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CENTRE ON REGULATION IN EUROPE

***Network industries: efficient regulation,
affordable & adequate services***

***CERRE Regulation Dossier for the Incoming European
Commission 2014-2018***

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Foreword

Europe's policies and, in growing quarters, its very nature are being seriously challenged by its citizens. The new European Commission which, later this year, will be sworn in for a five-year mandate will therefore, more than ever, be assessed on its capability to take the Union forward. Among many issues on the Commission agenda, those related to the regulation of network industries will have to be addressed in a particularly assertive though careful way.

This is so because, as citizens, we are also users and consumers of electricity, gas, heating, rail transport, electronic communications, media, postal and water services. Robust, reliable and transparent regulation systems and practices in those network industries are a necessary condition to affordable and adequate services in the short-, medium- and long-run. Therefore, effective and efficient regulation of network industries constitutes a visible and integral part of the good governance that citizens expect from public authorities at all levels and in particular from the Commission. Since the late 80's, the latter has been at the spearhead of the liberalisation process. It has also initiated, laid the foundations and played a key part in the development of those industries' regulation.

This is why the Centre on Regulation in Europe (CERRE) is publishing the CERRE Regulation Dossier for the Incoming European Commission 2014-2018. This new CERRE contribution to the policy debate includes a set of original, sector-specific and cross-sector recommendations on future regulatory policy in network industries. It provides a critical view on some measures and policies which are in the pipeline or already implemented, on others which should be reconsidered or approached differently and, eventually, on new initiatives to be taken. It has been developed in full independence by a group of some 20 academics recognised among the best economists and lawyers in their respective disciplines and fields.

For my part, a number of strong conclusions can be drawn from this Dossier.

Firstly, the liberalisation of network industries has been promoted on the assumption that competition would automatically bring about efficiency and welfare gains. This has clearly not been the case in all industries. The new Commission would therefore be well advised to investigate, in the light of experience, what liberalisation and the internal market entail concretely for network industries and, where appropriate, be prepared to rebalance those policy objectives.

Secondly, in most network industries, EU-level regulatory action should now focus on simplifying existing rules and ensuring proper implementation and enforcement rather than introducing new rules.

Thirdly, in nearly all sectors, reforms will be needed to foster investment in crucially needed infrastructure.

Fourthly, network industries' activities are included in what is now referred to in the EU terminology as services of general interest, which are subject to public service obligations. PSO's are part of the European model of society. However, if they are to remain sustainable, they will necessarily need to be revisited with a view of balancing the societal needs of citizens of each Member State, the associated cost of universal service, the principles of transparency and absence of distortion, and technological developments.

Fifth, the internal functioning of the European Commission cannot be left out of consideration. The growing convergence between sectors should lead to more systematic cooperation and possibly to reorganisation of those DGs involved in the regulation of network industries. What is at stake here is not only an administrative issue but, more fundamentally, the Commission's ability to propose to the Council and to the Parliament policies which are integrated, consistent, and clear to understand, and then to communicate these policies to the stakeholders and the general public.

My sixth and final point chimes with the message of the European electorate a few weeks ago: as it is the case for other policies, the new Commission should primarily focus its initiatives related to the regulation of network industries on areas where there are externalities and cross border issues.

I hope that the CERRE Regulation Dossier for the Incoming Commission 2014-2018 will provide a useful contribution to a democratic debate which is only starting. That debate and its outcome will play an important part in shaping how the European Union will look like in the years to come and how it will be perceived by its citizens.

Bruno Liebhaberg
Director General



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About CERRE

Providing top quality studies, training and dissemination activities, the Centre on Regulation in Europe (CERRE) promotes robust and consistent regulation in Europe's network industries. CERRE's current 42 members are regulatory authorities, operators and infrastructure managers in those industries as well as universities.

CERRE's added value is based on:

- its original, multidisciplinary and cross-sector approach;
- the widely acknowledged academic credentials and policy experience of its team and associated research staff;
- its scientific independence and impartiality;
- the direct relevance of its contributions to the policy and regulatory development process applicable to network industries and to the markets for their services.

CERRE's activities include contributions to the development of norms, standards and policy recommendations related to the regulation of service providers, to the specification of market rules and to improvements in the management of infrastructure in a changing political, economic, technological and social environment. CERRE's work also aims at clarifying the respective roles of market operators, governments and regulatory authorities, as well as at strengthening the expertise of the latter, since in many Member States, regulators are part of a relatively recent profession.

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As provided for in CERRE's by-laws, this report has been prepared in complete academic independence by CERRE's Joint Academic Directors, i.e. Professor **Natalia Fabra** (CERRE & Universidad Carlos III de Madrid), Professor **Pierre Larouche** (CERRE & TILEC - Tilburg University), Professor **Martin Peitz** (CERRE & University of Mannheim), Professor **Tommaso Valletti** (CERRE & Imperial College London) and Professor **Catherine Waddams** (CERRE & CCP-University of East Anglia), and the Director General, Professor **Bruno Liebhaberg** (CERRE & Solvay Brussels School of Economics and Management – Université Libre de Bruxelles).¹

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The contents and opinions expressed reflect only the authors' views. They do not necessarily reflect and, in any event, in no way bind any organisation member of CERRE, the association's governing bodies or those bodies' individual members.

¹ Details on the authors can be found on www.cerre.eu/organisation/joint-academic-directors and www.cerre.eu/organisation/director-general/prof-bruno-liebhaberg.



1. Executive summary

Cross-sectoral issues

The incoming Commission should give **priority to enforcement and capacity-building over more legislation**. Across network industries, the Commission should concentrate on ensuring that the existing regulatory frameworks are properly enforced, that the existing pan-European institutions function well, and that all Members have the requisite capacity for implementing and enforcing regulation.

There should be a mechanism for **ensuring a rebalancing of policy objectives**. In order to avoid political interference by each Member State in the work of its respective NRAs, the Commission should create an EU-level forum, where it can discuss with the political authorities of the Member States on the proper balance to be achieved between the various policy objectives in each network industry (especially between long-term and shorter-term objectives).

The Commission should investigate concretely **what the internal market may mean for the various networks industries**, in order to be able to base policymaking on a realistic picture of the internal market, and to avoid pre-empting or pre-judging developments.

The Commission should improve the internal coordination between the numerous DGs and services involved in, or concerned by, the regulation of network industries, to achieve **greater internal consistency**.

Energy

EU policy should supersede national policy in the presence of significant externalities (positive or negative), or where there are clear benefits from cross border co-ordination.

We identify five key priorities for the incoming Commission in energy. These apply to both electricity and gas, though some are especially pertinent in one sector.

The first priority is to **implement an effective means to reduce carbon emissions in the least cost way**. The Emissions Trading System has so far failed to do so, and if it is to be retained as a central instrument for this purpose, it needs to be radically reviewed, so that the price of carbon rises to reflect its true cost. Related to this, more support should be provided to research and development in the sector, identifying a better way to identify and fund potentially beneficial R&D which has well established positive externalities.

The second priority is to **complete the creation of the Internal Energy Market** in order to allow for greater security of supply, better integration of renewable technologies, and potentially more intense competition. However, since market integration might imply some price

rebalancing across Europe, it is important to explore the use of mechanisms which deliver net benefits overall while protecting the interests of those who would otherwise suffer adverse effects.

The third priority is to **reduce regulatory uncertainty where this may deter or raise the cost of investment**. In particular the Commission should try to avoid rapidly changing policies which are likely to engender uncertainty, and to provide a policy framework which does not encourage such volatility in the policies of Member States. **Investment in cross-border capacity is a major priority**, particularly in gas, to allow a more interconnected system which is less vulnerable to supply disruptions of a single source.

The fourth priority is related to the recent revision of the **Energy and Environmental State Aid Guidelines** (EEAG). For some of us, state aid control should not, in the context of deploying renewables, lead to increased uncertainty or to inefficient risk allocation. It should impede neither the achievement of environmental targets nor the development of new innovative technologies. Finally, state aid control should not seek to reformulate the (emerging) EU energy policy.

Fifth, the Commission should **clarify policies and their enforcement**. In retail markets, enforcement of competition for energy supplies to large consumers (business to business) is central to efficient outcomes in other parts of the value chain; the Commission should focus on ensuring that internal markets work well for this group of customers. An assessment of the benefits of competition for residential consumers is timely, in the light of experience of implementing the third energy package.

Electronic communications and media

The current regulatory framework for electronic communications has worked well so far, and should be maintained. However, in light of technological changes, a **more dynamic view of regulation is warranted**, paying particular attention to the long run implications of regulatory interventions. The **digital targets** formulated in the Digital Agenda 2020 are **not very helpful** in this respect. The economic case is not proven, not much direction is given on how to reach the targets, and if a target defines a requirement that a certain quality is universally available, then this could be made a USO.

The principle of **technological neutrality should be applied more pervasively**. Cable and traditional telcos should be subject to the same rules when they have similar market power. The same applies to over-the-top players (OTTs) when offering services which are functionally equivalent and close substitutes for services of traditional telcos. Considerable gains are likely to be achieved from **spectrum harmonisation across Member States that treats equally telcos and broadcasters**.

Strict **net neutrality** rules, along the lines of those currently being discussed, are to be avoided. There are likely benefits from a more flexible environment and the experimentation of new business models, as well as some flexibility for NRAs across Member States to experiment with different solutions.

A **European copyright law** is desirable and **should be a high priority** for the incoming Commission. When properly designed, this tends to increase incentives for content generation.

