

Luca Bertoletti, Ryan Khurana





Luca Bertoletti European Affairs Manager, Consumer Choice Center

Luca graduated with a degree in Political Science from the University of Milan in December 2014. He worked as a Business Economics Analyst for the Italian magazine TheFielder in Milan and as Think Thank Coordinator for the Austrian Economics Center in Vienna.

He is a fellow of Competere Institute in Rome, a columnist for Atlantico Quotidiano, and he sits on the scientific board of New Direction Italia.

He has been featured in the New York Times, Radio RAI, RAI 1, El Economista, The National and many other newspapers.

# Introduction

The Fourth Industrial Revolution<sup>1</sup> is well underway, and the member states of the European Union have fallen behind China and the United States<sup>2</sup> in developing the necessary infrastructure to fully leverage its potential. The strength of the EU is its diversity of cultures and languages, but in the case of innovation, this diversity is proving to be a barrier to scaling new developments. While trade in goods may be high, digital trade remains limited by lack of harmonisation in digital markets, and the interventions of certain states that make investment more cumbersome.

Failing to make the necessary investments to develop a 21st Century digital infrastructure in time will put the EU at a competitive disadvantage in global markets, hampering economic growth for the foreseeable future. At the foundation of technologies such as artificial intelligence and the internet of things, which promise huge gains in productivity, is the need for robust digital infrastructures and the accessibility of next generation bandwidth technologies. The following proposals would aid in the liberalising and harmonising of European Digital Markets to ensure these foundations are solid.

 $<sup>1. \</sup> https://en.irefeurope.org/Publications/Online-Articles/article/What-Will-The-Fourth-Industrial-Revolution-Require$ 

 $<sup>2.\</sup> https://www.bloomberg.com/news/articles/2018-03-27/european-technology-irrelevance-feared-as-u-s-china-dominate$ 



Ryan Khurana
Research Fellow,
Consumer Choice Center

Ryan previously worked at the Institute of Economic Affairs in London, UK, and co-founded JADA Consulting, a business development consultancy for disruptive tech companies, and was a Visiting Fellow at the Cevro Institute in Prague, Czech Republic.

He also worked as Policy Analyst at the Competitive Enterprise Institute, where he dealt with technology and innovation policy.

### DIGITAL SINGLE MARKET

# **National Fragmentation**

Despite efforts at liberalisation and improving cross-border operations of telecommunications in Europe, the market is highly fragmented. Some member states, such as Romania and Finland, providing some of the highest quality and lowest priced service in the world, while others, such as Spain and Ireland, having poor provision at astronomical prices. The EU should move to encourage cross-border provision of telecommunications services, and remove protections for legacy operators, that allow them to profit while maintaining low investment.

# To harmonise national markets, the following steps are necessary:

- The competition rules that prevent cross-border mergers of telecommunications operators should be relaxed so that countries with lower investment in their infrastructure can benefit from economies of scale.
- Divestment from partially State-owned operators would alleviate the crowding out of private investment in countries where legacy telecommunications firms continue to operate, thereby increasing competition.
- Telecommunication firms market entry would be harmonised by the introduction of a standard authorisation system, available in the most popular European languages, which can be submitted to numerous National Regulatory Authorities in a streamlined manner.
- National Regulatory Authority fees for telecommunications operation should be standardised, or waived entirely for smaller entrants, as to encourage new market entry, foster competition, and reduce disparities between member states.

 $<sup>3.\</sup> https://ec.europa.eu/digital-single-market/en/news/fixed-broadband-prices-europe-2016t$ 

## **Digital Service Provision**

As video consumption rises as a dominant form of internet use, and more users move towards mobile internet experiences, content delivery networks (CDNs) and cloud services gain increasing importance in the digital economy. Investment in these areas have generally been highly vertically integrated in recent years, such as the rise of private CDNs from social media, e-commerce, and streaming services. To boost competition in this architecture provision, thereby driving down overall costs and improving service for end-users, the EU must take steps to encourage innovation and implementation of new technologies.

# To encourage investment and innovation in digital services, the following steps are necessary:

Stricter monitoring of data localisation policies
to prevent localities from abusing loopholes in
privacy regulation to limit cross-border data
flows. Data localisation policy should never be
the default, and should only be allowed in
cases where information is crucial for security.
Current localisation policies present severe
barriers to bloc-wide digital investment.

- Relaxation of conditional data flow provisions, which restrict the flow of data if the transferring entity and nation receiving the data fail to meet high standards of data protection. Such policies internal to the EU discourage the investment in building data infrastructures in member states that are not as developed, and prevent innovation across the EU.
- A streamlining of regulation to reduce sector-specificity as means to enable the provision of digital service bundles to users. Current regulations, by being too narrowly specified, hamper vertical integration of services<sup>4</sup>, increasing complexity for endusers and raising overall costs. By regulating based for desired user outcomes, these barriers to integration would be reduced, increasing overall consumer surplus.



