Body of European Regulators for Electronic Communications



BoR (10) 44 Rev1b

# **BEREC** Guidance on functional separation - Annex I

# Functional separation in practice: EU experiences

February 2011

# **UK case**

### Context and legal basis

In September 2005, following the conclusion of Ofcom's strategic review of Telecommunications (TSR), BT Group plc (BT) offered a number of undertakings to Ofcom. In the TSR, Ofcom identified long-standing barriers to competition and investments and concluded that it was necessary to provide communication providers with equality of access to those parts of BT's network that represented a bottleneck.

The response to TSR's conclusions led to a fundamental change in regulation in the form of legally binding undertakings that were given by BT to Ofcom under the Enterprise Act 20021 on 22 September 2005 ("the Undertakings2") in lieu of a reference to the Competition Commission. It is worth noting that Ofcom, unlike other national regulators, has concurrent competition law powers and that the Undertakings offered by BT fell within the framework not of specific telecommunications regulation, but of UK competition law, in the form of the Enterprise Act 2002.

At the time of the TSR, BT had Significant Market Power (SMP) in 14 wholesale markets and 16 retail markets<sup>3</sup> and was therefore extensively regulated. In the wholesale markets, typically BT had an obligation to supply an SMP wholesale product at a regulated price on non-discriminatory terms<sup>4</sup>. However, as Ofcom's review developed, discrimination in these markets emerged as a core issue. Parties argued that BT was still able to favour its internal businesses and this was the prime cause of the lack of effective competition in the potentially competitive downstream markets. The LLU that BT was obliged to deliver to its competitors, through regulation, was "prohibitively expensive, not industrialised, and not fit-for-purpose, therefore entirely unsuitable for mass market take-up"<sup>5</sup>. The result was that there was no competition in broadband based on LLU. Ofcom also set out other forms of competitive advantage enjoyed by BT and its unfair treatment of its external wholesale customers:

Preferential knowledge of product innovation: through group activities, internal forums and board meetings, BT Retail could access key information on product developments, technical features and price changes earlier and more easily.

Influencing wholesale product and process investment priorities: BT Retail could exert more influence on product development and investment priorities than the other wholesale customers

Quality process: there was evidence that BT engineers favoured BT Retail customers and missed a high percentage of appointments with alternative providers' customers.

<sup>&</sup>lt;sup>1</sup> Section 131 (1) Enterprise Act 2002.

<sup>&</sup>lt;sup>2</sup> BT Undertakings are available at: <u>www.ofcom.org.uk/telecoms/btundertakings/btundertakings.pdf</u>

<sup>&</sup>lt;sup>3</sup> "Equivalence of Input and Functional Separation: A Framework for Analysis," prepared for BT Global Services by SPC Network, 26 Feb 2009.

<sup>&</sup>lt;sup>4</sup> Non discrimination was actually referred to as "no-undue discrimination" in UK law.

<sup>&</sup>lt;sup>5</sup> Quote from "Strategic Review of Telecoms" consultation phase 2.

Retail competitor market intelligence: BT Retail could become aware, by sharing information on the wholesale products purchased, of its competitors' retail activities.

Cost allocation: BT had the incentive to allocate higher costs at the wholesale level to products for which they had a lower retail market share.

As a consequence, BT's competitors had experienced twenty years of: a) slow product development; b) inferior quality wholesale products; c) poor transactional processes; d) a general lack of transparency. Ofcom concluded that BT behaviour had put alternative operators at a competitive disadvantage and therefore there was a need to impose "real equality of access".

### Degree of separation

According to Cave's definition UK separation is degree 4, i.e. "Functional separation with localised incentives and/or separate governance arrangements". The BT Undertakings deliver Equality of Access by means of two main remedies:

Equivalence of inputs at product level;

Functional/operational separation.

The former is discussed below. The latter led to the establishment of a separated unit within BT, called Openreach, which supplies the separated wholesale products - mainly local access and backhaul products (see below) - only to communications providers (not to businesses and consumers). Openreach holds separate accounts; its offices are located in different premises from the rest of the BT group and it uses a different market brand. Openreach is subject to Chinese walls to ensure that key competitors' information does not leak into BT retail branches. Importantly, BT Undertakings require Openreach IT systems to be virtually and physically separated by the rest of BT. The management team resides in a different location and their remuneration is not linked to the group performance. They have autonomy within their annual operating and capital expenditure plan, i.e. they can approve and plan their own investment up to a maximum of £75m.

The functional separation also involved some changes within BT Wholesale, with new rules set out to separate their SMP and non-SMP activities (see below for more details).

### Access products separated

The products separated by BT Undertakings (on an input equivalence basis) are:

- IPstream (bitstream product) by 31 December 2005 note that this is not an Openreach product but a BT Wholesale product
- Metallic Path Facility, i.e. Local Loop Unbundling by 30 June 2006
- Shared Metallic Path Facility, i.e. shared LLU, by 30 June 2006

- Backhaul products such as Wholesale Extension Services (WES) and Backhaul Extension Services (BES) by 30 June 2006

- Wholesale Line Rental (WLR)/ Carrier Pre-Selection (CPS) by 30 June 2007
- Wholesale ISDN2 by 30 September 2007, wholesale ISDN by 31 December 2007
- BT's next generation network 21CN

Further the Undertakings provide for all new Openreach products being launched on a Eol basis. This extends to NGA products offered by Openreach.

