12
Here Comes the Revolution – the European Digital Agenda

Robin Mansell

Introduction

The challenge of building an inclusive, equitable and sustainable European information society is at the heart of *A Digital Agenda for Europe* (European Commission, 2010a). These aspirations are not themselves very controversial. They become so, however, when the strategies aimed at achieving them are examined with respect to the emphasis that is given to supply-side and demand-side means of policy intervention. Should policy-makers privilege supply-side measures aimed at stimulating digital technology innovation and economic growth and competitiveness, or, alternatively, should they give at least as much, or greater, emphasis to demand-side measures to foster citizen capabilities for taking advantage of ICT-based networks and services? The *Digital Agenda* is the latest in a series of strategic EU initiatives. The EC's DG Communications Networks, Content and Technology oversees it, perhaps signifying a rebalancing of policy priorities given the name change from information society and media in mid-2012.

This chapter provides an account of the way in which policy initiatives in this area are framed by the *Digital Agenda* and its predecessors, focusing on the mid-1980s to the present. This account serves as the basis for a critical assessment of prevailing values and priorities. The aim of the *Digital Agenda* is to 'deliver sustainable economic and social benefits from a digital single market based on fast and ultrafast Internet and interoperable applications' (European Commission, 2010a, p. 1). It concerns 'mass media' or 'television-like' services and emerging digital information and media services that are provided using a variety of platforms and networks (European Commission, 2009b, 2010c).

I focus on the scaffolding of policy and the way it can be seen to shape policy intervention. North (2006) uses the term 'scaffolding' to refer to institutional constraints informed by individual preferences and by cultural, social, political or economic values. He suggests that scaffolding constrains the choices

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

available to institutionalized actors and that this creates path dependence, making it very difficult to rebalance policy actions, even if the policy discourse changes over time. David (2007, p. 110) notes that a key lesson from the study of path dependencies is that it is necessary to examine what kinds of public actions 'would be most appropriate to take at different points in the evolution of a given market process.' Here I consider whether policy-makers are locked into a very particular balancing of the interests of private sector and citizen stakeholders in their efforts to promote the European information society. The *Digital Agenda* is located within the wider European policy space and it influences the priorities of the research, technology development and innovation Framework Programmes that complement high-level strategic initiatives. Both are considered in this chapter.

The *Digital Agenda* in the European policy space

A Digital Agenda for Europe is one of the flagship initiatives of the Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth (European Commission, 2010d, p. i). This document begins with a comment by EC President, José Manuel Barroso:

> the last two years have left millions unemployed. It has brought a burden of debt that will last for many years. It has brought new pressures on our social cohesion. It has also exposed some fundamental truths about the challenges that the European economy faces [...] How Europe responds will determine our future.

One response is to achieve 'smart growth' – that is, a European economy based on knowledge and innovation. The production and consumption of digital ICTs are deeply implicated in this (European Commission, 2010d, p. 4). Responsibility for Europe's declining rate of average economic growth is attributed to the productivity gap with other regions of the world which is said to be due to the insufficient use of ICTs and to differences in business structures, lower investment in research, development and innovation, market access barriers and reluctance to integrate innovation within the dynamics of the economy (European Commission, 2010d). The EC's Digital Competitiveness Report had asserted that 'Europe needs a new digital agenda to meet the emerging challenges, to create a world beating infrastructure and unlock the potential of the internet as a driver of growth and the basis for open innovation, creativity and participation' (European Commission, 2009c, p. 14). The ICT industry in Europe represented only 5 per cent of GDP in 2009, less than in the USA and Japan, and only a quarter of the world market for ICTs was being generated by European firms (European Commission, 2010a). One major contributing factor

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

was attributed to the fact that Europe was behind other regions on high-speed Internet penetration indicators. The Europe 2010 strategy therefore set targets for broadband access 'to speed up the roll-out of high-speed internet and reap the benefits of a digital single market for households and firms' (European Commission, 2010d, p. 4).[1]

A Digital Agenda for Europe refers to the revolutionary impact of high-speed networks, electronic service convergence and universal accessibility of digital information on any device (European Commission, 2010a, p. 26). A virtuous cycle of supply–push and demand–pull is envisaged, but it is made clear that obstacles must be overcome. These include fragmented markets, lack of interoperability, rising cybercrime and the risk of low trust in networks, weak investment, insufficient research and innovation effort, and a lack of digital literacy and skills. There are comments on inclusivity – the 'digital society should be available to all' (European Commission, 2010a, p. 26) – but the principal thrust appears to be on ICTs as drivers of economic growth and productivity improvements, with media pluralism, for instance, following once the scaffolding for the information society is in place.

