

La lettre

de l'Autorité

REGULATE, SEPARATE, DIVIDE

Nicolas Curien,
Member
of ARCEP



Functional separation and the digital dividend – two seemingly unrelated subjects. And yet, if one looks at the etymology of the words themselves, there is a similarity: separare, to set apart and dividendus, something which has to be divided. The first refers to drawing a dividing line between, on the one side, an essential facility – the incumbent's access infrastructure – and, on the other, the various services which use this infrastructure as a common input; while the second relates to the division between competing uses of a scarce resource – the radio spectrum released by the phasing out of analogue television. Consequently, these two issues – separation and dividend – share a same economic basis. How to guarantee non-discriminatory access to an essential resource is the crux of the separation issue, and is covered in detail in this Newsletter. How to guarantee the fair division of a finite resource is that of the digital dividend issue, and this is now concentrating minds both in France and in Europe as a whole.

Aiming for proportionate separation

In the network industries, non-discriminatory access to the vertically integrated incumbent's essential infrastructure is a prerequisite for fair competition and guarantees the replicability of the services offered on the retail markets. Proper accounting separation, which allows a comparison to be made between the terms applied internally to the downstream arms of the integrated organisation and the prevailing prices on the wholesale markets, appears to be an effective and appropriate means of controlling the pricing aspect of non-discrimination.

••• Editorial continued on page 2

Functional Separation: pros and cons

Accounting separation, functional separation, structural separation, ownership separation – **there are a number of regulatory options which can be used to impose non-discrimination in the provision of access to the dominant operator's network. Separation is not always easy to implement.** An explanation.

In regulated network industries, it is sometimes necessary to impose on an integrated company an obligation of non-discrimination in the provision of access to certain infrastructures in order to assure effective and sustainable competition on the retail markets which rely on these infrastructures. For instance, ARCEP may, in accordance with the body of legislative and regulatory texts governing the sector, require an operator found by the market analysis to have significant market power to accede to reasonable requests for access to certain parts of its network under non-discriminatory conditions. The aim is to reduce the risk which exists, at least in theory, that a vertically integrated operator with proven power on a wholesale market linked to the possession of certain infrastructures will grant its own downstream retail arm beneficial treatment to the detriment of its competitors, which could result in a distortion of competition on the retail markets in question.

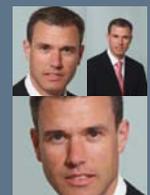
companies at a disadvantage by means of the pricing of access to infrastructures. In order to check whether the obligation of non-discrimination is being properly observed, the regulator does, however, have an effective tool at its disposal – the ability to require the dominant operator to implement accounting separation for its operations. In France, ARCEP required France Télécom to implement accounting separation as soon as the sector was opened up to competition. This requirement was extended on 7 December 2006 ⁽¹⁾, following the introduction of the new regulatory framework. The regulator requires France Télécom to provide separate accounts for its various operations, broken down in accordance with the definition of the relevant markets, and to ensure that its retail operations have recourse to its wholesale services under “equivalent conditions” to those offered to alternative operators entering the retail markets. ••• continued on page 2

Non-discrimination, or how to promote fair competition

The most obvious form of discrimination and the easiest to implement is to put competing

ARCEP's 2006
Annual Report
is out!

- Paul Champsaur's Editorial page 11
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Ofcom

- Ed Richards, CEO, tells us about Functional Separation page 8



However, ensuring equal treatment of operators as far as technical and commercial issues are concerned requires the use of additional regulatory measures, such as powers of investigation, on a case by case basis.

This makes it tempting to put in place a unified remedy designed to deal with all discriminatory practices, i.e. functional separation, or even legal (creation of subsidiaries) or structural (transfer of ownership) separation of the essential facility. In theory, such solutions seem attractive, in that they would reduce, or even eliminate, any incentive to act in a discriminatory fashion and would enforce transparency in the relations between the separate monopoly entity and the various competing services which are customers of that entity. However, from a practical point of view, a number of problems do arise. First of all, the greater the degree of separation, the higher the level of transaction and reorganisation costs involved. Secondly, and to a greater extent than in the energy sector, deciding where to draw the dividing line is a tricky business in the electronic communications sector, as has been demonstrated by the UK's Openreach setting, because of the rapid development of technologies and the growth in infrastructure competition.

Finally, separation does not in any way remove the need to regulate the new business unit which is created by the separation process, in order to ensure that it offers a sufficiently wide range of wholesale services, implements cost-oriented pricing, maintains a satisfactory level of quality of service and pursues an effective investment policy.

This being so, a proportionate regulatory mechanism could consist of trying to reproduce the theoretical benefits of functional separation while at the same time avoiding its practical disadvantages, perhaps by means of requiring the separation of information systems used for network operations and those used for service operations, and the adoption of a good practice code, similar to the approach adopted by AGCOM in Italy in 2002.

Aiming for a harmonised dividend

The burgeoning development of uses based on the new wireless electronic communications systems, including in particular third generation mobile telephony (UMTS), WiMax and personal mobile television (DVBH), requires the availability of additional radio frequencies.

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The provision of such services is based, in particular, on the internal use of commercial transfer agreements which can be controlled by the regulator.

Ad hoc correction of non-price discrimination

However, discrimination can also be non pricing-related. It may, for instance, take the form of employing delaying tactics in the processing of orders, or else not providing sufficient relevant information necessary for introducing a service on the retail market. It may also take the form of giving preference to the requirements of internal operations compared with those of competing operators, when planning the development of the network or establishing the conditions of access to infrastructure. This bending of the non-discrimination rules can prevent a competing operator from establishing a viable service offering from the pricing, commercial or technical points of view. It may also adversely affect its quality of service or its plans for developing its own

optical fibre links necessary to allow alternative operators to connect remote MDFs (2).

