

## Functional Separation in UK telecoms markets

### *Time to re-consider?*<sup>1</sup>

Pioneered in the UK, functional separation is proving an increasingly fashionable means of tackling competition problems in the telecoms sector. The UK's approach - described in more detail in this article - involved BT agreeing to separate certain assets, services and personnel into an operationally separate division, now known as Openreach. This arrangement has now been in force for five years; new European rules on functional separation will come into force in 2011. Is it time to re-evaluate the UK approach?

Functional separation in the UK was given force by means of undertakings offered by BT under the Enterprise Act 2002 and accepted by Ofcom in lieu of a market reference under that Act<sup>2</sup>. The problem as expressed by Ofcom was this:

*some assets in the network are either economically impossible or highly economically inefficient to try to replicate: the so-called enduring bottlenecks-mainly, though not exclusively, in the access part of the network.*<sup>3</sup>

The idea of functional separation was, therefore, to isolate the assets and services which were not capable of economic replication in a separate business unit. This in turn should encourage competitive investment where it is feasible.

Since the separation of Openreach, the European Commission and other member states have embraced the concept of functional separation. As part of the European telecoms

reform package<sup>4</sup>, National Regulatory Authorities ("NRAs") are to be given the power to impose functional separation as a remedy for dealing with significant market power under sector-specific rules.

UK-style functional separation is a distinct creature with some interesting characteristics. However, like many apparently radical ideas it did not spring fully formed from nowhere. Various types of separation of vertically integrated operators have been tested around the world, with varying degrees of success. The UK itself implemented a notional separation between BT's Systems Business and its Supplemental Services Businesses long before the 2002 functional separation. This proved an insufficient measure however as the distinction between the two became increasingly difficult to maintain. A lengthy experiment with structural separation preoccupied the U.S. throughout the 1980s and 1990s, which saw the separation of AT&T into long distance and local operations ("ILECs"). The intent here was broadly the same as the UK's 2002 separation - to isolate the hard-to-replicate local networks. That measure has now effectively been reversed by the mergers permitted in the last decade of: MCI and Verizon; Qwest Communications and US WEST; and AT&T and BellSouth. These have structurally rejoined the ILECs and long distance operators.

One form of separation that is widely practised and is still considered to be a desirable regulatory measure is accounting separation. Accounting separation is now one of the first and most widely used measures in the standard

<sup>1</sup> This article was first published in the Computer and Telecoms Law Review (Sweet and Maxwell), December 2010

<sup>2</sup> Undertakings of 22 September 2005

<sup>3</sup> Ofcom - Telecommunications Statement, 25 June 2005

<sup>4</sup> Better Regulation Directive (Directive 2009/140/EC) and the Citizens Rights Directive (Directive 2009/136/EC) which amend the Framework Directive 2002/21/EC, Access Directive 2002/19/EC, Authorisation Directive 2002/20/EC, Universal Service Directive 2002/22/EC and e-Privacy Directive 2002/58/EC. The changes must be implemented into national law by May 2011.

toolkit of regulators in developed and emerging markets alike. Functional separation - though framed as a measure of last resort - may with the backing of the EU Directives become a similarly successful and accepted approach. Already in New Zealand the Telecommunications Act 2001 ordered functional separation of the incumbent Telecom New Zealand and the Australian government has put before parliament proposals for the separation of Telstra.

This article considers the new European rules and, in particular, considers whether the effluxion of time and its accompanying technological changes imply that the UK's current approach (which relies on domestic competition law as opposed to the new sector specific approach) should be reconsidered.

The new European telecoms package<sup>5</sup> amends the Access Directive<sup>6</sup> to introduce an additional "functional separation" remedy to be applied in some circumstances to players with significant market power by National Regulatory Authorities.<sup>7</sup> Appropriate existing remedies must be tried first, i.e. transparency, non-discrimination, accounting separation, access to network facilities, and price control / cost orientation. The recitals suggest that as few as one may be appropriate.<sup>8</sup> Where these "have failed to achieve effective competition and... there are persisting competition problems and/or market failures identified in relation to the wholesale provision of certain access product markets", then as an "exceptional measure" the NRA may impose an obligation of functional separation.

