

**PARITÀ DI ACCESSO**  
Organo di Vigilanza

**2012**

**LINES OF INTERVENTION  
AND PROSPECTS  
FOR DEVELOPMENT**

**Annual  
Report**

**2011 ACTIVITIES AND RESULTS  
SUMMING-UP OF THE  
THREE-YEAR MANDATE**



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*This Report has been prepared in accordance with the provisions of Undertakings Group No. 7, proposed by Telecom Italia S.p.A. and approved with AGCom Resolution no. 718/08/CONS of the National Regulatory Authority for Communications (AGCom). The assessments made in this Report take into account information and data received by the Supervisory Board by 31 January 2012, in accordance with AGCom Resolution no. 718/08/CONS.*

# 1

## Introduction

In December 2008, the Italian National Regulatory Authority for Communications (AGCom), approved the Undertakings of Telecom Italia, in order to guarantee a more effective equality of treatment in the market of the access to electronic communications networks; it represents an innovative solution which, in addition to the measures and remedies required by AGCom, envisages the assumption of voluntary obligations by the Operator.

The Telecom Italia Undertakings, approved with Resolution no. 718/08/CONS, are part of the reference regulatory framework set out in article 14a of Decree Law 4 July 2006, no. 223, as converted into law no. 248 of 4 August 2006, which introduced this concept as a regulatory “negotiation” tool, which, with the creation of Open Access, discussed below, is the result of lengthy and carefully considered regulatory procedure started by AGCom with the active contribution of the Company.

This regulatory pathway has seen the involvement of all the relevant market Operators in a public consultation process, subsequently confirmed and further developed in Resolutions no. 731/09/CONS and no. 1/12/CONS, with which, after transforming many of the measures contained in the aforementioned Resolution no. 718/08/CONS into regulatory obligations, AGCom defined specific rules for next generation networks and services.

Directive no. 2009/140/EC, which amends the applicable regulatory framework largely outlined in Legislative Decree no. 259 of 2003, the “Electronic Communications Code”, fits into this context. In fact, while the Directive still regulates the case of “voluntary” separation (article 13b), it introduces a so-called “functional” separation, a further regulatory obligation to be imposed on Operators with significant market power.

A few months before the Undertakings were approved, Telecom Italia created a specific department, Open Access, responsible for managing the access network and the supply of associated services, to both the Retail division of the Company, and to the alternative Operators, through its Wholesale department, with the intention of ensuring that the principle of equality of treatment is respected.

When the Undertakings were approved, the Supervisory Board was created, tasked with the mission of monitoring the correct and complete implementation of the Undertakings by Open Access. The Supervisory Board has the task of investigating any breaches of the Undertakings, in response to third party reports or on its own initiative, and notifying its resolutions to AGCom and to the Board of Directors of Telecom Italia.

So the establishment of the Supervisory Board saw the implementation of a new model for checking the management of the Telecom Italia network, which represents one of the most important aspects of the agreement reached by the Company with AGCom, intended to assure increasing transparency in access by all Operators to network infrastructure.

In April 2009 the Supervisory Board began its activity in the framework of an extremely meaningful experience for the electronic communications industry in Italy.

The activity undertaken has demonstrated that continuous and constant monitoring of the correct execution of the various measures prescribed increases its impact, in terms of its increasingly efficacious capacity to influence company processes and information transparency.

In stimulating Telecom Italia to really pursue the aims that underpin the obligations assumed, the Supervisory Board has in fact consolidated a “broader” implementation of their original structure and, in expressing its opinions and Recommendations to the Company, has contributed to strengthen the efficacy of the Italian separation model.

The work method described above, the results obtained during the mandate, amply illustrated in the following sections, and the less burdensome character of the solution adopted in Italy, compared to those of other countries (such as the UK’s Openreach), represent converging elements of an efficacious alternative experience of clearly more invasive operations to separate the access network.

The Telecom Italia obligations, which completed the process started with the creation of Open Access, contributed to guarantee to the alternative Operators equivalent conditions for network access.

The contribution made by the Supervisory Board to the solution of disputes between Operators relating to the respect of the conditions of actual equality of treatment applied by Telecom Italia to its competitors in access to its network have been repeatedly emphasised by the Chairman of AGCOM, including during his presentations of recent years’ annual reports.

As declared by AGCOM Chairman Calabrò during a Parliamentary hearing on 21 July 2010, the Undertakings “*open the existing network to alternative Operators with a breadth, a transparency, an equivalence of access which they did not have in the past and, above all with monitoring by an independent board, most members of which appointed by this Authority*”; and AGCOM has created “*a new model to demonstrate that the network, even if owned by one Operator alone, can be used by everyone in conditions of equivalence*”.

The comments made by the Chairman of Telecom Italia in a Parliamentary hearing on 19 October 2010 should also be recalled. In his view “*Open Access and the Undertakings constitute a new model of equivalence in access that demonstrates how the network of a single Operator can be used by others in conditions of effective equality*” and that this model of equivalence applies not only to the copper network but “*given the Undertakings, it also extends to services providing access to the next generation network*”.

That the Undertakings constitute an alternative to the separation of the access network (the copper network and the fibre network) is also clear from their wording, which states that they will cease to be effective if AGCOM imposes “*regulatory measures prescribing any form of functional separation on Telecom Italia*” (paragraph 16.9) and by AGCOM’s express recognition of their suitability to guarantee “*efficacious separation of access activities from the rest of the functions of the Company*” (Resolutions no. 626/07/CONS and no. 718/08/CONS).

It should also be noted that the Italian system of governance of the obligations has in reality proved to be more complex and detailed than assumed at the time they were approved.

In fact management of some processes, such as, for example, the New Delivery Process, needs a longer time-frame for its benefits to be appreciable, and requires the full collaboration of and interaction between Telecom Italia and the alternative Operators.



Some issues have been addressed with immediate action, in the form of precise and detailed Recommendations to the Company, to ensure the necessary and preventative transparency of information for the OLOs, and in this way contribute to the balanced development of the reference market. These include cases such as the initiative to undertake a comprehensive review of the planning processes, as an outcome of an investigation procedure started following the complaints raised by British Telecom, Fastweb, Vodafone and WIND. This led to the creation of a pre-alarm mechanism to report exchanges close to saturation (the “amber light” system). Thanks to this, the uncertainties in the information regarding the saturation times of Telecom Italia exchanges for bitstream services that previously existed have been almost completely eliminated, resulting in earlier interventions with appreciable advantages for the OLOs and the market.

Other issues have been dealt with taking into account the prospective development of the market (like next generation services and networks) and thus their implementation has been slower and more gradual, becoming tangible only in the last year. Among these, the matter of the switch to the new Ethernet/IP platform for broadband services, due to the obsolescence of ATM technology, is of particular note. This impacts on service quality and the degree of openness of the market, and contributes to the reduction of the digital divide.

Finally, further issues required more detailed regulation, in relation to essential aspects of their scope and efficacy; this is the case for Regulatory Accounting and the identification of the so-called *transfer charges*, disciplined by the recent AGCOM Resolution no. 678/11/CONS of 12 December 2011.

The activity completed has confirmed the central role of the Supervisory Board in verifying that the Telecom Italia Undertakings are correctly executed, thanks to the continual and constant monitoring assigned to a subject “independent” of the Company that is a stable part of company life.

The notions and knowledge acquired will direct the future actions of the Supervisory Board, particularly in the context of the evolving regulatory framework applicable to the new models for the development of optic fibre networks.

The Italian electronic communications industry will in fact be characterised by significant technological evolution, in the short and medium term, with the involvement of the Italian National Regulatory Authority for Communications, as regulator, and industry Operators and the Government, as the parties stimulating demand for innovative services. The use of public funds, the accelerated and harmonious development of the Digital Agenda, the evolution of the next generation network, and transparent access to it for all, require a constant and evolved commitment to supervision.

In this context, the network management control mechanisms must evolve to keep abreast. Transparency of information about infrastructure investments, precise and prompt presentation of development plans, the use of non-discriminatory technologies, the correct use of any public resources employed, are issues that must thoroughly monitored, to ensure solid and lasting competitive dynamics in the market, in the interest of the players and the final customers.

In 2011 the Supervisory Board continued to pay particular attention to the new issues raised in complaints made by the alternative Operators, thanks also to the experience gained in previous years. Moreover, given the dynamic

nature of the processes for implementing Telecom Italia's equality of access obligations, it considered it worthwhile to subject some topics previously dealt with to further assessment, since the analysis of their impact on the market cannot be considered complete, and taking their technical and economic implications into account.

The interventions undertaken were intended to resolve critical issues related to some processes affecting the commercial relations between Telecom Italia and its competitors in the supply of intermediate services, and to make these processes more transparent, to the advantage of the market and consumers.

The Supervisory Board therefore made its contribution, convinced that the sensitive issues dealt with would assume an increasingly central role, also in light of the evolution of the reference market and its legal and regulatory scenario.

In this context, it is certainly worth mentioning its actions on the subject of the quality and development of the fixed access network, to guarantee the necessary and preventative transparency of information provided to OLOs and to safeguard their capacity to schedule their network planning and retail product marketing strategies sufficiently in advance, substantially reducing critical cases.

The extension of the project to analyse so-called "KOs" has been completed, with an original in-depth study into the reasons for rejections of Work Orders by alternative Operators that purchase wholesale services from Telecom Italia and by the Telecom Italia Retail department. This was a complex study, of the bitstream, Local Loop Unbundling (LLU) and Wholesale Line Rental (WLR) services, which clarified the dynamics underlying the Telecom Italia procedures for changing Operator, and permitted an objective comparison of the causes of rejection for the wholesale market and the retail market.

The project to validate the data generated by the Performance Monitoring System for Telecom Italia SMP services, to make available "guaranteed" data and information that could be used to assess and measure how Open Access processes the Delivery and Assurance activities it provides to both Telecom Italia customers and OLO customers then concluded. In the meantime, the Supervisory Board completed its verification of some KPIs transmitted monthly by Telecom Italia, recommending appropriate action to be taken by the Company to make the reference indicators more coherent and closer to reality.

Some initiatives to consolidate the professional training system for Open Access and Telecom Italia Wholesale department personnel were also completed, and the content of the Code of Conduct was also disseminated. Regarding the analysis to ascertain the increasingly close correlation between the management incentive system and the content of the Telecom Italia obligations, at the request of the Supervisory Board, the Company has set a specific objective for 2011, concerning the DSLAM desaturation interventions, which has been assigned to the management of the Network Planning and Network Operations departments.

In addition, the Supervisory Board received a number of complaints from alternative Operators during 2011, and as a result it started some proceedings which, even when it was found that the Undertakings were being formally respected, represented an opportunity to invite Telecom Italia to take the necessary action to improve their efficacy.

