THE PROTECTION OF THE EUROPEAN CITIZEN IN A COMPETITIVE E-SOCIETY: THE NEW E.U. UNIVERSAL SERVICE DIRECTIVE

Alexandre de Street

Abstract

A new regulatory framework for electronic communications (fixed and mobile telephony, Internet, cable TV, …) is due to be applicable in the Member States of the European Union in July 2003. This framework is composed of several Directives whose one – the Universal Service Directive – regulates the retail markets and the relationships between operators and end-users. The paper details this Directive and reviews its three-pillars structure: control of undertakings with significant market power, enhanced consumer protection, and guarantee of universal access to the most important electronic communications services. The paper shows that the new Directive is more an evolution than a revolution with regard to the previous regime. It maintains the faith in the market to deliver the best possible deal to the European consumers, and calls for a severe reduction of retail regulation and a more efficient provision of the universal service. The paper concludes by advocating for a migration of the concept of universal service from its liberalization origins to a European citizenship context.

1. INTRODUCTION

Throughout most of the twentieth Century the majority of European countries had a fairly simple industrial structure and regulatory model for the telecom sector and, more generally, for network industries. There was an identity that existed between public service, monopoly, and public undertaking. Indeed, telecom was considered as an economic public service and as such fulfilled
the principles developed by French administrative law. Telecom services were provided by a public monopoly which was able to cross-subsidise local calls and rural areas with prices above cost levels for long distance calls and urban areas. In the eighties, the European Commission, supported by some Members States and part of the industry, initiated a brand new industry structure and regulatory model, breaking the equation between public service and public monopoly. It maintained public service objectives, but radically changed the way they would be fulfilled as the market was considered more efficient than State. The telecom sector was thus progressively opened up to the full liberalisation of 1998, and a new type of regulation (that ended with the so-called 1998 regulatory package), aimed at ensuring a true single and effectively competitive European market, was put into place. Nevertheless, recognising that even a perfectly competitive market could not deliver all public service objectives, some safeguards (universal service, enhanced consumer protection, ...) were also established. These safeguards, and in particular the universal service, were difficult to design because they addressed two very different issues (the content of the public service and the means of its provision) and were to be uniformly applied in all the Members States despite their different economic characteristics and political preferences. Therefore, for each of the two issues a right balance needed to be drawn between European harmonisation and the flexibility left to Member States. It was deemed appropriate, on the one hand, to ensure lots of flexibility with regard to the content of universal service and only provide for a European minimum

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2 In particular, the three principles of changement, equality and continuity, see R. Chapus, Droit administratif général, 14e Ed, Montchrestien, 2000. See also for the Anglo-saxon tradition: W. Wade, Administrative Law, 8th Ed, Oxford University Press, 2000.

3 See in particular the Communication by the Commission of 30 June 1987, Towards a Dynamic European Economy: Green Paper on the Development of the Common Market for Telecommunications Services and Equipment, COM(87) 290. As stated at page 3, the overriding aim of the reform was to "develop the conditions for the market to provide European users with a greater variety of telecommunications services, of better quality and at a lower cost, affording Europe the full internal and external benefits of a strong telecommunications sector".


5 Due to the primacy of the market principle, these safeguards were to be based on market mechanisms. For example, consumer protection aims at improving the information of the consumers to enable them to make better choice, or the provision of universal service should be realised in the most efficient way, using auction if appropriate.

to be met by the individual State, but on the other hand, to limit more strongly this flexibility with regard to the means of provision, in order to ensure transparency and efficiency. To sum up, the European conception of the universal service is thus very peculiar because it was developed in a liberalisation context and because it applies to the whole European Union, which is a collection of heterogeneous States only mildly economically integrated and on the verge of political integration.

From the policy point of view, the liberalisation and the regulatory model change were justified in order to make the provision of public service (and the subsidy system which underlies it) more transparent, more dynamic, more efficient, and ultimately more democratic and in line with the principles of good governance. It was made possible because the whole telecom sector was no longer a natural monopoly (due to technological progress and the consequent decrease in costs). From the legal point of view, the reform was

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8 The reform was also motivated by the Internal Market Program 1992 and the convergence between the computer and the telecommunications sector (and the consequent fear of the computer firms not to be able to do further business due to the legal monopoly in telecoms). It was also explained by the desire of the European institutions to increase their role in the economy via regulatory intervention (similarly, see G. Majone, La Communauté européenne: Un État régulateur, Montchrestien, 1997).
based on the internal market and the competition provisions of the EC Treaty, which in fact had included a germinal form of the regulatory model since its origin in 19579. Given its success, the same new model was then progressively introduced in other networks industries, such as energy, postal services or railways10. Each time, the European institutions adopted a progressive approach to give time for the sector to adapt and ensure the necessary safeguards to maintain a satisfactory level of public service11.

But as the telecom sector evolves rapidly, regulation should be modified accordingly. Therefore, back in 199912, the European Commission began to consider a complete overhaul of the 1998 regulatory framework for two main reasons: adaptation to market developments (in particular the increasing competition) and adaptation to technological progress (in particular the convergence between media, telecom and information technology services). In July 2000, after an extensive consultation13, the Commission proposed a package of several new Directives14. Most of the Directives were adopted by the European institutions in March 2002 in the record time of 20 months,
thanks to the political momentum of the so-called “Lisbon objective” for the Union to become by 2010 the most competitive and dynamic knowledge-based economy in the world, capable of sustainable growth with more and better jobs and greater social cohesion, which implies inexpensive, world-class communications infrastructures and in turn, an up-to-date and future-proof regulatory framework.

The new regulatory package is mainly composed of one Liberalisation Directive, adopted by the Commission on the basis of Article 86 EC. It mainly codifies the previous liberalisation Directives that removed exclusive and special rights in the electronic communications sector. The package is also composed of four main harmonisation Directives adopted by the European Parliament and the Council on the basis of Article 95 EC, and whose national transposition measures are due to be applicable in July 2003. The Framework Directive comprises the general provisions on the institutions and their coordination to ensure an European regulatory culture, the provisions related to the assessment of Significant market power (which is the threshold to impose most of the regulatory obligations), and other provisions related to facilities needed to operate in the market (numbering, naming and addressing, rights of ways, …). The Authorisation Directive organises market entry and rolls back any unnecessary red tape. The Access Directive organises the wholesale markets (relationships between providers of electronic communications networks and services) aiming at ensuring access and interconnection between networks, and ultimately a true single and effectively competitive market. The Universal Service Directive, hereinafter the Directive, organises

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the retail markets (the relationships between operators and end-users) aiming to ensure the best possible deal for European citizens\[^{21}\].

These Directives carry forward the regulatory model introduced since 1987, and now clearly state that public intervention can only be justified in order to ensure competitive markets in case of market power, to stimulate the internal market and to complement the market to deliver public service objectives\[^{22}\]. Moreover, intervention should always be minimal and related to the level of competition, flexible but harmonised at the European level and technologically neutral. But the scope of the new framework has been considerably extended in comparison with the 1998 framework as it now covers not only telecommunications but also all electronic communications networks, services and associated facilities, i.e. all networks permitting the conveyance of signals (being wire or wireless, circuit or packet switched, used for telecom or broadcasting services), all the services consisting of the conveyance of the signals on these networks, and all the facilities that are associated with them (like conditional access systems or electronic program guides\[^{23}\]). This extension was justified by the technological convergence, the phenomenon by which each type of service can be delivered on every type of network, and the consequent need to regulate all technologies on an equal footing to alleviate any regulatory distortion. On the other hand, the scope of the framework does not extend to the content services such as broadcasting or e-commerce transactions.

Obviously, this scope and these regulatory principles apply to the Universal Service Directive, which focuses on the retail markets. The Directive, which simplifies the 1998 regime contained in five legal instruments\[^{24}\], comprises three very different pillars. The first pillar\[^{25}\] aims at ensuring effective

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\[^{22}\] Article 8 Framework Directive.

\[^{23}\] Articles 1 and 2 Framework Directive.


\[^{25}\] Chapter III of the Directive: Regulatory controls on undertakings with Significant market power in specific markets. This pillar is in fact the mirror on the retail markets of the Access Directive, which applies to wholesale markets.
competition at the retail level, and thereby providing for obligations to be imposed on undertakings enjoying sufficient market power to be able to distort competition and commit exploitative abuses of power at the expense of consumers. The second pillar is a collection of heterogeneous provisions aiming at guaranteeing proper functioning of the market and world-class communications infrastructure by ensuring better information, better regulatory mechanisms and the provision of basic facilities related to telephone and media services. Finally, the third pillar aims at guaranteeing availability of specified basic services, thereby imposing obligations on certain designated undertakings. Therefore, the first two pillars mainly target improvements in the functioning of the market, whereas the third one aims to complement this market.

