
THE TECHNOLOGY,
MEDIA AND
TELECOMMUNICATIONS
REVIEW

FOURTH EDITION

EDITOR
JOHN P JANKA

LAW BUSINESS RESEARCH

THE TECHNOLOGY, MEDIA AND TELECOMMUNICATIONS REVIEW

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THE TECHNOLOGY,
MEDIA AND
TELECOMMUNICATIONS
REVIEW

Fourth Edition

Editor
JOHN P JANKA

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EDITOR'S PREFACE

The pervasive influence of internet and wireless-based communications continues to challenge existing laws and policies in the TMT sector. Old business models fall by the wayside as new approaches more nimbly adapt to the shifting marketplace and consumer demand. The lines between telecommunications and media continue to blur. Content providers and network operators vertically integrate. Many existing telecommunications and media networks are now antiquated – not designed for today's world and unable to keep up with the insatiable demand for data-intensive, two-way, applications. The demand for faster and higher-capacity mobile broadband strains even the most sophisticated networks deployed in the recent past. Long-standing radio spectrum allocations have not kept up with advances in technology or the flexible ways that new technologies allow many different services to co-exist in the same segment of spectrum. The geographic borders between nations cannot contain or control the timing, content and flow of information as they once could. Fleeting moments and comments are now memorialised for anyone to find – perhaps forever.

In response, lawmakers and regulators also struggle to keep up – seeking to maintain a 'light touch' in many cases, but also seeking to provide some stability for the incumbent services on which many consumers rely, while also addressing the opportunities for mischief that arise when market forces work unchecked.

The disruptive effect of these new ways of communicating creates similar challenges around the world: the need to facilitate the deployment of state-of-the-art communications infrastructure to all citizens; the reality that access to the global capital market is essential to finance that infrastructure; the need to use the limited radio spectrum more efficiently than before; the delicate balance between allowing network operators to obtain a fair return on their assets and ensuring that those networks do not become bottlenecks that stifle innovation or consumer choice; and the growing influence of the 'new media' conglomerates that result from increasing consolidation and convergence.

These realities are reflected in a number of recent developments around the world that are described in the following chapters. To name a few, these include liberalisation

of foreign ownership restrictions; national and regional broadband infrastructure initiatives; efforts to ensure consumer privacy; measures to ensure national security and facilitate law enforcement; and attempts to address 'network neutrality' concerns. Of course, none of these issues can be addressed in a vacuum and many tensions exist among these policy goals. Moreover, although the global TMT marketplace creates a common set of issues, cultural and political considerations drive different responses to many issues at the national and regional levels.

This fourth edition of *The Technology, Media and Telecommunications Review* provides an overview of the evolving legal constructs that govern these types of issues in 30 jurisdictions around the world. In the space allotted, the authors simply cannot address the numerous nuances and tensions that surround the many issues in this sector. Nevertheless, we hope that the following chapters provide a useful framework for beginning to examine how law and policy continues to respond to this rapidly changing sector.

John P Janka

Latham & Watkins LLP

Washington, DC

October 2013

LIST OF ABBREVIATIONS

3G	Third-generation (technology)
4G	Fourth-generation (technology)
ADSL	Asymmetric digital subscriber line
AMPS	Advanced mobile phone system
ARPU	Average revenue per user
BIAP	Broadband internet access provider
BWA	Broadband wireless access
CATV	Cable TV
CDMA	Code division multiple access
CMTS	Cellular mobile telephone system
DAB	Digital audio broadcasting
DECT	Digital enhanced cordless telecommunications
DDoS	Distributed denial-of-service
DoS	Denial-of-service
DSL	Digital subscriber line
DTH	Direct-to-home
DTTV	Digital terrestrial TV
DVB	Digital video broadcast
DVB-H	Digital video broadcast – handheld
DVB-T	Digital video broadcast – terrestrial
ECN	Electronic communications network
ECS	Electronic communications service
EDGE	Enhanced data rates for GSM evolution
FAC	Full allocated historical cost
FBO	Facilities-based operator
FCL	Fixed carrier licence
FTNS	Fixed telecommunications network services
FTTC	Fibre to the curb

List of Abbreviations

FTTH	Fibre to the home
FTTN	Fibre to the node
FTTx	Fibre to the x
FWA	Fixed wireless access
Gb/s	Gigabits per second
GB/s	Gigabytes per second
GSM	Global system for mobile communications
HDTV	High-definition TV
HITS	Headend in the sky
HSPA	High-speed packet access
IaaS	Infrastructure as a service
IAC	Internet access provider
ICP	Internet content provider
ICT	Information and communications technology
IPTV	Internet protocol TV
IPv6	Internet protocol version 6
ISP	Internet service provider
kb/s	Kilobits per second
kB/s	Kilobytes per second
LAN	Local area network
LRIC	Long-run incremental cost
LTE	Long Term Evolution (a next-generation 3G and 4G technology for both GSM and CDMA cellular carriers)
Mb/s	Megabits per second
MB/s	Megabytes per second
MMDS	Multichannel multipoint distribution service
MMS	Multimedia messaging service
MNO	Mobile network operator
MSO	Multi-system operators
MVNO	Mobile virtual network operator
MWA	Mobile wireless access
NFC	Near field communication
NGA	Next-generation access
NIC	Network information centre
NRA	National regulatory authority
OTT	Over-the-top (providers)
PaaS	Platform as a service
PNETS	Public non-exclusive telecommunications service
PSTN	Public switched telephone network
RF	Radio frequency
SaaS	Software as a service
SBO	Services-based operator
SMS	Short message service
STD-PCOs	Subscriber trunk dialling-public call offices
UAS	Unified access services
UASL	Unified access services licence

List of Abbreviations

UCL	Unified carrier licence
UHF	Ultra-high frequency
UMTS	Universal mobile telecommunications service
USO	Universal service obligation
UWB	Ultra-wideband
VDSL	Very high speed digital subscriber line
VHF	Very high frequency
VOD	Video on demand
VoB	Voice over broadband
VoIP	Voice over internet protocol
W-CDMA	Wideband code division multiple access
WiMAX	Worldwide interoperability for microwave access

Chapter 7

EUROPEAN UNION

*Maurits J F M Dolmans, Francesco Maria Salerno and Federico Marini-Balestra*¹

I REGULATION

i The regulators

The European Commission (the Commission) is the most important regulatory body at the EU level. The Commission is equipped with a variety of regulatory and enforcement powers in the area of TMT, including antitrust, privacy,² online transactions,³ intellectual property⁴ and consolidation of the internal market for electronic communications.⁵ The adoption of the new regulatory framework for electronic communications⁶ has, among other things, increased the Commission's powers to oversee the measures proposed by national regulatory authorities (NRAs) to address problems relating to competition on the various telecommunications markets.

The Body of European Regulators for Electronic Communications (BEREC) was established by Regulation (EC) No. 1211/2009⁷ and commenced its activities in January

1 Maurits J F M Dolmans is a partner, Francesco Maria Salerno is a senior attorney, and Federico Marini-Balestra is an associate at Cleary Gottlieb Steen & Hamilton LLP.

2 See Section V.i, *infra*.

3 See Section II.iii, *infra*.

4 See Directive 2001/29/EC of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, OJ 2001 L 167/10; Directive 2004/48/EC of 29 April 2004 on the Enforcement of intellectual property rights, OJ L 157/45; and Directive 2009/24/EC of 23 April 2009 on the legal protection of computer programs, OJ L 111/16.

5 See Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, OJ L 108/33.

6 See Section I.ii, *infra*.

7 See Regulation (EC) No. 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office, OJ 2009 L 337/1.

2010. Its role is to ensure the consistent application of the EU regulatory framework by, for example, delivering opinions on the NRAs' draft measures concerning market definition, designation of undertakings with significant market power and the imposition of obligations on these undertakings (also called 'remedies'), and, upon request, providing assistance to NRAs in carrying out their duties under EU law. BEREC is also consulted by the Commission before it adopts recommendations on relevant product and service markets, which NRAs must rely on in defining the national relevant markets, and may be tasked by the Commission to carry out *ad hoc* market studies (e.g., regarding net neutrality).⁸

During the course of 2011, BEREC became fully functional and ready to fulfil its assignments as required by the current regulatory framework. Its most important initiatives between the second half of 2012 and September 2013 include (1) publication of best-practice guidelines on international roaming, on access services' remedies, and on quality of service in the scope of net neutrality; and (2) the publication of several opinions to assist the European Commission in evaluating measures by NRAs.⁹

ii Regulated activities

The EU adopted a new comprehensive regulatory framework for electronic communications networks and services in 2002, with the aim of fostering a consistent regulatory approach across the EU. In 2009, Directive 2009/140/EC,¹⁰ Directive 2009/136/EC¹¹ and Regulation (EC) No. 1211/2009 were adopted to improve and revise the 2002 regulatory

8 See Section VII.i, *infra*.

9 See http://berec.europa.eu/eng/document_register/welcome/.

10 See Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009 amending (1) Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (the Framework Directive); (2) 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities; and (3) 2002/20/EC on the authorisation of electronic communications networks and services (the Authorisation Directive), OJ 2009 L 337/1.

11 See Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending (1) Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, (2) Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector; and (3) Regulation (EC) No. 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws, OJ 2009 L 337/1.

framework.¹² It also seeks to encourage investment in NGA networks while preserving competition.¹³

The provision of electronic communication services is regulated by the Authorisation Directive.¹⁴ Under this Directive, the prospective electronic communications services provider only needs an authorisation from the competent NRA. This authorisation requires a simple procedure whereby the applicant notifies the NRA of its intentions, without having to wait for any approval by the NRA.¹⁵ The information that may be requested in such a notification must be limited to what is necessary for the identification of the provider. In a 2013 ruling, the Court of Justice held that the Authorisation Directive does not prohibit charges on telecoms undertakings' turnover, when the trigger for the charge is not the grant of an authorisation under the Directive, but the use of the services by the customer.¹⁶

By way of contrast, the use of spectrum in telecommunications is subject to a licence granted by the Member States and to fees. However, the Commission may impose certain obligations regarding spectrum allocation or the timing of such process.¹⁷

The regulation of audio-visual content is dealt under the Television Without Frontiers Directive. With the last revision in 2007, the Directive was renamed Audiovisual Media Services Directive (AVMSD) and then codified in 2010.¹⁸

The Commission also has extensive powers of investigation in the area of antitrust. It cooperates with national competition authorities (NCAs) to prohibit concerted practices, agreements restricting competition, and unilateral anti-competitive

12 The revised framework, *inter alia*, (1) seeks to ensure that consumers are better informed on the services they subscribe to and on the use of their personal data; (2) provides NRAs with powers to set minimum quality levels for network transmission services so as to promote 'net neutrality'; (3) provides for mandatory notifications by telecommunications operators regarding personal data breaches; and (4) seeks to enhance competition in the telecommunications market by facilitating the ability of customers to switch to alternative operators. Finally, the new framework enables NRAs to impose the functional separation of incumbents' networks activities from their commercial activities so as to overcome serious competition issues and ensure equality of treatment regarding competitors buying network services at the wholesale level. In 2011 BEREC published guiding principles to the attention of NRAs on the use of functional separation powers (available at www.mlex.com/Attachments/2011-03-11_4C151243B37U34S2/bor_10_44rev1.pdf).