However, the effectiveness of regulation to correct problems identified on an ad hoc basis is sometimes questionable. Therefore, in addition to ensuring that actual equivalence of inputs exists, making sure that interested parties have confidence in this equivalence of inputs is also important in order to prevent alternative operators from overestimating the risk. This was one of the arguments put forward in the United Kingdom for the functional separation of BT, which led in January 2006 to the creation of Openreach, a separate division responsible for marketing the incumbent's network access infrastructures.

Chinese wall mechanisms and dealing with the problem of asymmetric information flows

Functional separation involves making a separate business of the incumbent's division responsible for the sale of access to the infrastructures to which the non-discrimi-

« Functional separation devolves responsibility for non-discrimination from the regulator to the management of the newly created business. »



nation obligation relates, and applying to this new business unit a certain number of operational rules to create a Chinese wall between it and the other services offered by the incumbent operator. The functionally separate business is obliged to maintain strict

infrastructures, which in the end will have a detrimental effect on the level of confidence placed in it by its existing or potential customers.

It is therefore of great importance that, in order to ensure the development of fair and sustainable competition, the regulator should check that the non-discrimination obligation is being properly applied from the non-price point of view. In the absence of an automatic detection mechanism, the regulator must be constantly vigilant in order to be able to identify suspect practices and, if necessary, to impose corrective measures. It must carry out audits on a case-by-case basis and set often long and complex procedures in motion. This situation arose recently in France, with the opening of an inquiry into the non-discriminatory provision by France Télécom of the

equivalence of inputs between all its various carrier customers and also, therefore, between the company of which it is part and competing companies. The operational rules established aim in particular at controlling the flow of information between the newly created business unit and the other arms of the incumbent operator, as well as the order management processes within this new business unit, the behaviour of its employees and its mode of corporate governance.

Functional separation appears to be a potentially effective way of dealing with the problem of asymmetric information flows between the incumbent operator and the regulator and, in more general terms, with the issue of guaranteeing non-discrimination. Indeed, it has several advantages. Functional separation increases the transparency of the relationship



between the divisions managing the parts of the network subject to the non-discrimination obligation and the other services offered by the incumbent, making discriminatory behaviour easier to detect and, where appropriate, to sanction it.

The nub of the matter is that by reducing the incentive for and/or the ability of the employees managing these parts of the network to grant preferential treatment to the incumbent's own retail divisions to the detriment of alternative operators, functional separation makes such behaviour far less likely. It also allows responsibility for non-discrimination to be devolved from the regulator to the management of the newly created business. This means that, whereas in the absence of functional separation the regulator has to take steps on a case-by-case basis to re-establish equivalence of inputs, with functional separation equivalence of inputs is the rule, and it is up to the separated business unit to justify any departure from this rule which might be necessary for the efficient operation of the integrated company and to obtain the regulator's approval for any such change.

Functional separation, followed by legal separation – the experience of the energy industry

Where functional separation is considered insufficient to guarantee total non-discrimination, legal (or structural) separation of the operator may be recommended. This consists of converting the newly created business unit into a subsidiary, in order to make the relationship between this business unit and the incumbent's other divisions even more transparent. The final stage is complete separation of ownership, i.e.

the sale of the new subsidiary to different shareholders.



Total separation of the retail arms of the incumbent from the

divisions controlling access to the relevant parts of the network is, in theory, the only way of completely eliminating any incentive to discriminatory behaviour on the part of the incumbent operator.

The regulation of the energy industry offers an interesting example of how this

concept has been put into practice. In the electricity and gas sectors, European regulation has imposed first the functional separation and then the legal separation of the transport and distribution operations. In France, an electricity transmission system operator, operationally independent from EDF, was established in 2000, pursuant to the law of 10 February 2000 on the modernisation of the public electricity supply service, transposing the Council's Directive 96/92/EC which opened up the electricity industry to competition. The functional separation of EDF's distribution business was imposed by the law of 9 August 2004, in pursuance of Directive 2003/54/EC. The unbundling of network operations in the internal market was accelerated by the requirement to implement legal separation imposed by this second Directive, functional separation alone of the distribution business being permitted only on a temporary basis. The question of separation of ownership of the electricity transport companies is currently the subject of debate in Europe.

Separation is a tricky issue in the telecommunications sector

Although the functional separation of the network divisions of the incumbent operators has been imposed in the energy sector on the basis of European Directives, this solution has not yet become part of the European regulatory framework governing the electronic communications sector. Functional separation is currently under review in several countries, but so far has only been implemented in the United Kingdom,

« It is possible that functional separation will result in increased network access costs for all operators across the board. »

and is being approached with caution by most regulators. The apparent appeal of such a solution must not be allowed to mask the difficulties involved in implementing it, particularly when considering the distinctive features of the electronic communications sector.

Furthermore, in order to minimise the cost of rolling out these various networks and to guarantee the widest possible geographical coverage, as well as indoor penetration in dense areas, it will be necessary for these systems to be able to benefit from lower frequencies, i.e. below 1 GHz, which have better propagation properties, in addition to the frequencies already allocated to them at present. In fact, it just so happens that this would now be possible, because these highly sought-after frequencies in the VHF and UHF bands, which up to now have been allocated exclusively to audiovisual services, are due to be reallocated between now and 2011, due to the switch-over from analogue to digital television, and as the latter is six times less spectrum hungry than analogue, this will automatically result in a release of frequencies – the so-called digital dividend.