Postal services

While there may still be some scope for universal service obligations (USOs) for mail, in this declining sector the very concept of **USO should be revisited** as postal services are affected by the evolution of other sectors, especially intermodal competition for communication services. The universal service for the postal sector should not be looked at in isolation and the EC could **consider a broader “right to communicate”**.

Differential treatments (in particular VAT exemptions for mail) should be removed.

Where USOs are maintained, the **financing of USO should be made transparent**. To resolve the tension between USO and competition, geographic de-averaged prices with appropriate access charges, as well as auctioning USO, are recommended.

Rail

The emphasis of the new Commission in the rail sector should be on the **completion and full implementation of recent measures** (recast of the 1st Railway Package and the 4th Railway Package), in particular as they affect regulatory arrangements and track access charges, rather than on developing new proposals. New proposals will be needed in other modes of transport, to achieve the goal of efficient pricing, including **charging for externalities on all modes of transport**.

However, even in the freight sector, which has been open to competition for seven years, there remain severe barriers to entry. Independent and adequately resourced regulators ought to be able to deal with the problems of discrimination, given the new powers given to them under the recast of the 1st Railway Package.

Given the uncertainty about its efficiency in all circumstances and the strong opposition from some Member States, **complete separation of infrastructure from operations should not be further pursued**.

A major problem for the achievement of the Commission’s goal of a growing rail market share remains the poor condition of many rail routes in Central and Eastern Europe, and the Commission will need to consider how best to deal with this. **More funding will need to be**



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made available not just for major projects but also for maintenance and rehabilitation of existing lines in countries where resources are scarce.

Water

Liberalisation of the water sector is highly politically charged, which informs the issues for the incoming Commission. These centre on whether the water sector should continue to be excluded from the provisions of the single market, as it is currently the case with its exemption from the EU Directive on the award of Concession Contracts.

Two high level critical issues should be facing the incoming European Commission: firstly, to **determine the scope for competition in the water sector**, and the best way to make this effective to protect consumer interests, while respecting local preferences; and secondly, to **evaluate and implement the Universal Service Obligation in water**, given its unique position, embedded in the Water Framework Directive.



2. Cross-Sectoral issues

State of play and issues

i. Rebalancing of regulatory objectives

Across network industries, it seems that after twenty years, liberalisation efforts have run their course, with a measure of success that varies from one industry to the other and from one Member State to the other. Other policy objectives are being asserted – anew or again: the promotion of innovation and investment in infrastructure, the need to address climate change and promote sustainability, distributional concerns in the wake of the prolonged recession, etc. This makes the implementation of the regulatory framework and the operations of the regulatory authorities more complex.

ii. The internal market and consolidation

At the same time, we also witness a renewed debate about the core objective of the EU, the creation of an internal market. In most network industries, liberalisation was not accompanied by measures that would ease the freedom of suppliers and customers to move across borders (unlike in audiovisual media, for instance, where home-country control was introduced). Even if the connection with the internal market is tenuous at best, the internal market is often invoked in support of calls for more consolidation in network industries, leading to the emergence of stronger, European-level players. However, not all consolidation plans are cross-border, and in any event, given the industry structure, many of the consolidation efforts are bound to lead to competition law concerns.

iii. Regulatory uncertainty

Despite an emerging EU institutional model, regulatory uncertainty is still an issue. The internal market also plays a part on the institutional side. Following the 2009 reviews in electronic communications and energy, the outlines of an EU institutional model are emerging. EU-level legislation, once implemented by the Member State, is applied and enforced by an independent yet accountable NRA. The tasks, powers, organisation and procedure relating to that NRA are specified in a fair amount of detail in EU law, but at the same time the NRAs – acting together in a network-based organisation such as BEREC² or ACER³ – play a role in policy development and implementation at EU level. The Commission monitors and to some extent controls the actions of the NRAs, yet acts mostly through soft-law instruments. This model is being challenged now, on account of regulatory uncertainty, and more specifically too much diversity between the

² Body of European Regulators for Electronic Communications (BEREC).

³ Agency for the Cooperation of Energy Regulators (ACER).

respective national regulatory outcomes, too frequent changes and too much instability at EU level.

Some call for more EU-level enforcement (a European regulator, in the footprints of the banking sector), yet we also observe that some policy-makers at national level seek to assert more control over the decisions of NRAs, despite their independence, in order to put in place 'clear' or 'committed' solutions, albeit at national level.

Furthermore, Member States are also putting in place integrative institutional structures, which break from the principle of "to each sector its NRA". For instance, British NRAs enjoy concurrent competition law powers. Ofcom and AGCOM supervise the electronic communications and media sectors. The BNetzA regulates all network industries. Finally, the ACM is a single competition, consumer and network industry authority. Whilst EU law allows all of these, institutional differences may lead NRAs to also differ on substance, because of different intra-institutional trade-offs and arbitrages.

iv. Emphasis on legislation at the expense of enforcement

More fundamentally, we might have reached the limits of what can be achieved via legislation, in network industries. Most concerns voiced by regulators, industry players, interested parties or academics have to do not so much with the legislative framework, which by now is well developed, but with its application and its enforcement. These concerns cannot easily be addressed by new legislative initiatives; they require detailed and painstaking work to improve the analytical capability of NRAs and their effectiveness (unless, as mentioned in the above paragraph, the institutional model as such is tinkered with).

v. Internal functioning of the Commission

Looking broadly at network industries, one cannot fail to be impressed by the range of Commission DGs involved: DG ENER deals with energy (with DG ENV and DG CLIMA also having a say), DG CONNECT with electronic communications, DG MARKT with post, DG MOVE with rail and transport, and of course all of these liaise with DG COMP and central services such as the Secretariat General or the Legal Service. It should come as no surprise that cross-sectoral coordination is difficult. In particular, the Commission does not seem to be equipped or willing to make cross-sectoral policy arbitrages, for instance between the scope of universal service in postal regulation and the promotion of broadband Internet in the electronic communications regulation.



Challenges and responses

i. Rebalancing of objectives

Whilst the legitimacy of EU involvement as regards internal market and competition – the spearheads of liberalisation policy – is beyond question, for other policy objectives it is less immediately obvious that EU institutions can and should map the policy path and implement it. In that respect, it might be useful to create a **separate forum** for policy debates at EU level, involving the political authorities of Member States – ministries and ultimately Parliaments. Currently, Member States are only involved at the highest policymaking level in the EU, where broad objectives are fixed in the course of legislative processes. Of course, committees bringing together the Commission and the Member States already exist, pursuant to the respective sector-specific regulatory frameworks (such as COCOM⁴), but their role is limited. What is proposed here is a more political forum that would not merely advise or decide on Commission acts; rather, that forum would be discussing intermediate policy layers, i.e. the arbitrage between policy objectives and the concrete implementation of broad policy objectives through regulatory actions.

It might no longer be sufficient to stage these more concrete policy discussions, at EU level, in fora involving NRAs only (such as BEREC or ACER). This creates a risk that the political authorities of the Member States, being side lined, choose to run their own respective policy debates and seek to exert influence on their NRA – sometimes running afoul of NRA independence. This can be observed already, as noted above. Involving political authorities in EU-level debates on regulatory arbitrage and implementation would allow these issues to be debated amongst Member States and the Commission, instead of by each Member State in isolation. Conclusions can be reached in an open and coordinated manner at the political level. These EU-level conclusions can then be relayed to NRAs, in a way which does not prejudice their independence in any single Member State. In addition, such an EU-level forum would give greater legitimacy to EU policy, in an era where market opening and competition is no longer the clear top priority. Otherwise, the risk is a slow and underhand demise of liberalisation policy and its undisputed achievements, through a thousand cuts, as it were, inflicted at Member State level.

ii. The internal market and consolidation

The opening of network industries to competition was sometimes carried out at a very conceptual level, on the assumption that competition would bring about efficiency and welfare gains. This assumption proved correct in a number of cases, but in some sectors, e.g. the postal sector, it seems in retrospect that policymakers might have overlooked that much of these gains

⁴ The Communications Committee (COCOM) is composed of representatives of EU Member States. Its main role is to provide an opinion on the draft measures that the Commission intends to adopt in relation to Electronic Communications markets.

would likely come from reduced labour costs. It would be wise to avoid this misstep in the current round of debate around the internal market in network industries. Instead of well-worn references to potential cross-border trade, we would recommend to investigate more concretely what the internal market can mean for network industries. Is cross-border trade really likely and significant? Can we measure it? Or are we looking rather at the rise of larger, EU-wide operators? Why would these be beneficial for the welfare of EU citizens? If the industry structure should be different, is there a path towards that structure and can we learn from consolidation experiences in other sectors (airlines, banks, media, etc.)? Are differences in prices and non-price conditions across the EU acceptable and if so, up to what extent? Will the internal market herald more vigorous competition and lower prices? The aim is not to guide the market towards a specific outcome, but on the contrary to have a complete view of potential outcomes, so as not to pre-empt any outcome now, or later misjudge market developments. Only with a clear and concrete view of the expectations relating to the internal market can we avoid mistaken or misguided policy decisions taken in the name of the internal market.

iii. Regulatory uncertainty

Here the gains from a cross-sectoral approach are obvious. At the institutional level, the specificities of each network industry bear less on the discussion and the commonalities are more readily apparent. The institutions in every sector-specific framework (extending perhaps even to competition law, where the institutional framework differs to some extent) would be strengthened, if it could be emphasised that they are part of a common institutional design, and that such design represents a step forward in the evolution of EU law. The EU model rests on a combination of NRA **independence and accountability**, as explored in a previous CERRE study⁵. These two characteristics are not contradictory and, as they are understood in EU regulation, they rather enhance one another.

