by a focus on skills, training, and social support flanking measures. Rethinking the design of economic and social policies will require a deep change in the ways in which we produce, distribute and consume.

Arguably, though, measures under the green-digital transition can only produce the desired economic, environmental and social effects if their implementation considers the potential effects on affected workers and the most vulnerable and disadvantaged groups in society. It will be accepted only if it is 'fair' and if it can generate transformation and protection at the same time.

Workers and their representatives should be engaged and involved in socially balanced green-digital transition processes, together with social partner counterparts and policy makers to pursue active labour market policy which ensure that:

- * as many sustainable jobs as possible are preserved;
- as many 'quality' jobs as possible are created;
- as many unsustainable jobs are transformed into sustainable ones;
- as many workers as possible are helped to adapt to the new realities;
- restructure labour markets and employment relations that are as inclusive and protective as possible while maintaining the competitiveness of the economy at large.

2. WORKING CONDITIONS

There is a real risk that workers affected by the transitions will suffer disproportionately from a poorer quality of a new job than they had before². Failing to address job quality and security will result in deeper societal divisions, with adverse implications for growth, productivity, well-being and social cohesion. As green-digital transformations occur, a key challenge lies in managing the transition of work and workers in those industries, sectors and regions which are most affected towards the new opportunities that are opening up.

Successful green-digital transitions are not only about preserving as many jobs as possible and creating as many jobs as possible, they are also about the quality of jobs. Employment, even in new non-standard work relationships, must remain stable, and working conditions stay at least equal. New flexibilities should only occur to the mutual benefit of both worker and employer and not be imposed unilaterally.

Otherwise, labour market disparities are set to increase further, as the costs of structural adjustments and working conditions are not shared equally.

Workers and their representatives should be engaged and involved in socially balanced green-digital transition processes, together with social partner counterparts and policy makers to:

- ★ gear them not only towards economic growth and productivity gains but also focus on sustainability and especially decent working conditions and job quality;
- ★ embed them in national, regional, local as well as European levels of governance in a multi-layered perspective that can safeguard job quality standards.

3. SKILLS AND TRAINING

The widespread adoption of more digital and eco-friendly approaches to economic production and consumption is changing the demand and nature of work, and thus the skills required of many workers.

Without skills development, it is estimated that the global economy could lose as many as 71 million jobs in its move towards becoming green and digital; and that investment in education, training, upskilling and reskilling could reverse this prospect, bringing a net growth of 18 million jobs to the energy sector and industry alone.

In this context, investing in skills, re-skilling and upskilling can mitigate the negative disruption of green-digital transitions on labour markets, employment and working conditions and turn them into opportunities for the future. To a very large extent, skills and training determine if a vast potential for job creation in the developing green-digital sectors and industries can be tapped. It will determine how well workers can successfully transition from one declining job function, sector or industry to another rising one. This is where a real and major challenge of the transitions could be turned around into a real and major opportunity.

Workers and their representatives should be engaged and involved in socially balanced green-digital transition processes, together with social partner counterparts and policy makers to:

raise awareness of the need for new skills for workers and managers;

- include skills development strategies at all levels of transitions, in collective bargaining where union agreements should plan out the upskilling and re-skilling strategies within the company/sector/ industry;
- ★ expand the availability of digital & green skills through education, training & lifelong learning systems.

² In England, the University of Leicester studied the case of the closure of the steel mills on the north-east coast, closed since 2015: 80 per cent of the approximately 2,000 workers who were employed found new jobs in the "new" professions, but not at the same salary: At least four-fifths of the employees at the steel mills earned an average of £ 30,000 a year, but only one in five found the same pay check in the new job.



III. WHAT SHOULD BE DONE?

Environmental, digital and social sustainability are interlinked. Digitalisation as well as environmental and climate change-related risks and their management affect regions, sectors and industries, workers and population groups in different ways. Attention to social and employment-related inequalities and distributional impact-related imbalances arising from digitalisation and climate change and managing them is crucial.