Although the dividend will not actually be available until the end of 2011, it is important that we begin now, in 2007, to reassess the situation and to establish the terms for dividing up the spectrum. Two important milestones have already been reached, the first last February, at Community level, with the definition by the RSPG (Radio Spectrum Policy Group) of the digital dividend, and the second, in March, with the French law on the modernisation of audiovisual broadcasting and the television of the future, which specifically mentions the digital dividend, states that electronic communications services are an eligible use for this dividend (even though it is likely to remain mainly in the hands of the audiovisual sector) and establishes a parliamentary digital dividend commission, which is to rule on a scheme for the reuse of frequencies proposed by the Prime Minister. It is very important, while all this is going on, for France to take action to establish the precise extent of the digital dividend, taking into account the impact of the development of signal compression techniques (the MPEG-4 standard) and network planning (SFN architecture). It will then be in a good position to work, within the European framework, towards the identification and, if possible, the harmonisation within the dividend of a band of contiguous frequencies reserved for wireless broadband systems.

Nicolas Curien



Generally speaking, the implementation of functional separation entails costs which are well in excess of those involved, for instance, in the implementation of accounting separation. These costs relate to the reorganisation of the company, the duplication of technical staff and engineers and, in general, the splitting up of various activities which had presented a certain degree of synergy. In the case of telecommunications, it is therefore possible that functional separation will therefore result in increased network access costs for all operators across the board.

Greater regulatory control aimed at preventing discrimination on the part of the incumbent also runs the risk that the incumbent will then make less effort with respect to the overall quality of the services provided. Although this problem is not solely restricted to the telecommunications sector, it should be noted that when evaluating the first results of the Openreach undertaking, Ofcom identified a reduction in quality of certain products which could be interpreted as achieving equivalence of inputs by means of a general levelling down⁽³⁾. However, this could also be simply a temporary effect, as quality seems to have improved in certain respects, according to Ofcom's latest report⁽⁴⁾.

The British experience shows that functional separation is not a substitute for other regulatory mechanisms but should be regarded as a supplementary device. In other words, it does not do away with the need to regulate other aspects of the newly created business unit such as its tariffs, quality of service, investment management or even the range of services it markets. Even if it is a functionally separate business unit, the network access division of a particular operator will not always, as a matter of course, offer the range of services

The main "components" of functional separation

Several of the measures mentioned here are mandatory (accounting separation, creation of a business unit, etc.), while others are optional and can sometimes be applied to differing degrees. And, finally, some components can only be imposed in conjunction with others.

• Separation of functions

- Creation of a separate business unit "A", responsible for the production and supply of the products in question.
- Obligation to supply all operators under non-discriminatory conditions (equivalence/equality)
- Separation of operational support systems
- Separation of the brand (total = different name/partial = "A, a division of B")

• Separation of employees

- Employees are not permitted to work some of the time for A and some of the time for another department of the incumbent
- Restrictions on the movement of A's managers to the rest of the group
- Physically separate offices and places of work

- Pay incentives
- Code of conduct, notice boards, training

• Separation of information

- Limits on the flow of information between A and the other divisions (firewalls, Chinese walls)
- Implementation of separate access systems (information specific to the needs of the employee)
- Separation of information management systems

• Financial separation

- Accounting separation
- Separate budgets
- Financial autonomy

• Separation of strategies

- Separate management
- Separate management board, independent of the group
- Strategic investment decisions taken independently by A

• Monitoring of compliance with obligations/performance

- System for reporting breaches (integrated/independent)
- Independent complaint handling committee
- Sanctions applied in the case of default
- Publication of performance indicators (by an independent body/third party certification)
- Submission to the regulator of contracts signed between A and the incumbent (and/or alternative operators)
- Publication of compliance reports (by the regulator/by a third party)

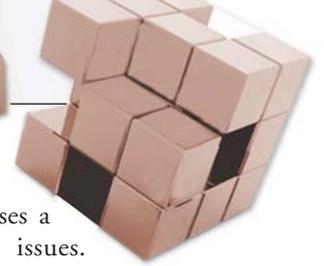
Glossary	
Accounting separation: separate financial reporting for each of the operator's lines of business in its regulatory accounts.	
Functional separation: creation of a separate business unit along with operational rules to establish Chinese walls between this new business unit and the incumbent operator's other operations.	
Legal (or structural) separation: making the new business unit into a separate subsidiary.	
Ownership separation: divestment by the operator of its newly created subsidiary (resale to different shareholders).	

necessary for the growth of the retail market.

Other problems relate more specifically to the particular nature of the electronic communications sector and make it more difficult to impose an obligation to implement the functional separation of certain infrastructures belonging to a vertically integrated operator with SMP. Three partly related examples are given below.

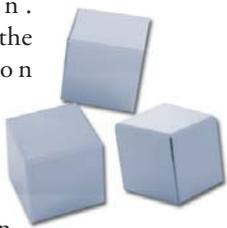
First of all, the competitive dynamics of

this sector mean that regular modifications to the regulatory structure in place will be necessary as the markets in question develop. This is the very basis for the European regulatory framework, which provides for periodic reviews – at least once every three years – of each market analysis and therefore of the obligations imposed in this respect by the regulators. This requirement can seem out of step with a long-term remedy like functional separation.



Next, as certain parts of the networks are replicated or will be replicated in the medium term, it is difficult to find an appropriate point at which to set the boundaries of the business unit to be separated. This difficulty does not arise in the electricity industry, as the transport and distribution networks are natural monopolies which do not call for any duplication. In this case, unlike the electronic communications sector, functional separation does not raise any question of the possible disadvantage to the operator on which it is imposed, compared with alternative operators which can continue to benefit from their vertical inte-

gration. Should the criterion used to establish the demarcation



point of the separate

business unit be the total lack of replication of the infrastructures required by competitors, or simply the dominant position of the operator on the wholesale markets linked to these infrastructures?