### Model of Equivalence/Consumption models

The product level equivalence chosen by Ofcom is "Equivalence of Inputs" or EOI, i.e. BT provides, in respect of a particular product or service, the same product or service to all Communications Providers (CPs) (including BT) on the same timescales, terms and conditions (including price and service levels) by means of the same systems and processes and with the same degree of reliability and performance. This means that BT consume exactly the same product and on the same terms as its competitors. At the time, Ofcom consulted on the alternative option to enforce "Equivalence of Outputs" or EOO, whereby wholesale products offered by BT to CPs would be comparable to those offered to its retail activities, but the underlying processes did not have to be exactly the same. However, it was argued that, when the cost of doing so was proportionate, EOI delivers many advantages over EOO.

### Inclusion of future products

In section 3.2.1, the Undertakings state that "When BT in the future provide the following products, it will do so on an Equivalence of Input basis". The following list of products includes all backhaul and Ethernet products, NGN Wholesale rental, any future IP bitstream etc. In general, however, the Undertakings ensure that any future product developed by Openreach has to be provided on an Equivalent of Input basis.

The focus of 2005 Undertakings was on copper-based consumer market products and on business ethernet products – reflecting likely market demand at that point in time. Today, however, the UK market is moving rapidly to deploy fibre access products for consumers and Small and Medium Enterprises (SMEs)<sup>6</sup>. The Undertakings made no explicit provision for next generation access (NGA) but of course the obligation on Openreach to offer all products on an EOI basis would be applicable here as well. Further, the Undertakings allowed enough flexibility to introduce changes, e.g. Ofcom recently varied the Undertakings to allow Openreach to provide wholesale FTTC and FTTP products<sup>7</sup> involving Layer 2 electronics (which the Undertakings did not previously allow).

In essence, the Undertakings restrict Openreach to the control and operation of assets within the Physical layer of the access and backhaul network. Openreach cannot control or operate

<sup>7</sup> FTTP and FTTC variations are available respectively at

<sup>&</sup>lt;sup>6</sup> Virgin Media has just completed super-fast broadband rollout throughout its network footprint; BT has announced plans for NGA rollout to 66% of UK premises by 2015; Strong expressions of interest from competing CPs in wholesale NGA products to be supplied by Openreach.

www.ofcom.org.uk/consult/condocs/fttc/statement and

www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/fttp.pdf

electronics unless an explicit agreement is reached with Ofcom. In the context of NGA, this would imply that Openreach must provide on an EoI basis the passive inputs (e.g. duct access or sub-loop unbundling) to BT downstream and other players to create their own NGA active wholesale products. However, BT was keen that Openreach be the entity providing a raw active NGA product (using Layer 2 electronics). BT therefore requested a variation to the Undertakings to allow Openreach to control and operate NGA electronics to allow it to offer its NGA wholesale product arguing that otherwise it would incur inefficiencies and be deterred from rolling out its NGA.

Ofcom consulted and agreed to variations to the Undertakings to allow Openreach to offer wholesale NGA products. Its decisions were based on the fact that communications providers did not have significant demand for NGA passive products (such as sub loop unbundling) and a consideration of the inefficiencies BT would incur in having two separate divisions involved in the delivery of the wholesale product. These additional costs could have deterred BT from proceeding with its NGA investment.

Ofcom has recently also concluded its Wholesale Local Access Market Review<sup>8</sup> which includes a decision on remedies to be applied in the context of NGA.

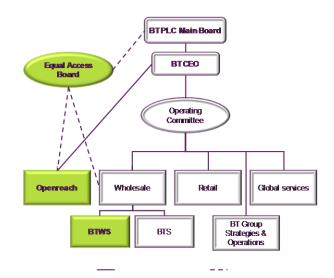
### **Governance arrangements**

The Undertakings introduced three main governance changes within BT:

- 1. The creation of Openreach as a separate unit to trade access products to alternative providers.
- 2. Rules within BT Wholesale to separate SMP and non-SMP activities.
- 3. The establishment of the Equivalence of Access Board (EAB), supported by the Equivalence of Access Office with the role of monitoring, reporting and advising BT on BT's compliance with the Undertakings.

The figure below shows the changes (highlighted in green) within BT organisational structure following the Undertakings. Note that BT has since restructured some of its business divisions but this restructuring has not affected the application of the Undertakings and there has been no change in terms of Openreach's and the EAB's remit.

<sup>&</sup>lt;sup>8</sup> Consultation on Wholesale Local Access market review is available at <u>www.ofcom.org.uk/consult/condocs/wla</u>



We discussed Openreach functions and governance arrangements above. As far as BT Wholesale is concerned, in section 6 of the Undertakings, a new management structure and incentive scheme for BT Wholesale was specified. In particular, within BT Wholesale there are two separate product management organisations: one is responsible for SMP products and the other for non-SMP products.