13 In April 2012, following a public consultation on its draft report, BEREC released its final report on co-investment and SMP in NGA networks.

14 As discussed below, the Commission is proposing the adoption of an European Passport.

15 Article 5 of the Authorisation Directive.

16 Case C-485/11 (*Commission v. France*).

17 See Section III.iv, *infra*.

18 See 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), OJ 2010 L 95/1.

behaviour. The Commission has exclusive jurisdiction with respect to mergers above certain thresholds, also in the area of TMT.¹⁹

iii Digital Agenda

In 2010 the Commission launched its 'Europe 2020 Strategy' to prepare the EU economy for the challenges of the next decade. One of the flagship initiatives of the 2020 Strategy is the Digital Agenda for Europe, which defines the key enabling role that the use of Information and Communication Technologies will have to play in Europe's efforts to succeed in its ambitions for 2020.²⁰

The Digital Agenda for Europe outlines 101 specific policy actions across seven domains, namely: (1) creating a digital single market; (2) enhancing greater interoperability for software; (3) boosting internet trust and security; (4) developing much faster internet access; (5) rolling out more investment in research and development; (6) enhancing digital literacy skills and inclusion; and (7) applying information and communications technology to address challenges facing society like climate change and the ageing

19 The respective competences of the Commission and NCAs to assess mergers are defined on the basis of the turnover of the undertakings concerned. Pursuant to Article 1.2 of Council Regulation (EC) No. 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) (OJ 2004 L 24/1–22), 'A concentration has a Community dimension where: (a) the combined aggregate worldwide turnover of all the undertakings concerned is more than €5 million; and (b) the aggregate Community-wide turnover of each of at least two of the undertakings concerned is more than €250 million, unless each of the undertakings concerned achieves more than two-thirds of its aggregate Community-wide turnover within one and the same Member State.' Article 1.3 of the Merger Regulation sets out additional criteria to define concentrations having a Community dimension. The only exception to this rule is that, for reasons of plurality of the media, a Member State may also review a concentration that falls within the competence of the Commission and adopt the measures needed to protect such interest (see Article 21.4 of the Merger Regulation). Once a merger is notified, the Commission has 25 working days to determine if it has serious doubts as to its impact on the common market. If it does, the Commission will open an in-depth investigation, which will normally last 90 working days. However, in practice the review process can last several months, as it is common practice to hold contacts with the Commission prior to the formal notification and the Commission may require the parties to submit additional information.

20 See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A Digital Agenda for Europe, COM(2010)245 final (available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC0245:EN:NOT>). See also the RAND Report prepared for DG Information Society and Media, 'Trends in connectivity technologies and their socioeconomic impacts', July 2009 (available at http://ec.europa.eu/information_society/activities/foi/library/docs/final-report-nosec-clean.pdf).

population.²¹ The Digital Agenda for Europe involves extensive use of regulatory powers, with no less than 31 new pieces of legislation expected to be adopted.²²

According to a report issued on June 2013, out of the above-mentioned 101 policy actions, the Commission has so far completed 61 actions, while eight have been delayed or are at risk of being delayed. The remaining 32 actions, under the responsibility of either the Commission or the Member States, are on schedule for completion by their respective deadlines.²³

As to the results of the Digital Agenda, on 12 June 2013, the Commission published its third scoreboard showing the performance of the EU and Member States in delivering on the agreed targets of the Digital Agenda after its first three years of existence.²⁴ The scoreboard provides positive findings: regular internet usage has been rising steadily, especially among disadvantaged groups; users do more online, including more online shopping and increased use of e-government services, including advanced services; roaming prices have fallen much faster than in the past (although this is primarily due to legislation, rather than to increased competition); and basic broadband coverage is nearly complete.

The Commission, however, noted the following as main areas of concern: (1) the target of 20 per cent of citizens engaging in cross-border online shopping by 2015 is certain to be missed and the share of SMEs selling online is likely to remain far below the target of 33 per cent by 2015; (2) the take-up of high-speed broadband has started to accelerate, but is still very far away from the levels desired for 2020; (3) mobile roaming prices are still more than three times higher than national call prices; and (4) public investment in ICT R&D suffered from the budgetary restraints, increasing by only 1.8 per cent, compared to a required annual growth of 5.5 per cent between 2007 and 2020 in order to reach the target.

On 18 December 2012, the Commission adopted a digital to-do list for the period 2013–2014, noting that the digital economy is growing at seven times the rate of the rest of the economy, but also that ‘this potential is currently held back by a patchy

21 See press release of 17 May 2010: ‘Digital Agenda: investment in digital economy holds key to Europe’s future prosperity, says Commission report’, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/571&format=HTML&aged=0&language=EN&guiLanguage=en>.

22 See press release: ‘Digital Agenda: Commission outlines action plan to boost Europe’s prosperity and well-being’, 19 May 2010 (available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/581&format=HTML&aged=0&language=EN&guiLanguage=en>).

23 See Commission Staff Working Document (available at <https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/DAE%20SCOREBOARD%202013%20-%20EXECUTIVE%20SUMMARY.pdf>).

24 The Digital Agenda scoreboard is available at <https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/DAE%20SCOREBOARD%202013%20-%20SWD%202013%20217%20FINAL.pdf>.

pan-European policy framework'.²⁵ Thus, to reignite growth, the Commission has planned the launch of a new legislative initiative, dubbed the 'single market for telecoms regulation' (see Section V.iii, *infra*).

Other legislative initiatives include the review of the Directive on the enforcement of intellectual property rights (the IPR Enforcement Directive) and the revision of the Data Protection Directive.²⁶

II TELECOMMUNICATIONS AND INTERNET ACCESS

i Internet and internet protocol regulation

The provision of internet access and, more generally, IP-based services has traditionally been regulated as part of the telecommunications regulatory framework. More specifically, these services are considered 'electronic communication services' (within the meaning of the Framework Directive) and subject to an authorisation procedure (consisting mainly of a notification) to facilitate entry into the market.²⁷

To the extent that the provision of VoIP has come to be a substitute for voice services provided over narrowband, the reforms introduced in 2009 provide equal treatment of providers of voice services, regardless of the underlying technology.²⁸

ii Universal service

Access to broadband internet is currently outside the scope of universal service at the EU level.²⁹ However, several EU measures encourage the take up of broadband. Indeed, broadband internet is one of the cornerstones of the Digital Agenda. In its Communication on this subject the Commission outlined its commitment to achieve two goals: (1) universal broadband coverage (combining fixed and wireless) with internet speeds gradually increasing up to 30Mb/s; and (2) to foster the deployment and take-up of NGA networks in a large part of EU territory, allowing ultra-fast internet connections above 100Mb/s.³⁰

25 See press release, 'Digital 'to-do' list: new digital priorities for 2013-2014', 18 December 2012 (available at http://europa.eu/rapid/press-release_IP-12-1389_en.htm).

26 See Section V, *infra*.

27 See Section I.ii, *supra*.

28 See Article 2(d) of Directive 2002/21 (consolidated version available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2002L0021:20091219:EN:PDF>). See also the study for the Commission on The Regulation of Voice over IP (VoIP) in Europe, published by Wik Consult on 19 March 2008 (available at http://ec.europa.eu/information_society/policy/ecomms/doc/library/ext_studies/voip_f_f_master_19mar08_fin_vers.pdf).

29 See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on universal service in e-communications – report on the outcome of the public consultation and the third periodic review of the scope in accordance with Article 15 of Directive 2002/22/EC, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0795:FIN:EN:PDF>.

30 See Digital Agenda Communication, para. 2.4.

On 17 May 2012, the Commission launched the second phase of its €600 million public-private partnership on the internet of the future.³¹ The second phase (2013–14) aims at ensuring the availability of the necessary test infrastructure for the early trials of innovative and complex internet services and applications in a wide range of domains across Europe. The Commission has so far budgeted €80 million for this second phase.

The Commission's major contribution to the achievement of the goal of 'broadband for all' is, however, through its regulatory powers. In particular, the Commission adopted:

- a* a Broadband Communication outlining a common framework within which EU and national policies should be developed to lower the costs of broadband deployment throughout the entire EU territory; and
- b* a Recommendation on NGA Networks on 20 September 2010 (the NGA Recommendation).³²

The Commission also adopted guidelines for the application of state aid rules in relation to the rapid deployment of broadband networks.³³

Together with the NGA Recommendation, and the Broadband Communication, the Broadband Guidelines on State Aid are part of the Digital Agenda's plan to achieve ambitious European goals for high-speed broadband development in the European Union. These measures are discussed below (the Spectrum Policy Programme is discussed in Section III, *infra*).

Broadband communication

On 20 September 2010, the Commission adopted a Broadband Communication in which it calls on Member States to adopt operational broadband plans regarding ultra-high-speed networks with concrete implementing measures to realise their targets, notably with respect to funding.³⁴ In this respect, it provides guidance on how public authorities may promote and support investment in broadband infrastructure and reduce investment costs (for example, through coordination by national and local authorities using town planning rules and mandating access to passive infrastructures). As a follow-up, in 2012 the Commission consulted on how to reduce the cost of rolling out high-speed internet.³⁵ The results of the consultation will feed into the Commission's impact assessment of potential measures at EU level on reducing the costs of broadband roll-out.

31 See <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/525&format=HTML&aged=0&language=IT&guiLanguage=en>.

32 See 'Broadband Communication' and 'Recommendation on NGA Networks', *infra*.

33 See 'Revision of the Broadband Guidelines on State Aid', *infra*.

34 See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – European Broadband: investing in digitally driven growth, COM(2010) 472 (the Broadband Communication', available at http://ec.europa.eu/information_society/activities/broadband/docs/bb_communication.pdf).

35 See press release 'Digital Agenda: Commission opens public consultation on how to reduce the cost of rolling out high speed internet', available at http://europa.eu/rapid/press-release_IP-12-434_en.htm.

Along with encouraging better use of existing EU funds, the Broadband Communication announces plans by the Commission and the European Investment Bank (EIB) to develop certain broadband financing instruments to respond to the needs of investment projects in terms of flexibility, maturity and risk. With this view, the Commission, in collaboration with the EIB, launched a public consultation on the 'Europe 2020 Project Bond Initiative' on 28 February 2011. The objective of this initiative is to help private promoters attract capital markets funding from investors such as pension funds and insurance companies to finance infrastructure projects (transport, energy, information and communication networks). Under this initiative, the EU would bear a limited portion of the risks associate to infrastructure projects, thereby improving the rating of the debt to be issued and helping its placement with institutional investors. Following the completion of an impact assessment, the Commission will present a proposal for the implementation of the Europe 2020 project Bond Initiative.

NGA Recommendation

The Commission adopted the NGA Recommendation on 20 September 2010, the same day on which it adopted the Broadband Communication.³⁶ The NGA Recommendation seeks to provide NRAs with guidance so that they may have a common approach when deciding whether to impose obligations on incumbents in connection with NGA networks. At the same time, the NGA Recommendation tries to strike a balance so as not to deter investment in such a highly capital-intensive infrastructure, and to regulate the 'migration' (or transition) from old copper networks to NGAs.