Regarding, for example, the need to ensure that the principle of transparency in the information provided by Telecom Italia to the alternative Operators is respected, Complaint no. S01/11 *“Welcome Italia/Saturation problems on bitstream services - Implementation of Undertakings Group no. 5 relating to the guarantees of transparency of the technical plans for the quality of the fixed access network”* is worthy of note; it was started in response to the complaint raised by the alternative Operator Welcome Italia, regarding the remodulation of dates for the resolution of bitstream service deteriorations.

In this case, the Supervisory Board, having found that in some, albeit limited, cases, the behaviour of the Company was such as to compromise the transparency requirements of the Undertakings, asked the Company to report, on a monthly basis starting from October 2011, the percentage of degraded systems that had been repaired within the time periods indicated in the Service Level Agreement, and to adopt all the measures necessary to ensure that the information destined for the alternative Operators is of adequate quality.

The issue described above, thoroughly discussed in this Report, is evidence of the breadth and depth of the work of the Supervisory Board in translating into tangible facts and behaviour the objectives that underpin the Telecom Italia obligations, and in first place those objectives for equality of treatment and transparency of information that the Company must assure to its competitors.

The Supervisory Board has consolidated its dialogue with the principal institutional reference bodies, both national and international, above all with AGCom, which it thanks wholeheartedly for its constant and precious support throughout the whole of the Board's mandate.

The cooperation offered by Telecom Italia's top management and corporate structures and in particular by Open Access, providing the Supervisory Board with the necessary information and instruments for carrying out its work, also deserves to be mentioned here, as does the equally useful frequent and reciprocal exchange of data and information with the alternative Operators.

Everyone involved is fully aware that the three year period from 2012 to 2015 will constitute an important testing ground for the objectives of equality of treatment and of development, also qualitative, of the next generation networks and the Digital Agenda, in the evolving context of the Italian electronic communications system: these constitute direct and indirect growth factors that are crucially important for Italy.

It is from this viewpoint that the Supervisory Board has formulated its intervention lines in the context of the evolving prospects of the market (Chapter 9 of this report), which by evaluating the experience gained in its first three years of activity, testify the role that the Board itself could continue to play in terms of auditing, advice and stimulus of adequate improvement processes by Telecom Italia.

# 2 | Network governance and Supervisory Board duties

The Supervisory Board was set up on 1 April 2009 in accordance with the provisions of the Undertakings submitted by Telecom Italia S.p.A. under Law no. 248/06 and approved by the National Regulatory Authority for Communications (AGCom) with Resolution no. 718/08/CONS. It is made up of five Board Members:



**Giulio Napolitano**

Full professor of Public Law at Roma Tre University, Giulio Napolitano has dealt for a long time with the regulation of public utility services. From 2006 to 2008 he was legal advisor to the Prime Minister's Office on matters regarding quality of regulation.

He is a member of the Scientific Committee of the Communications Observatory set up at Arel. He coordinated the legal section of the ultra broad band research project launched by AGCom, and was in charge of the sub-project on administrative simplification.



**Francesco Chirichigno**

A graduate in Economics and Commerce, Francesco Chirichigno held the office of Deputy Director General of STET in 1993 and CEO of Telecom Italia from 1994 to 1997, planning and implementing the merger of the five companies that were incorporated into the new Telecom Italia. A member of the Board of Directors of TIM, Assicurazioni MEIE, FINSIEL, RESEAU, Scuola REISS ROMOLI and CSELT, he has been chairman of FINSIEL and Consultant to the Minister of Communications. A member of the Communications High Council, from 2004 to 2006 he was Chairman of INFRATEL ITALIA S.p.A. and of the Fondazione Italiana Nuove Comunicazioni.



**Sergio Giovanni Fogli**

Sergio Giovanni Fogli graduated in Electrical Engineering at Milan Polytechnic.

He started his professional experience in SIP and in Telecom Italia he has held, among others, the posts of Marketing Manager for the Campania and Basilicata Regions, Regional Manager for Lombardy, and Marketing and New Services Manager for Private Customers. Appointed as Regulatory Affairs Department Director of Telecom Italia in 2001, he held this office until 2007.



**Claudio Leporelli**

Full Professor of Economics and Services Organisation at La Sapienza University of Rome, Claudio Leporelli performed research and consultancy for the Competition Authority, for the Authority for Information Technology in Public Administration, for the Post and Communications Ministry and for the Technical Centre for managing the Single Network for the Public Administration. He has been an expert at NARS (the Treasury Ministry) and a member of the advisory workgroup of the Ministerial Committee for allocating GSM and UMTS Licences. He was scientific manager for coordinating the ISBUL Project, a research project on ultra broadband supported by AGCom.



**Gérard Pogorel**

Professor of Economics and Management at Telecom ParisTech (ENST) in Paris, Gérard Pogorel has taught at French and European schools and Universities, holding the office of visiting professor at Federico II University, Naples. He has published books, articles and reports on the dynamics of innovation in fixed and wireless networks and the governance of the industry.

He is a member of committees and task forces for Governments and regulatory Authorities in the telecoms and media fields in Europe, Asia and for the European Commission. He is a member of the international panel of experts for the World Competitiveness Yearbook (IMD, Lausanne) and a Chevalier des Palmes Académiques.

### **General Secretary of the Supervisory Board**

The General Secretary of the Supervisory Board is Dr Fabrizio Dalle Nogare, who was nominated and appointed by Telecom Italia with the approval of AGCom. The General Secretary performs support functions and coordinates the activities of the Supervisory Board. He is also responsible for planning its activities and assisting the Chairman, as well as keeping the Supervisory Board abreast of any relevant information. He is assisted in the performance of his duties by the Supervisory Office.

### **Supervisory Office**

The Supervisory Office, whose Director is Luca Regoli, assists the Supervisory Board in performing its functions, provides operational support and, at the request and on the instructions of the Board, carries out preparatory and auxiliary work in handling complaints and claims received. The Supervisory Office staff consists of Marco De Grandis, Alessandro Mauro, Mario Volpari and Diana Stefani.

### **Supervisory Board**

The Supervisory Body acts with full autonomy and independence and is tasked with overseeing the correct execution of the Undertakings. On its own initiative or following complaints by third parties, the Board investigates possible breaches and notifies them to AGCom and the Board of Directors of Telecom Italia, according to the procedures and timescales specified by its Regulations, and gathers the necessary information and data to carry out its duties from all the Telecom Italia departments involved in the process.

The Members of the Supervisory Board remain in office for three years. The Chairman of the Board is Prof. Giulio Napolitano, designated by AGCom and appointed by the Board of Directors of Telecom Italia along with the other members of the Board: Prof. Claudio Leporelli and Prof. Gérard Pogorel (nominated by AGCom) and Dr. Francesco Chirichigno and Sergio Giovanni Fogli (nominated by Telecom Italia).

The Board meets at least once a month and sends AGCom and Telecom Italia a quarterly report on the work done, particularly with respect to reported irregularities or deficiencies encountered, any investigative procedures started, and cases of activation of unrequested services. The Board, furthermore, submits to AGCom and to Telecom Italia a yearly report on the work done and the results achieved.

The Supervisory Board is supported in its work by a General Secretary (Dr. Fabrizio Dalle Nogare) and by a Supervisory Office (directed by Luca Regoli), and has an independent annual budget, within the limit of resources allocated by Telecom Italia, based upon the minimum threshold determined by the above mentioned Resolution no. 718/08/CONS.

The Supervisory Board continuously monitors the correct implementation of the Undertakings and, in carrying out its duties, makes Resolutions and Recommendations intended to stimulate a more correct compliance therewith by Telecom Italia.

In addition, it receives complaints from Operators concerning alleged breaches by Telecom Italia and sends a report to AGCom and to the Board of Directors of Telecom Italia, in the event that the latter has not taken action to remedy the ascertained breaches in due time and in the proper manner.

In compliance with the obligations of transparency laid down by Article 21 of the Regulations, a specific Internet site has been created for the Supervisory Board (<http://organodivigilanza.telecomitalia.it/>), also available in English, through which all interested persons can access information on: i) its role and mandate; ii) the composition of the Board; iii) the procedures and methods for reporting and handling complaints; iv) the content of Resolutions and Recommendations.

Besides the above-mentioned documents the site also contains the press releases summarising the content of the decisions taken, making the activity of the Board transparent to the entire market and to all interested parties.

A detailed analysis of the activities carried out during the three-year mandate and, particularly, in 2011, is reported in the next pages of this Report; in addition, it is important to emphasise the role that the Supervisory Board has played so far, as a body that not only scrutinises Telecom Italia's compliance with the Undertakings, but also proposes further solutions, intended to facilitate the full achievement of the objectives of the Undertakings.

This approach of active encouragement adopted by the Supervisory Board has led to the adoption of Recommendations and tangible results flowing therefrom, which will be analytically presented below.

## THE GOVERNANCE OF THE SUPERVISORY BOARD



#### OPEN ACCESS

In February 2008, Telecom Italia reorganised its management structures, creating within the Technology & Operations Department a new Department of Open Access, whose purpose is to deal with the following issues with the emphasis on efficiency, quality and equality of treatment:

- all development and maintenance of the technological infrastructures for the access network;
- the supply of access services for the customers both of Telecom Italia and of the other Operators and the relevant technical assistance.

The creation of Open Access and the consequent internal reorganisation represent the foundation that formed the basis of the negotiation with AGCom, which concluded with the approval of the Undertakings.

Open Access provides its access services to the Retail Sales department of Telecom Italia and to the other licensed Operators through the National Wholesale Services department, which is the main reference point for Operators for dealing with commercial and technical requirements (from the offer, to planning, sales, technical assistance and billing) relating both to access services provided by Open Access and to other wholesale services.

