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# Telecommunication Regulation in the United States and Europe: The Case for Centralized Authority

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#### 1 Introduction

The twin goals of telecommunications liberalization and promotion of integrated infrastructure require a centralized regulatory authority, however, concerns over local autonomy conflict with this need. In Europe, the debate focuses on the allocation of jurisdiction between National Regulatory Authorities (NRAs) in the member states and the European Commission (EC); in the United States, the conflict is between state Public Utility Commissions (PUCs) and the Federal Communications Commission (FCC). While the tension between local and national regulatory institutions is not new, the issue is both more important and more difficult to resolve today.

First, a centralized regulatory authority is needed today if efforts to promote increased local competition and deregulation (US) -- or liberalization (European Union) -

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- are to be successful. The policy challenge is to manage the transition from monopoly regulation of a dominant incumbent carrier to a competitive market with a level-playing field for both the incumbent and new entrants. Creating this level-playing field means eliminating both regulatory and economic barriers to entry. When most of the strongest potential competitors to the incumbent operate in multiple local jurisdictions, heterogeneous local rules tilt the field in favor of the *status quo* and the dominant incumbent local carrier. In the US, this favors the Incumbent Local Exchange Carriers (ILECs) such as Bell Atlantic, SBC, or US West; while in Europe, it favors the national incumbent operators (called Telecommunications Organizations (TOs) in the European Union (EU)) such as France Telecom or Deutsche Telekom. An ILEC or TO can take advantage of heterogeneous rules and multiple regulatory fora to deter or delay increased competition. A centralized regulatory authority can help minimize opportunities for such behavior.

Second, a strong centralized authority is needed to facilitate deregulation. It is preferable to role up the regulatory carpet from the edges. The process of liberalization is likely to proceed more rapidly and will be easier to manage and coordinate if authority is centralized first. On the other hand, if the centralized authority is eliminated first, there is a significant risk that local deregulation will proceed asymmetrically, if at all.

Third, the emergence of the Internet and the goal of promoting an integrated global information infrastructure reduce the validity of assigning regulatory jurisdiction based on geographic boundaries. The Internet is inherently footloose, increasing the

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 2 of 25

difficulty of asserting local control. Allocations of jurisdiction on the basis of intrastate/interstate (US) or national (Europe) boundaries made more sense in a telephone-only world, but are no longer sensible in the Internet Age. Attempts to apply asymmetric local regulations may prove futile, but they may also distort or deter investment that is needed if the Internet is to continue to grow and evolve.

While the need for a strong centralized authority may be greater, prospects for satisfying this need are dimmer, largely for political rather than economic reasons. In the US, the FCC's ability to serve effectively as the centralized authority has been called into question by a series of decisions by the 8<sup>th</sup> U.S. Circuit Court of Appeals (8<sup>th</sup> Circuit). In Europe, there is no such thing as a Euro-FCC and creating one in the present political environment is likely to be extremely difficult. In both the U.S. and Europe, strengthening or creating an effective centralized regulatory authority will require overcoming significant legal and institutional challenges. In this paper, we do not address these issues, focusing instead on presenting the economic arguments for why a weak or non-existent central regulatory authority is detrimental to promoting competition and liberalization, and is more harmful today than in the past.

#### 2 Economics of Dual Regulation

Both the US and EU have dual regulatory systems consisting of local regulatory authorities and a centralized authority. In this section we examine the economic basis for allocating jurisdictional authority, offering two arguments in favor of (and one against) centralizing authority, as follows:

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 3 of 25

- Coordination and spillover externalities: yes, especially now with Internet.
- Local information and participation: *no*, more important in the EU than in the US.
- Regulatory costs: *yes*, even more so with deregulation and in light of rent-seeking costs (regulatory capture) which is especially relevant in the EU.

The following sub-sections explain these arguments in greater detail.

### 2.1 Coordination and spillover externalities

When there are spillover, coordination or network externalities across multiple local domains, centralizing authority offers an obvious mechanism for assuring that these are appropriately internalized.<sup>2</sup> In the case of telecommunications networks there are substantial externalities because the same facilities are used to support both local and interstate/cross-border services.

The value of centralized authority increases with the degree of market fragmentation across geographical sub-markets (EU Member States, U.S. states). The European Union in particular has traditionally been characterized by substantial market fragmentation.