Adverse effects on the labour market, employment and working conditions associated with deep and rapid structural changes because of digitalisation and climate change are not inevitable, and policy can and should play an important role in shaping the future of work in a green-digital era. Steering these changes will require strong cooperation between all workers and their representatives, the unions, together with social partner counterparts and policy makers.

To strive for a worker-friendly and socially balanced digital-green twin transition and achieve the outlined targets related to employment and labour markets, working conditions, and skills and training, workers and their representatives, the unions, together with social partner-counterparts and policy makers should focus above all on:

- 1. strengthened information, consultation and co-decision;
- 2. decent employment and working conditions;
- 3. access to training and skills;
- 4. adequate social protection;
- 5. the management of structural changes and economic competitiveness and diversification.

Addressing these matters will require streamlining across policy vehicles at the EU level, which include:

- ★ a beefed-up European Pillar of Social Rights with binding social targets, analogous to the European Green Deal with binding environmental targets;
- further social streamlining of soft policy instruments such as the European Semester;
- greater practical consideration of the EU's employment guidelines;
- ★ a review and potential strengthening of relevant EU legislation to better enforce existing legislation and identify legislative gaps in decent work.

Ensuring fair change management, building sustainable domestic supply chains that the industries and sectors of tomorrow need, and constructing a resilient public sector and public infrastructure that can support evolving green and digital business in the private sector and industries will also require public investments by national governments as well as by the EU. This includes making full use of EU funding instruments such as:

- ★ the Recovery and Resilience Facility (RFF);
- ★ the Social Climate Fund (SCF);
- ★ the Just Transition Fund (JTF);
- the European Globalisation Adjustment Fund for Displaced Workers (EGF);
- further EU structural investment and cohesion funds, including the European Social Fund (ESF).

1. STRENGTHENED INFORMATION, CONSULTA-TION AND CO-DECISION

Measures for stronger participation of workers and their representatives in change management are vital in having their concerns and suggestions heard; both will contribute to finding sustainable and commonly accepted solutions in green-digital transitions. Social dialogue at the European, national, sectoral and company levels through planning, education, and preparation of changes will make transitions fairer and more efficient. It can help to build a consensus and involvement of stakeholders in the world of work and has the potential to resolve important economic and social challenges, encourage good governance, advance social and industrial stability and boost economic development.

Workers should have a say over how these transitions happen. They should know what is expected from them at work as jobs and sectors industries become increasingly digital and green. They should know what training is required to face transitions at work successfully. They should be involved in discussions around social flanking measures when a workplace shuts down.

To make sure that all workers can be involved and heard in change processes:

- ★ EU funding should be stepped up for strengthened capacity building for all EU and national level social partners and trade union organisations to engage in change management, especially for smaller and independent unions without sufficient own resources to this end;
- inclusive social dialogue and trade union pluralism should be strengthened so that all workers count, and no one is left behind in these transition processes;
- ★ information and consultation legislation in Europe should be enhanced and the functioning of European Works Councils (EWCs) be made more effective. In particular, EWCs should require their worker-participants to be unionists; otherwise, fake (yellow) employer-dictated delegates could speak for workers in the Councils. There should also be meaningful ex-ante involvement of EWCs in corporate governance and not just the ex-post transmitting of information after corporate decisions have already been made;
- ★ each workplace needs a formal agreement negotiated between unions and employers to set out information, consultation, co-decision in green and digital transitions at the workplace, as well as a plan for how best to protect decent jobs. This needs to be supported by committees both locally and nationally, where unions, employers and governments consult each other and devise a common strategy for their industries and sectors.

2. DECENT EMPLOYMENT AND WORKING CON-DITIONS

The green and digital transitions and their regulation can lead to cleaner production, higher sustainability and the creation of new jobs. However, they may also risk stifling economic activity or lead to the relocation of businesses and mean that certain jobs will be eliminated,³ substituted⁴ or transformed.⁵ Moreover, there is a risk of job quality and working conditions deteriorating in substituted or transformed work.

In these cases, implications for workers and their families need to be anticipated and managed through active labour market measures and support for decent employment and working conditions.

Whether redirecting workers towards alternative substitute jobs in expanding industries and sectors, for example renewable energy, will offset job losses in fossil energy occupations, is dependent on factors such as the flexibility of labour markets, the alignment of incentives for investing and engaging workers in low-carbon sectors and industries, and supportive measures by governments.

