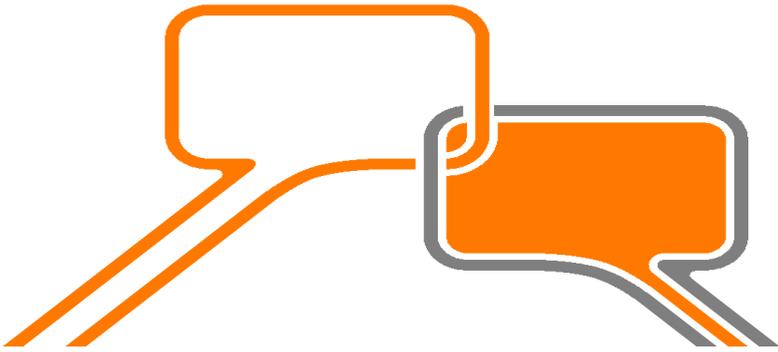


Committed to Europe



A Renewed European Industrial Policy

In a nutshell: we need more Europe and more of Europe's industrial policy to restore growth and jobs

Facing so many challenges at the same time, the EU has to ensure that its industry remains strong and competitive in the long run, to guarantee growth, jobs and increased welfare in the EU. Industrial and digitalisation policies should be developed hand in hand, for the benefit of its citizens and businesses. A reinforced Europe will create not just prosperity but shared prosperity. The challenges are high but not more than the tremendous opportunities a stronger EU can create.

The European Commission is thus right to develop plans on Renewed Industrial Strategy and on Digitalising European Industry, as well as to make the Digital Single Market one of its priorities. There is indeed little doubt that we are at the start of a new industrial revolution that will impact both individuals and businesses. From connected cars, to a world of connected “things” via the deepening of artificial intelligence, the future will be even smarter and will see substantial changes in the way we work and live. It is clear that for any economy, including Europe, digitalising industry is a question of competitiveness at the global level.

In that sense, Orange considers that:

- The EU is the right level to strengthen industry and develop the right impetus to quickly spread innovation and digitalisation; artificial intelligence is an example of an evolution the EU cannot afford to miss, and that can't be tackled only at national level;
- To be successful, an industrial policy will have to rely on citizens and businesses effectively empowered to act in a digital era; to get everybody on board, relevant education and training initiatives should be developed;
- New tools for economic players are required: cooperation across and within sectors should be encouraged and an innovation test based on relevant parameters should be run before adopting any new policy measure;
- In such a connected world, providing the economy and society with EU wide, high-quality services relying on standardisation and open innovation, delivered on top of state-of-the-art fixed and mobile networks, is absolutely vital;
- The international dimension should also be part of the EU industrial policy, especially by supporting a development strategy in specific areas of the world like Africa.

Telecoms operators play a vital role as enablers of this digital revolution and industrial policy strategy. Not only are we providers of increasingly performant networks and services, at the heart of this revolution, but as summarised below, we are also major contributors to the evolution of the digital ecosystem. European Industry and policy-makers need to work together. As Orange, we are ready to walk hand in hand with the European institutions to enable Europe to regain its competitive edge.

A competitive EU industry means an industry where innovation can flourish

On innovation, more Europe can be beneficial on numerous aspects. First in mind comes the question of the start-up ecosystem where the EU should become more supportive. Policy makers need to ensure a regulatory-friendly environment for start-ups and most importantly scale-ups in Europe. Start-ups development is absolutely key as they are good providers of innovation, attuned with market trends and bring a pragmatic and disruptive vision of innovation. Moreover, they can also evolve into unicorns or tech champions.

Orange has committed to invest €350million through Orange Digital Investments, wishing to accompany 500 start-ups through our Orange Fabs Programs up to 2020, being in the EU or in other parts of the world like Africa; <http://digitalventures.orange.com/>. Already 250 start-ups belong to that program. For instance, Activity is a leading European provider of network solutions and managed information systems for the Internet of Things that has built a fully integrated software platform for nationwide IoT services, offering ready-to-go IoT connectivity. Orange is also part of the Go Ignite Initiative, <http://www.go-ignite.com/>, together with Telefonica, Deutsche Telekom and Singtel, which offers innovative start-ups the opportunity to commercialise their innovations faster and scale their business outside their home market.