The third governance change regards the establishment of the EAB. Albeit not able to take executive operational decisions, the EAB has a proactive role in monitoring, reporting and advising on compliance. It is formed by five members, 3 independent (majority) and two from BT internal managerial staff. It is chaired by a BT non-executive board member. Supported by the EAO (staffed by circa 8 people), the EAB actively monitors and reports on compliance, investigates complaints, carries out own-initiative investigations, sets and monitors Key performance Indicators (KPIs) and makes recommendations for change. It must inform Ofcom of breaches, provide Ofcom with copies of EAB meeting minutes and publish an annual report.

At the same time the Undertakings were agreed, Ofcom also established the Office of the Telecommunication Adjudicator (OTA). The OTA had the main role to make LLU operational processes work for industry, by mediating between BT and other providers and therefore solving practical operational issues.

### **Incentive scheme**

Incentive arrangements are set out in detail under sections 5.36 and 5.37 of the Undertakings. In short, Openreach managers' and employees' incentives and bonuses cannot depend on the overall BT Group performance but they solely depend on Openreach objectives.

### Mechanisms to test effectiveness

The effectiveness of the Undertakings is measured in the EAB annual report through KPIs. Ofcom has also published a number of reviews of the implementation of the Undertakings, the most recent in May 2009.

The impact of the Undertakings can be measured through: a) Impact on consumers (price, broadband take-up, choice of products and providers); b) Impact on Industry (increase in take-up of BT wholesale products, investments, market shares); c) Impact on BT (Financial performance, investment incentives, deregulation).

At the moment, the UK has almost 7.5 million LLU lines<sup>9</sup>. Broadband prices dropped quite significantly since the Undertakings were introduced. In particular from 2005 to 2009 consumer prices for broadband reduced by around 30%, while during the same time broadband penetration has almost doubled increasing from 9.9 million of connections to 18.2 millions in 2009.

## Expiry and termination

The Undertakings will automatically terminate in the event that a market investigation reference is made to the UK Competition Commission under the Enterprise Act 2002 in respect of markets to which these Undertakings relate and the Competition Commission determines remedies to address any findings by it in respect of the reference.

Further, any commitments made under these Undertakings in respect of any products or services falling within a market for network access in which BT has been found to have SMP apply only for such time and to the extent that such products are required to be supplied as a result of a finding of SMP. More broadly, the Undertakings will cease to apply in their entirety if, at any time in the future, BT is found no longer to have SMP on any market connected with network access.

It should be noted that BT also has the right to make representations at any time to Ofcom with a view to Ofcom reviewing them to determine whether, and if so to what extent, they should cease to apply.

### Variation of the Undertakings

The Undertakings can be (and have been) varied by means of section 18 where it is simply stated that "BT and Ofcom may, from time to time, vary and amend these Undertakings by mutual agreement".

### Lessons learnt

### Competition and consumer impacts

It is difficult to isolate the specific impact that the Undertakings have had on the UK market as at the same time the Undertakings were introduced, two other significant steps were taken by Ofcom. The first was the establishment of the OTA tasked with ensuring that LLU processes were fit for purpose. The second was a significant reduction in LLU pricing. These three factors combined led to substantial improvements in the overall performance of the UK fixed telecoms market for competition and consumers. Eol has been a key element in ensuring competitors could access products in a fair and non-discriminatory manner.

<sup>&</sup>lt;sup>9</sup> <u>http://www.offta.org.uk/charts.htm</u>

Penetration of broadband services in the UK has raised substantially from 2004 to 2009<sup>10</sup>. Broadband prices have also dropped significantly. According to the 2009 OECD broadband prices evaluation, the UK has the lowest price for broadband monthly subscriptions<sup>11</sup>.

The development of competition has allowed for significant deregulation downstream including in the wholesale broadband access market where BT holds a SMP position for only 21.7% of all UK market of, the very high speed leased lines market and the telephony retail markets where BT is no longer subject to any SMP obligation.

However, although the Undertakings have delivered well in terms of competition and consumer welfare, they have posed some challenges as well.

We have identified some key challenges, some of which have resolved through the years:

- Openreach service quality suffered (even to BT's own downstream division):
  - some products delivered late or to a lower specification than originally anticipated.
  - There have been cases where service performance has been below what was expected in particular during 2010 there was a marked deterioration in service provisioning for WLR and LLU.
  - It has taken some time for Openreach's approach to its customers to become more commercially focused and its consultation approach is still not considered effective by some stakeholders
  - criticism by industry of Openreach being insufficiently commercial and too focused on compliance.
- The timeline for information systems separation has proven extremely challenging and while good progress has been made on the residential side, business systems separation is proceeding more slowly than anticipated. This led BT and Ofcom to renegotiate new system separation milestones.
- Parallel (or notional) equivalence: in some instances such as the legacy broadband/IPstream or the shared LLU vs. full LLU, BT used a variant of the main equivalent product. Although the variant was also available as a EoI product to all operators (and therefore BT was strictly compliant), in practice very few competitors used it apart from BT. As a result, BT consumed a different input compared to its competitors.
- Estimating the costs of implementing functional separation within BT is challenging. For example, many of the IT systems changes required to implement separation have been tightly aligned to other systems changes BT was planning to make for its own commercial purposes. It is therefore difficult to isolate the costs that are specifically due