The scope of the Recommendation primarily covers remedies to be imposed upon operators deemed to have significant market power (SMP). However, where it is justified on the grounds that duplication of infrastructure is economically inefficient or physically impracticable, NRAs may also impose obligations of reciprocal sharing of facilities on non-dominant undertakings, which would be appropriate to overcome bottlenecks in the civil engineering infrastructure and terminating segments.

The NGA Recommendation deals with two situations. First, it deals with access to wholesale physical network infrastructure. In this case, new entrants are seeking access to the network of a SMP operator to build their own infrastructure. The NGA Recommendation envisages a number of access obligations:

- a* Access to civil engineering infrastructure of the SMP operator. The NGA Recommendation lays down a principle of cost orientation for pricing access to existing civil engineering infrastructure of the SMP operator. More specifically, NRAs should regulate access prices to civil engineering infrastructure consistently with the methodology used for pricing access to the unbundled local copper loop, except where the SMP operator had to incur specific civil engineering costs to deploy an NGA network. Moreover, NRAs should require the SMP operator to

³⁶ Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA), 2010/572/EU (available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:251:0035:0048:EN:PDF>).

provide access to its civil engineering infrastructure under the same conditions to internal and to third-party access seekers (principle of equivalence).

- b* Access to the terminating segment in the case of FTTH. Where an SMP operator deploys FTTH, NRAs should, in addition to mandating access to civil engineering infrastructure, mandate access to the terminating segment of the access network of the SMP operator, including wiring inside buildings. Access should be provided on the basis of the principle of equivalence. However, with respect to pricing, while prices need to be cost-oriented, NRAs need to take into account, where appropriate, a higher risk premium (compared to access to copper) to reflect any additional and quantifiable risk incurred by the SMP operator.
- c* Unbundled access to the fibre loop in the case of FTTH. Where the SMP operator deploys FTTH, NRAs should, in addition to the aforementioned remedies, mandate unbundled access to the fibre loop. The price of access to the unbundled fibre loop should be cost-oriented, provided that NRAs take into account additional and quantifiable investment risks incurred by SMP operators. NRAs should verify the SMP operator's pricing behaviour by applying a properly specified margin-squeeze test over an appropriate time frame. Where the conditions of competition in areas covered by the joint development of FTTH networks based on multiple fibre lines by several co-investors are sufficiently different to justify the definition of a separate geographical market, NRAs should examine whether a finding of SMP on that market is warranted in light of the level of infrastructure competition resulting from the co-investment. The NRAs should in particular examine whether the co-investors enjoy equivalent and cost-oriented access to the joint infrastructure and whether competition is effective on that market. The NRAs should also examine whether the co-investors have provided for sufficient duct capacity for third parties to use and grant cost-oriented access to such capacity.
- d* Access obligations in the case of FTTN. NRAs should impose an obligation of unbundled access to the copper sub-loop. Pricing should be cost-oriented.

Next, the NGA Recommendation deals with wholesale broadband access. In this case, new entrants seek access not to infrastructure, but to a wholesale service to be delivered by the SMP operator, which enables them to compete with the latter in the retail market for broadband connections. According to the NGA Recommendation: 'NRAs should mandate the provision of different wholesale products that best reflect in terms of bandwidth and quality the technological capabilities inherent in the NGA infrastructure so as to enable alternative operators to compete effectively, including for business-grade services.' Access should normally take place at cost-oriented conditions. The same principles regarding co-investment in the case of unbundled access to the fibre loop in the case of FTTH apply.

Finally, the NGA Recommendation provides that existing SMP obligations in relation to wholesale access services should continue and should not be undone by changes to the existing network architecture and technology, unless agreement is reached on an appropriate migration path between the SMP operator and operators currently enjoying access to the SMP operator's network. In the absence of such agreement, NRAs should ensure that alternative operators are informed no less than five years – where appropriate

and taking into account national circumstances – before any decommissioning of points of interconnection such as the local loop exchange.

On 6 October 2011, BEREC published its report on the implementation of the NGA Recommendation. BEREC also collected data regarding the availability and regulation of NGA wholesale access products and on migration, pricing and risk issues in Member States. The report notes that operators in different Member States follow different NGA deployment strategies due to a number of factors and characteristics (such as population density and geography, costs of deployment, demand, competitive conditions, possible penetration and speed of migration), which it found justified by differences in national circumstances.

BEREC also notes that SMP regulation is becoming more complicated due to the fact that the wholesale access products need to be newly designed and adjusted to different NGA network architectures, and that markets are developing in an increasingly fragmented fashion (remedies are increasingly differentiated between different geographical areas within the same country).

In 2012, BEREC continued to monitor the progress of NGA deployment. In a report published in April 2012, it noted that co-investment may be the only economically viable means for operators to invest in NGA.³⁷ It stated that a co-investment agreement between multiple independent partners may improve competition but highlighted the elements that should be taken into consideration in assessing such agreements (e.g., number of partners, type of partners, type of contract, geographical roll-out, mono-fibre against multi-fibre and exclusivity).

In 2012 and 2013, the Commission has extensively relied on the NGA Recommendation to criticise national regulatory proposals which, for example, do not provide for fibre-based unbundling of the local loop.

The new state aid Broadband Guidelines

On 19 April 2011, the Commission launched a public consultation on the revision of the 2009 Broadband Guidelines, which provide a comprehensive framework for the application of EU state aid rules to this sector. After two rounds of public consultation, on January 2013 the Commission adopted new guidelines, which are aimed at taking into account technological advances, and at acknowledging that super-fast (Next Generation Access) networks can be based on different technological platforms. The Guidelines are based on the distinction between competitive areas ('black' areas), where no state aid is necessary – typically urban areas – and unprofitable or underserved areas ('white' and 'grey' areas) in which state aid may be justified, if certain conditions are met.

To help achieve the Digital Agenda objective of delivering very fast connections (of more than 100 Mb/s) to half of European households by 2020, the new guidelines allow public funding in urban areas, albeit subject to very strict conditions to ensure a pro-competitive outcome. To protect private investors, the guidelines require that any public investment must fulfil a 'step change' requirement: public finance of infrastructure

37 BEREC report on Co-investment and SMP in NGA networks, April 2012, available at http://erg.eu.int/doc/bor_12_41.pdf.

can be allowed only if it provides a substantial improvement over existing networks and not simply a marginal improvement in citizens' connectivity. Moreover, there are new provisions regarding the publication of financing documents, a centralised database for existing infrastructure and *ex post* reporting obligations to the Commission.

Other measures concerning universal service include the following:

Cross-border accessibility of phone numbers

Article 28, Paragraph 1 of the Universal Service Directive provides that any consumer should be able to access any number in the EU (except when cross-border accessibility is technically or economically not feasible or when a subscriber has chosen to limit access to calling parties located in specific geographical areas).

In a 2012 report, BEREC indicated that cross-border accessibility is predominantly a problem with special rate numbers such as premium rate, shared costs, directory enquiry services and free services numbers. The main reasons for this seems to be lack of market demand; difficulties in ensuring pricing transparency; national rules ensuring the protection of end-users (for example, as regards premium rate services); and sufficient available alternatives (such as geographical number, e-mail or internet). As a result, operators do not regard improving the cross-border accessibility of these numbers as a high priority. BEREC notes the lack of complaints from consumers and businesses and the general acceptance of a *status quo* with alternative solutions. Among other recommendations, BEREC suggested initiating a dialogue among stakeholders, and developing cross-border interconnection arrangements and additional or alternative instruments for distributing information about numbers and tariffs.

Single EU-wide phone number for businesses

Currently, there is no EU-wide number available for businesses wanting to be reachable across borders. Instead, companies need to rely on different national or non-geographical 'business' numbers, such as 0800-numbers in each Member State in which they operate. This situation could limit their accessibility by customers (international calls are generally more expensive and obtaining various national numbers could imply burdensome procedures in each state).

Against this background, on 6 December 2010, the Commission launched a public consultation on the possible benefits of a system that would allow businesses to use the same telephone number in all Member States, as a means to reinforce the single market. However, following the consultation, the Commission decided that further harmonisation of the numbering space for businesses was not necessary.³⁸

38 See <http://ec.europa.eu/digital-agenda/en/pillar-i-digital-single-market/action-18-harmonisation-numbering-regimes>.

iii Restrictions on the provision of service

EU Roaming Regulation

In 2007, the EU Roaming Regulation³⁹ introduced wholesale and retail price caps for roaming charges associated with voice, text messages and data services. In 2009, the EU amended the Roaming Regulation to lower those price caps until 30 June 2012, on which date it expired. On 13 June 2012, the Commission adopted a new regulation setting price caps on mobile telecommunication services.⁴⁰ This new regulation provides for further reductions to the caps put in place by the previous regulation but also introduces price caps on mobile data usage. From July 2013, the European Union's roaming regulation has lowered the price caps for data downloads by 36 per cent and for voice calls by 17 per cent compared with 2013. Furthermore, from 1 July 2014, customers will also have the option to use a separate mobile roaming provider when roaming (either through contract or by choosing a provider at their destination) without having to change numbers.

The Commission is currently evaluating changes to the roaming regime within the 'regulation connected Continent' initiative.⁴¹ In Commissioner Kroes' words, 'the level of roaming charges is still an important obstacle to the single market, and continues to be an important cost to citizens and businesses and as such constitutes a significant impediment to mobility' in the common market.⁴² Thus, the proposal aims to equalise the cost of calls so that the price of calls does not differ depending on whether the customer is at home or roaming. According to the information available, to achieve this aim the Commission is relying on voluntary alliances between providers; failing that, customers will continue to benefit from the pricing rules under the Roaming Regulation.

Net neutrality

The debate on net neutrality is still at an early stage in Europe compared with the United States, where, in 2005, the Federal Communication Commission (FCC) set out principles to encourage broadband deployment and preserve the open and interconnected nature of the public internet: rights for consumers to access lawful internet content of their choice, to run applications and services of their choice, to connect devices of their choice and

39 Regulation (EC) No. 717/2007 of the European Parliament and of the Council on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC, 27 June 2007 (available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:171:0032:0032:EN:PDF>).

40 Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union, OJ 2012 L172/10, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:172:0010:01:EN:HTML>.

41 See answer given on July 22, 2013 by Ms Kroes on behalf of the Commission to the Parliamentary question No. E-006805/2013 (available at www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2013-006805&language=EN).

42 Idem.

to have competition, as well as transparency and non-discrimination. On 23 September 2011, the FCC's rules on net neutrality were published in the Federal Register.⁴³

Some rules enshrined in the current telecoms regulatory framework already cover net neutrality issues:

- a* Under the current regulatory framework, NRAs are required to promote 'the ability of end-users to access and distribute information or run applications and services of their choice'.⁴⁴ They are also entitled to set minimum quality of service requirements.⁴⁵ This sets a very important principle for net neutrality, as it recognises and safeguards the basic freedoms of internet users.
- b* Moreover, the revised telecoms framework foresees the possibility for NRAs, after consulting the Commission, to set minimum quality of service requirements if there is a problem. This should ensure that traffic management and possible prioritisation does not lead to degradation of content and services provided by non-commercial actors or by new entrants.
- c* The revised telecoms framework provides strong transparency measures to ensure consumers understand the level of service their providers are supposed to guarantee⁴⁶ and are offered the ability to subscribe to a contract with a maximum duration of 12 months.⁴⁷

During the 2009 legislative revision, the Commission set out in a declaration its commitment to 'preserv[e] the open and neutral character of the internet, taking full account of the will of the co-legislators now to enshrine net neutrality as a policy objective and regulatory principle to be promoted by national regulatory authorities.'