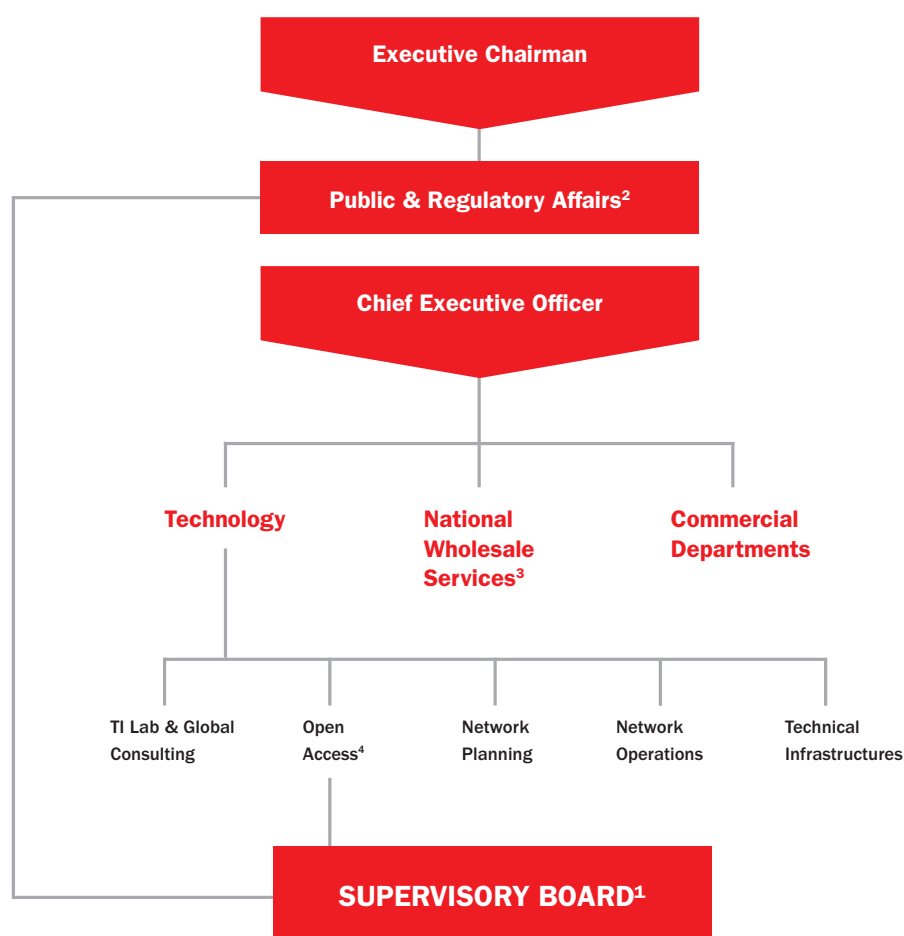
The Open Access model is characterised by the supply of services in terms of “Equivalence of Outputs” (EEO), on the basis of which the services offered to the commercial departments of Telecom Italia and to the other licensed operators respect the principle of equality of treatment, but are not necessarily identical.

The solution adopted was to specify that Telecom Italia’s Retail department deals directly with Open Access, while the OLOs deal with TI Wholesale.

The activities of Open Access and National Wholesale Services, for the production of access services, are separate from the other commercial departments of Telecom Italia and managed independently. Telecom Italia is organised according to the diagram shown below, which shows a direct hierarchical structure whereby the managers in charge of Technology & National Wholesale Services report directly to the CEO and the manager in charge of Public and Regulatory Affairs report directly to the Executive Chairman. Open Access reports directly to the director of Technology; the department of Technology also includes the TI Lab & Global Consulting, Network Planning, Network Operations and Technical Infrastructures departments.



## THE GOVERNANCE OF TELECOM ITALIA



**1** In case of reports and complaints, the Supervisory Board can gather information from Open Access and interact with the Public & Regulatory Affairs Department

**2** The manager of the Public & Regulatory Affairs Department reports to the Executive Chairman of the Telecom Italia Group

**3** The manager of the National Wholesale Services Department reports to the Chief Executive Officer of the Telecom Italia Group

**4** The manager of Open Access reports to the manager of the Technology Department

# 3 | Reference national and European regulatory framework

### 3.1 NATIONAL REGULATORY FRAMEWORK

*The principal regulatory provisions and initiatives that took place in the three years from 2009 to 2011 are briefly summarised below: from the approval of the Telecom Italia Undertakings to the recent definition of the rules for access services supplied through next generation networks.*

AGCom Resolution no. 718/08/CONS approved the Undertakings of Telecom Italia under the reference regulatory framework specified in article 14a of Decree Law 4 July 2006, no. 223, as converted into Law no. 248 of 4 August, 2006, which instituted this concept as a “contractual” tool for regulation.

The measures approved prescribe the assumption of elements of voluntary obligation by the Operator, to ensure more efficacious equality of treatment in the electronic communication network access market.

With Resolution no. 731/09/CONS, which imposed certain regulatory obligations regarding wholesale physical access service, wholesale virtual access services (bitstream) and Wholesale Line Rental services on Telecom Italia, AGCOM significantly enhanced the value and extent of the Undertakings, transforming many of the measures they contain into remedies, and Resolution no. 2/10/CONS (issued on conclusion of the analyses carried out on the markets for the wholesale supply of terminal segments of rented lines and rented lines on long distance circuits so as to identify the undertakings to be imposed on Telecom Italia) had similar impact, linking back to the content of some of the Undertakings.

In other cases, AGCom concluded its market analysis by acknowledging the positive effects and benefits of the new undertakings assumed by Telecom Italia. This was the case, for example, with Resolution no. 284/10/CONS (at the conclusion of the analysis of the markets on local, national and fixed-mobile telephone services available to the public and supplied in fixed locations to residential and non-residential customers), which removed the obligations previously imposed on Telecom Italia, since the reference markets were deemed to no longer be susceptible to “ex ante” regulation, taking account of the incisiveness of the obligations imposed in the access and interconnection wholesale markets, as strengthened by Resolution no. 718/08/CON, cited above.

AGCom also paid particular attention to defining the rules for access services provided through next generation networks.

Already with Resolution no. 731/09/CONS, the regulatory obligations identified contain specific provisions that assume special relevance for these networks.

In particular, this Resolution required Telecom Italia to provide access to its civil infrastructure and dark fibre at fair and reasonable conditions (a form of access that had in fact already been prescribed in Resolution no. 718/08/CONS); it also recommended that Telecom Italia adopt all possible measures to decongest the ducts currently in use, to guarantee access to the other Operators and, with reference to cable infrastructure to be built, prescribed that when excavating for new projects, Telecom Italia should provide sufficient spaces to permit other Operators to lay their own cables.

Again on the subject of access to cable infrastructure and dark fibre, the Resolution also imposed an obligation to transparency, consisting substantially in the publication of a Reference Offer containing the economic and technical conditions for the supply of these services. Telecom Italia was also required to supply a database containing detailed information on the presence of civil infrastructure, lit and dark fibre.

The Resolution did not impose any further obligations to provide physical access on Telecom Italia, such as on the unbundling of fibre, but did specify an obligation to provide access to bitstream services on fibre. Regarding the latter, the Resolution deferred the definition of the service bid conditions until after the approval by the European Commission of the Recommendation on access to next generation networks and the definition of a non-binding proposal for *“Guidelines to discipline the transition to NGN networks”* by the NGN Committee.

With Resolution no. 1/11/CONS, AGCom then subjected the draft provision that contains the regulations to discipline next generation network access services and identifies the regulatory obligations to be imposed on notified Operator Telecom Italia to public consultation.

Specifically, regarding Market no. 4 (Wholesale access to the physical infrastructure of the network), obligations for Telecom Italia have been identified relating to access to civil engineering infrastructures, the termination segment, disaggregated fibre network access for an FTTH network and fibre network access for an FTTN network.

With reference to Market no. 5 (Wholesale broadband access), the obligation to offer the bitstream service on fibre, with several price control models (cost-oriented or respecting the principle of non-discrimination), has been imposed with no territorial limitations, until changes in competitive conditions have been verified, and in any event until the obligation to supply optic fibre unbundling comes into force, scheduled for 2013. AGCom has made clear that, once the obligation to supply unbundling comes into force, the obligation to supply the bitstream service will be limited only to those areas in which unbundling will not be supplied.

It will then be necessary to assess if the separation model implemented through Open Access can guarantee conditions of equality of access so as to eliminate the obligation for bitstream services to be cost oriented, where required. After the transposition of the new European regulatory framework into law, the imposition of symmetrical obligations only for access to infrastructure that creates bottlenecks in the access network that are attributable to enterprises other than the notified Operator will need to be evaluated.

Furthermore, in the phase of transitioning from ATM to Ethernet transport technology, Telecom Italia must also provide a bitstream transport service on fibre in ATM technology.

The Authority has also adopted Resolution no. 301/11/CONS. This provision in fact constitutes a supplement to the provision previously submitted to public consultation with the aforementioned Resolution no. 1/11/CONS. This provision introduced a detailed set of rules for next generation network access services, covering not only general obligations imposed on Telecom Italia, but also the related conditions for their implementation, to complete the reference regulatory framework already outlined in Resolution no. 731/09/CONS.

Specifically, with reference to the supply of wholesale access to NGA networks, AGCom has imposed the following regulatory obligations on Telecom Italia concerning the markets for wholesale physical access to network infra-

structure in fixed locations (market 4) and wholesale broadband access (market 5), identifying, at the same time, the conditions for their implementation: i) obligations regarding the access and use of certain network resources; ii) transparency; iii) non-discrimination; iv) separation accounting; v) price control; vi) cost accounts.

Continuing this short review of the main regulatory interventions, Resolution no. 678/11/CONS should also be noted.

This provision assumes particular relevance in relation to the integration obligation applicable to current Regulatory Accounting and the internal service contracts referred to in AGCom Resolution no. 152/02/CONS, introduced by Telecom Italia at the request of AGCom, with the aim of making clear the financial flows of internal trade between the Telecom Italia sales office and the organisational units assigned to produce Open Access services, so as to demonstrate that the conditions applied between internal divisions and competitor Operators are fully equivalent.

Telecom Italia has submitted to AGCom a proposed model to incorporate separate accounting and to determine *transfer charges*. At the end of the public consultation on this proposal, and in the light of its outcomes, AGCom approved the fixed network Regulatory Accounting and service contracts guidelines with the aforementioned Resolution no. 678/11/CONS.

Resolution no. 679/11/CONS is equally relevant: this contains the “*Outcome of the audits of the Telecom Italia access network quality indicators, pursuant to articles 5, 6 and 7 of Resolution 578/10/CONS for the application of the increase in prices for wholesale access services for 2012*”, which concluded the audits required by AGCom pursuant to Resolution 578/10/CONS.

This Resolution defined, for the three year period 2010-2012, the Telecom Italia fixed network wholesale access prices, making the application of the price increases - subject to network caps - scheduled for 2011 and 2012 dependent on the outcome of an AGCom audit of the achievement of certain specific conditions regarding the quality and updating of the Telecom Italia access network.

The measure adopted specifies the indicators relating to the processes of activating the services and those of operating and maintaining the network that AGCom takes into account for the purpose of this audit, namely: i) the percentage of refusals, out of the total applications by Operators, deriving from access network problems (network “KOs”); ii) the progress of programmes to renew the copper network (preventive maintenance); iii) the number of faults reported for which an on-site intervention was required, as a proportion to the total number of active lines (fault rate).

In accordance with the provisions of Resolution no. 578/10/CONS, Telecom Italia submitted to AGCom a report, certified by Ernst & Young, containing the measurements and trends of the network quality indicators, for the application of the scheduled prices for 2012.

