

Agenda

Advancing economics in business

Global–local: European telecoms regulation in the 2020s

In January 2012, Richard Feasey, Public Policy Director at Vodafone, wrote for *Agenda* about the failure of European telecoms policy-makers to understand the challenges they and the industry face today, and claimed that critics of the current arrangements had yet to propose a coherent alternative. He now outlines such an alternative and discusses some of the issues that will need to be tackled

In my previous article, I suggested that part of the difficulty for regulators in understanding the challenges facing the telecoms industry arises from their natural conservatism and the existing institutional and legal framework of regulation in Europe.¹ This article is an attempt to propose an alternative to the current arrangements, or at least to start a debate. It assumes that, given the timeframes involved, we need to consider now what we need in 2016, and what might last until 2025.

My main proposals are:

- redefine the role of national telecoms regulators in a world in which services are increasingly supplied by one set of players on a trans-national basis and networks are run by another set of players on a national or sub-national basis;
- abandon many of the core assumptions of the past 20 years: that network operators have leverage over other players in the value chain, or that (access) infrastructure competition is the primary goal of regulation. Instead, make national regulators focus on the reach, availability and quality of access to the Internet offered in their national market;
- dismantle telecoms-specific consumer protection, privacy and security regulation, much of which reflects outdated concerns about privatisation and monopoly from 20 years ago. Assign these responsibilities to the regulators who already deal with these issues across the rest of the economy, but be careful to consider how the rules will be enforced against Internet service providers operating trans-nationally;

- take decisive steps to overcome the barriers which prevent European digital services from scaling much more quickly. Ask Member States to approve the creation of a new Digital Single Market authority to unblock obstacles and overcome the forces of conservatism which prevent Europe from tapping into a key source of future growth;
- do not attempt further spectrum reform at this stage. Focus, instead, on addressing the risks to the supply chain which arise from outdated standardisation practices and the rise in patent-related litigation in the ICT supply chain;
- think seriously about what ‘interoperability’ means in an Internet protocol (IP) services environment, and how it would be achieved.

Drivers of change

The end of ‘national’ problems

My starting point is that ‘national’ regulation, on which much of European telecoms regulation has been built, is increasingly outdated. This means that the role of the ‘national’ telecoms authorities also needs to be fundamentally revisited.

The creation and delivery of services increasingly occur across national borders (and often outside of Europe altogether). Service providers in the IP era are able to operate independently of the physical constraints imposed by the network infrastructure on which the services themselves run. The development of cloud services is an obvious example. The current European framework makes some attempt to accommodate trans-national markets, but treats them as the exception rather than the rule. The ability of national

The views in this paper are my own and should not be attributed to Vodafone. I am grateful to colleagues at Vodafone, as well as to many others, for insightful comments which have helped to inform this article.

regulators to enforce regulations against IP service providers who operate beyond national borders is also very limited. Any new proposals will need to confront these issues.

Also, network infrastructure markets are becoming increasingly sub-national or local in nature, reflecting the fact that the economics of network infrastructures is literally rooted in the local geography. Today's framework was designed to oversee the single national copper infrastructure which was built with public subsidy and owned and operated by a monopolist.² Tomorrow's infrastructure will instead consist of a complex patchwork of local networks within the same Member State, some operating under competitive conditions and others requiring regulation, each with different capabilities in terms of performance and technical characteristics. Regulation will need to be much more subtle and varied to deal with these localised conditions.

The end of vertical integration

One of the key reasons for the increasing irrelevance of national regulation is the technological and commercial transformation driven by the Internet. IP is restructuring the telecoms supply chain and separating the provision of services from the operation of the network infrastructure. Regulators traditionally worried about leveraging by network operators into downstream services markets, but technology (not regulation) has made this an increasingly marginal concern. Instead, incumbent network operators appear ever more vulnerable to attack from 'over the top' service providers, and regulators can no longer presuppose that it is the network operators that are best placed to leverage across the value chain.

The most recent review of the European regulatory framework in 2009 did not recognise the transformative power of the Internet, and most European regulation still tends to regard services and networks as synonymous and asks the same (national) regulator to deal with both. That needs to change in the IP era.

New institutions

Dismantling services regulation

If national telecoms regulators cannot regulate trans-national IP services, do we need a new European telecoms regulator? I think the answer is 'yes' only if we assume that IP services are somehow special and cannot otherwise be governed by the horizontal frameworks that already govern privacy, consumer protection and competition law in many other parts of the economy.

Telecoms services used to be special, and so the current European telecoms framework imposes a wide

variety of specific and detailed obligations on service providers, including obligations of universal service, billing and contracts, and various telecoms-specific privacy and security obligations. Telecoms was special 20 years ago because the firms providing the services were recently privatised monopolists, and the concern was that they would abuse their customers without appropriate regulatory safeguards. This is why consumer protection (not competition) was a core function in the early days of European telecoms regulation. However, these concerns are not particularly relevant to today's market of privately owned service providers operating across globally competitive markets. Nor is it clear that these telecoms-specific rules have delivered much for European consumers over the past 20 years. Universal service funds were activated in only a handful of Member States despite regulation being in place for years.