<sup>&</sup>lt;sup>10</sup> Current penetration is 70 broadband connections per 100 households. See <u>http://www.ofcom.org.uk/static/cmr-10/pdfs/ICMR-1.16.pdf</u>

<sup>&</sup>lt;sup>11</sup> See "Price ranges, Monthly subscriptions" at <u>http://www.oecd.org/document/54/0,3343,en\_2649\_34225\_38690102\_1\_1\_1\_1,00.html</u>

to functional separation as opposed to other planned changes by BT. Whilst clearly the costs are likely to have been material, this needs to be weighed up against the dynamic benefits that increased competition has brought about.

### Impact on NGA investment

Critics of functional separation have argued that the relatively late development of NGA in the UK has been due to functional separation stifling BT's incentives to invest.

Firstly, the Undertakings allow for flexibility in defining how they should apply to different situations. For example, the Undertakings expressly provide that BT and Ofcom may, from time to time, vary and amend the Undertakings by mutual agreement. Ofcom varied the Undertakings in this way to allow FTTP and FTTC to be developed and sold by Openreach on an Eol basis. Further, the Undertakings provide that Openreach must supply all products (including new products) on an EOI basis. An exemption to this catch-all provision is possible where Ofcom agrees EOI is not required for reasons of practicability or otherwise.

Secondly, a key driver of NGA take-up in many markets (such as the US) has been Pay TV. However, the UK digital multichannel TV market is already well developed with 91% of households already subscribing to multichannel TV offers (satellite and cable predominantly). See Figure 1.

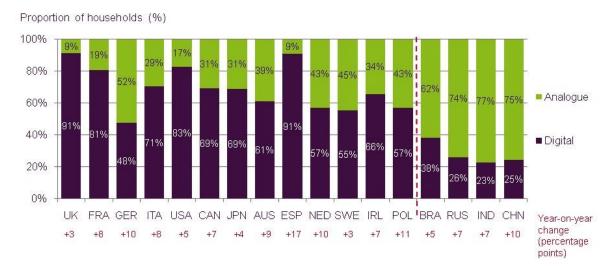
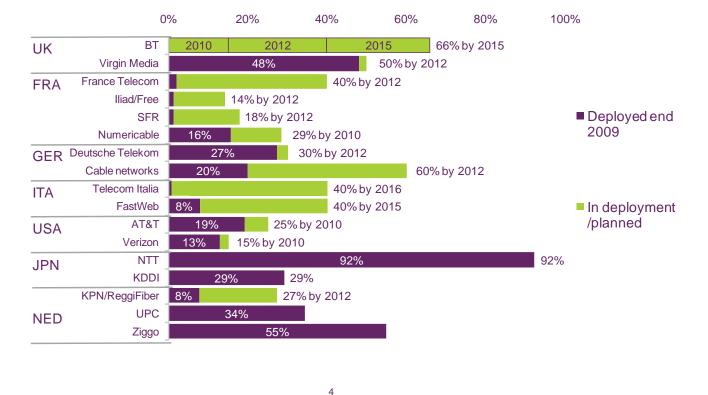


Figure 1 Take-up of digital television vs. analogue television in 2009

Lastly, aggressive competition from unbundlers and the cable operator who are offering attractive triple-play packages has arguably led BT to commit to investing in greater coverage over the next few years than many other incumbents (see

Figure 2).



## Figure 2 Current and planned household coverage of superfast broadband

## **Italian case**

## Context and legal basis

In May 2007 AGCOM launched a public consultation on the regulatory aspects of the fixed access network and the prospects of the new generation broadband networks (Resolution No. 208/07/CONS). The accompanying document, which contained an enquiry on the effectiveness of existing regulatory measures in addressing problems arising from the access network's bottleneck, showed what follows.

• The regulatory approach towards fixed telecommunications focused on the access to Telecom Italia (TI) local network given its character of essential and not duplicable

infrastructure. In this context, AGCOM adopted a strategy aimed at stimulating infrastructure competition by means of unbundling services.