Contradictory values and priorities

The economic growth priority is underpinned by evidence demonstrating that the effective use of ICTs in Europe is likely to require policy support for market competition, labor-market adjustment and openness to trade, as well as efforts to achieve price reductions in ICT equipment (Van Reenen et al., 2010). An analysis of the social, cultural and political benefits of ICTs, in contrast, finds little support in the research base for the idea that 'ICT straightforwardly fixes a large number of existing problems in society' (Siegen University, 2010, p. 2). The discourse of the *Digital Agenda for Europe* text is rife with competing understandings of the interactions between technological innovation, markets and social values, and aspirations, and there is little indication that this is acknowledged on the highest level of strategy. With little transition, for example, we find that 'ICT drives value creation and growth across the economy' and that 'the digital era should be about empowerment and emancipation' (European Commission, 2010a, pp. 23, 24).

These statements privilege different values responding to the commercial interests of industry stakeholders and to the cultural, social and political interests of citizens. The institutional scaffolding for policy is arguably fostering a path-dependent trajectory for successive information society policies that privilege supply-side measures over those aimed at strengthening demand – that is, responding to the potential of networking opportunities for citizens. This imbalance is evident in consultations prior to the launch of the *Digital Agenda*. Citizens gave priority to user rights and empowerment, followed by concrete

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

and measurable targets, and then by economic growth, productivity and the economic impact of innovation (European Commission, 2010e, p. 8). In contrast, organizations put economic issues ahead of user rights in their assessment of priorities for the Digital Agenda.

The next section examines features of European information society policies in recent decades, demonstrating that imbalance is a consistent feature of the institutional scaffolding for policy which privileges a supply-driven, market-led approach to building the information society.

Information society policy succession

The *Digital Agenda for Europe* follows a succession of policies as information society issues climbed higher on the EU policy agenda. 1993 saw the publication of the white paper on 'Growth, Competitiveness and Employment' (European Commission, 1993), the same year that the then US vice-president, Al Gore, trumpeted the benefits of information infrastructures (Gore, 1993). Both called for action to boost 'information highway' construction for the 'new society.' The European Council's group of 'prominent persons' representing industry and policy makers urged the European Council 'to put its faith in market mechanisms as the motive power to carry us into the Information Age' (European Commission, 1994a, p. 3), asserting that strengthening Europe's competitive position would imply addressing the institutional scaffolding – that is, regulation, standards and market facilitation. An *Action Plan for the Information Society* (European Commission, 1994b) soon followed.

The emphasis on technology and supply–push policies was soon called into question. Another group of experts, this time invited by the DG Industrial Relations and Social Affairs, asserted that 'one of the main challenges for the IS [information society] will be to develop the skills and tacit knowledge required to make effective use of information. From this perspective, ICTs should be viewed as essentially complementary to investment in human resources and skills' (European Commission, 1997a, p. 16). This group emphasized functionality of services over technology and it called for 'a much more socially orientated debate' (European Commission, 1997a, p. 56). A weakness in the institutional scaffolding was exposed. This was to become a persistent cleavage in the values espoused by those seeking to give highest priority to supply-side initiatives and those arguing for attention to demand-side initiatives and the interests of citizens.

In 1999, the *eEurope – An Information Society for All* strategy emphasized a digital knowledge-based economy for growth, competitiveness and job creation which was expected to lead to benefits for the quality of life (European Commission, 1999) and a series of action plans followed. By the start of the 2000s, the EU's Lisbon Strategy aimed to ensure that the EU would become 'the most

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

competitive and dynamic knowledge based economy in the world by 2010' (European Commission, 2000, p. np). In 2001 the *eEurope 2002* strategy and, in 2002, the *eEurope 2005 Action Plan* (European Commission, 2001, 2002) objectives included providing a favorable environment for private investment and job creation, boosting productivity, modernizing public services and enabling everyone to participate in the information society. Policies were expected to make 'a real difference' (European Commission, 2002, p. 8). By 2005, efforts were in train to restart the Lisbon Strategy because progress had been mixed (European Commission, 2005c). Success was said to require 'an explicit user-orientated focus' if potential economic, social and environmental gains were to be achieved (European Commission, 2005b, p. 89). Some stakeholders observed that Europe's strategy was so all-encompassing that it was difficult to make sense of the priorities (European Voice, 2004).

Progress reports started to note that increased spending might be justified to promote social cohesion (European Commission, 2005b). This might have signaled a need for direct government intervention on the demand-side, rebalancing attention that had so far been given to supply–push measures. The *i2010 Strategy* was announced in 2005 (European Commission, 2005a, p. 3) but arguably it persisted with the emphasis on growth over social development. By 2010 it was clear that aspirations for the European information society were still proving illusive.