At the same time, in putting NRAs in the driver seat, the EU model does leave room for divergent regulatory outcomes in different Member States. We find that the policy discussion on regulatory uncertainty would greatly benefit from a **more in-depth assessment of the significance of regulatory divergence between Member States**. Divergence is too often branded as a failure, without a proper assessment. No debate on an EU-level regulatory authority in any sector should be opened until this assessment has been made. In essence, divergence can be explained in different ways.

⁵ C. Hanretty, P. Larouche, A. Reindl, *Independence, accountability and perceived quality of regulators*, CERRE, 2012, <http://www.cerre.eu/publications/independence-accountability-and-perceived-quality-regulators>. See also *CERRE Code of Conduct and Best Practices for the setup, operations and procedure of regulatory authorities*, CERRE, 2014, <http://www.cerre.eu/publications/cerre-code-conduct-and-best-practices-setup-operations-and-procedure-regulatory-authori>.

Firstly, divergence can be a consequence of different stages of market development, i.e. the application of regulatory principles to different situations ‘on the ground’ in each Member State. This must be respected.

Secondly, divergence can reflect different policy conclusions drawn by each NRA. There are benefits to uniformity in policy approach across the EU, but there can also be benefits to allowing a measure of differentiation, in order to be able to compare and learn empirically about the best regulatory approach. In such a case, however, NRAs cannot be content just with putting forward their own solution in isolation. They must rather be brought to look at each other’s experiences and to try to identify best practices.

Thirdly, differences can also be explained by unsatisfactory performance by some NRAs, in which case some intervention from the EU level is warranted. At the moment, EU institutions have sufficient instruments at their disposal to intervene: next to the infringement procedures, sector-specific procedures (such as Article 7 in electronic communications⁶) and even the European semester can be used⁷.

The Commission will remain confronted with calls to set up pan-European regulatory authorities in network industries. Given the above, we would recommend continuing to work instead on strengthening existing pan-European institutions (ACER, BEREC and the IRG-Rail⁸, the ERGP⁹, and ERGA¹⁰). The main concern now is to foster capacity-building in a number of Member States where the NRAs are still weak. This can continue to be done through the existing pan-European institutions. The experience in other fields covered by EU law shows that it takes a number of years for national authorities to learn to work together in the interest of the EU. So far, the threat of EU-level intervention has worked well to incentivize the pan-European network-based institutions to improve their performance; they have already made considerable progress. As against that, single pan-European authorities could be vulnerable to capture (it is easier to capture a single authority than a network of 28 NRAs and the Commission) and it could become an ivory tower, disconnected from the field.

Moreover, given that the status of soft-law instruments (guidelines, recommendations, reports, opinions, etc.) is unclear and remains questioned before courts throughout the EU, their widespread use could itself contribute to regulatory uncertainty. The advantages of using soft-law instruments are undeniable. Yet in some cases, they are not followed by NRAs. In other cases, they are ignored by national courts reviewing NRA decisions, sometimes putting NRAs in a bind, torn between national law and EU soft-law. We would urge the Commission to try to **draw a global picture of the use and effectiveness of soft-law instruments in network industries**. On

⁶ <http://ec.europa.eu/competition/sectors/telecommunications/legislation.html>.

⁷ http://ec.europa.eu/europe2020/making-it-happen/index_en.htm.

⁸ Independent Regulators Group (IRG) Rail.

⁹ European Regulators Group for Postal Services (ERGP).

¹⁰ European Regulators Group for Audiovisual Media Services (ERGA).

the basis thereof, it could **clarify the status of EU soft-law instruments**: What exactly is their effect on NRAs? What does ‘utmost account’ imply? What are the obligations of NRAs towards soft-law, some form of ‘comply or explain’ principle? Does the answer to these questions depend on some features of soft-law instruments and if so, which ones? Of course, ultimately these questions are for the European courts to decide, but the Commission would do well to make its position known.

iv. Emphasis on legislation at the expense of enforcement

The Commission is in the driver’s seat when it comes to the EU legislative process, whereas – in keeping with general principles of EU law – it plays more of a monitoring and supporting role in the application and enforcement of EU network industries regulation. Against that background, it can appear very attractive to push for further action at the legislative level in response to perceived problems. Nevertheless, in keeping with our view and that of most observers, the next Commission should **emphasise the enforcement of existing legislation, and the assessment of its effectiveness**, before going into new legislative rounds. In other words, the Commission cannot avoid ‘getting its hands dirty’ and developing a more concrete understanding of the work of NRAs, as opposed to assessing their work from afar. This includes continuing to work with weaker NRAs on capacity-building.

v. Internal functioning of the Commission

Against the background of the fragmentation of the Commission, it will be a challenge to improve the communication between the various DGs involved in the regulation of network industries. In particular, while the bilateral links between ‘specialist’ DGs and ‘generalist’ DGs such as DG COMP, ENV, CLIMA seem well established – if not always working optimally – the **‘specialist’ DGs** dealing with one sector (including CONNECT, ENER, MOVE) **should be encouraged to share their experiences and work more closely together** in the areas where some synergies can be reached (especially as regards institutions).

Beyond that, the independence of NRAs towards the Commission remains the elephant in the room. There are good reasons to maintain a close link between the Commission and NRAs. At the same time, after so much effort has been invested in preventing NRA capture at Member State level, the Commission should not make itself vulnerable to capture at EU level, given its close link to the NRAs. The Commission should adopt **measures to prevent its own capture**, for instance by continuing and even enhancing the transparency of consultation processes and informal contacts, and ensuring a proper representation of those interests which are traditionally less powerful, such as consumers or smaller regional or local providers. Given its influence on the development of EU policy, the European Parliament should be encouraged to do the same. Increasing contacts with academics would also contribute to that end, for instance

through the creation of a standing group of academic advisors, on the model of the EAGCP¹¹ for competition policy, yet with a broader disciplinary coverage.

This will also require that the respective roles of general competition policy, including State Aid, and industrial policy are adequately understood, both within particular sectors and at a more general level. As already indicated earlier, this highlights again the challenge for the Commission to improve its communication to citizens and Member States policy makers about the benefits of EU action.

¹¹ The Economic Advisory Group on Competition Policy (EAGCP) creates a discussion forum on competition policy matters between academics who have a recognised reputation in the field of industrial organisation. Members represent different fields of research and academic research centres in Europe. Its main purpose is to support DG Competition in improving the economic reasoning in competition policy analysis. EAGCP members are proposed by the Chief Competition Economist and nominated by the Commissioner.



3. Energy

State of play and issues

The high level goals of the EU's energy policy remain broadly unchanged – to deliver a low-carbon economy, whilst making the energy more secure, competitive and sustainable. While the EU has often provided effective leadership in the development of such policy goals, it has faced challenges in achieving them. The economic crisis has affected the accomplishment of such goals, both assisting with achieving direct targets in the short run and posing difficulties for long term investment, but there have been other obstacles too for the full implementation of a coherent European energy policy.

The EU's climate change policy rests on three legs: the European Trading Scheme (ETS) to determine the price of carbon; the Renewables Directive to encourage deployment of near-market renewables; and the Strategic Energy Technologies (SET) Plan to fund R&D and demonstrations of immature low-carbon technologies. The creation of the ETS has been an important step forward. However, in recent years, carbon prices have been too low to provide a stable and robust price signal to promote investments in low-carbon technologies. There is widespread agreement on the need for a more effective way to reduce carbon emissions, which would require reform of the ETS if it is to be an effective instrument in reducing emissions. The Renewables Directive has been successful in fostering the deployment of renewables across Europe. Such deployment contributes to driving RES costs down. It should continue to be encouraged only where its benefits clearly outweigh those costs. The obligation placed on Member States to reach certain renewable energy targets assured a funding stream, which has nevertheless been absent for the SET Plan. The recently released White Paper on the 2030 climate and energy framework includes a carbon reduction target of 40% and a renewables targets of 27%; details on how such targets will be achieved are yet to be set.

The review of the Energy and Environmental State Aid guidelines in 2014 provide guidelines for principles of intervention, which apply more broadly to the Commission's energy policy: contribution to a well-defined objective of common interest; remedying a well-defined market failure; appropriateness of intervention; incentive effect on behaviour; proportionality; avoidance of undue negative effects; and transparency of the policy. The guidelines provide for gradual removal of feed-in tariffs and more reliance on competitive tenders. Assistance to nuclear generation will continue to be considered on a case by case basis.

Development of the Internal Energy Market has been very slow. Due to the lack of sufficient cross-border infrastructure, significant price differences which are unrelated to costs and which hamper development of regional markets remain across Member States. While some progress has been made in the completion of the Network Codes, which standardise the requirements for

network users, set out the rules under which EU-wide markets will operate, and specify the way in which TSOs will operate their networks, the Internal Market requires further investments in inter-connection capacity for realisation. The potential benefits of the Internal Market to improve security of supply, increase competition and integrate better the low-carbon technologies in the European energy system remain as aspirations.

The European Union's Third Energy Package implemented in 2009 included core elements such as ownership unbundling, the establishment of National Regulatory Authorities (NRA) for each Member State, and the establishment of ACER as a forum for NRAs to work together. Vertical un-bundling between the upstream business and the transport and storage infrastructure has been an important step forward in making the sector more competitive. However, competition still lags in other areas, notably at the retail level. Retail prices have reached record high levels relative both to historic experience and, more recently, to those prevalent in the United States, contributing to a low level of consumer trust.

