

IndustriAll European Trade Union Action Plan

The European ICT sector at a crossroads

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1. Introduction

The ICT sector in Europe is cross-cutting and omnipresent. Be it mobile phones or computers, industrial products or smart grids, cars or complex industry 4.0 networks, or other products in the different areas of the economy, the sector provides fundamental technology, software and services for industries and private users alike, and employment for 7.8 million European workers¹. The relevance of the sector also makes its strategic importance and its essential position in the industrial value chain obvious.

The European Union acknowledges the sector's critical role in a significant number of recent legislative proposals and initiatives. It is the focus of one of the European Commission's current flagship initiatives towards a twin transformation to a green and digital economy², but the White Paper on Al³; the Digital Services Act package⁴; the European Data Strategy⁵ and the Industrial Strategy⁶ all take into account the sector's important role in providing both technology and knowledge for the industry of the future, for a Green and Circular economy, and a digital society, not least because the European Commission has declared the years to come "Europe's Digital Decade"⁷.

IndustriAll Europe welcomes this focus and encourages further investments in the skills, R&D, and production capacities needed to make these proposals a European success story. Effectively, huge investments in the entire ecosystem are needed to make sure that a viable ICT sector in Europe can contribute to the twin transition. We have therefore identified a number of key priorities and challenges for the sector, that should be taken into account and addressed in the years to come.

2. COVID-19

The COVID-19 pandemic has accelerated the digital transformation of both the private and the public sphere, at unknown speed. The digital leap that people and businesses have had to make is without precedent, and investments have been made possible that were previously unheard of. Yet, if we want to keep our industry on track, we must not stop there.

Many companies in the sector have coped well with the pandemic. A significant number of the workers could work from home, significant parts of the sector were deemed essential and could therefore continue to operate their business⁸, even with restrictions and under strict hygienic measures. Where short-time working

¹ https://ec.europa.eu/eurostat/statistics-explained/index.php/ICT_specialists_in_employment#Number_of_ICT_specialists_

² https://ec.europa.eu/info/sites/info/files/communication-shaping-europes-digital-future-feb2020 en 4.pdf

³ https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020 en.pdf

⁴ https://ec.europa.eu/digital-single-market/en/digital-services-act-package

⁵ https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en#documents

⁶ https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en

⁷ https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en

⁸ https://www.eetimes.com/stop-cut-or-maintain-european-chip-production-amid-covid-19/



schemes were applied, a large number of companies compensated the net loss of income by up to 100%, thanks to the collective agreements in place.⁹

Yet, despite the important role that telework and access to a stable and fast internet connection played during the pandemic, the digital divide between countries, regions, people and companies remains a problem that further fuels already existing inequalities. ¹⁰ More investments in broadband infrastructure in all Member States, as well as a spatially inclusive and comprehensive roll-out of 4G and 5G networks are directly needed, to facilitate both telework and the establishment of the industry in all European regions.

3. Towards a recovery of the European economy

IndustriAll Europe welcomes the path-breaking Next Generation EU programme¹¹, with its focus on the twin transition to a green and digital economy. Investments are directly needed to keep companies afloat, workers in employment, and European economies competitive. Investments must, however, be targeted and in line with the EU flagship programmes. And they must be tied to social justice strings. We therefore call upon the European Union and Member States to invest in the European industry - to make it resilient, green and innovative, to enable it to address the challenges of sustainable and regenerative energy production and consumption, and to maintain and expand quality and secure jobs and a skilled workforce which has the ability to address the challenges ahead.

The ICT sector is without a doubt among the beneficiaries of the Recovery Plan. 20% of the budget is earmarked for investments in digitalisation, and Member States are asked to finally step up their efforts to bridge the digital divide. It is clear that investments in digitalisation are investments in an industry fit-for-future and in the jobs of tomorrow. This must not, however, stop at the borders of industry and digitalisation in the narrow sense. Investments in critical infrastructure, the digitisation of public schools and buildings, of hospitals and other institutions of the public sector, will support the industry in Europe without delay and trigger further investments in R&D, employment, skills and production capacities.