On 30 June 2010, the Commission launched a public consultation on traffic management, transparency, quality of service and the need for regulation which closed on 30 September 2010 with 318 responses from a wide range of stakeholders (including BEREC, operators, ICPs, Member States' authorities, consumer and civil society

43 47 CFR 0 and 8. The rules provide for three basic principles: (1) fixed and mobile broadband providers must disclose the network management practices, performance characteristics, and terms and conditions of their broadband services (transparency); (2) fixed broadband providers may not block lawful content, applications, services, or non-harmful devices and mobile broadband providers may not block lawful websites, or block applications that compete with their voice or video telephony services (no blocking); and (3) fixed broadband providers may not unreasonably discriminate in transmitting lawful network traffic (no unreasonable discrimination). US telecoms companies Verizon and MetroPCS have filed complaints against the FCC's order arguing among others that the FCC does not have the authority to adopt such rules. After a first victory in March 2012 for the telecoms operators, the case will be heard by the Washington, DC Court of Appeals. The appeals court was expected to hear arguments in that case in spring 2013, but deferred the case until Fall.

44 Article 8 Section 4(g) of the Framework Directive.

45 Article 22(3) of the Universal Service Directive.

46 Article 21 of the Universal Service Directive.

47 Article 30(6) of the Universal Service Directive.

organisations and a number of individuals). On 9 November 2010, the Commission released a report summarising those responses.⁴⁸ It showed that respondents generally agreed that traffic management is necessary to preserve a secure and efficient network and that traffic management does currently not have any negative impact on the consumer. However, BEREC voiced concerns that traffic management could be – and in some instances were – used to favour one service over another or to block certain services altogether (e.g., IPTV, VoIP, especially over mobile networks), and that privacy could be affected by packet inspection associated with traffic management. Few responses called for minimum quality-of-service requirements stage but clearly supported transparency to enable consumers to make informed choices, which could only be effective if other barriers to switching between ISPs are alleviated. The majority of respondents considered the regulatory framework revised in 2009 capable of dealing with the issues identified but noted that its effectiveness could only be assessed once it was fully implemented and applied at national level.

Further to this consultation process, on 11 April 2011, the Commission adopted a Communication on net neutrality summarising the issues raised in the public consultation, announcing that at the moment there was no need of new regulation and that BEREC would continue looking into a number of issues for which data was incomplete or imprecise (*inter alia*: barriers to switching; blocking and throttling practices; transparency and quality of service; possible competition issues).⁴⁹ The Commission made clear that under Articles 101 and 102 TFEU it reserved its right to assess any behaviour related to traffic management that may restrict or distort competition.

On 6 October 2011, BEREC published for consultation its draft Guidelines on Net Neutrality and Transparency, which provide for best practices and recommended approaches for NRAs and reported on the outcome of the public consultation in December 2011.⁵⁰ The next day, the European Data Protection Supervisor adopted an opinion on the European Commission Communication on open internet and net neutrality in Europe, highlighting the serious implications of traffic management practices on the fundamental right to privacy and data protection of users, in particular, in terms of confidentiality of communications.⁵¹

On 29 May 2012, BEREC published the results of its investigation into traffic management practices. It found that among the wide array of traffic management practices, the most frequent were the blocking or throttling of peer-to-peer traffic (on both fixed and mobile networks) and the blocking of VoIP traffic (mostly on mobile networks). In some cases, operators were instead giving preferential treatment to certain traffic, such as streaming or other real-time applications (which include VoIP and instant

48 See http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/net_neutrality/index_en.htm.

49 See <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0222:FIN:EN:PDF>.

50 Available at http://erg.eu.int/doc/berec/consultation_draft_guidelines.pdf and http://berec.europa.eu/doc/bor11_66_transparencyinput.pdf, respectively.

51 Press release available at www.edps.europa.eu/EDPSWEB/webdav/site/mySite/shared/Documents/EDPS/PressNews/Press/2011/EDPS-2011-10-Net-neutrality_EN.pdf.

messaging). The most common method used for traffic management is deep packet inspection, through which an operator examines the content of packets that pass on its network. The European Data Protection Supervisor Peter Hustinx highlighted the privacy implications of such techniques in an opinion dated 7 October 2011.⁵²

On the same day, BEREC released three documents for public consultation: the guidelines for quality of service in the area of net neutrality;⁵³ a report on differentiation practices and related competition issues;⁵⁴ and an assessment of IP interconnection in the context of net neutrality.⁵⁵ Based on those results and the implementation of the revised telecoms framework, the Commission announced that it might issue additional guidance or more stringent measures to achieve competition and consumer choice.

However, in 2013 the Commission seems to have embraced a different stance. Commissioner Kroes stressed that failure to take coordinated action on this issue would shatter the fragile construction of the telecoms single market (which is already far from being completed), since tomorrow's innovative services might have to stop at the border because of restrictive national laws.⁵⁶ The proposal for the regulation 'Connected Continent' includes a limitation on the use of traffic management.

On the antitrust side, on 9 July 2013, the Commission conducted dawn raids on several European telecoms operators to investigate whether the operators were blocking or 'throttling' services that use up large amounts of data. According to the Commission, such conduct would not only violate net neutrality, but would also breach Article 102 TFEU and, as such, represent an abuse of dominant position.⁵⁷

Monitoring and control of content

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 (the Directive on electronic commerce) explicitly sets out that no 'intermediary' should be obliged to engage in monitoring activities of a general nature (the 'mere conduit' rule).⁵⁸ This was confirmed in the context of the 2009 reform of the regulatory framework. In particular, Recital 30 of Directive 2009/136 stated that 'Directive 2002/22/EC (the Universal Service Directive) does not require providers to monitor information transmitted over their networks or to bring legal proceedings

52 Available at [http://ec.europa.eu/bepa/european-group-ethics/docs/activities/peter_hustinx_presentation_\(1\)_15_rt_2011.pdf](http://ec.europa.eu/bepa/european-group-ethics/docs/activities/peter_hustinx_presentation_(1)_15_rt_2011.pdf).

53 Available at http://berec.europa.eu/doc/consult/bor_12_32_guidelines.pdf.

54 Available at http://berec.europa.eu/doc/consult/bor_12_31_comp_issues.pdf.

55 Available at http://berec.europa.eu/doc/consult/bor_12_33.pdf.

56 See: 'The EU, safeguarding the open internet for all', SPEECH/13/498 of 4 June 2013 (available at http://europa.eu/rapid/press-release_SPEECH-13-498_en.htm).

57 See: 'Antitrust: Commission confirms unannounced inspections in internet connectivity services', MEMO/13/681 of 11 July 2013 (available at http://europa.eu/rapid/press-release_MEMO-13-681_en.htm).

58 See Section 4, Articles 12 to 15.

against their customers on grounds of such information, nor does it make providers liable for that information.’

However, the same Recital goes on to state that ‘responsibility for punitive action or criminal prosecution is a matter for national law, respecting fundamental rights and freedoms, including the right to due process.’

Moreover, in August 2010 the Commission launched a consultation on the future of electronic commerce in the internal market and the implementation of the Directive on electronic commerce,⁵⁹ where it sought, *inter alia*, stakeholders’ views on the mere conduit rule. The consultation closed on 5 November 2010 with more than 400 responses. In the ensuing 2011 communication, the Commission noted that although the Directive on electronic commerce removed a number of obstacles to cross-border online services, clarification was required, *inter alia*, regarding the liability of intermediary internet providers.

The interpretation of the mere conduit rule was also probed in two cases put before the European Court of Justice, which involve *Scarlet* (an ISP) and *Netlog* (a social networking website) and their responsibility for exchange of allegedly unlawful content by the users.⁶⁰ In an opinion in the *Scarlet* case, released on 14 April 2011, Advocate General Cruz Villalón argued that Directives 2001/29/EC, 2004/48/EC, 95/46/EC, 2002/58/EC and 2000/31/EC interpreted in the light of Articles 7, 8, 11 and 52, Paragraph 1 of the Charter of Fundamental Rights of the European Union do not allow national courts to order an ISP to filter all traffic transiting on its network for an indefinite period of time, at the ISP’s own cost. The court followed the AG’s opinion and held that these directives preclude a national court from issuing an injunction against a hosting service provider that requires it to install a system for filtering information that is stored on its servers by its service users if the injunction applies indiscriminately to all those users as a preventative measure, at the exclusive expense of the hosting service provider, and for an unlimited period of time.⁶¹

iv Security

Privacy and data retention

General EU rules on privacy are set out under Directive 95/46/EC.⁶² Special legislation translates the principles set out in Directive 95/46/EC into specific rules for the telecommunications sector. In particular, under Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communication

59 See http://ec.europa.eu/internal_market/consultations/2010/e-commerce_en.htm.

60 See the judgments of the Court of Justice in Cases C-70/10, *Scarlet Extended v. SABAM*, dated 24 November 2011; and Case C-360/10, *Sabam v. Netlog NY*, dated 16 February 2012, (information available on the website of the European courts http://curia.europa.eu/jcms/jcms/Jo1_6308/). Note that in February 2010, Google was surprisingly and controversially held liable for content made available through its website by an Italian court. The case is being appealed. See the corresponding section in the chapter on Italy.

61 The Court upheld the same arguments in the *Netlog* case.

62 OJ 1995 L 281/31.

sector (as amended by Directive 2006/24/EC and Directive 2009/136/EC), service providers must take strong security measures to protect their customers' personal data.⁶³ The rules also require that service providers inform, without undue delay, data protection authorities as well as their customers in the event of a security breach.⁶⁴ To ensure consistent implementation of these rules across Member States, the Commission adopted 'technical implementation measures', specifying what telecoms operators and ISPs should do if their customers' personal data is lost, stolen or otherwise compromised. Under these new rules, telecoms operators must inform the competent national authority (and, in some circumstances, their customers as well) within 24 hours after detection of the incident.⁶⁵ These rules also provide that user's consent must be obtained in order to store data on the user's computer with respect to data that is not related to the service accessed by the user (e.g., cookies for targeted behavioural advertising).

The Commission will also incentivise companies to encrypt personal data. To this end, in conjunction with the European Network and Information Security Agency (ENISA), the Commission will publish an indicative list of encryption techniques to render personal data unintelligible to any person not authorised to see it. If a company applies such techniques but suffers a data breach, it is not required to notify the latter to the customer because such breach would not have actually revealed the customer's personal data.⁶⁶

63 See Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), as amended in the 2009 reform of the regulatory framework.

64 The current version of the draft Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation), released by the Commission on 25 January 2012 foresees a similar requirement to notify all personal data breaches to the supervisory authority (See COM(2012) 11 final). This requirement has recently approved by the Council of the European Union in April 2013 (See press release '3234th Council meeting Agriculture and Fisheries', Luxembourg, 22 April 2013, available at: http://europa.eu/rapid/press-release_PRES-13-145_en.htm).