Challenges and responses

This section starts with a number of institutional considerations. Then, since many of the issues facing the incoming Commission are common to both gas and electricity, we present the priorities across the sectors, though the implications and implementation may vary across them. We finally discuss some issues which are specific to each sector.

Institutional issues

i. The boundaries of EU competences

A crucial question arises in identifying the appropriate boundaries of EU competence in energy policy. This is particularly important in light of political scepticism about the benefits of membership within several influential Member States. EU involvement is justified in principle in those areas where there exist externalities or public goods across Member States or significant benefits from cross border co-ordination, as identified in the revised state aid guidelines cited above.

One area where there are clear interrelationships between Member States is in security of supply, where reliability in one country has a direct impact on its neighbours. This calls for common principles to determine levels of security, to be met by all Member States, as well as coordination in interconnection capacity investments across Europe. A common European policy regarding this issue should be implemented as a necessary condition to achieve one of the most important benefits of the Internal Energy Market.

Another area of strong externalities and public goods is climate policy. An effective transition to a low carbon economy can only be achieved in a coordinated fashion, not least because Europe

cannot fight climate change alone and is committed to setting an example for others to follow. The transition to a low carbon economy involves several policy areas, ranging from Europe's new climate and energy framework, the need to reform the EU Emissions Trading System (ETS), the further development of interconnection capacity, clarity on State Aid policy in the energy sector, and the question of whether Europe should adopt a technology-neutral approach.

Competition policy is another area which requires EU guidance, particularly if there are market power issues facing those wishing to buy from or sell within other Member States. Competition Policy can both enhance the potential benefits of the Internal Energy Market, and inform the application of State Aid rules.

The EU has a crucial communication role in identifying and publicising the benefits of the Internal Energy Market to encourage adequate policy implementation across Member States. The benefits of greater security of supply, better integration of renewable technologies, and potentially more intense competition require emphasis. However, in this role it is essential to acknowledge that market integration might imply some rebalancing across Europe, with consumers in low energy price countries facing higher prices from interconnections which would result in national producers exporting electricity to high price countries. To obtain support from all Member States, this strand of work should explore regulatory measures which mitigate the negative impacts that market integration might have on some consumers, including revisiting the Electricity Target model. The Commission should explore the use of mechanisms which enable decisions to deliver net benefit overall while protecting the interests of those who would otherwise suffer adverse effects. These can result in fair and efficient outcomes, and facilitate agreements which would otherwise face political opposition. Understanding the extent to which individual Member States can opt out without affecting the overall benefits of the system should constitute an important aspect of the new Commission's work in that area. Continued assessment of the Third Energy Package will also be needed, both to ensure its effectiveness and to evaluate the need for a fourth package.

As a general principle, public goods are more appropriately financed from general taxation than from levies on individual sectors, where they raise concerns of distortion and equity.

ii. *Institutional design*

The current division of responsibility between DG Energy and DG Climate Action clearly highlights particular tensions between different policies, in particular between the sustainability agenda and that of short-term affordability and security of supply. However, the apparent 'trade-off' between environmental and other objectives may not exist, at least in the long term. A reduction in the costs of low-carbon technologies should lead to energy price reductions relative to a 'business-as-usual' alternative as well as to a strengthening of the European industry in this area. Nevertheless there may be a trade-off under a shorter-term perspective, as

the importance given to environmental issues is perceived by some as a threat to European competitiveness. How can short-run effects be reconciled with a longer term perspective? The EU should adopt consistent policies in this area, resisting pressures from interest groups, and regardless of institutional delineations. Environmental standards, prices and profits are generally higher and overall welfare lower, if environmental standards are set separately from those concerned with other aspects of energy markets. While this is an issue for the EU as a whole rather than for individual DGs of the European Commission, changes in the latter's institutional structure will have a material effect on resolution of any perceived trade-off.

The relationship between energy objectives and the role of DG Comp, acting in particular as the enforcer of State Aid rules, also requires clarification. As discussed hereunder, DG Energy needs to identify how far its objectives are consistent with State aid rules and competition rules, for example over the support schemes for renewables and/or nuclear power. As well as the intrinsic determination of priorities, there is a danger that the potential tension between competition and other objectives increases uncertainty and therefore the cost of investment in energy. It is crucial to identify the market failure which any intervention is addressing, both to target it as effectively as possible and to identify its status under the State Aid rules.

iii. European regulator

One continuing debate will be around the possible establishment of a European level regulator, extending the role of ACER. In the past the EC has exercised control usually associated with a regulator (for example, in requiring divestiture and unbundling) through general competition powers. DG Energy will need to consider how far it would be preferable to vest authority in a European level regulator, and the implications this would have for relationships with national regulators and Member States. If an independent European regulator is established, the EC would have to decide whether the relevant DGs would maintain instruments that potentially conflict with the regulator's competences and how their use should be coordinated so as to avoid overlap and legal uncertainty.

The debate about institutional structure between regulator and competition authorities is also very much alive within Member States, reflected in several recent changes in the institutional arrangements for such bodies. What is the best balance between the use of competition and sectoral powers to develop the internal market within the EU and to meet other objectives in the energy market?

Cross-sectoral energy policy issues

i. Reducing carbon emissions in the least cost way

One of the most important challenges is to implement the recently announced 2030 climate change and energy framework, which commits Europe to achieving a 40% carbon reduction and

a 27% share of renewable energy by 2030. While this commitment sets the pathway for future emissions reductions, a recently released IPCC report still considers it insufficient to limit the increase in global temperatures. Furthermore, the 40% emissions reduction objective will not be met if it is not translated into binding targets at the Member State level. Otherwise, individual Member States would have incentives to free-ride on others' abatement efforts. It is equally important to identify how the 27% EU-wide renewable energy target can be delivered, even if the burden is not allocated to binding objectives for individual Member States. While some of the implementation details are yet to be finalised, Europe should adopt an early agreement if it is to increase certainty for the energy sector and its investors. An ambitious agreement is also indispensable for Europe's leadership at the global level in this area prior to the important climate summits scheduled for late 2014 and 2015.

The emissions reduction target can be met through several channels. Long-term decarbonisation is unlikely without further deployment of renewable energy, but nuclear power, carbon capture and storage, energy efficiency, and substitution of coal for gas also have a role to play. The carbon price provides a technology-neutral instrument to select efficiently which among these is the least-cost way to achieve emissions reductions. However, the carbon price at its current level is ineffective in promoting and providing funding for low-carbon investments, while it delivers windfall profits for previously established generation facilities. Reforming the European carbon market or finding some better way of signalling an adequate carbon price is a central issue to be addressed by the next Commission. The quantity of emission allowances needs to be reduced below current levels and mechanisms for increased price stability should be introduced. The EU should not abandon the possibility of adopting an EU-wide carbon tax as a way of signalling an adequate and stable carbon price for Europe.

One question which often arises is whether the emissions reduction target can be met at least-cost with a carbon price alone, particularly if it remains at the currently low levels. Does the carbon price provide a sufficiently strong incentive for the deployment of renewables? Does it induce investors to internalize all the associated externalities (including learning-by-doing effects and imperfections in capital markets)? These and related questions are discussed separately below in the section on electricity issues. If the Emissions Trading System is to remain the main instrument for reducing carbon emissions, it requires radical review so that the price of carbon rises to reflect its true cost.

ii. *Support of Research and Development*

The EU and its Member States have provided substantial support to renewables through a variety of schemes, which have encouraged the development of new technologies. However the priority for the incoming Commission should be to ensure sufficient Research and Development funding for basic research that enhances the development of new technologies and the cost reduction of the existing ones. It is well established that Research and Development, particularly

at the stage of fundamental science, have the characteristics of a public good: because their benefits are shared with all, the market alone does not provide sufficient incentives to develop it without intervention. The Commission should develop clear criteria for assessing the potential value of different R&D activities, to ensure that increased funding is delivered where it is most beneficial.

iii. *Avoid rapid changes in policy and encourage appropriate investment*

As a central policy maker in Europe, the Commission should strive to avoid rapidly changing policies, both in its own policies and in those of Member States. While the Commission has a crucial role in addressing market failures in the energy sector, it is important also to recognise that political failure can lead to fluctuations in policy which create uncertainty in the market. While companies may exaggerate the effect of these for their own benefit, acute regulatory uncertainty can deter or raise the cost of investment. In particular the Commission should provide a policy framework which encourages policy stability both at Union and member state level. This is elaborated more in the section on encouraging gas investment below. In particular, retroactive changes should be avoided.

A major area of investment needed to develop healthy and well integrated energy markets is in expenditure on infrastructure, both to support the necessary cross-border flows and to accommodate the changing pattern of generation and demand across Europe. The deployment of cross-border infrastructure in Europe is key to the integration of renewable technologies in the energy mix, and can widen the potential for stronger competition between energy sources and reduce the costs of supply.

Moreover significant investment in energy infrastructure is crucial to accomplishing a truly integrated EU-wide energy market, which is one of the pillars of European energy policy, and is expected to give access to cheaper energy, increased security of supply and better integration of intermittent sources of energy. Such investments include electricity transmission, gas corridors, storage facilities and smart grid applications. Whilst the EC has already started to take some steps to support the development of infrastructure, further support and policy coordination in this field will be of key importance. Where the criteria for intervention, including cost effectiveness, are met, the EU should provide support for complex, ambitious infrastructure projects, and should promote further intra-regional and inter-regional cooperation on the development of the necessary regulatory arrangements for multi-country projects. The EU could also co-ordinate regulatory regimes between European countries where these are a barrier to such investments, including the development of regulatory arrangements for the operation of infrastructures which will increasingly be shared across Member States.