 $<sup>^2</sup>$  Coordination, spillover, and network externalities are common in telecommunications. Coordination externalities arise when activities in one domain need to be coordinated with activities in another domain. For example, a telecommunications service provider that provides service in multiple states would need to coordinate facilities planning for its backbone network which is shared by each of the states. Spillover economies occur when activities in one domain produce costs or benefits in another. For example, mass media advertising is likely to spillover to adjacent markets. Network externalities arise because the value subscribers place on network access is usually increasing in the size of the total subscribership (*i.e.*, telephone callers value telephone service more when they can call more people). Network externalities make a larger network more valuable than a smaller one.

Lack of service standardization, widely differing supply conditions, and the unavailability of many cross-border services are leading to large welfare losses.

The externalities and spillovers are more apparent at the wholesale level (between carriers) than at the retail-level (services sold to end-users) when competing suppliers are active in multiple local markets (which is particularly relevant in the case of US ILECs). In that case, heterogeneous regulations may distort investment incentives or operating behavior as carriers are encouraged to venue shop or otherwise arbitrage regulatory distortions.

#### 2.2 Local information and participation

There are two important reasons for decentralizing authority. First, decentralizing authority may be advisable to take flexible account of differences in local circumstances and to economize on information costs. For example, the costs of building a local telephone network are different in the mountains of Colorado and the plains of Kansas. In the European Union, the differences are less a matter of construction costs than of different institutional, cultural, and economic legacies.

Decentralization may also be advisable if information is most efficiently collected and maintained locally. For example, effective regulation of local incumbents requires collecting significant amounts of data. Local authorities may be in a better position to gather and synthesize this information. However, as we explain further below, decentralized information management becomes more problematic during liberalization

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 5 of 25

and when the incumbents are active in multiple local markets (*i.e.*, the information is no longer local).

A second, and related reason for decentralizing authority is to facilitate local participation. For telecommunications, this is most important with respect to issues of especial local concern such as the retail-level pricing of local services and the quality of local customer service. Local oversight of these issues may be justified on these grounds. On the other hand, centralization may lower participation costs for issues that affect multiple domains. For example, issues that concern carrier competition affect multiple local jurisdictions and require an understanding of technical, regulatory, and economic issues that may not be readily available locally.

## 2.3 Regulatory costs

The costs of regulation affect an assessment of the appropriate level of centralization in three ways. First, to the extent that local authorities confront similar problems that result in similar decisions, centralization may reduce the administrative costs of duplicate regulation. In principle, these benefits could also be realized by allocating responsibilities among specific local authorities, however, this would not reduce the shared and common costs of maintaining multiple local authorities. These costs may be increase as the regulatory challenge becomes more complex and requires more specialized and expensive human capital resources and the funds available to sustain such resources become more scarce. For this reason, liberalization and industry convergence are likely to increase the need to centralize authority.

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 6 of 25

Second, when regulators confront an environment of great uncertainty, there are advantages to experimentation. Decentralization of authority that allows flexible heterogeneity in approaches may be useful in discovering the best policy approach. This is sometimes referred to as the "Laboratory of the States."<sup>3</sup> While this may prove very useful, a strong centralized authority is desirable when it comes time to disseminate and implement the optimal solution to overcome resistance from laggard local authorities. In the case of promoting local competition in the US, the laboratory experiments were run for over a decade, and with passage of the Telecommunications Act of 1996 it was time to implement the national solution. In the case of the Internet, we do not yet know how these markets will evolve, so regulation seems premature at both the local and centralized level.

Third, *ceteris paribus*, decentralized regulatory authority is likely to be more cumbersome than centralized authority, making it more difficult to change the *status quo*. This is desirable when there is a risk of regulatory capture by a narrow interest group. It is not desirable when the goal of policy is to change the *status quo*. This is the case with respect to promoting liberalization and increased competition. Overall, therefore, the economics of regulation suggest that increased centralization is desirable.

Lehr & Kiessling

Telecom Regulation in the US & The European Union

<sup>&</sup>lt;sup>3</sup> See Noll and Smart (1989).

#### **3 Dual Regulation in the US and EU**

As noted above, both the US and EU have dual regulatory systems. In both cases, there has been a trend towards increasing centralization, although the US has progressed substantially further. In the US, there has been a presumption that the central authority has a right to preempt local authority, with the burden of proof being on the local authorities to demonstrate that such preemption is not appropriate. In the EU, the subsidiarity principle embodied in the EC constitution,<sup>4</sup> implies the opposite approach: there is a presumption that authority resides at the local level, with the burden of proof being on centralized authorities to justify their role. As we explain later, while we advocate stronger centralized authority in both cases, these alternative approaches are appropriate to the differing circumstances in the US and the European Union.