65 See Commission Regulation (EU) No. 611/2013 of 24 June 2013 on the measures applicable to the notification of personal data breaches under Directive 2002/58/EC of the European Parliament and of the Council on privacy and electronic communications, OJ L 173/2 (available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:173:0002:0008:EN:PDF>).

The new regulation is not associated to the draft regulation on data protection, which in its current version also provides for a 24-hour notification obligation. This requirement was heavily discussed, and the European Parliament rapporteur Jan Philipp Albrecht proposed to extend this period to 72 hours. MEP Albrecht's report is available at: www.europarl.europa.eu/meetdocs/2009_2014/documents/libe/pr/922/922387/922387en.pdf.

66 See Commission Press Release 'Digital Agenda: New specific rules for consumers when telecoms personal data is lost or stolen in EU,' 24 June 2013 (available at <http://europa.eu/rapid/press->

Pursuant to Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (as amended by Directive 2006/24/EC and Directive 2009/136/EC), ISPs do store certain basic information (time, duration or volume of communication, etc.) about their customers' communications, which they use for various purposes (e.g., billing, charging other companies for interconnection and marketing). The ban does not affect the technical storage of information that is necessary for the conveyance of a communication. Apart from the ISP, this kind of traffic data can only be used by certain national authorities (typically, the police) in accordance with the laws in each EU country and only in exceptional circumstances (e.g., for detecting and investigating serious crimes).

Under the EU rules, service providers must keep traffic data and geolocation data (e.g., data that indicates the location of computer or mobile phone) generated or processed by them and the data necessary to identify the subscriber or registered user, for a period of between six months and two years, depending on national legislation. On 31 May 2012, the Commission asked the Court of Justice to fine Germany for failing to implement the EU rules on data retention in its national law following a Federal Constitutional Court ruling that the proposed national legislation was unconstitutional.⁶⁷ In May 2013, the Court of Justice fined Sweden for its delay in implementing data retention rules.⁶⁸

In May 2010, the Article 29 Data Protection Working Party (an independent advisory body on data protection and privacy set up under Article 29 of the Data Protection Directive 95/46/EC and composed of representatives from the national data protection authorities of the EU Member States, the European Data Protection Supervisor and the European Commission) sent letters to three major search engine operators – Google, Yahoo! and Microsoft – arguing that their privacy policies did not comply with Directive 95/46/EC, particularly with respect to methods of making users' search data anonymous. The Working Party urged those search engine operators to engage outside auditors to verify compliance with the directive. In its letter to Google, the Working Party also asked the company to cut the retention period from the current nine months to six months.⁶⁹ In October 2012, after several months of investigations carried out by the French data protection authority (CNIL) on the new unified privacy policy adopted by Google, the Article 29 Working Party sent a letter to Google stating arguments that the company's new

release_IP-13-591_en.htm).

67 See press release 'Data retention: Commission takes Germany to Court requesting that fines be imposed,' 31 May 2012 (available at: http://europa.eu/rapid/press-release_IP-12-530_en.htm?locale=en).

68 Case C-270/11, *Commission v. Sweden*, judgment of 30 May 2013. The fines amounted to €3 million. The judgment is available at <http://curia.europa.eu/juris/document/document.jsf?text=&docid=137828&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&c id=4941124>.

69 See press release, 'Article 29 Data Protection Working Party - Press Release: EU data protection group says Google, Microsoft and Yahoo! do not comply with data protection rules,' 26 May 2010 (available at http://ec.europa.eu/justice/policies/privacy/news/docs/pr_26_05_10_en.pdf).

policy does not comply with key data protection principles. The Article 29 Working Party asked Google to make numerous improvements to its policy, including the provision of clearer and more comprehensive information for each type of processing setting out the purposes and categories of data.⁷⁰

Activities like listening, tapping, storing or otherwise intercepting or monitoring communication without the user's consent are banned. However, Member States may restrict confidentiality of online communication for reasons relating to state security, defence, public security, and the prevention, investigation, detection and prosecution of criminal offences.⁷¹

A significant review of the current European data protection framework was initiated in 2009 in order to further harmonise data protection legislation throughout Europe, whose fragmentation is considered to be overly burdensome to businesses with cross-border activity. After several consultations, on 25 January 2012, the European Commission proposed a new regulation, aimed at updating existing legislation.⁷² Once adopted, the proposed regulation will require businesses to be more responsible and accountable in the way they handle customer and client data and envisages penalties for serious breaches of up to €1 million or up to 2 per cent of the global annual turnover of a company. The fines would start out at €250,000 or up to 0.5 per cent of the turnover for less serious offences, such as a company charging a fee to comply with a request from a user for his or her data. In its current draft, the proposed regulation will widely apply also to operators not established in the EU, which offers goods and services to European citizens. The proposed regulation is currently being discussed at the European Parliament and is expected to be adopted before its mandate comes to an end in 2014. The Regulation will

70 See press release 'Google's new privacy policy : incomplete information and uncontrolled combination of data across services,' 16 October 2012 (available at http://ec.europa.eu/justice/data-protection/article-29/documentation/other-document/files/2012/20121016_press_release_google_privacy_cnll_en.pdf). The Article 29 Working Party's letter is available at http://ec.europa.eu/justice/data-protection/article-29/documentation/other-document/files/2012/20121016_letter_to_google_en.pdf. The recommendations are available at http://ec.europa.eu/justice/data-protection/article-29/documentation/other-document/files/2012/20121016_google_privacy_policy_recommendations_cnll_en.pdf.

71 See (1) Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), as amended in the 2009 reform of the regulatory framework; and (2) Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58/EC.

72 Proposal for a Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation), 25 January 2012, COM(2012) 11 final.

be binding in its entirety and directly applicable in all Member States after two years from its date of entry into force.⁷³

The review of the data protection rules has become even more pressing in the wake of the PRISM scandal.⁷⁴ Press sources report that in August 2013 the Commission mandated an informal working group composed of CEOs from major IT-sector companies to submit proposals. Some are calling for a ‘Schengen for data’, in reference to the 1995 Schengen Agreement that removed border controls between 10 EU Member States.⁷⁵ Under this proposal, data of EU citizens or companies must be hosted, treated and processed only on European territory even for services offered by non-EU companies.

Protection for children

Under Article 27 of the Audiovisual Media Services Directive (codified version), Member States shall take appropriate measures to ensure that television broadcasts by broadcasters under their jurisdiction do not include any programmes which might seriously impair the physical, mental or moral development of minors, in particular programmes that involve pornography or gratuitous violence.

The Commission has also adopted the Safer Internet Programme, which aims to (1) promote the safer use of the internet and other communication technologies, particularly for children and young people; (2) educate users, particularly children, parents, carers, teachers and educators in this regard; and (3) fight against illegal content and harmful conduct online.⁷⁶

Cybersecurity

Since 2004, ENISA has worked with the relevant national authorities and with the European institutions to disseminate knowledge, favour the sharing of best practices and coordinating responses to common threats.⁷⁷ The role of ENISA has been reaffirmed in the 2009 reform of the regulatory framework.⁷⁸ In the 2010 Digital Agenda for Europe, the Commission promised to present in 2010 measures aiming at a reinforced and high-level Network and Information Security Policy, including legislative initiatives such as a modernised ENISA, and measures allowing faster reactions in the event of

73 See Article 91 of the draft General Data Protection Regulation, cited above.

74 PRISM is a mass electronic surveillance data mining program known to have been operated by the United States’ National Security Agency (NSA) since 2007. The existence of this programme was revealed in mid-2013.

75 See press release ‘Atos CEO calls for ‘Schengen for data’’, available at www.telecompaper.com/news/atos-ceo-calls-for-schengen-for-data--963463. For concerns associated with this proposal, see Section V, *infra*.

76 For more information on the current initiatives, see DG Information Society’s portal, at http://ec.europa.eu/information_society/activities/sip/index_en.htm.

77 See www.enisa.europa.eu/about-enisa. ENISA’s mission is enshrined in Regulation (EC) No. 460/2004 of the European Parliament and of the Council of 10 March 2004 establishing the European Network and Information Security Agency (OJ 2004 L 77/1).

78 See Articles 13a and 13b of the Framework Directive (consolidated version).

cyberattacks, including a common emergency response team (CERT) for the EU institutions. The Commission also committed to present measures, including legislative initiatives, to combat cyberattacks against information systems by 2010, and related rules on jurisdiction in cyberspace at European and international levels by 2013. It is also envisaged that by 2012 Member States should establish a well-functioning network of CERTs at national level covering all of Europe. Moreover, Member States should, in cooperation with the Commission, carry out large-scale attack simulation and test mitigation strategies.

On 31 March 2011, the Commission presented its communication on cyber security in which it outlined that the reinforcement of international cooperation would require establishing the discussed CERT by 2012, developing a European cyber-incident contingency plan by 2012 (and organising regular exercises), promoting globally agreed principles for the stability and resilience of the internet and establishing strategic partnerships with key non-EU countries (including the US) in this area.⁷⁹

The Commission completed the setting up of its own CERT in June 2011 (CERT-EU). CERT-EU is made up of IT security experts from the main EU institutions (the Commission, the European Parliament, the General Secretariat of the Council, the Committee of Regions and the Economic and Social Committee) and ENISA. The team operates under the strategic oversight of an inter-institutional steering board. Following a successful one-year pilot programme, CERT-EU has now been established as a permanent and full-scale computer emergency response team for the EU institutions.

International cooperation

In 2009, the Foreign Affairs ministers of the EU unanimously gave the Commission a mandate to negotiate a new agreement under which the US will gain access to financial messaging data held by SWIFT, necessary to the US Treasury Department's Terrorist Finance Tracking Program. This came about after the press reported in 2006 about a secret programme run by the US law-enforcement agencies and the US Department of the Treasury. On 1 August 2010, following approval by the European Parliament, the EU-US Terrorist Finance Tracking Program Agreement came into force, regulating the transfer of financial messaging data from the EU to the US.⁸⁰

III SPECTRUM POLICY

i Development

Spectrum management remains within the competence of the Member States. However, it is recognised that European law may play a crucial role in strategic planning, coordination and, where appropriate, harmonisation at EU level, so that spectrum users derive the full benefits of the internal market. More specifically, in 2005 the Commission

79 Commission Communication on Critical Information Infrastructure Protection – 'Achievements and next steps: towards global cyber-security' – COM(2011) 163 (available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0163:FIN:EN:PDF>).

80 See www.swift.com/about_swift/press_room/swift_news_archive/2010/index.page?

published a Communication on 'A market-based approach to spectrum management in the European Union'⁸¹ and in the 2010 Digital Agenda for Europe the Commission committed to initiate the legislative process leading to a decision by the European Parliament and Council on a European Spectrum Policy Programme for more efficient management of radio spectrum.

On 14 March 2012, the European Parliament and the Council adopted the Commission's first radio spectrum policy programme.⁸² The five-year policy programme aims, *inter alia*, at ensuring that sufficient spectrum is made available for wireless broadband, which is seen by the Commission as one of the means to reach the targets set in the Digital Agenda. Specifically, Member States, in cooperation with the Commission, must take all steps necessary to ensure that sufficient spectrum for coverage and capacity purposes is allocated within the Union, in order to ensure that wireless applications contribute effectively to achieving the target for all citizens to have access to broadband of a speed of at least 30Mb/s by 2020.