- The existing bottleneck gave rise to several problems concerning the effective application of non-discrimination and equal treatment principle between TI's network divisions and retail divisions, on the one hand, and Ti's network divisions and the alternative operators that purchase its services, on the other.
- AGCOM had already tried to solve these problems in 2002 with the Resolution No. 152/02/CONS, which imposed a set of organizational measures on the vertically integrated operator aimed at better separating its network activities from its retail activities (accounting separation, administrative separation IT systems separation).
- Even if this strategy was able to achieve some positive results (in terms of diffusion of unbundling services and reductions in the prices of final services), the outcome of the first round of market analyses showed a competitive situation suffering from several structural problems, which did not seem solvable using the usual regulatory instruments. In fact, Telecom Italia was found dominant in all fixed network markets with market shares well above the European average in all four fixed access markets. TI's dominance resulted also in a slow uptake of broadband services.
- These problems seemed to depend mainly on the control of the single access network and on the vertical integration of the incumbent operator. This was confirmed by the high and rising number of disputes on access to local network between TI and competitors, brought not only to AGCOM, but also to the Italian Antitrust Authority and to ordinary courts.
- All the above elements led AGCOM to believe that some additional regulatory measures were needed to guarantee and reinforce equal treatment in the access to TI's local network (the so-called "equality of access") and to avoid any form of "regulation by litigation".
- In this context, AGCOM identified a number of solutions to guarantee effective competition in the provision of TI's fixed access network services: *i*) to integrate and strengthen the administrative separation measures imposed with Resolution No. 152/02; *ii*) functional separation of TI's access network either by accepting binding commitments by TI, or imposing an obligation under Article 45 of the Italian Code (which transposes Article 8(3) AD); *iii*) structural separation of TI's access network as the effect of an autonomous decision of TI.
- All participants in the consultation, except TI, highlighted the persistence of a low level of competition especially in the access and broadband segments. They also emphasized that the measures imposed by Resolution No. 152/02/CONS were unable to address these problems and called for the adoption of new instruments suitable to guarantee the effectiveness of the principle of equal treatment. Most of the participants argued that functional separation was the most appropriate instrument in order to address the above mentioned problems.

In June 2008, a few months after AGCOM started its joint analysis of all retail and wholesale fixed network access markets, TI proposed – according to Italian Law 248/06 – a set of commitments within the limits of most fixed networks market analyses proceedings, and some other infringement proceedings. Indeed, Law 248/06 empowers AGCOM to accept commitments offered by operators within the limits of infringement and regulatory proceedings and to make them binding.

TI's regulatory commitments were mostly behavioural and were aimed at promoting competition in the provision of electronic communication networks and electronic communication services and at enforcing TI's existing obligations of non-discrimination and equal treatment in the provision of access network services. AGCOM approved these

commitments making them binding on December 11th, 2008 (Resolution No. 718/08/CONS).<sup>12</sup>

The logic of commitments has been further strengthened by the evolution of the regulation of access markets. In fact, on December 16th, 2009, AGCOM adopted Resolution No. 731/09/CONS outlining the obligations for TI as SMP operator in all fixed network access markets. This resolution implements as regulatory obligations some of the measures included in the commitments (in particular commitments No. 1, 5, 6, 7, 8 and 9)<sup>13</sup>.

### Degree of separation

It is difficult to clearly categorise the form of separation of the Italian incumbent within the options normally used to define separation and enumerated in the paper of Cave (ref). In fact, the Italian case of separation contains elements that can be found both under the heading of "functional separation" (option 3) and "functional separation with localised incentives and/or separate governance arrangements" (option 4).

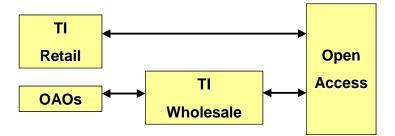
It has to be specified that TI has been subject to administrative separation obligations since 2002,<sup>14</sup> which were subsequently reinforced by TI's commitments aimed at ensuring the effective implementation of equivalence of access in the delivery of wholesale access network services.

In February 2008, before commitments were offered, TI had already set up its new Open Access division. Open Access has its own staff (separated from the rest of TI), information systems and investment budget. It is in charge of the passive elements of the access network: the copper access network (local loop and sub-loop, street cabinets, MDFs), the fibre access network and the local backhaul network (copper and fibre). TI's wholesale division continues to act as a "one-stop-shop" providing all wholesale services, including access network services such as local loop unbundling, to alternative operators. In this way, Open Access receives orders for access network services from both TI Wholesale (which serves alternative operators) and TI Retail (see the figure below).

<sup>&</sup>lt;sup>12</sup> Following TI's proposal, AGCOM published TI's commitments to allow third parties to comment and TI to reply. After this market test phase, TI submitted a new proposal containing many modifications over the previous one. AGCOM, while recognising that the new TI's proposal contained many improvements, deemed it not fully satisfactory and, in November 2008, asked TI to emend and integrate it within 10 days. In December 2008, TI offered a final proposal which was deemed satisfactory by AGCOM, that approved and made it binding on December 11th, 2008 (Resolution No. 718/08/CONS).
<sup>13</sup> AGCOM assessed Telecom Italia's commitments and considered most of them as measures

<sup>&</sup>lt;sup>13</sup> AGCOM assessed Telecom Italia's commitments and considered most of them as measures directly connected and ancillary to remedies; the remaining commitments were considered as aimed at improving the competitive conditions of the market, but not directly related to remedies.

<sup>&</sup>lt;sup>14</sup> In particular, different divisions were created: "TI Retail" serving end-users, "TI Wholesale" serving alternative operators and "TI Network" providing access, transport and interconnection services to both TI Retail and TI Wholesale. It was also implemented a physical separation of TI Wholesale staff and management from TI Retail and a logical and physical separation of TI Network and TI Wholesale systems from TI Retail in order to avoid retail units accessing the data of other operators.