4. Thinking beyond the recovery

Further investments must also be made into the resilience of supply chains. Shortages and disruptions – especially in the early phase of the COVID-19 pandemic – have hampered production globally and revealed the over-dependency of European ICT companies on global value chains for strategic components. As microelectronics and semiconductors are at the heart of our modern economic system, we must make sure that the supply is guaranteed in the event of future crises.

A growing global demand for semiconductors and the failure to step up the supply within the existing production capacities leads to frequent shortages, or even production downtimes, in industries that are highly dependent on just-in-time deliveries and security of supply, such as the Automotive industry. It is therefore of utmost importance to further develop the resilience of the EU's strategic value chains. Supply routes should be diversified without further delay, and stockpiles extended to be prepared for further ruptures. Vast and reliable investments in a full-scale ICT supply chain in Europe are needed and strategic concepts to reshore production or to substitute parts that are currently being produced offshore should be discussed to ensure a true strategic autonomy.

In the long run, having production capacities reshored, with quality workplaces and a skilled workforce ready to take up the challenges ahead, will be decisive for Europe as a location for business and a leading role on

 $^{^{9}}$ i.e. ATOS in Germany with a step-up to 90% , Proservia in Germany with a step-up to 100%.

¹⁰ https://ec.europa.eu/jrc/sites/jrcsh/files/jrc121193.pdf

¹¹ https://news.industriall-europe.eu/Article/520

¹² https://news.industriall-europe.eu/Article/555



the world markets of the future. IndustriAll Europe therefore welcomes the joint declaration by 18 Member States on processors and semiconductor technologies dated 7 December 2020¹³, as this will bolster the EU's capacity to design and produce competitive processors and keep critical infrastructure onshore. This has, in the mid-term, the potential to maintain an adequate production of processors and microelectronics in Europe. We must, however, not stop there. The long-term goal should be to have a full-scale ICT sector in Europe, from semiconductor manufacturers to producers of terminal devices. The European Commission's plans for a Circular Economy will certainly play their part, but this must be actively encouraged and expanded.

5. Social Dialogue: leading the way to a just transition

Private companies must also play their part in the recovery and contribute to a resilient sector in Europe. Companies should step up investments in skills analysis and skills development, in re- and upskilling of the existing workforce, and in continued further development of vocational education and training (VET), together with Social Partners. Supported companies must pay their taxes in Europe and should not practice tax evasion. They should also take into account their responsibility with regard to local suppliers and sub-contractors, and possible bailouts should be conditional to secure commitments regarding local supply- and service chains, as well as regarding suppliers themselves.

Social Partners should be consulted on health and safety at the work place, be it on the shopfloor or remotely. Employees' representatives should be involved when new technologies and software are introduced in the workplace, and forward-looking workforce planning should be at the heart of future-proofing the sector, to make sure that no one is left behind. Employees' representatives and trade unions must have the right and the means to reach the workforce, no matter what the work organisation of their company looks like, to make sure that the transformation of the world of work will indeed be a just transition.

6. Training and skills

To manage a just transition and to keep the European ICT sector competitive, ambitious skills strategies and quality jobs are directly needed. Governments, industry, Social Partners and the education sector must take up the skill challenge related to the twin transition to a green and digital economy and make sure that both the existing and future workforces are well prepared. This is not only true for the ICT sector in the narrow sense, but every worker should be equipped with the basic digital skills to be able to address the challenges ahead. A holistic approach to skills development should be pursued, from early childhood education to Lifelong Learning. In that sense, every European citizen should be equipped with the necessary economic means and skills to reap the fruits of the technological developments.

Skill intelligence and the need to accurately forecast the skills needs for the jobs of the ICT and related sectors of the future, are only a first step. Strategic skills planning at company level, as well as regional and national level, and in reference to the overall EU programmes, such as the Pact for Skills, the Industrial and SME strategies, and the European Digital Strategy, are of utmost importance.

Access to and investment in VET must be scaled-up to support re- and upskilling efforts. Continuous VET must become the norm for the existing workforce, and initial VET, such as apprenticeships schemes, must be supported. Particular attention should also be paid to SMEs, which need special support to develop the adequate training schemes and the right skilling initiatives. Finally, different skills needs of different status groups must be identified and tailored, advanced training must be provided to make sure that everybody has the educational opportunities at hand that fit best.

