

European Union Telecommunications Policy

Seamus Simpson
(School of Arts and Media, University of Salford, UK)

Accepted for Publication in the *Oxford Research Encyclopedia of Communication*, (Ed. Jon Nussbaum), New York: Oxford University Press, 2017.

Pre-publication Version
Accepted for publication on 13.6.17

European Union Telecommunications Policy

Summary

This article explores the character and development of telecommunications policy at EU level. For most of the 20th century a matter of national governance and thus of peripheral interest to the EU, from the mid to late 1980s the EU began to develop an intensified policy package for the telecommunications sector. Telecommunications has now grown to become one of the most prominent and extensive policy areas addressed by the EU. But what can account for such a remarkable Europeanisation of telecommunications governance? In polar contrast to its origins, the article shows how telecommunications has become a key focus for effecting sectoral change by advocates of neo-liberal economics and policy. This went hand-in-hand with arguments around propounding the benefits of economic globalization, which sustained a move to internationalise the organization of telecommunications to the European level along neo-liberal lines. However, notwithstanding the remarkable growth of the EU governance framework for telecommunications, the article also nuances its analysis through illustrating the constant

resistance to wholesale Europeanisation of telecommunications policy. It provides evidence of a residual tension between national and EU level interests in this respect. This has been evident in policy proposals, decision taking and implementation at key junctures spanning more than 30 years. The article illustrates the role played at different times by key EU and national level governmental, regulatory and commercial actors, in particular. Telecommunications, the article argues, thus provides a classic illustration of the balance that needs to be struck between supranational and intergovernmental interests in the development of communications policies at the EU. Now part of a converging electronic communications sector, this feature of telecommunications governance is as prominent today as it was in the very early days of EU telecommunications policy development of the mid- to late 1980s.

Keywords

European Union; regulation; telecommunications; policy; governance

European Union Telecommunications Policy

The Telecommunications sector in Europe: From Stability to Change

For much of the 20th century, telecommunications was one of the most stable sectors in Europe. This stability went hand in hand with a highly distinctive character. Telecommunications was considered to be - along with a raft of other sectors, such as electricity, gas, water and the railways - a public utility, stemming from its strong network character (Grande 1994). In economic terms, telecommunications service provision was widely viewed as a natural monopoly. The very substantial investment costs associated with purchasing the component parts for - and the roll out of - a telecommunications network tended to militate against competition, or, more precisely, the development of any kind of competitive market structure beyond areas of dense population, where revenue streams might be considered to justify market entry. This analysis of telecommunication sat alongside an understanding of its strategic significance in economically and socially (Humphreys, 1992; Hulsink, 1999). Telecommunication was highly valuable to the national economy in terms of the revenue generated from the manufacturing and sale of network components, as well as services delivered through the network. In secondary terms, the presence of a well-functioning telecommunications system was seen as a spur to economic activity more generally: investment, production, employment and sales in the economy could be stimulated through a so-called multiplier effect. The telecommunication system was also viewed as socially valuable in a number of respects (Michalis, 2002; Bauer 2002). It had the potential to enrich the quality of personal one-to-one human communication. This was particularly the case for those located in sparsely populated areas or at distance from family and friends and could allow

public, political, health and security administration of various kinds to function more effectively. It is important to understand that whilst the telecommunication sector has been transformed in organizational and functional terms, these core staples of the sector persist, though understandably in a different articulation due to the passage of time.

In its original configuration, for most users, telecommunication services amounted to voice telephony and, for (some) businesses, simple data communication in the form of fax, accessed through relatively simple equipment located at the ends of the network. This network was for the most part fixed-link, that is, it employed a transmission system which relied on copper coaxial cables punctuated by switching centres. The economics of fixed link telephony in terms of high (dis-incentivising) investment costs, allied to the policy goal of achieving progressive network roll out, led, in Europe, to the policy solution of publicly owned monopoly or near monopoly (Bartle, 1999). Network equipment manufacturing, though more competitive, was little more than oligopolistic in nature. To facilitate international communication, European states took their place in the International Telecommunication Union, which was the context for the creation of a series of bilateral international accounting rates between countries to handle international telecommunications traffic (Hills, 2002).

However, through the 1970s and into the 1980s, the technical characteristics of telecommunications changed rapidly as a result of a set of key innovations, aligned to convergence with IT and data processing. Central to this was digitalization, which greatly enhanced the speed, reliability and security of the network. Digitalisation also meant widespread capacity to conduct computer-to-computer communication. The telecommunications services palette thus widened to incorporate combinations of voice,

data, text and images: so-called value added network services (VANS) (Humphreys and Simpson 1996). The extra capacity required for the carriage of these enriched services could be provided by optical fibre cable technology, though comprehensive upgrading of the network is still a work in progress – and thus a policy challenge - in most, if not all, European territories. In addition, mobile (part) microwave based communication emerged from the margins of telecommunications, requiring new network roll out. The popularization of mobile communication, in which high speed audiovisual services accessed through so-called smart phones are now commonly available, has been one of the most outstanding changes to have affected a sector which, more broadly, has undergone nothing short of a transformation.

The new telecommunications service possibilities arising from digitalization provided the ground for a fundamental re-examination of the structure and operation of telecommunication in Europe. Much of the reason for this was practical: there was distinct dissatisfaction with the availability (or non-availability as was often the case), cost and quality of telecommunications services. Dissatisfaction was particularly strong among international business users and was expressed - not least to governments held responsible for the then sectoral structure - on an individual basis and through user representative bodies, such as the International Telecommunications Users Group (Simpson, 1992). A particular bugbear was the lack of choice of service provider in the publicly owned monopoly system. Strong pressure soon mounted for change in the structure of telecommunication service provision to occur given the new technical possibilities. A key practical argument was that the economics of new VANS did not point to the natural monopoly of the existing system but, rather, suggested the potential

efficacy of a competitive service market structure. These developments soon became a mutually reinforcing complement to more general political change of a fundamental nature in western Europe that emerged through the 1980s and 1990s: the growth of neo-liberalism (Harvey, 2007). With its immediate origins in the economics of the conservative US Right of the late 1970s, the philosophy and strategies of neo-liberalism soon gained ground in the UK. In outline, the message of neo-liberalism was simple: a philosophical emphasis on individual over group interest cast as liberation and empowerment; the rolling back (though not complete eradication) of state influence in economic and social life; and, lastly, a view of the market as the superior form for organizing economic and (ultimately) social life. For many, the pre-dominance of neo-liberalism and market relations extends into most, if not all, aspects of social life, not least culture (Freedman, 2014). In practical terms, for its advocates, telecommunications presented as a tailor-made case to introduce neo-liberal reforms. The sector was state run. It was highly uncompetitive but technological change in certain of its key parts appeared suggested the amenability of introducing competition. Elsewhere, modest competition could be engineered as a starting point in line with the orientation of the neo-liberal approach towards marketization (Jordana, 2002; Steinfield 1994).

In the UK, the forerunner economy of telecommunications policy change across the EU, radical change in the ordering of telecommunications thus ensued (Bartle, 2002). The incumbent telecommunications operator was partly - and then completely - privatized and a competitor service provider introduced. New licences were awarded to companies to provide VANS. A nascent mobile communications market was created through the licensing of a duopoly of network operators and, thence, a raft of service providers. A

new independent national regulatory authority, in the form of the Office of Telecommunications (OFTEL), since 2003 called the Office of Communications (OFCOM), was created to set in place, enforce and develop a regulatory framework for the functioning of a competitive telecommunications market in the UK. The prototypical ground had now been set for a neo-liberalised and radically reformed telecommunications policy model in Europe. This model was soon emulated, though far from replicated wholesale, across the rest of Europe, and beyond (Thatcher 1999; Werle, 1999; Simpson and Wilkinson 2002). As this complex process unfolded through the late 1980s and 1990s, a key player emerged in the form of the European Union: EU telecommunications policy was born.