The programme provides, *inter alia*, that Member States should authorise the use of all the spectrum designated by previous Commission Decisions 2008/477/EC (2.5–2.69GHz), 2008/411/EC (3.4–3.8GHz) and 2009/766/EC (900/1,800MHz), under conditions that provide consumers with easy access to wireless broadband services by January 2012, and that they should open up the 800MHz band (which is part of the 'Digital Dividend) to wireless broadband by 1 January 2013. The Commission may allow Member States to delay the opening up of the 800MHz band until the end of 2015 where exceptional national or local circumstances exist, which would prevent the availability of the band (for example, where cross-border frequency coordination is necessary).⁸³

On 3 September 2012, the Commission published a Communication on promoting the shared use of radio spectrum in the internal market.⁸⁴ In light of the scarcity of spectrum, the Commission proposal provides a harmonised approach under

81 See COM(2005) 400, available at http://eur-lex.europa.eu/LexUriServ/site/en/com/2005/com2005_0400en01.pdf.

82 See Decision No 243/2012/EU of the European Parliament and the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme, OJ 2012 L 81/7.

83 Half of Member States have missed the 2013 deadline, and the Commission has been forced to grant nine out of the received 14 deadline extension requests. According to the Commission, such delays demonstrate the need to ensure the timely availability of harmonised spectrum across the EU, including the harmonised timing of assignments and duration of spectrum usage rights for wireless broadband communications, while each Member State continues to set the authorisation conditions and procedure for spectrum (See press release 'Europeans suffering because most Member States are too slow delivering 4G mobile broadband spectrum,' 23 July 2013, available at http://europa.eu/rapid/press-release_IP-13-726_en.htm).

84 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Promoting the shared use of radio spectrum resources in the internal market, 3 September 2012, COM(2012) 478 final (available at http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/_document_storage/com/com-ssa.pdf).

which NRAs could consider sharing deals between operators that do not own any or enough spectrum and those that do in an effort to increase the general availability of spectrum across Europe.

On 14 June 2012, the European Commission made public plans to repurpose the 700MHz band from broadcasting only to other additional uses including mobile broadband. The Commission is working with experts on designing a system for assigning the use of wireless frequencies in Europe. This system would identify the frequencies that are potentially used below their optimal level and which could be used for more valuable technology. The Commission announced that coordination of spectrum management and assignment for mobile and wireless services will be further addressed in early autumn of 2013.

As mentioned, the spectrum would be considered as a ‘European input’, and thus widely regulated at the European level in case the Connected Continent Regulation is to be approved. In particular, the Commission proposes a strict harmonisation between authorisation procedures applicable in the Member States in order to ensure that frequencies are released under a common framework that would provide *inter alia* for harmonised authorisation duration; fees and administrative charges; and capacity and coverage obligations.

ii Flexible spectrum use

In order to allow more flexibility to take account of market needs, Article 9 of the Framework Directive (as amended) makes technology neutrality⁸⁵ a binding principle, and introduces the principle of service neutrality,⁸⁶ with the possibility for exceptions to the principle in limited cases such as meeting general-interest objectives. The principle of spectrum tradability can be imposed in commonly defined bands (Article 9b).⁸⁷

Pursuant to the radio spectrum policy programme, sufficient and appropriate spectrum should be made available in a timely manner to support the EU’s policy objectives. Flexibility in the use of spectrum should be maximised through the application of the principles of technology and service neutrality; the opening of spectrum to new services; and the principle of spectrum tradability, while striving to maintain and develop effective competition, in particular in electronic communications services, by avoiding excessive accumulation of radio frequencies by certain operators where it results in ‘significant harm’ to competition. Another objective is the reduction of fragmentation in the internal market by enhancing coordination and harmonisation of technical conditions for the

85 Article 9.3.

86 Article 9.4: ‘all types of electronic communications services may be provided in the radio frequency bands, declared available for electronic communications services in their National Frequency Allocation Plan in accordance with Community law.’

87 There are transitional rules for a period of five years starting from 25 May 2011, in order to allow holders of rights to use radio frequencies that were granted before that date and that will remain valid for no less than five years after that date, to submit an application to the competent national authority for a reassessment of the restrictions on their rights in accordance with Article 9(3) and (4).

use of spectrum. Finally, the EU should participate in international negotiations relating to spectrum. However, bilateral negotiations carried out by Member States should be coordinated and consistent with EU law and policies.

iii Broadband and next-generation mobile spectrum use

On 6 May 2010, the Commission adopted a decision establishing harmonised technical rules for the use of frequencies in the 790–862MHz band, seeking to direct Member States on the uses of the digital dividend in terms of 800MHz frequencies (which will become available as analogue television broadcasting transitions to digital – a process that is due to be concluded by the end of 2012).⁸⁸ These harmonised rules will favour the efficient use of wireless broadband networks in Member States, such as 4G mobile technology (e.g., LTE or WiMAX). On 18 April 2011, the Commission approved technical rules for the use of the 900 and 1,800MHz radio frequency bands. Such technical rules allow for the co-existence on the 900MHz and 1,800MHz frequency bands of 2G, 3G (UMTS) and 4G (LTE/WiMAX) systems, which was foreseen in the revised GSM Directive on the use of radio spectrum for mobile services.

To stimulate investments for the development of 4G services, on November 2012, with implementing decision C(2012)7697, the Commission added 120MHz to the radio spectrum portfolio for 4G technologies, such as LTE, around the 2GHz band. This band is solely used for UMTS (Universal Mobile Telecommunications System) wireless communications, known as 3G networks. The Decision makes it mandatory for Member States to open the relevant spectrum by 30 June 2014 at the latest, and lays down harmonised technical conditions to allow coexistence between different technologies. On this basis the EU will enjoy up to twice the amount of spectrum for high speed wireless broadband as in the United States, namely around 1,000MHz.

iv Spectrum auctions and fees

It is up to Member States to auction spectrum or impose spectrum-user fees. If they decide to do so, they must comply with the following principles enshrined in the Authorisation Directive:

- a* selection criteria must be objective, transparent, non-discriminatory and proportionate (Article 7.3, consolidated version);
- b* where competitive or comparative selection procedures are to be used, Member States may extend their duration for as long as necessary to ensure that such procedures are fair, reasonable, open and transparent to all interested parties, but by no longer than eight months (Article 7.4, consolidated version); and

88 See Commission Decision of 6 May 2010 on harmonised technical conditions of use in the 790-862MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union (OJ 2010 L 117/95 – available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:117:0095:0101:en:PDF>).

The analogue television switch-off was accomplished by the end of 2012 in most Member States (among the exceptions, Greece, Bulgaria, and Hungary).

- c fees for the rights of use for radio frequencies must reflect the need to ensure the optimal use of these resources. Member States shall ensure that such fees shall be objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose (Article 13, consolidated version).

Pursuant to the technical rules for the use of the 900 and 1,800MHz radio frequency bands approved on 18 April 2011, Member States had until 31 December 2011 to implement the Commission's technical parameters into their national rules so that GSM bands are effectively made available for LTE and WiMAX systems.

IV MEDIA

i Restrictions on the provision of service

The AVMSD sets out EU rules, *inter alia*, on advertising, protection of minors, and promotion of European works. Note that, with respect to media ownership, under EU law there are no restrictions on foreign (i.e., non-EU) ownership. Member States are, however, free to impose such restrictions against non-EU Member States. See the corresponding section in the chapters on national jurisdictions. The AVMSD applies to all audio-visual media services, whether linear (traditional television) or non-linear (VOD), irrespective of the technology used to deliver the content (principle of technological neutrality).⁸⁹

In its report on the application of the AVMSD released on 7 May 2012, the Commission clarified the scope of its upcoming review of the Connected TV market, in which internet and broadcasting converge.⁹⁰ The review follows increasing complaints by telecommunications and media firms about the advantageous position of OTT providers. It is expected that the Connected TV review will seek to make these providers fall within the purview of existing EU law in a move seen to restore the level playing field in this market and ensure that customers can expect the same level of protection, for example, on advertising.

89 See Article 1(1)(a) and the explanatory note provided by the Commission: 'The AVMSD covers all services with audio-visual content irrespective of the technology used to deliver the content: The rules apply whether you watch news or other audio-visual content on TV, on the internet or on your mobile phone [...],' available at http://ec.europa.eu/avpolicy/reg/tvwf/provisions/index_en.htm. Due to this broad scope, the AVMSD also applies to internet-based broadcasting (like, for instance, YouTube channels). In contrast, the simple exchange of contents between users would fall outside of the scope of the AVMSD because there is no editorial responsibility nor any 'programme' within the meaning of Article 1(1)(b) and (c).

90 First Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the application of Directive 2010/13/EU 'Audiovisual Media Service Directive', 4 May 2012, Com(2012) 203 final.

ii Digital switchover

The Commission has strongly supported the digital switchover.⁹¹ However, the impact of the digital switchover has varied from country to country. See the corresponding sections of the chapters on national jurisdictions.

iii Internet-delivered video content

The impact on the move to internet-delivered video content varies from country to country. Note that the Commission has advocated a principle of technological neutrality, where Member States are enjoined from favouring a given distribution means over another (e.g., DTTV over digital satellite) or a given company's product or technology over another's. This principle has been upheld by the judgment of the General Court in *Mediaset v. Commission*,⁹² where the court dismissed Mediaset's application for annulment of a Commission decision prohibiting as incompatible aid a subsidy paid by the Italian state for the purchase of DTTV decoders in the context of the digital switchover, for breach of the principle of technological neutrality. The Court of Justice confirmed the General Court's decision on 28 July 2011.⁹³

As previously noted, the principle of technological neutrality has also been embraced by the AVMSD. On 13 July 2011, the Commission published its Green Paper on the online distribution of audio-visual works in the EU (Green Paper).⁹⁴ The Green Paper was intended to contribute to the development of a digital single market, called for by the Digital Agenda, particularly in the online distribution of audio-visual works. It invited stakeholders to comment on the challenges and opportunities facing audio-visual media service providers. It also sought stakeholders' views on whether the regulatory and legal framework poses barriers to the cross-border availability of online services in the EU. The Commission has not yet taken any initiative on the basis of the public consultation.⁹⁵

On 22 April 2013, the Commission published its Green Paper 'Preparing for a Fully Converged Audiovisual World: Growth, Creation and Values'. The Green Paper invites stakeholders, including viewers and internet users to share their views on the changing media landscape and borderless internet in particular on market conditions, interoperability and infrastructure, and implications for EU rules in the light of the emerging diffusion of Connected TV (which, from a legal perspective, means convergence

91 See, for example, Communication from the Commission to the Council, the European Parliament, the European Economic and Social committee and the Committee of the Regions on accelerating the transition from analogue to digital broadcasting, COM(2005) 204, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52005DC0204:EN:NOT>.

92 Case T-177/07.

93 Case C-403/10.

94 Green Paper on the online distribution of audio-visual works in the European Union: Union: opportunities and challenges towards a digital single market, COM(2011) 427 final (available at http://ec.europa.eu/internal_market/consultations/docs/2011/audiovisual/green_paper_COM2011_427_en.pdf).

