Current and future European regulation of electronic communications: A critical assessment

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Abstract
The current European regulation for electronic communications has been applicable since 2003 and is currently under review that should lead to new rules applicable by 2010. This paper aims to assess the implementation of the current regulation and the proposals for reform tabled by the European Commission. It is argued that those proposals go in the right direction but should go further. First, the regulatory framework should clearly state that the objectives of regulators are to maximise the long-term welfare of European citizens. Secondly, the main body of economic regulation—the so-called Significant Market Power regime—should be based on a strong test aiming to identify structural market problems that cannot be efficiently dealt with by competition law. Thirdly, possible remedies applicable by the regulators should include structural and technological components, provided that a strict cost benefit analysis is undertaken. Fourthly, the institutional design should be improved by better aligning the incentives of the National Regulatory Authorities with the dynamic nature of the markets, by improving the checks and balances (in particular those provided by national courts and European Commission), and by improving coordination amongst the institutions (the national regulators and the national Courts).

The current European regulation for electronic communications, applicable since 2003,1 is currently under review. In November 2007, the European Commission tabled proposals for reform. These are currently being negotiated between the Council of Ministers and the European Parliament.2 Negotiations should be finalised in 2009 and the new regulatory framework should be applicable in the 27 Member States of the European Union by 2010. This paper aims to assess the
implementation of the 2003 regulatory framework and the reform proposals of the Commission. Section 1 deals with the current framework, explaining the different stages of the economic regulation, assessing its successes and failures and attempting to understand the reasons for the failures. On that basis, Section 2 assesses the Commission proposals focusing on the objectives of regulation, the scope of sector regulation (in particular compared to competition law), the choice of remedies, and the institutional design. Finally, Section 3 briefly concludes.

1. The implementation of the 2003 European regulatory framework

1.1. The four steps of European economic regulation

Economic regulation (i.e. which aims to ensure efficiency) is mainly composed of the Significant Market Power (SMP) regime. This regime is aligned with competition law principles in order to ensure a progressive removal of obligations as competition develops in the different markets (market-by-market sunset clauses) and facilitate the transition towards the mere application of competition law when sector regulation is no longer necessary. Regulators are obliged to follow four steps before regulating an electronic communications operator, as explained in Fig. 1.

1. European screening
   - [3 criteria test]\(^1\)
   - SSNIP test
   - Draft a Recommendation

2. National screening
   - [3 criteria test]
   - SSNIP test
   - Possibility of Commission veto

3. Market analysis
   - No effective competition
   - SMP = dominant position
   - Possibility of Commission veto

4. Remedies
   - At least one
   - Proportionate
   - Possibility of Commission comments

Fig. 1. The current SMP regime. Note: Brackets are used because the three criteria are not always applied in practice.

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\(^1\) Next to the SMP regime, the second part of the economic regulation is the interconnection clause (Article 5(1) of the Access Directive), which provides that regulators may impose interconnect obligations on undertakings that control access to end-users (independently of any SMP designation) to ensure end-to-end connectivity. This regime has not been used very much to date because most interconnection issues have been dealt with under the SMP regime with the fixed and mobile termination markets.


and interconnection markets). To decide the list of markets, the Commission applied the three-criteria test but only in a superficial manner, because it lacked comprehensive information on each national situation, and because the Recommendation applies to a hypothetical ‘representative’ Member State, thus excluding national specificities.

(2) Taking into account the Commission Recommendation, the 27 NRAs identify the markets for regulatory analysis in cooperation with their National Competition Authorities. They may select the same markets as those covered by the Recommendation, but may also subtract from or add to the Commission list. In selecting markets, NRAs should apply the three-criteria test explained above for two reasons. The first is legal: the criteria are derived from the Framework Directive which applies to the NRAs. The second is practical: NRAs are in a better position to take into account national characteristics in order to adequately perform the test. However, most of the NRAs did not apply the three-criteria test to markets that were selected in the Commission Recommendation because they assumed that the Commission had already applied the test. After the selection, the NRAs delineate the product and the geographic dimensions of the markets on the basis of the SSNIP test.

In addition, a safeguard clause provides that emerging markets should not be subjected to inappropriate regulation. This means that NRAs should be less interventionist in emerging markets than in existing ones because they may deter investment incentives, constrain spontaneous market developments and unduly influence technological progress. However, this does not impede regulators from intervening when they need to prevent the dangers of or otherwise alleviate vertical foreclosure.

(3) Then, the NRAs analyse the defined markets to determine whether they are effectively competitive. The notion of ‘non-effective competition’ is equated with the concept of ‘significant market power’, which itself is equated with the notion of antitrust ‘single or collective dominant position’. Once markets are selected, the NRAs thus have little flexibility because they must conclude that there is no effective competition once there is a dominant operator.

(4) Finally, the NRAs have to impose at least one obligation on SMP operators in the wholesale markets. They should impose only proportionate (i.e. the least burdensome) remedies chosen from a list of five in the Access Directives: transparency, non-discrimination, compulsory access, price control, cost accounting or accounting separation. They may also impose other remedies with the prior agreement of the Commission. Here again, the NRAs have little flexibility because they have to regulate SMP operators without being able to argue that antitrust remedies alone would be sufficient to police their behaviours. On the retail markets, the NRAs should impose at least one remedy on the SMP operators, provided a wholesale intervention would not be sufficient. They should choose from the more open list provided by the Universal Service Directive.