2. FIRST PILLAR: REGULATORY CONTROLS ON UNDERTAKINGS WITH SIGNIFICANT MARKET POWER IN THE RETAIL MARKETS

Controls of retail markets, and in particular price controls, have always been at the forefront of regulation, as what ultimately matters is the service provided to the end user. During the era of monopoly, retail prices were controlled or actually set by the State and involved heavy cross-subsidisation. In the context of full liberalisation, the Member States were forced to allow the incumbents to re-balance their tariffs towards the costs, so as to put an end to the heavy losses of efficiency that were due to the cross-subsidies. But as the incumbents maintained their control on a large part of the market, the prices of their previously monopolised services continued to be heavily regulated via different mechanisms (rate of returns regulation, price caps, …). The new regulatory framework aims at an important lifting of retail market regulation

26 Chapter IV of the Directive: End-user interests and rights, as well as Articles 33 and 34.
27 Chapter II of the Directive: Universal service obligations including social obligations, as well as Articles 18, 31 and 32 of the Directive.
28 Article 4c Directive 90/388 as amended and Commission/France (Universal service in France) C-146/00 [2001] ECR I-9767, para 35. Tariffs’ re-balancing normally implies an increase in the charges for access and local calls and a decrease in the charges for long distance and international calls. See the Eight Implementation Report, p. 42 and Table 1 of the Annex 2. As of December 2002, nine Member States considered that they have achieved full tariffs re-balancing.
29 On the different types of prices control and their welfare effects, see D.E. Sappington, “Price Regulation”, in M. Cave, S. Majumdar, I. Vogelsang (eds.), Handbook of Telecommunications Economics, V.I: Structure, Regulation and Competition, North-Holland, 2002, 227-286. He shows that price cap regulation is in general more efficient because, by focusing more on the control of price than the control of earnings, it provides stronger incentives for the regulated firm to reduce its production costs and increase its operating revenues. As of December 2002, ten Member States still regulate the retail prices of the incumbents, and all of them use a price cap mechanisms: Table 1 of the Annex 2 of the Eight Implementation Report.
because entry barriers to retail markets are very low (provided access to infrastructure market is well regulated), hence sector-specific regulation is not justified. Retail intervention should thus be limited to two specific cases: presence of substantial market power or need to ensure the universal service. The remaining part of this section focuses on the first case, by developing the Significant Market Power (SMP) regime as it applies to retail markets.

The SMP regime is in fact at the cornerstone of the new framework, as it covers generally wholesale as well as retail markets and triggers the majority of regulatory obligations that can be imposed by a National Regulatory Authority (NRA)\(^{30}\). It applies the three objectives of the regulation (effective competition, single market and consumers’ interests), but mostly aims at preventing ex-ante that undertakings having sufficient market power will abuse it and prevent or distort competition. The regime has been fundamentally modified by the new Directives and aligned to antitrust methodologies, in order to better reflect the economic realities of the markets (and their degrees of competition) and to be more flexible. Under this new regime, the imposition of obligations on SMP operators takes place in three steps: firstly, markets have to be defined; secondly markets have to be analysed to determine if one or more undertakings enjoy SMP; and thirdly obligations have to be chosen among a menu provided in the Directives\(^{31}\).

The first step in the imposition of obligations is thus to define the relevant markets in two sequences. The Commission periodically adopts a Recommendation that defines, in accordance with the principles of competition law, the product and service markets within the electronic communications sector, the characteristics of which may be such as to justify the imposition of regulatory

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\(^{30}\) Conversely, the new SMP regime can be seen as a market-by-market sunset clause, based on competition law analysis. For a detailed analysis of the new SMP regime: A. de Streel, “The Integration of Competition Law Principles in the New European Regulatory Framework for Electronic Communications”, World Competition 26, 2003.

\(^{31}\) The two first steps of the analysis are provided in Articles 7, 14 to 16 Framework Directive, as well as in two Commission soft law instruments: Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex-ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ 8.5.2003, L 114/45, hereinafter the Recommendation on relevant markets; and Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, OJ 11.7.2002, C 165/6, hereinafter the Guidelines on market analysis. See also the Working Paper of the European Regulators Group (which is composed of all the NRAs of the Member States) on the SMP concept for the new regulatory framework, May 2003, available at <http://erg.eu.int/documents/index_en.htm>. The application of the third step on the retail markets is provided in Articles 17 to 19 Universal Service Directive.
In practice, the Commission selects the markets justifying ex ante regulation on the basis of three criteria related to the presence of durable and important entry barriers, and then delineates the boundaries of these selected markets on the basis of antitrust methodologies. Then, the NRAs, taking the utmost account of the Recommendation and the Guidelines on market analysis, define relevant markets appropriate to national circumstances, in particular their geographical dimension within their territory, in accordance with the principles of competition law. If an NRA wants to define a product or service market that differs from those of the Recommendation, it must notify its intention to the Commission, which could oppose it.

Secondly, having defined the markets, the NRA analyses them to determine whether they are, or are not, effectively competitive, which means to determine whether one or more operators enjoy SMP on the market. In turn, this SMP assessment involves determining whether one or more undertakings enjoy a dominant position or could leverage a dominant position from a closely related market. Under competition law, a firm enjoys a dominant position when, alone or collectively with others, it has sufficient market power to behave to an appreciable extent independently of competitors, customers, and ultimately consumers. To determine whether a firm enjoys single dominance, the NRA has to assess a number of criteria on a forward-looking basis: high and stable market share around 40%, high barriers to entry and expansion, absence of countervailing buying power, … To determine whether several firms enjoy collective dominance, the NRA has to assess whether two or more undertakings, albeit remaining independent, behave like a single dominant
entity. This parallel behaviour may be due to structural links between the firms (like agreements) or market structure such that companies align their behaviours without any concerted practices (pure tacit collusion). In this latter case, the market should present some particular characteristics such as transparency, mature market, similar cost structure and market shares between firms, possibility of retaliatory mechanisms, ... 38

Thirdly, if a defined retail market is not effectively competitive and the NRA concludes that obligations imposed on the wholesale markets would not result in the achievement of effective competition, internal market or citizens’ interests, it imposes regulatory obligations. Therefore, three conditions have to be met before imposing obligation on a retail market: (i) the market should present such characteristics as to justify ex-ante regulation; (ii) one or more operator should enjoy a dominant position (or be able to leverage a dominant position); and (iii) obligations on the wholesale market are inadequate to solve the competitive problem. This third condition, which is an important innovation of the Directive, is particularly relevant, as most anti-competitive behaviours on a retail downstream market stems from an abuse of market power on an upstream wholesale market. Hence, it is more appropriate to regulate the upstream market, source of the problem, rather than intervene in the downstream market, which is only its manifestation. The SMP regulation on a retail market should thus remain exceptional and is justified only when wholesale measures would either be too late or too difficult to implement due, for instance, to the lack of transparency in the market.

If the conditions are met, the NRA imposes one or more appropriate regulatory obligations on operators designated as having SMP. The obligations can be chosen among the non-exhaustive list of Article 17 of the Directive. They should be justified in the light of the three basic objectives of the regulation (effective competition, single market, citizens’ interests), based on the nature of the problem identified, and proportionate, which implies that they should be the least burdensome option possible to achieve the regulatory aim. 39 The NRA could impose different types of price control. As under antitrust law, it could prohibit anti-competitive practices, like excessive prices, 40


40 A price is deemed to be excessive under competition law when it bears no relation to cost: General Motors 26/75 [1975] ECR 1367, para 12; United Brands, para 251; Commission Notice on the application of the competition rules to access agreement in the telecommunications sector, hereinafter Access Notice, Of 22.8.98, C 265/2, para 105-109. See also: M. Haag and R. Klotz,
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predatory prices\(^{41}\), or price squeezes\(^{42}\). Going beyond the remedies applicable under competition law, the NRA could also impose a positive price control with different methods: it can introduce benchmarking\(^{43}\) and setting prices similar to those applied in similar competitive markets; it can set a retail price cap; or with sufficient information about the actual cost, it can use them to directly set prices, possibly relying on different accounting methods than those used by the regulated operator\(^{32}\). As the SMP regime mainly aims at ensuring effective competition, the retail tariffs control should ensure competition, hence orientation of the prices towards costs. They should not directly guarantee other objectives such as general accessibility and affordability of certain services, hence tariffs below costs. To ensure effective price control, the NRA could impose the implementation of appropriate cost accounting


\(^{42}\) There is a price squeeze when the margin between the access fee on the upstream wholesale market and the final price of the SMP operator on the retail downstream market is insufficient for a reasonable efficient service operator to make a normal profit: *Poudres sphériques* T-5/97 [2000] II-3755, para 179; Commission Decision of 18 July 1988, *Napier Brown-British Sugar*, OJ 19.10.88, L 284/41; Commission Decision of 21 May 2003, *Deutsche Telekom*, not yet published, IP/03/717; Access Notice, para 117-119; Statement of objections against *KPN*, 27.3.2002, IP/02/483.