To make sure that workers affected by job elimination, substitution and transformation and poorer working conditions are effectively supported, the focus should lie on:

- ★ generally promoting the role of trade unions and social partners in active labour market policies;
- enhanced public employment services to further facilitate job changes;
- public employment projects to help individuals find re-employment, in which the government provides a subsidy for salaries and subsidies for social services;
- ★ early 'internal' retirement for workers less than five years away from retirement age, with enterprises remaining responsible for workers' 'subsistence' during these bridging years;
- ★ overarching framework conditions determined by social partners and policy makers to ensure decent wages, stable work contracts, adequate health and safety and quality working conditions.

³ Jobs will be eliminated above all jobs in high-emitting industries and sectors such as coal mining.

Occupations (jobs) can be substituted where, e.g. economic activity shifts from high emitting road transport to cleaner rail transport or from waste management in dumpsites to recycling.

⁵ Most occupational profiles and job functions will be transformed in any sector or industry that greens and digitalises its production methods or modes of working.

3. ACCESS TO TRAINING AND SKILLS

Where jobs are replaced or transformed, access to training and up- and re-skilling is a central tool to help workers adjust to new working environments to complement other active labour market measures. The gap between the skill levels required for jobs in green and digital sectors and industries and the training and competency standards provided is generally still too significant. This gap puts workers and the labour market at a very high risk. The goal is to ensure the continuous adaptability and employability of all workers, through a life-cycle approach that provides access to tailored lifelong learning and skill acquisition throughout people's careers, as sectors become increasingly digital and green and economies, as a whole, evolve.

Moreover, education systems and curricula need to be adjusted to the skills that are needed and in demand in labour markets, in particular in terms of green and digital jobs, so that young persons entering the job market will not face major obstacles in school-to-work transitions.

To help workers acquire the skills required for their jobs in increasingly green and digital work environments:

- EU and national education systems should be able to respond to the demand for digital and green skills in the labour market. Best practice exchanges should be fostered across Europe;
- ★ facilitating framework provisions should be put in place for adapting skills systems at the EU and national levels, with a focus on the provision of more and tailored technical and vocational life-long training. EU exchange programmes should be tailored more towards re-training and newly emerging job functions;
- national skills development policies should be better synchronised with policies on technology, the economy and the environment, with a view to better matching the supply and demand of skills in the labour market;
- re-employment training subsidies should be introduced for employers to encourage training and boost worker retention rates;
- union and their social partner counterparts should create adequate and tailored training and lifelong programmes to prepare workers for alternative employment and minimise the risks of non-re-employability.

4. ADEQUATE SOCIAL PROTECTION

Where jobs are eliminated, where active labour market measures cannot match substituted workers to new sectors and industries or jobs, or where re-skilling efforts are unsuccessful in helping workers adjust to transformed job profiles, it is crucial to protect affected workers and their families against poverty and social exclusion throughout their life cycle.

Trade unions have to play a major role in the demand for effective social protection for those who lose their jobs as a result of the green and digital transitions, in particular also against the background of broader, long-standing challenges to make social protection schemes accessible and adequate to those who need it the most and affordable for public budgets at the same time.

Unless stakeholders affected by and responsible for social protection systems have the possibility to take part in meaningful and well-informed social dialogue, there is a serious risk that these interventions will not contribute towards sustainable, just and fair transitions.

A particular challenge pertains to a frequently lacking awareness of and access to information about social protection entitlements among those that would qualify for them. This hinders their ability to claim benefits and increases the likelihood of mistakes being made when applying for them and of fraud. All social protection schemes must be transparent and information regarding all of its core components must be readily available, including targeting procedures, eligibility criteria, benefit levels, complaints and redress systems. Without such mechanisms there is a higher risk that social protection schemes will not succeed in reaching those most in need of assistance.