Previous accounting separation measures have been extended by TI's commitments. In particular, TI has to submit its internal transfer charges for approval to AGCOM and to provide AGCOM with separate accounts for Open Access to let AGCOM to verify the equivalence between the internal transfer charges and charges applied to alternative operators. Open Access staff has also been prohibited to sell retail services.

### Access products separated

TI's current SMP access network products are:

- Local loop unbundling (market 4/2007);
- Wholesale broadband access (market 5/2007);
- Wholesale line rental;
- Terminating segments of leased lines (market 6/2007);
- Next generation access products on which SMP is found (as it has occurred in the last market analysis of market 4);
- Co-location services.

#### Model of Equivalence/Consumption models

Open Access has to provide SMP services both to TI Retail and TI Wholesale (which serves OAOs) on the basis of the equality of treatment principle. In particular, the product level equivalence adopted by AGCOM can be broadly classified as "Equivalence of Outputs", which describes a situation where regulated wholesale products offered by the incumbent operator to alternative operators are comparable to the products it provides to its retail division in terms of functionality and price, but these products may be provided also by different systems and processes. Actually, many of the systems and procedures used by alternative operators are the same of those used by TI retail division.

Telecom Italia has adopted a unified delivery process for the orders of SMP services coming from both its commercial department and alternative operators. In the cases of lack of network resources, orders will be held on a waiting list (so-called single queue system) and be processed on a "first come first served" basis and on the basis of different queues depending on the service, on the chosen quality level and on the technical difficulty of the intervention. TI has adopted a new customer relationship management system to handle technical and commercial relationships between alternative operators and TI's Wholesale function. Moreover, procedures have been defined for planning new co-location facilities in case of lack of resources.

Since most provisioning and assurance activities are not directly offered by TI, but are outsourced to other firms which operate on a local basis, the delivery process includes arrangements that put alternative operators directly into contact with the firms that offer provisioning and assurance services.

### Inclusion of future products

The model of equivalence applies to the following access services (so-called "SMP products"): LLU, Bitstream, WLR, terminating segments of leased lines and co-location. Commitments only apply to copper-based services, but there are also some explicit provisions on next generation access (NGA) services. In particular, if AGCOM finds TI dominant in the provision of access services on NGA, commitments will be extended to these services.

In addition, TI has to publish a reference offer for access services to its passive infrastructures and to its dark fibre and that TI has to join the "NGN committee" set up by AGCOM to discuss and solve technical, economic and organisational problems that may arise during the transition to NGAN.

Moreover, TI has to notify the Supervisory Board, AGCOM and the alternative operators its fixed access network building plans.

#### **Governance arrangements**

The Italian approach to separation includes a set of governance bodies as the Supervisory Board, OTA Italia and the NGN Committee described in the following.

The "Supervisory Board" (SB) is in charge of monitoring, reporting and advising on compliance of TI's commitments. It is made up of five members (three designated by AGCOM and two by TI) with a not renewable term of three years. It is supported by the "Supervisory Office", a department made by TI employees, which acts as a centralised contact point to both the SB and alternative operators on issues related to the commitments. The SB, which does not substitute AGCOM in any way, monitors and reports on compliance, investigates complaints, sets and monitors Key Performance Indicators. By its own initiative or investigating complaints received by third parties, the SB verifies possible breaches and, should this be the case, it notifies the management of TI and AGCOM. SB may adopt resolutions and recommendations regarding the proper implementation of the commitments which do not interfere in any way with the exercise of AGCOM's powers (AGCOM remains the only body in charge of ascertaining commitments' violations). The SB – as well as the Supervisory Office – is located in separate premises from the rest of TI. The Body has to produce a three-monthly report (to be submitted to TI and AGCOM) and an annual report<sup>15</sup>.

TI has committed to participate in a new access network dispute settlement body set up by AGCOM (OTA Italia) which is similar to the Office of the Telecommunications Adjudicator (OTA) in the UK. TI committed to adhere to the contractual scheme set up by AGCOM. OTA Italia has the main role to make operational processes of wholesale access services work for industry, by mediating TI and other providers and therefore solving practical operational issues.

TI has also committed to participate in the activities of "NGN Italia", a committee set up by AGCOM to discuss and solve technical, economic and organisational problems that may arise during the transition to NGAN.

<sup>&</sup>lt;sup>15</sup> Consultation of TI's annual report is available on <u>http://organodivigilanza.telecomitalia.it/eng/relazione\_annuale.shtml</u>

### Incentive scheme

The commitments provide for an incentive scheme based on targets for both Open Access and TI Wholesale staff on internal/external equality of access, customer satisfaction and quality, security and efficiency of the fixed access network. It is worth noting that the incentive system is not linked to the overall performance of TI but it depends only to the achievement of Open Access and TI Wholesale targets. The Commitments provide for a code of conduct – with related training courses – for the management and the staff of Open Access and TI Wholesale, which sets the necessary rules and procedures to ensure the fulfilment of the commitments.