\(^{44}\) On the wholesale markets, the Commission recommends to use a LRIC methodology for the pricing of interconnection (Commission Recommendation of 8 January 1998 on interconnection in a liberalised telecommunications market (Part 1 – Interconnection pricing) at par. 3) as well as for the pricing of unbundled access to the local loop (Commission Recommendation of 25 May 2000 on unbundled access to the local loop: enabling the competitive provision of a full range of electronic communications services including broadband multimedia and high speed Internet, OJ 29.6.2000 L 156/44 at Article 1(6).
systems, with specific format and methodology, whose compliance would be verified by a qualified independent body. Going beyond price control, NRA could also impose other types of obligations such as prohibition of discrimination between end-users or unreasonable bundling of services, or any other appropriate remedies.

Finally, the NRA can impose carrier selection and pre-selection. In this hypothesis, the SMP regime is used in a peculiar and non-flexible way, as the Directive determines in advance the market to be analysed and the remedy to be imposed. Indeed, if an NRA finds that an operator has SMP in the market for the provision of connection to and use of the public telephone network at a fixed location, it imposes carrier selection and pre-selection at a price that is oriented towards cost and does not act as a disincentive for subscribers to these facilities. Moreover, this provision, which applies to fixed networks, could be extended to other networks (including mobile) under the general and more flexible SMP regime.

The thrust of the Directive is thus a severe reduction of retail regulation. Indeed, under the new regulatory model, markets should be left alone as far as possible and a regulator should only intervene where competition is not possible or takes time to emerge (i.e. where there are high and durable barriers to entry), hence mainly on the wholesale markets. Clearly if regulatory interventions were to be as intense as in the monopoly era, albeit in a modified form, the liberalisation program would be rendered useless. In practice, it remains to be seen whether NRAs will be ready to free retail markets from their obligations, but that is certainly one of the best moves we could expect in favour of consumers.

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45 See further the Study made for the Commission services: Andersen, Implementation of cost accounting methodologies and accounting separation by telecommunications, July 2002.

46 Hugin 22/78 [1979] ECR 1869; Hilti T-30/89 [1990] ECR II-163, para 118-119, upheld in appeal by Hilti C-53/92P [1994] ECR I-667; Tetra Pak II C-333/94P [1996] ECR I-5951, para 37 tying may be abusive even where tied sales of two products are in accordance with commercial usage or there is a natural link between the two products.

47 Article 19 of the Directive. Carrier selection refers to the possibility to use an alternative operator for making calls than the operator renting the line, by dialling a short code before the called number. In case of carrier pre-selection, the short code is registered in the user’s terminal, hence should not be dialled for the alternative operator to be used. Under Competition law, the fees for carrier selection and pre-selection charged by a dominant operator can not be excessive: IP/98/430 of 13 May 1998 involving Deutsche Telekom.
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3. SECOND PILLAR: ENHANCED PROTECTION OF END-USER INTERESTS AND RIGHTS

The second pillar of the Directive aims at protecting the interests of the end-users of electronic communications networks and services. In fact, the entire Directive and indeed the whole regulatory package pursue this objective, but this second pillar is a heterogeneous collection of specific provisions aiming at increasing transparency in the market, ensuring better regulatory mechanisms, or the provision of additional facilities related to telephony or media services. It creates rights for end-users (i.e. users not providing public electronic communications networks or services) or sometimes for consumers only (i.e. the sub-set of end-users that request communications services for purposes which are outside their trade, business or profession)\(^{48}\). The correlative obligations to these rights apply to all undertakings active on the relevant markets, without any compensation mechanism. Moreover, this pillar applies in addition and without prejudice to Community rules on consumer protection\(^{49}\).

3.1. End-users’ rights to ensure better information and better choice

The Directive ensures transparency of supplying conditions (including tariffs and quality of services) on an individual and a general basis, to increase the ability of consumers to optimise their choices and thus to benefit fully from competition\(^{50}\). These provisions are important as, like the first pillar, they ensure proper functioning of the market supposed to be the route to deliver the best possible deal to European citizens.

Firstly, consumers should have a *contract with minimum specifications* (Article 20). Subscribers to services providing connection and/or access to the public telephone network have a right to a contract. Moreover, that contract should specify at least the name and address of the supplier, the quality and the tariffs of the services, any possible compensation scheme, the conditions for termination, and the dispute resolution mechanism. In addition, when consumers subscribe to other types of electronic communications services, they

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\(^{48}\) Article 2 Framework Directive. For instance, a company requesting telecommunications services to link its different offices is an end-user without being a consumer, whereas an individual requesting a private line at home is an end-user and a consumer.


\(^{50}\) Recital 30 of the Directive.
have no right to any contract but if a contract is concluded, it should include the same minimum specifications. Subscribers have also the right to withdraw from their contracts without penalty upon notice of proposed modifications in the contractual conditions.

Secondly, some general information related to use of publicly available telephone services by end-users should be published either by the undertakings themselves or by the NRAs (Article 21 and Annex II). In particular, to fully benefit from competition, NRAs should encourage the provision of information that enables a comparison between the different offers on the market, for instance using interactive guides. NRAs could also require undertakings that provide publicly available electronic communications services to publish quality of service information, that are based on standardised parameters if appropriate (Article 22 and Annex III).

3.2. Institutional provisions to ensure good governance

The Directive also transposes to the electronic communications sector some new regulatory methods in order to improve its governance. NRAs should consult all the stakeholders (operators, manufacturers, end-users) and take account of their views on issues related to end-users’ rights, in order to be able to adopt better decisions (Article 33.1). In addition, co-regulation mechanisms, like code of conducts and operating standards, could be used under the guidance of the NRAs to improve the general quality of service provision (Article 33.2). Finally, transparent, simple and inexpensive out-of-court procedures should be available to consumers for dealing with unresolved disputes related to issues covered by the Directive (Article 34).

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51 Member States can extend the scope of this provision to other end-users, in particular the SMEs: Recital 49 of the Directive.
52 Names of the different undertaking providing the services, type of services offered and standard contractual conditions, dispute settlement mechanisms, and information about rights as regards universal service.
53 See Annex III of the Directive: supply time for initial connection, fault rate per access line, fault repair time, unsuccessful call ratio, call set up time, response times for operator services, response times for directory enquiry services, proportion of coin and card operated public pay-telephones in working order, bill correctness complaints.
55 If necessary, Member States may extend the scope of this latter provision to cover disputes involving other end-users, in particular SMEs. Moreover, as noted in Recital 47 of the Directive, Member States should take full account of the Commission Recommendation 98/257/EC of 30 March 1998 on the principles applicable to the bodies responsible for out-of-court settlement of consumer disputes, OJ 17.4.98 L 115/31.
3.3. End-user rights to ensure availability of certain facilities related to basic services

The Directive ensures also the availability of certain facilities related to telephone service. In a sense, they force the bundling of these facilities with the offered electronic communications services to guarantee a world-class offer and promote a true single European electronic communications market.

To decrease the costs of switching between telephone services providers, and hence increase the competition between them, number portability (the possibility of keeping one’s number when changing operator) between fixed numbers or between mobile numbers should be available (Article 30)\textsuperscript{56}. Moreover, the wholesale price for the related interconnection should be cost-oriented and the retail price charged to subscribers should not act as a disincentive to use portability. As on-net and off-net calls’ tariffs could be different and as the portability of numbers will make the determination of the called network more difficult, the Directive encourages the NRAs to facilitate tariff transparency alongside number portability, to strengthen its impact on competition\textsuperscript{57}. Similarly, to decrease switching costs on the digital television market, and guarantee effective competition and the fullest connectivity possible to digital television sets, interoperability of consumer digital television equipment should be ensured, but no use of a specific standard is imposed (Article 24 and Annex VI)\textsuperscript{58}. Thereby, the regime of the TV standard Directive is carried over\textsuperscript{59}.

To ensure a world-class communications offer able to support interactive value-added services, NRAs should be able to require that all public telephone networks’ operators make available to end-users tone dialling or dual-tone multi-frequency operation and calling line identification within Member State and between Member States, subject to technical feasibility and economic viability.