<sup>5</sup> Specifically Directive 2009/140/EC of the European Parliament and of the Council amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services

<sup>6</sup> Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive)

<sup>7</sup> New Article 13a Directive 2002/19/EC

<sup>8</sup> Recital 61, Directive 2009/140/EC

All proposals for functional separation are to be considered first by the Commission and "in order to avoid distortions of competition in the internal market... should be approved in advance by the Commission"<sup>9</sup>. NRAs are required to submit full justification for the measure, an analysis of its impact, and a draft measure detailing the design of the proposed separation. The recitals stress the importance of the NRA considering the full implications of imposing this remedy:

*"[It] is very important to ensure that its imposition preserves the incentives of the concerned undertaking to invest in its network and that it does not entail any potential negative effects on consumer welfare. Its imposition requires a coordinated analysis of different relevant markets related to the access network, in accordance with the market analysis procedure set out in [the Framework Directive]<sup>10</sup>."*

Explicitly, the information to be submitted to the Commission is as follows:

- (a) evidence justifying the conclusions of the national regulatory authority [...];
- (b) a reasoned assessment that there is no or little prospect of effective and sustainable infrastructure-based competition within a reasonable time-frame;
- (c) an analysis of the expected impact on the regulatory authority, on the undertaking, in particular on the workforce of the separated undertaking and on the electronic communications sector as a whole, and on incentives to invest in a sector as a whole, particularly with regard to the need to ensure social and territorial cohesion, and on other stakeholders including, in particular, the expected impact on competition and any potential entailing effects on consumers;

<sup>9</sup> Recital 61, Directive 2009/140/EC

<sup>10</sup> Article 16, Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services

- (d) an analysis of the reasons justifying that this obligation would be the most efficient means to enforce remedies aimed at addressing the competition problems/markets failures identified.

Further stressed in the recitals is the attention that the NRA must pay in designing the remedy to “the products to be managed by the separate business entities, taking into account the extent of network roll-out and the degree of technological progress, which may affect the substitutability of fixed and wireless services.” Thus, the draft measure sent to the Commission is to include the following specific design details:

- (a) the precise nature and level of separation, specifying in particular the legal status of the separate business entity;
- (b) an identification of the assets of the separate business entity, and the products or services to be supplied by that entity;
- (c) the governance arrangements to ensure the independence of the staff employed by the separate business entity, and the corresponding incentive structure;
- (d) rules for ensuring compliance with the obligations;
- (e) rules for ensuring transparency of operational procedures, in particular towards other stakeholders;
- (f) a monitoring programme to ensure compliance, including the publication of an annual report.

The NRA must take the “utmost account” of the Commission’s opinion in relation to the proposals when making a final decision on the remedy.<sup>11</sup>

In addition to addressing compulsory functional separation, the Directive introduces measures addressing voluntary separation by SMP

<sup>11</sup> In accordance with Articles 6 & 7 Directive 2002/21/EC

operators.<sup>12</sup> Before either structural or functional separation by an SMP operator, it must inform the NRA to enable a full market analysis of all relevant markets to be carried out. Based on the outcome of that analysis, the NRA may impose remedies upon any new company or operationally separate business that is found to have SMP.

The EU has justified the new functional separation remedy substantially by reference to the UK<sup>13</sup>, where the recent boom in broadband subscriptions has been attributed to the creation of Openreach and the take-off of local loop unbundling<sup>14</sup>.

Even though the UK has functional separation already, the new SMP remedy of functional separation will still be implemented here as part of Ofcom’s toolkit of remedies. This was confirmed by the government in a recent consultation:

*Functional separation in the UK (in the case of BT) has already been carried out under UK competition law. However, we will still need to implement these new powers to comply with the Directive.*<sup>15</sup>

There is no suggestion that existing functional separation needs to be cleared with the Commission<sup>16</sup>. There are some notable differences between the UK approach and the new European remedy and these would become very obvious if there were an attempt to impose

<sup>12</sup> New Article 13b, Directive 2002/19/EC

<sup>13</sup> See ‘EU Telecoms Reform: 12 reforms to pave way for stronger consumer rights, an open internet, a single European telecoms market and high-speed internet connections for all citizens’ MEMO/09/568

<sup>14</sup> The Office of the Telecommunications Adjudicator reported 6.36 million lines unbundled at end December 2009.