The structure of the sector also affects the incentives for investment. Unbundling has played a significant part in energy reform. Questions arise, however, as to whether it should go any

further or perhaps even be reconsidered in some areas. An evaluation of the performance of retail markets should determine whether the integration between generators and distributors on the one hand and distributors and retailers on the other is imposing obstacles to the development of competition in these markets. The potential gains of unbundling are clear in principle. DG Energy and DG Competition are in an ideal position to assess its benefits concretely, but also to appreciate any potential shortcomings from its early application of the principle in the sector.

iv. Clarification of enforcement, particularly in retail markets

One area where implementation has lagged considerably behind policy is the deregulation of retail markets. There are signs that some Member States are moving back towards ex ante control or severe limitations on their retail energy markets, partly because household energy costs are a politically sensitive and salient area, and the general level of energy prices continues to rise. Should the EU maintain the approach of the early liberalization process, whereby retail competition was considered as the best way to make consumers better off? Or in the light of its poor performance, should the EU rather switch to a more regulatory approach to provide direct short term consumer protection? Would this latter approach be consistent with the development of a thriving internal market? If prices downstream are capped while those in the wholesale market increase, there is a real danger that upstream developments, and particularly investment, will be hampered. Alternatively, do price control mechanisms or equivalent public interventions determined at Member State level illustrate the merits of subsidiarity as well as a necessary political tool to limit citizens' disengagement from the European integration process? Resolving these dilemmas is a key policy issue for the next Commission, following the anticipated 2014 Commission communication on retail competition.

Consumers have low levels of trust in the market, and one important political factor is the affordability agenda. Public Service Obligations (PSO) have played an important role in the development of markets in Member States. They are, however, often perceived as an impediment to the development of a European level market, as shown in the CERRE report on the topic. Given the political salience of energy costs, the new Commission will have to consider whether energy-related PSOs should be designed at European level. To what extent and how far should energy market design serve social policy? What are the implications for the development of competitive markets? While priorities and policies are likely to differ across Member States, should the EU be involved in those issues? Those questions, and in particular the protection of vulnerable citizens, go to the heart of the relationship between the EU and Member States. While not specific to energy (water, telecoms, post and other network industry services are also concerned), these questions are particularly relevant and sensitive for gas and electricity, because of high energy prices and also because of the increasing proportion of household expenditure on energy bills. Policy measures in the energy sector aimed at addressing affordability concerns should be compared and coordinated with more general fiscal and

welfare policies to support poor households, with the goal of adopting an effective and least distortionary overall approach. Competition for energy supplies to large consumers (business to business) is widely accepted as central to efficient outcomes in other parts of the value chain, and the Commission should focus on ensuring that the internal market works well for this group of customers. An assessment of the benefits of competition for residential consumers is timely, in the light of experience of implementing the third energy package.

The development of smart metering interacts closely with retail market policies. However, this raises further issues, such as how best to implement the smart technology itself, how far this should be mandated to be uniform across Member States and the appropriate interaction between competition in infrastructure and metering and competition in the related product market.

As identified in a recent CERRE report¹², the deployment of smart meters on a large scale will strengthen the potential for demand-side flexibility at household level, thus favouring both consumers (through real time pricing and improved service quality) and retailers. The principles determining co-ordination should be considered in determining whether common standards should be imposed across Member States (for example to allow mass production of meters at acceptable costs).

v. *State Aid control*

The revision of the Energy and Environmental State Aid Guidelines (EEAG) has raised several issues in the context of deploying renewable and nuclear energy. It has also led to intense discussions within the group of academics involved in the preparation of this Dossier. As in other areas, it is important to identify the most appropriate tools to combine competition and environmental objectives/instruments. State Aid control should be used to minimise the potentially-negative impact of national policies. A number of members of the CERRE group are, however, concerned that implementation of the revised EEAG could in effect lead to complete reformulation of those policies, as that would create uncertainty, impose greater security of supply challenges and jeopardise the delivery of the environmental targets.

Energy policy and State Aid should be kept separate: policy harmonisation should be pursued through the former, not through the latter. This links to some of the measures contained in the EEAG. For instance, these require Member States to provide support to renewables solely in the form of a premium to the market price, claiming that the energy market would otherwise be distorted. However, not only is this unsupported by economic principles, it would also fail to

¹² G. Cervigni, P. Larouche, *Regulating Smart Metering in Europe: Technological, Economic and Legal Challenges*, CERRE, 2014, <http://www.cerre.eu/publications/regulating-smart-metering-europe-technological-economic-and-legal-challenges>.

secure the renewable energy targets at least cost as it faces investors with unnecessary price volatility which would increase financing costs and create entry barriers.

Lack of clarity around the principles of State Aid legislation and its application to the energy sector introduce regulatory uncertainty which imposes costs on the sector and its customers. This undermines investors' legal security and confidence, thus risking delay or increased costs of deploying renewables in Europe. In any event, State Aid control should only apply to the future schemes and not to those already in place in order to mitigate the effects of such uncertainties. For similar reasons, the EU should also be vigilant towards changes to support schemes, sometimes imposed retroactively in some Member States.

Electricity issues

i. Renewable energy

A further deployment of renewable energy is necessary to achieve the EU emissions reduction targets. The question is whether such investments will take place without renewable targets at Member State level. Team members preparing this dossier agree on the objective of reducing emissions at least cost, as identified in the first priority above, but there are different views on how best to achieve this end. Some are in favour of binding targets, as they have been a key driver for the growth of clean forms of energy while contributing to rapid reductions in their costs. Cost reductions brought about by large-scale deployment of renewables require commitment to regulatory frameworks, a role which targets provide. The case for targets is strengthened in the absence of a well-functioning carbon market. Other team members argue that a robust carbon price is the best driver to induce least-cost emissions reductions regardless of specific technologies employed. This strategy depends for success on a reformed ETS delivering socially efficient carbon price signals and links to the question of whether the EU should follow a technologically neutral approach, an issue to which we return below.

Integration of renewable energy should also be accompanied by an expansion of the transmission network and by the development of smart grids at the distribution level. The EU must ensure that Transmission and Distribution System Operators can perform their central role effectively in ensuring the quality and security of supply while allowing for the integration of renewables in the energy mix.

ii. Nuclear energy

Similar issues are reflected in the nuclear debate. Member States should legitimately be allowed to determine whether or not they include nuclear power in their energy mix. It is important, however, to arrive at a general understanding regarding the balance between, on the one hand, the potential contribution of nuclear power to decarbonisation and its costs, and, on the other hand, those of other low-carbon alternatives. The Commission should ensure that support to

nuclear power is transparent and assessed in the same way as for renewables, if trust in the single market, and belief in a 'level playing field' are to be maintained. At the minimum, the EU has an important role in encouraging informed discussion.

iii. *Technology neutrality*

The role of renewable and nuclear generation in reducing carbon emissions raises the general issue of technology neutrality *versus* technology-specific support. The EU has recognised the importance of providing varying support for different technologies based on their stage of development, and there are sound economic arguments on 'infant industries' supporting this argument. A fully technology-neutral approach may not necessarily minimise the long-term costs of decarbonisation as the currently cheapest renewable technologies may not always remain so. Furthermore, competition between mature and less mature technologies may result in excessive rents to the former as their costs have not yet converged. There may also be equity arguments against technology neutrality which delivers rents to mature technologies, which have received support in the past, while denying such support to emerging technologies today. However, technology specific support schemes should not become a 'Trojan horse' for special (local) pleas in favour of specific technologies. This would lead to efficiency distortions both across technologies and between Member States. For this reason, it is important that any technology-specific measure be unambiguously justified in terms of the technology's state of maturity and of its scope for future cost reductions, with a clear timetable for its integration into more general support mechanisms.

The next Commission can mitigate these tensions by exploring ways to achieve a more integrated and comprehensive market for renewables in Europe, which could increase the efficiency of investment location decisions as well as deliver lower costs and better learning outcomes across Europe. For instance, an integrated policy could include tenders for renewable capacity at the European level, with no specific country location. Such policy would certainly raise issues such as how to finance investments, which the Commission could co-ordinate with policies similar to those adopted for the funding of R&D or the development of cross-border infrastructure.

iv. *Electricity wholesale market design*

One of the major challenges faced by energy regulation is the need to re-design wholesale electricity markets. The current market arrangements are not well suited to accommodate the greater weight of renewable energies in the energy mix whilst providing the right incentives for the provision of the necessary back-up capacity. The EC has a role to play in informing such regulatory challenge.

v. *Capacity markets*

One response to such challenge is the development of electricity capacity markets at Member State level. Individual capacity markets may, however, pose a real threat to the continued development of cross-border energy trading and the development of the Internal Market, unless they are also truly open to other Member States. Because of the political sensitivity of power outages, it is difficult to persuade Member States, particularly those through which energy flows, to sacrifice sovereignty rather than organising local capacity markets and deploying limited energy for the benefit of their own citizens during potential energy shortages. The new Commission will need to propose efficient measures to harmonise the emerging capacity markets and to ensure that a global problem is dealt with in a coordinated fashion. As argued in a recent CERRE report¹³, coordination of System Operators in case of scarcity as well as the development of good intra-day markets and cross-border balancing markets will also be crucial to achieve this goal.