The certifying Company, in its own technical report, declared that it had audited the indicators measurements and trends as communicated by Telecom Italia, and the conformity of the calculation method adopted, and stated that, for the latter, it also used other sources, including the Telecom Italia Undertakings and the Resolutions of the Supervisory Board.

After carrying out these tests, the certifying Company declared that it had not encountered anomalies, and considered that the indicators had been measured and calculated as specified in the current regulations.

After checking that the outcomes of the audits of the quality and modernisation of the Telecom Italia access network, carried out pursuant to Resolution no. 578/10/CONS were favourable, AGCom approved the increase in wholesale access service prices for 2012 with Resolution no. 679/11/CONS.

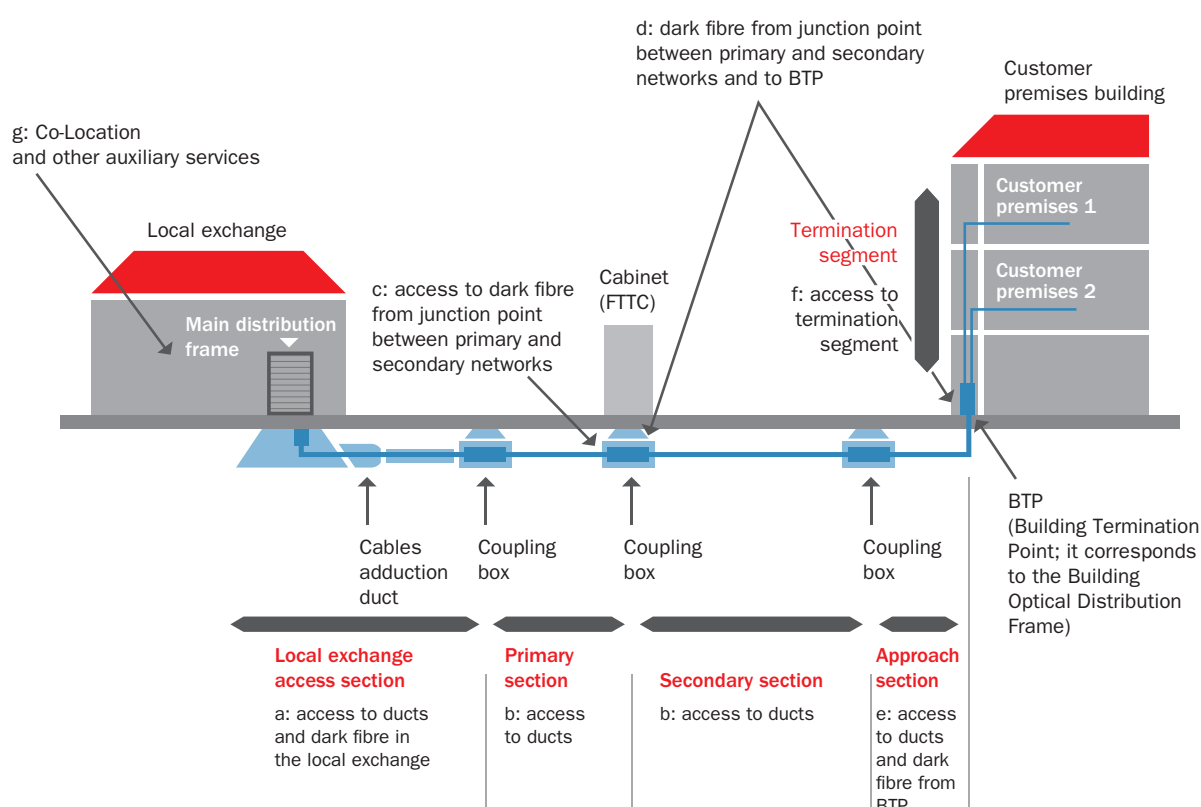
On 11 January 2012 AGCom approved the final provision to discipline access services to new generation networks (NGN) with Resolution no. 1/12/CONS.

Referring to the text of the Regulations for analysis of the detail elements, the new rules, established after completion of the process started with the aforementioned Resolutions no. 731/09/CONS, no. 1/11/CONS and no. 301/11/CONS, make the following general provisions.

Without prejudice to the obligation to supply disaggregated access to its network where technically possible, and taking the actual development of the market into account, Telecom Italia is required to submit a Reference Offer for passive services such as the so-called end-to-end service (disaggregated access to compatible fibre with the current network architecture of the incumbent), its individual components (so-called building blocks), access to civil works (such as cable ducting) and active services, i.e. fibre bitstream, offered at various network levels, and the innovative VULA (virtual unbundled local access) service supplied directly in the exchange, within two months of the date the resolution comes into force.

At the same time, the resolution prescribes that the procedures needed to define the regulations for advanced VDSL technologies (vectoring and bonding), the provision of any symmetrical obligations for access to infrastructure, the definition of the risk premium, and more generally the economic conditions of the offer for such service should be started promptly.

The figure summarises the reference NGAN infrastructure scheme.



**The reference NGAN infrastructure scheme**

The new discipline applicable to next generation networks and services introduced by the aforementioned Resolution no. 1/12/CONS, is also capable of affecting the current structure of the Undertakings, the sphere of application of which is extended to intermediate access services provided through next generation networks, for which AGCom designates Telecom Italia as SPM Operator (point 9.4). In this respect, regarding the relationship between the content of the aforementioned point 9.4 and the impact of the provisions contained in this Resolution, the Supervisory Board, with Resolution no. 3/2012 of January 18, 2012, started to analyse and assess the possible application of the Undertakings to intermediate access services supplied on next generation networks; the results of such assessments will represent the starting point for the subsequent supervisory activities. For completion, investigations A248 and A426 should also be mentioned: they were started in 2010 by AGCM, the Italian Competition Authority, to look more deeply into alleged anticompetitive conduct by Telecom Italia.

The behaviour of the Company that is being examined by the Competition Authority is: a) a presumed sales strategy focussed on deliberately delaying and hindering activations of wholesale services requested by alternative Operators, with unjustified reasons or technical pretexts, or by not being sufficiently diligent in managing its wholesale service supply processes; b) in the alleged absence of provision of wholesale services and information to alternative Operators that might potentially be necessary to formulate offers to non-residential customers.

The facts alleged in the Investigations were also evaluated by the Supervisory Board, which proceeded to ask Telecom Italia, with Resolutions no. 21/2010 and no. 23/2010 respectively, to allow access to the investigation papers and any other document that might be useful, so as to ascertain whether or not incorrect sales practices, consisting of systematic recourse to refusing to process Work Orders issued by alternative Operators (“KOs”), had actually occurred, and the sales departments of the Company had been provided with more or better information than the OLOs, when participating in public tenders for the supply and management of electronic communications contracts to Operators.

The most important point, in this context, is the observation that some of the measures that Telecom Italia proposed to the Competition Authority as undertakings, intended to obtain closure of the Inquiries without a finding that an offence had been committed, take as reference actions already requested to Telecom itself by the Supervisory Board, in order to promote a more effective realization of the objectives that underlie the Undertakings, which have by now become increasingly central in the reference regulatory and normative framework for the electronics communications sector.

## **3.2 EUROPEAN REGULATORY FRAMEWORK**

### **3.2.1 The principal developments in the European Union regulatory framework in 2009-10**

#### ***The “Telecoms Package”***

The most important new development in the European regulatory framework in the last three years was the approval of the so-called “Telecoms Package” by the European Parliament at the end of 2009. This changed several important passages of the European Union Directives on electronic communications. In substance, these are:

- 1.** Directive no. 2009/136/EC, which modified the “Universal Service Directive” (Directive no. 2002/22/EC), the “E-Privacy Directive” (Directive no. 2002/58/EC) and the regulations on cooperation between national regulatory Authorities (Regulation (EC) no. 2006/2004)
- 2.** Directive no. 2009/140/EC, which modified the “Framework Directive” (Directive no. 2002/21/EC), the “Access Directive” (Directive no. 2002/19/EC) and the “Authorisation Directive” (Directive no. 2002/20/EC).
- 3.** Regulation (EC) no. 1211/2009, which established the Body of European Regulators for Electronic Communications (BEREC).



The “Package” contains rules that cover matters ranging from the strengthening of the rights of telephone and internet users, to the creation of BEREC, the new rules about radio spectrum management and the inclusion of freedom of access to the internet among the fundamental human rights, for the first time in the world.

So far as the issues related to network access are concerned, the Package introduces new tools available to national regulatory Authorities to define subnational markets, the possibility of imposing on Operators the sharing of network elements and associated facilities, as well as measures designed to promote the elimination of the so-called digital divide, principally in rural areas.

With reference to the subject of network separation, Directive no. 2009/140/EC changed the Access Directive, introducing the different cases of “functional” separation and “voluntary” separation.

Regarding the former (article 13a of the new Access Directive), functional separation is defined as an instrument of exceptional nature and a *remedy of last resort* that a regulatory Authority can impose on vertically integrated electronic communications Operators with significant market power in one or more relevant markets; the measure consists in the obligation to transfer all the activities related to the supply of wholesale access services/products to a commercial entity that operates in a wholly independent way. The measure may be imposed after it has been ascertained that the “typical” regulatory obligations (such as the obligation for transparency, non-discrimination, accounting separation, etc.) have proved to be ineffective, and that there are important and persistent competition issues and/or shortcomings in the market, identified in relation to wholesale supply of some access product markets. Particular emphasis is put on the importance of respecting the principle of proportionality between the competitive shortcomings observed in the market and the remedies adopted.

When submitting proposals for functional separation to the Commission, national regulatory Authorities should support these applications with assessments which attest the need to proceed in the direction indicated, with in depth analysis of the impact that functional separation of the access network might have on the market and on all the stakeholders involved.

However, the case of “voluntary” separation (article 13b of the Access Directive) delineates the scenario of a separation (functional or structural) that is proposed voluntarily by the Operator designated as having significant market power. In this case, the Operator must inform the national regulatory Authority, which assesses “*the effect of the intended transaction on existing regulatory obligations*” and, following an analysis of the markets, decides whether to impose, amend or withdraw the obligations on the Operator.

### **The Recommendation on regulated access to Next Generation Access networks**

In September 2010, after a lengthy approval procedure, the Commission adopted Recommendation No. 6223/2010 which contains guidelines on access to future next generation access networks. The development of NGN networks is still at an early stage; however, issues of various kinds are emerging in different European countries on which the Commission has been asked to take action; to mitigate the proliferation of many and diversified solutions, the Commission has outlined a common regulatory framework, capable of stimulating investments.

It pays particular attention to the delicate subject of the balance between the need to protect competition, on the one hand, and the need to encourage investment by Operators, on the other. For example, it recognises a risk premium for investments made by the incumbent in the context of access price definition, while at the same time promoting the entrance of new Operators to the market with several measures, including the imposition of the obligation to provide access to network infrastructure. The supply of bitstream services should also be made obligatory.