Finally, segmentation can be difficult to define in practice and on a stable basis over time, since it is not limited to passive infrastructures (civil engineering, high structures, radio masts, etc.), and particularly because telecommunications networks are constantly undergoing rapid technological change, unlike other sectors. In particular, the characterisation of certain parts of the network as a natural monopoly can change over time in line with the development of the technologies and investment strategies of the various operators.

Ultimately, ending up, as a result of functional separation, with another "monopoly" which will need to be regulated on an ongoing basis would seem to be contradictory when compared with the principles of the regulation introduced in France and elsewhere in Europe over the last ten years, which aims to develop sustainable competition by means of investment in infrastructures and the reduction, or eventual elimination even, of regulation in the industry.

A final general argument, but one which is particularly relevant in a sector marked by profound technological

change, raises the issue of adequate incentives for investment in the functionally separate networks, since such decisions are not made in isolation from the strategies of the players on the retail markets or, naturally, from the choices made by the operator on the parts of the network which have not been separated. A mechanism for coordinating the various players would probably be essential, but would be particularly complicated to organise, without necessarily being able to achieve a satisfactory balance between non-discrimination and efficiency.

« Functional separation does not remove the need for **regulation of prices, quality of service, investments or the services offered in the access network.** »

Finding an effective and proportionate remedy is a major concern

Another approach, which currently seems to be under consideration by the Italian regulator AGCOM, is to separate the entire network from the retail services⁽⁵⁾. While this solution simplifies the question of deciding on the demarcation point of the division to be separated, it does not clearly separate the parts of the network which have been replicated from those where the incumbent is required to provide access to its competitors under non-discriminatory conditions. Therefore, although it does provide transparency in the relations between the business units selling access to the network and those offering retail services, it can be particularly difficult to define and control the rules required to govern the operation of the separated business unit. With this configuration, independence from downstream activities should only be required for certain infrastructures.

In theory, the implementation of functional separation within the incumbent, achieving greater transparency, as well as adequate incentives to provide equivalence of inputs, leads to simplified and more effective regulation, as far as non-discrimination is concerned. In practice, however, defining the demarcation line of such a

business unit raises a number of issues. Furthermore, functional separation gives rise to a whole range of costs and does not remove the need for regulation of prices, quality of service, investments or the services offered in the access network.

Ultimately, it is only by carefully assessing the benefits of such a measure as far as its anticipated effects are concerned, taking into account conditions throughout the industry in the country in which this measure is to be implemented, and therefore of the gains to be achieved from greater competition, that it can be established whether it will prove to be an effective and proportionate measure.

On a smaller and more pragmatic scale, without directly imposing the creation of a separate business unit, it is also possible to impose operational rules on the incumbent drawn from various "components" of functional separation and which have the same objective of achieving non-discrimination. This was the course chosen by AGCOM in 2002, when it imposed on Telecom Italia (TI) rules requiring the separation of the information systems of the divisions responsible for network management and those selling retail services, together with a code of conduct for its employees. Similarly, current regulation in France is based on a combination of various non-discriminatory mechanisms. For instance, with regard to access to France Télécom's local loop, accounting separation has been imposed, along with regular monitoring of France Télécom's operational processes and of various quality of service indicators for its LLU services.

⁽¹⁾ ARCEP Decision No. 06-1007

⁽²⁾ Optical fibre links which France Télécom is obliged, subject to availability, to offer to alternative operators, as part of its LLU service offering (ARCEP Decision No. 05-0277)

⁽³⁾ Cf. Ofcom's "Report on the Implementation of BT's Undertakings", Fourth Quarterly Report, 5 September 2006.

⁽⁴⁾ Cf. Ofcom's "Report on the Implementation of BT's Undertakings", Fifth Quarterly Report, 12 February 2007.

⁽⁵⁾ In 2002, AGCOM imposed on Telecom Italia (TI) rules requiring the separation of the information systems of the divisions responsible for network management and those selling retail services, together with a code of conduct for its employees. It now seems that the Italian regulator is considering going still further by imposing operational separation within TI, still using the same model of separation between the network infrastructures and the retail services.



Is it really a good idea?

Jacques Champeaux, Executive Director, Regulatory Affairs, France Télécom



Separation presents a major risk of under-investment in the new access infrastructures

The latest news on the subject of separation stems from the declarations made by the European Commissioner in charge of the Information Society, which recommend allowing national regulators to oblige operators having significant market power to separate network and services. As an example of this, Viviane Reding mentions the “break up” of ATT in 1984, as well as the creation of Openreach in the UK, a division of BT with a remit to commercialise certain access products reputed to be monopolies.

Openreach is the remedy that BT negotiated with the British regulator, Ofcom, following the failure to develop unbundling in the United Kingdom, in the place of solutions that have functioned in other countries, particularly in France. While, for some people, functional separation seems to be a guarantee of

non-discrimination, it also has major drawbacks.

Degradation of service quality

Firstly, it removes any incentive to ensure the operational quality and economic performance of access activities, which are subject to the separation obligation : the entity in charge of these, by its very nature and governance, has no direct interest in the smooth operation of retail services. Yet, the quality of access services calls for the deep and permanent involvement of the network owner, to ensure good inter-meshing between the customer process and the network process. So, while such a separation may, on paper, lead to greater equality of treatment between retail operators in the perimeter defined by the separation process, it also means a general degradation of service quality. This has been observed with Openreach, as it has with the electricity and rail sectors and recently, unfortunately, in the British rail network. In addition, equality remains theoretical, as long as the historic operator isn't really supplied by the separate entity in charge of the access network, which, according to Ofcom, is still mainly the case of BT and Openreach.