#### 3.1 Dual regulation in the US

In this section we briefly review the roles of the main regulatory actors in the US, the Federal Communications Commission (FCC) and the state-level Public Utility Commissions (PUCs).<sup>5</sup>

Lehr & Kiessling

<sup>&</sup>lt;sup>4</sup> This principle is embodied in a number of provisions of the EC Treaty, for example in the European Union antitrust legislation Art. 85 and 86 EC Treaty. These rules only apply to Member States if cross-border trade is impacted to a considerable extent. If this is not the case, Member States' antitrust rules apply instead. For further discussion of the regulatory landscape in the European Union and the role of the subsidiarity principle, see Kiessling and Blondeel (1998).

<sup>&</sup>lt;sup>5</sup> For a more complete discussion, see Vogelsang (1994), Kellogg, Thorne, and Huber (1992), or Noll (1989).

Historically, the PUCs have been responsible for regulating intrastate telecommunications services, while the FCC has been responsible for interstate services.<sup>6</sup> This demarcation of responsibilities has always been somewhat arbitrary because the same facilities that support local calling services also provide access to interstate toll services. Over time the FCC extended its authority by asserting its right to preempt local authorities on issues related to interstate services.<sup>7</sup> For example, the FCC forced the opening of the Customer Premise Equipment (CPE) market to competition and deregulated enhanced services in its Computer II decision in 1980, over the opposition of state commissions.

More recently, the FCC's authority has been called into question by the decision of the Eighth US District Court of Appeals to strike down a portion of the FCC's Interconnection Order which the FCC issued as part of its effort to implement the Telecommunications Act of 1996's pro-competitive rules for opening and unbundling the local access networks to competing carriers.

#### 3.2 Dual Regulation in the European Union

Dual regulation emerged somewhat later in the EU than in the US. In Europe, telecommunications were regulated exclusively at the member state level until the early 80s. The Commission applied its competition policy to telecommunications for the first

Lehr & Kiessling

<sup>&</sup>lt;sup>6</sup> Section 2 of the Communications Act of 1934 limits the responsibility of the FCC to interstate and international telecommunications.

time in 1985<sup>8</sup> and in 1987 presented a framework for future regulation and liberalization in the telecommunications sector.<sup>9</sup> In contrast to the US, still today there is no designated, central (=EU level) regulatory body in telecommunications. Regulatory policy is conducted in parallel by several, relatively independent policy-making authorities that often pursue conflicting goals. However, the Commission has been attempting to impose itself as the *de facto* EU level regulator in telecommunications. Below we summarize the current scope of dual regulation between the Member States and National Regulatory Authorities on the one hand and the European Union institutions (Commission, Council and Parliament) on the other hand.

The European Commission – Directorate General IV (Competition). DGIV is responsible for EU competition policy. DGIV is the main architect of the Commission's liberalization policy in telecommunications and its central instrument has been Art. 90 EC Treaty which has been used successively to liberalize telecommunications markets (*e.g.*, services other than voice telephony in July 1990, voice telephony and infrastructure provisioning in January 1998, etc.).<sup>10</sup>

The European Commission – Directorate General XIII (Telecommunications, Information Market, and Exploitation of Research). DGXIII is responsible for the

<sup>&</sup>lt;sup>7</sup> See Vogelsang (1994).

<sup>&</sup>lt;sup>8</sup> In a landmark decision the Commission found in 1985 that British Telecom had abused its dominant position in the telecommunications market (see Ravaioli, 1991).

<sup>&</sup>lt;sup>9</sup> Commission of the European Communities (1987).

<sup>&</sup>lt;sup>10</sup> For a succinct history of telecommunications liberalization in the EU see Kiessling and Blondeel (1998).

execution of the EU research and development programs in telecommunications, the Open Network Provision (ONP) legislation as well as various harmonization and standardization measures. DGXIII also played an important role in the definition of the core regulatory competition framework. The draft process of both the 1997 Interconnection Directive<sup>11</sup> and the 1997 Licensing Directive<sup>12</sup> was driven by DGXIII.