The Emergence of EU Telecommunications Policy: Rationale Building and Political Controversy

Indeed, it was in considerable part the complexity, uncertainty and radically different approach to the organization and functioning of telecommunications that the 1980s heralded which presented itself as an opportunity for the EU to increase - what was until then - a relatively marginal involvement in telecommunications policy, such was its national-centricity. A number of key elements combined to explain the emergence and growth of the EU as an actor in telecommunications. It is important to note that in a territory as varied as the EU - even with its by today's standards small number of 12 Member States (there are at the time of writing 28 EU Members, prior to 'Brexit') - policy change in telecommunications was developing at different speeds and to different extents at the national level. The EU found an opportunity, and was seen as important in delivering, a coordinative role in the emergence of a regulated market liberal

telecommunications space across most of Europe (Roy, 2002). However, as exemplified in the next section, the EU did much more than play the role of a policy coordinator and facilitator. In fact, at a number of key junctures, the EU can be recognised as something of a policy leader or entrepreneur (Cram, 1994). Combining its policy leadership, coordinative and facilitatory roles required significant political skill and awareness – which was predominantly, though not always, in evidence - particularly at junctures of forward policy movement and resistance to change. Here, a strong feature of the evolution of EU telecommunications policy has been an effort to strike an acceptable balance between a range of different national interests. Related to this has been the need to secure agreement between the EU's main institutions that have been involved in telecommunications policy development: the European Commission (the EU's civil service which consults and proposes new policy initiatives); the European Council of Ministers (containing political appointees from the national Member States to vote on proposals produced by the European Commission); and the European Parliament (containing directly elected members from the EU's member states which votes on decisions made by the European Council of Ministers).

A raft of highly important economic issues also contributed to a rationale for the widening and deepening of the EU's involvement in telecommunications policy. In the late 1980s, there was a growing emphasis on the international nature and potential of telecommunications. However, given its history, understanding the implications of a potentially open international telecommunications services market was challenging. The EU, which amounted to a considerable part of the global market, was viewed by many – particularly the larger EU economies and their telecommunications operators - as a

useful staging post to gaining a foothold in the international potential of the telecommunications (Schneider, 2002). EU member states had been part of a (far from completely developed) common market since 1957, which set important ground for the consideration of telecommunications as a more competitive Europeanised sector. In this environment, from a customer perspective, a more open, common European market could deliver the neo-liberal promises of lower prices and improved service quality. However, whilst cross-Member state market integration in telecommunications was certainly a possibility, it was an open question about the extent to which this could be achieved (Michalis, 2004).

Beyond economics, there were also political reasons underpinning the interest in developing telecommunications as an EU policy area. First, in both politically symbolic and practical consumerist terms, enhanced policy cooperation in telecommunications had the potential to ‘make Europe a smaller place’ through easier, cheaper cross EU communications. Tied in with this was the opportunity to add telecommunications to the portfolio of industries which were characterized by strong European integration in economic terms. Historically one of the most unlikely candidates for such a move, legal measures could be devised at the EU level that set out the parameters of a more liberalized and potentially integrated European telecommunications market. This process, in turn, presented opportunities at the EU institutional level, particularly for the European Commission, though also to a lesser extent the European Parliament. The Commission’s functions and broader political instincts led it to focus on telecommunications, which, by the mid-to-late 1980s was regarded as a sector not only providing an opportunity for – but rather necessitating even – the development of EU

policy activity. Through subsequent decades, the Commission has developed into a key telecommunications policy player through liaison with key industry actors, launching sector wide consultations, proposal of new legislative measures and recommendations in telecommunications for Member States to decide upon; monitoring compliance with legislation passed by Member States; and representation of the EU in global fora for the negotiation of telecommunications agreements, notably the World Trade Organization.

Despite this fertile ground for the development of EU telecommunications policy, there was at the same time reticence about - and even opposition to - potential developments in this direction. Across various parts of the EU, there existed ideological opposition to neo-liberalism. That telecommunications was considered a tailor made case for reform by neo-liberals equally made it a sector tailor made for resistance to such change by its opponents. In particular, the long established public service and public interest aspects of telecommunications were considered by many to be undermined intrinsically by the process of state withdrawal and the introduction of competition and regulation (Simpson, 2009). The fact that such parameters might be set in place at the EU level pointed towards a reduction in the ability of national level actors to resist change in this direction, whose messages increasingly were overlaid by an agenda of economic internationalization (Ohmae, 1991; Cerny, 1997). This concern was particularly strongly felt in smaller member states, even those in general favourably disposed to liberalization of telecommunications. Here a distinction is to be drawn between liberalization domestically and opening up of the sector to competition internationally, with the risks such exposure might bring to indigenous service providers. It was also the case that, even among many arch neo-liberals, notably the Conservative government of the late 1980s

under Margaret Thatcher, there was deep concern about ceding policy power to the EU level. Particular focus was trained on potential institutional growth of the European Commission. The potential advantages of the Europeanisation of telecommunications through the EU route for these actors needed to be carefully balanced with measures to ensure control of the evolution of the sector was maintained predominantly in national hands (Thatcher, 2002) . A classic general dilemma of Europeanisation, this is not easy to achieve, as the case of telecommunications illustrated well.

The Establishment of EU Telecommunications Policy: the 1998 Regulatory Package

The decision to create competition in telecommunications services, through new markets with licence-based entry and by opening up existing markets to competition, was a highly significant one. That a policy strategy to drive such change through at EU level should have developed through the late 1980s and into the next decade was remarkable. However, a complex milieu of factors came together over approximately a seven year period from 1987-94 to ensure that Member States resolved to do just that. First, the UK and Germany – two of the leading political players in the EU - were forerunner telecommunications liberalisers and were keen to see the markets for telecommunications terminal equipment and VANS opened to Europe-wide competition (Humphreys, 1992) . The UK had even gone further than this by creating competition in voice telephony. By the late 1980s, Germany too was of the view that this market could usefully be opened to, albeit limited, competition. Second, a strong international business user lobby made its voice heard by urging strongly for the opening of telecommunications services to competition at EU level. Within the institutional corridors of the EU, the European Commission had become emboldened enough to present proposals for the creation of a

Single European Market in Telecommunications through a Green Paper (European Commission 1987) whose liberalization and Europeanisation thrust chimed with a broader Single Market project that was under way at the time across the EU (European Commission 1986). Sensing strong opposition to the idea of liberalization of voice telephony, the Commission nevertheless signaled its intention to propose the liberalization of telecommunications terminal equipment and VANS. It was acutely aware, however, that liberalizing legislation in the form of directives in these areas would be subject to enough opposition in the Council of Ministers to make their passage into law impossible. However, displaying an audacious policy entrepreneurial role, the Commission invoked the then article 90 of the Treaty of Rome (now article 86 of the Treaty on European Union) and, specifically, a clause within it which the Commission claimed required it to put in place directly necessary measures to remove the existence of positions of dominance held by public undertakings in relevant markets. The Commission argued that the PTTs in Member States, which were at least partly publicly owned, were abusing their position in respect of article 90 in the markets for the sale of telecommunications terminal equipment and VANS. As a consequence, it released two liberalizing directives (European Commission 1988; European Commission 1990) in these areas which would require when implemented open EU wide competition. The ensuing period was the most controversial one in the history of EU telecommunications policy. It had two key components: a fascinating lead up to a 'liberalisation tipping point' and a debate on the extent to which the European Commission - an unelected body - might be allowed to introduce legislation whose process directly bypassed the Council of Ministers and the European Parliament (the latter at that stage merely had a consultative

role in respect of Council of Ministers decisions).

A legal challenge to the Terminal Equipment Directive was issued by France, as well as three other separate challenges to the services directive by, respectively, Spain, Belgium and Italy. However, a process of negotiation between the Commission and Member States through 1989-90 ensued which removed the political controversy from the Commission proposals (Humphreys and Simpson, 2005).

The solution manifested itself in what became known as the Open Network Provision compromise, where Member States agreed to open up all telecommunications services to competition except public voice telephony and basic data transmission services. A key feature of the compromise was freedom granted to Member States to put in place public service obligations - which nevertheless needed to be in line with EU competition rules - on private service providers which leased lines from the incumbent on the public network. By this stage, all Member States, however reluctantly, had come to the realization that liberalization of telecommunications services was inevitable and even desirable. Nonetheless, it was clearly argued that liberalization should not be allowed to sweep away the public service element that was so strong in the evolution of telecommunications. It became clear also to Member States that liberalization of telecommunications services would require a separation of the operational and regulatory functions of their telecommunications administrations, though this was never expressly required by EU legislation. Beyond this, creating competition in an historically monopolist dominated network services environment would require the putting in place of a raft of regulatory measures to ensure acceptably fair levels of access to the network to provide services competitively. Thus, the era of independent publicly regulated,

competitively ordered telecommunications services in the EU was born (Steinfeld et al., 1994; Thatcher, 1999).