Nevertheless, it was still claimed that what was needed was a policy framework to unleash ICTs as a 'driver' of economic recovery. When the key initiatives of *A Digital Agenda for Europe* (European Commission, 2010b) were announced, there was a strong focus on greater bandwidth and on competitive Internet networks as the 'arteries' of the future economy. Direct government intervention on the supply side was, however, now on the agenda (European Commission, 2010a, p. 6). In addition, research, technology development and innovation efforts were seen as being 'suboptimal.' Policy remained predominantly oriented towards supply–push and market-facilitation measures, and the imbalance in the scaffolding for the European information society persisted.

Policy and the Framework Programmes

Was this imbalance evident in research, technology development and innovation measures under the Framework Programmes as well? Programs in the ICT field, as in other areas, are designed primarily to strengthen the scientific and technological basis of European industry and to encourage its competitiveness internationally. They are precompetitive and are not intended to benefit particular companies (Luukkonen, 1998). In principle, they can be geared towards supply–push or demand–pull initiatives. These programs have been subject to

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

extensive evaluation for their impact on firms and on collaboration within the European research area (Protogerou et al., 2010), but whether they privilege supply–push over demand–pull measures in practice has received less attention.

In the mid-1980s, EC-sponsored projects focused on network infrastructure, information and audiovisual services innovation;[2] until the mid-1990s, emphasizing the promotion of the competitiveness of European telecommunications and information markets but, later, also promoting economic development and social cohesion. As far as infrastructure research was concerned, the aim was to encourage developments that would become economically viable. In the case of services in the telematics applications field, the emphasis was on underpinning their economic viability 'as far as possible,' reflecting early awareness of the weaknesses of the European market in the face of global competition. From the mid-1980s, the removal of legal barriers within the internal European market was seen as essential with priority being given to research to underpin a consistent legal framework. Directives aimed at market facilitation emerged over time for the protection of personal data, databases, electronic information services and network infrastructure. The consistent aim has been to develop a 'balanced' legal and regulatory framework.

From the early period there is evidence of attention to demand-side initiatives aimed at creating new markets by 'raising awareness,' 'triggering' the potential for the creation of high-quality digital content and supporting 'market enablers.' It was recognized that digital content would need to become more accessible, usable and exploitable. At the same time, however, there was continuous reference to the need to devise means of meeting industry concerns about the enforcement of copyright in digital information. With the launch of Information Society Technology programs in the late 1980s, there was increasing evidence of demand-side initiatives and greater attention to projects to address 'major societal and economic challenges,' but still arguably an imbalance.

In the programs from the mid-1980s onwards, technical standards and the interoperability of networks and services were given a high profile, with increasingly frequent references to the need to develop open standards and services 'under user control.' Initially more concerned with telecommunications equipment, the emphasis soon shifted to digital information services, including databases, multimedia content and, later, to open platforms for all services. There is a continuous emphasis on stimulating investment in the infrastructure, in the early period, in reference to promoting integrated broadband communication and, later, to underpinning the mobile Internet and new delivery channels and platforms. Throughout, there was an emphasis on individual or personalized access systems and services. There were a few references to community access systems, but little sign that the call for a shift towards universal community services and away from an overemphasis on individual consumers as the principal drivers of demand was being heeded (European

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

Commission, 1997a), even though this might have helped to stimulate demand for trans-European services of public interest.

The emphasis in the mid-1980s was on specialized information services of European origin, later shifting to services customized for use by Europeans. In the early period there was some attention to stimulating small and medium-sized enterprise participation in the information society, with more emphasis later on diffusing best practices and removing access barriers. Throughout, there was attention to support for strategic ICT fields – starting with telecommunications (electronics, microelectronics, intelligence in networks and network services, etc.), increasingly moving towards demonstrating the benefits of digital content, but with a strong emphasis on technological innovation in areas such as machine-understandable data.

The *Digital Agenda* theme of promoting Internet access and take-up is a persistent one, too. Initially the focus was on providing low-cost services, promoting 'exploitation' by end users and 'matching generic service functions to user needs.' Later the emphasis was on improving digital service use, observatories for monitoring take-up, mobilizing groups of users and community initiatives, and the discourse shifts towards e-inclusion. Demand-side initiatives in support of digital literacy started with programs aimed at maintaining universal access and developing experimental applications, but this latter was associated with the user-friendliness of services and improving literacy and training. Even though demand-side concerns about digital literacy and user involvement became more prominent, in the Information Society Technology programs of the late 1980s, a strong emphasis on technology solutions remained. And although there was some attention to community-oriented services, it was mainly technology – in the form of software (semantic and context-aware systems) – that was expected to boost users' capacities to organize, personalize and share knowledge.