\textsuperscript{56} The Directive does not impose, nor prohibit, Member states to impose portability between a fixed number and a mobile number: Article 30(1) and Recital 40 of the Directive. Under Competition law, the retail fees for porting a number charged by a dominant operator can not be excessive: IP/98/430 of 13 May 1998 involving Deutsche Telekom.

\textsuperscript{57} Recital 41 of the Directive.

\textsuperscript{58} Firstly, all consumer equipment intended for the reception of digital television signals must be able to discard digital TV signals according to the common European scrambling algorithm, and display signals transmitted in clear. Secondly, any analogue or digital television set of a minimum screen size (42 cm for analogue set and 30 cm for digital set) must be fitted with a standardised open interface socket (like the DVB common interface connector) permitting simple connection of peripherals and able to pass all the elements of a digital TV signal.

(Article 29 and Annex I)\(^{60}\). Similarly, Member States should take all necessary steps to ensure, particularly in the event of catastrophic network breakdown or in case of “force majeure”, the integrity and availability of the public telephone network and services at fixed locations, especially an uninterrupted access to emergency services (Article 23). In addition, all subscribers to publicly available telephone services have the right to get an entry in the universal service directory, an access to the universal service directory enquiry service, and an access to an operator assistance service (Article 25). Furthermore, in order to ensure effective competition on the directories and directory enquiry services markets, all undertakings which assign telephone numbers to subscribers should give access to their data on fair, objective, cost oriented and non-discriminatory terms\(^{61}\). Finally, in order to promote a European telephony market, any restriction that prevents end-users in one Member State from accessing directory enquiry services in another Member State should be lifted\(^{62}\).

Similarly, to create this European telephony culture, all end-users from one Member State should be able to access non-geographic numbers, including freephone and premium rate, of other Member States where technically and economically feasible, except where a called subscriber has chosen for commercial reasons to limit access by calling parties located in specific geographical areas\(^{63}\) (Article 28). In addition, all end-users across Europe should be able to call emergency services free of charge by using the single European emergency call number “112”, and be informed about this possibility (Article 26). That implies that national emergency services appropriately answer and handle these calls in a manner best suited to their organisation, and that fixed and mobile networks’ operators make available caller location to the extent technically feasible\(^{64}\). Moreover, Member States shall ensure that the “00” code is the standard international access code and that all undertakings

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\(^{60}\) However, to ensure minimum regulation, each Member State may decide to waive this necessity in all or part of its territory if it considers, after taking into account the views of interested parties, that there is sufficient access to these facilities. In addition, soft disconnection may be imposed on all operators, and not only on the designated universal service provider; respectively Article 29(2) and 29(3) of the Directive.

\(^{61}\) Under competition law, a dominant undertaking could be requested to provide the data on a non-discriminatory and cost-oriented basis: see IP/97/292 of 11 April 1997 involving the Belgian national telecom operator Belgacom, and ITTI Promedia/Commission T-111/96 ECR [1998] II-2937.

\(^{62}\) See further the study for the Commission services: Analysys, Regulatory Framework and Market Developments Concerning Directory Services in EU and EEA Member States, September 2002.

\(^{63}\) However, tariffs charged to parties calling from outside the Member State concerned need not be the same as for those parties calling from inside that Member State: Recital 38 of the Directive.

\(^{64}\) On this condition, see: Commission Recommendation on the processing of caller location information in electronic communications networks for the purpose of location-enhanced emergency call services, to be adopted.
operating public telephone networks should handle calls to the European telephony numbering space65 (Article 27), the necessary interconnection arrangements being governed by the Access Directive.

4. THIRD PILLAR: UNIVERSALITY OF ACCESS

The third and last pillar of the Directive aims at ensuring that all European citizens have access to the indispensable services of the eSociety and no unacceptable digital divide is created between the information “haves” and information “have-nots”, even though this will not be necessarily fulfilled by the market alone. In particular, it guarantees access to the basic electronic communications networks and services at an affordable price (universal service and additional national mandatory services) and access to a minimum set of leased lines at a cost based tariff. It also gives the possibility to ensure pluralism and cultural diversity by guaranteeing an access to specified radio and television broadcast channels and services (“must carry” rules).

4.1. Universal access to basic electronic networks and services: The universal service and additional national mandatory services66

Article 3 of the Directive carries over the objective of the 1998 regime where every European citizen had a right to have access to some basic telecommunications services at an affordable price67. It provides that “Member States shall ensure that

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65 The ITU Recommendation E.164 assigned the code “3883” to the European Numbering Space. See further: <http://www.aitu.org>.


67 This objective has been very well fulfilled as the penetration rate of fixed or mobile voice telephony is generally above 95% across all the European regions. See EOS Gallup, Study on the Situation of telecommunications services in the regions of the European Union, April 2000. See also:
the services set out in Chapter (II) are made available at the quality specified to all end-users in their territory, independently of geographical location, and, in the light of specific national conditions, at an affordable price\textsuperscript{68}.

The appropriateness of this very objective has been questioned by some academics, in particular economists: why should the State decide what its citizens need? Instead of subsidising telecom services used by the citizen with social needs or living in remote areas, would it not be more appropriate to give the monetary equivalent of the subsidy directly to the citizen, who could then decide how to spend it. To address this critique, several economic and social reasons may justify a universal service policy: scale economy, network externalities\textsuperscript{69} (i.e. the fact that an additional customer on the network increases the utility of all the customers, but is not compensated for that by these others customers), merit goods, or the need to alleviate the exclusion of some citizens from the Society. In any case, for the majority of the world countries, universal service (albeit it can have very different meanings) is a political imperative, the only question to be solved being how to ensure it in the most efficient way.

This question is appropriately addressed by the Directive, which states that any measure taken to guarantee universal service should be objective, transparent, non-discriminatory, and proportionate\textsuperscript{70}. It should also respect two important but subtly different principles: no distortion of competition and minimisation of distortions within the markets\textsuperscript{71}. The first principle, which stems directly from the EC Treaty, means that universal service measures may not distort competition between undertakings active in the same relevant market. In turn, this implies inter alia that all undertakings in competition could be designated as a universal service provider, or that each provider incurring a net cost should be compensated. At the same time, if the initial state of competition may not be altered by universal service measures, markets are nonetheless often distorted because some services have to be provided at prices that depart from normal commercial conditions (below their costs) and therefore some subsidies (involving some taxes) have to be paid. The second principle then means that these markets’ distortions have to be minimised. This implies inter


\textsuperscript{69} See similarly Article 2 of the Framework Directive.

\textsuperscript{70} However, as Laffont and Tirole put it (op. cit., note 66, 230), if network externalities may justify subsidy for developing network or new services, this rationale is weaker in case of developed network when the externalities have already been internalised by operators.

\textsuperscript{71} Article 3(2) of the Directive.

\textsuperscript{71} Respectively Article 1(2) and Article 3(2) of the Directive.
The New E.U. Universal Service Directive

Recitals 4 and 23 of the Directive. One way to assess this market distortion is to compute the shadow cost of public funds (i.e. the dead-weight loss associated with one Euro of general tax revenue) linked to universal service obligations. Hausmann showed that the social dead-weight loss associated with the possible financing of a specific subsidy (up to $2.25 billion a year) to schools and libraries by long distance services in the US could equal to $1.93 billion a year, which makes a shadow cost of public fund of .86, far above the average shadow cost of public fund of .25 to .40. See J. Hausmann, "Taxation by Telecommunications Regulation", in J. Poterba (ed.), Tax Policy and the Economy 12, 1998, NBER and MIT Press, 29-48. Nevertheless, as explained by Riordan (op. cit. note 66, 438), this conclusion is very dependent on the assumption that the market is not competitive; hence the producer loss due to the universal service taxes is important. With another assumption on the market structure, the shadow cost of public fund may be lower.

Article 4(2) and Recital 8 of the Directive. Some flexibility is left to Member States, which may allow a data rate below the upper limit of 56 kbits/s to exploit the capabilities of wireless technologies, which may be of particular relevance in some future Member States.