It specifies that prices should fully reflect the risk related to the investment; at the same time, national regulatory Authorities will have available to them a raft of possible remedies they may adopt to promote the entrance of alternative Operators.

There is a special stimulus for the adoption of forms of co-investment, and the need to differentiate regulations *ex ante*, so as to acknowledge the special nature of local markets (such as urban or rural areas) is also recognised.

More generally, Operators' freedom to choose between point-point or point-multipoint types is guaranteed, provide the possibility of disaggregated access is (also) guaranteed. Finally, the national regulatory Authorities must ensure that the SMP (Significant Market Power) Operator develops systems that can guarantee alternative Operators an easy migration from copper to fibre.

#### ***The Commission's public consultation on network neutrality***

The European Commission published a public consultation on the subject of network neutrality in 2010. This was aimed primarily at exploring the arrangements for management of traffic by the Operators in greater depth, and to assess the efficacy of the new regulations on net neutrality adopted under the new European regulatory framework for electronic communications published in 2009. In April 2011 the Commission reported its conclusions on this subject to the European Parliament, the European Council, the European Economic and Social Committee and to the Committee of the Regions. In particular, the Commission considered it would be premature to take decisions on the subject of net neutrality, preferring instead to wait for the new European regulatory framework to be transposed into national laws, and to identify, on completion of this process, what might be the best action to take.

#### ***The "Europe 2020 Strategy" and the European Digital Agenda***

The European Council approved the "EU 2020 Strategy" in 2010. This is a broad-ranging strategic project initiated by the European Commission to prepare the EU economy for the challenges of the next decade. The document contains options and measures to relaunch employment and increase productivity levels and social cohesion, as well as environmental protection objectives such as the pursuit of an economic system that reduces carbon emissions; these objectives will have to be translated into practice through concrete actions by the EU and the Member States.

One of the seven initiatives of the Europe 2020 Strategy is the "Digital Agenda for Europe" (European Commission communication COM(2010) 245) which sets out the principal objectives and the actions that the Commission intends to take for the development of broadband in the European Union, and establishes the key role that information and communication technology (ICT), and the internet in particular, must play to achieve the objec-

tives that Europe has set itself for 2020. The document estimates that reaching the objectives contained in the Digital Agenda will be able to stimulate innovation and economic growth, and improve standards of living in the EU for citizens and businesses.

#### **European Commission Communication on Broadband: “Investing in digitally driven growth”**

In 2010 the European Commission published communication no. 472/2010 entitled “*European Broadband: investing in digitally driven growth*”, in which it emphasized the importance of investment in the new networks to drive the economy and as a modern and efficient tool at the service of citizens.

The Commission also identified several lines of action to support the pursuit of these aims, namely:

1. the Member States and local Authorities are encouraged to adopt work plans for the development of broadband, for the former, and policies that might reduce the cost of the civil works, for the latter;
2. the Commission itself, with the European Investment Bank, will identify and put into effect financial instruments designed specifically for the creation of broadband networks, and stimulate better use of the European funds made available for this purpose.

### **3.2.2 The most significant initiatives of 2011**

#### **The BEREC public consultation on functional separation**

In October 2010, the Body of European Regulatory Authorities for Electronic Communications (BEREC) started a public consultation on functional separation, with the aim of identifying guidelines to support national regulatory Authorities with regard to the advisability or otherwise of adopting models of functional separation and - if appropriate - on the most suitable procedures for creating them.

The model of functional separation adopted by Telecom Italia is expressly cited, together with the British, Polish and Swedish models, as useful reference examples when examining the procedures for applying Articles 13a and 13b of the Access Directive. However, the document emphasises how these experienced accrued in the regulatory framework that applied prior to the approval of the aforementioned “Telecom Package”, and thus classified them as operations peculiar to a specific national reference context, initiated voluntarily by the incumbents, outside the European regulatory framework. In February 2011, after it had received comments on this subject from the principal European Operators, BEREC published the final document on the subject of functional separation, in which it expressed its position on several specific aspects:

1. BEREC emphasises the complexity, intrusiveness and costs that are involved in adopting forms of functional separation;
2. the British and Italian cases which, as stated, do not fit the remit of article 13a, are cited in the document as examples of practical application of models of functional separation. In particular, BEREC reiterates that the model introduced by Telecom Italia, including the monitoring role played by the Supervisory Board, is to be considered a valid example of functional separation to all intents and purposes;

3. regarding the content of any proposal for functional separation that regulatory Authorities might submit to the Commission pursuant to article 13a of the Access Directive, BEREC states that the purpose of the document in question is not to provide well defined and detailed assessment criteria, or an exhaustive list of all the parameters that national regulatory Authorities must apply in their assessments; it instead considers preferable a flexible approach, which can be adapted to the various national contexts. Furthermore, BEREC has recognised that purely qualitative criteria (such as those used for the standard remedies) cannot be considered sufficient to make a decision about the possible imposition of functional separation;
4. also with reference to the identification of the governance rules for the new separate division, the rules with which the Supervisory Body must comply, the procedures to be followed to guarantee the necessary transparency of work procedures, BEREC does not consider it appropriate to define in detail the rules which regulatory Authorities must follow, since it must instead ensure that they have the flexibility necessary for their differing reference contexts. The structural assets involved in the separation process merit a separate discussion, that BEREC considered appropriate to detail in the document;
5. finally, regarding article 13b, it is emphasised that separation proposed voluntarily by an Operator is clearly a different case to separation imposed by a national regulatory Authority (article 13a), and the two contexts cannot be compared.

#### **Public consultations by the Commission in October 2011**

In October 2011, the Commission started two public consultations on the following subjects:

1. the application of a non-discrimination obligation in access to electronic communication networks (*"including functional separation under article 13a of the Access Directive"*);
2. costs calculation methods to determine the prices for wholesale products.

The purpose of these consultations is to identify common guidance on these matters for national regulators, in a context in which growing regulatory fragmentation could jeopardise not only the investments in new technologies, but also the evolution of the Single European telecommunications market.

Regarding, in particular, the first of the two consultations, on the application of non-discrimination obligations to network access, it arose from the observation that national regulators interpret the application of the non-discrimination obligation in different ways, and from the need to consider in greater depth the level of detail the Commission's guidance should have to ensure that the overall reference framework is sufficiently harmonised throughout the European Union.

The consultation document examines the different discriminatory behaviours that an SMP Operator may adopt; it pays particular attention to the subject of defining indicators that can provide details about the actual respect of the principles of equality of treatment by vertically integrated Operators.

The Commission also deals with the issue of the functional separation introduced by the new article 13a of the Access Directive, to better define the market circumstances that justify recourse to this instrument.

Finally, it should be noted that the Commission repeatedly mentions the possibility that monitoring of the actual respect of the non discrimination principles may be delegated to an “independent industry body”.

***The BEREC public consultation on the effects of co-investments in NGN networks on market competitiveness.***

After decisions taken by the last Council meeting of 2011, BEREC launched a public consultation on the competitive effects consequent on the adoption of policies for co-investment by several Operators in the new optic fibre access network.

The consultation document mentioned, particularly regarding Italy, the case of *Trentino NGN*, a Newco set up by Telecom Italia, the Autonomous Province of Trento, MC Link and La Finanziaria Trentina which will connect 60% of the homes of the entire province with optic fibre, and the case of the Province of Lucca, where Telecom Italia - selected as private partner - and the Provincial government have signed an agreement to create optic fibre coverage for the industrial districts in the area.

***Other relevant documents in 2011***

In concluding this review, the following should also be recalled:

1. the public Consultation by the European Commission launched on 19 April 2011 which started the revision of community guidelines on public financing for the development of broadband networks;
2. the public consultations launched by BEREC during 2011 on the promotion of broadband services and technologies and on the guidelines on net neutrality and transparency, the results of which will be known in 2012;
3. the BEREC report on “Open Access” published in February 2011, intended to develop a shared understanding of the term “Open Access”, which “*is neither defined in the Regulatory Framework, not in any other legal document*”.

# 4

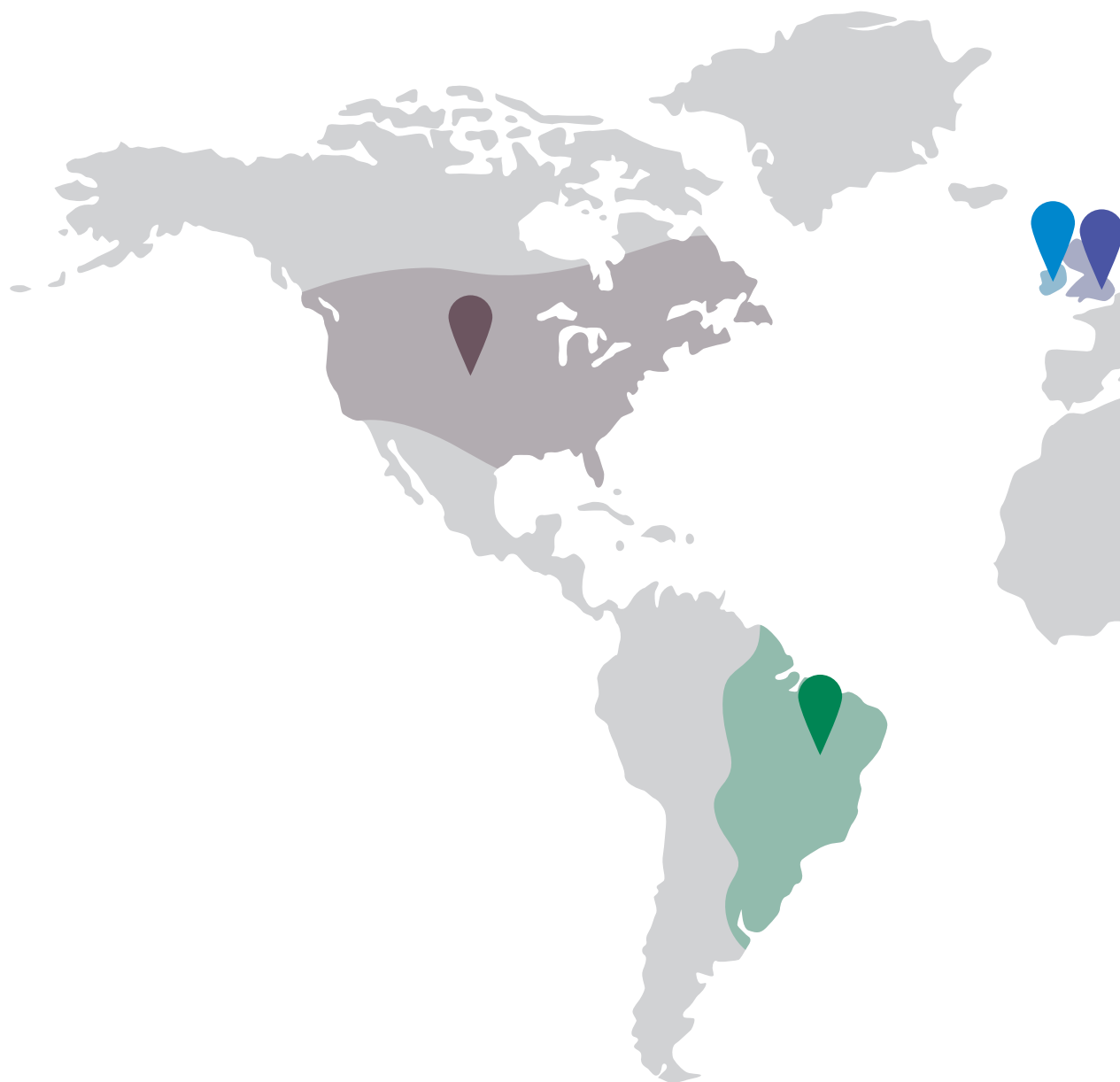
International comparison  
of access network separation  
models and equality  
of treatment indicators