¹³ https://ec.europa.eu/digital-single-market/en/news/joint-declaration-processors-and-semiconductor-technologies



7. industriAll Europe's demands for an ICT sector fit-for-future

To meet these goals, and to build on the guidelines set out in the Recovery Plan, industriAll Europe identifies five key areas in the ICT sector which should be prioritised and in which investments should be stepped up. We call upon decision makers to:

1. Invest in more and better connectivity

- 1.1 Assess why and where Europe lags behind in the roll-out of 5G and broadband internet connections, making sure that the same mistakes are not repeated when it comes to the development and roll-out of 6G
- 1.2 Foster market solutions for industrial 5G solutions
- 1.3 Develop a harmonised approach for Member States implementing 5G campus networks
- 1.4 Step up investments in broadband infrastructure, in all regions and Member States
- 1.5 Step up research efforts in digital technologies as enablers of a low-carbon, energy- and resource-efficient industry, and of smart mobility and health
- 1.6 Define and invest in 'locomotive' application markets, such as power networks, transport systems, healthcare monitoring networks, home appliance networks or manufacturing technologies, whose demand has the capacity to pull the whole ICT sector
- 1.7 Step up investments in new ICT sectors, such as Artificial Intelligence, Cloud Computing, Quantum Computing and Advanced Manufacturing
- 1.8 Develop strong and fundamental ethical principles to guide any initiative aiming at regulating robotics, Artificial Intelligence and Machine Learning applications
- 1.9 Boost research tax incentives and foster public research institutes, in order to keep pace with international competition in those fields
- 1.10 Invest in the digital upgrading of public buildings, which will make them more energy efficient and save costs, in the long run
- 1.11 Invest in the digital transformation of public administration, which will bolster the sector and make it more attractive for private businesses to follow

2. Invest in holistic digital supply chains in Europe

- 2.1 Industrialise and automate the Circular Economy processes of maintenance, repair, disassembly and recycling
- 2.2 Strengthen research and development efforts in subsectors, such as industrial electronics, as they are the enablers of deep transformations and of digitalisation of manufacturing, automation, telecommunication technology, smart grids and data-based medicine
- 2.3 Develop the resilience of the EU's strategic value chains; diversify supply routes and extend stockpiles, to be prepared for ruptures
- 2.4 Invest in a full-scale ICT supply chain in Europe and develop concepts to reshore or substitute parts that are currently produced offshore to consequently limit external dependencies and to make sure that the technology needed for industry 4.0 applications is produced in Europe, according to European values and with the generated wealth shared in Europe
- 2.5 Step up investments in European cloud solutions, such as GAIA-X, to enhance digital autonomy
- 2.6 Digitally trace and monitor social and environmental conditions of manufacturing along international value chains
- 2.7 Develop the potential of digital technologies to assist workers, rather than replacing them

3. Invest in the data economy as a motor for innovation and job creation

3.1 Step up investments in industrial digital platforms, including the manufacture of electronic components and systems, with clear mutual commitments and sanctions in case of non-compliance



- 3.2 Develop the ICT sector as the industrial engine for Europe, which will provide industry 4.0 applications with the necessary technology
- 3.3 Develop public self-service solutions as a driver for IT infrastructure
- 3.4 Make active use of technical standards and standard setting to finetune rules for the European marketplace and to ensure that European-based companies are competitive under their regime
- 3.5 Mandate the use of open standards for the digital integration of manufacturing, and their availability under Fair, Reasonable, and Non-Discriminatory (FRAND) conditions
- 3.6 Apply the abstract template of Collective Bargaining to the discussion between generators and users of Big Data in industry
- 3.7 Clearly define the rights attached to accessing and processing data under a legal regime of licensing
- 3.8 Increase the benefits of industrial data by granting all stakeholders the right to exploit data according to their needs
- 3.9 Regulate monopolistic digital platforms
- 3.10 Prevent the capture of wealth created by European industries by digital monopolists
- 3.11 Ensure fairness to promote cooperation and innovation in the digital economy, specifically regarding the rights attached to data and software
- 3.12 Mandate ambitious standards for the security and confidentiality of data in European networks and cloud infrastructure