### Mechanisms to test effectiveness and manage compliance

The effectiveness of separation is monitored by the comparison between Key Performance Indicators and Key Performance Objectives on the quality of SMP products provided by Open Access, and on the respect of the internal/external equality of treatment principle between alternative operators and TI's own commercial business units. Moreover, TI has set up a department in charge of regularly reporting on Open Access performance (on a monthly, quarterly and yearly basis).

### Structural TI's changes which impact on the commitments

Even though the organisation and management of TI's organisational structure, including Open Access, is not covered by the commitments, TI needs AGCOM's explicit approval for structural changes that have a significant impact on the commitments.

### Expiry, efficacy and variation of the commitments

All commitments will cease to have effects if AGCOM finds that TI has no longer SMP in any of the wholesale access network markets (markets 4-6/2007), or if AGCOM imposes functional separation on TI. Commitments on SMP services will cease to have effects, within the limits of specific products or areas, if AGCOM finds that TI has no longer SMP in the provision of a specific access network product (or in a specific geographic area) or TI is no longer subject to the access obligation in the provision of a specific access network product.

TI and AGCOM can agree to introduce amendments to the commitments.

Five years after the Commitments' approval, AGCOM may start a proceeding aimed at reviewing the commitments.

## **Polish case**

### **Problems in the Polish market**

Formal work on the imposition of functional separation on the Polish fixed incumbent (Telekomunikacja Polska SA, further referred to as TP or the incumbent) started in 2008. The Polish regulator (the President of UKE) had for some time already taken action in order

to eliminate problems with the implementation of regulatory obligations on the part of TP as reported by market players on numerous occasions. One of the key issues for alternative market players has been the implementation of non-discrimination obligations, particularly as regards access to infrastructure owned by the SMP operator. Despite the fact that this obligation was imposed on TP problems resulting from breaches to this obligation were reported by alternative operators on numerous occasions. The implementation of regulatory obligations by TP were subject to many decisions issued over a couple of past years, of both regulatory and enforcement nature. Nevertheless market situation did not change and telecommunications undertakings were still treated in a discriminatory manner.

Because of persistent discriminatory behaviour and problems as well as due to the fact that the existing regulatory action turned out ineffective to overcome them, the Polish regulator started work aimed at defining feasibility and legitimacy of imposing functional separation as a regulatory measure ensuring more effective enforcement of obligations imposed on the undertaking with SMP. One of the first steps in this process was to commission a report on the legitimacy of the SMP operator's separation. In November 2008 a consortium presented its report on the "Analysis of functional separation of Telekomunikacja Polska SA" <sup>16</sup>, which concluded, inter alia, that:

- there is no effective competition in the fixed-line telephony and data transmission markets, which results from substantial market advantage of TP;
- there is a permanent barrier to market development, i.e. anti-competitive approach of TP, attempting to obstruct cooperation with alternative operators and the flow of information within the TP Group favouring anti-competitive actions;
- the access network in Poland is of low quality and there are risks connected with actions taken by alternative operators based on administrative decisions.

## Work on functional separation in Poland

Given the above conclusions, the President of UKE started work aimed at imposing functional separation on TP. The work began with the analysis of a retail broadband market and wholesale markets for BSA and LLU. These analyses showed that the Polish broadband market was characterised by low accessibility (in practice limited to larger cities) and low quality of services (capacities on offer), which gives Poland one of the poorest rankings among the EU countries. In addition, a number of barriers have been identified in wholesale markets, such as lack of alternatives to TP access infrastructure on a larger scale, geographic coverage, combination of dominant position in the wholesale market and vertical integration of TP allowing for and encouraging discrimination towards operators competing in the retail market, low quality wholesale services, obstacles and delays in the provision of wholesale services or impediments for consumers to switch between providers. In the light of such conclusions, the Polish regulator decided that only functional separation would be able to make TP ready to cooperate by establishing mechanisms designed for motivating relevant units and their managers to maximize wholesale sales and cooperate on equal footing.

<sup>16</sup> 

http://www.uke.gov.pl/uke/index.jsp?place=Lead01&news\_cat\_id=339&news\_id=3501&layout=3&page=text

In response to actions taken by the Polish regulator aimed at imposing FS on the incumbent, TP presented an equivalence of access programme called "TP Charter of Equivalence" elaborated by the company. For TP this document was a proposal for solutions alternative to functional separation.

The concept of equivalence in its essence assumed that "a wholesale product may be regarded as compliant with the principle of equivalence if an alternative operator's attitude to obtaining this product instead of a product identical to the one used by units delivering retail product to TP customers is neutral".

The document proposed by TP was based on three pillars of equivalence: equivalence of products, equivalence of wholesale service handling and equivalence of information.

For each of these pillars TP planned launching a number of activities in order to ensure that the goals defined for all three pillars of equivalence would be achieved.

In response to TP proposal, the Polish regulator presented its position on this document indicating that the Charter of Equivalence failed to meet regulatory objectives of the President of UKE. The implementation of this document will not ensure that effective competition increases thanks to non-discrimination in a wholesale telecommunications market and will not have any impact on the development of competition in infrastructure.

Furthermore, in August 2009 the Polish regulator published a "Consultation document on the legitimacy of functional separation of Telekomunikacja Polska SA"<sup>17</sup>, which presented the results of analyses, major assumptions and form of a planned obligation.