95 See http://ec.europa.eu/internal_market/copyright/initiatives/index_en.htm.

between sectors subject to different rules and restrictions). As to the market evolutions, the Commission states that convergence between different media is a reality, and that it is expected that connectable TVs will move from 40.4 million devices at the end of 2012 to becoming the leading TV equipment in EU households by 2016. By the same year, the majority of consumer internet traffic in volume is expected to be video and the majority of IP traffic to be channelled mainly through Wi-Fi and mobile devices.

iv Mobile services

The impact of the growing demand for mobile media varies from country to country. As mentioned, according to the Commission, by 2016 the majority of data traffic would be channelled through wireless technologies. Please refer to the corresponding section of the chapters on national jurisdictions. The Commission has supported the uptake of mobile TV by promoting the adoption of the DVB-H standard for broadcasting content to mobile devices.⁹⁶

v Independence of media regulators

On March 2013, the Commission consulted on the issue of independence of regulatory bodies competent for audio-visual media services and on possible options for strengthening their independence, including a possible revision of the AVMSD.⁹⁷

In a resolution dated 21 May 2013 the EU Parliament called for annual EU monitoring of national media laws which could hamper or limit media pluralism and journalists' independence. According to the EU Parliament, the scope of AVMSD should be extended to establish minimum standards for protecting the fundamental right to freedom of expression and information, media freedom and pluralism.⁹⁸

V THE YEAR IN REVIEW

i Cloud computing

The Digital Agenda calls for an 'EU strategy for cloud computing' as one of the actions related to ICT in light of the significant annual growth rate expected in this area. In order

96 See press release of 17 March 2008, 'Mobile TV across Europe: Commission endorses addition of DVB-H to EU List of Official Standards', available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/451>.

97 The consultation follows the final report of the High Level Group on Media Freedom and Pluralism which underlined the limitations of the current text of Article 30 AVMSD. Article 30 AVMSD reads as follows: 'Member States shall take appropriate measures to provide each other and the Commission with the information necessary for the application of this Directive, in particular Articles 2, 3 and 4, in particular through their competent independent regulatory bodies.' The wording of Article 30 AVMSD does not directly establish an obligation to create an independent regulatory body if such body does not already exist.

98 Available at www.europarl.europa.eu/news/en/pressroom/content/20130520IPR08584/html/Media-freedom-MEPs-call-for-annual-EU-monitoring-of-national-media-laws.

to do so, the EU has to address business user needs while protecting citizens' rights and privacy. The Commission released its much-anticipated Communication on 'Unleashing the Potential of Cloud Computing in Europe' (Cloud Computing Strategy) on 27 September 2012.⁹⁹

The Cloud Computing Strategy does not envisage the creation of a 'European Super Cloud' (i.e., a dedicated hardware infrastructure to provide generic cloud computing services to public-sector users across Europe) but rather relies on public cloud offers that meet European standards, are competitive, open and secure. The Commission does not, however, exclude the creation of dedicated clouds by public authorities for the storage and treatment of sensitive data. The Cloud Computing Strategy gives no preference to European suppliers through protectionist measures but instead sets out actions that will lay the foundation for Europe to become a 'world cloud computing powerhouse'.

The key areas where action is needed include resolving fragmentation of the digital single market, where differing national legal frameworks and uncertainties over applicable law, data protection rules, consumer protection and criminal law impeded the development of cloud computing solutions at the EU level; addressing issues with contract terms between cloud computing services providers and professional users and consumers (current issues relate to data access, data portability, ownership of data, possible liability and compensation mechanisms for service failures such as downtime or loss of data); and standardisation and certification.¹⁰⁰

A number of follow-up actions took place in 2013:

- a* the establishment of a European Cloud Partnership (ECP), bringing together industry experts and public-sector users to work on common procurement requirements for cloud computing in an open and fully transparent way. The ECP aims at better public procurement of cloud services in Europe, based on common definitions of requirements;
- b* the establishment of a group of experts on cloud computing contracts to help develop model contract terms.¹⁰¹ The group consists of cloud computing service providers, consumers, small firms, academics, and other stakeholders. Its tasks will be complementary to the work of the expert group on cloud computing service

99 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Unleashing the Potential of Cloud Computing in Europe', COM(2012) 529/2.

100 On 19 June 2013, the Parliament's Committee on Industry, Research and Energy adopted a draft report on the Cloud Computing Strategy supporting the Commission's efforts to develop a coherent approach to cloud services. The draft report is available at www.europarl.europa.eu/sides/getDoc.do?type=COMPARTL&reference=PE-506.114&format=PDF&language=EN&secondRef=01.

101 Commission Decision of 18 June 2013 on setting up the Commission expert group on cloud computing contracts, OJ 2013 C 174/6.

level agreements launched by the Commission in February 2013.¹⁰² This issue is also covered by the proposal for the Connected Continent Regulation which is aimed at further harmonising rules on end-users' protection. In particular, the proposal contains rules on contracts' content and their termination;

c action to develop standards. To this end, the Commission requested ETSI¹⁰³ to coordinate with stakeholders and identify a detailed map of required standards.¹⁰⁴ In parallel, the Commission will also work with the support of ENISA and other relevant bodies to assist the development of EU-wide voluntary certification schemes and establish a list of such schemes by 2014.

The PRISM scandal is also causing a rethinking in the applicable data protection rules. The proposed 'Schengen area for data' (including a ban on export of European company and personal data outside the EEA), however, is not free from business and economic issues. First of all, a European cloud would undermine Europe's ambitions to become a 'world cloud computing powerhouse'. This proposal may hinder multinational cloud computing services because, for example, other jurisdictions may respond by requiring that their data should also be stored only in their own jurisdictions, which would undermine the competitiveness of European cloud providers. Second, it is unclear if such proposal is compatible with the EU and Member States' obligations under the WTO's General Agreement on Trade in Services (GATS). It would also reduce EU consumers' choice, and impose great difficulties on any European-based firms conducting business outside the EEA

ii Music licensing in the single market

As part of its support of a digital single market, the Commission has vowed in its Digital Agenda to simplify copyright clearance, management and cross-border licensing by, *inter alia*, enhancing governance, transparency and pan-European licensing for online rights management. On 11 July 2012, the Commission released a proposal for a directive on collective rights management and multi-territorial licensing of rights in musical works for online, which aims at modernising collecting societies and improving governance and transparency.¹⁰⁵ The proposal provides for strengthened reporting obligations and rights holders' control over the activities of collecting societies. This follows criticisms made by some that collecting societies were not making timely payments to rights holders and in

102 See <https://ec.europa.eu/digital-agenda/en/news/cloud-computing-service-level-agreements-exploitation-research-results>. The Commission has already addressed contract law-related problems which affect the confidence of consumers and businesses in the digital single market through the Regulation on a Common European Sales Law.

103 European Telecommunications Standards Institute.

104 To facilitate this, ETSI launched the Cloud Standards Coordination initiative on 4-5 December 2012 in Cannes and intends to organise a Cloud interoperability week in September 2013.

105 See Proposal for a Directive of the European Parliament and the Council on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online uses in the internal market, 11 July 2012, COM(2012) 372 final.

some cases that royalties collected were lost due to poor investment decisions. It also aims at facilitating multi-territorial licensing of authors' rights in musical works for online uses throughout the EU, which is an essential element of the digital single market.

The proposal is still ongoing; according to some commentators, last April it has received some support from the General Court's ruling in the *Cisac* case,¹⁰⁶ which partially upheld a Commission decision related to pan-European licensing.¹⁰⁷

iii Review of regulatory instruments within the framework for telecommunications

Draft Recommendation on non-discrimination obligations and costing methodologies for access services

After a long debate with BEREC and NRAs, in September 2013 the Commission published a recommendation on access remedies.¹⁰⁸

The measure relies on two pillars: ensuring equivalence of access to integrated operators' competitors; and setting out a harmonised costing methodology.

As to the first pillar, the Commission suggests that equivalence of inputs (i.e., the supply to competitors of the same access services enjoyed by the vertical integrated company's downstream units) is in principle 'the surest way' to avoid non-price related discrimination. The Commission is, however, aware that imposing equivalence of inputs with respect to legacy copper-based inputs could be disproportionate since it could require an extensive reorganisation of internal productive processes. Moreover, the Recommendation proposes some measures intended to monitor compliance with non-discrimination obligations (such as the establishment of a technical replicability test, and the setting of key performance indicators to evaluate and compare the quality of services rendered to competitors).

As to the second pillar, the Commission suggests the adoption of a common costing methodology (bottom up – long run incremental cost +) which, for copper-based local loop unbundling services, should lead to monthly tariffs within the price band of €8/€10 per line (2012 prices). This price band is expected to incentivise operators to climb up the ladder of investment by providing them with the right message in their 'make or buy' decisions. In order to enhance regulatory stability and market consistency, the Commission suggests that, once they have set tariffs within the mentioned price band, NRAs should not modify the costing methodology (and hence the tariffs) without a market analysis procedure, and should avoid undue price fluctuations by ensuring stable access prices over at least two review periods (i.e., about six-years).

The Recommendation is likely to reduce the NRAs' discretion vis-à-vis the regulation of access services, but it should guarantee market stability and regulatory consistency, thus favoring broadband investments.

106 See joined cases T392/08 et al.

107 See Commission Decision relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (Case COMP/C2/38.698 – CISAC).

108 The measure follows Commissioner Kroes' policy statement issued on 12 July 2012 (available at http://europa.eu/rapid/press-release_MEMO-12-554_en.htm?locale=en).

Before its adoption, the Commission relied on the Draft Recommendation's principles to challenge regulatory proposals submitted by Member States, which it finds inconsistent with the draft recommendation's principles.¹⁰⁹

Revision of the Recommendation on relevant markets

On the basis of the public consultation held between October 2012 and January 2013, the Commission is expected to adopt by the end of 2013 a revised version of Recommendation No. 2007/879/EC, which lists product and service markets within the electronic communications sector susceptible to *ex ante* regulation.

According to Article 15 of Directive 21/2002/EC (Framework Directive), the Commission should identify the electronic communications product and service markets whose characteristics justify the imposition of *ex ante* regulation. The Commission could veto NRAs' attempts to define (and hence regulate) markets not included in the recommendation.¹¹⁰

Therefore the revised recommendation is key to the overall functioning of the EU Regulatory Framework since it: allows NRAs to focus their regulatory efforts on markets where competition is not yet effective; helps NRAs to regulate critical markets in a coordinated manner, thereby contributing to the development of the internal market; and provides market players with legal certainty.

Proposal for a regulation on a single market for electronic communications

After the 2009 directives, which partially amended the 2002 EU regulatory framework, the Commission is evaluating the adoption of other legislative measures intended to promote the establishment of an e-communications single market, which is still 'far from being completed'.¹¹¹

The key part of this strategy would be a regulation ambitiously aimed at achieving a 'connected continent', able to compete in the digital era with old and new superpowers.