Gas issues

i. *Investments in infrastructure*

Investment in infrastructure is crucial across energy, but particularly in the gas sector, including cross-border capacity, interconnectors and storage. Proper deployment of these infrastructures as well as their efficient economic functioning is critical for security of supply and the good functioning of the gas market. A more interconnected European gas system allows capacity to cope better with local shocks in supply, thus reducing the total import capacity needed at the European level. However, since there are clear externalities in the investment decisions of the different countries within an interconnected system, it is important to provide answers to two related problems: how to coordinate investments, and how to allocate the costs of excess capacity across Member States.

A key to resolving these problems is to understand the reasons for the weak investment activity in the European gas sector. Regulatory uncertainty regarding the ETS and the current low price of carbon are certainly playing a major role. Because carbon is under-priced, coal is gaining ground against gas, a move which will make it more expensive to meet the carbon emissions targets. Moreover, as the share of renewables in the energy mix increases, the need to reform the ETS is even more pressing to stimulate gas investment.

¹³ G. Cervigni, *Generation capacity adequacy in Europe: What economic rationale for Capacity Remuneration Mechanisms?*, CERRE, 2013, <http://www.cerre.eu/publications/generation-capacity-adequacy-europe-what-economic-rationale-capacity-remuneration-mecha>.

ii. Market structure

Another issue that investors fear is that intense competition between infrastructures will not allow them to recoup their investments, leading to underinvestment in capacity. This clearly applies to storage facilities, which are needed to provide market flexibility and mitigate market power in times of scarcity. The EC should assess whether exemptions from regulation might be creating competition which is “too keen” between infrastructures. There is related to regulatory uncertainty regarding the status of infrastructure whose initial exemption from regulation is time limited and about to expire, which has an important bearing on current decisions on expansion of cross-border and interconnector capacity. Similar issues apply to investment in Liquefied Natural Gas (LNG) plants.

Upstream and downstream markets retain an oligopolistic structure with few main sources of supply and demand. In these circumstances, crafting a well-functioning forward market can be as effective as bringing additional entry into the market. Market liquidity and price arbitration remain challenges for participants in the industry, with large differences in short and long term prices. The current REMIT regulation (Regulation on Wholesale Market Integrity and Transparency) focuses on avoiding the important problem of insider trading. However implementation of this regulation is not straightforward because market transparency is intimately linked to market design, i.e., the welfare effects of opening forward markets depend on market liquidity, which in turn depends on the market microstructure of the forward markets. Since several market designs exist in Europe, the EC should focus on identifying the optimal market design to be adopted by the different hubs.



4. Electronic communications and media

State of play and issues

The “Framework Directive” from 2002 is still in place together with a number of amendments in subsequent years. Despite (or partly because of) the framework and various additional directives, perceived fragmentation is an issue within the EU, both in terms of industry structure and of regulatory outcomes.

The European Commission has enforced a number of interventions in the telecommunications markets, including access (in its 2002 Access Directive, amended in 2009), universal service (in its 2002 Universal Service Directive) and roaming (in its roaming regulation from 2007 with amendments in 2009 and 2012). In particular, the Commission has fixed roaming prices at the retail level.

In its **draft Regulation** concerning the European single market for electronic communications and to achieve a Connected Continent¹⁴ (September 2013), the European Commission intends to take a more active role in the allocation of spectrum. The aim is to harmonise the allocation of spectrum across Member States to allow operators to exploit cross-country synergies.

Contrary to statements in the 2009 Framework review, legacy networks are unlikely to be entirely replaced by fibre in a short time horizon. Progress in xDSL technologies has allowed ultra-high broadband speeds available on hybrid copper/fibre networks. Here, fibre progressively replaces copper wires until a concentration point in the network (between the cabinet and the building) where the DSLAM¹⁵ is placed to convey signals over the legacy copper pairs. These hybrid solutions have the advantage to deliver speeds above 100Mbps and allow for a rapid deployment at a fraction of the rollout costs of a full Fibre to the Home (FTTH) network.

With the convergence of voice and data and substitution possibilities between fixed and mobile, traditional revenue sources of telecom operators have in many cases been eroded. This has added to the perceived underinvestment problem in new infrastructure. Roll-out of Next Generation Access (NGA) and LTE¹⁶ is slow compared to U.S. and parts of Asia in most parts of the EU, with various explanations for it and various opinions as to the urgency of the issue.

¹⁴ Regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent - COM(2013) 627.

¹⁵ A Digital Subscriber Line Access Multiplexer (DSLAM) is a device used by Internet Service Providers (ISPs) to route incoming DSL connections to the Internet. Since a "multiplexer" combines multiple signals into one, a DSLAM combines a group of subscribers' connections into one aggregate Internet connection.

¹⁶ Long Term Evolution (LTE) is the global standard for the fourth generation of mobile broadband (4G), supported by all major players in the industry.

In the interaction between services and infrastructure it appears that several strong OTTs have the upper hand, with large profits being made at the service layers (mainly from advertisement) and rather limited profits by telecom operators who still rely on charging end users only. Classical services offered on a dedicated basis via electronic communications networks (e.g., voice telephony and TV distribution) are now offered over IP networks with comparable quality. With OTTs offering IP-based services (using the networks of the network operators) a new competitive landscape has emerged and classical services are no longer the only game in town and have become a less significant part of the commercial bundle, since they are also offered by OTT providers.

The European Commission has addressed privacy issues with its **2002 Privacy and Electronic Communications Directive** (amended in 2006) together with the Citizen's Rights Directive from 2009. New privacy concerns have recently become the topic of public debate.

As media are moving to the internet, convergence among media is becoming an issue. The Commission is currently reviewing the **2007 Audiovisual Media Services Directive**.

At the institutional level, in 2009 the Body of European Regulators for Electronic Communications (BEREC) has been established with the aim to promote best practice and coordination among national regulators. Recently, the European Commission has established a European Regulators Group for Audiovisual Media Services (ERGA). Its role is merely advisory though, but it is a first step towards a more formal body of regulators also in the audiovisual sector.

Challenges and responses

The overall approach by the European Commission for competition and maintaining a level-playing field is laudable. In light of the technological change and dynamics in the market, a more **dynamic view** seems to be warranted, paying particular attention to the long run implications of regulatory interventions.

i. Access rules

There is possibly a **trade-off between low prices and higher investments**. Rules, especially at the access level, designed for legacy networks, may not work well for next generation networks. However, it is difficult to draw clear conclusions from existing analyses. Access rules should be based on common principles that apply to copper networks, hybrid networks, cable networks and mobile networks. In this respect, it would be helpful to understand the logic behind the Commission's different practices in the costing of mobile termination in contrast to fixed termination.

In the **fixed-line sector**, regulators face the challenge to develop access rules which enable competition between owners of the legacy network and other operators. Regulators have to

take into account the benefits from competition due to investments by alternative operators in particular in areas where competition from cable is absent, while keeping in mind the costs from network duplication. Much of the debate is focusing on access to the legacy networks. While alternative network operators argue in favour of low access prices and an access regime which provides a large number of access products, many incumbent operators claim that at the current level of prices they are not able to secure investments. We note that the availability of attractive access products on the copper part (in particular, close to the consumer) makes it more attractive for alternative access operators to undertake network investments up to that delivery point. However, less favourable access terms for the incumbent tend to lead to lower profits due to lower access revenues and possibly lower retail prices. Abstracting from imperfections in the capital market, this would not provide an argument for higher access prices for parts of the legacy network. However, as several telecom operators are financially in a bad state (high level of indebtedness) higher access revenues may make outside investors more inclined to provide capital for investments. Clearly, for investments to be undertaken, a business case for them needs to be made, but it is questionable whether profits from and protection of the legacy network are the proper instruments. The general message emerges that the European Commission has to take the interaction between Next Generation Networks (NGN) investments and access to legacy networks into account.

ii. Level-playing field

To ensure a **level-playing field** between incumbent operators and alternative network providers, it should be considered that, for instance, activations of new lines could, instead of being provided by the incumbent personnel, be outsourced to external technicians certified and trained by the incumbent. Also, repair services can be outsourced with the aim of reducing the risk on non-price discrimination. NRAs should become active in this direction when there is evidence of such non-price discrimination by incumbent telcos.

In light of the success of several cable network operators, policy proposals that allow for a **more symmetric regulation** between cable network operators and traditional telco operators should be developed, addressing the principle that regulation should be technologically neutral. Broadly speaking, two alternative approaches can be considered, (i) to impose access regulation also on cable network operators when they have market power, and (ii) to withdraw access regulation from telcos in those areas where competition from cable networks is intense. To assess the position of an operator in the market, the common practice to define markets at the national level has to be questioned in this context. Instead, markets may need to be defined at the regional or local level. In those regional or local markets with effective competition, regulation can possibly be withdrawn.

A similar principle of symmetric regulation should be followed more in general across the whole value chain of electronic communications. Specifically, and in light of the monopolization

tendencies at the level of IP-based services and content aggregation, it appears less and less obvious that certain regulations only apply to telcos but not to OTTs. Whether OTTs should become subject to electronic communications regulations depends on their offerings. As an economic principle, two services which, although differing in the underlying technology, are functionally equivalent and are close substitutes for one another should be subject to the same regulatory obligations (or lack thereof). Policy makers have tended to rely on a rather formalistic analysis that has been based on the interpretation of legal categories and on technological considerations. Based on such an analysis, IP-based services do not fall under the scope of the regulation applicable to classical services. This approach should be challenged. The European Commission should consider to make OTT providers, when offering substitute services, face the same regulatory obligations as providers of traditional services, especially as regards universal service, consumer protection, emergency services (in the case of voice over IP, VoIP) or must-carry and content regulation (in the case of IP-based TV and video-on-demand, VOD), an issue we return to below.¹⁷

iii. Net neutrality

The interplay between OTTs and telcos is affected by the policy towards **net neutrality**. Strict net neutrality rules are to be avoided, as there are likely benefits from a more flexible environment and the experimentation of new business models. A European policy towards net neutrality is needed (such a policy is envisaged in the Draft Regulation) to avoid fragmentation due to incompatible rules imposed by Member States. Competition authorities (and DG Comp at the European level) should deal with potentially anticompetitive practices (vertical contracts between content and infrastructure providers, differential treatment of own content by telcos). It would also be anachronistic to attempt a strict application of net neutrality as commercial deals that involve preferential treatment are already arising among some telecoms operators and content and service providers. While vertical contracting may be anticompetitive even in the absence of SMP, we currently do not see a convincing argument for strict net neutrality rules.