In conjunction with the passage of the liberalizing Telecommunications Services Directive, the EU also put in place, through the standard (not article 90) legislative process, a key directive on Open Network Provision. This directive was structured as a harmonizing framework in which Member States agreed to put in place service stipulations which would allow network service provider inter-operability, as well as to create a technical committee to liaise with a range of parties from network operators, equipment manufacturers, users and the Commission to ensure that the directive was implemented effectively. The ONP directive was a key part of a pivotal process in the evolution of EU telecommunications policy. It 'took the heat' out of use of article 90 by the European Commission. By the time that the European Court of Justice had issued a final judgement in respect of the article 90 cases in front of it which, remarkably, endorsed the procedural right of the Commission to use article 90, a liberalization tipping point had been reached at EU level. Yet equally, the Commission also realized the limits to which it was able to mount challenges of this kind to Member States. The policy idea of ensuring balance between the national and EU level had thus been ensconced in EU telecommunications policy. The ONP directive was also highly significant in that it paved the way for the passage at EU level of a raft of directives which specified the harmonization of key parameters of the neo-liberal telecommunications model, such as licensing, interconnection and, as a public service counterweight, universal service (Goodman, 1996).

Once the liberalization tipping point had been reached, the EU telecommunications

regulatory package developed quickly through the 1990s. Following a comprehensive Telecommunications Services Review in 1992, EU Member States took the step to agree to open up all public voice telephonic services by 1998 (European Council of Ministers 1993). Following this, in 1994, in the light of a key report *Europe and the Global Information Society* (European Commission, 1994), also known as the Bangemann Report after the Committee's Chair, Martin Bangemann, Member States agreed to liberalize all telecommunications infrastructures by the beginning of 1998 in line with voice service liberalisation (European Council of Ministers 1994). According to Humphreys and Simpson (2005), a number of factors can explain this dramatic series of policy developments. First, telecommunications was developing into a global industry where national protectionism was viewed as increasingly outmoded. Second, the former PTT incumbents of the larger EU economies, many now newly corporatized or partially privatized, were hungry to pursue commercial opportunities beyond their national territories. Third, even among smaller member states, whose commercial players were unlikely to benefit from international expansion, the lower consumer prices and quality of service improvements witnessed in early liberalizing states, notably the UK, was a significant factor in them agreeing to liberalization. It is also the case that the EU was able to serve as a useful 'policy alibi' for those states facing opposition to change domestically. Thus, the emergence and development of the EU telecommunications regulatory framework, as it came to be known, was the result of a combination of national and European level factors in the context of a changing techno-economic telecommunications context.

By 1998, therefore, through the passage of a battery of legislative measures, the ground

was set for a broadly re-regulated EU telecommunications sector to begin operation. These directives were of two characteristic kinds: six liberalizing (enacted through article 90 (now article 86) and 6 harmonizing (enacted through articles 100a (now 95) related to the establishment of the internal market in the EU; and article 66 (now 55) which refers to the freedom to provide services across the EU). Central to the establishment of liberalized telecommunications markets in the EU were the 1996 Full Competition Directive (European Commission, 2006), the 1997 Interconnection Directive (European Parliament and Council 1997a), and the 1997 Authorisation and Licences Directive (European Parliament and Council 1997b), as well as the 1997 Universal Services Directive (European Parliament and Council, 1997c) which provided a *service public* balance to a re-regulation of telecommunications across Europe, under the aegis of the EU, that was strongly liberalizing in thrust.

Policy Implementation and Refinement: Media Convergence and the Electronic Communications Regulatory Framework

The setting in place a comprehensive policy framework at EU level for the re-regulation of telecommunications was for, the European Commission, the culmination of a ten year project (European Commission, 1998a). However, though a crucial landmark, in reality setting the policy framework at EU level was only a relatively early stage in the evolution of EU telecommunications policy. An important series of developments and refinements of the regulatory framework has occurred. The features of this process have thus continued to set the character of EU telecommunications policy.

A key characteristic has been an almost constant monitoring of the performance of the

framework by the European Commission, in line with one of its core responsibilities and competences. Monitoring of the extent of compliance of Member States in the transposition and implementation of the Directives of the framework has been prominent in a series of annual implementation reports. The Commission has also been keen to monitor the state of competition in the different national markets of the EU and the reasons behind, in particular, evidence of limited competition. This activity has amounted to a very large information gathering and processing exercise in which the Commission has relied heavily on the series of independent, publicly resourced National Regulatory Authorities in telecommunications which were established at the Member State level. It is important to note that none of the liberalizing or harmonising legislation passed at EU level required Member States to set up these authorities (Thatcher, 2004a), though such moves were an inevitable corollary of the commitment to removing operational and regulatory control from the former PTT incumbents, as well as to police an increasingly complex system of market regulation.

This monitoring process was supplemented by a series of broader consultation and stock-taking exercises which have led successively to the proposal by the European Commission of changes to the regulatory framework. A key landmark occurred in 2002 with the proposal by the Commission, duly accepted by Member States, of a very significant streamlining of the regulatory framework. Prior to this, a major debate occurred on the future regulation of communications at EU level in the context of ongoing processes of media convergence (Levy, 1999). Telecommunications is now a fundamentally important part of a converging media world where distinctions between IT, telecommunications, broadcasting and publishing have become increasingly blurry.

Media convergence is a long standing and complex process enabled by the digitalisation of telecommunications and then mass communication broadcasting. The popularization of the Internet from the mid-1990s created a new online context within which voice, data and image based communication has developed in unprecedentedly integrative ways. For EU telecommunications policy makers, media convergence has, at times, presented opportunities to establish and develop telecommunications policy. Early on, the changing economics of telecommunications services enabled by the growth of VANS provided a context for the EU to forge ahead with the liberalization of telecommunications services. The idea of convergence has also been symbolically important for the EU with its connotations of change in the direction of ‘coming together’. The European Commission has, at key moments in the development of its telecommunications policy package, adopted aspects of the discourse of convergence to advocate policy change. This has involved calls to action to its Member States to address areas related to convergence where the EU is seen to be lagging behind in, as well as pointing up the opportunities from media convergence around the Internet, in particular. However, on the other hand, grappling with media convergence in policy terms has highlighted the political limitations of the EU as a setting for telecommunications policy. This was particularly evident in the late 1990s when the Commission launched a policy drive to create a more convergent regulatory framework for media at EU level, which, at its most ambitious, would have covered broadcasting, IT, publishing and telecommunications (European Commission 1997). The Commission’s move precipitated a period of controversy which illustrated two key problems for the EU in the pursuit of a broader and deeper media policy based on convergence (Simpson, 2000). First, there was strong opposition from

the broadcasting sector to moves which would regulate more commonly broadcasting and other forms of electronic communication per se. Since the 1990s, this has lessened, not least because of the gravitation of broadcasting players, to a significant degree, towards the Internet, though it is clear that complete convergence of broadcasting with other forms of electronic communication is still some distance away. Second, the historically national centredness of broadcasting regulation across the EU meant strong resistance to the transference of regulatory sovereignty over media content to the supranational level. This has been a persistence feature – and impediment to the deepening – of EU broadcasting policy for more than three decades.

The upshot of the EU's policy engagement with convergence of the late 1990s, though politically sobering for the European Commission, was, nevertheless, significant for the further development of its telecommunications policy. In essence, telecommunications provided 'face saving' convergence policy development for the EU. Here, a new Electronic Communications Regulatory Framework was agreed and came into force in 2003. Strongly connotative of convergence through its title, the ECRF was, in fact telecommunications policy centric in character. Specifically, the new framework covered the regulation of all electronic communications infrastructures but not content beyond that already contained in the 1998 telecommunications regulatory framework. Excluded specifically at that point were broadcast content and so-called Information Society services. This referred to content services of any kind offered through the Internet. Since this point, the telecommunications policy package has developed under the electronic communications mantle (Michalis, 2004b).