On the other hand, the success of unbundling in France shows that vertical integration spurs the historic operator to perform well and that this benefits the market as a whole, through the real application of the principle of

non-discrimination, which is permanently controlled by multi-lateral working groups and the monitoring of operational indicators.

Risk of under-investment

Secondly, separation presents a major risk of under-investment in the new access infrastructures, because of the lack of incentives for the access network operator, which, as a virtual monopoly removed from competitive pressure, has no interest in the development of offers in the retail market. Moreover, chronic under-investment is a constant characteristic of cases of separation observed in network industries in the past.

Finally, unlike the electricity and rail sectors, the technologies of telecommunications access networks develop rapidly. So, wanting to fix an effective and durable frontier is a vain hope. The risk of errors, costs and delays in implementation are disproportionate against any eventual gains.

All of this shows that separation is not such a good idea after all. We can hope that, in this field, the players in the French market will go beyond the traditional roles they generally play: what France Telecom would lose in terms of efficiency, in both the operational and economic fields, following a functional separation, would not be gained by its competitors, who would suffer just as much, and would certainly not benefit consumers. ■

Openreach : BT's view

Grant Forsyth, Head of Global Interconnection - Commercial,



Without this assurance, BT would undoubtedly have been more reluctant to invest in its 21C next generation network

In September 2005, BT took the decision to offer Ofcom a series of voluntary Undertakings⁽¹⁾ – in lieu of a reference to the Competition Commission and potential full structural separation – that included the formation of a

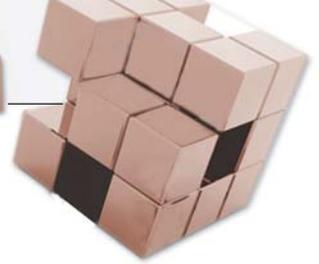
separate new business division to be called Openreach. The implementation of this functional separation solution came with Ofcom's commitment to review the removal of retail regulation.

BT's Undertakings are a set of legally binding agreements

The key elements of the operator's undertakings are as follows:

1. Equivalence of Inputs for BT's downstream activities and for BT's wholesale customers for Access and Backhaul services:
 - same products
 - same supply timescales, terms and conditions, including price and service levels
 - use of the same systems and processes

- same service, system and process reliability and performance
 - same controlled access to and sharing of commercial information relating to products, services, systems, processes, network coverage and capabilities.
2. 'Chinese wall' separation between up and downstream product divisions within BT.
 3. Effective, transparent and public accounting separation obligations.
 4. A clearly separate (from the incumbent's other business units) upstream business unit with:
 - transparent, forceful obligations – public, published, monitored and reported targets
 - separate staff, management, and remuneration incentives
 - specific obligations with respect to



So why are they so against it?

Richard Lalande, *Chairman of AFORST*

Accounting separation, which is already being implemented, is not sufficient to guarantee the operational and financial equality of access which would enable alternative operators to compete with the incumbent on a level playing field, i.e. allow them to replicate its retail services developed on the basis of non-replacable infrastructures, at least under reasonable financial terms.

The first problem is that accounting separation does not reduce the asymmetry of information hampering the regulators. Because of the time-consuming processing involved, instead of being an ex ante tool designed to prevent discriminatory behaviour, it is in fact only of any use in the context of any ex post proceedings, and therefore incompatible with the fast-moving development of the market.

Furthermore, it fails in particular to resolve the issue of operational discrimination. We have had to wait three years to see the LLU and bitstream quality of service indicators start to converge with those of France Télécom's retail services. Now that a new cycle of investment is beginning with NGN and NGA networks, the industry cannot afford such delays.

The solution we really need is functional separation, on the lines of the Openreach model implemented by BT and which, as far as we know, has been a success both for that operator and for the British market, to the

extent that its implementation is being seriously discussed in a growing number of countries and in the European Community.

Contrary to this, however, AFORST is not in favour of structural separation which means, in other words, the dismantling of the incumbent operator, even to the extent of splitting up its ownership of its network management operations and its retail services. Apart from the high cost of implementation involved, this solution, by setting a fixed boundary around the transferred assets, would not be able to take into account technological progress and would discourage the owner of the network from making the necessary investments.

A flexible incentive tool

Functional separation, on the other hand, offers the necessary flexibility to adapt to technological and competitive changes in the marketplace. It avoids the need for complex, costly and, to a certain extent, ineffective regulations. It stimulates innovation and efficiency in the competing services, and, particularly as far as NGA networks are concerned, it would make it possible to include ducts and fibres in the access services offered to third party operators as a matter of course. It is an effective means of encouraging the incumbent operator to behave honourably. And above all, contrary to the incumbents' constant refrain, functional separation does not mean "over" regulation.



On the contrary, it is a straightforward means of implementing the non-discrimination principle and is an effective way of introducing progressive deregulation, while targeting only relevant bottlenecks at any given time.

And finally, what about the other risks alleged by the incumbents? Financial risk? In fact, financial analysts seem to agree on the benefits of functional separation in terms of return on investment and increased market value through a better distribution of risk between the network and retail operations. Risk of curbing the rollout of FTTH? Just the opposite, in fact. Such a solution allows the incumbent operator to enhance the value of its infrastructures by making them available to all under non-discriminatory conditions. This will act as an incentive to invest both in basic infrastructure and in services for all operators. So, why are they so against it? ■

wpoint

Legal and Regulatory, BT Global Services

commercial and customer information confidentiality

- monitoring and oversight by an independent Equality of Access Board
- governed by a independent management Board
- 5. Effective regulation to ensure enforcement including:
 - open to directions from Ofcom and/or court enforcement
 - reference to the Competition Commission
 - third party actions for damages.