Based on the available information,¹¹² the Commission's legislative proposal relies on three pillars: a European passport intended to allow operators to freely supply (and end-users to freely enjoy) services in the whole single market; a consistent application of remedies particularly for those 'European inputs' such as frequencies; and a harmonised set of rules on the protection of end-users intended to increase consumer confidence in the internal market. On 16 September 2013, BEREC expressed some concerns about the Commission's proposals, noting in particular that 'the proposals represent a substantial shift in the balance of power between the Commission, Member States and national regulatory authorities, centralising competences at the Community level' with the 'risk'

109 For instance, on 12 August 2013 the Commission blocked the adoption of regulatory measures from the Italian NRA on the ground that they were hampering market stability and regulatory predictability (See: Commission's press release of 12 August 2012).

110 See Article 7 of the Framework Directive.

111 See 'A Telecoms Single Market: Building a Connected Continent,' SPEECH/13/622 of 9 July 2013.

112 See www.ec.europa.eu/digitalagenda.

of undermining the ability of NRAs ‘to take appropriate and proportionate regulatory action’.

iv Case law on Broadcasting rights

The AVMSD authorises any broadcaster established in the EU to produce short news reports on events of high interest to the public, where those events are subject to exclusive broadcasting rights. Short extracts may be chosen freely from the signal of the holder of the exclusive broadcasting rights, which may request compensation corresponding only to the additional costs directly incurred in providing access to the signal. In a 2013 ruling the Court of Justice denied that this provision breaches the Charter of Fundamental Rights of the European Union which guarantees the right to property and the freedom to conduct a business.¹¹³

In another case concerning retransmission of programmes via the internet, the Court of Justice held that retransmission constitutes, under certain conditions, ‘a communication to the public’ of works which must be authorised by their author.¹¹⁴ Therefore, TVCatchup, which offers UK consumers an internet-television broadcasting service which permits its users to receive, via the internet, ‘live’ streams of free-to-air television broadcasts, should seek authorisation from the broadcasters.

v Antitrust and merger control

The Commission fined Telefónica and Portugal Telecom for sharing out inter se the Iberian market

On 23 January 2013, the Commission fined Telefónica and Portugal Telecom €79 million for agreeing on a non-compete clause in breach of Article 101 of the Treaty on the Functioning of the European Union (TFEU) which prohibits anti-competitive agreements.¹¹⁵ The clause was part of the acquisition by Telefónica of the Brazilian mobile operator Vivo, which was until then jointly owned by both parties. The parties terminated the non-compete agreement in early February 2011, after the Commission opened antitrust proceedings.

Trend of merger control in mobile markets

The industry is increasingly asking for a more lenient application of the merger control rules, on the ground that the current strict policies prevent the integration of EEA-wide telecoms businesses, and that continuing fragmentation hampers investments in

113 See case C283/11 (*Sky Österreich GmbH v. Österreichischer Rundfunk*), not yet reported. The Court acknowledged that the legislation in dispute encroaches upon the freedom to conduct a business because it prevents the holder of exclusive broadcasting rights from deciding freely on the price to be charged for access to the signal; and exempts broadcasters that produce short news reports from paying for the costs involved in acquiring those rights. However, in the Court’s view, these limitations are justified by other public interests and proportional.

114 See Case C607/11 (*ITV Broadcasting Ltd and Others v. TVCatchup Ltd*), not yet reported.

115 See Case COMP/39.839, *Telefónica/Portugal Telecom*.

the sector (particularly for the roll-out of fibre and 4G networks).¹¹⁶ The Commissioner for Competition, however, continues to take the view that the lack of market integration and continued existence of national markets does not allow a more liberal application of merger control rules to telecoms mergers.¹¹⁷ The conditional clearance on 12 December 2012,¹¹⁸ of the concentration between Hutchison 3G Austria Holdings GmbH (H3G) and Orange Austria Telecommunications GmbH (Orange), is a good illustration of this attitude.

Despite the parties' lower market shares (the merger could lead to a combined market share below 25 per cent) and the presence of other two (bigger) MNOs (Telekom Austria and T-Mobile Austria), the Commission considered that the transaction would have led to a significant impediment of effective competition in an already highly concentrated market. Therefore, the Commission considered the concentration compatible with the internal market subject to structural commitments, namely, to enter into an upfront agreement with one MVNO to be approved by the Commission; to release some spectrum to a new entrant; and to grant wholesale access to up to 30 per cent of H3G's network capacity to a number of MVNOs in the coming 10 years.

General Court confirms that compliance with regulation does not exclude antitrust intervention

Spain and Telefónica brought an action before the General Court seeking the annulment of the Commission decision alleging a market squeeze-abuse.¹¹⁹ In a 2012 ruling upholding the decision, the General Court followed well-established case law on margin squeeze (*Deutsche Telekom* and *TeliaSonera*).¹²⁰ On the relationships between competition law and regulation, the General Court held – also following well-established principles – that compliance with telecommunications regulation – and, in particular, compliance with the decisions taken by the NRA on the basis of the regulatory framework – does not protect operators against an intervention by the Commission on the basis of competition law. In that respect, the General Court points out that the rules of the European Union on competition law supplement, through the carrying out of an *ex post facto* verification, the regulatory framework adopted by the European Union legislature for regulating the telecommunications markets. The General Court judgment is currently under appeal before the Court of Justice.¹²¹

116 See 'EU to end mobile roaming charges next year,' *The Telegraph* (available at www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/telecoms/10119159/EU-to-end-mobile-roaming-charges-next-year.html).

117 See 'EU's Almunia defends merger rules against telecoms criticism,' available at <http://uk.reuters.com/article/2013/02/28/eu-telecoms-mergers-idUKL6N0BS8XQ20130228>.

118 Case No. M.6497 – *Hutchison 3G Austria/Orange Austria*.

119 Cases T336/07 and T398/07 (*Telefónica*) not yet reported.

120 Case C280/08 (*Deutsche Telekom*), Case C52/09 (*Konkurrensverket v. TeliaSonera Sverige AB*).

121 Case C295/12 (*Telefónica and Telefónica de España v. Commission*).

VI CONCLUSIONS AND OUTLOOK

Three years after the launch of the 2010 Digital Agenda Communication, the Commission can boast several regulatory measures and the constant lowering of roaming charges for calls within the EU. The aftermath of the *Telefónica* and *TeliaSonera* judgments also shows that the Commission can resort to antitrust enforcement to impose obligations on dominant undertakings that can go even further than regulation.

In spite of this display of powers, it seems that the needed investment to build NGA, and develop news services and applications is inadequate. It is illustrative that the sector is asking for a more lenient approach in reviewing mergers, arguing that more concentration is needed, if the investment is to reach a critical mass. The draft Connected Continent Regulation may already provide some answer to this need. However, this suggests that in the coming years the sector may be confronted with an even more complex co-existence of cooperation between operators, public intervention, and interplay between regulation and competition law.

In December 2012 the European Commission stepped into the midst of a fully fledged patent war between ICT manufacturers who litigate patents in various European jurisdictions. The Commission issued a statement of objection accusing Samsung of abusing its dominant position by trying to prevent Apple from using a patent essential to mobile phone use, in spite of Apple (according to the Commission) being a 'willing licensee'.¹²² As Commissioner Almunia told to a news conference, 'the decision we adopted in December was to launch a statement of objections to Samsung and maybe some others will follow.'¹²³ In line with this statement, in May 2013 the Commission issued a statement of objection accusing Motorola of potential misuse of its mobile phone standard-essential patents by seeking and enforcing of an injunction against Apple in Germany.¹²⁴

As these battles are increasingly fought at a global level, the Commission and the US Department of Justice have confirmed their intention to focus on coordinating

122 More precisely, the European Commission informed Samsung of its preliminary view that Samsung's seeking of injunctions against Apple in various Member States on the basis of its mobile phone standard-essential patents amounts to an abuse of a dominant position. While recourse to injunctions is a possible remedy for patent infringements, such conduct may be abusive where SEPs are concerned and the potential licensee is willing to negotiate a licence on fair, reasonable and non-discriminatory terms.

See press release 'Antitrust: Commission sends Statement of Objections to Samsung on potential misuse of mobile phone standard-essential patents,' available at http://europa.eu/rapid/press-release_IP-12-1448_en.htm.

In 2012, the Commission has also commenced investigation against Motorola over allegations put forward by Microsoft and Apple that the company abused its standard-essential patents to block sales of its competitors' products.

123 See www.reuters.com/article/2013/01/30/eu-patents-charges-idUSL5N0AZCDA20130130.

124 See press release 'Antitrust: Commission sends Statement of Objections to Motorola Mobility on potential misuse of mobile phone standard-essential patents,' available at http://europa.eu/rapid/press-release_IP-13-406_en.htm.

their policy approaches to intellectual property, particularly in the field of standard-essential patents. Motorola settled with the US Federal Trade Commission, on the basis of a Consent Decree that requires Motorola to negotiate in good faith for a specific period of time, and to offer arbitration or judicial proceedings to set licence terms for standard-essential patents if no agreement can be reached within reasonable time. If the prospective licensee refuses, the patentee can seek injunctions. It is expected that the EU proceedings will result in broadly similar rules.

Lawsuits by patent assertion entities (PAEs), or patent trolls, are on the rise – in particular in the US but increasingly also in the EU – while ICT manufacturers are trying to defend themselves against them by acquiring or cross-licensing patent portfolios.¹²⁵ Concerns also arise in connection with the use of PAEs as ‘privateers’, to whom operating companies spin off part of their patent portfolio, with the aim of the PAE then targeting rivals. The US antitrust authorities are considering an in-depth review of these PAE practices, which may have consequences also for the EU.

Finally, two new trends in the industry may give rise to regulatory change in the future.

‘Over-The-Top’ providers (OTTs) continue to grow. Network operators resent such growth: they spend money to manage and update networks for the OTTs’ benefit, but OTTs do not contribute – according to the network operators – in proportion to the costs they cause. The Commission has so far resisted network operators’ claims to allow for traffic management systems, which allow network operators to prioritise traffic by type, to charge for guaranteed bandwidth or to block or degrade the quality of certain content. However, this trend is not sustainable in the medium term. Hence, unless the parties can agree on revenue-sharing models, regulatory intervention is likely. For instance, the proposed Connected Continent Regulation is likely to allow content and service providers (such as IP-TV providers, VoIP providers and certain health applications provider) to negotiate assured quality agreements with network operators.

More and more data content is available on mobile devices such as smartphones and tablets. As a consequence, new services emerge that cross the boundaries between medium and content. For instance, the penetration of video broadcasting on mobile devices has increased considerably. By the same token, this trend calls into question the traditional separation in the regulation of these two. As noted, currently media services fall under the AVMSD, while electronic communications are subject to the telecoms regulatory framework. However, the provision of network access directly interacts with access to content: users’ ability to enjoy the service of their choice increasingly becomes a function of the bandwidth they have available. As a consequence, convergent regulation for convergent services to guarantee the integrity of the fruition of both medium and content, may not be that far away.

125 More than 300 PAEs have been identified so far and aggregate payments to PAEs are reported to exceed US\$500 billion over time (over US\$80 billion per year over the past four years). See James Bessen, Jennifer Ford and Michael J Meurer, *The Private and Social Costs of Patent Trolls* (SSRN ID: 1930272), p. 4; M Dolmans, D Ilan, ‘European Antitrust and Patent Acquisitions: Trolls in the Patent Thickets’, *Competition Law International*, Vol. 8, No. 2, August 2012.

Appendix 1

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