To ensure that social security schemes are accessible and adequate for workers adversely affected by green and digital transitions, the emphasis should be placed on:

- adequate social protection and medical and pension benefits for employees who lose their jobs as a result of job elimination, substitution or transformation;
- ★ participatory mechanisms to assure input from workers' representatives who play a role in advocating for the rights and conditions of workers and that can compensate for the asymmetry of negative impacts;
- transparency and appropriate access to information as important tools against corruption, clientelism and increasing right holders' access to and participation in social protection schemes.



V. CONCLUSIONS

The green-digital twin transition can lead to cleaner production, provide a boost to economic sustainability and create new jobs. However, it will also lead to large numbers of jobs being eliminated, substituted or transformed. There is also a risk that job quality and working conditions in 'new' jobs is lower than in 'old' jobs. The consequences of the twin transition for labour markets, employment and working conditions are enormous and span almost all economic sectors. In this dynamic time of profound and rapid transformation, it is vital that workers and their representatives (trade unions) are involved, engaged and have their voices heard in change management at all levels. They need to ensure that the green-digital twin transition is not only geared towards climate neutrality and economic competitiveness but also towards social fairness. They need to make sure, together with social partner counterparts and policy makers, that the transitions leave no one behind and that there will be balance between the economic, the environmental and the social.



IV. ANNEX: SECTOR AND INDUSTRY STUDIES

1. THE AUTOMOTIVE SECTOR AND INDUSTRY

Like other sectors and industries, the EU's automotive industry was unable to escape from the significant effects of the Covid pandemic crisis. In the automotive sector and industry there is great excitement about the green and digital transitions, but also a lot of confusion. In a frenzied race for green mobility and autonomous driving, its supply chain is alternating between research, technology and bombastic announcements, perhaps to the point of not realising how far the EU's digital and green transition objectives (the most ambitious in the world) are from having a coherent plan to achieve epic change, and not realising how many risks, together with one of the decisive industry chains, the entire European economy faces. However, the market currently appears oblivious to this phenomenon. Surveys suggest that, for instance in Italy, only 2 out of 10 drivers believe that electric cars will bring great benefits to the environment, despite 12 million highly polluting cars still circulating in the country; a finding that likely mirrors public opinion in other European countries too. Furthermore, there is the problem of infrastructure: European manufacturers are sounding the alarm bells, with 10 countries having fewer than one recharging point every 100 km.

The metamorphosis of the automotive sector and industry not only marks the transition towards electric propulsion, but also concerns digitalisation, from on-board services to autonomous driving. Hence, the recent shortage of semiconductors – as a result of disrupted supply chains following the Covid pandemic's lockdowns together with increased demand for microchips – also stopped automotive assembly lines because today cars need more chips than pistons (up to 3,000 per model). This is to say that the change in the production paradigm risks sidelining a sector and industry that in Italy alone exceeds 10% of GDP and will soon have to worry about both increasingly high transition costs in decarbonisation processes and the supply of raw materials without which it would not be possible to produce lithium batteries or solar panels. These are three very hot topics that risk triggering a crisis with incalculable consequences:

- ★ If the transition promoted by European legislators towards electric mobility is not well managed, the fear is that the automotive supply chain will collapse, taking along with it hundreds of thousands of jobs: at great social cost. Huge investments in the face of an unresponsive market and still lacking infrastructures: how long can it last? The European automotive market has lost 25% compared to 2019 – the real yardstick after the unfortunate year of lockdowns in 2020 – and most models on the market risk being already obsolete, effectively blocking the market;
- ★ There is a threat that the available clean energy in Europe is not enough to see millions of electric vehicles circulating. The energy produced from renewable sources today accounts for no more than 30% of the total need. Producing energy or batteries using gas or, worse, coal would only move the problems upstream. It is not for nothing that the issue of nuclear power is re-emerging in the political debate, also considering the recent increases in household energy bills;
- Raw materials indispensable for the automotive assembly are often in the hands of a few individual countries. In the case of the famous rare earths, China supplies 98% of all total imports to the EU. Trade dependency is a security-related problem, but there is an environmental dimension too. The mines and smelters in China needed to process rare earths are highly polluting, and the fact that this processing takes place outside Europe does not mean that it is not an issue. We live on one planet, after all. The green revolution on a global level could be just a utopia. And if markets continue to exist where the ecological transition is slow or non-existent, such as in large parts of Africa, South America and Asia, in addition to the environmental damage of the 'old' fossil fuel-based engines still circulating elsewhere, Europe could pay the price of being cut out of production chains which may be politically incorrect and environmentally damaging but is efficient and profitable.