The benefits of functional separation

BT, Ofcom, competitors and consumers all benefit from the undertakings.

First of all, BT benefits from retaining the

efficiencies of a vertically-integrated operator and removing the uncertainty of future harsh regulatory remedial actions, thereby allowing it the ability to invest and innovate with greater freedom. Without this assurance, BT would undoubtedly have been more reluctant to invest in its 21C next generation network.

Ofcom benefits through having a clearer regulatory focus on the incumbent telecommunications operator, which is now subject to strict oversight of its compliance with non-discrimination principles.

Furthermore, competitors can have greater confidence in the industry through a level playing field which will result in increased investment and innovation leading to greater choice and lower prices to the benefit of all consumers.

And last but not least, investor confidence has not been dampened. The creation of Openreach and its own separate reports provides a clearer picture of the financial performance of different parts of the business. The increased transparency is likely to lead to BT having greater analyst coverage and greater access to capital funding in the financial markets.

Helping to create a climate of confidence for sustainable infrastructure competition, investment and innovation, BT has shown a relatively strong share performance compared with many of its European peers since it announced its undertaking to functionally separate. ■

¹<http://www.btplc.com/Thegroup/Theboard/Boardcommittees/EqualityofAccessBoard/EqualityofAccessBoard.htm>



Functional separation in the UK

Ed Richards, CEO, OFCOM



We do believe that all regulators should have the powers to impose functional separation under the EU Framework even if only as a power of last resort.

In September 2005, Ofcom's strategic review of regulation of the UK telecoms sector was completed by BT offering a series of legal undertakings under national competition law. The undertakings gave a commitment to create a new business unit of 30,000 people, to be called Openreach, which would have its own senior staff, capital expenditure budget, offices, employee incentive schemes and brand identity. Openreach would contain the 'natural monopoly' parts of the BT business, in particular access and backhaul infrastructure. This is increasingly being described in Europe as 'the UK model of functional separation'.

When we started our review in 2004, the UK market had been open to competition for 20 years. But competition remained weak and

fragmented, with BT still in a very strong market position in all market segments. As a consequence, consumers were losing out, particularly when it came to the deployment of new services such as broadband. We looked at a range of options for change but it was clear that the BT access network was a natural monopoly and would remain so for the foreseeable future. The core challenge was therefore to get the regulation of that natural monopoly right.

Partly this would be achieved by full and effective implementation of the EU regulatory framework. We looked for best practice from other regulators, and to take one example, drew heavily on the successful policies of ARCEP in local loop unbundling. But designing remedies more effectively would not address the problem of the lack of incentive on BT to comply with regulation. As a vertically integrated company in which managers of wholesale and retail products often worked physically alongside each other, BT had both the motive and the means to discriminate against competitors.

A full ownership separation of BT would have addressed such problems, but would take time as it would require an investigation of up to two years by the Competition Commission. And it was not necessarily the only way to remove incentives to discriminate. Putting the monopoly parts of BT with a separate manage-

ment and incentive structures would also have the same effect. From this was born the idea of 'Functional Separation'.

How is the policy working in practice? So far, very well. Openreach went from a theory to a practical reality in six months. Its creation has prompted a new wave of investment in the UK telecoms market which in turn has triggered a major price war in the broadband market. Importantly, there have been big benefits for BT itself – we have been able to deregulate retail markets and BT's share price has risen partly because of confidence that there is a new stability in the relationship with the regulator. Ironically, some European incumbents who were initially very hostile to functional separation are now seriously examining it for this reason.

How relevant is this UK experiment to other regulators? We certainly don't believe that all regulators would need to follow the UK approach to achieve effective competition – this depends on national market circumstances. The degree of 'Functional Separation' required in different national markets would also differ. But we do believe that all regulators should have the powers to impose functional separation under the EU Framework even if only as a power of last resort.

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Functional separation: what we can learn from the British experience

Winston Maxwell, Partner, Hogan & Hartson

The objective of functional separation is to create a virtual company within an integrated operator, with responsibility for managing access to certain resources. In the United Kingdom, BT has set up an entity of this type, known as Openreach, to control the British incumbent's access and backhaul networks. These are network elements over which BT is likely to retain its dominant position for some time to come. New investment in fibre access networks (FTTx) will be made through Openreach. This business unit treats other divisions of BT as customers and applies the same conditions to these internal customers as it applies to third party operators. All procedures, including the information systems, production systems and

the employee pay structure, are designed to ensure non discriminatory treatment of the group's external and internal customers. Compliance with the non discrimination obligation is monitored by the Equality of Access Board, which reports to the BT Board of Directors. Openreach will also present separate financial statements.

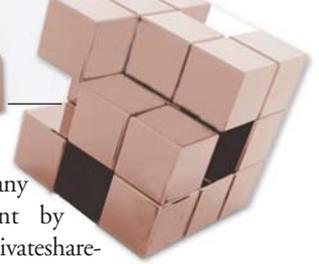
Separation with a view to reducing the need for regulation

The Openreach system was not imposed by the British regulator Ofcom as part of the remedies established following the market analyses, but rather as a result of bilateral negotiations leading to a series of Undertakings by the incumbent operator. This was in BT's interests,



Compliance with the non discrimination obligation is monitored by the Equality of Access Board, which reports to the BT Board of Directors

because functional separation will, in theory, lead to speedier deregulation of its other operations, allowing it more room for manoeuvre on its retail markets. The British incumbent considers that if the conditions of access to the "built-



ding blocks” of the network are the same for everyone, and this equivalence is both verifiable and verified, then the regulator will be able to concentrate on that part of BT and relax its control over the group’s other operations. By creating a situation where the group’s behaviour in the upstream market is deemed to be irreproachable, BT hopes to be able to gain greater freedom of action in the downstream markets.

