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Abstract

The paper tackles the discussion about vertical separation in the electronic communications sector, in its two main forms functional and structural. The author will argue how mandatory structural separation under certain conditions could be a possible option. The evidence is provided by the analysis of recent commitment decisions adopted by the European Commission in the energy sector, and by structural separation undertakings signed in Australia and New Zealand in the past few years. The paper considers the theoretical background, such as the various forms of separation identified by the OECD in 2001 and 2011, but also the current discussion around the Second Telecoms Review (2005-2015) in the United Kingdom.

Keywords: vertical structural separation, functional separation, regulation, abuse, dominance, essential facilities, commitments, electronic communications

Dr Pierluigi Congedo*

1. Introduction

This paper tackles the discussion about vertical separation (separation of vertically-integrated parts of an undertaking, such as the network) in the electronic communications sector, in its two main forms: functional and structural. The author will argue how negotiated and even mandatory structural separation under certain conditions could be a possible option.

In the last decades the hypothesis of adopting structural remedies in the electronic communications sector, at least at US level, lost the favour recorded in the 1980s.

The Harvard School advocates in favour of antitrust intervention to deal with market structure hindering competition, and how separation may actually reduce the structural competitive advantage that the incumbent may have in the market. The Chicago School looks instead at economic efficiency reasons, and is generally keener to adopt less invasive solutions and put behavioural remedies (i.e. functional separation) on top of the competition enforcement agenda, only if and after regulatory tools have shown their inadequacy.

Also the Organisation for Economic Cooperation and Development ('OECD') recently took in a Recommendation on structural separation adopted on the 13 December 2011 (published in January 2012)¹, showing how, at inter-governmental level, the position changed in the last decade, in favour of '*à la carte*' enforcement solutions, departing from the position expressed in 2001, more favourable to structural separation.

It is a very useful document that, alongside with a Report on structural separation published at the same time, stresses how the choice of the most suitable form of (horizontal or vertical) separation should follow a case-by-case approach, on the basis of the evaluation of two main factors:

1. The advantages and disadvantages that the separation may determine in competition terms;
2. The costs and benefits that the separation may determine.

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The author takes personal responsibility of the opinion expressed.

¹ OECD Report 2011 'Report on Experiences with Structural Separation', OECD pub. 2012, p 10, accessible at <http://www.oecd.org/daf/competition/50056685.pdf>

If this two-fold approach is correct, I am prone to add a third, decisive, factor to be borne in mind in favour of structural separation: the importance of deterrence. The threat of structural separation could be dropped at a later stage (for instance while negotiating commitments), finally adopting behavioural-based solutions.

After having discussed the evolution of the OECD approach, I will analyse the current position of the doctrine, both at legal and economic level.

Among various authors, Prof. Martin Cave played a decisive role in the United Kingdom in explaining how ‘replicability’ of infrastructures is of paramount importance to boost network-based competition, going beyond the pressure on the local access incumbent to open its network (i.e. through *ex ante* regulatory tools), or through mandatory divestiture of the network (through *ex post* enforcement tools). Martin Cave’s ‘ladder of investments’ scheme² influenced the current debate at European level on access to networks, in addition to the influence that OECD reports on separation might have had on regulators and competition authorities. All these positions were kept in consideration during the debate (what is considered the First British Telecoms Review 2005) preceding BT’s functional separation and the creation of the separate access division, Openreach in 2006³.

I will also make reference to specific experiences such as the creation of Openreach as a separate division within BT’s group for the electronic communications sector,

² CAVE, *Six Degrees of Separation, Operational Separation as a Remedy in European Telecommunications Regulation*, in *Communications & strategies*, 2006, 89ff. See also CAVE - DOYLE, *Network separation and investment incentives in telecommunications*’ University of Warwick, MEC 1521, 2007, 1-32.

³ See in particular OECD, *Restructuring Public Utilities for Competition*, Competition Law and Policy, Paris, 2001, 1-95; OECD, *Competition and Regulation Issues in Telecommunications*, Competition Law and Policy, Paris, 2002; OECD, *Report on Structural Separation*, Journal of Competition Law and Policy, 1-65; OECD, OECD Report 2011 ‘Report on Experiences with Structural Separation’, Paris, 2006, , 10, accessible at <http://www.oecd.org/daf/competition/50056685.pdf>.

and to the commitments decisions in the cases EO.N⁴, RWE⁵ and ENI⁶ (2008-2010) in the energy sector that led to structural separation.

After a short analysis of the OECD position on functional and structural separation, the following sections highlight the reasoning behind the choice of functional separation rather than structural separation when British Telecom negotiated the undertakings that led to the creation of Openreach as a separated division within the same group. The section on Openreach is aimed at clarifying the advantages and the disadvantages that functional separation entails. I will then focus on the advantages and disadvantages of structural separation, on the basis not only of the AT&T case but also looking at the remedies adopted with respect to the energy sector and to a recent case of structural separation adopted in Australia dealing with the national incumbent: *Telstra*.

The last section contains conclusive remarks on structural separation and an analysis of the doctrine of Martin Cave on 'degrees of separation', opening the path to a new approach towards structural separation, as a remedy that can be considered to be the most convincing form of deterrent that the enforcer, the European Commission, can put forward in exercising its prerogatives on the basis of Art. 7 of Regulation 1/2003/EC.

2. The OECD position in the last decade. From the 2001 Recommendation on structural separation to the 2011 Report and amended Recommendation.

⁴ Commission Decision *E.ON* (Case COMP/38.388-38.389) of 26 November 2008, [2009] OJ C36/8 of 13 February 2009, accessible at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39388/39388_2796_3.pdf.

⁵ Commission Decision *RWE (Gas Foreclosure)* (Case COMP/39.402) of 18 March 2009, Summary of the decision in [2009] OJ C133/10 of 12 June 2009 accessible at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39402/39402_576_1.pdf

⁶ Commission Decision *ENI* (Case COMP/39.315) of 29 September 2010, [2010] OJ C352/8 of 23 December 2010, accessible at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39315/39315_3019_9.pdf.

In 2001 the OECD issued a 'Recommendation [of the Council]⁷ on structural separation in regulated industries' stating that policies aimed at boosting competition can be broadly divided in two types: (i) those primarily addressing the 'incentives of the regulated firms' (such as vertical ownership separation), called 'structural policies', and (ii) those primarily addressing the ability of the regulated firms to deny access (for instance, imposing access separation), which may be called 'behavioural policies'.

In 2001 the OECD forum recognised that 'structural' policies, though the most difficult to adopt, could be the most suitable. Ten years later, in 2011, the same forum admitted that in certain circumstances 'behavioural' remedies (accounting separation, functional separation) «may play a useful and important role in supporting certain policies such as access regulation», somehow modifying the approach held one decade earlier⁸.

On the one hand, the decision-making process in favour of a structural remedy in regulated industries often requires high-profile and sensitive trade-offs, independence from the regulated industry, high expertise, and transparency in assessing the competitive effects. On the other hand, behavioural remedies may not entirely eliminate «the incentive of the regulated firm to restrict competition and therefore **may be less effective** [...] at facilitating competition than structural remedies»⁹.

First of all, the OECD Report 2001 identifies the tools for protecting and promoting competition, applicable to all the regulated industries (electronic communications, energy, railways, postal sectors) distinguishing the so-called (i) 'access regulation'

⁷ OECD, *Recommendation of the Council concerning structural separation in regulated industries*, 26 April 2001, C (2001) 78/FINAL, Paris, 2001.

⁸ *ibid.*, 3.

⁹ *ibid.*

from (ii) 'ownership separation', (iii) 'club ownership' and (iv) 'operational separation'¹⁰.