Artificial intelligence is another aspect where the EU has a role to play; to be competitive in the long run the EU cannot afford to become a laggard in this domain. Several aspects can be worked on: from financing research via specific programs, through ensuring there is no legal or regulatory hurdle to its development, while guaranteeing that EU values and ethics are preserved.

Modernising industries should go together with modernised and digitalised public authorities; the transformation of Member States into an eGovernment is both challenging and essential. And telecom operators are ready to support such changes by rolling out the relevant networks, but also by contributing to its cybersecurity and developing innovative and secured systems, for instance for e-identity.

A successful strategy requires people and businesses empowered to act in a digital era

There won't be successful policy, and no increase in competitiveness without people, with the right skills and competencies. Education and lifelong skills development for all is therefore needed. While robots at work and in our homes may provide an inspiring vision of benefits to society as a whole and stimulate growth, jobs and skills, it is nevertheless imperative to anticipate huge impacts on jobs (50% of which could be automated within a few years), education and training.



Orange is not only an enabler, we also directly contribute to the transformation, first via an internal programme for re-skilling our workers, and secondly, with our strategy 'Essentials 2020' that aims at digitalising and supporting our business customers in their transformation. It is also important to gather various representatives of society to better assess and exchange on significant societal changes driven by digital technologies; one example is the Digital Society Forum gathering sociologists, psychologists, researchers and digital players; <https://digital-society-forum.orange.com/en/>



The strategy should be developed holistically and assimilated by all

Driving innovation in the EU also means modifying the way we interact and work together. EU initiatives that unite industries on some common projects are strongly welcome as they ease and speed up discussions and collaboration. The Commission's Connected & Automated Driving initiative is a perfect illustration. Private

public partnerships are another one, especially when looking at 5G or cybersecurity. The need for collaboration will undoubtedly increase with the roll-out of 5G networks; thanks to its unique characteristics - based on network slicing or stronger adaptation and flexibility for consumers-clients' needs - it will benefit a great range of sectors, from health to transport via entertainment.

Industrial innovation needs to rely on a supportive holistic legal framework that would:

- Allow cooperation; a supportive implementation of competition law should be developed, as innovation often means cooperation between different industries, and also between competitors. Policy makers need to pave the way for more open and extensive collaboration. Specific forms of cooperation can be welfare enhancing not only upstream at a precompetitive stage, but also in the market. Such cooperation is notably necessary for open and interoperable systems to gain the size required to be competitive against largest, closed proprietary platforms. Another key requirement is to ensure that the implementation of competition rules as defined in the Treaty is read together with EU political objectives, which can evolve. For instance, there is now a political consensus to reach a Gigabit Society; to be aligned with it, impact on private investment and dynamic effects of a given case should be better taken into account by competition authorities;
- Impose an innovation and competitiveness test to any policy measure before adoption; a more global approach should be taken by EU policy makers to run such a test on any draft measure to evaluate its potential impacts on growth and jobs in the EU. The Commission has developed the right approach in theory, and it now needs to be delivered in practice. It should also be applied by all EU bodies when amending a Commission text on substantial provisions and rely on a robust methodology. In our view, the current statistics methodology used by the Commission to evaluate the impact of innovation on growth, prices or consumer welfare should be reviewed as it is based on static profiles of consumption and static lists of products and services. By doing so it underestimates the impact of investment in innovation, on growth and consumer welfare, and overlooks the impact of technical progress on price reduction¹. This can have a strong impact on EU policy, for instance, on merger assessment.
- Guarantee a right to innovation for all; this notably implies no pre-emptive regulation of emergent and innovative markets/services, such as Internet of Things or Machine to Machine services.

R&D, standardisation and open innovation are key assets to make the EU industry stronger

The funding provided by EU institutions is key in supporting European research in the ICT domain and should be secured through Horizon 2020 and the new Framework Programme 9. Orange is strongly committed in that respect and contributes to the working groups of the Digitalising of European Industry initiatives and to the Horizon 2020 Programme in general, notably within the 5G or cybersecurity PPPs. We also continue to promote the Fiware initiative, born from the EU's Future Internet PPP.