Overall, there was continuity in the basic themes and a tension between economic and social priorities. Social and demand-side issues made appearances but the principal goals remained consistent with supply-oriented strategies, commercial market priorities and competitiveness. These tensions reflect the contradictory values embedded in the scaffolding of information society policies. They are particularly visible in three areas: (i) trust and security; (ii) open information and copyright; and (iii) public service media.

The theme of using technology to address issues of trust and the security of digital networks and content was strong throughout the period. Initially, security technologies were seen as essential to enhance the quality and reliability of digital services but, by the mid-1990s, they were seen as essential for developing 'personal communications spaces.' Trust and security issues rose in prominence on the policy agenda due to threats to the integrity of networks and services, and the need to ensure that law enforcement authorities could access traces of online activity, as well as the need to enforce data protection

legislation. Efforts to stimulate demand for online content and services were challenged by increases in cybercrime (Hathaway, 2010) and, with the Internet by then regarded as a critical infrastructure, resilience and security against threats were given an increasingly high priority. Tensions between competing values were created as conventional definitions of privacy, including the right not to be subject to surveillance by the state or companies, were called into question, and legislative measures on both the EU and member-state levels were gradually introduced to extend monitoring of online activity.[3]

Similarly, there was a persistent tension in moves to support open data/ information/content standards aimed at stimulating content co-production and user-generated content while, simultaneously, enforcing copyright. There were frequent references to the need to reassess the balance between citizen/consumer and digital rights holder interests, but supply-oriented initiatives and the latter's interests remained predominant, even as efforts were made to foster online cultures of digital content (free) sharing.[4] Thus, on the supply-side, open platforms may be seen as essential to the future of the European industry, but this clashes with the open sourcing of digital content and demand-side initiatives.

The third area – public service media – where the introduction of public value tests to ensure that publicly funded content does not threaten the sustainability of the commercial broadcast industry, also exhibits contradictory values. Some analysts welcome the way in which PSB has become associated with market-failure arguments (Donders, 2012). This occurred even though public broadcasting is enshrined as a component of democratic society in the EU's Amsterdam Protocol (European Commission, 1997b). Member states can define and organize Public Service Broadcasting (PSB), but this does not necessarily apply to innovations in new digital content services, where supply-side measures and commercial market considerations seem to take precedence over demand-side considerations and public good values. The future development of media services must demonstrate why they do not jeopardize the commercial health of their 'competitors' (Michalis, 2010), again confirming the primacy of supply-side policy initiatives.

Overall, while the *Digital Agenda for Europe*, its predecessors and successive Framework Programmes have acknowledged that ICT skills shortages and a digital literacy deficit are restraining the take-up of digital networks and services in Europe, the imbalance between supply–push and demand–pull measures is a persistent feature of the policy scaffolding for the European information society.

Path dependency of information society scaffolding

It is unsurprising that these policies and implementation strategies espouse contradictory values. However, in the light of observations that policy initiatives

fail to meet the aspirations set for them by the political classes, it is important to ask whether change is incremental and path dependent, being locked into the supply-side emphasis, or whether there is the potential for a more balanced approach. In reference to media policy, it has been suggested that 'much policy-making is often no more than policy-succession, whereby an existing policy or programme is succeeded by another' with incremental change (Papathanassopoulos & Negrine, 2010, p. 7). Papathanassopoulos and Negrine stress that the implementation of policy measures is one of the greatest challenges that policy-makers face. Instead of examining which actors play the predominant roles in establishing the balance between conflicting values or focusing on the governance processes giving rise to policy discourses,[5] the analysis in this chapter considers how policy has developed at the higher level of institutional scaffolding and at the level of implementation as illustrated through research, technology development and innovation programs.

In a comparison of the discourses of information society policy in Europe and the USA, Stewart et al. (2006) found an emphasis on Internet access and supply-side, market-oriented initiatives in their analysis of policy documents in the 1995–2002 period. A subsequent analysis of the 2004–2008 period suggested a realization that direct state intervention is important alongside regulation and market facilitation if policy goals are to be achieved. In Europe there was a 'slightly more balanced' approach in comparison with the neoliberal emphasis on market facilitation in the USA in both periods (Gil-Egui et al., 2010, p. 188). Direct state intervention may occur through subsidies for the private sector, while market facilitation is more likely to involve norm, standards or rule setting. As Falch (2007) points out, the institutional means of implementing high-level policy agendas influences both the supply of and demand for network expansion, digital information and media services. Different combinations of technological, economic, political and cultural factors will, of course, influence the specific form of the institutional scaffolding (Falch and Henten, 2010).