Access regulation (regulatory approach) follows the following scheme:

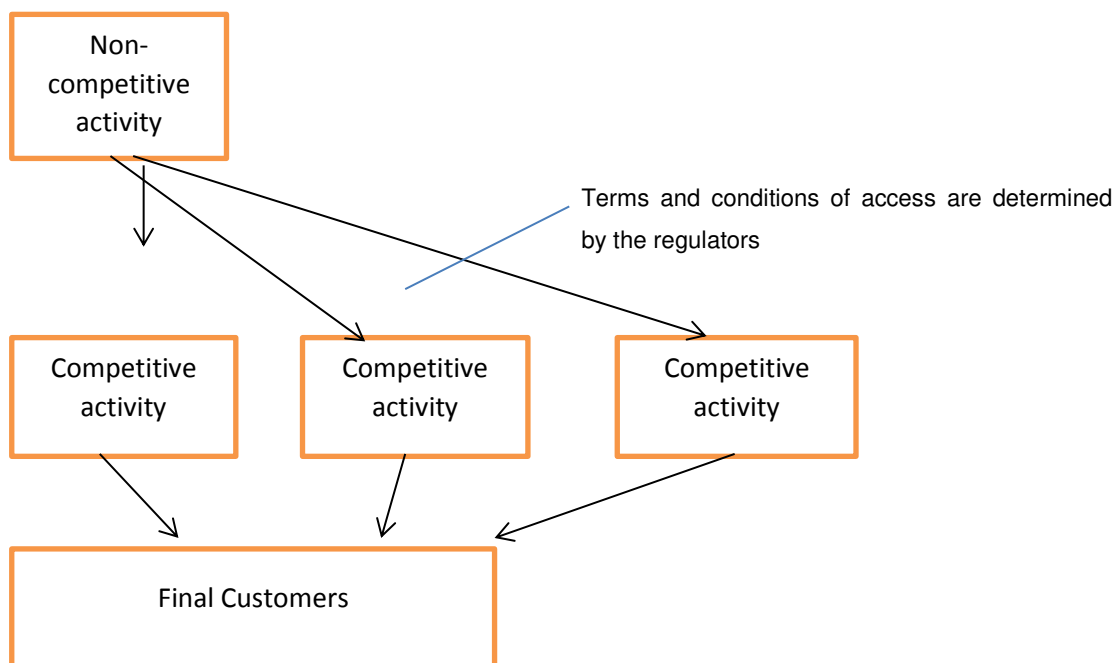


Figure no. 1: Access Regulation (source: OECD Report 2001, p 12)

The regulator intervenes to fix the prices of access to the non-competitive activity, i.e. the access to the infrastructure («the regulator sets these terms and conditions to facilitate competition downstream between rival firm and the competitive component of the integrated firm»¹¹).

¹⁰ *ibid*, 11-15

¹¹ *ibid*, 11.

But what if the regulatory approach (as in the case *Deutsche Telekom*¹² or *Telefónica*¹³ where the incumbent put in place margin squeeze practices even applying the tariffs set by the German telecoms regulator), does not work?

The possibility introduced by Directive 2009/140/EC in the electronic communications sector, on the basis of the British precedent, is functional separation; whilst in the energy sector since 2009 the alternative is structural, ownership separation.

The OECD Report 2001 had already foreseen these two possibilities. The following figures depict how both ownership separation and club ownership work.

The first (ownership separation) is implemented through the vertical separation of the non-competitive activity (the network) and the competitive activity (the services): «under this approach the owner of the non-competitive part has no incentive to discriminate or distinguish artificially between competing firms in the competitive activity»¹⁴:

¹² Commission Decision *Deutsche Telekom AG* (Case COMP/C-1/37.451, 37.578, 37.579), [2003] OJ L263/9; on appeal, *Deutsche Telekom AG v. Commission*, Case T-271/03, [2008] ECR II 477; before the ECJ, *Deutsche Telekom AG v European Commission*, Case C-280/08, [2010] ECR I-09555, [2010] 5 CMLR 1495.

¹³ Commission Decision *Wanadoo España v Telefónica* [2008] OJ C83/6 ('Telefónica'), appealed at the General Court: Case T-336/07 *Telefónica and Telefónica de España v Commission* [2007] OJ C269/55, ECR I-0000, judgment on the 29 March 2012. On appeal at the Court of Justice, Case C-295/12 (see opinion of the Adv Gen Wathelet, 26 September 2013 accessible at <http://curia.europa.eu/jcms/upload/docs/application/pdf/2013-09/cp130117en.pdf>).

¹⁴ *ibid*, 12.

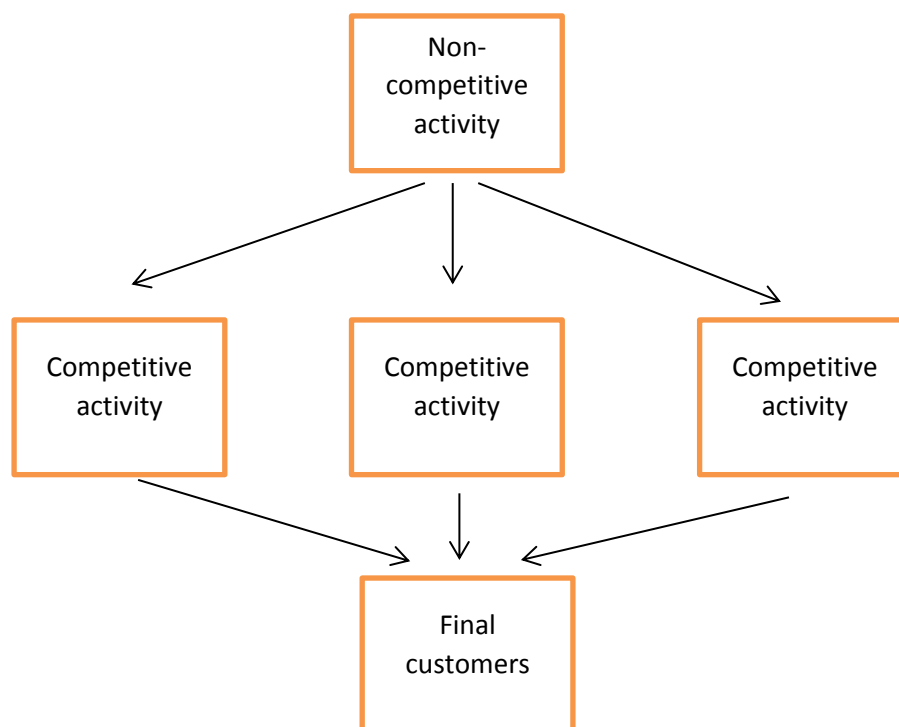


Figure no. 2: Ownership Separation (energy sector, for instance, cases E.ON, RWE and ENI) (source: OECD Report 2001, p 13)

This form of separation removes the incentive to discriminate downstream competition. The main disadvantage would be the potential loss of economies of scope from integration. The separation of the company controlling the network from the company/ies controlling the services is the most suitable at European level, considering that the AT&T form of separation (also called 'club ownership separation'), horizontally dividing the group into local vertically-integrated companies can be considered equivalent, in size, to the co-existence of multiple vertically-integrated telecoms groups in each European Member State.

With respect to club ownership separation, the network of one vertically-integrated company is structurally separated on a local basis, preserving, in scale, vertical integration services/network (example: the creation of the 'Baby Bells' after the AT&T's break-up).

The scheme is as follows:

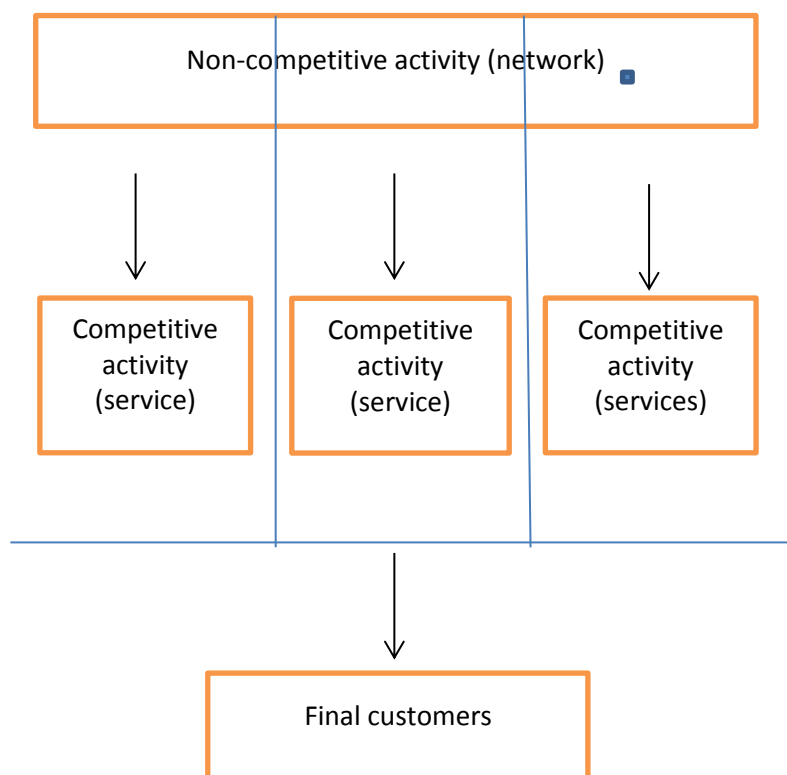


Figure no. 3: Club ownership separation (case AT&T) (source: OECD Report 2001, p 13)

A fourth form of separation suggested by the OECD Report is the ‘operational separation’. It is also described as a hybrid of the previous three forms of separation, depending on the body which takes control of the non-competitive component (network)¹⁵. Therefore, if the governance is in the hands of the regulator, it is equivalent to regulatory separation (access regulation); if the governing body has representatives of the downstream firms, can be compared to joint or club ownership separation.

This approach takes this form:

¹⁵ *ibid*, 14.