This view is not shared by all incumbent operators. France Télécom considers that the Openreach system creates inefficiencies, leading to a general reduction in quality of service for all operators. The French incumbent operator also rejects the idea that it is possible to draw a clear boundary around the infrastructure and services to be managed by the Openreach business unit. Its view is that any demarcation will quickly become outdated because of the rapid development in networks and services. Many of these objections come down to the conclusion that functional separation would not be a proportionate remedy, that the costs of the remedy would exceed the expected benefits.

Even if functional separation were explicitly mentioned in the European Access Directive and the French Post and Electronic Communications Code, the regulator could not impose this solution unless the remedy passed the proportionality test.

In France, the proportionality of a remedy such as this would depend on the market to which it applies. In the residential broadband market, it is possible that the operational procedures already implemented by France Télécom are sufficient to achieve a satisfactory level of non discrimination, whereas in other markets, such as the wholesale bitstream market for instance, the level of non discrimination is still unacceptable. Consequently, functional separation would be appropriate for the bitstream market, but not necessarily for the residential broadband market.

Encouraging a culture of non-discrimination

One of the lessons from the Openreach experience is that non discrimination is not simply a matter of compliance with a series of detailed non discrimination rules, but involves the creation of a true culture of non discrimination among all the personnel responsible for managing access to shared resources. Without such a culture, any detailed non discrimination rules imposed by the regulator will remain a dead letter and some form of functional separation will become necessary.

In France, a culture of non discrimination is creeping into France Télécom. Alternative operators sometimes say that France Télécom “has understood” non discrimination for

certain services, and that for those services France Télécom is implementing truly non discriminatory procedures with respect to third party operators. In the case of other services or markets, however, alternative operators complain of systematic discrimination, despite the existence of detailed non discrimination rules. In these markets, the non discrimination rules are inadequate because they are not backed by a culture of non discrimination. In such circumstances, functional separation would be a proportionate remedy.

« In the residential broadband market, it is possible that the operational procedures already implemented by France Télécom are sufficient to achieve a satisfactory level of non discrimination, **whereas in other markets, such as the wholesale bitstream market for instance, the level of non discrimination is still unacceptable.** »

Preserving investment incentives

In addition to proportionality, the functional separation remedy would also need to satisfy the criterion of encouraging efficient investment in networks and innovative services. Some people say that functional separation removes incentive for investment, citing the example of French “cable plan” in the 1980’s, generally considered a failed experiment in separating network ownership from operation. This same line of argument has been advanced with respect to all the remedies imposed on France Télécom with regard to its optical fibres or new services. Some feel that any access remedies on new infrastructure will kill investment.

ARCEP’s approach across markets has been to impose remedies which preserve investment incentives. The regulator has, in certain cases, abandoned the concept of cost-oriented pricing in favour of a concept of “non-excessive” pricing, which allows a greater return on investment in order to compensate for the risk incurred. This same pro-investment approach can be transposed to the remedy of functional separation. Some investment banks even go as far as to say that functional separation would encourage investment in new optical fibre networks. The incumbent’s separate business unit is regarded by the financial market as having the characteristics of a utility, allowing a higher gearing ratio and more attractive financing opportunities.

The investment bank J.P. Morgan goes even further. In its view, an incumbent operator which rolls out a major programme of investment in optical fibre within the framework of a functional separation scheme such as Openreach has every chance of receiving the blessing of the authorities, allowing it to become the only FTTx operator on the market

and discouraging any parallel investment by other public or private shareholders. By adopting a functional separation solution for new investment in fibre networks, the incumbent can gain credibility as a “neutral” operator and thus pre-empt this new market. The bank adds that this stratagem would have little chance of succeeding in France, given the active efforts of the regulator and the government to establish shared optical fibre networks outside the ambit of France

Télécom. In other countries, however, the bank sees functional separation as a tool which could facilitate the creation of a new fibre monopoly. This is the “dark side” of structural separation.

Finding a legal basis

Is it necessary for EC directives to be amended before ARCEP can impose functional separation? The regulator has already imposed several measures that resemble functional separation in the context of non discrimination remedies. Its decision on accounting separation requires France Télécom to establish internal protocols to ensure that the operator uses the same inputs as its competitors when developing its retail services. Unfortunately, the internal protocols that France Télécom is required to put into place are not published, which makes this measure less effective in terms of creating a culture of non discrimination recognised by the market. One of the benefits of functional separation is to create a verifiable culture of non discrimination which can be recognised as such by other players on the market, and will in turn create a certain degree of confidence in, and deregulation of, the incumbent.

Imposing functional separation of the Openreach type in France would probably require a more specific legal basis than that provided by the current provisions of the Access Directive and the French Post and Electronic Communications Code. It was probably in order to remove any ambiguity on this point that the Chair of the European Regulators Group (ERG) called, on 12 October 2006, for a revised Access Directive to specifically mention this remedy. If functional separation were explicitly provided for in the EC Directives and national law, it could be examined in the ERG’s Remedies Paper and thus gain in legitimacy. The regulator would then find it easier to bring this subject up with the incumbent operator, perhaps within the scope of wider dialogue about the deregulation of the operator’s other operations. ■



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Ten years on : positive results for the national economy and for consumers

1997-2007: although it cannot be said that the regulatory process over the past ten years has been all smooth sailing – having been marked by a series of conflicts and disputes with stakeholders – it has nevertheless been carried out with a certain serenity thanks to a solid foundation of high quality texts at both the European and national level, and to a reasoned and professional approach. Of course it would be presumptuous for ARCEP to take sole credit for the very positive strides made during the past decade, but its contribution remains undeniable.