The 2003 regulatory package dramatically reduced the number of sector specific

regulatory measures in telecommunications from 20 to 7. A key objective was to incorporate a regulatory convergence perspective to all electronic communications network infrastructure and associated services: the new framework covered fixed and mobile telecommunications networks, cable TV infrastructures, terrestrial broadcast networks and Internet infrastructure. The revised framework comprised two liberalizing measures: a Regulation on local loop unbundling introduced in 2000 (European Parliament and Council 2000) in response to a perceived stubborn lack of network competition in the so-called 'last mile' of the network; and a new competition directive (European Commission 2002). It also contained harmonization directives concerning matter such as access and interconnection (European Parliament and Council 2002a), authorization (European Parliament and Council 2002b), universal service (European Parliament and Council 2002c) and data protection and privacy (European Parliament and Council 2002d), as well as a Framework directive (European Parliament and Council 2002e).

A major feature of the evolution of EU telecommunications policy has been the attempt by the European Commission to secure Member States's agreement to create a regulatory body at the European level in telecommunications. This became a particularly significant issue for the Commission as evidence suggested persistent difficulties in securing the degree of regulatory harmonization necessary for the pursuit of a genuine Single European Market in telecommunications (Bartle, 2001). Such efforts were bound in with an evident desire on the Commission's part to gain more direct influence in the regulation of telecommunications markets across the EU. As part of the process leading to the creation of the ECRF in 2003, the Commission proposed - and was successful in

securing agreement to create - the Communications Committee, which effectively replaced the existing ONP and licensing committees and was comprised of Member State telecommunications appointees. However, the Commission also proposed, unsuccessfully, the creation of a High Level Communications Group in which it would have played a pivotal decision making role alongside NRAs (Michalis, 2004b). The European Regulators Group emerged from this policy deliberation as a compromise solution. Replacing the High Level Regulators Group established in the 1998 Regulatory Framework, the ERG was comprised of NRAs and the Commission, the latter present in a non-voting capacity. The purpose of the ERG was to facilitate coordination between NRAs, in particular to ensure as much commonality as possible in the implementation of the telecommunications regulatory framework. A key aspect of the ERG was its secretariat, resourced by the Commission. The ERG marked the formal institutionalization of a committee of NRAs at EU level.

The persistence of the Commission and the securing of policy compromise in the context of an ongoing struggle between the national and EU levels for regulatory power in telecommunications are key features of the evolution of the EU policy environment. The latter was particularly evident in the Commission's desire to secure for itself a veto over certain key regulatory decisions taken at the national level. An example was a proposal to allow it, through a legally binding Decision, to specify telecommunications sub-markets that would be subject to sector specific regulatory measures. Similarly, any proposed market regulation in additional areas desired by Member States would have to secure the Commission's agreement. Member State opposition to this proposal was, unsurprisingly strong and resulted in a downgrading of the Commission's input to the status of a non

legally binding Recommendation derived after public and NRA based consultation. Another example centred on a debate, in the lead up to the agreement of the 2003 ECRF, on a potential veto for the Commission on NRA decisions to remove ex ante regulation from a particular sub-market. After much often fractious exchange, it was agreed that the Commission could only exercise the power of veto here in the event of there being a European dimension to the decision (Telecom Markets, 18.12.01: 5). Thus, Article 7 of the ECRF's Framework Directive allowed the Commission to veto decisions about which operators exercised SMP in specified markets and also in relation to markets not identified by the Commission as needing sector specific regulation. The NRAs also met as part of a more informal, pan-European Independent Regulators Group, separate from the EU policy apparatus, which was in part indicative of their desire to exercise epistemic interaction outside the presence of the Commission (Humphreys and Simpson, 2005).

Nevertheless, the idea of creating a stronger EU level telecommunications regulatory authority persisted in the mind of the Commission and surfaced strongly in 2007 as part of a review of the ECRF. A proposal for a Regulation to create a new such body was issued by the Commission, justified by the view that there was persistent evidence of inconsistent regulatory practice, leading to unfair competition in telecommunications across the EU. The Commission held the loose coordination among NRAs which existed in the ERG as an impediment to this. Instead, the proposed new body would have had a much greater supranational dimension in which the influence of the Commission would have been stronger. An Administrative Board with members appointed by the European Council of Ministers and the Commission in equal measure would have sat above and overseen the new body's Board of Regulators, comprising the EU NRAs. The work of

the new body was to be used by the Commission to inform it in respect of decisions it would take related to its veto powers already held and, more importantly, a new right of veto - which the Commission sought in its proposals for revision of the ECRF – related to the regulatory remedies specified by NRAs in respect of identified problems in national telecommunications markets. The latter proposal was firmly rejected by Member States in the agreed revisions to the ECRF, albeit that the new procedure did give the Commission more objection-raising and discursive scope to disagree with remedies produced by NRAs (Simpson, 2011).

The proposal for the new regulatory body would have created significant supranationalisation of EU telecommunications policy making, within which the European Commission's policy power would have grown considerably. It was unsurprising that this proposal met with strong opposition from NRAs, but adverse reaction was strong also from the European Parliament. The latter produced a counter-proposal in which the Commission's proposed Administrative Board would be absent from the new regulatory body, with only one third of its budget coming from EU resources. Despite its supranational character, it is interesting that the EP declared its wish to see a regulatory system underpinned by subsidiarity and minus any kind of supranational European regulatory agency, something it feared would be the consequence of the Commission's proposal. After considerable deliberation, the European Council of Ministers and the EP agreed on the creation of the Body of European Regulators in Electronic Communications to replace the ERG. BEREC is essentially intergovernmentalist in nature, being a forum for cooperation among NRAs, through its Board of Regulators, very much akin to the ERG. A major difference, though, providing

a Europeanised character to the new body, was the establishment of the BEREC office, an administrative arm, as a formal, legally established, Community body with legal, administrative and financial autonomy (European Parliament and Council, 2009a: 2; Simpson 2011).

Current Policy Challenges of Convergence and the Future of European Union Telecommunications Policy

The current phase of EU telecommunications policy – like the electronic media environment as whole - continues to be influenced strongly by matters of media convergence. A thorny issue here has been the relevance to EU telecommunications of Internet (or Net) Neutrality (Wu, 2003). Net Neutrality first emerged as a high profile issue in negotiations that led to the revision of the EU's ECRF, begun in 2006. The upshot was the inclusion of an appendix to 2009 Better Regulation Directive (European Parliament and Council 2009) which contained a Declaration on Net Neutrality, formulated by the European Commission. The ECRF allows Member States to act against discriminatory action taken by ISPs in respect of content. The Commission addressed Net Neutrality further in a 2013 proposal in the broader area of the single market in electronic communication, something which proved controversial. A particular concern centred on the extent to which the EU would allow so-called paid prioritisation for Internet services. In October 2015, the European Parliament voted in favour of new Net Neutrality regulations (European Parliament and Council, 2015) which epitomise the policy tightrope which the EU tends to have to walk in respect of the more controversial aspects of electronic communications regulation related to the ECRF. Specifically, going forward, the Regulation allows Member States to stipulate the provision of what are

termed guaranteed-quality services. It is important to note that services related to Internet access are not included in this term. Once the legislation is enacted, these services will only be permitted by NRAs if it is deemed that the network is sufficiently capacious to allow them to exist in a way that does not cause detriment to the provision of Internet services to other users.

The intertwined elements of telecommunications and the pursuit of a common market across the EU were re-articulated strongly in 2015, when the European Commission declared the goal of creating *A Connected Digital Single Market* (European Commission, 2015) with specific mention of the need to address fragmentation in telecommunications regulation. In May, it issued a Communication on the creation of a European Digital Single Market with three key goals: improved access to online goods and services; the creation of appropriate conditions to see the future growth of digital networks and services; and maximization the growth of the European digital Economy (European Commission 2015). As part of the action lines associated with the pursuit of these goals - and in by now a very familiar fashion - the Commission launched a review of the telecommunications regulatory framework in July. Here, it noted key changes which had occurred since its last review, placing particular emphasis on the broad and highly costly process of upgrading of network infrastructure; the convergence of fixed and mobile communication networks; the emergence online of vertically integrated, convergent so-called Over-The-Top (OTT) service providers; and the strong rise in demand for wireless data from consumers (European Commission 2015:1). OTT service providers, which do not operate according to the same regulations as telecommunications service providers, yet whose services appear increasingly substitutable with traditional electronic

communications services, such as voice telephony, were singled out for particular attention. Relatedly, in June 2015, the European Parliament and European Council of Ministers reached agreement on a 2013 proposal from the European Commission to take measures to deliver a so-called *Connected Continent*.