A policy shift towards more attention to administrative matters and policy coordination among institutions and interested stakeholders is indicative, Gil-Egui et al. (2010) suggest, of a renewed willingness on the part of the state to address market failure through its existing institutions, in some cases through a willingness to engage in direct state intervention. In the EU in the wake of the 2008 financial crash and prolonged recession, the European Economic Recovery Plan recalled the revolutionary potential of ICTs, asserting that 'equipping Europe with this modern infrastructure is as important as building the railways in the nineteenth century' (European Commission, 2008, p. 16). Direct state intervention was envisaged, acknowledging that public funds would be needed to provide broadband access in areas where market actors are unlikely to provide services. Technology investment by government and the private sector is seen as central to the recovery plan. For instance, the *European Strategy*

for ICT R&D and Innovation in Europe, published just before the *Digital Agenda* was launched, says that Europe must lead the development of the 'Future Internet' and that it must 'raise its game' to do so (European Commission, 2009d, p. 5). The sense of urgency is heightened by the fact that the EU's ICT business sector was spending less than half as much on research and development as its US counterpart; it was clear now that public intervention in support of broadband investment was to be welcomed (European Commission, 2009c).

After the financial crash, the discourse employed in policy documents in the USA also started to change (Mansell & Steinmueller, 2013b). The American Recovery and Reinvestment Act of 2009 (US Government, 2009) initiated a Broadband Technology Opportunities Program. This was to provide public funding to improve access to broadband services, and to provide education and equipment to assist schools, libraries, health-care providers and vulnerable groups in society. The Federal Communications Commission was expected to play a role in the broadband stimulus program, and its Connecting America: The National Broadband Plan (Berkman Center, 2010; FCC, 2010) suggested that digital exclusion would grow in the absence of government action. Like its European counterpart, the Broadband Plan set targets for high-speed broadband access.[6]

This shift was consistent with a change in focus across the OECD member states (OECD, 2008). In both the EU and the USA, despite a policy discourse suggesting increasing acceptance that direct state intervention is necessary to meet information society policy goals, policy implementation arguably continues to favor supply-side over demand-side interventions. In this respect, information society policies, notwithstanding a shift away from the values of neoliberalism, are characterized by incremental 'policy succession' rather than by radical change in the way in which different values are balanced.

Conclusion

Independent assessments of infrastructure and content initiatives in Europe express disquiet about the imbalance between technology and supply-side initiatives and those aimed at social and cultural objectives. For example, Pelkmans and Renda (2011) argue that this criticism should be directed towards policy reform in the telecommunications sector. They suggest that if market barriers are to be overcome, there is a need for radical approaches to institutional design – in this case to create a common EU independent regulator for the sector. On the content side, independent analysts observe that policymakers 'need to beware of an over-optimistic or utopian approach: the use of networked technologies is not inherently democratic, nor does it automatically have democratic consequences' (Institute of Education, 2009, p. 1). The observation that digital technology and content themselves do not resolve

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

social problems or lead necessarily to democratic outcomes resonates with the research results that have long emphasized the social conditioning of technological innovation.[7] Incremental changes in market facilitation and research programs belie the path dependency of European information society policy. Prevailing values in society (whether they are inclusive, open and transparent, or exclusive, fractured and restrictive) and whether responses to change are partial or complete, proactive or reactive (European Foresight Platform, 2011), are central features that shape the institutional scaffolding for information society policy in Europe, as they do elsewhere.

It is the demand-side, or what those outside the economics discipline often refer to as the appropriation of digital technologies and content and the way this mediates the social order, that is witnessing great transformation (even revolution) as networks and Internet applications become more ubiquitous. Providing citizens with the capabilities for applying digital tools and applications to enable them to exploit the potential of mass collaboration in an open networked and participatory cultural paradigm brings the benefit of inclusion (Jenkins, 2006; Castells, 2009), whether this is in line with democratic principles or otherwise. Measures on the demand side may include efforts to enable citizens of all ages to acquire the digital literacies. They may address other educational initiatives to build awareness of the range of opportunities and risks involved in online activities. They may also extend to providing support for ensuring that network access and content pricing do not present barriers to citizens who seek to benefit from the information resources that increasingly are available to them. The key point is that any such initiatives need to be undertaken on a sustained basis and to ensure that citizens who are disadvantaged in the offline world do not become similarly disadvantaged in the online world.