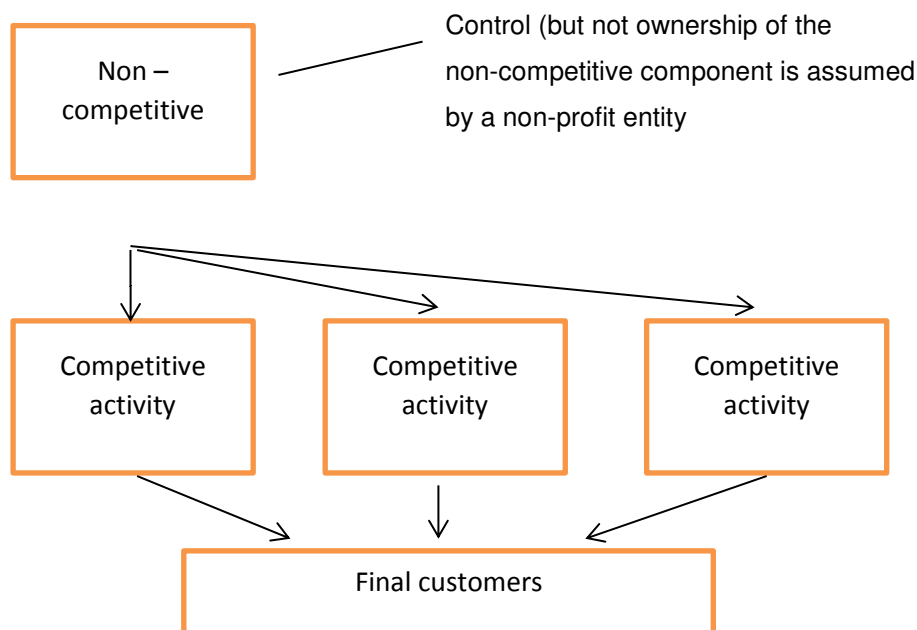


Figure no. 4: operational separation (source: OECD Report 2001, p 15)

This form of ‘operational separation’ or ‘operational unbundling’ was adopted in the electricity industry in the US. The Federal Trade Commission defined this form of operational separation as follows:

«[it] has taken the form of an entity independent of the [electricity] utility operating the transmission and distribution grids to ensure open access and transparent pricing, although the monopolist retains ownership of the physical assets. The operational unbundling plan may work to preserve economies of vertical integration, internalise loop flow externalities (caused by the fact that electricity does not follow a contract path, but rather the path of least resistance), and assure transparent investment signals for potential investors while eliminating the strategic opportunities of the monopolist to subtly favour its own generation capacity»¹⁶.

As per the OECD Report 2001 operational separation (or ‘unbundling’) is that adopted in the US electricity industry. The positions cited above are partially

¹⁶ Federal Trade Commission, Prepared Statement of the FTC before the Committee on the judiciary US of representatives, 28 July 1999.

accepted by the most recent OECD Report 2011 on structural separation¹⁷ published in conjunction with the amendments to the OECD Recommendation 2001¹⁸ on structural separation in regulated industries, adopted on the 13 December 2011.

The OECD Report 2011 states that «structural separation is a remedy of continued relevance, which can both advance the process of market liberalisation and address some of the difficulties inherent to behavioural remedies and more complex and intensive sector regulation [...]. Nevertheless, structural separation may not be necessary or appropriate in all industries or markets [and] the impact of structural separation or the lack thereof on corporate incentive to invest in the network industries has become a prominent issue»¹⁹. To conclude; «the choice of structural versus behavioural measures, in a given set of circumstances, therefore remains a matter that requires careful evaluation»²⁰.

The Report stresses how at European level during the 2001/2011 decade there have been many successful examples of functional and structural separation. Some of them were implemented on the basis of voluntary commitments (or undertakings, in the UK experience)²¹: to make a few examples, BT's functional separation occurred in 2006 and structural separation of *E.ON*²², *RWE*²³ and *ENI*²⁴ as part of

¹⁷ OECD, *Report on Experiences with Structural Separation*, Paris, 2012, 10 (fn 6) ('OECD 2011 Report'), accessible at <http://www.oecd.org/daf/competition/50056685.pdf>.

¹⁸ OECD, *Recommendation 2011 on structural separation in regulated industries*, C(2011) 135 and CORR1, accessible at <http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/recommendationconcerningstructuralseparationinregulatedindustries.htm>.

¹⁹ *ibid*, 8.

²⁰ *ibid*.

²¹ *ibid*, 10.

²² Commission Decision *E.ON* (Case COMP/38.388-38.389) of 26 November 2008, [2009] OJ C36/8 of 13 February 2009, accessible at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39388/39388_2796_3.pdf.

²³ Commission Decision *RWE (Gas Foreclosure)* (Case COMP/39.402) of 18 March 2009, Summary of the decision in [2009] OJ C133/10 of 12 June 2009 accessible at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39402/39402_576_1.pdf

²⁴ Commission Decision *ENI* (Case COMP/39.315) of 29 September 2010, [2010] OJ C352/8 of 23 December 2010, accessible at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39315/39315_3019_9.pdf

commitments signed with the European Commission in recent years (2008, 2009 and 2010 respectively).

It also underlines that functional separation and ownership vertical separation (or divestiture) were implemented in various Member States with respect to the electricity and gas sectors; whilst in the electronic communications markets functional or structural vertical separation «is presented as an exceptional measure for implementation only in cases of persistent market failure»²⁵.

The most interesting aspect of the OECD Report 2011 is that it stresses how, before choosing structural separation as a remedy, the regulatory or competition authorities should bear in mind the «trade-off between efficiency and competition»²⁶. In other words, whilst there is a vast literature that shows that profit-maximising vertically-integrated firms make efficient decisions, there are also arguments that underline how a bottle-neck monopoly can create major problems for competition.

This dichotomy, competition versus efficiency, can be considered the main obstacle to support the opportunity of structural separation in vertically-integrated telecommunications companies. The OECD 2011 Report stresses that in any case in which structural or functional separation had to be decided the authorities faced the issue «whether separation measures will impact negatively on investment incentives»²⁷.

The OECD Report 2011 also underlines how, on the one hand, behavioural remedies are by their very nature more respectful of proportionality and of the rights of the parties, and are obviously more flexible, since they can be tailored to the specific conducts that need to be addressed. On the other hand, they tend to be too weak *vis à vis* highly concentrated industries and require monitoring by a large amount of people and resources.

²⁵ *ibid.*10.

²⁶ *ibid.*12.

²⁷ *ibid.*, 109.

Structural remedies are the most 'effective', in legal terms. Once adopted they can only with difficulty be brought to the *status quo ante*, therefore they do not require high monitoring resources and can be put in place in the short term. However, they might have high transactional costs; they can be inefficient, in economic terms; they could potentially damage third party and could interfere with the technological development of the company, whilst reducing the incentive to competition.

If wrongly applied, they can recreate the same anti-competitive situation, simply changing the actor(s) in a specific market.

3. The role of the legal ('effectiveness') and economic ('efficiency') tests in choosing the best remedy, within the boundaries of competition law.

In recent years there has been wide debate on what remedy is the most suitable, with respect to merger remedies as well as with respect to Art. 102 TFEU enforcement.

Legal effectiveness means the capacity for a divested entity to remain a viable and effective competitor²⁸, whilst economic efficiency measures the grade of efficacy of a proposed remedy pre-and post-merger; in other words, the effective impact that the remedy has on examined markets (in terms of level of prices, level of supply, survival of competitors, impact on the final consumers with respect to quality and level of prices).

It is interesting to analyse and compare the remedies adopted in the presence of a proposed (or implemented) merger with the remedies that could be adopted in order to enhance the competitive environment in the presence of violations of Art. 102 TFEU. In fact, only taking into consideration both factors (effectiveness and

²⁸ On the point see the excellent paper published by TAJAN-PAPANDROPOULOS, *The merger remedies study: in divestiture we trust?*, in *European Competition Law Review*, 2006, 443-354 (para 2.2).

efficiency of the remedies) it is finally possible to decide which remedy will have the most suitable impact on a specific economic scenario.

For a long time the European Commission has been arguing that only 'structural remedies' can be really effective, considering the difficulties deriving from *ex post* monitoring of a behavioural remedy. However, at least in the electronic communications sector, the Directive 2009/140/EC favoured, as a regulatory tool, functional separation. Functional remedy is directly linked with the idea of appointing a trustworthy monitoring trustee, both in mergers and in art. 102 TFEU enforcement. Monitoring trustees are widely used figure heads (both at EU level, and at national level) and ensure that the 'undertakings' signed by the merging parties (or the party that has accepted to divest or to carry out a certain number of obligations to address the competition authority concerns) are effectively implemented.

The Commission (or the national competition authority), as correctly noted by TAJANA and PAPANDROPOULOS in their seminal article, may have a lack of expertise in a specific market²⁹. Therefore, only a highly competent monitoring trustee could be a sufficient guarantee for the adoption of a less invasive remedy such as functional separation. Whilst preserving the integrity of the company, it may grant that over a certain time-frame the competition concerns are duly addressed, through the adoption of the measures that the Commission or the National Competition Authority and Regulators may have suggested as urgent to make the market under review more competitive.