The three-criteria test is stricter than the dominance test as it aims to identify the subset of the dominance cases where competition law would be insufficient to police market power because of structural market failures. Thus the sequence of the SMP regime, as shown in Fig. 1, is awkward because logically the three-criteria test (which is stricter) should be performed after the SMP/dominance test (which is looser), and not beforehand. This peculiarity is linked to the division of power between the European and the national levels. At the European level, the Commission starts the process with no (or a largely superficial) analysis of the three-criteria test in order to focus the NRAs on a harmonised set of markets. At the national level, the NRAs are reluctant to perform a thorough analysis of the three-criteria test. A dominance assessment becomes then necessary to refrain from regulating markets selected in the Commission Recommendation but where no operator enjoys market power.

However, it would have been preferable for NRAs to apply the three-criteria test thoroughly without an additional dominance assessment. By the same token if the NRAs had applied the test strictly, the lack of flexibility in market analysis (step 3) and choice of remedies (step 4) would not have been problematic and would even be justified. Indeed when there is hard-core market power, it is implausible that the market would be effectively competitive or that antitrust remedies would suffice to redress the competitive problems.

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8 At the retail level: 1. Access to the public telephone network at a fixed location for residential and non-residential customers. At the wholesale level: 2. Call origination on the public telephone network provided at a fixed location; 3. Call termination on individual public telephone networks provided at a fixed location; 4. Wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location; 5. Wholesale broadband access; 6. Wholesale terminating segments of leased lines, irrespective of the technology used to provide leased or dedicated capacity; 7. Voice calls termination on individual mobile networks.


11 An antitrust dominant position has been defined as a position of economic strength which gives the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. For the application of these principles to the electronic communications sector, see Guidelines on market analysis, para 70–106.

12 Commission Guidelines on market analysis, para 112.

13 Articles 8–13 of the Access Directive for the remedies on wholesale markets. ERG Revised Common Position of May 2006 on the approach to appropriate remedies in the ECNS regulatory framework, ERG (06) 33, therein Revised Common Position on remedies.

14 Commission Guidelines on market analysis, para 114.

15 Articles 16–19 of the Universal Service Directive for the remedies on retail markets.
As the framework gives some discretionary power to the NRAs, two specific institutional mechanisms have been set up to ensure a common regulatory culture across Member States (i.e. harmonisation of regulatory approaches but not necessarily harmonisation of results).

The first mechanism is the Commission’s control over all NRA draft decisions that affect trade between Member States under the so-called Article 7 review.\(^\text{16}\) The Commission may veto a market definition that differs from its Recommendation as well as an SMP (or no SMP) designation, and it may comment on (but not veto) the choice of remedies. As of August 2008, out of more than 770 NRAs draft decisions, seven have been vetoed\(^\text{17}\) and more than 30 have been withdrawn by the NRAs before a veto. As is shown elsewhere (\textit{de Street}, 2007), this direct and ex-ante control of NRAs’ decisions comes in addition to two other controls derived from general European law: a direct and ex-post control with infringement procedures before the European Court of Justice\(^\text{18}\) and an indirect and ex-post control in the form of antitrust cases (cases have already been decided against Wanadoo/France Telecom in 2003, Deutsche Telekom in 2003 and Telefonica in 2007 and several others have been informally settled by the Commission).\(^\text{19}\)

The second mechanism to enhance harmonisation is the European Regulators Group set up by the Commission in 2002 where all 27 NRAs meet in order to exchange best practices.\(^\text{20}\) The ERG has only an informal role, but is instrumental in developing common positions and opinions on specific regulatory issues such as methodologies to decide on the remedies imposed on SMP operators.

\subsection*{1.2. Successes and failures of the European regulatory framework}

The 2003 regulatory framework aimed to achieve six good governance principles\(^\text{21}\): transparency, flexibility, European harmonisation, proportionality, technological neutrality, and legal certainty. Of these, it is submitted here that three are not satisfactorily met.\(^\text{22}\)

First, the principle of European harmonisation is better fulfilled today than under the previous 1998 regulation but problems remain.\(^\text{23}\) The NRAs are not able to deal with market segments with an obvious internal market dimension such as international roaming, for which a direct intervention of the European legislator was required.\(^\text{24}\) In addition, the coordination mechanisms between NRAs are relatively weak as they are mainly voluntary (within the European Regulators Group) and do not prevent some divergences (reflecting different national circumstances but also different regulatory approaches and varying confidence in public intervention to solve competitive problems).\(^\text{25}\) Moreover, no specific cooperation mechanism is set up between national courts, which play an increasingly important role. Not surprisingly, there is thus no single market for electronic communications as underlined by the industry (\textit{Hogan & Hartson and Analysys}, 2006, p. 132) and Commissioner Reding (2007).

Secondly, the achievement of the proportionality principle is very difficult to assess. It is undisputed that the level of SMP retail regulation has slightly decreased but the level of wholesale regulation has increased. Every year brings its Beaujolais nouveau and its new remedy: fixed bitstream access in 2004, wholesale line rental in 2005, naked DSL access in 2006, international voice roaming price control in 2007, and international SMS roaming price control in 2008. That said, it is more difficult to determine whether there is too much regulation compared to a level that would optimise investment and maximise long-term consumer welfare. In Europe, the Commission consultants \textit{London Economics and PricewaterhouseCoopers} (2006) have shown that there is a positive relationship between regulation and investment. However \textit{Friederiszick, Grajek, and Röller} (2007) have shown no relationship between regulation and investment of fixed incumbents and a negative relationship between regulation and investment of the fixed new entrants.\(^\text{26}\) Similarly \textit{Waverman, Meschi, Reillier, and Dasgupta} (2007) noted a negative relationship between regulation and investment of new


\(^\text{18}\) For the infringement procedures launched by the European Commission, see http://ec.europa.eu/information_society/policy/commm/implementation_enforcement/infringement/index_en.htm

\(^\text{19}\) See http://ec.europa.eu/comm/competition/sectors/telecommunications/overview_en.htm


\(^\text{23}\) On the optimal allocation of tasks in European electronic communications, see \textit{Nicolaides} (2006).