4. Invest in a fairer and easier business environment

- 4.1 Regulate and tax value creation according to the rules of where the work is contracted and physically performed through digital platforms
- 4.2 Ensure that productivity increase resulting from digitalisation is shared equally between capital and labour
- 4.3 Ensure fair competition both within the EU and with countries outside, with neither social nor fiscal dumping
- 4.4 Protect local manufacturers by imposing quality standards
- 4.5 Promote fair competition between countries and continents regarding taxes and social and environmental rules
- 4.6 Set stringent regulation in regard to energy efficiency and the use of eco-friendly materials
- 4.7 Attract new investments by offering incentives for companies investing in EU countries, while demanding a long-term plan for investment
- 4.8 Make sure that national job retention schemes and European programmes, such as SURE, are in place as long as necessary
- 4.9 Combine job retention schemes with re- and upskilling of the workers concerned
- 4.10 Make sure that the existing workforce has access to training and re-skilling, so no one is left behind
- 4.11 Invest in up-skilling, further training and re-training, responding to skill shortages of skilled personnel, e.g. by interdisciplinary programmes which combine IT and traditional skills
- 4.12 Invest in skills analysis and skills development, as well as Lifelong Learning concepts
- 4.13 Develop and invest in industry 4.0 training programmes at universities to make sure that graduates are ready to operate state-of-the-art technology upon their entry into professional life

5. Strengthen the role of Social Dialogue

5.1 Involve Social Partners in the drafting and implementation of the National Recovery and Resilience Plans



- 5.2 Define, agree on and enforce health and safety standards for production and office work in light of the recent insights of the pandemic
- 5.3 Define, agree on and enforce health and safety criteria for telework
- 5.4 Make sure that the additional costs of telework (utilities, such as heating or electricity), are covered by the employer
- 5.5 Anticipate and manage change in a socially responsible manner, by strengthening national and European levels of information and consultation rights across the supply chain on the envisaged challenges
- 5.6 Make sure that workers get their fair share of the wealth generated from digitalisation as well as that generated by Big Data Analytics algorithms and discuss the allocation of these gains
- 5.7 Discuss how to preserve the professional know-how of industrial workers, while exploiting Big Data Analytics as a tool to assist workers
- 5.8 Management should report to, consult and reach agreement with trade unions or works councils on the nature of the data being collected, the frequency of its collection and the duration of its storage,
- 5.9 Management should report to, consult and reach agreement with trade unions or works councils on the explicit algorithms used to process this data, the teaching data, its biases and the means implemented to overcome them
- 5.10 Management should report to, consult and reach agreement with trade unions or works councils on the acceptable means to supervise work and the procedures for workers or their representatives to detect errors or unfair treatment in the automated processing of their data
- 5.11 Provide works councils with the means to hire the competencies of software engineers to support them in the discussions
- 5.12 Prevent the permanent availability of mobile workers with a right to disconnect and make sure that the flexibility of working time made possible by digitalisation and telework is balanced between workers and employers and does not harm the health of workers
- 5.13 Address the qualification needs and expand involvement of workers in vocational education and training
- 5.14 Ensure that all workers, including 'atypical' contractual relationships with the company (e.g. crowd- and platform workers, agency workers), can bargain their wage and working conditions collectively, or be included in the scope of collective agreements
- 5.15 Ensure health and safety at work when interacting with autonomous robots and vehicles
- 5.16 Ensure that employees' representatives are involved when new technologies are introduced in the workplace, so that they monitor these changes and take part in the decisions as part of Social Dialogue
- 5.17 Digital technologies and robots should assist workers, rather than replace them. Impact assessments and training programmes should be mandatory upon the introduction of new technology that has the potential to significantly affect employment. Social Partners should negotiate on the right framework conditions and make sure that gains in efficiency are equally shared between capital and labour.
- 5.18 Ensure that employees' representatives and trade unions have the right and the means to reach the workforce, no matter what the work organisation in a company looks like
- 5.19 Foster sectoral social dialogue on a European level, encourage the exchange of best practice examples and work on joint solutions to overarching problems