Moreover, Member States should choose the least expensive technologies

4.1.1. Scope of the universal service

The scope of the universal service is described in Articles 4 to 7 of the Directive. Firstly, it comprises access for a connection to the public telephone network at fixed location, allowing end-users to make and receive calls, fax, and data communications. The data rate should be sufficient to permit functional Internet access, taking into account prevailing technologies used by the majority of subscribers and technological feasibility, hence it is currently limited by the Directive to a single narrowband network connection at 56 Kbits/s. As the Directive is technologically neutral, the connection at the fixed location or address could be fulfilled via wire or wireless technologies (including cellular) provided they allow call, fax and data communications to be carried out and that the tariffs for outgoing and incoming communications are structured in such a way as to meet the affordability criterion. Moreover, Member States should choose the least expensive technologies

72 Recitals 4 and 25 of the Directive. One way to assess this market distortion is to compute the shadow cost of public funds (i.e. the dead-weight loss associated with one Euro of general tax revenue) linked to universal service obligations. Hausmann showed that the social dead-weight loss associated with the possible financing of a specific subsidy (up to $2.25 billion a year) to schools and libraries by long distance services in the US could equal to $1.93 billion a year, which makes a shadow cost of public fund of .86, far above the average shadow cost of public fund of .25 to .40. See J. Hausmann, "Taxation by Telecommunications Regulation", in J. Poterba (ed.), Tax Policy and the Economy 12, 1998, NBER and MIT Press, 29-48. Nevertheless, as explained by Riordan (op. cit. note 66, 438), this conclusion is very dependent on the assumption that the market is not competitive; hence the producer loss due to the universal service taxes is important. With another assumption on the market structure, the shadow cost of public fund may be lower.

73 Article 4(2) and Recital 8 of the Directive. Some flexibility is left to Member States, which may allow a data rate below the upper limit of 56 kbits/s to exploit the capabilities of wireless technologies, which may be of particular relevance in some future Member States.

74 It should thus be underlined that connection at fixed location does not mean connection via fixed public network, but only connection at a specified address (see Recital 8). The signification of fixed location in Article 4 of the Directive appears to be different from the one in Article 19 of the Directive that refers to fixed network.
among those available because the provision of the universal service should minimise market distortions.

Secondly, universal service comprises at least one comprehensive and regularly updated directory, in a printed and/or electronic form approved by the NRA. The directory should list the data in a non-discriminatory way, and abide by the Data Protection Directive, which provides for an opt-in system for directories produced or placed on the market after the entry into force of the national transposition measures. Moreover, a directory enquiry service should be available. Thirdly, sufficient public pay telephones (that inter alia enable the placing of emergency calls free of charge) should be available to meet the reasonable needs of end-users in term of geographical coverage.

Finally, disabled people should have an equivalent access to the above-mentioned services (connection at a fixed location, directories and directory enquiry services, public phone boxes) as that enjoyed by other end-users. For example, specific services such as textphone for the deaf or speech-impaired people, or billing in specific formats such as Braille for the blind or partially sighted, could be made available free of charge. Moreover, as specific measures may be enacted to ensure that the disabled can take advantage of the same choice of undertakings available to the majority of end-users, and thus benefit from the forces of competition, Member States may give vouchers or subsidies directly to the disabled. This is a very efficient way to ensure universal access as it respects the freedom of choices of consumers and empowers them to benefit from competition between firms.

As the universal service is an evolving concept, the Commission shall periodically review its scope in the light of social, economic and technological developments, and possibly propose its re-definition to the European Parliament and the Council. The Commission is committed to carry the first review in July 2005 (one year before the general review of the whole regulatory package) and in particular study whether the scope should be extended to mobile telephony and high speed Internet access (Article 15). The twin socio-economic criteria that usually justify universal service will guide the Commission in its review. Two questions will be raised: (i) will the lack of access to a specific service risk leading to social exclusion and (ii) will the universal

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75 Articles 12 and 16 Data protection Directive. The Directive should be transposed by 31 October 2003.
76 Nevertheless, to ensure minimum regulation, an NRA may decide not to impose these obligations if, after public consultation, it considers that these facilities or comparable services are widely available.
77 Recital 13 of the Directive.
availability of this service convey a general benefit to all consumers due to the positive network externalities generated (Annex V). Therefore, the Directive builds in an adaptation mechanism that ensures, in an efficient way, that as the eEconomy evolves, no European citizen is left behind.

4.1.2. Characteristics of the universal service

Having described the different services that form part of the universal service, we should now turn to the price/quality characteristics these services have to meet. In the European context, universal service implies accessibility but also affordability, hence access prices that may be below costs and provision of facilities to control expenditures. Moreover, it implies a certain specified quality of service. On the determination of both of these characteristics, Member States enjoy some flexibility that ensures, in the light of the subsidiarity principle, that universal service fits national circumstances.

Firstly, tariffs of the universal service services should be affordable, in the light of specific national conditions (Article 9). The criteria for determining affordable prices are not specified in the Directives and should thus be defined by each Member State. For instance, they may be linked to the penetration rate or to the price of a basket of basic services related to the disposable income of specific categories of customers. Particular attention should be paid to the needs and capacities of vulnerable and marginalised groups. To achieve affordability, Member States may require that the designated universal service provider offer tariffs that depart from those offered under normal commercial conditions (i.e., which are below costs), that they comply with a price cap, or that they offer similar tariffs across the whole territory. Direct support (via vouchers for example) may also be provided to consumers having low income or special social needs. Among all these possibilities, Member States should choose the combination that minimises market distortions. For instance, it has been shown that self-selected tariffs (where the universal service provider proposes a suite of tariff plans that consumers can choose depending on their consumption pattern) may be efficient as it gives an incentive to consumers to reveal their preferences and limit the subsidy to the ones really in need. Moreover, subsidies that are targeted to a specific group of citizens or specific area are more efficient than a general geographical averaging. It might also be appropriate to choose two different mechanisms for uneconomic areas and for uneconomic customers in economic areas. In the first case, tariffs below costs could be imposed to the designated operator(s), whereas in the second one, vouchers could be distributed to those specified customers who could

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78 M.H. Riordan, *op. cit.*, note 66, 454.
then themselves choose their providers and benefit from the competition. Moreover, as empirical evidence has shown, affordability is not only linked to the level of expenditure, but also to the way customers can control it. Therefore, the universal service provider should also offer at no additional cost facilities that enable subscribers to monitor and control expenditure and avoid unwarranted disconnection (Article 10 and Annex I).

Secondly, because quality is as important as price, quality information should be available and credible performance targets should be imposed. Providers of universal service have thus to publish adequate and up-to-date quality of services information based on standardised parameters, as well as any other parameters developed by the NRA, which in particular take into account the specific needs of disabled users. Moreover, NRA could set performance targets, persistent failure to meet these would then result in sanctions against the universal service providers (Article 11).

4.1.3. Designation of universal service providers

Having described what the European citizen is entitled to request, we should now explain which measures Member States should take to live up to these expectations. That implies answering two questions: which undertakings will have to provide universal service and how these undertakings will be compensated?

If necessary, Member States may designate one or more undertakings to guarantee the provision of universal service so that the whole of the national territory is covered (Article 8). If it is deemed efficient, different undertakings could be designated to provide different elements of universal service and/or to cover different parts of the national territory. In order to fulfil the absence of competitive distortion principle, the designation method should be transparent, objective and non-discriminatory. Hence all undertakings able to meet the minimum requirements and whose economic situation allows them to provide the universal service efficiently can be considered for designation.

- Phased payment for connection fees and pre-payment systems for usage fees, itemised billing, selective call barring for outgoing calls, and soft disconnection. Nevertheless, to ensure minimum regulation, an NRA should be able to waive these requirements in all or part of its national territory if it is satisfied these facilities are widely available. Moreover, to limit the expenses of the subscribers, designated undertakings could not force consumers to subscribe to additional facilities or services which are not necessary or not required for the service requested.
- Sanctions will be imposed in accordance with Article 10 Authorisation Directive.
- There is no need to designate a universal service provider in part or all the national territory if the market spontaneously fulfils universal service objectives or if the government directly gives vouchers to the citizens who may then choose their provider.
to provide the universal service (including mobile operators) should be able
to participate in the designation process and be aware of it84. In order to fulfil
the minimisation market distortion principle, the method should ensure that
universal service is provided in a cost-effective manner, i.e. in the least costly
way. In practice, a whole range of designation mechanisms is allowed from
direct designation to auctions and tendering (similar to public procurements).
Auctions can be appealing85, but may be problematic, due in part to the
difficulty of ensuring that sufficient undertakings are in a position to bid
against the incumbent (they would need to use alternative network technolo-
gies or acquire the use of the assets of the incumbent) and because of the
asymmetry of information (for example concerning the net costs or benefits
of serving groups of subscribers) between the incumbent and potential
entrants86. Therefore, they should be used only when there is already sufficient
competition on the local access market.