\(^\text{25}\) The most outstanding example of such divergence was the approach followed by the UK regulator that imposed a quasi-structural separation on BT as a quid pro quo for a removal of retail regulation: Ofcom Final statements of 22 September 2005 on the Strategic Review of the Telecommunications and undertakings in lieu of a reference under the Enterprise Act 2002.

\(^\text{26}\) The authors note that the introduction of regulated access to incumbents’ networks costs Europe a lost investment to the amount of 25.1% of the entrants’ infrastructure stock in the first year. This loss accumulates over time and reaches 111.5%, which is equivalent to €18.1 billion over 5 years. In other
Hands-on markets, whether they are retail markets such as Voice over IP, or new underlying wholesale markets such as VDSL, abuse of market power. In particular, the attitude of the regulators is not yet clear and consistent with regard to new sorts of business models (and make operators climb a specific value chain) and refuse to support other types of business models.

1.3. The reasons for failure

Four main reasons are identified for the failure of the 2003 regulatory framework: the absence of clear objectives, the alignment of sector-specific regulation with antitrust methodologies, an inappropriate tool box of remedies, and institutional design.

1.3.1. Absence of clear objectives

The European Directives do not differentiate between different conceptions of the role of the regulators and their underlying economic theories. Partly following Garnham (2005), at least four different paradigms can be discerned leading to varying degrees of public intervention from a most hands-off approach to a the most hands-on approach. (1) The Schumpeterian model: the NRA promotes competition that is not based on price but on entrepreneurial innovation which in turn depends upon monopoly rents derivable from successful innovation. (2) The neo-classical competitive model: the NRA promotes competition that mainly on price and does not allow an operator to gain excessive profit. (3) The soft industrial policy model: the State itself is involved in the provision of electronic communications networks or services, or at least ensures that some specific products and services are provided in the market (e.g. the Commission i2010 Action Plan) (Fig. 2).33

Thus, the data do not show an uncontroversial relationship between regulation and investment. This is because the investment decisions are influenced by many factors other than the level of regulation (mainly by the state of the financial markets and the expected evolution of consumer demand). That said, several points cannot be disputed. The increase of regulation does not match the de-regulatory rhetoric of the public authorities. Moreover as Cave (2006) notes, one of the key regulatory instrument, i.e. the ladder of investment or the stepping stone theory which is deemed to ensure a smooth transition between service-based and infrastructure-based competition has been misapplied (for instance by failing to set dynamic pricing) and led to over-regulation. Finally, the cost of regulatory procedures has increased because the SMP regime is more complex to implement, requiring significant data to process and systematic consultation by the Commission.28

Thirdly, the principle of legal certainty has not been achieved so far. As mentioned, there is a discrepancy between de-regulatory rhetoric and the interventionist stance of the NRAs which does not help in understanding the true aims of regulators. In addition, the strategy of regulatory actors is not always predictable. For instance, it is not clear whether regulators directly protect the consumers (for example when regulating international roaming prices), promote entry (and in this case, which kind of entry: infrastructure-based competition or service-based competition)29 or merely prohibit abuse of market power. In particular, the attitude of the regulators is not yet clear and consistent with regard to new markets, whether they are retail markets such as Voice over IP,30 or new underlying wholesale markets such as VDSL infrastructure31 or 3G networks.

1.3.1. Absence of clear objectives (footnote continued)

words, their results suggest that the entrants would more than double their infrastructure over 5 years in the absence of regulated access to the incumbents’ local loops. In terms of total telecommunication investment in Europe, lost investment is equivalent to 8.4%.

27 The authors calculate that for Europe, the lost long-term investment in alternative access platforms exceeds €10 billion as a result of just a 10% local loop unbundling price reduction.

28 Cave estimated at a CEPT conference in April 2005 average costs for the initial market review at €5 million per Member State. Arnbak at the 2006 ITS Conference in Amsterdam estimated that the costs of communications regulators in EU ranged from less than €1 to €6.30 per capita, the most expensive being the Portuguese, the Danish and the Finish NRA and the least expensive being the French and the Dutch NRA.

29 The European Regulators Group (ERG Revised Common Position on remedies) and the Commission (Monti, 2003) argue that there is no conflict between both types of competition when the time dimension is taken into account and that NRAs should provide incentives for competitors to seek access from the incumbents in the short term and to build their own infrastructure in the long term. However, this ladder of investment theory is not easy to apply in practice and does not help balancing to be made between short-term and long-term effects of regulation on investment.


32 An example of this soft industrial is the use of the ladder of investment suggested by Cave (2006, p. 233) where NRAs decide to support certain sorts of business models (and make operators climb a specific value chain) and refuse to support other types of business models.

The problem is that the 2003 regulatory framework does not choose between those options, and the NRAs (and the other actors involved in regulation) are left to decide which paradigm to follow. This missing choice decision has several unfortunate consequences. First, a specific NRA may adopt two paradigms at once or change paradigms over time. More critically, NRAs have no legal instrument to commit to one option (which may in turn undermine investment incentives and competition in the long run as shown by Spiller, 2005). Secondly, the NRAs across Europe may choose different paradigms, thereby undermining the building of a common regulatory culture and possibly the establishment of a single market for electronic communications.

1.3.2. Unfortunate alignment of sector-specific regulation with antitrust methodologies and scope of regulation

The European legislature tried to obscure the difficult issue of objectives by aligning sector-specific regulation with antitrust methodologies. But unfortunately, as Larouche (2002) and Dobbs and Richards (2004) observe, such alignment do not evacuate the fundamental regulatory questions and worse, they add difficulties. Some difficulties are linked to the use of antitrust methodologies in dynamic markets while others are linked to the transposition of antitrust methodologies into a regulatory context.