*Council of the European Union.* The Council of Ministers is comprised of the Ministers of Member States that are responsible for telecommunications policy, and therefore represents the Member States' interests. Regulatory measures of the Council often express political compromises between the Member States. The Commission depends crucially on support of its liberalization measures from the Council. The Council and the European Union Parliament have passed the core regulatory framework enabling the transition to competitive markets in telecommunications, i.e. the Licensing Directive<sup>13</sup> and the ONP Interconnection Directive.<sup>14</sup> However, as we show below, the Council has also blocked many measures proposed by the Commission in, for example, the areas of market entry liberalization, licensing, etc., thereby expressing the opinion of

<sup>&</sup>lt;sup>11</sup> The European Parliament and Council of the European Union, Directive 97/33/EC of 30 June 1997 on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP). *OJ L 199/32 (97/33/EC, 26.7.97)*, 1997.

<sup>&</sup>lt;sup>12</sup> The European Parliament and Council of the European Union, Directive 97/13/EC of 10 April 1997 on a common framework for general authorizations and individual licenses in the field of telecommunications services. OJ L 117/15 (97/13/EC, 7.5.97), 1997.

<sup>&</sup>lt;sup>13</sup> The European Parliament and Council of the European Union *op cit* Ref 12.

<sup>&</sup>lt;sup>14</sup> The European Parliament and Council of the European Union *op cit* Ref 11.

conservative Member States.

*Member States and National Regulatory Authorities (NRAs).* The central objective of Member States is to control he evolving national regulatory and market environment. It is therefore in the interest of Member States to keep the Commission from extending its regulatory powers into areas which the Member States consider to be under national regulatory responsibility.<sup>15</sup> As a result, the NRAs are currently working to impose themselves as the prime regulatory authorities for the transition towards competitive markets.

#### 4 The Need for a Centralized Authority

In the introduction, we offered three reasons for why a centralized regulatory authority is more important today. These included the promotion of local competition in the face of resistance from an entrenched incumbent, more efficient management of overall deregulation, and the changes in networks implied by the emergence of the Internet. In the following three sub-sections, we explore each of these arguments in greater length.

#### 4.1 Promoting Competition

A strong centralized authority is needed to promote telecommunications competition. The biggest challenge facing policy-makers in the US as well as in the EU is

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 12 of 25

<sup>&</sup>lt;sup>15</sup> Analysys, *Network Europe: Telecoms Policy to 2000*. Analysys Publications, Cambridge, 1994, 8f.

how to promote efficient competition for local services, which remain a de facto monopoly virtually everywhere. Heretofore, the economics and the regulatory legacy has protected the dominant position of the incumbent carrier. In the past, most analysts believed that provisioning telecommunications networks was a natural monopoly (either because of network interconnection externalities or scale and scope economies). This helped justify regulating telecommunications as a protected monopoly. In most of Europe, the telecommunications provider was publicly owned; in the US, the Bell System was private, but was subject to comprehensive regulatory oversight. With changes in the market and technology, it became feasible to introduce increased amounts of competition along the telecommunications value chain. Thus, recent regulatory efforts have rightly concentrated on introducing competition in the remaining monopoly areas (*i.e.*, local services in the US, and local as well as long-distance services in the EU).

Introducing local competition requires a change in the regulatory paradigm. Regulators need to remove regulatory and economic barriers that deter competition from other carriers. Instead of protecting the regulated incumbent's market from creamskimming entry, the regulator must develop policies to promote the emergence of competition. The dominant incumbent carrier has little incentive to cede market share to entrants willingly. By defending the *status quo* and resisting the implementation of new policies, the incumbent can forestall the implementation of market-opening, procompetitive regulatory reform.

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 13 of 25

Examples of how incumbents may exploit dual regulatory regimes to slow the progress of competition abound. In the US, following over a decade of state-level experiments in alternative regulatory regimes (*i.e.*, the laboratory of the states), Congress passed the Telecommunications Act of 1996. Passage of this act signaled general recognition that a national policy was needed for local competition to succeed, yet almost three years later, the Act has still not been successfully implemented anywhere. Similar issues are debated state-by-state and it doesn't even matter if the states all decide identically on the same issues, as is often the case.<sup>16</sup> Arguing the same contract provisions between the same parties with often the same expert witnesses in state after state serves only to slow the process of implementing the Act.