#### **4.1 INTERNATIONAL MODELS OF ACCESS NETWORK SEPARATION**

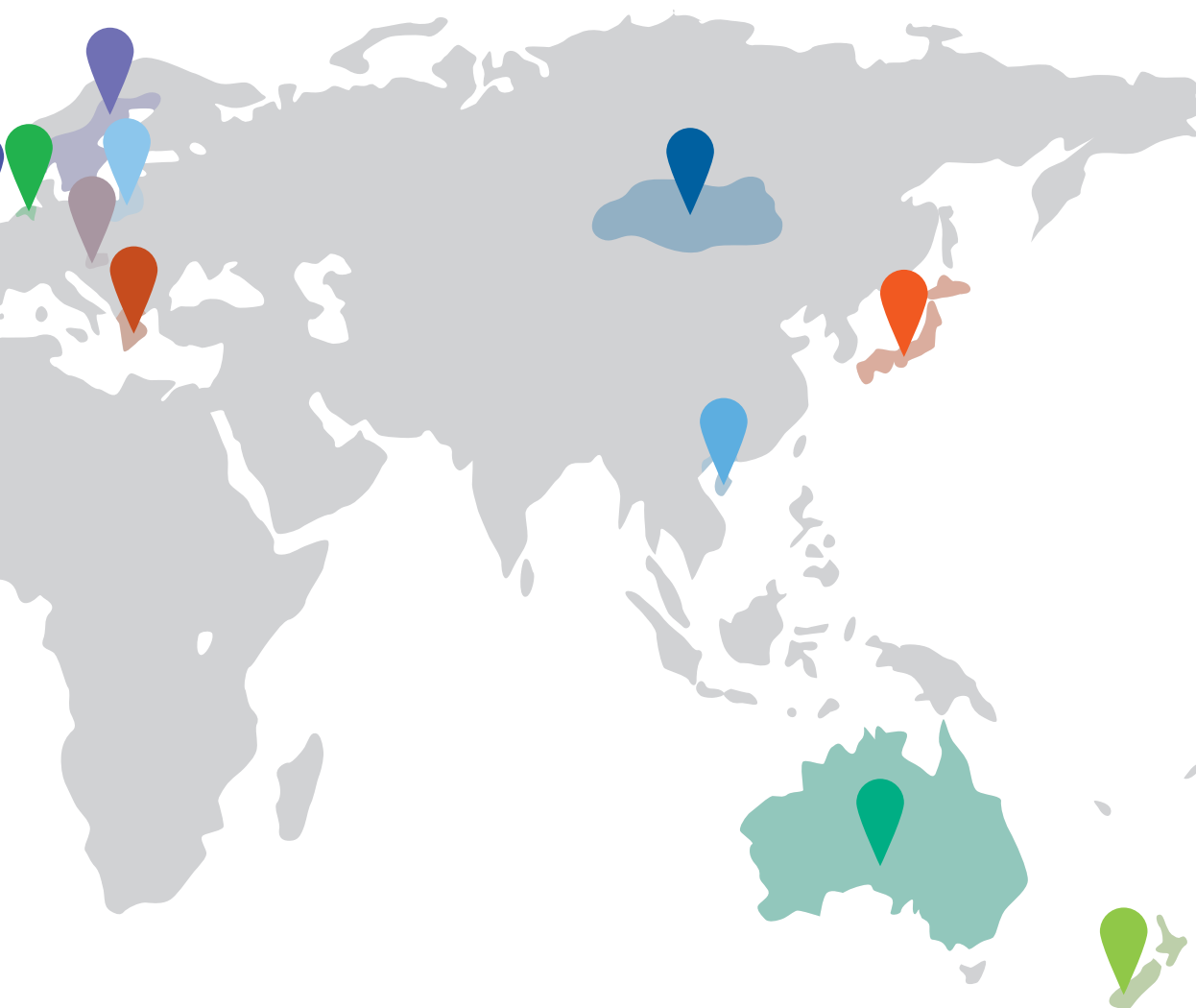
The issues around access to the fixed electronic communications network and compliance with the principle of equality of treatment between competing Operators are common to many countries, particularly in those contexts in which the historical Operator still maintains vertically integrated businesses and a market power deemed significant.

So in a number of countries, these issues have very often been dealt with by directly involving the national regulatory Authorities, and this has in some cases led to the adoption of models that to varying extent and in various forms, involve functional or structural network separation, in order to eliminate situations of discrimination to the detriment of the alternative Operators.

A summary of the most significant experiences accrued to date, internationally, is provided below. This includes not only countries that have already adopted models, but also those in which a lively debate on the subject is still under way.







#### AUSTRALIA

In Australia the process that led to the separation of historical operator Telstra's network started in 2006, the year in which the wholesale division, responsible for sales of wholesale network services to alternative Operators was created. However, this solution was thought to be insufficient to guarantee full respect of the principle of equality of treatment. In 2010, after years of discussions and negotiations with the incumbent, the Government, following a public consultation, started the ambitious project to create the National Broadband Network (NBN), the new publicly owned optical fibre network destined to cover the entire country. NBN Co., a Company specifically created by the Government, part-owned by the Ministry of Communications and the Ministry of Finance, will lay the fibre.

In the month of June 2010 the first agreement between Telstra and the Government was reached, which provided for the incumbent:

- to progressively migrate its customer base from the copper network to the new fibre network;
- to progressively close the copper network as the new network is laid;
- to receive state funding of approximately 11 billion Australian dollars in recognition of the opening of its own access network and the use of its pipes, channels and exchanges, and the migration of its customer base to the new network;
- to be able to lease the new network on the same terms and conditions as its competitors.

In March 2011, after a lengthy parliamentary debate, the House of Representatives approved the bill that gave definitive authorisation to the network separation project, and on 29 July 2011 the incumbent sent the industry regulatory body, the Australian Competition and Consumer Commission (ACCC), the Undertakings document (*Telstra Structural Separation Undertaking and Migration Plan*) that envisages the structural separation of the copper network by 2018. This document on the one hand commits the operator to the progressive disconnection of services on copper and the migration of its customer base to the new fibre network, and on the other establishes the measures that Telstra will take to guarantee the necessary transparency and compliance with the principle of equality of treatment for other operators. In this context, an Independent Telecommunications Adjudicator (ITA) would also be established, the main task of which would be to guarantee rapid resolution of disputes between Operators.

In October 2011 the Telstra shareholders authorised the sale of the network to the Government, and NBN Co. published its Annual Plan for the construction of the new network in the same month.

According to the latest estimates - updated to November 2011 - the total costs of creating the next generation network should be around 50 billion Australian dollars, a sharp increase (+40%) from the 36 billion previously estimated.

#### BRAZIL

In 2008, Anatel, the industry regulatory Authority, added the "execution of regulatory and market impact studies" of the advantages and disadvantages of adopting structural, company and functional separation mechanisms to the list of actions planned in the PGR (*Plano Geral de Atualização da Regulamentações do Brasil*).

In addition, Anatel's 2009 Annual Report states that one of the next tasks to be undertaken is the identification of relevant markets and the designation of Operators with significant market power, so as to assess whether or not it is appropriate to impose asymmetrical regulatory measures.

The 2010 PGR contained plans for the development of an Open Network by local loop unbundling and structural or functional separation. In the same year, the Government launched the National Broadband Programme (PNBL), which assigns a key role to TeleBras, which will manage the backbone network and offer wholesale access services.

In 2011 Anatel published the public consultation on the new General Competitiveness Plan (*Plano Geral de Metas de Competição*, PGMC). Among the several hypotheses envisaged, the regulatory Authority could start a regulatory programme by adopting a model inspired by the Undertakings of Telecom Italia.

## JAPAN

The Japanese electronic communications market presents a situation which is highly diversified between copper - the network of which the historical Japanese operator Nippon Telegraph and Telephone (NTT) holds 35% of the market, and fibre - of which NTT's market share exceeds 70%. The possible separation of the NTT fibre access network, for the purpose of pursuing greater market competitiveness, is therefore on the Government's agenda.

The so-called "Hikari-no Michi" plan started in 2009. The aim is to create a society in which *"broadband services are adopted in every household by sometime around 2015"*.

In 2010 the Government declared that for the moment it will not proceed with the spin-off of the incumbent's fibre network; however, the latter will have to open its networks to competitors, and create a firewall between the NTT division in charge of creating the NGN, and the other divisions of the Company.

However, if the level of competitiveness achieved by the market by 2015 is considered to be unsatisfactory, the model may be reviewed. Adoption of a functional separation model, which also includes restricting access to information systems and creating an efficacious monitoring system, is considered the most realistic option, compared to a scenario of company or structural separation.

## GREECE

In Greece there has been a debate about the possible separation of incumbent OTE's network for some years.

In 2007 the national regulatory Authority for the sector, EETT, took the first step, requiring OTE to set up a "Chinese wall" between its retail and wholesale departments; and prohibiting access terms for the retail section of OTE that are more favourable than those for the wholesale section. It also introduced an obligation for OTE to pursue measures designed to ensure compliance with the principle of equality of treatment from a technical and economic point of view.

The document published by EETT in 2008 on the strategic plans for the 2008-2011 period envisaged a specific analysis of the behaviour of the historical operator, and a public consultation that could have ultimately led to the mandatory separation of the network from the sales departments; at the moment, however, there have been no further steps in this direction.

## IRELAND

The proposal for separation of the network of incumbent Eircom was advanced in 2007 to the Ministry of Communications and the regulatory Authority, the Commission for Communications Regulation (ComReg), by the Company that owns the operator, Australia's Babcock & Brown, which aimed in this way to monetise its investment in the Irish market.