Track record thus far

The first point to be made is how well the legal framework has worked and how successful the process of opening the markets up to competition – on the impetus of the European Commission – has proven, particularly in France where broadband offers are now among the highest quality and least expensive in Europe.

Naturally, this is due first and foremost to the dynamism of the players – whether France Telecom or its competitors – to their innovation and their investment. What better example to illustrate this than the introduction of the service boxes which have helped spur France to the top of the ranking in Europe, with the lowest prices (and among the lowest in the world) and the highest bitrates (now reaching 20 Mbps), not to mention the highest levels of IPTV and VoIP usage of anywhere in the globe.

But this success is also the fruit of pragmatic and efficient regulation based on a solid regulatory and institutional framework. Thanks to well-defined European directives, which were transposed faithfully by the Parliament into national law, and to successive governments which provided the regulator with the necessary means to carry out its tasks, the Authority has managed to create a healthy competitive environment which has encouraged investment, innovation and regional development, all of which have served the public interest.

Of particular importance is the fact that this success story has proven beneficial to consumers: between 1998 and 2005, retail prices decreased by just over 30%, on average, while consumption increased by close to two and a half times, which translated into a consumer surplus of more than 10 billion euros over that seven-year period.

The next steps

Easing retail market regulation

If the Law of 1996 created a framework that was geared essentially to opening the classic telephone network up to competition, the current framework, which was put into place in 2004, has introduced a great deal more flexibility and reactivity. This flexibility has allowed the regulator to adapt its actions to the true state of competition in a given market, particularly thanks to the market analysis process.

The prospect of the gradual eradication of sector-specific regulation and its replacement by competition law is no longer a utopian view. It does, however, require close collaboration between ARCEP and the competition authority, something which has been well underway for several years now.

Achieving progressively lighter regulation began in summer 2006: regulation has already been lifted for several France Telecom retail fixed telephony offers, as the focus has shifted to regulating wholesale markets, in other words the relationships between operators.

But easing regulation does not mean no regulation at all! In addition to postal sector regulation – a task that the Parliament assigned to ARCEP in May 2005 – the Authority has a number of other responsibilities: managing frequency and numbering resources, overseeing universal service, regional development and consumer protection.

Generally speaking, ARCEP actions will be devoted more and more to achieving symmetrical regulation, in other words a situation where the same rules are applied in the same fashion to all market players, and no longer to only the incumbent carrier or the dominant players in a given segment. Once healthy competition has taken hold, the task for ARCEP is to focus on those elements that will allow consumers to exercise their freedom of choice, regardless of the type of operator, in a lasting and efficient way – elements which include consumer information, terms of contract cancellation, number portability, terms for accessing value-added services, quality of service guarantees, etc.

Fibre

The tremendous success of broadband in this country needs to be consolidated and further amplified by the next stage of market development, namely ultra-broadband and the deployment of fibre optic networks to the premises. Several players have already announced forthcoming investments in this area. Fibre is a new tech-

nological disruption, and one that will require massive investments. As a result, the sharing of passive infrastructure will play a critical role in the shape of things to come.

Public authorities – and local authorities in particular – as well as ARCEP have a central part to play in creating a framework that is propitious to the deployment of this new local loop, while remaining mindful of fostering competition between national players. In particular, Authorities will need to prevent the creation a new monopoly over the fibre loop and, ultimately, enable the development of an alternative local loop.

The digital dividend

The digital dividend is the third major issue facing not only France but also Europe as a whole. The emergence of new mobile technologies engenders a growing need for frequencies, to enable the development of wireless broadband and mobile TV. The phasing out of analogue television and its replacement by digital broadcasting, which consumes fewer radio resources, will free up much-coveted low frequency bands that boast particularly good propagation and indoor penetration capabilities, and which are therefore essential to achieving broad coverage across the nation.

As a result, there is now a pressing need to identify the quantity of frequencies liberated by the end of analogue broadcasting – as has already been done in several countries around the globe (the United States, Japan, South Korea) – and to examine the options for reassigning these frequencies and prepare the technical roadmap for implementing the digital dividend. It goes without saying that the reuse of these frequencies will require that particular attention be given to harmonisation at the European level.

Clearly, a number of challenges lie ahead for ARCEP in this rapidly evolving regulatory environment. Having blown out its tenth-birthday candles, the Authority is now looking to the future. Armed with experience and recognised by its peers inside the European Union and beyond, it is ready to forge ahead – continuing to uphold its responsibilities and to work for the common good.



Paul Champsaur
chairman of ARCEP



2006 ARCEP's Annual Report is out !

- ARCEP published its 2006 Annual Report on July 2nd 2007. As this is ARCEP's 10th birthday, the Report also covers the French regulator's actions since the opening of telecommunications market to competition.
- The French version of the Report can be downloaded directly from ARCEP's Website (www.arcep.fr/publications) or can be ordered from ARCEP (see the form below).
- An electronic edition of ARCEP's Annual Report will be published in English in the course of July on ARCEP's Website and a CD-Rom version will also be available.

To order the hard-copy version of ARCEP's 2006 Annual Report in French

The hard copy edition of ARCEP's 2006 Annual Report is available in French only. It is a one-volume document (453 pages) and includes a CD-ROM with the electronic version of the Report in French and all the relevant sources. The price for each Report is 22 € (free shipping).

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