However, as flagged by the Commission in its 2016 mid-term review, there won't be a stronger EU industry without clear support for standardisation and open innovation, in particular for 5G, cloud computing, the Internet of Things, data technologies and cybersecurity. Standardisation allowing technical compatibility from end-to-end is a form of open innovation which integrates the best in class technologies from multiple actors, both small and large. Mobile connect (<https://mobileconnect.io/>) is a relevant example of the benefits standardisation can bring: the entire mobile industry has developed a simpler and easier way to identify ourselves on the net, by matching the user to their mobile phone, allowing the user to log-in to websites and applications quickly without the need to remember passwords and usernames. It's safe, secure and no personal information is shared without permission.



¹ Aghion, P., Bergeaud, A., Boppart, T., Klenow, P. J., and Li, H. (2017). Missing growth from creative destruction. Working Paper, Federal Reserve Bank of San Francisco.

Finally, actors contributing to standards should be able to benefit, in an effective manner, from a fair return on investment, in order to be able to continue to reinvest in future technologies and constitute as a result a virtuous cycle of innovation benefitting the whole ecosystem, right to the end-user. In order to enable for this return on investment, the effective protection of essential patents and the commercial flexibility in the means of Fair Reasonable And Non-Discriminatory valorisation constitute the driver of innovation in Europe. Any initiative that would lead to discourage owners of essential patents from contributing their innovations to standards, will inevitably lead to fragmentation and the proliferation of closed and proprietary solutions which will only hinder open innovation and interoperability as we know it.

Achieving the Digital Single Market is a pre-requisite to building a stronger EU industry

Electronic communication networks are the raw material on which mass and high-quality level connectivity can develop, as well as innovation in services and the Internet of Things world of tomorrow. Innovation will only flourish in the EU, strengthening its competitiveness, if state-of-the-art networks are available. To achieve a Gigabit Society and support the renewed industrial policy, the EU thus needs to help facilitate the deployment of those networks, fixed, for instance Fiber-To-The-Home Networks, and mobile networks such as 5G. Those evolutions will not only provide higher capacity and quality but also greener and more efficient networks.

They require huge investments, which calls for a modified mind-set for the regulatory framework to make it compliant with this goal; by rewarding private operators taking the risk to invest, and ensuring legal certainty from a long-term perspective. In that sense, Orange has welcomed the Commission's draft Code for electronic communications aiming at developing a modernised and investment friendly set of rules. The outcome of the legislative debate is still uncertain on many key aspects, and Orange strongly hopes the approved text will confirm the Commission's initiative.

A stronger EU industry will also have to rely on trust and cybersecurity. Trust means the right framework on personal data protection, which the EU has established thanks to the General Data Protection Regulation that comes into effect in May 2018. This Regulation ensures a high level of protection together with some flexibility to allow innovation to flourish for all. It is now essential that the sector-specific ePrivacy Regulation remains aligned with that general framework as far as communication metadata processing is concerned. Not doing so would prevent European operators from contributing and competing in the area of Big Data, in contradiction with the principle of innovation. The new Commission initiative on Free Flow of non-personal Data is on the other hand welcome. Finally regarding cybersecurity, it means ensuring a proper set of rules and coordination to fight more efficiently against increased and diverse cyberattacks. The Commission is right to launch that initiative to improve coordination across the EU.

Finally, a true Digital Single Market will not be achieved if we keep the status quo on taxation. It is now undisputable that some big global players are playing fast and smart with Member States rules. The lack of EU harmonisation to fight against aggressive tax planning deprives member States, and thus the EU at a whole, from contribution to the EU economy. Orange supports the current debate aiming at establishing a fairer contribution from all entities to the European economy, thereby putting an end to the current unjustified situation.

The international dimension

Based on Orange's experience in Africa, we have operations in over 20 countries, it is obvious that this Continent is a source of innovation, growth and dynamism that the EU should both support and benefit from. By contributing to the development of telecommunications networks, digital infrastructures and innovative services in Africa, the EU will participate to the development of this Continent, and also benefit from its growth and profit from innovations developed for its very dynamic and demanding markets.

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