

## Telecommunications: functional separation, a cure worse than the disease

The era of telephone monopolies in Europe has been over for more than a decade. But some law-makers feel the transition to a competitive telecommunications market is still incomplete, and so they are taking action. Their aim is officially to enhance competition and dynamism in this sector, but some interventions may amount to inappropriate remedies that risk producing the opposite effect.

This is true of a measure currently under study in Brussels. In November 2007, Viviane Reding, the European commissioner for Information Society and Media, suggested a series of reforms to the electronic communications regulations. One of the proposals aims to give national regulators the power to impose a "functional separation" of incumbent operators (the former monopolies) into two distinct entities, one in charge of managing network infrastructure and the other providing retail service to its customers.<sup>1</sup>

### NOT SO NATURAL MONOPOLIES

To understand the logic underlying this measure, it is necessary to go back a little, to the time when the telecommunications market was first opened to competition.

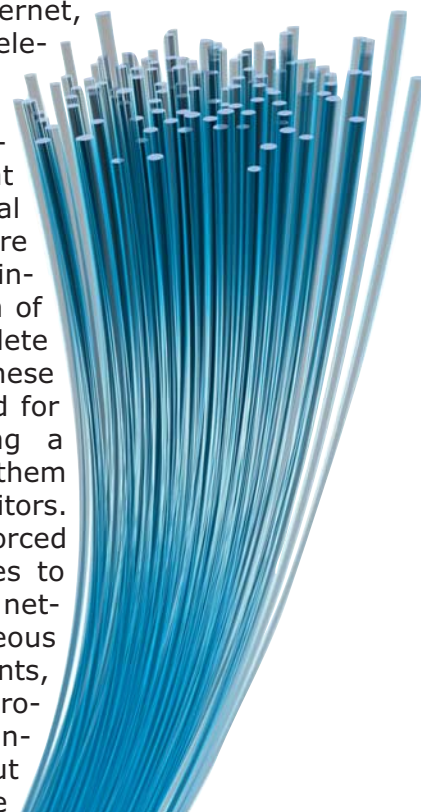
The telecommunications sector, like transport and electricity distribution networks, has the characteristic of relying on infrastructure that is hugely costly to build and that, to be profitable, must connect the greatest possible number of access points. These costs, and the constraints of physical space, mean that the dynamics of this sector do not correspond to the traditional vision of competition. It is hard to imagine many similar networks being superimposed to serve the same customers. The first company to build an extensive network will always have a big head start over the others.

For this reason, the conventional economic viewpoint has always regarded telephone services as a "natural monopoly," in other words a sector whose very nature makes it impossible or highly improbable that two producers will be competing with each other. Throughout the world, telecommunications thus became a public utility controlled by the state, so as to prevent any individual company the chance to derive undue profit from the exploi-

tation of this natural monopoly.

This way of seeing things has changed, however, and it is recognised now that it is, in fact, possible for competitors to enter the field by replicating at least part of the existing network and/or by using different technologies to provide the same service. Thus, it is possible nowadays to have a telephone conversation in various ways: by sending an analogue or digital (IP) signal on traditional wireline networks, by using software on a computer connected to the Internet, by cable, by mobile telephone, and so on.

When the legal monopolies of incumbent operators in traditional telephone services were abolished, regulators intervened with the aim of offsetting the complete market domination these operators had enjoyed for decades and creating a new balance between them and their new competitors. In particular, they forced the former monopolies to lease parts of their networks at advantageous rates to the new entrants, enabling the latter to provide telephone and Internet services without having to replicate the



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June 2008

1. See the *Proposal for a Directive of the European Parliament and of the Council*, 13 November 2007, available at <http://register.consilium.europa.eu/pdf/en/07/st15/st15379.en07.pdf>.



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full infrastructure throughout their territory. A company may thus typically install its own fibre optic network between cities and lease the local loop (the copper wires connecting the switch with each home), thereby reaching customers directly.

## I PREVENTING DISCRIMINATION

Incumbent operators thus found themselves selling retail services to individual customers and at the same time leasing wholesale services (for instance, local loop access, an operation referred to in industry jargon as “unbundling”<sup>2</sup>) to their competitors so that the latter can sell the same retail services.<sup>3</sup> One can easily imagine the conflicts of interest that may arise from such a situation within a company. In order to maintain its market domination, it could have an incentive to provide its competitors with wholesale services of lesser quality than those it uses itself.

To prevent former monopolies from engaging in this type of discrimination and using their dominant positions to prevent the emergence of strong competitors, regulators have turned to various solutions, including quality control of wholesale services, accounting separation, and a prohibition on the sharing of certain information between the units in charge of network management and those selling retail services. In most countries where such measures have been imposed judiciously, they have provided for the emergence of alternative operators that are sufficiently dynamic to invest in setting up their own networks and to compete directly with the former monopolies.