In addition to delay, heterogeneous entry rules create entry barriers for competitors who compete in multiple local areas. In the US, the ILECs operate in multiple states; as do most of their competitors. Requiring these competitors to develop state-specific infrastructure provisioning and marketing plans increase entry costs. The regulatory uncertainty and the staggered sequence of procedural decisions also contribute to higher entry costs.

<sup>&</sup>lt;sup>16</sup> For example, in each of the 14 states in which US WEST is the ILEC, US WEST has argued that it should not be required to comply with the FCC's interconnection order (see *First Report and Order, In the Matter of Implementation of Local Competition Provisions in the Telecommunications Act of 1996*). In each state, the PUCs have eventually upheld substantial portions of the Order. These include such things as requiring US WEST to permit resale of all services, unbundling at least the set of elements identified in the FCC's order, and implementing electronic interfaces at parity.

In the EU as well, without the European Commission as a central regulatory driving force, market competition would have been further delayed and more fragmented due to resistance from conservative Member States, as well as national dominant network operators. The following summary of major events on the road to liberalization illustrates this point:

- May 1992: The Council refuses the Commission's proposal to rapidly eliminate the remaining monopolies. In its decision the Council expressed the will of the majority of Member States.<sup>17</sup>
- April 1993: The Commission's proposal to liberalize cross-border telephony services in the EU on 1 January 1996 fails to gain support from Member States.<sup>18</sup>
- July 1993: The Council confirms 1 January 1998 as the date for the full liberalization of all remaining monopolies. This date had been proposed by Member States.<sup>19</sup>

#### 4.2 Efficient Liberalization/Deregulation

A centralized authority is needed to coordinate and manage telecommunications deregulation. Lack of coordination among local authorities in the pace and way in which deregulation proceeds may result in heterogeneous rules that will distort competition and

Lehr & Kiessling

<sup>&</sup>lt;sup>17</sup>Telecom Markets, 1992, 25 June 1992, 1–2.

<sup>&</sup>lt;sup>18</sup>See Schenker (1993).

<sup>&</sup>lt;sup>19</sup>Council of the European Union, Resolution of 22 July 1993 on the review of the situation in the telecommunications sector and the need for further development in that market. *OJ C* 213/1 (93/C 213/01), 1993.

incentives to invest or comply with regulations. Disparate regulatory regimes create opportunities for venue shopping whereby firms whose activities are regulated in one market may seek to move those activities to another, less regulated market. This makes it more difficult to enforce remaining regulations and raises the costs to competitors active in multiple markets.

In addition, as liberalization proceeds, regulators will relinquish resources and relax requirements for information sharing. This will reduce the regulators' capability to regulate at the same time that competition and convergence will be fueling the rise of increasingly complex supplier relationships and organizational forms. In this environment, scale and scope economies are likely to make it more efficient to concentrate regulatory expertise in the central authority.

The need for a centralized authority is perhaps best understood if one considers the alternative: deregulating from the center outwards. If followed to its conclusion, we may end up with local authorities intact, but no centralized agency capable of coordinating decisions, sharing information, and economizing on duplicative efforts. In this case, it will be even more difficult to effect policy reforms to the *status quo*.

Maintaining or increasing the power of a centralized authority is not inconsistent with rapid deregulation. Once local regulations have been relaxed and competition is firmly established, it will be possible to deregulate at the center as well.

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 16 of 25

#### 4.3 The Internet and Geographic Boundaries

The emergence of a global communications infrastructure, as exemplified by the Internet, increases the benefits of centralized versus local regulation. This is due to a number of factors, including changes in market structure, regulatory approaches, and the technology of the Internet.

With globalization and industry convergence, the potential spillover effects or externalities associated with the telecommunications sector have increased substantially.<sup>20</sup> A global communication infrastructure reduces transportation costs, breaking down geographic boundaries between markets. Consumers and potential suppliers may more easily collect and share information about product offerings and prices. The Internet reduces the entry costs for bcal retailers interested in participating in wider-markets, or of national/global retailers participating in local markets. This is true of the communication services themselves, as well as the trade that they support.