On the one hand in dynamic markets it is not always appropriate to rely on standard antitrust principles which were developed for stable industries because the nature of the competitive dynamics may be different. As explained by Audretsch, Baumol, and Burke (2001) or Evans and Schmalensee (2001), such antitrust principles may need to be adapted when applied to dynamic markets, but this is difficult because the relevant economic theories are very recent (in particular the theory on multi-sided markets).

On the other hand, the transposition of antitrust methodologies in the regulatory context creates several distortions in the development of competition law and sector-specific regulation because the objectives and the procedures of both sets of rules are different. Contrary to what Krüger and Di Mauro (2003) imply, antitrust principles are more than a rigorous economic way of looking at the market because they are intrinsically linked to the objectives and the procedures of antitrust law. As warned by Temple Lang (2006), antitrust principles cannot be transposed as such into the regulatory realm without leading to inappropriate extension of the role of competition, confusion between legal instruments and complex litigation and multiple procedures. Moreover, such principles focus the mind of regulators on situations of general market power and not on the peculiar situation where market power cannot be dealt with by competition law remedies because of its structural nature.

1.3.3. A limited regulatory remedies toolbox

Currently, most of the sectoral remedies proposed in the European directives and applied by regulators are behavioural although the market problems to be addressed by sector-specific regulation are structural (otherwise, a competition law intervention would be efficient). This paradox seems to lead to never ending regulation. There are several reasons for this paradox. First and foremost, when the sector was liberalised in the 1990s, the political compromise among European institutions lay in opening the markets but not breaking up the existing monopolists. This was partly due to political lobbying by the incumbents and partly due to economic analysis showing that the costs of a breakup might outweigh its benefits. Second, the tools relied upon in the previous 1998 regulatory framework (i.e. regulating monopolists and mimicking the market results that effective competition would provide) were all behavioural and there was a tendency to follow the same remedies in the 2003 regulatory framework (path dependency of remedies). Thirdly, with the recent competition law alignment, the behavioural remedies of Article 82 EC are naturally carried forward in the regulatory realm.

1.3.4. Institutional failure

A third reason for the identified failures of the 2003 economic regulation is the institutional design which misunderstands the incentives of the NRAs and puts insufficient checks and balances in place.

Stern (2004) shows that NRAs’ incentives lead to over-regulation because of the well-established problems of state bureaucracy implying that authorities have a tendency to increase their activities. A recent illustration of this is the European Regulators Group contribution to the current regulatory Review. The ERG argues for more power (i.e. the possibility of regulating tight oligopolies as well as the whole product chain) and less checks and balances (i.e. reinforcing the powers of the ERG and weakening those of the Commission). In addition, NRAs have few incentives to take into account the dynamic side of competition (investment, innovation) because the indicators on which they are evaluated are mainly static, (price level, number of competitors). This ‘static’ approach was justified at the beginning of the liberalisation process when regulation aimed to break down the power of the previous monopolists, but is no longer appropriate after 20 years of market opening and rapid technological progress when ‘it is not the big who beat the small but the fast who beat the slow’ to quote Niklas Zennström of Skype Technologies.

In addition and linked to institutional design, antitrust principles do not constrain much the NRAs in their actions (as many NRAs adapt them quite flexibly to their own purposes) but they do constrain the Commission in its comment under the Article 7 procedure (as the Commission always looks at the impact of its comments on its pending and future stock of antitrust cases).


To make things even worse, the current incentives of the NRAs are such that their interventions will neither produce the benefits of subsidiarity (particularly regulatory competition because NRAs have no incentive to compete within the ERG and are sometimes impeded from doing so by the Commission Article 7 review) nor the benefits of centralisation because the NRAs have no incentive to take into account the effect of their regulations on the welfare of other European countries. To be sure, the 2003 regulatory framework provides two mechanisms to stimulate a European regulatory culture (the Commission Article 7 review and the European Regulators Group). However, the goal of both mechanisms is merely to achieve a common regulatory approach across Member States not that each NRA should take into account the externalities it creates in other Member States.\(^{37}\)

Even though NRAs' incentives are not aligned with the benefits of consumers and citizens, the situation may be partly corrected with the right checks and balances. Unfortunately, the 2003 regulatory framework does not provide for them. The first such check and balance is the cooperation between the NRA and the national competition authorities (NCAs). However, the NCAs do not always play a restraining role as they may have an incentive to see their antitrust theories extended via the sector regulation.

The second check and balance is the possibility of appealing the decisions of the NRA at national level. However, such appeal procedures are generally slow, the appeal judges are not specialised and, jealous of their independence, may lose track of the importance of European harmonisation.

The third check and balance is the Commission Article 7 review of all NRAs draft decisions. However, the roles and standards of the Commission review are unclear: a fully fledged European appeal or merely a harmonisation tool. In addition, the legal value of the Commission decisions and the possibility of appealing them are very limited, as the veto decisions are reviewable, but the mere comment letters are not.\(^{38}\) This lack of accountability may explain the politicisation of the Article 7 review in some prominent cases and the use by the Commission of the Article 7 review to extend antitrust doctrine without the fear of being sanctioned by the Courts.\(^{39}\)

2. A critical assessment of the Commission reform proposals

Given the drawbacks of the 2003 regulatory framework, this paper will now assess the reform proposals recently tabled by the Commission. It will focus on four issues which are the main weaknesses of the economic regulation: the objectives, the scope of sector regulation, the choice of regulatory remedies and the institutional design.\(^{40}\)

2.1. Clarifying the objectives of the economic regulation

Regarding the objectives of regulation, the Commission did not propose any change to the current directives because it deems them sound and it seemingly does not want to open a Pandora’s Box that may lead to difficult negotiations between the Council of Ministers and the European Parliament.