<sup>4.</sup> https://etno.eu/datas/positions-papers/2017/ETNO%20Position%20Paper%20on%20the%20EECC



# **Ending Geo-Blocking**

The EU has made progress in ending Geo-Blocking practices for E-Commerce, rightly believing this to improve the growth of the sector within the bloc. This, however, is far from ending the practice which prevents the existence of a true Digital Single Market, as the fastest growing sector of consumption, digital media,5 is still free to discriminate users within the EU based on their IP address or bank residency.

# To free citizens from Geo-Blocking, the following steps are necessary:

- Cross-border licensing needs to be issued for digital media to increase the choice available to consumers, and prevent inequalities in access from appearing across the bloc.
- Purchases of digital content should not be able to discriminate based on the location of the bank with which the content was purchased. Doing so prevents ease of movement for European citizens who would like to access content in another member state with their home bank account.

<sup>5.</sup> https://techcrunch.com/2018/02/06/at-last-an-end-to-geoblocking-in-europe-nope-not-by-a-long-chalk/

# **5G TECHNOLOGY**

### **License Terms**

The European Union's decision to harmonise spectrum licenses for 20 year periods<sup>6</sup> is a compromise that has appealed to no-parties involved. National governments desire shorter license terms as auction rounds are an effective revenue raising tool, while telecoms operators desire longer term contracts in order to secure their investments. 20 year periods provide neither party with their desired outcome.

To remedy these grievances for parties involved and ensure that there is both allocative and investment efficiency in the development of 5G, the following steps are necessary:

 A universal, market-based mechanism for spectrum allocation would improve allocation.
 Restrictions on who is allowed to bid on spectrum licenses should be removed, and cross-border investment should be encouraged, as to prevent legacy operators from dominating spectrum markets in their respective nations.

- Spectrum should be auctioned within member states within a fixed timeframe from allocation to the nation, as to avoid delayed processes, and the development of regional inequalities in investment and innovation.
- The European Union should adopt unlimited term licenses on spectrum auctions and facilitate the operations of secondary markets in spectrum licenses, with fees on sales as revenue raising tools. Monitoring and encouraging companies to re-auction their licenses if they are no longer able to make ideal investments, or if they have overvalued their asset, encourages initial auctions of higher value, and provides sufficient investment incentives for those companies that have made better R&D decisions surrounding 5G.

 $6. \ https://www.reuters.com/article/us-eu-telecoms-spectrum/eu-countries-lawmakers-strike-deal-to-open-up-spectrum-for-5g-idUSKCN1GE2IB$ 



## **Internet of Things**

There has been significant criticism<sup>7</sup> surrounding the European Commission's plan on 5G in relation to autonomous vehicles, smart cities, and the development of new connected devices. The current proposals regulate the means by which manufacturers are able to adopt 5G connected devices in their products, locking them into specific technologies, such as ITS-G5 for automakers. This lock-in prevents the flexibility of markets in emerging technologies and discourages investment in R&D, which will likely result in European telecoms falling behind the quality of those in more liberal technology markets such as the United States and China.

# To prevent lock-in and ensure that the best technologies are adopted, the following steps are necessary:

Ends-based, rather than means-based, regulation
of innovative technologies, to ensure that certain
desired outcomes are achieved, but that
innovation to achieve those outcomes are
ensured.

- If a specific technology is stipulated in the short-run, due to concerns such as interference, provisions need to be made such that a newer technology would trigger a sunset clause in the technology specific regulation, and that competition in implementation is maintained.
- Environments need to be created, similar to the FCA's Sandbox<sup>8</sup> in the UK, such that speculative investment in new innovation can be made in Europe, rather than simply the adoption of technologies developed abroad. Freeing new technologies from existing regulations is essential to allowing EU to become a home for disruptive experimentation.

<sup>7.</sup> https://www.politico.eu/wp-content/uploads/2018/07/CEO-Letter-to-European-Commission-on-Connected-Car-Legislation1.pdf?
utm\_source=POLITICO.EU&utm\_campaign=3af9dddc41EMAIL\_CAMPAIGN\_2018\_07\_09\_11\_09&utm\_medium=email&utm\_term=0\_1
0959edeb5-3af9dddc41-190023333
8. https://www.fca.org.uk/firms/regulatory-sandbox





# Conclusion

A failure to liberalise and harmonise the European Digital Single Market in time will impede the establishment of the up-to-date EU digital infrastructure essential for technologies such as artificial intelligence and the Internet of things to flourish. By looking at the issues of National Fragmentation; Digital Service Provision; Ending Geo-Blocking; License Terms; and the Internet of Things, this report sets out the prerequisites for the improvement of cross-border operations of telecommunications in Europe.

Specifically, the paper stresses that in order to free citizens from geo-blocking, cross-border licensing needs to be issued for digital media so that the choice available to consumers is expanded, and the inequalities in access are prevented from appearing across the bloc. Added to that, the paper advocates for the removal of restrictions on who is allowed to bid on spectrum licenses and for the advancement of the cross-border investment.

Overall, the paper maps out the steps the European Union should take towards bettering its existing digital foundations through the liberalisation and harmonisation of the European Digital Market.



# Contact: Luca Bertoletti European Affairs Manager, Consumer Choice Center luca@consumerchoicecenter.org +39 3451694519