As well as being ineffective, these regulations are increasingly an obstacle to meeting consumer needs.³ Consumer expectations and technical capabilities are changing much more quickly in Internet markets, making it difficult for traditional, prescriptive regulation of consumer protection and privacy to keep up. The challenge of remaining flexible and encouraging innovation arises whether regulations are developed by telecoms or by horizontal regulators, but I think the latter approach is likely to be more successful.

We need to begin to see telecoms services markets as little different from, and requiring the same regulatory approach as, other fast-moving services markets. This will require national telecoms regulators to give up most of their responsibilities in these areas, and to hand them to the bodies that oversee privacy, consumer protection and competition for other sectors of the economy.

A Digital Single Market authority

Although national telecoms regulators should do less when it comes to regulating digital services in general, a lot more should be done to remove the obstacles which still stand in the way of completing a European Digital Single Market. Too often, entrenched interests in the Member States have been able to resist or delay the disruptive consequences of digitisation in Europe, slowing down the transition in key sectors and meaning that Europe is not globally competitive in many areas that should be a major source of economic growth and innovation.

One solution is to create a new institution—some kind of European Digital Single Market authority—with a clear mandate to remove obstacles that are identified by affected firms seeking to grow. Such an authority

would have to be able to process complaints much more quickly than the European courts deal with current infringement proceedings, and would have to be able to override or revise national measures when they impede the European Digital Single Market. The authority might also identify the obstacles that impede growth beyond Europe's boundaries, and engage with other governments and international bodies to overcome them.

This would show that Member States were serious about completing the European Digital Single Market. The European Commission could present this as an alternative to the transfer of powers from the national telecoms regulators to some new pan-European regulator—a move which might otherwise be required to drive more harmonisation in services markets. Without such political commitment, the task will take years to accomplish, as the endless debates on pan-European digital rights licensing and the reform of collecting societies demonstrate. In my view, the next regulatory framework needs to take a much more robust approach to overcoming the forces of conservatism and the obstacles to growth which continue to plague Europe.

Competition issues

Competition issues in Internet services markets are very different from the traditional network bottleneck issues in telecoms. Not only are these markets often trans-national in nature, but they also tend to be fast-moving, complex, 'winner takes all' two-sided markets. The skills and competences required from regulators are different. Regulators of Internet services markets worry about whether market power is transitory, rather than about managing deeply entrenched pricing power. Remedies are much more likely to be structural than to involve the application of some 'cost-based' pricing rule (since costs in Internet services markets are invariably difficult, if not impossible, to determine, and setting efficient prices requires information about demand conditions that regulators cannot possibly know).

In short, these are not the kinds of market where three-yearly reviews and incremental adjustments by a national regulator, as we have today, make much sense. The job of policing services markets is better left to competition authorities.

Network regulation

If services regulation should be removed from the national telecoms regulators, what remains for them is the regulation of access to physical network facilities, which, as I have already argued, has always been inherently local in nature and will, if anything, be increasingly so in future. National regulators are already defining 'sub-national' markets to distinguish

between networks that require access regulation and those that do not, and new technologies such as vectoring and fibre-to-the-home (FTTH) will lead to even more localism in future.⁴

Retaining responsibility for the regulation of networks does not mean that national telecoms regulators should continue to act as they do today. First, I think we should abandon the assumption that regulation of infrastructure is a temporary act of 'holding the fort' until sufficient entry and competition occur to allow the regulator to withdraw. In fact, all the evidence suggests that we will see more consolidation among networks as we move to a superfast broadband era. The objective of actively promoting further duplication of (access) infrastructure should finally be abandoned.

Second, it is not clear that national regulators will need to spend much time on traditional voice interconnection issues in future. As all traffic migrates to IP, traditional interconnection charging models will be replaced by largely unregulated peering and transit arrangements. Of course, questions of exploitation or discrimination could still arise under Internet charging arrangements, but these are likely to be specific and better suited to attention from the competition authorities than the national regulator.

Instead, the main concern of the national telecoms regulators in the next framework is likely to be broadband coverage and network quality. This is already apparent, with some national regulators investing a lot in assessing fixed network performance and mobile network coverage. It is also a key element of the Commission's Digital Agenda targets.

The concern about quality and reach could take many forms. I favour the objective of ensuring that citizens have access to broadband connections that offer an adequate level of 'best efforts' Internet connectivity. This is an appropriate 'universal service' target for the 21st century, although for some reason it is currently debated in the context of 'net neutrality' instead.

If I am right then national regulators will have to become more concerned with how to encourage private sector investment in infrastructure, not to promote network competition but simply to meet the targets for infrastructure performance required by national policy-makers. National regulators are also likely to be more involved in the allocation and distribution of public funds where private sector investment is not forthcoming to meet these goals. The US Federal Communications Commission (FCC) is far more advanced than any European telecoms regulator today in reformulating its role and objectives along these lines. I would hope and expect European regulators to follow.