4.1.4. Compensation for universal service providers87

Once the providers of universal service have been designated, NRA shall
determine the net cost of its provision to ascertain to what degree it represents

84 Similarly, see the Green Paper on Services of General Interest, para 79-83 and the rules contained
in the public procurement Directives (Directive 92/50 on public procurement of services,
93/38 as last amended by Directive 98/13) and Commission interpretative Communication on concessions under
Community law, OJ 29.4.2000 C 121/2. See further: Telaustria, C-324/98 [2000] ECR I-10745,
para 60-62: even if public service concession contracts fall outside the scope of the specific public
procurement Directives, the contracting entities are bound to comply with the fundamental rules
of the EC Treaty, thereby ensuring transparency and sufficient advertis ing for any potential
tenderer, to enable the service market to be opened up to competition and the impartiality of
procedures to be reviewed.

85 On auctions, see further: V. Sorana, “Auctions for universal service subsidies”, Journal of Regulatory
obligations”, Telecommunications Policy 22, 1998, 661-669 for a typology of auctions and the criteria
to be taken into account when designing an auction for universal service obligations. D. Weller,
the proposed made by GTE in the US for an auction leading to in-market competition, but this
scheme was criticised by J.J. Laffont and J. Tirole, op. cit., note 66, 244-260.


87 As of April 2003, only two Member States have decided to compensate the universal service
provider (see also Table 10 of the Annex 2 of the Eight Implementation Report). France
provisionally estimated the net cost at 295.6 M euro for the year 2002, see the NRA Decision 02-
at 40.28 M euro for the year 2001, see the NRA Decision 14/02/CIR of 29 December 2002,
available at <http://www.agcom.it/prov/d_14_02_CIR.htm>. The United Kingdom decided in
1999 that due to the intangible benefits, there is no net cost. Spain decided in 2001 that the
estimated net cost incurred by the universal service provider, i.e. 268 M euro, did not represent
an unfair burden, hence should not be compensated.
an unfair burden for the undertakings concerned (Article 12 and Annex IV). In order to do so, two methods could be applied depending on the designation mechanism. If an auction or a similar method has been used, and provided the procedure was sufficiently efficient\(^88\), the net cost is revealed during the designation and amounts to the lowest bid received and selected. Otherwise, cost should be calculated as such and corresponds to the net cost the undertaking could have avoided, had it not been designated as a universal service provider (net avoidable cost). Calculation of this is based upon the costs attributable to those elements of the services or those specific end-users, that can only be provided for at a loss or under a price structure that falls outside normal commercial standards\(^89\). From these costs, the intangible benefits (the estimate, in monetary terms, of the indirect benefits that an undertaking derives by virtue of its position as provider of universal service) should then be deducted\(^90\).

Therefore, when auctions are efficiently used, the determination of the net cost is fairly straightforward, as it is revealed during the designation process itself, similar to the calculation of the cost of a public procurement. Otherwise, the determination requires a specific and complex calculation\(^91\), whose each step needs to be verified by the NRA and made publicly available\(^92\). On the

\(^{88}\) If the auction was flawed due to insufficient number of bids or asymmetries of information as outlined above, the net cost does not necessarily amount to the bids received, hence should be calculated separately.

\(^{89}\) The Annex III of the previous ONP-interconnection Directive provided that the costs and benefits to be taken into account in the calculation of the universal service cost should be forward-looking and not historic. This provision has not been carried forward in the new Directive, but is still applicable as it ensures an efficient and least market distortive provision of the universal service. See also footnote 44.


\(^{91}\) The NRA should single out each element of the universal service that is compensated, calculate it without any approximation or on a flat rate basis, and should take into account intangible benefits even though they are difficult to assess: France/Commission (Universal service in France) C-
other hand, if the Member State directly subsidises end-users, the amount cannot be part of the calculation of the universal service’s net cost, as no burden at all is laid on the undertakings. This lack of flexibility may give incentives to Member States not to use direct subsidies, because they could not then be financed via a sectoral fund (sector-specific funding generated from within the sector) and are therefore inevitably borne by the general public budget. This is unfortunate because vouchers may be an efficient means of meeting universal service objectives.

When an NRA considers that the net cost represents an unfair burden, the providers of universal service can be compensated, upon request, from public funds and/or funds from within the electronic communications sector (Article 13). In each case, the Commission should be notified of the compensation, which should be in conformity with Community law, in particular with the State aid rules of Articles 87 and 88 EC. Compared with the 1998 framework, where the possibility of financing was limited to the sector, this increase in flexibility allowing the use of general public funds should be welcomed. Indeed economic literature has shown that, unless there are significant inefficiencies within current taxation, a compensation via the general budget is less distorting and more efficient than the use of a sectoral fund. This is because the taxable basis is broader, thus the crowding-out effect of the taxes


93 The NRA has some flexibility to determine when a net cost is such that it amounts to an unfair burden, as for example it can decide that the net cost does not justify the administrative costs of a specific financing scheme, see: Communication of 1996 on Financing of Universal Service, op. cit., note 90, para 2.3.

94 Article 6(2) Liberalisation Directive.

95 This regime is evolving. In two recent cases, reverting the previous practice of the Commission, the Court of First Instance judged that public financing which only compensated the net cost of a public service obligation amounts to a state aid, hence should be notified to the Commission, but could be allowed under Article 86(2) EC: FFSA T-106/95 [1997] ECR II-229, para 172-178; SIC T-46/97 [2000] ECR II-2125, para 84. In a more recent case, the Court of Justice reverted this case-law, judging that compensation that exactly matches the net cost of a public service obligation does not amount to a state aid as it does not create any advantage that will distort competition: Ferring C-53/00 [2001] ECR I-9067, para 27. In even more recent cases, the Advocate General Léger advised the Court of Justice to go back to the previous position of the Court of First Instance: Altmark Trans C-280/00, whereas Advocate General Jacobs suggested a middle way depending of the designation methods of the undertaking having public service obligations: GEMO C-126/01. See also the Working Document of the Commission Services of 12 November 2002 on Services of general economic interest and state aid, available at <http://www.europa.eu.int/comm/competition/state_aid/others/1759_sieg_en.pdf>; A. Alexis, “Services publics et aides d’Etat”, Revue du droit de l’Union européenne, 2002/1, 63-107; D. Triantafyllou, “L’encadrement communautaire du financement du service public”, Revue trimestrielle de droit européen, 1999, 21-41.
is accordingly smaller\(^{96}\). Nevertheless, some fear that this flexibility will generate competitive distortions between Member States, and competitive disadvantage for the countries using sectoral funds compared to those using the general budget. Fortunately, such concerns are unfounded, as differences in compensation mechanisms are akin to divergences in other economic factors, such as the cost of labour or capital or the taxation regime, and the universal service net cost burdens are small when compared with overall economic activity. Moreover, undertakings in the sector generally compete within national markets, even if communication is by definition an international activity\(^{97}\).

If a Member State decides to establish a sectoral fund, it should be financed by all electronic communications networks and services operators who provide services in the territory of the Member State establishing that fund, and therefore includes operators of fixed telecoms networks, mobile services, cable TV, and even Internet Service Providers\(^{98}\). The sharing mechanism should be in accordance with the usual principles of transparency, non-discrimination, proportionality, and least market distortion. To ensure least market distortion, contributions should be recovered in a way that minimises as far as possible the impact of the financial burden falling on end-users, for example by spreading contributions as widely as possible among electronic communications operators\(^{99}\). On the other hand, to ensure proportionality and reduce the burden on new entrants, Member States may choose not to require contributions from undertakings whose national turnover is less than a limit set by the State. To guarantee non-discrimination with regard to vertical structure and hinder the sharing mechanism from giving the undertakings any incentive to vertically integrate, the contribution method should avoid any double imposition falling on both outputs and inputs, or any accumulated impositions (e.g. service provider paying on the basis of its own activities \textit{and} in relation to inputs purchased from other operators). To alleviate this risk without re-inventing the wheel, the Commission had suggested the use of a VAT type mechanism\(^{100}\). Unfortunately, this proposal was not adopted by the European legislator due to the (out-of-place) fear of the Council that Member

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\(^{96}\) Liberalisation of Network Industries: Economic implications and main policy issues, \textit{European Economy}, 1999/4; See also note 72.

\(^{97}\) R.A. Cawley, \textit{op. cit.}, note 66, 9. Indeed, most of the relevant markets in electronic communications are national in scope: A. de Streel, \textit{op. cit.}, note 33.

\(^{98}\) Therefore, there is no link between the operators being able to receive compensation (the ones being able to provide universal service’s services as defined in Articles 4 to 7 Universal Service Directive) and the undertakings that should participate to the universal service fund (all providers of electronic communications networks and services as defined in Article 2 Framework Directive).