Yet European information society policy is locked into technology supply–push approaches even when the importance of the demand-side is acknowledged. As Melody (2011, p. 119) points out, 'the evolving path of telecom liberalization has been shaped primarily by changes in policies and regulations.' This is no less so for information and media services. Reports sponsored by the EC on progress towards an inclusive, equitable and sustainable information society lament the fact that the most successful Internet businesses (e.g., Google, eBay, Amazon and Facebook) originate outside Europe. The principle response is to deploy supply-side strategies to foster the single market for telecommunication or Internet services, but this downplays the changes on the demand-side.

A shift in Europe and the USA (under the Obama administration) towards policy favoring direct state intervention in limited instances does not appear to be deeply entrenched, and measures to address the demand-side are even less prominent. Weaknesses in the policy scaffolding have yet to be tackled. It is an

open question as to whether it is politically feasible for the institutions of the EU to change as far as the information society project is concerned. If successors to the *Europe 2020* strategy start to reflect a radical change in the institutional scaffolding at the highest political levels as EU institutions respond to the financial crisis, there may be hope that a new space for addressing the value contradictions in the information society sphere will open up. Until then it is likely that direct government intervention into digital networks and services will continue largely to favor supply-side commercial interests. Without a radical change in the policy scaffolding, the Internet and its applications are likely to develop along a trajectory that maximizes the potential for the empowerment of citizens to the extent only that citizens find means to empower themselves (Mansell, 2012).

The policy discourse of the *Digital Agenda for Europe* refers to the revolutionary nature of ICTs, but it does not sufficiently acknowledge the 'revolutionary' changes in the social order. Overemphasis of the benefits of supply-led policy neglects the difficulty of bringing stakeholders with commercial interests in the market, networks and service designers and innovators, consumers, and representatives of the state and other civil society interest groups into a dialogue that might start to address incommensurable values. The virtuous cycle of supply and demand envisaged by European policy-makers is unlikely to bring the expected benefits if it is disproportionately informed by technology-centric visions and persistent imbalances. Some may argue that this is inevitable, but that makes it no less urgent that it is addressed if the goal is to achieve an inclusive, equitable and sustainable information society in Europe.

Notes

1. Broadband access for everyone by 2013 and to 30 Mbps or above by 2020, with 50 per cent or more households subscribing to Internet connections above 100 Mbps (European Commission, 2010d).
2. This discussion is based on a review of programs funded from the mid-1980s to the present including RACE 0-1985-86, 1-1987-92, 2-1991-94; ACTS 1994–1998; Telematics 1991–1994, 1994–1998; INFOMAR 1984–1988, IMPACT 1-1988-90, 2-1991-95; INFO 2000 1996–1999, ECONTENT 2001–2005, ECONTENT PLUS 2005–2008; Information Society Programme 1998–002; User Friendly Information Society 1998–2002 and successors.
3. See draft legislation in the UK on communications data (Home Office, 2012) and on critical infrastructure (European Commission, 2009a).
4. See the Digital Economy Act in the UK (Mansell & Steinmueller, 2013a; Ofcom, 2012; UK Government, 2010), enforcement of copyright legislation via Internet service providers and the uneasy compromise on net neutrality (European Commission 2009b).
5. See Mansell & Raboy (2011); Puppis (2010); Raboy et al. (2010) on European and global governance of media and communication.

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen

6. It called for 100 million homes to have affordable access to download speeds of 50 Mbps and upload speeds of 20 Mbps by 2015.
7. For example, Dutton (1999); Kubicek et al. (1998); and Woolgar (2002).

References

Berkman Center. (2010). *Next Generation Connectivity: A Review of Broadband Internet Transitions and Policy from around the World*. Boston, MA: Berkman Center for the Internet and Society, Harvard University.

Castells, M. (2009). *Communication Power*. Oxford: Oxford University Press.

David, P. A. (2007). Path Dependence: A Foundational Concept. *Cliometrica*, 1(2), 91–114.

Donders, K. (2012). *Public Service Media and Policy in Europe*. London: Palgrave Macmillan.

Dutton, W. H. (1999). *Society on the Line: Information Politics in the Digital Age*. Oxford: Oxford University Press.

European Commission (1993, 5 December). Growth, Competitiveness, Employment: The Challenges and Ways forward into the 21st Century, white paper. Brussels: European Commission, COM(93)700 final.

European Commission (1994a, 26 May). Europe and the Global Information Society: Recommendations to the European Council (Bangemann report). Brussels: European Commission.

European Commission (1994b, 19 July). Europe's Way to the Information Society: An Action Plan. Brussels: European Commission, COM(94)347 final.