<sup>15</sup> Consultation by the Department for Business, Innovation and Skills, “Implementing the Revised EU Framework, Overall Approach and Consultation on Specific Issues, September 2010”

<sup>16</sup> There is an interesting question about whether changes to existing functional separation arrangements ought to be cleared with the Commission - outside the scope of this article

SMP-based functional separation obligations on BT here.

The key difference stems from the fact that functional separation in the UK was a voluntary undertaking by BT to avoid a market reference to the Competition Commission. A market reference was a two-way bet. It could have resulted in something as extreme as a full structural separation of part of BT's business. Equally, though, there were respectable reasons for supposing the Commission might have decided that no separation was necessary at all. For example, at the time BT could plausibly argue that it had never been the subject of direct enforcement action for breach of its licence or (subsequently) SMP conditions. This means in practice that the creation of Openreach was the outcome of a set of negotiations with a very finely-balanced negotiating dynamic and which ultimately required BT to agree. This contrasts with the SMP remedy which can be imposed on BT by Ofcom acting without BT's consent.

Secondly, the two types of functional separation are enforceable in different ways. Ofcom has direct, specific powers to enforce SMP Conditions under the Communications Act. These include fines of up to 10% of turnover; and also the power to withdraw the right to provide services in the UK<sup>17</sup>. The enforcement route for Enterprise Act undertakings is more nebulous; it involves enforcement by Court order or injunction under (section 167(7) of the Enterprise Act). The Communications Act route is more flexible and easier for Ofcom to use. Similar points apply in respect of private enforcement. The Enterprise Act undertakings may be enforced privately, but there is a statutory defence where reasonable efforts have been made to comply with the undertakings. SMP Conditions may be enforced privately and, again, there is a "reasonable steps" defence. However SMP Conditions may only be the subject of private enforcement with the consent of Ofcom. In practice, neither SMP Conditions nor BT's Enterprise Act undertakings has been

the subject of private enforcement actions. It is clear, however, that it is considerably easier for Ofcom to enforce SMP Conditions than Enterprise Act undertakings.

Thirdly, while SMP conditions do not rely on consent, the imposition of an SMP remedy of functional separation would still be subject to a complex environmental dynamic. It would be subject to consultation in the UK; it would be subject to appeal in the UK; and it would be subject to the European Commission process outlined above. This sounds like it might have a very significant impact on the process of imposing such a remedy. In practice, the so-called "market review" process is well understood, tried and tested; and Ofcom has well-developed relationships with the European Commission. The question of how the Appeals bodies might treat an attempt to impose functional separation, however, is an utterly open one; certainly the Competition Appeal Tribunal, who would hear any such appeal, have not been shy of overturning the regulator.

Fourthly, just as the SMP remedy of functional separation may be imposed by a National Regulatory Authority, so it may be changed without the consent of the regulated party (although subject to due process). Again this is in contrast to the position under the Enterprise Act. This may seem unimportant but in a fast-moving technological and commercial environment it is actually very significant. Thus far, BT's Enterprise Act Undertakings have been amended often and with significant impact<sup>18</sup>. A good example of this is in relation to next generation access broadband services. These have required multiple sets of amendments to BT's undertakings which, in each case, have required BT's consent. We consider the question of NGA more directly later in the paper. However, for the moment it is sufficient to note that NGA is an extremely important issue and the mechanics of amending functional

<sup>17</sup> Sections 95 ff of the Communications Act 2003

<sup>18</sup> A full record can be found here: <http://stakeholders.ofcom.org.uk/telecoms/policy/bt-undertakings/exemptions-variations/>

separation rules to deal with it are also important.

This is all very interesting but does it have practical implications? The short answer is that it must. Once the SMP remedy of functional separation is available, Ofcom will be almost bound to consider it only because it is one of the options available to it. Even if Ofcom decides not to look at it of their own volition, it would very likely be raised by one or more market players; at which point Ofcom would be required to consider it by virtue of section 48(5) of the 2003 Act. The question, essentially, is whether Ofcom considers only when it becomes unavoidable to do so (i.e. as part of the ordinary market review process which focuses on more-or-less rigorously-defined economic markets) or pro-actively takes a wider view as part of a structured programme. The latter makes more sense; functional separation by definition is not well-suited to being a remedy specific to a single product market (and has never been used in this way); and if this transpires, it may be that Ofcom would undertake a dedicated project considering whether to replace the existing Enterprise Act undertakings *en bloc* with SMP functional separation obligations.