States’ tax prerogatives would be affected. Finally, to ensure objectivity and transparency, the fund should be administrated by the NRA or an independent body under its supervision, and a report giving the cost of the universal service and the contribution of each operator should be published annually (Article 13.2 and 14).

4.1.5. Additional mandatory services that can be imposed by each Member State

The universal service comprises a minimum, cornerstone-set of services that should be available and affordable across the whole Community, and whose net cost could be financed with the general budget and/or a fund from within the electronic communications sector. An individual Member State may want to go beyond this minimum set and decide to make additional services available and affordable on its territory when markets do not fulfil the perceived needs of the citizens. For example, in the context of the “eEurope” action plans101, Member States may decide that schools or health care establishments should have fast Internet access at a price below costs102, or that broadband infrastructure should be rolled out in the less developed regions103. In this case, any compensation mechanism should then abide by Community law, in particular state aid rules, but cannot be financed from within the sector (Article 32). Indeed, the use of sectoral funding should be limited, as concentrating the financing of general service obligations on a particular sector would create important market distortions and risk slowing down the development of a fundamental sector of the economy.

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101 Communication from the Council and Commission of 14 June 2000, eEurope 2002: An information society for all; Communication from the Commission of 28 May 2002, eEurope 2005: An information society for all, COM(2002) 263. The latter Action Plan aims at ensuring that Europe has by 2005 modern online public services (e-government, e-learning, e-health) and a dynamic e-business environment, which should be enabled by a widespread availability of broadband and secure infrastructure. It is based on four inter-linked action lines: relevant policy measures at EU level, exchange of best practices, benchmarking on a list of specified indicators, and co-ordination mechanisms among Member States.

102 On this topic, see the study done for the Commission services: Empirica and WRC, Use of advanced telecommunications services by health care establishments and possible implications for telecommunications regulatory policy of the European Union, October 2000, and the different Member States initiatives available at <http://www.europa.eu.int/information_society/eeurope/action_plan/ehealth/index_en.htm>.


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4.1.6. Final comments

Therefore, with regard to universal service, the new Directive does not introduce substantial modifications in comparison with the 1998 regime, hence is more an evolution than a revolution. The scope of the universal service has been made technologically neutral (the GSM could now be used to fulfill its objective), but has been left nearly unmodified\textsuperscript{104}. As the Commission indicated at the beginning of the Review\textsuperscript{105}, an important extension of the universal service was not considered appropriate for several reasons. It could imply a financing by the electronic communications sector of some services that are not linked to the sector and were previously not financed by it\textsuperscript{106} and would substantially raise entry barriers, thereby slowing down the emergence of competition (which is a good way to ensure public service objectives), leading to a vicious circle where an extended universal service would slow down its very provision. Moreover, any extension would not have been sustainable for some of the future Member States where the telecom networks are not yet fully developed\textsuperscript{107}.

\textsuperscript{104} During the negotiation of the Directives, the inclusion in the scope of the universal service of the low cost Internet access to some public institutions (like in the US) and of the broadband Internet access for every citizen was heavily debated. Both suggestions have been rejected because the use of sectoral fund to finance such services could lead to important distortions in the markets. Therefore, the minimum data rate that universal service access should provide has only be slightly modified: whereas the 1998 regime provided a data rate of 2,4 Kbits/s (Articles 2(3a) and 5 ONPVoice telephony Directive with a cross-reference to Annex I, Part I ONPInterconnection Directive), the new Directive provides a data rate of 56 Kbits/s. On the welfare effects of an inclusion of the Internet access in the universal service, see: J. Crémer, “Network externalities and universal service obligation in the Internet”, European Economic Review 44, 2000, 1021-1031.

\textsuperscript{105} 1999 Communication Review, op. cit. note 12, para 4.4.1. See also the study for the Commission services: WIK, Re-examination of the scope of universal service in the telecommunications sector of the European Union, in the context of the 1999 Review, April 2000.

\textsuperscript{106} For example, there is no reason a priori why the Internet connections of a school should be financed by the communications sector, instead of the education department of the government. Moreover, the main costs to bring Internet to schools are related to the purchase of computers and other hardware, maintenance and teachers training, and not much to telecommunications access costs: M.S. Kosmidis, "Bringing the Internet to Schools: US and EU policies", 2001 available at <http://www.arxiv.org/abs/cs.CY/0109059>.

\textsuperscript{107} Study by Cullen & WIK, Universal Service in the Accession Countries, June 2000. To deal with the problems of the heterogeneity and the different level of network development across Member States, Hart proposed to group Member States into three different classes or scopes of universal service – basic high quality services, state-of-art services, broadband for all –, each Member State having a certain timeframe to fulfil the objective of its class. The system has the advantage that all countries should realise the same effort (same relative progress), even if the absolute scope of the universal service will vary among the Union. He proposed further the establishment of a European Universal Service Fund: T. Hart, “A dynamic universal service for a heterogeneous European Union”, Telecommunications Policy 22, 1998, 839-852. On the different stages of universal service, see: C. Milne, “Stages of universal service policy”, Telecommunications Policy 22, 1998, 775-780.
Some voiced concerns that the limited scope of the universal service indicates that the European institutions, and in particular the Commission, would be opposed to ambitious objectives for the e-Society. That does not seem to be the case as the Member States keep all the necessary flexibility to enact policies that reflect their political preferences and economic characteristics, provided they use the general budget. The limited scope of the universal service indicates only that the use of a sectoral fund, involving important market distortions, should be limited. More particularly, some pointed contradictions between the new Universal Service Directive and the ambitious eEurope 2005 Action Plan. Again, that is not the case as the Action Plan is mainly about objectives and targets to be achieved by the Member States (for example extensive roll-out of broadband), whereas the Directive is mainly about the means to achieve any objective in the e-Society (by relying primarily on market forces, and allowing States intervention only when necessary) and otherwise set a European minimum for the public service.

With regard to the way universal service can be provided, the new Directive reinforces and details the implementation of the principles of transparency, non-discrimination and non-distortion of competition. More importantly, it introduces a new and important principle with far reaching implications that should lead to more efficiency: the obligation of minimising market distortions. In this context, it also opens the possibility for Member States to finance universal service with their general budget.

As stated previously, the European conception of universal service is about the appropriate application of subsidiarity regarding its scope and means of provision. If the flexibility left to Member States should be significant for the former, it should be more limited for the latter. The new Directive goes in this direction, even though it could perhaps have further constrained the power of the State with regard to the means of provision108.

4.2. Access to the minimum set of leased lines

If universal service aims at ensuring that a minimum of three basic electronic communications services (connection to the network, directory and directory enquiry services and public phone boxes) are available at an affordable price to consumers, the Directive aims also at guaranteeing availability at cost-based tariffs of a minimum and harmonised set of leased lines across the whole

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Community (Article 18 and Annex VII). Thereby, it carries forward the regime of the ONP-Leased lines Directive.\(^{109}\)

### 4.2.1. Scope and conditions

The minimum set of leased lines with harmonised characteristics is published, together with associated standards, in the Official Journal of the European Union.\(^ {110}\) These requirements can be adapted to technical developments and changes in market demand by the Commission, acting with the Communication Committee (composed of representatives of Member States) in accordance with the regulatory comitology procedure.\(^ {111}\) This minimum set should be available across the territory of all Member States, but contrary to universal service, should not necessarily be affordable for everyone. It should only be offered in non-discriminatory and cost-oriented conditions, and technical characteristics as well as supply conditions (including tariffs) should be published in an easily accessible form. On the other hand, the provision to end-users of leased lines outside the minimum set is covered by the general provisions on retail markets control (the first pillar explained above).

### 4.2.2. Designation of the providers

The providers of part or all of the minimum set of leased lines are those undertakings with Significant Market Power. In practice, NRA defines, in accordance with the principles of competition law, the relevant markets that cover the minimum set listed in the Official Journal.\(^ {112}\) Then, it determines

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\(^{109}\) Directive 92/44/EEC as amended by Directive 97/51/EC.

\(^{110}\) The set is published as part of the List of Standards referred to in Article 17 of the Framework Directive. See Chapter 1 of the Annex of the Commission List of standards and/or specifications for electronic communications networks, services and associated facilities and services (interim issue), OJ 31.12.2002, C 331/32. The minimum set comprises seven types of leased lines: four analogue types, and three digital types (64 Kbits/s, 2048 Kbits/s unstructured, and 2048 Kbits/s structured).