This is unfortunate. The new directives should state unambiguously what the primary goal of the regulatory actors is and, to the extent feasible, decide between a hands-off approach based on confidence in market mechanisms and a more pro-active approach based on an industrial policy view. The overall objective should be to maximise long-term consumer welfare, hence the directives could follow the example of Australian law which provides that\(^{41}\):

The object […] is to promote the long-term interests of end-users of carriage services or of services provided by means of carriage services.

In addition, the directives may give indications on secondary objectives, to help NRAs make operational the primary objective.\(^{42}\) For instance, they should clarify that regulators have to encourage investment and make dynamic efficiencies prevail over static efficiencies. They should also clarify that compulsory access might be imposed solely if infrastructure competition is not possible or desirable or as a means of accelerating infrastructure competition. In both cases, access obligations should be duly justified with a balance of costs and benefits and be limited in time.

On that basis, each of the 27 NRAs should set their operational objectives and the means to attain them. If they plan to manage competition in the market, they should explain why their intervention is needed, how they will achieve their objectives, on what conditions and under which timeframe they expect to cease their intervention. Similarly Larouche

\(^{37}\text{Both mechanisms have backfired. The ERG is becoming a place to exchange the best regulatory practices (but not the best de-regulatory examples) putting the NRAs in competition towards the goal of greater regulation (race to biggest). The Commission review is sometimes used to achieve a harmonisation of results between Member States rather than a harmonisation of methods. In some sense, the current regulation leads to the worst possible result for the European citizens.}^{38}\text{Case T-109/06, Vodafone v. Commission [2007] ECR I-5151, para 150 and Case T-295/06 Base v. Commission [2008] ECR I-0000, paras 73 and 109.}^{39}\text{That may be the case of the comments against the draft decision of the Dutch regulator which included cable in the wholesale broadband access market: Case NL/2005/281 of 2 December 2005.}^{40}\text{The paper does not deal with other important issues for which the Commission has made very interesting proposals like the spectrum assignment and management.}^{41}\text{Section 152 AB (1) of the Australian Trade Practice Act 1974.}^{42}\text{See Section 152 AB (2) of the Australian Trade Practice Act 1974.}
(2007) proposes that public authorities should set out ex ante a scenario for the evolution of the sector, based not on technological but on economic and functional considerations. Considering the uncertainty of developments in the sector, it would be preferable to set out negative scenarios, i.e. undesirable outcomes, defined as a set of parameters which would trigger intervention if they are found to have occurred. That would give more legal certainty and, at the same time, provide a benchmark to assess whether a regulator has fulfilled its own goals.

2.2. Refocusing the scope of the economic regulation

Regarding the scope of regulation, the Commission introduced only minor changes by modestly re-drafting the three-criteria test in its second Markets Recommendation of 2007.43 However, it is submitted here that the changes should have been more radical. First, the sequence of analysis of the NRAs should be clarified as illustrated in Fig. 3. The NRAs should adopt an overall welfare approach, possibly by analysing markets in clusters as suggested by Hogan & Hartson and Analysys (2006) or de Bijl et al. (2005). The sequence of analysis should then be as follows: (1) First, NRAs start their analysis at the retail level and examine whether there is a competitive problem at that level, i.e. the existence of a dominant position. (2) If there is no operator with a dominant position, the authorities should terminate their analysis there. Conversely, if there is a competitive problem, authorities should continue their analysis at the wholesale level and identify, with the three-criteria test, the hard-core market power that justifies regulation. At that level, they should start by analysing the least replicable asset of the value chain and assess whether the imposition of remedies at that point of the chain would suffice. (3) If it is not the case, the authority should move up the value chain towards easier replicable asset.44

Secondly, the three-criteria test should be included in the Framework Directive as suggested by Renda (2006) and always be applied by the Commission and the NRAs. That would focus the regulators’ minds directly on the key relevant question. In so doing, the three-criteria test should also be clarified (Never and Preissl, 2008).

(1) The first criterion would have two branches. The first branch would be triggered by the presence of entry barriers on the supply side. There are different conceptions of entry barriers and Schmalensee (2004) argues that the appropriate notion of entry barriers depends on the objectives of the legal instrument for which it is used. Thus, the notion of entry barriers should be qualified. First, the barriers should be structural, as strategic entry barriers constitute behavioural issues that may be dealt efficiently by competition law.

Second, the barriers should be non-transient because transient barriers do not justify heavy handed intervention. The timeframe of what is ‘transitory’ is difficult to decide, but should be at least the period until the next market review (a minimum of 2–3 years) and possibly beyond that period.

Third, the barriers should principally be of an economic nature, i.e. covering fixed costs that are sunk (otherwise, there is no need to intervene because the market is contestable). If the barrier is of a legal nature (such as limitation of spectrum allocation that cannot be traded), the best remedy consists in removing the barrier. In this case, it would be more efficient for the regulator to lobby public authorities (legislature, government, etc.) for the removal of the legal barriers rather than to regulate the market. Thus only if, and for the period when, there is no way to remove such legal barriers the market may be selected for regulation.