There is another reason for revisiting the existing undertakings in the short to medium term. The original undertakings separate fairly specific assets and services from the rest of BT: ethernet services (essentially fibre-based, high bandwidth services); local loop unbundling services; and wholesale (voice) line rental<sup>19</sup>. As Ofcom said at the time:

*The current products to which such equivalence is to be applied include shared and full metallic path facility (MPF), wholesale line rental (WLR), backhaul extension service (BES), WAN extension service (WES) and IPStream.*

The Undertakings at that time were essentially concerned with traditional broadband, not next

<sup>19</sup> The product are listed at paragraph 5.4 of the Undertakings as originally given

generation access (NGA) broadband<sup>20</sup>. Ofcom did consider so-called next generation networks in the context of these undertakings; but these were next generation core networks. Next generation access networks, though mentioned in Ofcom's work, were explicitly not dealt with in the original undertakings but were earmarked for a later review with the comment that:

*there are many important and complex issues to be addressed before we can confidently set out the appropriate regulatory approach.*

In practice this meant that the issues about NGA were dealt with in a series of later amendments to the original Enterprise Act Undertakings which, essentially, gave Openreach the right to build and operate NGA networks provided that the derived services (rather than the input services in the form of SLU) were made available on equivalent terms to all downstream providers including BT's own downstream businesses<sup>21</sup>. This approach has since been mapped in SMP conditions which do not include functional separation but do include a suite of other SMP remedies (including equivalence of inputs)<sup>22</sup>.

This is certainly one legitimate approach but it potentially leaves unanswered the questions of whether and how alternative providers might invest directly in NGA networks using regulated inputs<sup>23</sup>. The argument goes like this: functional

<sup>20</sup> The distinction is important. Traditional broadband networks use DSL technology installed at the BT local exchange. DSL plugs into the copper loop - which is made available through regulation to competitive players in the process known as local loop unbundling. NGA networks rely on various technologies including DSL, in this case a variant of the technology, still using copper loops but installed much closer to the customer - at a point known as the sub-loop. This too can be made available to competitive players in a process known, logically enough, as sub-loop unbundling (or SLU). NGA networks are much faster than traditional broadband networks.

<sup>21</sup> This so-called "equivalence of inputs" provision is a key part of functional separation.

<sup>22</sup> Ofcom statement and SMP Conditions, Review of the Wholesale Local Access Market, 7 October 2010

<sup>23</sup> Investment in this case means installing expensive electronics and potentially dumb assets such as street

separation remedies, as we have seen, are designed to isolate the parts of the network which are not susceptible to competitive investment; they can then be heavily regulated and are bought on an equivalent basis by all players, including BT's own downstream business. By functionally separating these irreplicable assets and making them subject to equal access (through so-called equivalence of inputs or "Eol") to these irreplicable assets, investment is encouraged where it is efficient.

The difficulty with NGA is that access to sub-loops - the input products required for at least some NGA services - does not benefit from functional separation in the manner envisaged for local loop unbundling at the time of the original undertakings. This is what Ofcom said on the subject:

*provision by Openreach of the passive inputs<sup>24</sup> on the basis of strict Eol would require that Openreach, in producing its active products, consumes those inputs in exactly the same way that other CPs might consume them. It would therefore need to create an internal trading arrangement, with a formal commercial interface within its own organisation for all transactions involving those inputs.*

*The impacts of such an arrangement are difficult to quantify with certainty, but they would include significant additional costs and complexity, particularly in the development and operation of processes and systems to support internal transactions and hand-offs that would otherwise not be required. The main beneficial impact at this stage in the development of super-fast broadband would be to offer greater confidence to potential investors interested in using BT's passive inputs. However, this would not remove other uncertainties that face such*

*potential investors at present, most notably in the economic viability of this form of investment.*

*In light of the current absence of serious interest in passive inputs for super-fast broadband we consider that imposing such an arrangement would risk creating an unnecessarily complex and costly operating model for Openreach without delivering effective and sustainable competition based on passive inputs. We therefore conclude that requiring Openreach to provide passive inputs on the basis of Eol would not be proportionate<sup>25</sup>.*