NRAs have quite some flexibility when it comes to implementing market definitions and SMP tests (as well as remedies). The lack of a common European regulatory practice runs the risk of regulatory fragmentation. However, it can be argued that some elements of regulatory experimentation are beneficial. Despite the risk associated with regulatory experimentation, the inherent lack of prior knowledge regarding the regulation of a highly innovative sector and the very different situations on the ground across Member States justifies leaving NRAs some freedom.

¹⁷ This argument has been developed in the CERRE policy paper “Convergence, consolidation, uncertainty: future-proofing electronic communications regulation” by Pierre Larouche, <http://www.cerre.eu/publications/convergence-consolidation-uncertainty-future-proofing-electronic-communications-regulat>.

iv. Consolidation

While we do not envisage any changes to current merger guidelines, the European Commission and national competition authorities should pay particular attention to dynamic issues when investigating mergers in electronic communications and media markets. In light of the consolidation in the mobile sector, does it follow that a more dynamic view calls for a more lenient merger policy? We do not think that this is necessarily the case, but we acknowledge that merger policy is currently not very good at assessing dynamic effects, given its static focus on prices. A key question here is the extent to which higher rents from a more consolidated market structure can feed into higher incentives to invest in high speed networks, which would constitute a quality improvement. An efficiency defence of a merger should be open to such dynamic considerations. However, mergers that basically save on fixed costs are not expected, *ceteris paribus*, to have a beneficial effect on consumer prices and network quality. It is yet to be demonstrated that mergers can lead to spectrum optimisation that can reduce marginal running costs or achieve better value propositions to consumers. Merger remedies, when they are used, should not conflict with symmetric regulation.

v. Spectrum

Harmonization of spectrum policies is a laudable aim. The incoming Commission should lay the groundwork to make this feasible in the medium to long run. Exploiting resulting cross-country synergies should also be in the interest of Member States. There is also still considerable differential treatment among mobile firms and broadcasters, which is difficult to sustain and leads to several technical and economic inefficiencies.

vi. Roaming prices

Regulation of **roaming prices** at the retail level would require a sound justification to remain in place. In its present state, the European Commission does not follow its own principles. While apparently rather popular, we see this regulation as an overly interventionist measure with possibly negative overall effects for consumers. A proper evaluation of such a regulatory intervention makes it necessary to take price effects in related markets into account. Also, retail regulation is a last resort only when wholesale regulation alone cannot fix the problem. In this sense, at the wholesale level, unbundling requirements of roaming services appears to be a more appropriate policy. We support the European Commission in advocating roaming unbundling.¹⁸

vii. European digital agenda

Turning the attention from the specificities of regulation to the broader level of the **European digital agenda**, there is some incoherence with respect to **digital targets**. First, the economic

¹⁸ See EU directive No 531/2012, which addresses roaming unbundling.

case is not proven, and these targets seem more political targets that are quite difficult to enforce. Interestingly, it contains an adoption target, namely that at least 50% of the European population by 2020 should be subscribing to services offering speeds of at least 100 Mb/s. Clearly, bandwidth-intensive services are only going to be developed if it is foreseeable that the required infrastructure is in place. What digital targets can possibly address is the coordination problem among the different parties. However, it is unclear what the real demands of innovative services and content providers will be and why 50% adoption is a relevant fraction of participation. Second, not much direction is given on **how** to reach the targets.¹⁹ Third, if a target defines a requirement that a certain quality is universally available, then this could be made a USO. This applies to the digital target that 100% of the population should have access to at least 30 Mb/s. However, this target appears to express rather a policy goal, which would need to be financed through general taxes and should not be made a USO to avoid within-industry distortions, at least not in the near future.

viii. Privacy and data protection

Privacy and data protection issues are an internal market issue. Already in 1995, the Data Protection Directive has been adopted, which is going to be replaced (most likely in the fall 2014) by a Data Protection Regulation (with immediate binding force in all Member States). In addition, in 2002, the e-Privacy Directive has been adopted. The Commission's initiative (i.e., the proposed Regulation) to ensure that harmonized data protection rules apply equally to players active in Europe (and not only established in Europe) is valid and should be supported. The proposed Regulation will strengthen enforcement of the rules, in particular, through stricter sanctions in case of infringements. There remains scope, however, to encourage labelling and certification solutions to increase transparency for users about the privacy-intrusiveness of services and applications. The role of public policy should be to encourage that market solutions for labels and certification are developed. This may be accompanied by publicly enforced minimum standards. There also remains scope for the EU to invest further in research on, and reflect on an appropriate framework for, the future data ecosystem (with personal information bank accounts, personal clouds, etc.), to generate trust and stimulate take-up. These issues should be a top priority of the incoming Commission.

ix. Content

While infrastructure is local, content can be delivered across borders. Incompatible national solutions lead to a fragmentation of markets. We note that some content is truly global (in particular, premium content such as blockbuster movies, top series and certain sports events).

¹⁹ We acknowledge that the European Commission has taken some steps to facilitate reaching those targets (in particular, the proposed Regulation on Measures to Reduce the Cost of Deploying High-Speed Electronic Communications Networks, which has been changed into a proposed Directive by the European Parliament).

Within the European Union, as people live and work in or travel to places outside their country of origin, they want to be able access local content from their country of origin. Hence, also these people rely on being able to have access to foreign content. Also, for content aggregators to be able to tap into the whole European market, they need a European license. A **European copyright law** is desirable and should be a high priority for the incoming Commission. Such a law tends to increase incentives for content generation (both commercial and non-commercial), as a more integrated market allows right holders to quickly access a large population.

Limiting the rights of copyright holders (and collective rights associations) appears to be important to stimulate creativity and innovation in Europe. This may also create stronger demand for additional services on the consumer side and thus encourage investments in infrastructure.

x. Country of origin principle

The **country of origin principle** for media should continue to be applied to facilitate the life of broadcasters. If initiatives to replace this principle by a country of destination principle were successful, this would severely damage the internal market. Some parties advocate total deregulation of the sector. This would create a lot of uncertainty, in particular, about which domestic rules apply to providers from abroad.

An important issue is to look into the role and place of OTTs when they are active as digital media intermediaries. At the moment they are merely subject to the rules in the E-Commerce Directive (and general competition law). Should these digital media intermediaries be subject to, e.g., search neutrality rules or due prominence rules for public service content? While regulatory intervention has to be considered with great care and must be preceded by a convincing argument of market failures, the lack of a regulatory framework for digital media intermediaries runs the risk of inappropriate policy responses including idiosyncratic remedies in abuse of dominance cases.



5. Postal services

State of play and issues

During the past decade the EU postal market has been gradually liberalised, moving away from a government-run service to a market enterprise setting. The purpose of the EU postal legislation is to complete the internal market for postal services and to ensure that efficient, reliable and good quality postal services are available to all EU citizens at affordable prices.

The first two Postal Services Directives (97/68/EC and 2002/39/EC) have provided for the opening up of a number of postal services, including the delivery of parcels and express services. Acting as “**universal service providers**”, incumbent operators were entitled to keep their monopoly on the delivery of letters weighing less than 50 grams (called “reserved area” and representing 70% of all letter post and around 60% of all revenues in the EU). The third Postal Services Directive (2008/06/EC) provided for all EU Member State to abolish remaining reserved areas by 2010 (2013 for some countries).

Those countries which liberalised first now see increased levels of market concentration (Sweden and the Netherlands). However, this appears to be the typical trajectory of a liberalised market and, thus, appears to be no reason to worry.

Today operators are confronted with an accelerating decline in the core mail business. This tends to lead to fewer postal offices, and less frequent delivery of mail. At the same time, e-commerce is gathering pace and postal operators are trying to benefit from this opportunity.

Challenges and responses

In a declining market, regulation has to be revisited to avoid the regulatory burden becoming unreasonable. Indeed some regulations have been gradually removed and this trend should continue if mail finds substitutes in electronic communications as this limits the market power of traditional operators. Parcels regulation should be the least intrusive possible and cover the e-commerce sector at large, not solely delivery.

i. Universal service obligations

The declining consumer-to-consumer market opens a possible **adjustment of the concept of USO**. A new USO should balance the societal needs of citizens of each Member State and the associated cost of the universal service.

More broadly, postal services are affected by the evolution of other sectors, especially intermodal competition for communication services. The European Commission should therefore initiate a discussion on whether USO is still meaningful for mail alone, as there are alternative technologies that allow communications to benefit also more remote areas. The

Commission should therefore consider the possibility of a **comprehensive redefinition of the USO concept**, towards a more general “**right to communicate**”.