This risk scenario must be contemplated because it ultimately impacts workers which, if we fail to take action, will be doomed to pay the higher cost: A shortage of semiconductors coupled with high demand by the market means less production. Less production means fewer hours worked. Fewer hours worked mean lower income. Lower income and uncertainty mean a worsening of working conditions.

2. THE TRANSPORT SECTOR AND INDUSTRY

Following the EU's Sustainable and Smart Mobility Strategy, there are three issues with the transport sector and industry in the green-digital era. Firstly, climate change will bring with it physical risks (material damages caused by extreme changes to the climate) and transitional risks (risks associated with the material and financial transition towards less pollutant activities). Secondly, the future of transportation will face the pervasive automation of the sector and industry, with autonomous trains, unmanned aircrafts, autonomous tracks or deliveries made by drones, putting at risk the overall stability of the labour market for operational workers: Train drivers, pilots, train managers, cabin crews, maintenance workers, and truck drivers, to name just a few. Thirdly, in the last decade EU trade policies have permitted the widespread liberalisation of the transport sector and industry, switching from the ideology of transport being a service provided by the State to transport being a private service: MaaS – Mobility as a Service. MaaS means that transportation activity is compared to



every other private entrepreneurial activity, which basically responds only to market supply and demand, with the ultimate goal of creating and extracting value from the activity provided.

In this complicated scenario, where these three issues are co-related and layered upon other variables such as geopolitical events or other global emergencies, three main risks can be identified:

Short term risks (0-5 years): in the short-term, the extreme liberalisation of the transportation market is very probably not going to overcome the widespread high demand for services in the sector and industry. The changes in demand will cause services to contract. Without specific guarantees the private companies are then entitled to get rid of non-essential personnel. Much of this personnel is highly-specialised and without regular practice and training, their certifications and licenses will expire completely;

Medium term risks (5-15 years): In the medium term there is a higher risk for the labour market in the sector and industry. Shrinking demand (services offered) will probably speed up the process of digital innovation (automation) in several parts of the sector and industry such as rail or civil aviation, to compensate for the lack of personnel and offering the same level of service. This transitional phase will totally change the role of responsibility within the operational activities, switching the personnel from fully responsible (with the permits that accompany that) to supervisors (with no clear economic retribution). If not regulated at EU level, the risk is that private companies will be permitted to unilaterally lower salaries and not re-skill or up-skill workers who stand to lose their job within a remarkably short period. It is not fully clear in this phase who is going to be responsible for accidents/inconveniences occurred, since EU has not yet produced its 'Electronic Personalities and Legal Responsibility of Robotic Systems produced with Artificial Intelligence Technology';

Long term risks (over 15 years): In the long run it is likely that the sector and industry will look totally different to how they do today. Especially the rail sector and industry will face a pervasive automation; ATO (Autonomous Train Operation) will be fully implemented. Since the operational personnel has to a large extent a relatively low education level coupled with high specialisation, it is going to be impossible to relocate them in jobs that will ensure a similar income. At the same time, workers aged above 40 or 50 years old will be too young to retire and too old to switch completely to a job that ensures the same income in a different sector and industry.

Against the background of these issues and risks, younger workers must continuously up-skill or re-skill to futureproof themselves as workers. The EU and employers can have a major role in this process since higher level education is very expensive for workers both in economic and physical terms. Moreover, trade unions need to propose counter-mechanisms to avoid extreme liberal behaviour from private firms, as policies to avoid social dumping and unfair concurrency between vectors with different technologies available (e.g. Rail vector vs. Hyperloop).





EUROPEAN CONFEDERATION OF INDEPENDENT TRADE UNIONS (CESI) Avenue des Arts 19 AD | B-1000 Brussels T.: +32 2 282 18 70 | F.: +32 2 282 18 71 | info@cesi.org | www.cesi.org

t