Leaving aside the effectiveness of the remedy, probably the most important aspect, still under-estimated, is the assessment of the economic impact of a long-term remedy (either structural either behavioural with a functional nature). Taking an economic perspective, at least in the short term, a structural remedy might not be the most efficient. There is a possibility that if the undertaking is forced to divest, it will

²⁹ TAJANA-PAPANDROPOULOS, cited: «A third party, independent and with the necessary expertise, is needed to oversee the activities of the parties and effectively monitor compliance with the conditions set out in the Commission's clearance decision».

dismiss the less economically vital part of its business³⁰. It has been argued that there are good reasons in favour of the adoption of behavioural remedies, that may be more effective in those economies where the competition authorities work in combination with highly skilled Regulatory entities. Depending on the type of behavioural remedies may turn to be less intrusive disruptive.

In 2000 US scholars such as SHELANSKI and SIDAK, pending the *United States v Microsoft*³¹ proceedings for abuse of dominant position against Netscape, proposed a three-fold test to assess the validity of a proposed divestiture, in order to assess *ex ante* the impact that a (legally effective) remedy may have had in terms of economic efficiency³². For them the remedy (i) should produce a net gain in static economic efficiency; (ii) net gains in static economic efficiency should overcome potential losses in dynamic efficiency; (iii) enforcement costs should be taken into account.

In the first case, the remedy is seen in the perspective of creating new competitors, or isolating an infrastructure that is finally opened up to multiple operators. The pro-efficiency gains might be evident. Then the antitrust authority must take into account the risks that 'dynamic efficiency' is jeopardised by the presence of multiple players, on the one hand, and by the risk of disruptions pending on the head of the separated

³⁰ MOTTA stressed the risk that «inappropriate divestments may actually facilitate collusion by restructuring an industry in a more symmetric way or multiply multi-markets contacts». MOTTA-POLO-VASCONCELOS, *Merger Remedies in the EU: An Overview*, in LEVEQUE-SHELANSKY (eds), *Merger Remedies in American and European Union Competition Law*, London, 2003, 106.

³¹ The Judge T. Jackson in his conclusion filed on the 3 April 2000 at the US District Court of the District of Columbia acknowledged the attempt of monopolising by Microsoft and ordered as a remedy the separation of the company in two entities, one to produce the operating system, and one to produce other software components. It is famous the opinion expressed in his 'findings of fact' filed on 5 November 1999: «Most harmful of all is the message that Microsoft's actions have conveyed to every enterprise with the potential to innovate in the computer industry. Through its conduct toward Netscape, IBM, Compaq, Intel, and others, Microsoft has demonstrated that it will use its prodigious market power and immense profits to harm any firm that insists on pursuing initiatives that could intensify competition against one of Microsoft's core products. Microsoft's past success in hurting such companies and stifling innovation deters investment in technologies and businesses that exhibit the potential to threaten Microsoft. The ultimate result is that some innovations that would truly benefit consumers never occur for the sole reason that they do not coincide with Microsoft's self-interest». As known the judgment was partially overturned by the District Court of Appeals and remanded the case for consideration of a proper remedy under a more limited scope of liability. The case was ultimately settled and the separation was avoided.

³² SHELANSKY-SIDAK, *Antitrust Divestiture in Network Industries*, in Chicago Law Review, 2001, 1.

industry (network), on the other. The enforcement costs of a structural remedy may also be taken into account and depending on the market conditions (type of industry), might be high or low.

As FARRELL and SHAPIRO discuss in their paper '*Intellectual Property, Competition, and Information Technology*'³³, network effects may play a crucial role in deciding what remedy should be suggested. It must be said that authors like TAJANA correctly stressed the risks that a draconian remedy may also have on third parties (shareholders, employees), and takes also into consideration the impact of 'general interest'³⁴.

He pointed out how the Commission, or a national authority, rather than pursue the effectiveness of a legal remedy, should take into consideration the 'thermometer' provided by economic, efficiency-oriented, tests, which may be able to foresee the disruptions that a rather draconian remedy may cause.

Finally it must be stressed that there are a limited number of studies on the impact of structural remedies in article 102 TFEU cases, because there are very few decisions at European level which have adopted structural separation as a way of enhancing competition³⁵ (such as the above-mentioned commitments decisions adopted in the energy sector).

4. Structural separation in the electronic communications: an option to be considered by the European enforcer.

³³ FARRELL-SHAPIRO, *Intellectual Property, Competition, and information Technology*, Berkeley Competition Policy Centre Working Paper no. CPC-04-45, 2004.

³⁴ TAJANA, *Structural Remedies and Abuse of Dominant Position*, TILEC Discussion Paper, Tilburg University, 2005. These concerns raised by several parties. See LITAN-NOLL-NORDHAUS-SCHERER, Remedies Brief of Amici Curiae, *United States v. Microsoft Corp.*, 27/4/2000, 64.

³⁵ The main concern in Europe, since the creation of the early EEC, and until today, was the weakness of the national champions rather than their 'dominant position' or level of concentration.

Experience shows that functional separation as implemented in the United Kingdom with the creation of Openreach, as a functionally separated entity, represented only one of the possible forms of separation. It was tailored to the specific features of the company, to the alleged anticompetitive behaviours and to the features of the British market.

After having analysed the various possible forms of separation as identified by the OECD report 2001³⁶, we can look at (and compare) three forms of separation: (i) functional, (ii) structural (internal corporate separation) and (iii) ownership separation, starting with the *Openreach* experience in the UK, looking at the progressive passage from operational to full structural separation of the national telecoms incumbent in Australia (*Telstra*) by 2018, and at the relatively recent (December 2011) voluntary ownership separation of the New Zealand telecoms incumbent (*New Zealand Telecom*). Functional separation represents a tighter form of operational separation, with the creation of internal ‘walls’ mainly hindering exchange of information within retail, wholesale and access divisions of the same company. The various divisions still belong to the same company, but each division acts as if it was a separate company. A very good synthesis: ‘they have to buy and sell services between each other in an internal market»³⁷.

The model adopted in the UK with Openreach follows this scheme:

³⁶ OECD, ‘Restructuring public utilities for competition’, Report on Competition and Regulatory Reform, 2001, accessible at <http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/19635977.pdf>.

³⁷ See the overview on separation by lawyers WATERS and DAMIAN, *Separation regulation of dominant telecommunications operators in today’s legacy networks and tomorrow’s next generation networks. One separation model does not fit all – key design issues and lessons learned*, accessible at <http://www.gtlaw.com.au/wp-content/uploads/Separation-regulation.pdf>, p. 2.

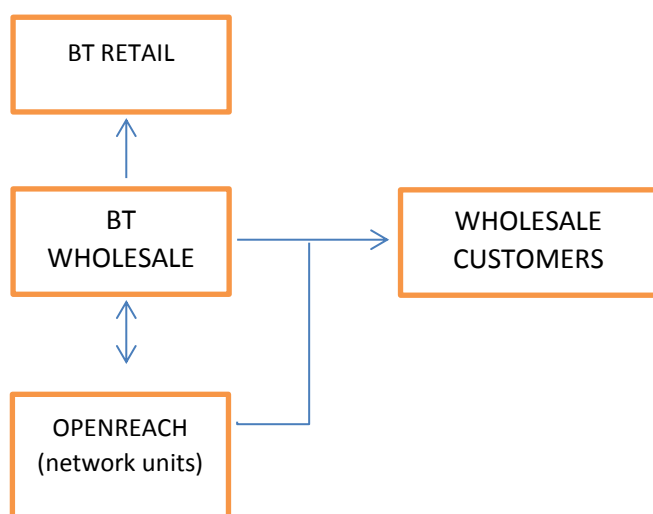


Figure no. 5: functional separation of BT, United Kingdom (2006)³⁸

Openreach, the access division, deals with the local network infrastructure, the fibre extension in local loop and the regional backhaul networks. It provides various services: ULLs services, ISDN, PSTN resale. On the other hand, BT Wholesale deals with (i) the electronics used on the network (including DSLAMS in local loop and regional backhaul network), (ii) all the other regulated services not provided by Openreach, and (iii) other most advanced communications services (e.g. wholesale local switched calls, layer 3DSL). BT Wholesale division, as shown in the chart, deals with its own wholesale customers and with BT retail customers, whilst Openreach provides access services to BT Wholesale division and to Wholesale customers on an equal footing.

On the 16 July 2015 OFCOM launched its second Telecoms Review³⁹, publishing a document open to responses until 6th October 2015. The targets of the review are to modify the current legislation in order to increase (i) investment and innovation, delivering widespread availability of services; (ii) sustainable competition, delivering

³⁸ *ibid*, 4.