Functional separation is a variation on this type of solution, but it goes much further. It breaks up an operator's vertical integration and involves the creation of a fully separate division in charge of network management to eliminate any ability or incentive to discriminate against competitors. It is offered as a radical type of intervention in cases where more moderate measures would not have

succeeded sufficiently in encouraging unbundling. But is this remedy really necessary or effective?

## I AN UNNECESSARY MEASURE

The case of Britain, often used to show the pertinence of imposing a reorganisation as drastic and costly as this, is far from conclusive. In that country, local loop unbundling did not have much success in the early years after the opening of access in 2001. In 2005, the market share held by BT (formerly British Telecom) in DSL broadband lines—directly or through resellers—was still over 99%. This failure led to measures that included

the functional separation of BT and the creation of an entity called Openreach to manage the network.

Since then, the number of local loops leased by alternative operators has exploded (see Figure 1). But this phenomenon, far from being limited to Britain, has affected all European countries. If Britain has seen a high relative increase, it should be noted that other countries have

achieved higher levels of unbundling using different methods. This is especially true of Germany and France, which have not turned to functional separation.

Furthermore, as observed by researchers who have delved into the British case, “the degree of correlation between the two events remains questionable.”<sup>4</sup> The growth in unbundling seen since 2005 may actually be linked not to functional separation but rather to other factors such as changes in the incumbent operator's rate policies. In 2004, BT made a 70% cut in the rental charges for partial unbundling (Internet only) that alternative operators have to pay. A year later, BT also made a 40% cut in the charges for total unbundling (Internet and telephone). These rate reductions, which were likely to lead to higher demand from alternative operators, could have produced the same effects without restructuring the company.

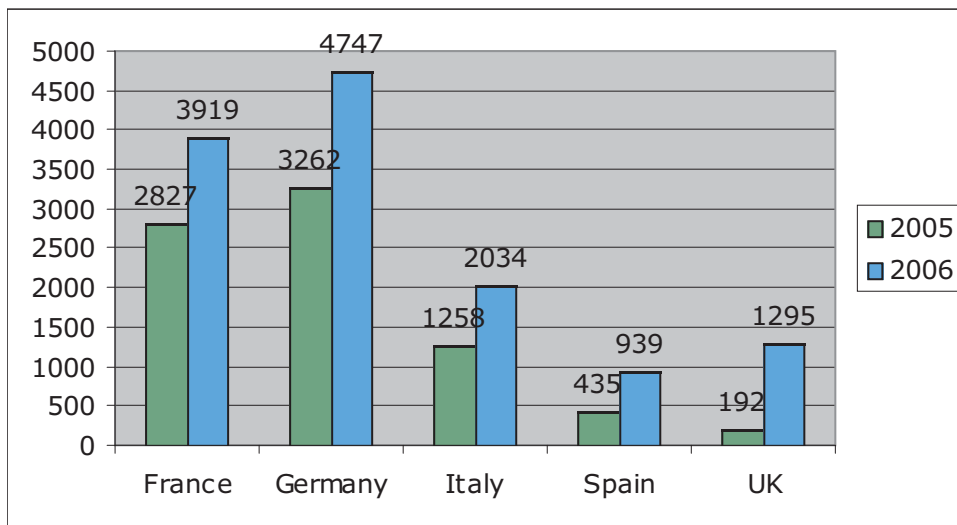
“The dynamism of the European telecommunications industry depends on the hundreds of billions of euros that will be invested in it over the coming years. This sector does not need further uncertainty or regulatory complications but rather stability and flexibility.”

2. Regulated wholesale services include other services as well as access to other parts of the network, but we are focusing here on the central issue of unbundling so as to simplify the argument.

3. A regulation that took effect on 2 January 2001 made the local loop accessible to alternative operators in all European Union countries, although some countries had adopted similar measures earlier. See [http://admi.net/eur/loi/leg\\_euro/fr\\_300R2887.html](http://admi.net/eur/loi/leg_euro/fr_300R2887.html).

4. Julien Salanave and Sophie Girieud, *Functional separation in telecoms: panacea or plague?*, IDATE Consulting & Research, March 2008, p. 13.

**FIGURE 1**  
Number of unbundled local loops  
in the top 5 western European countries (thousands)



Source : InfoCom, [http://www.infocom-de.com/pressarchives/press\\_040507.html](http://www.infocom-de.com/pressarchives/press_040507.html)

## I A HARMFUL MEASURE

Functional separation may also cause considerable prejudice to the industry and to consumers by compromising investment in fibre optic access networks. These should gradually replace the use of copper wire in local loops, allowing for the emergence of faster broadband networks. But bringing fibre into homes is not being done systematically everywhere. An operator will not invest in the costly deployment of a fibre network until it has identified zones where the sales outlook can make its investment profitable in the longer term.