The President of UKE considered two scenarios: separation into two and separation into three organisational units. For the scenario with three units it was planned that a separate unit would be established to manage access network resources (buildings, ducts and access network including active elements and service elements), along with a retail sales unit and a wholesale unit. The scenario with two units would envisage the establishment of a retail unit responsible for retail sales and a wholesale unit managing the remaining resources such as buildings and ducts.

Another element of planned functional separation of TP consisted in ensuring independent management for organisational units formed as a result of FS, which should allow for pursuing business objectives by these units in isolation from business objectives of the whole TP group, with these being contradictory in certain circumstances. The President of UKE also considered creating a separate incentive scheme for employees of a separate unit based on sales performance at the wholesale level. In the opinion of the President of UKE it was also important to create a separate brand for the unit responsible for wholesale sales.

In order to block the flow of forbidden information between particular units favouring discriminatory behaviour, it was planned to implement so called Chinese walls, including in particular separate IT systems, separate office rooms and a Code of Best Practice.

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http://www.uke.gov.pl/uke/index.jsp?place=Lead01&news\_cat\_id=391&news\_id=4452&layout=3&page=text

The document also presented basic monitoring principles comprising first of all monthly reports on current work, periodical financial reports from a separate unit and measurements of key performance indicators (KPIs).

### Agreement between TP and the President of UKE

TP in order to avoid functional separation imposed by the Polish regulator by means of an administrative decision started negotiations with market players and with the President of UKE in order to arrive jointly at a solution that would eliminate market problems and enhance cooperation between operators.

In the course of work that took several months with many meetings between market players and the Polish regulator, a solution was finally found to address major market problems and to create grounds for development of equal and effective competition. On 22 October 2009, an Agreement was signed between the incumbent and the President of UKE under which TP committed itself to undertake a number of activities aimed at improving cooperation between TP and alternative operators, ensure stable and foreseeable conditions for the functioning of the telecommunications market in Poland as well as the development of this market by means of investment in modern telecommunications infrastructure.

Under the Agreement, TP committed itself to perform all regulatory obligations imposed on it and to ensure equal treatment for all alternative operators under the same terms and conditions as applied to its own retail arm. TP will primarily separate within its structure a unit dealing with the provision of wholesale services and will provide these services to other operators under non-discriminatory terms and conditions. Moreover, the incumbent will submit to the President of UKE on a regular basis information about its compliance with nondiscrimination principles internally by means of specific indicators designed for that purpose (so called KPIs) and by means of quarterly reports of independent auditors.

Other activities to ensure equal treatment for all market players include differentiated incentive schemes for employees involved in the provision of wholesale services and for employees dealing with retail services. Under the Agreement TP committed itself also to introduce new organisational culture for employees dealing with the provision of wholesale services, to conduct appropriate training courses on non-discrimination as well as to introduce and apply a set of rules and attitudes (code of practice) describing TP employees' conduct, especially as regards the application of non-discrimination. TP committed itself to limit the flow of forbidden information both internally and between entities comprising the whole TP capital group. Limitations in the flow of information will be achieved thanks to separation between employees dealing with the provision of wholesale services and those working for the retail arm and thanks to the introduction and application of rules of conduct (code of practice) on one hand, and on the other thanks to the separation of IT systems within TP. As a result of activities undertaken by TP its IT systems are expected to function in a manner that will ensure transparency of internal organisation for TP and other companies within the TP Group as well as equal access to information for all entities. They should prevent discriminatory flow of forbidden information within the TP Group. Wholesale services will be provided by TP wholesale unit using separate IT systems to which other TP units and TP Group companies have no access.

Furthermore, TP will conclude contracts with telecommunications undertakings in line with the procedure and templates defined in reference offers. Concurrently, starting from the day on which the Agreement was signed, the incumbent ceased to apply templates that were contradictory to templates defined in reference offers, and in particular it stopped to place clauses and final provisions contradictory to contract templates defined in reference offers. The Agreement also contains rules governing certain aspects of cooperation between TP and alternative operators which should facilitate the provision of services by the incumbent. These include:

- a system for demand forecasts enabling TP correct network measurement for traffic related to services provided to alternative operators;
- interconnection model defining basic rules and conditions for the provision of services by TP to alternative operators;
- IT interface, i.e. a tool used to exchange information and data related to regulated services between TP and alternative operators;
- Time-to-Market process designed to prepare and implement TP wholesale offer, taking account of market players' needs and expectations.

The Agreement regulates also many other issues related to, inter alia, TP investment in modern telecommunications infrastructure and closing court disputes between TP and the President of UKE or TP and alternative operators.

The Polish regulator monitors implementation of the Agreement by the incumbent on a regular basis, by means of quarterly audits. The President of UKE also plans in the nearest future to make a comprehensive assessment of the Agreement, in particular as regards implementation of obligations imposed on TP and to re-consider whether the Agreement is sufficient to ensure stable conditions for competition or whether it will be necessary to implement functional separation as a regulatory obligation under an administrative decision.