European Commission (1997a, 15 April). Building the European Information Society for Us All: Final Policy Report of the High-Level Expert Group. Luxembourg: Directorate General for Employment, Industrial Relations and Social Affairs, High-level Expert Group.

European Commission (1997b, 10 November). Protocol on the System of Public Broadcasting in the Member States in the Treaty of Amsterdam Amending the treaty on European Union, the Treaties Establishing the European Communities and Related acts: European Commission, OJ C340.

European Commission (1999, 8 December). Communication on a Commission Initiative for the Special European Council of Lisbon, 23–24 March 2000 – Europe – an Information Society for All. Brussels: European Commission COM(99) 0687 final.

European Commission (2000, 24 March). Presidency Conclusions of the Lisbon European Council. Brussels: European Commission.

European Commission (2001, 23–24 March). eEurope: Impact and Priorities. Brussels: European Commission COM(2001)140 final.

European Commission (2002, 21–22 June). eEurope 2005: An Information Society For All – An Action Plan. Brussels: European Commission COM(2002) 263 final.

European Commission (2005a, 1 June). i2010 – A European Information Society for Growth and Employment, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Brussels: European Commission COM(2005)229.

European Commission (2005b). Preliminary Analysis of the Contribution of EU Information Society Policies and Programmes to the Lisbon and Sustainable Development Strategies: Final Report. Brussels: Report prepared by ECOTEC Research and Consulting Ltd.

European Commission. (2005c, 23 March). Presidency Conclusions of the Lisbon European Council. Brussels: European Commission.

European Commission (2008, 26 November). A European Economic Recovery Plan. Brussels: European Commission COM(2008)800 final.

European Commission (2009a, 30 March). Critical Information Infrastructure Protection. Brussels: European Commission, SEC(2009)399/400, COM(2009) 149 final.

European Commission (2009b, 18 December). 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 Communication networks and services, 2002/19/EC on Access to, and Interconnection of, Electronic Communication Networks and Associated Facilities, and 2002/20/EC on the Authorization of Electronic Communication Networks and Serivces. Brussels: European Commission, OJ L337/37.

European Commission (2009c, 4 August). Europe's Digital Competitiveness Report: Main Achievements of the i2010 Strategy 2005–2009. Brussels: European Commission COM(2009)390.

European Commission (2009d, 13 March). A Strategy for ICT R&D and Innovation in Europe: Raising the Game, Commission Staff Working Document. Brussels: European Commission SEC(2009)289.

European Commission (2010a, 19 May). A Digital Agenda for Europe. Brussels: European Commission COM(2010)245 final.

European Commission. (2010b, 19 May). Digital Agenda for Europe: Key Initiatives. Brussels: European Commission.

European Commission. (2010c, 15 April). Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the Coordination of Certain Provisions Laid Down by Law, Regulation or Administrative Action in Member States Concerning the Provision of Audio Visual Media Services (audiovisual media services directive) Brussels: European Commission, OJ L 95/1.

European Commission. (2010d, 3 March). Europe 2020: a European Strategy for Smart, Sustainable and Inclusive Growth. Brussels: European Commission, COM(2010)2020.

European Commission. (2010e, no date). Summary of Responses to the Public Consultation – Priorities for a New Strategy for European Information Society 2010–2015. Brussels: European Commission.

European Foresight Platform. (2011). Digital Europe 2030: Scenarios for ICT in Future Governance and Policy Making. Seville: European Foresight Platform EFP Brief No. 194.

European Voice. (2004). Lisbon Agenda Reduces to 'Nothing', Declares Kok. *European Voice*, 10(36), 1.

Falch, M. (2007). Pentration of Broadband Services: The Role of Policies. *Telematics and Informatics*, 24(4), 246–258.

Falch, M. & Henten, A. (2010). Public Private Partnerships as a Tool for Stimulating Investments in Broadband. *Telecommunications Policy*, 34(9), 496–504.

FCC. (2010). *Connecting America: The National Broadband Plan*. Washington DC: Federal Communications Commission.

Gil-Egui, G., Tian, Y. & Stewart, C. M. (2010). Framing the Information Society: A Comparison of Policy Approaches by the USA and the EU. In S. Papathanassopoulos and R. Negrine (Eds.), *Communications policy: theories and issues* (pp. 179–199). Basingstoke: Palgrave Macmillan.

Gore, A. (1993). *Remarks by Vice President Albert Gore at the National Press Club*. Washington DC, 21 December.

Hathaway, M. E. (2010). Towards a Closer Digital Alliance. *SAIS Review*, 30(2), 21–31.

Home Office. (2012, June). Draft Communications Data Bill. London: Presented to Parliament by the Secretary of State for the Home Office.