Fourth and more importantly, the barriers should be so high that no effective competition can be expected. The difficult question is how ‘high’ is high and the issue is whether a ‘natural’ tight oligopoly should be regulated (OPTA, 2006). As Cave, Stumpf, and Valletti (2006) observe, it is easy to enumerate the factors that make entry into a market particularly difficult, but it is much more difficult to develop hard and fast quantitative thresholds that will enable regulators to make determinations based on actual data. This is because it is a multi-dimensional issue and it is not easy to decide how to weigh the various factors, and because of such a rule, once published, would be subject to gaming from

43 The ERG has just adopted clarifying guidelines in June 2008.
44 For example, in the supply of broadband, unbundled local loops are in functional terms a less comprehensive product than bitstream, as they provide service over a smaller part of the value chain. Unbundled loops would thus be analysed first. On this sequence of analysis, see Cave et al. (2006).
45 ERG Revised Common Position on remedies, p. 59.
46 The ERG defines the sunk costs as ‘costs which, once incurred, cannot be recouped, e.g. when exiting the market. Examples for sunk costs are transaction costs, advertising expenses or investment in infrastructure for which there is no or little alternative use’: ERG Revised Common Position on remedies, p. 127.
operators and regulators. Thus, these authors propose a straightforward rule: entry barriers cannot be considered high enough to justify regulation if it can be shown that a firm as efficient as the incumbent can enter one or several markets with an acceptable level of risk on the basis of those markets alone. In practice lack of evidence of entry (both in the European Union and elsewhere) may support the view that entry barriers are high, provided that the possibility of both exclusionary behaviours by the incumbent (such as predation) and deterring effects of regulation regarding entry are taken into account. Thus, the first branch of the first criterion would cover non-transitory and non-strategic entry barriers that are mainly of an economic nature and that are so high that only one operator (save in exceptional circumstances) is viable in the market. To make the criterion operational, the regulatory actors could opt for the two-stage approach proposed by Cave (2006). They start with an empirical analysis and look at the degree to which operators in Europe or worldwide have built competitive networks in similar circumstances and in economically viable conditions. Then they complement this finding with a cost analysis based on engineering models that estimate the cost curve or econometric cost functions. An example of the first branch of the first criterion is the fixed local loop in some countries.

The second branch of the first criterion would be triggered by the presence of externalities, either due to network effects or tariff principles, where one player may impose a cost or a benefit onto others without having to pay/being rewarded accordingly. As explained by Littlechild (2006), that may be the case for fixed and mobile call termination in Europe due to the externalities generated by the calling-party-pays principle.

(2) The second criterion would ensure that a dynamic view is adopted and correct the possible static bias that the first criterion may entail. Thus regulators should assess whether the market would deliver the results of dynamic competition (i.e., innovation) despite high entry barriers, or in other words, whether the market would deliver the benefits of Schumpeterian creative destruction. For instance, this may sometimes be the case if there is ex-ante competition for the market, although there is no more ex-post competition in the market.

(3) The third criterion would ensure that a market is selected for regulation solely when antitrust remedies would be less efficient than sector-specific regulation, on the basis that the latter is subsidiary to the former. This criterion should be based on structural elements and be fulfilled when the two first criteria are met (i.e. when there are high entry barriers that do not deliver the dynamic benefits of competition) serving solely as a cross-check. The third criterion should not be based on additional institutional elements (such as the respective powers of the national competition authority relative to the national regulatory authority) because institutions vary across Member States, hence such conception of the third criterion would undermine the consistency of regulation in the single market.

2.3. Enlarging regulatory remedies toolbox

The Commission tries to solve the paradox of having behavioural remedies in place for solving structural problems by proposing to give the NRAs the possibility of imposing functional separation between wholesale access products and retail service activities. Recognising that NRAs may abusively use this ‘atomic bomb’ with the risk of type I errors (false condemnation) which Hausman (1997) has shown to be very costly in the electronic communications sector, the Commission proposes very stringent conditions for imposing such functional separation: evidence that the behavioural remedies fail on a persistent basis, an impact assessment of investment incentives, and prior authorisation of the Commission.47

This proposal of the Commission goes in the right direction but should, in fact, go much further. First regulators should be able to impose all types of remedies, whether behavioural, structural (such as functional or even structural separation), or technological (such as wholesale bill and keep or the retail receiving party pays to solve the termination problem as suggested by de Bijl et al., 2005 or Littlechild 2006), provided they would secure a route towards de-regulation.

Second for all remedies, NRAs should advance compelling arguments that the benefit of their intervention outweighs its costs. The benefit is the correction of market failure and consequent increase in welfare while the costs are the direct costs of designing and implementing the rules by the regulators and the regulatees and the indirect costs due to type I errors. As cost/benefit analyses are extremely difficult to perform, especially as they involve predictions of future market developments, a qualitative argument should suffice when quantitative analysis is not possible or too burdensome.

Third, the mode of choosing remedies should change. Instead of imposing remedies, NRAs should try, to the extent possible, to reach settlements with the operators to ensure incentive compatibility.48 In turn, this requires important powers for the regulatory authorities, in order to increase their bargaining power.

2.4. Improving the institutional design

2.4.1. The national regulatory authorities

The Commission proposes to strengthen the NRAs by making them independent not only of operators but also of governments, through ensuring they have adequate financial and human resources and by enlarging their power to fine operators.49

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47 See the proposed new Article 13a of the Access Directive.
Those proposals are to be welcomed, but are again insufficient. Additional changes are needed for regulators to adopt a more dynamic conception of competition focussed on investment and innovation. (1) Regulators should not only focus and report on static indicators (the price level or the number of competitors in the market), but also on more dynamic indicators (the level of investment or the number of new products and offers). (2) Regulators should be assessed independently against specific objectives and involving all stakeholders (consumers, competitors, experts, etc.). In fairness, the Commission’s yearly reports on the implementation of the regulatory framework generally assess the performance of the NRAs. However, this is limited to compliance with the existing substantive obligations laid down in the directives and does not raise more general questions such as whether NRAs have a sufficiently dynamic view of the market or whether the very existence of an NRA is still justified. (3) Regulators (in particular those from some small member States) should be more intensively and better trained, possibly within a European school to develop a Community spirit.