In addition, there is a challenging tension between maintaining USO via uniform geographic prices (with the associated cross-subsidies between low- and high-cost areas), and the introduction of competition. To solve this tension, **geographic de-averaged prices and/or auctioning USO** are recommended instead of keeping reserved areas.

In particular, auctions of USO should be designed to encourage participation, allowing players from other sectors (e.g., electronic communications) to participate and offer their solutions to the needs covered by USO. In fact, as mentioned above, the universal service for the postal sector should not be looked at in isolation and a **broader communications universal service should be contemplated**.

The third Postal Directive provides alternative flanking **measures to finance universal service** for mail delivery, namely:

- a. Public compensation (public subsidies or public procurement procedures);
- b. Access pricing (paid by new entrants to use incumbent’s network). Notice that with appropriate unbundling and access regulation, the case for retail pricing regulation is called into question;
- c. Compensation fund (cost of USO funded through taxes on operators or on customers);
- d. Pay-or-play (new entrants in low-cost areas, i.e. cities, must pay a compensation fund to finance the postal services in high-cost areas).

It is very important, though, that the **financing of USO** should be made **transparent**. Likewise, the **costing of USO** must be **transparent and based on common principles** in all Member States. A transparent costing would also help policy makers to better understand the net resources to be raised in case a USO policy is to be adopted, as often the costs of USO interventions appear to be underestimated.

Finally, there are **no compelling reasons to impose harmonisation** across Member States. Instead it is logical that each Member State selects the solution it considers most appropriate, as long as general rules on state aid are followed. The Commission could suggest a low minimum agreed standard and then, according to the subsidiarity principle, individual Member States could implement stricter requirements.

ii. Objectives of regulation

In terms of the objectives to be reached by regulation, one could think of transposing the SMP regime typical of electronic communications to post. Under this regime, relevant markets are first identified, which form the basis for an economic analysis of dominance and corresponding

remedies. This system could replace the current non-discrimination requirement. The former is more based on proper economic analysis, but it is also more costly and possibly intrusive, especially given the declining nature of the mail sector. The latter is conceptually simpler to implement but less grounded on economic principles, as non-discrimination cannot be an objective *per se*. If kept, non-discrimination requirements must be clarified considerably as well as the goals they intend to achieve.

As mail is competing with other types of communication, VAT exemption of mail should be removed across Member States, as this possibly distorts “intermodal” competition. In particular, Article 132 Section 1 (a) of VAT Directive 2006/112/EC should be removed.

A European approach towards legal documents in electronic communications (and electronic signatures) appears to be desirable and the incoming Commission should make efforts to make progress in this direction as this can lead to important cost savings for firms, public authorities, and consumers. However, at least in the medium term this cannot fully replace mail of legal documents.

Since incumbent postal operators still have a rather dense network, with postal offices spread over the country, there is an allegation that they might leverage this asset into other sectors (e.g., banking or mobile phones). While this cross-subsidisation is indeed possible in principle, we do not envisage any particular intervention by the European Commission. An *ex post* assessment of competition would be the appropriate tool.

6. Rail

State of play and issues

Regulation of rail transport is seeing a number of changes at the European level. A large amount of legislation has been introduced in recent years, culminating in the recast of the 1st Railway Package, for which the implementing acts are still under preparation, and the 4th Railway Package which is still making its way through the legislative process.

With respect to **vertical separation**, separate organisations are required, with independent decision making regarding charging and capacity allocation. However, these organisations may be part of a holding company structure (as in Austria, Germany, Italy, and proposed for France). The 4th Railway Package originally proposed complete separation, but in its revised draft allows for continuation of the holding company structure, albeit with tighter Chinese walls and greater penalties for infringement. Arguments remain that vertical separation leads to system sub optimisation through misalignment of incentives. On the other hand, with the holding company model discrimination against new entrants remains a risk.

The market has been opened to **competition**. There already is open access for freight and international passenger traffic. The 4th package proposes competition for domestic passenger services, through open access for commercial services and competitive tendering for services run under public service contracts. Some countries (notably Great Britain, Sweden and more recently Italy) have already effectively implemented this, but other countries have no competition in the domestic passenger market, and even the freight market is still often dominated by the incumbent. In general, it is fair to say that there is limited competition for passenger services in most Member States.

Various **regulatory measures** have been introduced at the European level. It is required that there be a regulator, and this is now required to be a body independent of the Ministry. Track access charges are calculated to ensure effective and efficient competition – they should be based on marginal costs but mark-ups are permitted where needed to achieve financial balance. In practice, the range of structures and levels of track access charges is wide among European countries. It is also required that, either through the regulator or through a direct multiannual contract with the Ministry, states should ensure that infrastructure managers are efficient, and are adequately funded. In practice, there remain doubts as to the efficiency of many infrastructure managers and enormous problems exist with funding of some Central and Eastern European railways.

Technical standards for **inter-operability** are in place under the leadership of the European Rail Agency (ERA). But it will take several years to overcome technical differences among countries, and even the technical specifications of interoperability (TSIs) are being implemented differently



in different countries. The 4th package proposes more standardisation of vehicle acceptance with a bigger role for ERA.

Challenges and responses

i. Organisational structure

The **freedom of organisational structure** should continue as a principle and should even increase, together with the development of a strong independent regulator. Available empirical evidence tells that there is no one-size-fits-all structure that should be adopted everywhere. Country differences (mainly due to geography and population density) can lead to different organisations of the vertical structure. Since structural choices can vary by country, it is particularly relevant that they are approved and supervised by strongly independent regulators with effective powers to intervene in the market in the event of alleged discrimination.

ii. Legislation enforcement

The 4th Railway Package was intended to complete market opening by permitting competition in domestic passenger services, either through open access for commercial services or competitive tendering for public service contracts. The Commission will need to consider how far modifications to the package by the European Parliament might prevent this aim and lead to the need for further legislation to achieve it. Apart from this, no further rail legislation is required for the next four years. The European Commission should give time for the 4th package to produce effects, and not start working on a 5th package already. The focus should be on **enforcement** and on providing support to the **independence of the national regulators**. There should also be greater **penalties for infringements**, which will help enforcement.

In terms of regulatory requirements and tools, financial flows need to be more transparent, as do costing methods for track access charges (the Commission is tackling this in implementing the first railway package recast).

iii. Underinvestment

In many Member States there are **limited funds** for track maintenance, rehabilitation and upgrades. This is of particular relevance in a number of Eastern European countries. The underinvestment problem has to be addressed before gains from competition and liberalization can be expected. The European Commission should consider how to ensure that adequate funding is available to deal with these problems, as opposed to concentrating funding on major new projects.

iv. Competition

The perceived lack of competition appears to be due to barriers of entry, which may need to be addressed at the national or even regional level. For passenger rail, this applies in particular to ticketing services (e.g., enforced joint ticketing, rights to use alternative carrier in case of missed connection), but also to the availability of rolling stock.

v. Environmental policy

In terms of **environmental policy** objectives, the Commission has long had a policy of charging each mode its external costs, but Member States have resisted measures to implement it. It is therefore important to the future of the rail sector that the Commission's policy of fully charging external costs on all modes be implemented. Progress towards implementing that policy is currently perceived to be slow. Currently, striking asymmetries between different modes of transport persist. This includes different rules for infrastructure charging among the modes and different tax frameworks. Appropriate inclusion of external costs will help achieve a **level playing field among the different modes of transport**. The re-adjustment of intermodal framework conditions is necessary to avoid distortions of competition and to create a single European market. The incoming Commission should push in this direction.



7. Water

State of play and issues

Water and waste water assets are generally (though not universally) publicly owned, but services are delivered by a mixture of public and private companies, some of the latter long established. The Right2Water campaign submitted a policy proposal to the EC in December 2013, using the EU Citizens' Initiative. The EC responded by affirming the unique role of water *"not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such"*²⁰. The EC also emphasised the importance of developing more transparency and benchmarking, and ensuring equal treatment, within the context of national and local choice.

As well as raising issues of competition and universal service, the water sector brings together a number of quality issues, including environmental management and the Drinking Water Directive, raising issues of how quality levels should be determined and the cost of their achievement met.

Challenges and responses

The issues are framed by the two questions above, namely how far there is scope for competition while preserving appropriate local autonomy over water sources, and the nature of the Public Service Obligation, its valuation, and its interaction with any competitive process. It is the operation rather than the ownership of the assets which is in question, since most assets remain publicly owned. However maintenance of existing infrastructure and investment in new assets remains crucial to continuing supply, and there are concerns about raising sufficient revenue to support these activities to the requisite level to provide this essential service to future generations.

The exclusion of water from the Concessions Directive²¹ presents a number of immediate tasks for the Commission.

The first is an assessment of the effect of exempting the water sector from the Concessions Directive. The Commission must produce such a report within five years of the Directive (i.e. by 2019) on any effects of the exemption on the internal market, and the costs and benefits which may have resulted.

²⁰ First recital of the EU Water Framework Directive, 2000/60/EC.

²¹ Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts.

Since the debate is hotly contested and deeply political, such a report should provide valuable information which can form the basis of future decisions. The Commission thus has a crucial role in informing the political and economic debate through providing data on the current nature of the water services sector.

The Commission is committed to providing and supporting benchmarking initiatives, which will themselves provide information on the relative performance of the water sector in different areas. While comparability may be difficult because of varying local conditions, the Commission should be encouraged to provide these data which will inform the debate and enable future decisions to be taken with more knowledge of the costs and benefits of different arrangements. The transparency agenda will enable the best use of such additional knowledge.

The Commission should continue its consideration of differential VAT obligations, and how these might distort the market, including potentially adverse effects on costs and prices.