In launching its 2015 review, the Commission noted a number of areas of concern. Here, whilst the regulatory framework to date was viewed as having ensured that ‘markets operate more competitively, bringing lower prices and better quality of service to consumers and businesses, it can be questioned as to whether it has sufficiently promoted the transition towards high capacity Next Generation Access (NGA) networks fit to meet future needs’ (European Commission 2015: 3). Whilst noting that some market integration had occurred, it was still the case that ‘progress is slow and the provision of connectivity to business and consumers remains highly fragmented and diverse across the Union’. The Commission was also directly critical of what it described as ‘the institutional set up’ in the EU, making reference to both NRAs and BEREC, though not specifying any details (ibid). These issues would be addressed through a review examining what was described as the three pillars of the EU regulatory framework for telecommunications related, respectively, to networks, services and governance.

The first stage of the review was a by now familiar consultation exercise, where the Commission invited views on the regulatory framework and potential changes to it according to three pillars: network regulation in order to ensure appropriate levels of investment in fixed and mobile infrastructure; services regulation to cater for a growing environment of diverse online services; and the operation of the regulatory framework consistently in national telecommunications markets, in particular in respect of the

increasingly important matter of spectrum. The current review is absent a consideration of the important matter of roaming, which has been dealt with separately through an EU Regulation aimed reducing the cost to consumers of using their suite of domestic mobile communications services whilst abroad (European Parliament and Council 2012; 2015).

A key issue for the EU going forward is the regulation of spectrum, where convergence figures prominently. Here, the coming together of fixed and mobile communications platforms raises concerns about securing appropriate levels of interfacing at the infrastructural level, clearly within the remit of the existing EU regulatory framework. Beyond this, at the content and services provision and consumption level, the dramatic growth in on-the-move online services has called forth a debate about the extent to which current allocations of spectrum might need to be changed. This debate has been carried out largely separate from discussions of the telecommunications regulatory framework. In particular, the mobile communications industry has pressed hard for a reallocation of key parts of the spectrum away from broadcasting and broadcast related uses towards mobile communication. The so-called digital dividend has provided an initial context for and stimulus to this debate. Such pressures from the mobile communication industry have met with resistance from established spectrum tenants from the broadcasting sector. Discussions have also centred on ways in which the current allocation and use of available spectrum might be made more efficient in the light of technological changes. In launching its review, the Commission raised spectrum as a convergence underpinned infrastructural matter with a European dimension. Here, it questioned whether a more harmonized approach to the allocation might need to be developed across the EU. Equally, it entered the debate on potential spectrum reallocation from an infrastructural

perspective by raising matters related to so-called spectrum sharing where ‘the combined net socio-economic benefit of multiple applications sharing a band is greater than the net socio-economic benefit of a single application’ (European Commission 2015:).

In March 2016, the Commission provided an initial informal analysis of the results of its consultation. A key concern of former telecommunications incumbents is that the system of regulated competition has sacrificed long term investment for short term market based outcomes. It is also clear that there is likely to be a feisty debate between telecommunications operators and so-called OTT companies over whether the latter should be regulated in the same fashion (Michalis, 2016) as the former given the potential substitutability of the services provided by both. Predictably, there was evidence of a difference of opinion among the range of respondents about changes to the framework, suggesting that the future of EU telecommunications is likely to be at least as contested as its past.

Historiography: European Union Telecommunications Policy

The emergence of the EU to prominence as an actor in telecommunications has been one of the more remarkable developments in the international communication policy landscape of the last 30 years. As such, explaining its evolution and development has garnered considerable attention from a number of communication policy scholars. Conceptual contributions to understanding EU telecommunications policy can be grouped into three inter-related areas: understanding the relative influence of the EU and national levels in policy development; changes in the international political economy and

telecommunications; and the evolving nature of EU telecommunications regulatory governance.

Unsurprisingly, one of the key concerns of academic research on EU telecommunications policy has been to understand the relative influence exerted by the national and EU levels, respectively, on policy development. Scholars such as Mark Thatcher (1999; 2001; 2004) and Ian Bartle (1999; 2004) have emphasized the importance of national level economic and political interests in the development of EU telecommunications policy. Here, national level political actors, in particular, are seen to be central to the creation of policy at EU level and its evolution. Thus, policy outcomes are primarily the product of agreements between different national interests and reflect the exertion of preferences and the securing of compromise in classic intergovernmental fashion. An equally important dimension of this research highlights the ability of the national level to download and absorb policy agreed at EU level through policy filters and the political modus operandi characteristic of national level interests.

Other early research on the emergence of the EU, given its remarkable and swift rise to prominence through the 1980s in telecommunications, placed emphasis on the EU institutional level. Here, the EU was viewed as a corporate actor (Schneider et al 1994) driving policy forward in key instances independent of national member state interests. In this process, the supportive role played by telecommunications business interests has been emphasized in a generally neo-pluralistic policy landscape of the kind characterized by much earlier by Lindblom (1977). Other research at this time emphasized the importance of the growth and relative power of the EU level (Sandholtz, 1993; 1998). As EU telecommunications policy has matured, research has emphasized the complex

interplay between the national and EU levels in decision-making and policy implementation (Michalis, 2004; Humphreys and Simpson 2005; Goodman 2006). Bartle (2002) notes the way the EU provided a policy alibi for Member States in the implementation of EU telecommunications policy legislation. Other research has emphasized the way in which the European Commission has drawn on its competition policy powers to make interventions in telecommunications policy (Schneider and Werle, 1990; Schmidt 1998). This was evident in the late 1990s in the Commission's position that it would approve a France Telecom: Deutsche Telekom proposed joint venture, known as Atlas, related to the provision of international leased lines and services, only if Germany and France agreed to the liberalization of so-called alternative telecommunications infrastructures (Schmidt, 1997, 1998). The Commission has also intervened strongly on competition grounds to oppose the provision of so-called 'regulatory holidays' for incumbent providers to allow them to invest in network infrastructure (Simpson 2009).

The telecommunications sector has attracted considerable research from scholars interested in changes in the international political economy. Here, the influence of neo-liberal globalization and its relationship to - and implications for - the national level in telecommunications have garnered particular attention. Classic features of telecommunications policy change highlighted in this article: liberalisation; creation of new markets; state withdrawal through (partial) privatization; and the creation of new public regulatory authorities at the national level resonate with the growth of the neo-liberal regulatory state (Seidman and Gilmour 1986) and internationally, the European regulatory state (Majone 1994; 1996; 1997). The manifestation of a regulatory state in

telecommunications at the national level in the UK and Germany has been addressed by Bartle et al. (2002) and Coen et al. (2002). Belloc, Nicita and Parcu (2012) highlight the importance of NRAs in delivering competition in telecommunications at the national level. The development of EU telecommunications policy is also seen to have created an interplay between the competition state and the regulatory state (Humphreys and Simpson 2008). Here, an interesting feature is that the pursuit of competition in telecommunications has, ironically required a complex and detailed battery of rules.

A third major strand of scholarship on EU telecommunications policy aims to characterize the kind of governance in evidence in the sector. Here, a focus has been placed on the nature of EU legislation and how that reflects the complex relationship between between national and EU level interests. Recent work has recognized the role and limitations of so-called hard and soft governance entailed in EU policy measures. Evidence suggests that in the revised regulatory framework agreed in 2009, the use of soft governance measures was prompted by the EU as means of ensuring political compromise. Used in this way, the potential deliberative and flexible advantages of soft governance are at risk of not being realized (Simpson, 2011). An interesting finding is that the usage of both hard and soft governance has been a way of addressing the limitations of each if deployed solely (Simpson, 2013). As EU policy has developed, research has focused on the extent to which networked governance has emerged. Here, evidence suggests that a system of cross-nationally linked national regulatory authorities facilitated by European level resources has been in operation (Thatcher and Coen, 2008). The functioning of this governance network ties in with an analysis of the EU's attempts to create a stronger institutional apparatus for the regulation of telecommunications at the

European level and attempts to resist such moves. Humphreys and Simpson (2008) have nevertheless characterised a complex regulatory system – a ‘two level pluri-dimensional governance order’ - where the European Commission sits prominently in a devolved and diverse regulatory system.