³⁹ OFCOM, Strategic Review of Digital Communications ('Strategic Review'), accessible at http://stakeholders.ofcom.org.uk/binaries/consultations/dcr_discussion/summary/digital-comms-review.pdf

choice, quality and affordable prices; (iii) empowered consumers, able to take advantage of competitive markets; and (iv) targeted regulation where necessary, deregulation elsewhere. The OFCOM document considers the possibility of introducing structural separation

«This has the potential to deliver benefits, since it would address BT's underlying incentive to discriminate against competitors, and enable a simplified regulatory framework. It may also increase Openreach's management focus on, and control over, network investment decisions and performance issues. However, to the extent those issues arise from a lack of competition to Openreach, it may not fully address them. It would be an intrusive and complex intervention both for BT and the rest of industry, with substantial implementation challenges. It would also require ongoing regulation to guard against excess returns by the structurally separate upstream 'monopolist'»⁴⁰.

The British Telecom's Openreach solution was subject to criticism by its competitor Vodafone, that actually argued that structural separation should be considered as a new form of regulatory intervention⁴¹. Vodafone in particular claims that BT received an anti-competitive advantage benefiting of a 5-billion pounds broadband network financed with tax-payers money.

Matters developed differently in Australia. After a long debate⁴² about the opportunity of adopting structural separation as recommended by the Australian government

⁴⁰ OFCOM, Strategic Review, 14.

⁴¹ The Guardian, 'Vodafone calls for BT form separate broadband company', 25 March 2015, at <http://www.theguardian.com/business/2015/mar/25/vodafone-calls-for-bt-to-form-separate-broadband-company>, accessed on the 22.12.15.

⁴² Plans for structurally separate Telstra, the Australian incumbent, were discussed by a Senate committee since 2003. Telstra objected that structural separation would have led to class actions from shareholders.

since 2007⁴³, in 2012 undertakings were signed by Telstra leading to structural separation of the company⁴⁴. As per Telstra website,

«on 28 February 2012, the Australian Competition and Consumer Commission (ACCC) accepted Telstra's Structural Separation Undertaking (SSU) and draft Migration Plan. The SSU commenced operation on 6 March 2012, while the Migration Plan took effect from 7 March 2012.

The SSU fulfils two roles:

- It commits Telstra to structural separation by 1 July 2018, through the progressive disconnection of **fixed voice and broadband services** from Telstra's copper and Hybrid Fibre-Coaxial (HFC) **networks**, while the New Broadband Network (NBN) is being rolled out [by the government⁴⁵]; and,
- It sets out the various measures which Telstra will put in place to provide for equivalence and transparency in the supply of **regulated fixed network services** to its **wholesale** customers and the supply of comparable services to its **retail** customers during the transition to the NBN»⁴⁶.

⁴³ For the debate preceding structural separation of Telstra, see 'Telstra Faces Enforced Split', by Katharine Murphy and Jesse Hogan, *The Age*, 3 October 2007 accessible at <http://www.theage.com.au/news/business/telstra-faces-enforced-split/2007/10/02/1191091114582.html>.

⁴⁴ On 29 July 2011 Telstra submitted a structural separation undertaking and draft migration plan to the Australian Competition & Consumer Commission (ACCC) on the basis of Sections 577A and 577BDA of the Telecommunications Act 1997. After a supplement of negotiation, the ACCC accepted on the 27 February 2012 Telstra's structural separation undertaking and approved the draft migration plan. On the 6 March 2012, Telstra's Structural Separation Undertaking and Migration Plan came into force. Detailed chronology and milestones are available at <https://www.accc.gov.au/regulated-infrastructure/communications/industry-reform/assessment-of-telstras-ssu-draft-migration-plan>.

⁴⁵ Brackets added.

⁴⁶ Australian Competition Authority (ACCC), Structural Separation Undertakings offered by Telstra on the 23 February 2012, accepted by ACCC on the 28 February 2012, accessible at <http://www.accc.gov.au/system/files/Structural%20Separation%20Undertaking.pdf>. An outlook of Telstra's structural separation undertaking is available both on the website of Telstra accessible at <http://www.telstrawholesale.com.au/structural-separation-undertaking/index.htm>, and from the website of the Australian Competition & Consumer Commission (ACCC). Particularly useful is the Telstra's Structural Separation Undertaking Annual Compliance Report 2011-12, accessible at <https://www.accc.gov.au/system/files/Telstra's%20structural%20separation%20undertaking%20annual%20compliance%20report%202011-12.pdf>.

To understand how the Australian Competition & Consumers Commission ('ACCC') led the negotiations to the point of accepting undertakings leading to full structural separation (by 2018) of Telstra, it is important to consider that as per 1st December 2006 the company was subject to operational separation, forcing it to keep separate retail, wholesale and key network services business units⁴⁷.

The Parliament of Australia however expressed serious concerns about the capacity of Telstra to grant full competition by simply implementing an operational separation scheme:

«Telstra's integrated position across all the telecommunications platforms has led to longstanding and widespread concerns that the existing telecommunications structure is failing consumers, businesses and the economy in general»⁴⁸.

Structural separation of Telstra (with the creation of a structurally-separated state-funded New Broadband Network) was conceived as a step further than functional (operational) separation.

An excerpt from 'Telstra's structural separation undertaking – Annual Compliance Report 2011-2012' issued by the ACCC clarifies how the government found that functional (operational) separation was not enough. This has to be borne in mind, since the same reasoning might be applied to the European scenario, within single Member States:

«In late 2010, the Australian Government introduced legislation which created a framework for reforming the telecommunications industry—effecting structural separation of Telstra by the progressive migration of Telstra's fixed line access services to the wholesale-only National Broadband Network (NBN) as the NBN fibre is rolled out⁴⁹. This reform

⁴⁷ OECD Competition Committee, *Report on Experiences with Structural Separation*, PARIS, 2012, 109-110, available at <http://www.oecd.org/daf/competition/50056685.pdf>

⁴⁸ Parliament of the Commonwealth of Australia, House of Representatives, Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2009. Explanatory Memorandum, p 8.

⁴⁹ Emphasis added.

recognised that Telstra, as the vertically integrated access provider to the ubiquitous copper network, operates at all levels of the supply chain and competes with the businesses that it supplies to. **This has given rise to long standing competition concerns around Telstra's ability and incentive to favour its retail business over other service providers accessing its network to the detriment of consumers.**

Prior to the commencement of the SSU, Telstra was subject to an **operational separation** framework which was intended to promote equivalence between Telstra's wholesale and retail customers. **The ACCC has previously publicly stated that the operational separation regime, and the ACCC's limited role in investigating and reporting matters to the Minister, was largely ineffective in addressing Telstra's ability and incentive to discriminate against its competitors**⁵⁰. Upon the coming into force of the Structural Separation Undertaking (SSU) on 6 March 2012, the operational separation regime ceased to operate»⁵¹.

The operational separation (for the period 2006-2012), preliminary to the structural separation of the NBN [New broadband Network] from Telstra's wholesale and retail services, had been conceived in the 'separation of the business units formalised through subsidiaries, so that each separated business unit is a subsidiary of a holding company rather than being an organisational unit within the one company. [A] common set of shareholders still owns the structurally separated subsidiaries»⁵².

The chart that follows shows how operational (functional) separation (within the same group) had been put in place from 2006 to 2012:

⁵⁰ Emphasis added.

⁵¹ Australian Competition & Consumer Commission (ACCC), Telstra's Structural Separation Undertaking – Annual Compliance Report 2011-2012, a Report to the Minister for Broadband, Communications and the Digital Economy, with letter of 13 April 2013, accessible <http://www.accc.gov.au/publications/telstras-structural-separation-undertaking>. With respect to the instructions that the ACCC gives to Telstra in order to address competition concerns during the current migration period, see ACCC press release of 7 February 2013, 'ACCC directs Telstra to amend measures developed under the Migration Plan', accessible at <http://www.accc.gov.au/media-release/accc-directs-telstra-to-amend-measures-developed-under-the-migration-plan>.

⁵² See the overview on separation by lawyers WATERS and DAMIAN, *Separation regulation of dominant telecommunications operators in today's legacy networks and tomorrow's next generation networks. One separation model does not fit all – key design issues and lessons learned*, accessible at <http://www.gtlaw.com.au/wp-content/uploads/Separation-regulation.pdf>, p. 3.