Moreover, coordination between the NRAs and competition authorities (being the national competition authorities or the Commission) should be clarified, and in some countries improved, to alleviate duplication of procedure, conflicting decisions and forum shopping between authorities. At a minimum, an efficient division of tasks should take place between authorities as underlined by Larouche and de Visser (2006).

2.4.2. The national Courts

To ensure that national appeal bodies apply proper checks and balances to the decisions of the NRAs, the Commission proposes two changes. First, a strengthening of the conditions under which a national Court may suspend a NRA decision pending the outcome of an appeal (the appellant should prove that the regulatory decision would create a serious and irreparable damage and that the balance of interest so requires). Secondly, a data collection exercise on the subject-matter, number, and duration of the appeals.\(^{50}\)

Given the importance of the appeal process and the problems to date, additional changes are suggested. The Framework Directive, and possibly new accompanying Commission Guidelines on national procedures in the electronic communications sector, should provide for limited harmonisation of national appeal rules and best practices. As Andenas and Zleptnig (2004), Cullen International (2006), and Lasok (2005) have shown, good practices are: (i) a first possibility of appeal within the NRA should be excluded, (ii) the number of levels of appeal on the merits should be limited to one, (iii) the control of the appeal body over the NRAs should be of an administrative nature similar to the control of the Court of First Instance over Commission antitrust decisions, (iv) the appeal should be fast,\(^{51}\) and (v) the legal requirement for a party to appeal a NRA decision should be sufficiently clear.\(^{52}\) The implementation of such best practices is especially important as litigation is expected to increase in future because incumbents are likely to intensify their policy of appealing NRAs’ decisions as their market shares decline and their core revenues are under increasing threat from new entrants and new platforms (e.g., VoIP).

In addition to ensure that national judges work in a European spirit, they may set up informal devices to exchange information and best practices and rely on mechanisms similar than those established in relation to antitrust decentralisation (such as the possibility for the Commission to intervene as amicus curiae in the national court proceedings).\(^{53}\) They may also be actively trained with the support of the European Commission. In addition, national courts should have the right to ask for the NRA’s opinion when applying telecom law in a private dispute.\(^{54}\)

2.4.3. The European Regulators Group and the possible creation of a European Regulatory Authority

One of the most radical proposals of the Commission is the creation of a European Electronic Communications Market Authority (EECMA).\(^{55}\) Its structure, inspired by the European Central Bank, consists of a Director, an Administrative Board (appointed by the Council of Ministers and by the Commission), a Board of the heads of the national regulators, and a Board of Appeal. Its role would be to contribute to a better functioning of the internal market for electronic communications and to enhance cooperation between NRAs and the Commission, inter alia by advising the Commission when reviewing NRA draft decisions, by conducting market analysis in trans-national markets cases, by issuing the right to use numbers from the European Telephone Numbering Space and frequencies for services with cross-Community potential, by participating in the resolution of cross-border disputes, and by taking over the tasks of the European Network and Information Security Agency (ENISA).

\(^{50}\) See the proposed new Article 4 of the Framework Directive, COM(2007) 697.

\(^{51}\) The Framework Directive should ensure that the appeal procedure allows for rapid adoption of a decision, as is the case in Article 18(1) of Directive 2000/31/EC on electronic commerce providing that: “Member States shall ensure that court actions available under national law concerning information society services’ activities allow for the rapid adoption of measures, including interim measures, designed to terminate any alleged infringement and to prevent any further impairment of the interests involved.”

\(^{52}\) The Court of Justice has already given some clarification on the locus standing by deciding that appeal against a NRA decision can be lodged by the operators designated as having SMP, but also by the competitors of the SMP operators and by the users: Case C-426/05 Tele2 v Telekom-Control-Kommission [2008] ECR I-0000, para 43.

\(^{53}\) Article 15 of the Council Regulation 1/2003. This has also been proposed by Larouche and de Visser (2006) and by Hogan & Hartson and Analysys (2006, p. 174).

\(^{54}\) Similarly to what is provided under antitrust decentralisation: Article 15(3) of Council Regulation 1/2003.

\(^{55}\) See the proposed new Regulation establishing EECMA, COM(2007) 699.
The creation of a Euro-regulator has been the hydra of the regulatory debate since the beginning of liberalisation. Those in favour of a Euro-regulator, e.g., Geradin and Petit (2004), argue that: (1) it would internalise the cross-country externalities created by regulatory decisions; (2) it would ensure economies of scale in regulatory decisions, which may be important in technically complicated or analytically intensive regulatory fields such as network pricing; (3) it would remove the resolution of technical issues from political pressures, thereby securing policy consistency over time and providing a substitute for inadequate NRA activities; (4) it would lighten the workload of other European institutions, which could in turn focus on their core strategic functions; and (5) it would clarify their competences (political and strategic duties for the Commission—technical tasks for the agencies), in turn contributing to a better understanding of Europe by its citizens. Those against a Euro-regulator claim that (1) it would lead to an additional administrative layer, (2) it is difficult to distinguish between national and Community issues, (3) it would be too distant from the market, (4) it is currently not justified as the market conditions in the Member States remain very different, and (5) it may be harmful in the future as it will be more difficult to dismantle once sector-specific regulation is no longer justified.