However the discussions on the subject were suspended in 2008, due to the turbulence in the financial markets and the broader debate in the Irish Government about the future of the telecommunications industry in Ireland.

Subsequently, in 2010, the alternative Operators jointly submitted a request for the structural separation of the Eircom network and the creation of retail and wholesale departments.

In the same year, in response to a public consultation on the NGN, the regulatory Authority recalled that the new EU regulatory framework provides the option of adopting models for the functional separation of the network as a remedy of last resort, for those operators that enjoy Significant Market Power (SMP), for which the measures adopted have not led to the elimination of discriminatory behaviours.

However, the regulatory Authority also dwelt on the possible costs associated with a functional separation (would such a measures actually be necessary, and proportionate? Could different and more appropriate/efficient solutions be identified?) and observed that the experience in the other Member States shows that the best results were achieved in those cases in which functional separation was proposed voluntarily by the incumbent and not imposed by the regulator.

#### MONGOLIA

In Mongolia, the Government decided to proceed with implementing actions to guarantee network access to all Operators at non-discriminatory conditions back in 1995. It was considered advisable to avoid network duplications, also to reduce the costs of entering the market for new Operators as much as possible, thus increasing competitiveness.

For this reason, the network of the historical Operator Mongolian Telecommunications Company (MTC) was structurally separated, and the telecommunications sector assets owned by the Government were partially privatised. Between 2004 and 2007 MTC was split into two separate companies:

- a new public Company, Information Communication Networking Company (ICNC), which owns the national backbone and access network, international and long distance connections, local and rural transmissions, and also provides a wholesale access service to Operators, ISPs and any other public or private entity interested, guaranteeing compliance with the principle of equality of treatment.
- Telecom Mongolia (partially privatised), which supplies retail services.

If on the one hand this model has effectively guaranteed a competitive system, providing access to the network at non-discriminatory conditions, it should be recalled that ICNC has suffered serious economic setbacks: the regulated tariffs did not in fact allow the company to cover its costs, and in 2008 the Government had to intervene with ad hoc subsidies.

#### NEW ZEALAND

In 2008 the New Zealand incumbent, Telecom New Zealand (TNZ), adopted a model of functional separation presenting a number of undertakings inspired by the British model of the British Telecom Undertakings, the primary purpose of which was to guarantee compliance with the principle of non-discrimination in alternative Operators' access to wholesale services offered by the dominant Operator: these Undertakings, accepted and ratified by the Government, established the separation of the Company into three divisions: Network, Retail and Wholesale, and also envisaged the establishment of a supervisory board, the Independent Oversight Group (IOG), tasked with responsibilities similar to those of the Equality of Access Board in Britain and the Supervisory Board in Italy.

In 2010, activities were started to create the new optical fibre network (UBF, the Ultra Fast Broadband project), with the definition of the call for bids to identify the Operators that would build it. The Government imposed the following alternative on TNZ:

1. participate in the bid, but proceeding to a structural separation which would go beyond the current functional separation already adopted;
2. not participate in the bid, thus becoming a *de facto* competitor of the Government.

TNZ announced that it wanted to participate in the bid and proceed with the separation ("de-merger") of the wholesale division. The structural separation will be carried out through the creation of two new companies:

- Chorus2, which will supply the network access service, and be prohibited to operate in the retail market;
- Servco, a retail Company that will purchase services from Chorus2 at the same terms and conditions as the other operators.

Each of the two companies would have its own Board of Directors and its own Managing Director, as well as independent management and human resources. Both companies would also be separately listed on the stock exchange.

In May 2011, Crown Fibre Holdings, the public entity that is administering the 1.5 billion New Zealand dollars allocated for the new network, concluded an agreement with TNZ and Operator Enable to cover 75% of the population with the new ultrafast network by 2019. The structural separation plan submitted by TNZ was firstly approved by the Government in August 2011 and then by the shareholders of the Company in October 2011. Since November of that year Chorus shares have been listed and traded on the stock exchange.

This is probably the first case in the world in which an incumbent Operator voluntarily proposed a structural separation of its fixed access network.

## THE NETHERLANDS

In the Netherlands, one of the first countries to introduce local loop unbundling, a system involving accounting separation alongside regulation of access services and transparency and non-discrimination obligations has been in force for some years.

In 2007, the regulatory Authority OPTA, believing the level of competitiveness in the market to be sufficient, considered adoption of a model of functional separation of incumbent KPN to be excessive, also because there is effective competition in the cable communications market in the country, with a very extensive network, and municipal local networks too.

In particular, OPTA observed that the imposition of functional separation is not one of the possible remedies contemplated in the regulatory framework of the country, declaring at the same time that it was ready to reconsider its position if there were evolutions in the European regulatory framework that might expressly prescribe the adoption of measures for the functional separation of the network, something which actually happened with the new Telecoms Package in 2009.

However, it is interesting to examine, at local level, the municipal model adopted by the city of Amsterdam, which resembles the “Singapore model” (see below) in some respects, albeit in a different context, and provides:

- a partnership between several subjects that owns control of the passive network infrastructure, with Reggefiber, a Company that has recently come under the control of KPN, as majority shareholder in the partnership;
- an operator with a concession to manage the active section;
- several competing operators offering retail services.

## POLAND

In 2008 the Polish regulatory Authority (UKE) began working on a plan to separate the incumbent operator Telekomunikacja Polska S.A. (TP SA) into a retail and a wholesale department.

In order to prevent this happening, the *incumbent* operator proposed a so-called “*Charter of Equivalence*”, list of voluntarily adopted measures aimed at eliminating situations of discrimination against OLOs in accessing its network. Of the principal content of the “*Charter of Equivalence*”, the following are of particular interest:

- the creation of a separate wholesale division;
- the undertaking to separate the IT systems of the Operator’s wholesale division from those of its other departments;
- the adoption of a code of conduct for employees of the wholesale department;
- a list of Key Performance Indicators (KPIs) to constantly monitor compliance with the undertakings.

In many respects the contents of the “*Charter of Equivalence*” recall those of Telecom Italia’s Undertakings: TP, for example, is obliged to ensure “equivalence of outputs” (wholesale products and prices offered to the OLOs must be sufficiently comparable to those offered to its own sales departments, and not necessarily the same) rather than an *Equivalence of Inputs* as required for the “*Openreach model*”.

In 2009, after the undertakings were presented by the incumbent Operator, UKE suspended the separation process under way, signing an agreement with TP SA under which the regulatory Authority undertook not to change the access tariffs to OLOs established by the Operator; in exchange, the incumbent Operator must make investments to improve the quality of the network.

The European Commission has paid close attention to what has been happening in the Polish market: in March 2010 it sent a note to the incumbent Operator, which had been accused of abusing its dominant position, stating that the offers for wholesale access to its broadband services were inadequate.

#### SINGAPORE

In recent years the Singapore Government started work on the construction of the new optical fibre network, the *Next Generation Nationwide Broadband Network*, officially in operation since September 2010, which currently covers approximately 40% of Property Units in Singapore. To create a system which ensures that the barriers to entry are set at a low level, structural separation of the network was made obligatory; the model adopted envisages:

1. a Company that owns the passive infrastructure (called NetCo or Network Company): after a public auction, OpenNet, a joint venture created in 2008 to build the new fibre network, was chosen. It supplies ducting and dark fibre at a pre-set price;
2. a wholesale operator that manages the active infrastructure, comprising the exchanges and transmission equipment (OpCo or Operating Company), identified by the regulatory Authority in 2009 as StarHub, a Company that operates through the Nucleus Connect Company;
3. a certain number of Retail Service Providers (RSPs) who compete with one another. Five retail Operators - LGA, M1, SingTel, StarHub, and SuperInternet - have accepted the Nucleus Connect interconnection commercial offer.

#### SWEDEN

The Swedish regulatory Authority PTS has paid particular attention to the subject of equality of access to the fixed network in recent years, since it considers that the vertically integrated incumbent Operator, Telia Sonera, adopted discriminatory practices that damage its competitors. The necessary changes were made to the law in 2008, giving PTS the power to impose functional separation on the incumbent. Telia Sonera had in the meantime created a separate division, Skanova Access, responsible for managing network access independently; this created a functional separation model voluntarily: Skanova, which manages access services to the copper and fibre network provided to both OLOs and the sales departments of Telia Sonera, constitutes a legally separate department of Telia Sonera, with separate computer systems and subject to financial auditing obligations, even though it is wholly owned by the incumbent. Skanova Access personnel must abide by a specific Code of Conduct containing measures intended to ensure compliance with the principles of equal treatment and non-discrimination.

Control of the actions of Skanova Access was given to the Equality of Access Board, a body created with the principal aim of monitoring compliance with the principle of Equality of treatment by the network department, primarily by analysing a basket of performance indicators. This Board, which reports to the CEO of Telia Sonera, consists of a Chairman, the Telia Sonera internal audit manager, and two independent members appointed by the Operator. No members are appointed by the regulatory Authority.

The regulatory Authority received the Telia Sonera initiative somewhat coldly, declaring that it considered that the introduction of Skanova had not produced significant improvements in terms of transparency and compliance with the principle of equality of treatment.

#### UK

In 2005, after the Strategic Review of Telecommunications, British regulatory Authority Ofcom concluded that action was required to deal with the so-called bottleneck that the British Telecom (BT) access network represented, a barrier to entry that was able to produce a de facto restriction on full freedom of access to the market for alternative Operators, and a considerable limitation to the development of local loop unbundling. After a period of negotiation, BT proposed a number of Undertakings, ratified by the regulatory Authority, which established new rules for the supply of goods and services to OLOs and their commercial departments, in order to guarantee equality of access at conditions that did not discriminate against the competitors of the incumbent Operator. BT also undertook to ensure Equality of Inputs (EOI), based on which the offer to its own sales network and to the OLOs would be equal, with the "same timescales, terms and conditions, and using the same systems and processes". In addition, a specific Code of Practice detailed the behaviour expected of the Operator's employees.

2006 saw the creation of Openreach, a functionally separate British Telecom group Company responsible for managing the access network: Openreach has its own offices, its own commercial brand and independent management systems; its CEO reports directly to the CEO of British Telecom Group PLC. Both BT Retail and the OLOs have a direct relationship with Openreach.

The Undertakings also provided for the creation of a special body (the Equality of Access Board), which was established in 2005, at that time the only such body of its kind, internationally, tasked with monitoring compliance with the Undertakings. This Board is an organ of the British

Telecom Group PLC Board Committee and is chaired by a non-executive director of BT; the four other members are a senior manager of the incumbent Operator and three independent members, chosen after a consultation with Ofcom. The Equality of Access Board has its own Secretariat, which deals primarily with organising Board meetings, and is assisted by the Equality of Access Office, the manager of which reports to the director of Public Affairs at BT. The Equality of Access Office, in addition to undertaking audits of full compliance with the Undertakings, receives not only formal complaints from OLOs, but also many informal reports of presumed infractions, from the alternative Operators as well as from Ofcom, the OTA, and BT itself ("Quick checks").