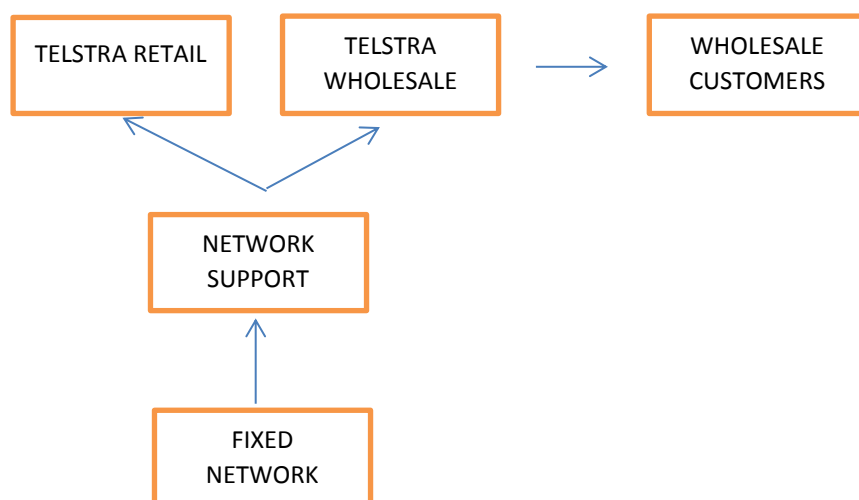


Figure no. 6: operational separation of Telstra, Australia (2006-2012)⁵³

In this case, the fixed network is operationally separated from the provision of services. Telstra Wholesale does not operate the infrastructure, but supplies all wholesale services. An intermediate entity, 'network support', deals with the 'operations support systems' ('OSS'), and supports both retail and wholesale units. This first phase of operational separation can be compared to functional separation as per the BT's Openreach model, and constitutes a preliminary step towards the current structural separation migration plan. During the phase of progressive structural separation 2012-2018 the functional separation model *de iure* ceases to exist⁵⁴.

⁵³ *ibid*, 5.

⁵⁴ See from Telstra Wholesale's website, 'High level summary of Telstra Structural Separation Undertaking and Migration Plan', page 1, accessible at <http://www.telstrawholesale.com.au/download/document/ssu-and-mp-briefing-summaries-1.pdf>. It expressly says that 'consistent with the Government's decision to frame structural separation as an alternative to functional separation for Telstra under the legislative scheme, the Interim Equivalence and Transparency measures in the Structural Separation Undertakings (SSU) **do not constitute functional separation**'. See in particular the detailed migration plan outlined from page 3ff.

The interesting aspect of the Australian 'restructuring plan' launched in 2011 is that the deployment of the New Generation Network (New Broadband Network or 'NBN') is conceived through the creation of a new infrastructure directly deployed by a separate, government owned, company⁵⁵, so that all the players are put on an equal footing in the future provisions of wholesale services, including Telstra.

This shows that since the New Generation Network substantially differs, from a technological point of view, from the traditional fixed-line copper networks on which broadband services are provided enhancing bandwidth through ADSL technology, the model of functional separation as implemented in the British telecommunications with Openreach is considered insufficient and not applicable in the Australian context. The Australian competition authority has adopted structural separation as a way of favouring the intervention of the government to create a 'New Broadband Network' (the entire operation should be completed by 2018), so that Telstra « must not supply services to those premises [customers] using the copper or HFC networks (other than pay TV services in the case of the HFC). Telstra will satisfy this commitments by progressively decommissioning its copper customer access network ('CAN') and HFC broadband service on an area by area basis as the NBN rolls out»⁵⁶.

The new characteristics of the NBN are:

- (a) It will be realised as the largest civil works projects for decades;
- (b) There is still uncertainty on the future demand of services that will be provided by the NGNs;
- (c) There will be a constant and substantial investment to upgrade the networks;
- (d) NGNs are layered, open standard networks, compared to the vertically-integrated technology of copper networks, barriers to entry at the

⁵⁵ *ibid*, 12.

⁵⁶ Telstra Wholesale's paper cited above, 1.

connectivity layers are lower and there is limited technological capability to leverage between layers⁵⁷.

Therefore the role of regulation, with respect to NGNs, will be much more linked to the creation of incentives to develop new infrastructures, than to the application of the traditional regulatory tools to deal with access-related bottlenecks⁵⁸.

In the Australian scenario, matters are going in a different direction with the progressive passage from functional to structural separation. The ACCC first tried to implement functional separation within the Telstra group (separating wholesale and retail services, while still operating the traditional network). When it was clear that discrimination between its own retail customers and wholesale customers, was still taking place, the ACCC pushed for the signature of undertakings preliminary to the creation of a structurally separated entity, funded by the State, that will be the main New Generation Network on which Telstra will provide its wholesale services in competition with any other telecommunications operator.

In this respect, the creation of the New Generation Network as a separate entity represents a measure that is set to avoid once for all any access-related anticompetitive conducts. Quoting from the mentioned 'Telstra's Structural Separation Undertaking ('SSU') - Compliance Report 2011-2012'

«[i]n introducing structural reform of the telecommunications industry, the government recognised that the ACCC would need stronger enforcement mechanisms that those under the operational separation regime to ensure transparency and equivalence. The SSU measures are a substantial improvement upon the previous operational⁵⁹ separation framework and more effectively promote equivalence and transparency. The SSU provides for stronger enforcement mechanisms, which are particularly

⁵⁷ *ibid.*

⁵⁸ *ibid.*

⁵⁹ Here the word operational and functional is a synonym.

important for protecting competition and delivering outcomes in the interests of consumers and businesses, during the rollout of the NBN»⁶⁰.

Unfortunately, it is still premature to analyse quantitative data to see whether structural separation currently under implementation in Australia will have a positive impact on competition, prices and quality of the services provided. In that context the SSU were signed as a preliminary step towards the creation of a NBN, with the idea of putting Telstra and its competitors on an equal foot in the provisions of telecommunications services. Seen from a European perspective, it looks like the ACCC, suggesting complete structural separation by 2018, wants to create the pre-conditions for the realisation (mainly at government's costs) of a New Generation Network. Considering that the new network is technically different from the traditional copper wire network, it allows the presence of more players over the same infrastructures, and should *de facto* represent an opportunity of growth and development for that country.

It is important to note that during the implementation of the structural separation undertakings (also called the 'migration plan' phase) Telstra is under constant scrutiny by the ACCC. Regulatory tools such as price caps will be still put in place during the transitional phase. However some features of the undertakings can be directly enforced by the ACCC before the Australian Federal Courts, through remedies that range from «fines to compensation orders and any other orders that the Court considers appropriate»⁶¹.

If the ultimate scope of the undertakings signed by Telstra is that of structurally separate its network by 1st July 2018 by progressively disconnecting fixed telephony services on its copper network and broadband services on its hybrid fibre-coaxial (HFC) network, migrating these services onto the (wholesale-only) NBN rolled out by the government, Telstra management is aware that during the transitional phase the objective of the undertakings is to ensure equivalence and transparency in how Telstra treats retails and wholesale customers of regulated services on the copper

⁶⁰ Telstra's USS Compliance Report 2011-2012, p 4. Emphasis added.

⁶¹ Telstra Wholesale's action plan.

network⁶², a clear indication of the concerns raised by the ACCC during the phases of negotiation of the structural separation undertakings⁶³. The incumbent recently showed that is confident to respect the roadmap set in 2012 with the ACCC, and will be able to complete structural separation by 2018⁶⁴.

The New Zealand Telecom experience is a third model of separation to be considered. They went a step further than in other jurisdictions, with the national incumbent de-merging into two listed entities: Chorus and Telecom New Zealand, with different share ownership⁶⁵.

In 2005 the New Zealand government launched a review of the telecommunications sector⁶⁶, with a particular focus on broadband development. On the basis of the review, on December 2006 the government passed the 'Telecommunications

⁶² See Telstra's SSU Compliance in 2012-2013, introduction, accessible at <http://www.telstrawholesale.com.au/download/document/telstra-commitment-ssu-compliance-2012-2013.pdf>.

⁶³ To follow the developments of the undertakings signed by Telstra before the ACCC, a useful link is <http://www.accc.gov.au/regulated-infrastructure/communications/industry-reform/telstras-structural-separation-undertaking>.

⁶⁴ ADHIKARI, *Telstra ready to push on with structural separation*, Technology spectator, 18 March 2014, accessible at <https://www.businessspectator.com.au/news/2014/3/18/technology/telstra-ready-push-structural-separation>. In June and October 2014 Telstra put forward two proposals of rectification of the commitments signed with the ACCC. In particular, «[u]nder clause 9(a) of the SSU Telstra has an obligation to ensure that particular aspects of retail and wholesale services will be equivalent (the 'overarching equivalence commitment'). Under Schedule 11 to the SSU, Telstra may report possible breaches of the overarching equivalence commitment and must, no later than 30 days after reporting the possible breach, submit a proposal to the ACCC which sets out the steps that Telstra proposes to take to remedy the possible breach (a 'rectification proposal'). The ACCC may accept a rectification proposal or if satisfied that it does not provide an effective remedy for the possible breach, reject the rectification proposal and direct Telstra to take alternative steps to remedy the possible breach». See <https://www.accc.gov.au/regulated-infrastructure/communications/industry-reform/telstras-structural-separation-undertaking>, accessed on the 22.12.2015.

⁶⁵ WATERS-DAMIAN, cited, 5.

⁶⁶ Ministry of Economic Development, 'Stocktake Process, stakeholder Input and Supporting documents' (POL/1/27/10/2/1), published on 20 April 2006.

Amendment Act'⁶⁷ requiring a 'robust operational separation' of the vertically-integrated, privatised telecommunications incumbent, Telecom New Zealand, into at least three business units, to provide wholesale, retail and local access services⁶⁸.