Dismantling the vertical integration of an incumbent operator inevitably breaks off coordination between investment decisions and marketing imperatives for retail services. What we get in its place is a monopolistic structure created artificially by regulation. It is put in charge of building a fibre network but is stripped of any incentive to do so. This new entity must then institute a new artificial coordination with its sister entity and with alternative operators to know where and how to invest.

How, in this sort of situation, can investments be prioritized? Why invest when there is an obligation to share the new infrastructure with others (in the case of a former monopoly) or when it is possible to benefit from investments made by the former monopoly (in the case of new entrants)?

do you consider it would be timely and efficient for next-generation access investment to take place in the UK?"<sup>5</sup>

## I AN ARBITRARY MEASURE

Functional separation can only be achieved on the basis of arbitrary decisions that have the effect of freezing a fundamentally dynamic situation. How, for example, can a demarcation be established between services and infrastructure (beyond the local loop) that are to come under the network manager and the others? This question has no simple answer.

Replicating parts of the network may appear problematic at certain times, and regulated access may prove necessary to insure that alternative operators will survive. However, technological advances, market changes and investment decisions by operators may modify this situation from year to year. Adopting regulations based on how the situation evolves appears to be a much more flexible and effective remedy than irreversibly creating a new structure that risks being permanently detached from reality.

Similarly, this action focuses on a particular means of voice and data transmission, namely the wireline network set up by the former monopolies. The goal of creating competition solely between

If a network is actually built, it can result only from a purely administrative process detached from any market logic.

This is precisely what is happening in the United Kingdom, where Stephen Timms, the minister for competitiveness, issued a warning in September 2007 on Britain's slowness in bringing fibre to the homes compared to countries such as the United States, France, Germany, Japan or South Korea. At the same time, Ofcom, the regulator, launched consultations on what regulatory framework should be adopted to speed up investment, asking stakeholders among other things: "When

5. Ofcom, *Future broadband - Policy approach to next generation access*, 26 September 2007, available at <http://www.ofcom.org.uk/consult/condocs/nga/summary/>.



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operators using this technological platform risks becoming anachronistic in short order. Other platforms such as cable, WiMAX or the mobile broadband network could soon be offering the same services in many places. Having just one platform carry the burden of regulation is not only arbitrary but goes against the principle of technological neutrality<sup>6</sup> that is supposed to underlie any regulatory framework.

## I AN INCOHERENT MEASURE

Finally, functional separation runs completely counter to the position that justified the measures taken when the telecommunications sector was opened to competition a number of years ago. These measures were adopted to compensate for the long head start that the incumbent operators enjoyed after decades of monopolisation. But it has always been obvious that the measures would lose their *raison d'être* in a market that became truly competitive as new entrants invested in infrastructure.

Rather than being part of this transition period, functional separation creates a new monopolistic entity and gives it a permanent status, guaranteeing the regulator a role for an indefinite period. As emphasized by Paul Champsaur, chairman of the French regulatory body ARCEP, this approach "ensures a lasting existence for a natural monopoly, the local loop, henceforth seen as non-duplicable and thus to be regulated over a sustained period. Taking this approach means halting the extension of facilities-based competition and post-

poning indefinitely the full replacement of sectoral regulation by general competition law, whereas these principles lie at the heart of the European framework."<sup>7</sup>

## I CONCLUSION

Commissioner Reding defends this extreme measure—she referred to it publicly as a "nuclear weapon" to be used as a last recourse—by explaining that the "existence of common rules will allow for a better harmonised and more efficient use of this new remedy in Europe."<sup>8</sup> But as we have seen, this is actually a false remedy that risks weakening the patient rather than helping him. Even if national regulators are not obliged to apply functional separation, the adoption of these new common rules will make it easier to impose and will inevitably create a climate of uncertainty regarding the regulatory context.

The dynamism of the European telecommunications industry depends on the hundreds of billions of euros that will be invested in it over the coming years. This sector does not need further uncertainty or regulatory complications but rather stability and flexibility. Members of the European Parliament should contribute to it by rejecting this proposal.

6. In other words, the principle according to which regulation must not favour any technology over any other.

7. Interview with Paul Champsaur, "Paquet télécom, troisième acte," *La lettre de l'Autorité*, No. 60, March-April 2008, p. 2, available at [http://www.arcep.fr/uploads/tx\\_gspublication/lettre60.pdf](http://www.arcep.fr/uploads/tx_gspublication/lettre60.pdf).

8. Viviane Reding, "Une concurrence encore trop limitée," *La lettre de l'Autorité*, No. 60, March-April 2008, p. 5, available at [http://www.arcep.fr/uploads/tx\\_gspublication/lettre60.pdf](http://www.arcep.fr/uploads/tx_gspublication/lettre60.pdf).

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