Similar divergences exist at the political level. Back in 1994, the High Level Group on the Information Society chaired by the then Commissioner Bangemann favoured the creation of a Euro-regulator with limited competencies. Two years later, a study by NERA/Denton Hall (1997) also favoured such authority with competency limited to the management of scarce resources, and the resolution of access and interconnection disputes. Later, another study by Eurostrategies/Cullen International (1999) found no support in the industry for such a European Authority and concluded that its cost would probably outweigh its benefit. More recently, Hogan & Hartson and Analysys (2006) found that the majority of operators would be less disruptive and more politically acceptable for the Member States. However, the proposal of the Commission would not control. It has also met opposition in the European Parliament, which is more surprising given its past support for Europeanised bodies. Therefore, the likely compromise of the current negotiation would be that the EECMA will be toned down to a Body of European Regulators in Telecom (BERT) that would merely be an improved ERG. Its structure would be light: a Managing Director and a Board of National Regulators. Its funding would come partly from the Community budget and partly from the NRAs. Its role would be reduced to that of advising the Commission and the NRAs in order to promote a consistent regulatory approach across the European Union.

This route of transforming the cosy club of national regulators into a European institution has some advantages as it would be less disruptive and more politically acceptable for the Member States. However, the proposal of the Commission is preferable as it is difficult to understand how the NRAs, that are and remain accountable to national politicians, could have sufficient incentives to take into account the effects of their regulation in other countries. Indeed, the functioning of the ERG today does not show a strong European orientation.

2.4.4. The European Commission

In parallel to the creation of the EECMA, the Commission proposes to extend its own powers to review NRAs draft decisions. In addition to being able to veto market definition and SMP assessment as is the case today, the Commission could also veto the choice of remedies made by the NRA.56 Such a proposal is to be welcomed because the most important aspect of a regulatory decision is indeed the remedies imposed and some unjustified divergences have been observed today.

However, the proposal is insufficiently qualified to ensure that the Commission review aims at building the internal market (but not become a general European appeal system), that the Commission remains fully accountable and that the process is streamlined.

First, the review of the Commission should be limited to NRA decisions which affect trade between Member States. Obviously, the interpretation of such criterion is controversial. It may lead to a narrow view covering only the NRA decisions having cross-country spill-over effects, international roaming being a case in point. Alternatively, it may lead to a broader view covering all decisions dealing with services that may potentially be traded between countries, or decisions affecting the competitiveness of the market players thus impacting the conditions of competition in the internal market, all electronic communications services being potentially included. As put by Larouche (2007), a reasonably restrained economic interpretation is justified.57 Thus the mere fact that one NRA adopts a different approach than another NRA is not sufficient per se to justify a Commission review; it must also lead to an impediment in the commerce between Member States. The power of the Commission would be more limited than today as the internal market conditions which founded this intervention will be interpreted more strictly than currently.

Second, the Commission should retain its full discretion to take any case, and should have the sole right to take a case when it has serious doubts as to compatibility with Community law and wants to veto the NRA decision. This would imply that all Commission decisions should be reviewable by the Community Courts. In contrast with the current system, the Commission should no longer be entitled solely to make comments. The Commission will surely see drawbacks in losing one means of building a European regulatory culture, i.e. adopting comment decisions. However, the advantages of this

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proposal is that (1) the Commission comment letters will disappear which is positive because such letters are not reviewable by the courts and yet have an influence on the regulatory process and (2) the disappearance of such comment letters will save time allowing for the Commission to concentrate on the most serious cases.

Third, the Commission could adopt Guidelines on the controversial issues (such as the treatment of Voice over IP or cable for market definition, the treatment of captive sales for the purpose of market power assessment and the imposition of asymmetric remedies on operators active in the same relevant market) to ease the review process. Going further, the Commission may decide that if the NRAs follow the approach proposed by the Commission, their draft decisions should not be notified.58

In addition, and more generally, the Commission should gear all its interventions (recommendation of relevant markets, review of the NRAs’ draft decisions, infringement procedures against Member States, telecom antitrust cases) towards the long-term welfare of the citizens. Any other considerations (like harmonisation for the sake of it, preservation freedom of action in antitrust cases, or political bargaining) should be discarded. To ensure this, the Commission should report on its own activities, goals and achievements in its annual implementation reports. More creatively, a panel of high level experts reporting to the European Parliament could assess the performance of the sector, the functioning of regulation, and the respective roles of the regulatory actors (in particular the Commission which is otherwise never evaluated by an external body) before each major Review of the regulatory framework, as in the case of Australia with the Report of the Productivity Commission or in Canada with the Sinclair Report.

3. Conclusion

Today, the European regulatory framework for electronic communications has not fully delivered on its principles. In particular, it has led to an apparently never ending expansion of regulation and less legal certainty. This is worrying in the context of market and technological developments in the sector, as convergence implies more competition between different players previously in separate market segments and as the objectives of broadband deployment under the i2010 Initiative will require major investment. Thus, substantive and institutional law should be improved.

In November 2007, the Commission made some proposals for reform that go in the right direction but are too modest. First, the European directives should clearly state that the objectives of regulators are to maximise the long-term welfare of European citizens. Secondly, the Significant Market Power regime should be based on a clarified three-criteria test aiming at identifying structural market failures that justify regulation. Thirdly, the choice of remedies should be enlarged to include structural and technological remedies, provided that a strict cost benefit analysis is undertaken. Fourthly, the institutional design should be improved by aligning the incentives of the NRAs with the dynamic nature of the markets, by improving checks and balances (in particular, those provided by national Courts and the European Commission), by creating a European regulatory authority with powers focused on internal market issues, and by improving the coordination amongst all the involved institutions (the national regulators and the national Courts).

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References


58 This would be a generalisation of the Commission practice not to comment on some types of notifications and be similar to the block exemptions used in Article 81 EC and in State Aids control. Indeed, it is efficient to have an ex-ante control only if the cost for the Commission to force NRA to change decisions afterwards and the cost of regulatory errors are high: Barros (2004), Hogan & Hartson and Analysis (2006) propose a ‘white list’ of a priori non-problematic decisions that would be excluded from the Commission notification.