The operational separation proposed in 2006 envisaged three pro-competition targets:

- (i) To promote competition in telecommunications markets for the long-term benefit of end users of telecommunications services in New Zealand;
- (ii) to require transparency, non-discrimination, and equivalence of supply in relation to certain telecommunications services; and
- (iii) to facilitate efficient investment in telecommunications infrastructure and services⁶⁹.

Operational separation was implemented on 31 March 2008. Telecom New Zealand therefore comprised «five customer-facing business units:

- (i) a retail unit providing fixed line, mobile and internet services to consumers and small and medium business customers;
- (ii) an operationally separate wholesale business unit providing next generation wholesale network products to service providers;
- (iii) an operationally separate unit that manages Telecom's local access network;
- (iv) a specialised unit that provides technology services for larger business customers; and,
- (v) an Australian subsidiary providing telecommunications services in Australia»⁷⁰.

⁶⁷ New Zealand Parliament, Telecommunications Amendment Act (No2) 2006.

⁶⁸ *ibid*, sect. 32, inserting a new Part 2A into the Telecommunications Act 2001. See OECD Report 2012, cited, p 77-78.

⁶⁹ New section 96A of the New Zealand Telecommunications Act 2001.

⁷⁰ OECD Report 2011 'Experiences with Structural Separation', cited, 78-79.

The model of operational separation of Telecom New Zealand was summarised by the following chart

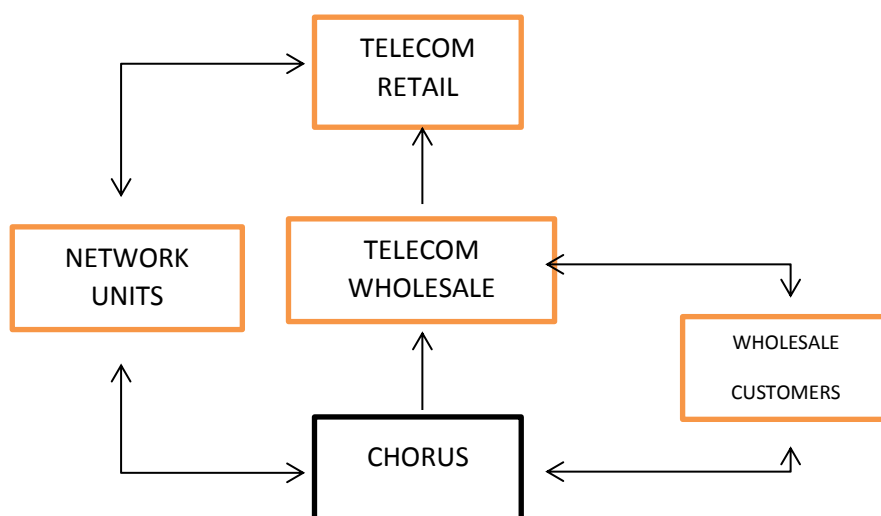


Figure no. 7: New Zealand MARK I operational separation model, preliminary to ownership (structural) separation of CHORUS (local network) from 1st December 2011⁷¹.

In the chart Chorus represented the business unit managing the local network (not necessarily fibre-network), the regional backhaul networks (not the electronic equipment) and the information system to support Chorus's services (but not to support shared services). The Telecom Wholesale, on the other hand, did not own assets, since these belong to the Network Units⁷².

This process of operational (functional separation) finally resulted in ownership separation of the network from the core wholesale and retail business, bringing the monopoly of New Zealand Telecom to an end. On 30 November 2011 the 'de-merger' process was completed, with Telecom New Zealand and Chorus becoming

⁷¹ WATERS-DAMIAN, cited, 5.

⁷² *ibid.*

separate listed companies⁷³ (in literature also referred as Telecom New Zealand 2 and Chorus 2):

«On December 1, 2011 New Zealand telecommunications created a world first when the incumbent provider, Telecom, structurally separated and its network access division, Chorus, became a stand-alone, publicly listed company»⁷⁴.

This is the sole case of (voluntary) full ownership structural separation already implemented that I was able to identify. As I will discuss later, on an empirical point of view, also in this case the time-window to assess whether in New Zealand structural separation led to (i) increase in competition, (ii) reduction in costs and (wholesale and retail) prices and (iii) enhanced quality of services is too short.

In September 2010 structural (and ownership) separation of Telecom New Zealand was preceded by the launch of a sector inquiry by the New Zealand Ministry of Economic Development, on the basis of its 'discussion document' on 'Regulatory implications of structural separation'⁷⁵.

The document states that the national incumbent announced (2010) its intention to consider structural separation through the demerger into two companies of its assets, within the framework of the Government's ultra-fast broadband initiative⁷⁶. The Ministry made clear that any change in the existing regulatory regime should have been consistent with the principle of «promotion of competition in

⁷³ PUTT, *After Structural Separation – New Zealand telecommunications a year after Telecom New Zealand and Chorus became separate companies*, in *Computer World New Zealand*, 2012, 6-7. See also *New Zealand Herald*, 1st December 2011, accessible at http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10769994. See also PULLAR-STRECKER, 'Telecom split first in world', *Fairfax NZ News*, 27 October 2011, accessible at <http://www.stuff.co.nz/business/industries/5858284/Telecom-split-first-in-world>.

⁷⁴ PUTT, cited, 6.

⁷⁵ Ministry of Economic Development, 'Discussion document – Regulatory Implications of Structural Separation', September 2010, accessible at <http://www.med.govt.nz/sectors-industries/technology-communication/pdf-docs-library/communications/telecom-separation/regulatory-implications-of-structural-separation-september-2010.pdf>.

⁷⁶ *ibid*, 8.

telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand»⁷⁷, in the hope that «the likely model of structural separation would lower barriers to entry at the retail level, by removing incentives to discriminate against competitors who operate at the retail level. There is scope in these circumstances for removing regulatory provisions which deal with the interface between wholesale and retail levels of the market. However there would be some residual vertical integration between the network and the wholesale layers of the business, so some incentives to discriminate against competitors would likely to remain»⁷⁸.

The voluntary structural separation of the network company Chorus from its mother company Telecom New Zealand in reality was the only way to ensure that Telecom New Zealand could take part of the roll out of the new ultra-fast broadband (UFB) network mainly rolled out at government's expenses. One of the main advantages for the mother company was to be 'relieved' by the sector regulations, while Chorus would have continued to control the local copper and fibre network, dealing with wholesale business complaining with the sector regulations⁷⁹.

Therefore, in the Telecom New Zealand voluntary structural separation example we face a combination of industrial strategy (make possible for Telecom New Zealand to be part of the roll-out of the New Generation Network (UFB) without controlling the existing network too) and of government's support for what was considered a pro-competitive initiative⁸⁰, also considering that Chorus would have continued to be subject to sectorial regulation. At the same time also Chorus, in the after break-up scenario, would have been allowed to participate to up to 70% of the new UFB,

⁷⁷ *ibid.*

⁷⁸ *ibid.*, 11.

⁷⁹ PUTT, cited, 8-23. In May 2011 the managers of Telecom New Zealand announced that they would have been partner of the government's UFB network (22).

⁸⁰ Ministry of Economic Development, 'Discussion document – Regulatory Implications of Structural Separation', September 2010, accessible at <http://www.med.govt.nz/sectors-industries/technology-communication/pdf-docs-library/communications/telecom-separation/regulatory-implications-of-structural-separation-september-2010.pdf>.

receiving de facto a (interest-free) loan from the government of NZ\$ 929 million, to be repaid between 2025 and 2036⁸¹.

In the first year from the break-up (November 2011/November 2012) 100,000 households (urban users) were connected with the new ultra-fast broadband network⁸², demonstrating that structural separation did not cause disruption.

It is important to highlight here that in some highly dynamic OECD economies, such as Australia and New Zealand, structural separation in the electronic communications, in the form of separation of the network from communications services, was not considered a taboo and was adopted as a valid option by the respective competition authorities, sector regulators and governments.

Even though the Australian and New Zealand scenarios are different under a competition law point of view (Telstra signed structural separation undertakings before the Australian competition authority as a remedy to enhance competition, while Telecom New Zealand voluntarily decided to break-up from its own network in order to be put in condition to strategically invest in the new generation network), they must be borne in mind as two examples that contradict the claims of inefficiency and impracticability of the structural remedy.

5. Functional or structural separation: two possible options also for the Italian scenario.

In Italy the presence of network-related abuses, offers a good case to ask the question of whether high pecuniary fines may represent a serious deterrent for national incumbents.

⁸¹ According to PUTT's book, during the transitional phase preceding the complete roll-out of the UFB network, 99% of Chorus revenues still come from fixed telephony services provided over the traditional copper network.

⁸² PUTT, cited, 24.

The question is whether the electronic communications regulator, in the presence of recurrent abuses, could suggest the national competition authority to adopt a more draconian remedy such as structural separation? If so, what type of structural separation would be most suitable among those discussed?