Industry convergence also poses important challenges for regulatory policies in other domains such as content, privacy, intellectual property, tax policy, and security – all issues which require national (in the US) or EU-wide oversight. More traditional aspects of regulatory policy such as cost separations by markets or services are much more

<sup>&</sup>lt;sup>20</sup> Convergence of the computer, data communications, and telecommunications industries on the network side; convergence of entertainment media, publishing, and interactive multimedia services on the content side; and, integration of local, national, and global markets increase the potential for spillovers across industry, technology, and market boundaries relative to the earlier world of POTS and separate networks for television distribution, data communications, and telephony.

difficult in a world of converging infrastructure. For example, in the US, the allocation of costs to interstate and local markets, or between regulated and enhanced services becomes increasingly arbitrary both because firms are using common or shared facilities to compete in multiple services (*e.g.*, service bundling to offer one-stop shopping or integration of local, long distance, and international services) and because of changes in the technology (*e.g.*, packet switching). The increased complexity and arbitrariness of cost allocation procedures makes it more difficult and error-prone to sustain demarcations of regulatory authority based on geographic boundaries.

It is also important to understand how the emergence of the Internet as a new networking paradigm reduces the relevance of geographic boundaries, thereby enhancing the need for centralized authority. First, the basic features of the Internet make it less amenable to local regulation:

- *Packet switched, not circuit switched*: increased routing options and less hierarchical switching increases the extent to which local and interstate or EU-wide facilities are shared or common.
- *End user control*: with network intelligence shifted to the periphery, it is less feasible to sustain arbitrary regulatory-mandated heterogeneity at interconnection points in the backbone (*i.e.*, across state or national borders); and, the boundary between customer premise equipment (CPE) and the network is blurred.
- *Multimedia*: In the Internet, traffic is multimedia (voice, video, data) and hence much more heterogeneous (with respect to value, source of origin -- receiver or sender).

This makes it more difficult to develop an appropriate basis for metering traffic to establish prices or allocate costs.

- *Open, interoperable standards*: encourage interconnection of existing diverse infrastructure further increasing spillover effects; while heterogeneous local regulation that affects the evolution of Internet technology (*e.g.*, local filtering requirements required to be implemented in router software) poses a significant risk for the continued evolution of the Internet.
- Internet, historically not regulated: The Internet has been subject to substantially less regulation than the incumbent telephony carriers. If the Internet evolves into *the* platform for our global communications infrastructure -- supporting telephony as one application among many -- then it will be subject to communications policy. Implementation of a coherent policy will be hindered if there is a legacy of disparate local regulatory policies that must be rationalized and if there is no strong centralized authority.

#### 5 The US and the European Union Experiences Differ

Although similar in many respects, there are important differences between the EU and US that make the need for centralized authority less important in the EU, or to put it differently, central authority in the EU should fulfill a more circumscribed role.

The US and the EU are obviously two economic areas with very different economic and political characteristics. The US shares a common language, culture, and with minor differences, set of political and regulatory institutions. In the EU, national differences are substantially more pronounced, with language being only the most obvious distinction. These differences make the case for centralized authority categorically different then in the US. Although the extent of cross-border telecommunications demand in the EU is comparable to interstate demand in the US, the supply side has been historically fragmented into national markets. Although this in itself bolsters the argument for centralized authority, the resulting fragmentation in supply promotes nationally oriented constituencies and thus strong local regulation. Only recently have the dominant national operators in the EU such as British Telecom or France Telecom begun significant efforts to offer services outside of their home countries, either directly or through strategic alliances.

Differences in regulatory market models in the EU provide another reason why the need for a centralized regulatory authority in the EU is less strong than in the US. The US is by and large characterized by more homogeneity of views as to the basic competitive framework. This has been further enforced by the Telecommunications Act of 1996. In contrast, there is no general agreement in the EU on how best to promote competition. For example some EU countries strongly promote facilities-based infrastructure based competition whereas others put the emphasis on service-based competition. Moreover, even the countries that are seeking to promote infrastructure competition differ with respect to the appropriate mechanisms for facilitating new network investment.

An example of how this balance might be achieved is provided by the experience of the EC with respect to the subject of carrier pre-selection. Since the early 90s, the UK

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 20 of 25

government had encouraged the construction of competitive local access infrastructure by giving local operators certain market advantages. These include allowing new access operators to "own" the customer (*i.e.* the access operator receives all revenue from the end-to-end call and controls how its subscribers' calls get routed in the long-distance and the termination network). The new access carriers argued that carrier pre-selection will reduce their profit margins because the customer now controls the choice of the long-distance operator and the latter will bill the customer directly. The new providers therefore argue – supported by Oftel, the UK regulator – that carrier pre-selection would endanger the viability of investment in competitive local infrastructure.<sup>21</sup>

The European Commission's Draft Directive on Operator Number Portability and Carrier Pre-Selection of January 1998 includes the obligation of local access providers that command significant market power to implement carrier pre-selection. Market experiences in the US and Australia show that this helps bring down long-distance tariffs and introduce customer choice. However, no obligation was imposed in the Draft Directive on access providers that do not command significant market power to offer carrier selection. This effectively addresses the UK's objections against carrier preselection, leaving it up to other Member States to oblige carrier pre-selection on all carriers if they wish to do so.