Institute of Education. (2009). CIVICWEB – Young People, the Internet and Civic Participation. London: Institute of Education, University of London, D17 Report, Project No. 028357, European Commission.

Jenkins, H. (2006). *Convergence culture: Where Old and New Media Collide*. New York: New York University Press.

Kubicek, H., Dutton, W. & Williams, R. (Eds.) (1998). *The Social Shaping of Information Superhighways: European and American Roads to the Information Society*. Frankfurt: Campus Verlag.

Luukkonen, T. (1998). The Difficulties in Assessing the Impact of EU Framework Programmes. *Research Policy*, 27(6), 599–610.

Mansell, R. (2012). *Imagining the Internet: Communication, Innovation and Governance*. Oxford: Oxford University Press.

Mansell, R. & Raboy, M. (2011). Introduction: Foundations of the Theory and Practice of Global Media and Communication Policy. In R. Mansell and M. Raboy (Eds.), *Handbook on Global Media and Communication Policy* (pp. 1–20). New York: Blackwell-Wiley.

Mansell, R. & Steinmueller, W. E. (2013a). Copyright Infringement Online: The Case of the Digital Economy Act Judicial Review in the United Kingdom. New Media & Society, 15(8), 1312–1328.

Mansell, R. & Steinmueller, W. E. (2013b). Digital Infrastructures, Economies, and Public Policies: Contending Rationales and Outcome Assessment Strategies. In W. H. Dutton (Ed.), *The Oxford Handbook of Internet Studies* (pp. 509–530). Oxford: Oxford University Press.

Melody, W. H. (2011). Liberalization in the Telecom Sector. In M. Finger and R. W. Kunneke (Eds.), *International Handbook of Network Industries* (pp. 103–122). Cheltenham: Edward Elgar Publishing.

Michalis, M. (2010). EU Broadcasting Governance and PSB: Between a Rock and a Hard Place. In P. Iosifidis (Ed.), *Reinventing Public Service Communication: European Broadcasters and Beyond* (pp. 36–48). London: Palgrave Macmillan.

North, D. C. (2006). *Understanding the Process of Economic Change*. Washington DC: Academic Foundation.

OECD. (2008). *Broadband Growth and Policies in OECD Countries*. Paris: OECD Report for ministerial meeting on the future of the internet economy, Seoul, South Korea 17–18 June.

Ofcom. (2012). *Online infringement of Copyright: Implementation of the Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order 2012*. London: Ofcom Consultation, 26 June.

Papathanassopoulos, S. & Negrine, R. (2010). Approaches to Communication Policy: an Introduction., In S. Papathanassopoulos and R. Negrine (Eds.), *Communications policy: theories and issues* (pp. 3–21). Basingstoke: Palgrave Macmillan.

Pelkmans, J. & Renda, A. (2011). Single e-comms Market? No Such thing . . . . *CEPS Policy Brief*, 231, 11 pages.

Protogerou, A., Caloghirou, Y. & Siokas, E. (2010). Policy-Driven Collaborative Research Networks. *Economics of Innovation and New Technology*, 19(4), 349–372.

Puppis, M. (2010). Media Governance: A New Concept for the Analysis of Media Policy and Regulation. *Communication, Culture & Critique*, 3(2), 134–149.

Raboy, M., Landry, N. & Shtern, J. (2010). *Digital Solidarities, Communication Policy and Multi-stakeholder Global Governance: The Legacy of the World Summit on the Information Society*. New York: Peter Lang.

Siegen University. (2010). *Study on the Social Impact of ICT (CPP No. 55A – SMART No 2007/0068) Final Version*. Siegen: Fachbereich Wirtschaftsinformatik und Neue Medien and Others.

Stewart, C. M., Gil-Egui, G., Tian, Y. & Pileggi, M. I. (2006). Framing the Digital Divide: a Comparison of US and EU Policy Approaches. *New Media & Society*, 8(6), 731–751.
UK Government. (2010). *Digital Economy Act 2010 (c.24)*. London.
US Government. (2009). *American Recovery and Reinvestment Act of 2009*. Washington DC: 111th Congress of the United States of America, Senate and House of Representatives.
Van Reenen, J., Bloom, N., Draca, M., Kretschmer, T. & Sadun, R. (2010). *The Economic Impact of ICT SMART No. 2007/0020*. London: Enterprise LSE.
Woolgar, S. (2002). *Virtual Society? Technology, Cyberpole, Reality*. Oxford: Oxford University Press.

10.1057/9781137032195 - The Palgrave Handbook of European Media Policy, Edited by Karen Donders, Caroline Pauwels and Jan Loisen