This, then, is the current situation. The functional separation line remains as drawn in 2005. Ofcom concluded it should leave it there in 2009; and, having finished a review under sector-specific powers in October 2010, has reinforced the position with the same directional conclusion<sup>26</sup>:

*There has been limited uptake of the SLU [sub-loop unbundling] remedy across the UK. While there has been some roll-out of SLU-based networks, these have generally targeted small coverage areas, predominantly in rural areas (with the exception of the Digital Region project). CPs did not provide us with firm plans of wide-spread roll-out across the UK, indicating that demand for SLU was very limited.*

If correct, that strongly implies that there would be no point redrawing the lines of functional separation specifically to target sub-loops. However, Ofcom also pointed to uncertainty about the current position:

*there is uncertainty about the extent and timing of NGA investment, as well as take-*

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cabinets at the sub-loop level - i.e. part-way between the BT local exchange and the customers it serves.

<sup>24</sup> In this context, the passive inputs are SLU and other inputs such as cabinet access

<sup>25</sup> Ofcom explanatory statement on Variation to BT's Undertakings under the Enterprise Act 2002 related to Fibre-to-the-Cabinet, 11 July 2009

<sup>26</sup> Ofcom statement on wholesale local access markets, 7 October 2010

*up by consumers. This makes it harder to foresee how the existing competitive conditions will change over the next few years. It is possible that the WLA [wholesale local access] market will change quickly in the future, for example as the speed of NGA deployment picks up.*

This very uncertainty has led for calls - at the moment in a minority - for the functional separation line to be re-drawn at the sub-loop, rather than as now (at the local loop). In practical terms this would mean substantially fewer assets within openreach. In intellectual terms it would mean that there would have to be a legitimate view that investment by alternative providers was viable right up to the street cabinet (i.e. much closer to the home than now). In short, it would be a radical move. At the same time, a separate body of opinion is emerging which implies the redrawing of the line further from the customer<sup>27</sup>.

In normal times this might be the stuff of business as usual. However there are reasons for believing that a review might happen sooner rather than later. First, this is the kind of policy which depends on likely investment: the regulator should only regulate heavily at the sub-loop if there is a real prospect of material alternative investment at that level. However, there is an element of self-fulfilment about this - just as the policy depends on the prospect of investment, the reverse is also true: serious investors will not commit unless they know that the policy environment is friendly<sup>28</sup>. So at the

point where policy makers decide that real investment by alternative players is a strong possibility but contingent on committed regulatory action, there could be a very fast policy shift towards renewed intervention. Secondly, there is currently a comparatively new government in the UK with thoughtful and well-informed ministers<sup>29</sup>, in the broadest sense an agenda for reform, and a strong belief in the importance of NGA.

In short, there is a new legislative environment, a new government, and an unstable policy debate: fertile ground for change.

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<sup>27</sup> See for example the joint paper for Vodafone by Towerhouse Consulting LLP and Ingenious Consulting, available through the Ofcom website here: [http://stakeholders.ofcom.org.uk/binaries/consultation\\_s/wba/responses/Vodafone\\_supporting\\_document.pdf](http://stakeholders.ofcom.org.uk/binaries/consultation_s/wba/responses/Vodafone_supporting_document.pdf)

<sup>28</sup> This is effectively what occurred with first generation broadband, where significant levels of investment only happened once Ofcom kicked off the original functional separation proceedings and undertook a number of other measures to stimulate investment: re-setting regulated prices, creating a new organisation to deal with the fiendishly complex process issues, and so on. See Brisby, Paul Brisby, *The Regulation of*

*Telecommunications Networks and Services in the United Kingdom*, 12 COMP. & TELECOM. L. REV. 114 (2006).

<sup>29</sup> See this account of the recent government Broadband Industry Day (the author this paper was there) for a flavour: [http://www.zdnet.co.uk/news/regulation/2010/08/13/su-per-fast-broadband-for-uk-get-creative-say-ministers-40089794/?s\\_cid=938](http://www.zdnet.co.uk/news/regulation/2010/08/13/su-per-fast-broadband-for-uk-get-creative-say-ministers-40089794/?s_cid=938)