Lehr & Kiessling

Telecom Regulation in the US & The European Union

<sup>&</sup>lt;sup>21</sup> See Molony (1997).

In this case, the central regulatory authority's mandate is limited to a regulatory principle for which consensus can be reached between the member states: the imposition of carrier pre-selection on local access providers that command significant market power. This provision is compatible with pro-infrastructure policies pursued by Member States like the UK.

#### 6 Conclusions

On both sides of the Atlantic, communications policy-makers are seeking to promote competition and liberalization, while assuring the provision of an integrated, global, communications infrastructure. Realization of these goals requires a strong centralized regulatory authority. Unfortunately, in both the US and Europe, this authority is inadequate. In the US, the FCC's authority has been challenged by a series of decisions from the 8<sup>th</sup> Circuit; in Europe, there is no effective EC-level regulator.

This paper examines the economics of dual regulation and the history of this system in Europe and the US, and seeks to make the case for a strong centralized authority. The need for such authority is especially important in light of industry convergence and the growth of the Internet.

With convergence, communications networks are becoming increasingly integrated with respect to the types of traffic handled, the types of facilities that support that traffic, and the geographic markets in which carriers participate. This increases the potential for spillover and coordination externalities, thereby increasing the risk and costs that heterogeneous local regulations will harm incentives for efficient infrastructure

Lehr & Kiessling Telecom Regulation in the US & The European Union Page 22 of 25

investment and service provisioning. Strong centralized authority is needed to address these risks and help internalize these externalities.

With liberalization, the ruling regulatory paradigm is to promote competition wherever possible. This poses a substantial threat to the dominant position of incumbent carriers and provides them with a vested interest in protecting the *status quo* regulatory and market environment. Complex and heterogeneous dual regulation creates multiple veto points that are vulnerable to strategic exploitation by an incumbent wishing to forestall regulatory reform or to increase rivals' costs. This provides another important reason for providing strong centralized regulatory oversight over communications policy. If competition is to be successful, the centralized authority should have effective jurisdiction over issues related to the basic structure of competition.

Although these arguments apply on both sides of the Atlantic, it is obvious that the states that comprise the US are significantly more homogeneous and more integrated than the member states of the EU. These differences imply that the jurisdiction and power of a centralized authority should be much more circumscribed in Europe than the US. Nevertheless, in both regions, the *status quo* needs to be revised in favor of stronger centralized authority. For the EU, we recommend transferring considerable responsibility from the National Regulatory Authorities to an EU-level regulator.<sup>22</sup> This regulator could be situated within the European Commission or established as an independent European Regulatory Authority (ERA) in telecommunications. The Commission will examine the need to set up an ERA as part of the EU Sector review in 1999. In order to gain support from the Member States for an ERA that is vested with the necessary statutory powers, the ERA should be established as a Commission of Member State NRA representatives. This would ensure that Member States keep sufficient control of the ERA's EU wide regulatory policies and that the NRAs' hands-on experience in national regulation is duly considered by the EU-level regulator.

For the US, we recommend that the FCC's ability to preempt state regulatory authorities with respect to communications policy be reaffirmed and extended, especially with respect to issues directly related to the promotion of local competition and the implementation of the pro-competitive provisions of the Telecommunications Act of 1996. On economic and policy grounds, we disagree with the position of the 8<sup>th</sup> Circuit and hope that these decisions will be overturned by the Supreme Court when it considers these issues sometime in 1999. Irrespective of whether one would like to see more or less telecom regulation in the US, we think it is important that the FCC's authority be maintained until such time as deregulation is more advanced at the state-level.

<sup>&</sup>lt;sup>22</sup> This viewpoint has been expressed by Commission officials and policy observers alike (see Public Network Europe, 1997, or Espicom, 1997).

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Lehr & Kiessling Telecom Regulation in the US & The European Union Page 25 of 25