\(^{112}\) Depending of the demand-side and supply-side substitutions, the NRA has to decide if each of the technical type of leased line constitutes a separate market, or if some or all types are part of the same relevant market. In the Recommendation on relevant markets, the Commission did not identify specific market for each category of leased lines in the minimum set since it is likely that the market structure will be similar for each sub-set. Moreover, as for every network industries, the product market definition is stained with a geographical dimension because every product is geographically bound. That geographical aspect of the product dimension should thus not be confused with the geographical dimension of the relevant market: P. Larouche, "Relevant Market Definition in Network Industries: Air Transport and Telecommunications", *Journal of Network Industries* 2000, 407-445; A. de Streel, *op. cit.*, note 33.
if the market is effectively competitive, i.e. if no operator enjoys SMP/dominant position. If the market is effectively competitive, no obligation is imposed, the European legislator having concluded that the market alone, without public intervention, is capable of providing the minimum set at cost-based prices. On the other hand, if the market is not effectively competitive, the NRA designates operators with SMP and imposes upon them the obligations described above. Contrary to the universal service, no compensation is possible\(^{113}\) as leased lines are offered at cost rates, hence providers do not incur any net cost.

Nevertheless, the use of the SMP regime to designate the providers of leased lines is unfortunate and could lead to a deadlock. The SMP regime and its associated obligations aim to ensure effective competition, or in other words, that products and services that are offered on the market will be provided at cost-based prices. It should not aim to guarantee the offer of specified products or services, because if a product is not proposed on the market, then there is no SMP operator and no competitive problem. Therefore, if the list of the minimum set includes leased lines that are not offered, there is no SMP operator, hence NRA cannot impose the provision’s obligations. It would have been preferable to maintain the 1998 regime, under which the obligations are imposed on the SMP undertakings, or where there is no SMP entity in the market, obligations are imposed on any other operator\(^{114}\).

4.3. Access to specified radio and television broadcast channels and services: “Must carry” obligations\(^{115}\)

Turning to the media, Member States may decide that specified radio and television broadcast channels and services should be available across their territories to ensure pluralism and cultural diversity. If the market alone does

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113 Recital 28 of the Directive.
114 Article 1 ONP-leased lines Directive.
not fulfil these objectives, governments may take measures to guarantee the accessibility of these channels and services. These objectives as such relate to content, hence are outside the scope of the new framework. But to the extent that Member States intervene and want to force operators covered by the new framework (operators of electronic communications networks, services and associated facilities) to carry certain channels, they should comply with the Directives and could not impose any obligation not provided therein. Therefore, Article 31 of the Directive states "Member States may impose reasonable must carry obligations, for the transmission of specified radio and television broadcast channels and services, on undertakings under their jurisdiction providing electronic communications networks used for the distribution of radio or television broadcasts to the public". As usual, these obligations should comply with the principles of proportionality, transparency and non-discrimination.

### 4.3.1. Scope: channels and services to be transmitted

Without prejudice to other Community rules, in particular the freedom to provide services or competition rules, a great deal of flexibility is left to Member States to determine which broadcast channels and services should be transmitted to ensure pluralism as this is mainly a question related to content. Nevertheless, Article 31 has set some limits, as it requires that obligations should only be imposed for broadcast services, which may for instance include teletext or services to enable appropriate access by disabled users, but excludes any services that are not directly related to broadcasting. Moreover, to ensure transparency and proportionality, channels and services to be transmitted should be specified and related to defined general interest objectives.

### 4.3.2. Determination of the providers and possible financing

Must-carry obligations can only be imposed on operators of networks meeting two cumulative conditions: a significant number of end-users of such networks should use them as their principal means to receive radio and television broadcasts. Currently, these conditions cover the traditional three broadcast platforms, namely cable, satellite and terrestrial broadcasting networks, and

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116 It is mainly covered by national laws, but also by the Television Without Frontiers Directive: Council Directive 89/552/EEC of 3 October 1989 on the co-ordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities, as amended by Directive 97/36/EC.
118 Recital 43 of the Directive.
119 Recital 44 of the Directive.
The New E.U. Universal Service Directive

120 Art. 2(e) Framework Directive defines associated facilities as the "means those facilities associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service. It includes conditional access systems and electronic programme guides".


122 Statement by Commissioner Liikanen at the European Parliament before the vote in second reading, 12 December 2001. Nevertheless, the must-carry regime applying to networks operators and the FRND regime applying to associated facilities’ operators are different as the first category of operators can be forced to give access without any compensation, whereas the second category of operators could only be forced to give access against fair compensation.

123 Recital 45 of the Directive.


The obligations imposed should be proportionate, i.e. pursue a legitimate aim and use means that are both necessary and the least burdensome. That implies that Member States should choose the most economically efficient way to ensure universal access to the specified radio and television broadcast channels and services. As economic theory has shown, one way to guarantee such efficiency is to provide compensation to the network operator for the transmission service it offers. This internalisation of the cost supported by the network operator ensures that Member States and broadcasters will choose the least costly way to reach the end-users. This compulsory compensation was proposed by the Commission in its initial draft, but unfortunately was not adopted by the European legislator. The final text only provides that Member States may decide to determine appropriate remuneration, but are not forced to do so.
To conclude, the “must carry” provision is an inevitable innovation of the new framework that now covers all electronic communications networks, including those used to deliver media services. Its implementation will be heavily discussed as it touches on the delicate borderline between content and infrastructure\textsuperscript{126}, but it should be understood that it does not aim to reduce the possibility for Member States to pursue pluralism objectives. On the contrary, it secures these objectives and ensures they are fulfilled in a transparent and efficient way to the benefit of the whole society.

5. CONCLUSION

The new regulatory framework for electronic communications networks and services has been reviewed to adapt regulation to the development of the economic and technological conditions within the markets (increasing competition and convergence), while stimulating the emergence of a true single market. Most of the new Directives are fairly innovative with regard to the 1998 regulation (by facilitating entry and avoiding unnecessary red tape, giving more flexibility to NRAs while at the same time ensuring a common regulatory culture, or putting in place market-by-market sunset clauses based on competition law principles). In that respect, the Universal Service Directive may appear to be the least innovative one of the package, as it does not introduce radically new thinking. Nevertheless, its three-pillar structure and the provisions contained in each of these provide a great deal of helpful clarification. It also introduces two important new principles that will hopefully be properly implemented by the NRAs to the benefits of all end-users: a call for a severe reduction of retail markets controls and a guarantee that universal service is provided in the least distorting way. Fully applied, they will ensure that the European universal service, and generally the protection of the European citizen in the Society, is one of the most modern in the world, thereby participating in the sustainability of the goals of the European Social model promoted by the Lisbon European Council in March 2000.

More fundamentally, the new Directive carries forward the regulatory model and its underlying assumption, introduced since the beginning of the liberalisation program, namely that the market is in principle more efficient than the State at ensuring services of general interest, and that public intervention is justified only when there is market power or when the market fails to deliver the public objectives.

\textsuperscript{126} See M. Cave and P. Larouche, \textit{op. cit.}, note 15, 31.
Some have criticised this approach as being too liberal and too Anglo-Saxon, or as completely ignoring, if not reversing, more than three centuries of public service tradition. Adopting a less dogmatic perspective, but still taking the public service as the starting point, it appears that the new model has modernised, improved and democratised le service public. Firstly, it has ensured a cornerstone of public service that is common throughout the whole Union, and could become the embryonic form of a European public service. It has also clarified how this cornerstone is defined and reviewed, on the basis of transparent and objective socio-economic criteria and after consulting all the stakeholders. Secondly, it has ensured that the provision of this cornerstone fulfils several principles relating to good governance: public consultation, objectivity, transparency, non-discrimination, proportionality, non-distortion of competition, and minimum market distortion. With the universal service, the user is no longer treated as a passive receiver of goods and services that have been decided by the State (very often via a public enterprise lacking full legitimacy), but is rather treated as an active participant in an equal relationship with a dynamic and responsive enterprise. But, the universal service was developed in a liberalisation context, and therefore is regarded by many with suspicion. Now that the European construction is at a crossroads, that a Convention on the future of Europe and an Inter-Governmental Conference is to decide whether the Union should move from economic integration to political unification, it is time to recognise the value of the universal service as such and to migrate this concept from its liberalisation context to a European citizenship context.

To conclude, the new regulatory framework for electronic communications networks and services aims at ensuring an inexpensive world-class communications infrastructure across Europe, thereby contributing to the development of a European eSociety to the benefit of all citizens. It follows the logic and the principles developed a decade ago, and the Universal Service Directive can be seen as its best and most obvious representation. Let us hope that this new society is now ready to deliver on its promises!

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