Lastly, it seems sensible to include the regulation of spectrum as part of the responsibility of the national regulators, since the spectrum and the network are so tightly coupled together. Although this article has a number of radical suggestions, I do not favour a move to pan-European spectrum licensing and management. I do not think such a move is necessary to create a pan-European services market or (even if it were possible) a pan-European network. I fear it would instead be enormously disruptive to the debate, and likely to distract from more important goals discussed below.

Key challenges

Enforcement

Whoever regulates Internet services markets will face the challenge of trying to enforce national rules against parties who operate outside of national borders. This is a challenge about which I have written elsewhere. Today's policy-makers are not really engaging with this problem, but the next framework must.⁵

In the past, some EU regulators have fallen back on regulating the network operators in order to get at trans-national service providers that breach national laws—for example, by requiring that operators block access to websites in 'the cloud' that facilitate piracy or other unlawful activity.

Separating the regulation of services from the regulation of networks could make it more difficult to use national networks to take enforcement action against service providers in future. However, one of the reasons for arguing that service regulation should be taken away from national telecoms regulators is precisely that regulators tend to focus on network operators that they can easily regulate, rather than on the service providers that are the source of the problem. Separating the responsibilities improves the chances that we will focus on the right problem in future.

Standards and patents

The current regulatory framework pays a great deal of attention to improving the availability and use of spectrum, having recognised that this was a key input for the industry. The next framework will need to pay similar attention to new 'environmental threats' that could equally inhibit the development of the industry if they are not recognised and dealt with.

The first of these is the future role of standardisation and the pooling of intellectual property in developing many of the core global technologies on which the industry relies. It is now widely recognised, for example, that European standardisation efforts

at ETSI (the European Telecommunications Standards Institute) are in need of reform. But it is not yet clear what model for standardisation will emerge in its place.

Related to this is the explosion in patent-related litigation, particularly between rival smartphone producers or between those producers and firms that have acquired large patent portfolios which they are now seeking to monetise. The potential costs to the industry in terms of disruption to the supply chain, as well as direct licensing fees for the use of technology, represent a massive threat to the sector.

Neither of the issues is capable of being resolved by national telecoms regulators. They may not be capable of resolution at all. But a new telecoms regulatory framework should accord them as much attention as the current framework has devoted to spectrum.

Interoperability

Interoperability has been a core feature of the telecoms regulatory framework of the past 20 years. The next framework will need to consider carefully whether this concept is still relevant in the IP environment and, if so, how it applies.

It is tempting to say that IP standards ensure interoperability, but, in contrast to the traditional telecoms services, many Internet services do not interoperate. They have instead developed as parallel ecosystems, each founded on rival operating systems. The lack of interoperability is behind many of the competition concerns in Internet services markets today, and makes it difficult for consumers to switch service providers. That said, the lack of interoperability, together with 'winner takes all' markets, are also part of what has driven the phenomenal innovation in Internet services markets in the past 20 years.

It is often difficult (and costly) to introduce interoperability obligations as remedies once technologies have been developed, but there may also be other reasons for imposing interoperability obligations on telecoms markets. The 'any to any' requirement for voice telephony (and email and SMS) ensures that any user on the edge of a network can communicate with any other user. This was, to some extent, justified by competition concerns, but also on simple externality grounds—everybody on the network benefits collectively if they have the opportunity to communicate with everybody else. As voice telephony becomes an IP service like any other, the next regulatory framework will need to be clear about whether (and why) existing interoperability requirements are to be carried forward into the IP world.

Conclusion

Fundamental changes are needed if we are to create the regulatory institutions, objectives and culture to meet the challenges of the next 10–15 years. There is otherwise a real danger that we will over-regulate the networks in the pursuit of misguided competition goals, fail to protect consumers because we cannot enforce

rules, battle for years to complete the European Digital Single Market and overcome the forces of conservatism, and see our key supply chains disrupted by patent wars for years to come. These are all formidable challenges, so it is as well that the debate starts now.

Richard Feasey

¹ Feasey, R. (2012), 'Nice to Nasty: the Changing Outlook for European Telecoms Regulation', *Agenda*, January.

² Unless European governments are to find billions of euros to fund a National Broadband Network project, as the Australian government is currently attempting to do.

³ For example, see the latest proposals for revisions to the EC Data Protection Directive, which does not recognise the implications of the IP revolution for privacy. European Commission (2012), 'Commission Proposes a Comprehensive Reform of Data Protection Rules to Increase Users' Control of their Data and to Cut Costs for Businesses', press release, January 25th.

⁴ One important exception is the development of global infrastructures comprising storage, routers and transmission capacity, such as those run by Google, Amazon and others to support their core services.

⁵ Policy-makers have understandably avoided public debate of this issue, partly because they do not fully understand it, but also because no state will wish to admit that it does not have any means of regulating the services that its citizens consume.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Leonardo Mautino: tel +44 (0) 1865 253 000 or email l_mautino@oxera.com

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