References

- Bartle, Ian (1999), 'European Union policy making and globalization: A comparative study of the liberalization of telecommunications and electricity', PhD thesis, Liverpool University.
- Bartle, Ian (2001), 'Is the European Union an "agenda setter's paradise"? The case of a possible European regulatory authority for telecommunications', *Current Politics and Economics of Europe*, 10 (4), 439–59.
- Bartle, Ian (2002), 'When institutions no longer matter: reform of telecommunications and electricity in Germany, France and Britain', *Journal of Public Policy*, 22 (1), 1–27.
- Bartle, Ian, Markus M. Müller, Roland Sturm and Stephen Wilks (2002), *The Regulatory State: Britain and Germany Compared*, London: Anglo-German Foundation.
- Bauer, Johannes (2002), 'Normative foundations of electronic communications policy in the European Union', in Jacint Jordana (ed.), *Governing Telecommunications and the New Information Society in Europe*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar, pp. 110–133.
- Belloc, Filippo, Antonia Nicita and Pier Luigi Parcu (2012) 'Liberalizing Telecommunications in Europe: Path Dependency and Institutional Complementarities', *Journal of European Public Policy*, 20(1), 132-54.
- Cerny, Philip (1997), 'Paradoxes of the competition state: the dynamics of political globalisation', *Government and Opposition*, 32 (2), 251–74.
- Coen, David, Adrienne Héritier and Dominik Böllhof (2002), *Regulating the Utilities: the UK and Germany Compared*, London: Anglo-German Foundation for Industrial Society.
- Cram, Laura (1994), 'The European Commission as a multi-organisation: social policy and IT Policy in the EU', *Journal of European Public Policy*, 1 (2), 195–217.
- Grande, Edgar (1994), 'The new role of the state in telecommunications: an international comparison', *West European Politics*, 17 (3), 138-58.
- Hills, Jill (2002) *The Struggle for Control of Global Communications – the Formative Century*, Illinois: University of Illinois Press.
- Hulsink, Willem (1999), *Privatisation and Liberalisation in European Telecommunications: Comparing the Netherlands and France*, London and New York: Routledge.
- Humphreys, Peter (1990), 'The political economy of telecommunications in France: a case study of "telematics"', in Kenneth Dyson and Peter Humphreys (eds), *The Political Economy of Communications: International and European Dimensions*, London and New York: Routledge, pp. 198–228.
- Humphreys, Peter (1992), 'The politics of regulatory reform in German telecommunications', in Kenneth Dyson (ed.), *The Politics of German Regulation*, Aldershot: Dartmouth, pp. 105–36.
- Humphreys, Peter and Seamus Simpson (1996), 'European telecommunications and globalization', in Philip Gummert (ed.), *Globalization and Public Policy*, Cheltenham, UK and Brookfield, USA: Edward Elgar, pp. 105–124.
- Jordana, Jacint (ed) (2002), *Governing Telecommunications and the New Information Society in Europe*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

- Levi-Faur, David (1999), 'The governance of competition: the interplay of technology, economics, and politics in European Union electricity and telecom regimes', *Journal of Public Policy*, 19 (2), 175–207.
- Levy, David (1999) *Europe's Digital Revolution: Broadcasting regulation, the EU and the nation state*. London: Routledge.
- Lindblom, Charles (1977), *Politics and Markets*, New York: Basic Books.
- Majone, Giandomenico (1994), 'The rise of the regulatory state in Europe', *West European Politics*, 17 (3), 77–101.
- Majone, Giandomenico (1996), *Regulating Europe*, London and New York: Routledge.
- Majone, Giandomenico (1997), 'From the positive to the regulatory state: causes and consequences of changes in the mode of governance', *Journal of Public Policy*, 17 (2), 139-67.
- Michalis, Maria (2002), 'The debate over universal service in the European Union – plus ça change, plus c'est la même chose', *Convergence*, 8 (2), 80–98.
- Michalis, Maria (2004), 'Institutional arrangements of regional regulatory regimes: telecommunications regulation in Europe and limits to policy convergence', in Erik Bohlin, Stanford L. Levin, Nakil Sung and Chang-Ho Yoon (eds), *Global Economy and Digital Society*, Amsterdam: Elsevier, pp. 285–300.
- Michalis, Maria (2007) *Governing European communications: from unification to coordination* Lanham, USA: Lexington Books.
- Ohmae, Kenichi (1991), *The Borderless World. Power and Strategy in the Interlinked Economy*, London: Fontana.
- Roy, Simon (2002), 'Telecommunications policy in the European Union', in Peter Humphreys (ed.), Special Issue on Telecommunications in Europe, *Convergence: the Journal of Research into New Media Technologies*, 8 (2), 100-13.
- Sandholtz, Wayne (1993), 'Institutions and collective action. The new telecommunications in western Europe', *World Politics*, 45 (2), 242-70.
- Sandholtz, Wayne (1998), 'The emergence of a supranational telecommunications regime', in Wayne Sandholtz and Alexander Stone Sweet (eds), *European Integration and Supranational Governance*, Oxford: Oxford University Press, pp.134-63.
- Schmidt, Susanne K. (1996), 'Sterile debates and dubious generalisations: European integration theory tested by telecommunications and electricity', *Journal of Public Policy*, 16 (3), 233-71.
- Schmidt, Susanne K. (1997), 'Behind the Council agenda: the Commission's impact on decisions', *MPlfG Discussion Paper 97/4*, Cologne: Max-Planck-Institut für Gesellschaftsforschung.
- Schmidt, Susanne K. (1998), 'Commission activism: subsuming telecommunications and electricity under European competition law', *Journal of European Public Policy*, 5 (1), 169-84.
- Schneider, Volker (2002), 'The institutional transformation of telecommunications between Europeanization and globalization', in Jacint Jordana (ed.), *Governing Telecommunications and the New Information Society in Europe*, Cheltenham, UK and Northampton MA, US: Edward Elgar, pp. 27-46.
- Schneider, Volker and Raymund Werle (1990), 'International regime or corporate actor? The European Community in telecommunications Policy', in Kenneth Dyson and Peter

- Humphreys (eds), *The Political Economy of Communications. International and European Dimensions*, London and New York: Routledge, pp. 77-106.
- Seidman, Harold and Robert Gilmour (1986), *Politics, Position and Power. From the Positive to the Regulatory State*, Oxford: Oxford University Press.
- Simpson, Seamus (2004), 'Universal service issues in converging communications environments: the case of the UK', *Telecommunications Policy*, 28, 233-48.
- Simpson, Seamus and Rorden Wilkinson (2002), 'Regulatory change and telecommunications governance: a neo-Gramscian analysis', in Peter Humphreys (ed.), Special Issue on Telecommunications in Europe, *Convergence: The Journal of Research into New Media Technologies*, 8 (2), 30-51.
- Simpson Seamus (2008) 'The Changing Totems of European Telecommunications Governance: Liberalisation, Market Forces and the Importance of the EU Regulatory Package' in David Ward (ed.) *The European Union & the Culture Industries: Regulation and the Public Interest*, Aldershot: Ashgate, pp105-24.
- Steinfeld, Charles (1994), 'An introduction to European telecommunications', in Charles Steinfeld, Johannes M. Bauer and Laurence Caby (eds), *Telecommunications in Transition: Policies, Services and Technologies in the European Community*, London: Sage, pp. 3-17.
- Steinfeld, Charles, Johannes M. Bauer and Laurence Caby (eds) (1994), *Telecommunications in Transition: Policies, Services and Technologies in the European Community*, London: Sage.
- Thatcher, Mark (1999), *The Politics of Telecommunications: National Institutions, Convergence, and Change*, Oxford: Oxford University Press.
- Thatcher, Mark (2001a), 'The Commission and national governments as partners: EC regulatory expansion in telecommunications 1979-2000', *Journal of European Public Policy*, 8 (4), 558-84.
- Thatcher, Mark (2002a), (ed.) 'Regulation after delegation: independent regulatory agencies in Europe', a special issue of the *Journal of European Public Policy*, 9 (6).
- Thatcher, Mark (2002b), 'Regulation after delegation: independent regulatory agencies in Europe', *Journal of European Public Policy*, 9 (6), 954-72.
- Thatcher, Mark (2002c), 'The relationship between national and European regulation of telecommunications', in Jacint Jordana (ed.), *Governing Telecommunications and the New Information Society in Europe*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar, pp. 66-85.
- Thatcher, Mark (2004a), 'Varieties of capitalism in an internationalized world: domestic institutional change in European telecommunications', *Comparative Political Studies*, 37 (7), pp. 1-30.
- Thatcher, Mark (2004b), 'Winners and losers in Europeanisation: reforming the national regulation of telecommunications', *West European Politics*, 27 (2), 284-309.
- Vogel, Steven (1996), *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*, Ithaca, US, and London: Cornell University Press.
- Vogel, Steven (1997), 'International games with national rules: how regulation shapes competition in "global markets"', *Journal of Public Policy*, 17 (2), 169-93.
- Waesche, Niko M. (2001), 'Global opportunity and national political economy: the development of Internet ventures in Germany', PhD thesis, London School of Economics and Political Science.