The Italian Communications Authority (*Autorità per le garanzie nelle Comunicazioni*, 'AGCOM') on 2 May 2007, launched a public consultation process⁸³ in order to discuss the possibility of introducing into the Italian legal system structural or functional separation of the communications infrastructure at present still controlled by the incumbent. During the 2007 consultation process, the AGCOM pointed out that, as per AGCOM decision no. 152/02/CONS of 2002, two set of provisions had been already introduced in the Italian legal system establishing (i) general measures to grant full application of the principle of non-discrimination; and (ii) specific duties (or remedies) for all the relevant markets. AGCOM claimed that in line with the fundamental targets of competition law at European level it had already established the 'administrative separation' of Telecom Italia, in order to facilitate non-discriminatory access to the network resources held by the dominant operator. However, mere accounting separation did not impede Telecom Italia from carrying out a series of (network) access-related abuses, sanctioned with pecuniary fines with a very low deterrence impact, considering the recidivism.

AGCOM decision 208/07/CONS states that the Italian Competition Authority, before the adoption of the above-mentioned AGCOM decision no. 152/02/CONS, had issued a non-binding opinion theoretically favourable to structural (company or ownership) separation. It actually stated that the best remedy would have been structural separation, since it would have produced: (i) the greatest fairness in the attribution of joint costs to the separate entities, facilitating the interpretation of the access rate to the infrastructure or for the provision of wholesale or retail services; (ii) the elimination of incentives to continue anticompetitive behaviours, since the two legal entities (network and service provider) would have had two different and

⁸³ AGCOM decision no. 208/07/CONS of 2 May 2007 (entitled '*Avvio di una consultazione pubblica sugli aspetti regolamentari relativi all'assetto della rete di accesso fissa ed alle prospettive delle reti di nuova generazione a larga banda*'), available at http://www.agcom.it/provv/d_208_07_CONS/d_208_07_CONS.htm

separate business targets⁸⁴. The AGCOM decision 208/07/CONS, triggering the consultation process, pointed out that one of the most relevant forms of abuse is the possibility for vertically-integrated operators to lower ('squeeze') the competitors' profit margins by raising the access cost or reducing retail prices. In both cases, it is difficult for the competitor to survive within the same market, since its profits are either cut by excessively high entrance costs (access price) or by excessively low retail prices⁸⁵.

Here the issue at stake is whether functional separation would have been successful in the long term (i) in all those countries where the incumbent is prone to repeat the same type of abuse, (ii) in those countries where it can be demonstrated that administrative judiciary reviews routinely lead to a substantial reduction of fines imposed by the NCAs or (iii) where the difficulty of monitoring 'functional separation' of the incumbent through the creation of a (truly) separated access division may put in serious doubt the effectiveness of the remedy (as we have just discussed in the Telstra case above).

The main objective of the Italian Communications Authority today is to achieve enhanced facilities-based competition. The key problems are much the same as those existing at the beginning of the process of liberalisation:

(i) dominance of the incumbent, Telecom Italia, in the fixed telecommunications wholesale and retail markets; (ii) the very high market share of Telecom Italia in the broadband services market⁸⁶; (iii) insufficient (or, in some areas, non-existent) diffusion of broadband services; (iv) the large 'digital-divide' for a significant share of Italian population⁸⁷.

⁸⁴ *ibid*, 54-55.

⁸⁵ *ibid*, 75.

⁸⁶ Here a substantial difference must be taken into account with the UK scenario: BT's broadband wholesale market share is of just 27%: OFCOM, 'The Communications Market 2009', August 2009. This is a factor that may justify a lower interest of BT to invest in the further enhancement of the New Generation Access network, and also a progressively reduced need of functional (and, a fortiori, structural) separation for the British incumbent.

⁸⁷ AGCOM decision no. 208/07/CONS, p 80.

The competitive scenario in terms of the fixed line network is nearly identical to that observed at the start of the liberalisation process. Amongst the most significant (and recent) instances of abusive conducts decided against Telecom Italia, it is useful to recall a case tackled by the Italian Competition Authority⁸⁸ in which it was acknowledged that Telecom Italia, from 2001 to 2003, abused its dominant position through margin squeeze conducts, in particular by offering low-price broadband services to public administration premises and business clients. Telecom Italia violated the principle of non-discrimination and favoured its commercial divisions, damaging the commercial divisions of its competitors by charging excessive prices for the wholesale services (i.e. unbundling services)⁸⁹. Similar conclusions were reached by an arbitration panel settling litigation between Telecom Italia and Fastweb⁹⁰ in 2007. The panel ascertained that Telecom Italia had obstructed access to the local loop (ULL) in at least 10.000 cases between 2001 and 2004.

It must be noted that on 14 February 2008, pending the review/consultation carried out by the Italian regulator regarding the best remedy (functional v. structural separation) to deal with the access to Telecom Italia's network, the management of the latter published the decision adopted by the board of directors to (spontaneously) implement in the following months a 'form of' functional separation. Telecom Italia created a separated division called 'Open Access' (clearly tailored on the *Openreach* model), within the Direction 'Regulatory & Network' aimed at dealing with the access issues. In reality the 'separation' proposed could be considered as an advanced form of 'accounting separation' rather than a complete 'functional separation', since

⁸⁸ Italian Competition Authority (AGCM), decision no. 13752, Case A351 – Abusive conducts of Telecom Italia, of 16 November 2004, in Bulletin no. 47/2004 of the Italian Competition Authority.

⁸⁹ It must be noted that also the *Consiglio di Stato*, the Italian highest administrative court, reached the same conclusions, as may be inferred reading the judgment of 10 February 2006, quashing the appeal judgment of the Administrative Tribunal (*Tribunale Amministrativo del Lazio*). In particular it recommended for the Italian Communications Authority to adopt new regulations underpinning the principle of non-discrimination.

⁹⁰ The litigation between Telecom Italia and Fastweb was settled through recourse to an arbitration panel chaired by prof. Guido Alpa on 27 January 2007 with the payment of EUR 60 million by Telecom Italia to Fastweb for negligence in obstructing the unbundling of local loop in the period of time 2001-2004 for at least 11.000 clients. See press release issued by the damaged company at <http://company.fastweb.it/index.php?sid=19&idc=1109>.

Telecom Italia's 'Open Access' Division could not be considered functionally or legally separated from the parent company Telecom Italia. In the following months (11 December 2008) AGCOM accepted the 'undertakings' proposed by Telecom Italia and considered the creation of the separate division 'Open Access' in line with the European directives (in line with the obligations of accounting separation, neutrality, non-discrimination). In March 2011 Telecom Italia officially announced that the 'Open Access' division was fully operational⁹¹. However the measure appears to be still some way from addressing the competition concerns, and certainly does not interfere with the control of the network, and in particular, with the decision-making process with respect to new investments⁹².

For the sake of completeness, in May 2009 the so-called 'Caio Report'⁹³ was published. It suggested various measures to enhance competition while helping innovation in the network. The measures in the report range from simple functional separation to structural separation, for certain respect anticipating the initiatives adopted in Australia and in New Zealand only a few years.

In September 2010 the President of the Italian Competition Authority declared that he was not *a priori* against the intervention of the a State-controlled financial entity (Cassa Depositi e Prestiti⁹⁴) to create the New Generation Network structurally separated from the national incumbent, and that he would have been also theoretically favourable to the creation of a joint-venture of Telecom Italia with its main competitors if the target was to bridge the digital divide of the country.

⁹¹ On 9 March 2011 also the French competition authority announced that was in talk with the national de French regulator (*Autorité Réglementation des communications électroniques et des Postes*, or 'ARCEP') aimed at functionally separating France Télécom's network, on the model of the British Openreach. ARCEP had already anticipated this intention in an informal publication on its periodic newsletter (La Lettre, no. 55, April 2007).

⁹² On the 25 July 2013, the Italian Communications Authority (AGCOM) accepted the proposal of (functional) separation of the access network offered by Telecom Italia, alongside with the creation of an 'Equivalence of Input' (EOI) access mechanism. The next step is to launch a market study interviewing all the Italian telecoms operators. The press release is available at <http://www.agcom.it/default.aspx?message=visualizzadocument&DocID=11566>.

⁹³ After the name of the manager, Francesco Caio, who presented the report to the Italian government in 2009.

Structural separation for the time being was not considered a viable option⁹⁵, but was at least discussed for the first time with respect to one of the largest European telecoms players.

In certain respects, the solutions considered in Italy mirror the solutions adopted both in Australia and in New Zealand analysed above. In both cases competition law concerns and the government's agenda to innovate the communications infrastructure in these three countries (New Zealand, Australia and Italy) are behind the idea of infrastructure separation from the body of the telecommunications incumbent providing wholesale and retail services. The substantial difference is that in New Zealand and, by 2018, in Australia, structural separation is a reality, supported also by the competition authorities.

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