- Weiss, Linda (2003), *The Myth of the Powerless State: Governing the Economy and a Global Era*, Cambridge: Cambridge University Press.
- Werle, Raymund (1999), 'Liberalisation of telecommunications in Germany', in Kjell A. Eliassen and Marit Sjøvaag (eds), *European Telecommunications Liberalisation*, London and New York: Routledge, pp. 110-27.

Primary sources

- European Commission (1984), *Communication From the Commission to the Council on Telecommunications: Progress Report on the Thinking and Work Done in the Field and Initial Proposals for an Action Programme*, Luxembourg: Office of Official Publications of the EC, Com(84)277, 18.5.84.
- European Commission (1985a), *Proposal for a Council Directive on Standardisation in the Field of Information Technology and Telecommunications and Proposal for a Council Directive Concerning the first Phase of the Establishment of the Mutual Recognition of Type Approval of Telecommunications Terminal Equipment*, Luxembourg: Office of Official Publications of the EC, Com(85)230, 25.6.85.
- European Commission (1985b), *White Paper on Completion of the Single European Market*, CEC Luxembourg: Office of Official Publications of the EC, Com(85)658 final, 1985.
- European Commission (1985c), *15th Competition Report*, CEC Luxembourg: Office of Official Publications of the EC.
- European Commission (1986a), *Proposal for a Council on the Coordinated Introduction of the Integrated Services Digital Network (ISDN) in the European Community*, Luxembourg: Office of Official Publications of the EC, Com(86)205.
- European Commission (1986b), *Communication from the Commission to the Council on European Telecommunications Policy*, Luxembourg: Office of Official Publications of the EC, Com(86)325, 1986.
- European Commission (1986c), *Proposal for a Council on the Coordinated Introduction of the Integrated Services Digital Network (ISDN) in the European Community*, Luxembourg: Office of Official Publications of the EC, Com(86)205.
- European Commission (1987a), *Communication from the Commission - Green Paper on the Development of the Common Market for Telecommunications Services and Equipment*, Luxembourg: Office of Official Publications of the EC, Com(87)290, 30.6.87.
- European Commission (1987b), *Communication from the Commission - Green Paper on the Development of the Common Market for Telecommunications Services and Equipment Summary Report*, Com(87)290. Luxembourg: Office of Official Publications of the EC, 30.6.87.
- European Commission (1988a), *Communication from the Commission - Towards a Competitive Community-wide Telecommunications Market in 1992 - Implementing the Green Paper on the Development of the Common Market for Telecommunications Services and Equipment up to 1992*, Luxembourg: Office of Official Publications of the EC, Com(88)48, 09.02.1988 .

European Commission (1988b), *Commission Directive of 16th May 1988 on Competition in the Markets in Telecommunications Terminal Equipment*, Luxembourg: Office of Official Publications of the EC, 88/301/EEC, 27.5.88.

European Commission (1989a), *Directive on the Second Stage of Mutual Recognition of Type Approval for Telecommunications Terminal Equipment*, Luxembourg: Office of Official Publications of the EC.

European Commission (1989b), *Commission Directive on Competition in the Markets for Telecommunications Services*, Luxembourg: Office of Official Publications of the EC, Com(89)671.

European Commission (1989c), *Revised Proposal for a Council Directive on the Establishment of the Internal Market for Telecommunications Services Through the Implementation of Open Network Provision*, Luxembourg: Office of Official Publications of the EC, Com(89)325.

European Commission (1990a), *A European Market for Telecommunications - the Twelve Give Their Political Agreement to Liberalise Services*, Luxembourg: Office of Official Publications of the EC.

European Commission (1990b), *Directive of 28 June 1990 on Competition in the Markets for Telecommunications Services*, Luxembourg: Office of Official Publications of the EC, OJL192/10, 90/388/EEC, 24.07.90.

European Commission (1992a), *Review of the Situation in the Telecommunications Sector*, SEC(92) 1048 final. 21.10.92.

European Commission (1992b), *Pluralism and Media Concentration in the Internal Market*, Brussels: Com(92)480, 23.12.02.

European Commission (1993), *Growth, Competitiveness and Employment: The Challenges and Way Forward into the Twenty First Century*, Brussels: European Commission, Com(93) 700 final.

European Commission (1994a), *Europe and the Global Information Society; Recommendations to the EC*, Brussels: European Commission. (The 'Bangemann Report').

European Commission (1994b) *Commission Directive of 13th October 1994 Amending Directive 88/301/EEC and Directive 90/388/EEC in Particular with Regard to Satellite Communications*, 94/46/EC, OJL268/15, 19.10.94

European Commission (1995) *Commission Directive of 18th October 1995 Amending Directive 90/388/EEC with Regard to the Abolition of the Restrictions on the Use of Cable Television Networks for the Provision of Already Liberalised Telecommunications Services*, 95/51/EC, OJL256/49, 26.10.95.

European Commission (1996a), *Commission Directive Amending the 1990 'Competition Directive' to Ensure Full Competition in Telecommunications Markets*, Brussels: European Commission, 96/19/EC.

European Commission (1996b) *Commission Directive of 16th January 1996 Amending Commission Directive 90/388/EEC with Regard to Mobile and Personal Communications*, 92/2/EC OJL20/59, 26.1.96.

European Commission (1997a) *Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors, and the Implications for Regulation. Towards an Information Society Approach*, Brussels, Com(97)623, 3.12.98.

European Commission (1997b), *Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors and the Implications for Regulation. Towards an Information Society Approach*, Brussels: European Commission, Com(97)623, 23.9.97.

European Commission (1997c) *A European Initiative in Electronic Commerce*, Brussels: Com(97)57.

European Commission (1997d), *Action Plan on the Safe Use of the Internet*, Brussels: Com (97) 582.

European Commission (1998a), *European Commission, Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions; Third Report on the Implementation of the Telecommunications Regulatory Package*, Brussels: Com (1998) 80 final.

European Commission (1998b), 'Working Document of the Commission: Summary of the Results of the Public Consultation on the Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors; Areas for Further Reflection, SEC(98)1284, www.ispo.cec.be/convergencegp/gpworkdoc.html.

European Commission (1999a), *Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions. Fifth Report on the Implementation of the Telecommunications Regulatory Package*, Brussels: Com (1999), 537 final.

European Commission (1999b), *Towards a New Framework for Electronic Communications Infrastructure and Associated Services. The 1999 Communications Review*, Brussels: Com (1999) 539.

European Commission (1999c), *The European Union's Telecommunications Policy*, Brussels: Information Society Directorate-General.

European Commission (2000a), *Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions; Sixth Report on the Implementation of the Telecommunications Regulatory Package*, Brussels: Com (2000) 814.

European Commission (2000b), *Commission Recommendation of 25 May 2000 on Unbundled Access to the Local Loop: Enabling the Competitive Provision of a Full Range of Electronic Communications Services including Broadband Multimedia and High-Speed Internet*, 2000/417/EC.

European Commission (2000c), 'Commission proposes value added tax on e-commerce', *E-Policy News*, Brussels: European Commission, June.

European Commission (2001a), *Seventh Report on the Implementation of the Telecommunications Regulatory Package*, Brussels: Com (2001) 706.

European Commission (2001b), *Communication from the Commission on the Application of State Aid Rules to Public Service Broadcasting*, Official Journal of the European Communities, 2001/C 320/04.

European Commission (2002a). *Eighth Report from the Commission on the Implementation of the Telecommunications Regulatory Package: European Telecoms Regulation and Markets 2002*, Brussels, COM (2002) 695 final.

European Commission (2002b), *Commission Guidelines on Market Analysis and the Assessment of Significant Market Power under the Community Regulatory Framework*

for Electronic Communications Networks and Services, Luxembourg: OJ C 165, 11.7.2002, pp. 6–31.

European Commission (2002c), *Open Network Provision Committee Working Document: The 2003 Regulatory Framework for Electronic Communications – Implications for Broadcasting*, Brussels, June 14.

European Commission (2003a), *Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services*, OJ L 114, 8.5.2003, pp. 45–49.

European Commission (2003b), *Commission Recommendation of 23 July 2003 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services*, OJ L 190, 30.7.2003, pp. 13–18.

European Commission (2003c), *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. European Electronic Communications Regulation and Markets 2003*, Brussels, 19.11.2003 Com (2003) 715 final.

European Commission (2003d), *Report from the Commission to the European Parliament, the Council and the European Economic and Social Committee: First Report on the Application of Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market (Directive on Electronic Commerce)*, Brussels: Com(2003)702 final, November 21.

European Commission (2004a), *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. European Electronic Communications Regulation and Markets 2004*, Brussels, 2.12.2004 Com (2004) 759 final.

European Commission (2004b), *Commission Staff Working Paper. Annex to the European Electronic Communication Regulation and Markets 2004 (10th Report)*, Volume 1, Brussels 2.12.2004 (SEC (2004) 1535).

European Commission (2004c), *Commission Staff Working Paper. Annex to the European Electronic Communication Regulation and Markets 2004 (10th Report)*, Volume 2, Brussels 2.12.2004 (SEC (2004) 1535).

European Commission (2004d), *Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions on Interoperability of Digital Interactive Television Services*, Brussels, Com(2004)541 final, SEC(2004)1028, July 30.

European Commission (2004e), *Commission Staff Working Document on the Treatment of Voice Over Internet Protocol (VoIP) under the EU Regulatory Framework – An Information and Consultation Document*, Brussels, June 14.

European Commission (2009) ‘Commission Declaration on Net Neutrality’, (2009/C 308/02), OJC 308/2. 18 December.

European Commission (2011) *Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the*

Regions ‘The open internet and net neutrality in Europe’ Brussels, COM(2011) 222 final, 19.4.2011.

European Commission (2013) ‘Proposal for a Regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent, and amending Directives 2002/20/EC, 2002/21/EC and 2002/22/EC and Regulations (EC) No 1211/2009 and (EU) No 531/2012’. COM(2013) 627 final, 2013/0309 (COD), Brussels, 11.9.2013.

European Commission (2015) ‘Background to the Public Consultation on the Evaluation of the Regulatory Framework for Electronic Communications and on its Review’. 11 September. Available at: <https://ec.europa.eu/digital-single-market/en/news/public-consultation-evaluation-and-review-regulatory-framework-electronic-communications>

European Commission (2016) ‘Summary report on the public consultation on the evaluation and the review of the regulatory framework for electronic communications networks and services’, 3 March. <https://ec.europa.eu/digital-single-market/en/news/summary-report-public-consultation-evaluation-and-review-regulatory-framework-electronic>

European Parliament and Council (2009a) ‘Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009 amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services’. Brussels.

European Parliament and Council (2009b) ‘Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws OJ L 337, 18.12.2009, 11–36.

European Parliament and Council (2015) ‘Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union’. OJL310/1, 25 November.

European Council of Ministers (1986), *Council Directive of 24th July 1986 on the Initial Stage of the Mutual Recognition of Type Approval for Telecommunications Terminal Equipment*, Luxembourg: Office of Official Publications of the EC, OJ L217/21, 86/361/EEC, 5.8.86.

European Council of Ministers (1988), *Council Resolution of 30 June 1988 on the Development of the Common Market for Telecommunications Services and Equipment up to 1992*, (88/C 257/01) OJ C 257/1, 4th October.

European Council of Ministers (1993) *Council Resolution of 22nd July 1993 on the Review of the Situation in the Telecommunications Sector and the Need for Further Development in that Market*, Luxembourg: 93/C213/01, 06.08.1993.

European Council of Ministers (1994), *Council Resolution of 22nd December 1994 on the Principles and Timetable for the Liberalisation of Telecommunications Infrastructures*, Luxembourg: Office of Official Publications of the EC, OJ No C 379, 31.12.94.

European Council of Ministers (1999), *Resolution of the Council and of the Representatives of the Governments of the Member States, Meeting within the Council of 25th January 1999 concerning Public Service Broadcasting*, Luxembourg: Office of Official Publications of the EC, OJ No C 30/01, 5.2.99.

European Court of Justice (1982), *Judgment on 'European Commission versus British Telecom'*, Luxembourg: Office of Official Publications of the EC, OJ L360/36, 10.12.82.

European Court of Justice (1988), *France versus the European Commission*, Luxembourg: Office of Official Publications of the EC, case 202/88,1988.

European Court of Justice (1991), *Judgment of the Court of 19th March 1991 on Case C-202/88: French Republic v. European Commission (Competition in the Markets in Telecommunications Terminal Equipment)*, 91/C96/04, OJ C 96/06, April 12.

European Court of Justice (1992), *Judgment of the Court of 17 November 1992 in Joined Cases C-271, C-281 and C-289/90: Kingdom of Spain and others v. European Commission (Competition in the Markets for Telecommunications Services)* 92/C 326/08, OJ C 326/8, December 11.

European Parliament and Council (1997a), *Directive of 30 June 1997 on Interconnection in Telecommunications with Regard to Ensuring Universal Service and Interoperability through Application of Open Network Provision*, 97/33/EC, OJL199/32, 26.7.97.

European Parliament and Council (1997b), *Directive of 10 April 1997 on a Common Framework for General Authorisations and Individual Licences in the Field of Telecommunications Services*, 97/13/EC, OJL117/15, 7.5.97.

European Parliament and Council (1998), *Directive of 26 February 1998 on the Application of Open Network Provision to Voice Telephony and on Universal Service for Telecommunications in a Competitive Environment (replacing European Parliament and Council directive 95/62/EC)*, 98/10/EC OJL101/41, 1.4.98.

European Parliament and Council (2000a), *Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on Unbundled Access to the Local Loop*, Official Journal of the European Communities, 30.12.2000, L 336/4–8.

European Parliament and Council (2002a), *Directive of the European Parliament and Council on a Common Regulatory Framework for Electronic Communications Networks and Services (Framework Directive)*. Brussels: 4 February, PE-CONS 3672/01.

European Parliament and Council (2002b), *Directive of the European Parliament and of the Council on Universal Service and User's Rights relating to Electronic Communication Networks and Services (Universal Services Directive)*. Brussels, 4 February, PE-CONS 3673/01.

European Parliament and Council (2002c), *Directive 2002/19/EC of the European Parliament and of the Council of 7th March 2002 on Access to and Interconnection of*,

Electronic Communications Networks and Associated Facilities (Access Directive),
Brussels, OJL 108/7-20, April 24.

Links to digital materials

European Commission DG Connect:

<https://ec.europa.eu/digital-single-market/en/dg-connect>

Telecommunications National Regulatory Authorities:

The URLs of the above can be found at:

http://www.telecomsmarketresearch.com/free_research_viewer.php?id=4

Body of European Regulators for Electronic Communications:

<http://bereg.europa.eu>

Independent Regulators Group:

<https://www.irg.eu>