Over recent years some changes have been made to the Undertakings: the deadlines for the separation of Openreach IT systems have been rescheduled, and the Equality of Access Board has been given some additional responsibilities.

#### HUNGARY

The debate about the possible imposition of models of functional separation on incumbent Operator Magyar Telekom is increasingly pertinent in Hungary: while on the one hand the OLOs seek the adoption of similar remedies, to increase the level of competition in the market, on the other hand the regulatory Authority has so far emphasised the possible critical aspects of such a solution, such as excessive costs and the fact that it would not be reversible.

At the same time, however, measures have been imposed that in certain respects resemble those adopted in other models of functional separation, such as the adoption of a basket of KPIs to monitor the performance of the incumbent in the process of supplying unbundling services and wholesale bitstream access, and limitations on the flow of information between the various departments of the incumbent Operator.

#### USA

In the United States, the best known case of "forced" separation is the case of operator AT&T, which in 1984 was split into:

- a long distance carrier;
- seven Regional Bell Operating Companies.

According to a view that is dominant in the country, competition should operate not "within a technology", but "between technologies": so the national regulatory Authority, instead of containing the incumbent in a given technology, should favour the development and competition of different, mutually competing technologies (e.g. fibre, mobile, cable, satellite...) since it is thought that this would definitely bring greater benefits to the final consumer. All of this is in a context in which an excess of rules creates disincentives to investment in the industry: according to AT&T, the Federal Communications Commission (FCC) "*should avoid launching appeals for extreme forms of regulation that could damage, if not destroy, the investments necessary to achieve these objectives*".

Although FCC chairman Julius Genachowski recently stated that he would avoid imposing more onerous obligations, such as an obligation for competitors to share networks, he is also convinced that a new regulatory framework is needed, to allow the national regulatory Authority to proceed with the project to redefine broadband, also with reference to the recently launched National Broadband Plan.

In 2010 the District of Columbia appeal court queried the power of the FCC to impose rules on the management of the network owned by an operator, thus accepting the reasoning put forward by Comcast, the largest cable Company in the United States, which has for years argued that it is entitled to manage its own network without regulatory hindrance, given the considerable investments made.

## **4.2 INTERNATIONAL COMPARISON OF EQUALITY OF TREATMENT INDICATORS**

An international meeting of supervisory bodies responsible for monitoring equality of access to the fixed network of the incumbent Operators took place December 2010, in Brussels, attended by the Equality of Access Boards of British Telecom and Telia Sonera, and the Independent Oversight Group of Telecom New Zealand, as well as Telecom Italia's Supervisory Board. The meeting was also attended by representatives of the European commission and AGCom, and by Japanese Operator NTT, which had expressed its intention to deepen its understanding of the models of functional separation adopted internationally, and of the supervisory bodies.

The meeting was intended to explore the participants' knowledge and experiences in depth, and to produce a joint analysis of specific topics of common interest. During the meeting the intention of developing a mutual exchange of information that will permit increasingly in-depth analysis of specific topics emerged.

A comparative analysis of the Key Performance Indicators (KPIs) was identified as one of the first topics for comparison. These indicators examine compliance with the principle of equality of treatment between the retail divisions of the incumbent Operator and the alternative Operators by numerical analysis of a series of specific quantities mainly referred to the Delivery and Assurance processes.

Measuring this basket of performance indicators, under the control of the respective supervisory boards, is, in fact, an experience common to all the models of functional separation, and so it can be used to highlight similarities and differences, and to suggest to the incumbent suitable improvements to make to the reference work process. In May 2011 the Supervisory Board sent a document containing requests for information on the indicators monitored and on the Delivery and Assurance processes to the British, Swedish and New Zealand supervisory bodies.

In particular, the document sent by the Supervisory Board contained:

- 1.** a description of the Open Access Delivery and Assurance process, asking that recipients illustrate the similarities and differences that emerge in relation to the processes of their reference Operator;
- 2.** a description of the principal indicators calculated by Telecom Italia regarding the Delivery and Assurance processes, accompanied by a request for information on the presence or absence of similar indicators in the operator's basket of KPIs, providing, in this case, the corresponding formulas for their calculation and the quantities analysed;
- 3.** a request for a comparison of the causes and corresponding percentages of Work Order rejections, on both active and non-active lines.

The document was also sent to the Japanese Operator NTT which, having taken part in the meeting in Brussels, had declared its intention of jointly examining these subjects in depth.

The Supervisory Board received contributions from Telia Sonera and the British Telecom Equality of Access Board, and these made it possible to start an initial comparison between the analysis procedures conducted by Telecom Italia and those conducted by the British and Scandinavian operators.

After the transmission of these documents, bilateral meetings with these Operators were organised, to examine the areas of comparison in more detail.



#### 4.2.1 Analysis of the contributions provided by the British Telecom Equality of Access Board and a comparison with the Openreach model

##### **The Delivery process**

The document transmitted by the British Telecom Equality of Access Board firstly illustrates the Openreach Delivery model, highlighting the main features that distinguish it from the “Open Access model”:

1. Openreach measures *Equivalence of Inputs*, while Open Access measures *Equivalence of Outputs*;
  - *Equivalence of Inputs*: the Operator supplies the same product/service to all its customers on the same time scale, terms and conditions, and service level. Every customer - including the incumbent's Retail division - will have access to exactly the same commercial information about the products, services, systems and processes adopted to which all the other customers have access;
  - *Equivalence of Outputs*: the Operator supplies to each customer a product/service that is equal or similar to that supplied to the other customers; there may be differences in the IT systems used, but the final product must be *substantially similar* for each customer served.
2. In the British case, the OLOs purchase almost all services directly from Openreach, in exactly the same way as the British Telecom Retail division, without any technical interfacing with the Wholesale department of the incumbent.

Differences also remain regarding the way in which appointments are made with the alternative Operator's customer: while in the case of Telecom Italia, Open Access receives an Expected Delivery Date (EDD), in the United Kingdom a precise appointment is set.

##### **Arrangements for scheduling appointments**

- Openreach publishes a diary to be accessed by the Operators to arrange the appointment with the final customer;
- the OLO contacts its customer and with him or her determines the most appropriate date and time;
- the OLO informs Openreach of the date arranged with the customer and Openreach takes the appropriate action.

If the final customer does not honour the appointment, the alternative Operator has to pay a fine to Openreach.

##### **The basket of performance indicators: general approach**

With reference to the general approach adopted to develop the indicator system, the comparison of the Italian case with the British one, as illustrated in the document received, allows the following points of note to be highlighted:

1. British Telecom supplies KPIs that refer to compliance with the specified service level for individual products/services offered (such as WLR3, WLR3 ISDN2, etc.), while Telecom Italia calculates indicators that contain quantities that refer to a single aspect of the process analysed (for example, the average delivery time for broadband service), obtained by calculating the weighted average of the performances of the various services;

2. the indicators calculated by British Telecom do not report the absolute values of the performances recorded as such (which is what happens for the Open Access KPIs), but the variances outside a range considered “tolerable” in statistical terms; so if, therefore, the performance of the Retail - or Wholesale - department should be (significantly) higher or lower than a level of performance considered “normal”, then a monitoring activity starts that is specifically focused on determining if there are possible anomalies and/or inequalities of treatment. Statistically, this type of analysis is carried out using a tool called the z-test.

#### ***The Delivery process indicators***

Regarding the indicators for the Delivery process, the following points emerge from the analysis of the document transmitted by the British Equality of Access Board:

1. Openreach - unlike Open Access - does not calculate the percentage of voice Work Orders closed within 20 days of issue of the request, but the percentage of orders completed on time, that is by the required date, for each type of service, separately (WLR, LLU, Ethernet), and then compares the value of this percentage for the Retail and Wholesale departments to check the actual compliance with the principle of equality of treatment;
2. in addition, indicators that are the same or similar to the percentage of asymmetrical broadband Work Orders completed within 10 calendar days are not calculated by the British operator.

#### ***Analysis of the causes of refusal of Work Orders***

From the dialogue with the British Telecom Equality of Access Board, we have been able to ascertain that the problems that cause Work Orders to be rejected are fundamentally very similar in nature in Italy and in the UK (customer not honouring the appointment, saturated network elements, etc); in detail, Openreach identified approximately 50 different situations, and a code has been attributed to each so as to quickly classify the critical points encountered.

However, in the Openreach model, unlike the Open Access model, there is no cancellation of an order followed by subsequent reissue of a new Order: in the case of KOs, in fact, the order is suspended while awaiting the necessary action to overcome the causes of the suspension: once these problems have been eliminated, the Order resumes its progress to achieve the connection.

#### ***The Assurance process indicators***

Finally, with reference to the Assurance indicators, Openreach - unlike Open Access - does not calculate the indicator on the average fault repair time, nor the percentage of faults repaired within two working days, but instead calculates the percentage of faults repaired within the pre-established period of time calculated for the individual product/service.

#### ***The meeting with the Equality of Access Office and Openreach***

The subjects discussed above were also discussed in a specific meeting held in July 2011, between the Supervisory Office, the British Telecom Equality of Access Office and Openreach.

The aim of the meeting was to examine the topics dealt with in the document described above in greater depth,

and allow information to be exchanged, not only on the principal KPIs, but also on other possible topics of common interest, such as comparison of the Delivery and Assurance processes, to examine the similarities of and differences between the “Open Access model” and the “Openreach model” in greater depth.

Of the topics discussed, the question of the IT supports used to supply services is worth recalling: in the case of Openreach, unlike Open Access, the processes and databases used for BT Retail and for the OLOs are the same, although it has become necessary to use special interfaces for those OLOs that do not have adequate IT systems, as is the case for Telecom Italia.

More generally, although there were some evident differences between the two models, very many common aspects emerged from the comparison, particularly regarding the problems that are faced on a daily basis when executing these processes.

#### **4.2.2 The contributions provided by the Telia Sonera Equality of Access Board and the Telia Sonera/Skanova Access model**

The document transmitted by the Telia Sonera Equality of Access Board illustrates the types of KPIs that are calculated by the Scandinavian Operator; in this respect it is interesting to note that Skanova calculates one group of indicators for the Equality of Access Board and another group of indicators for the Post-och Telestyrelsen (PTS), the Swedish regulatory Authority. The KPIs in the first group differ greatly from those in the second: only a minority of KPIs are common to both groups.

##### **The Delivery process**

The document firstly illustrates the Telia Sonera/Skanova Access Delivery model, which differs from the Open Access model and is organised in three levels:

- 1.** Skanova Access supplies basic regulated products on the passive section of the network, which are sold to both the alternative Operators and the Telia Sonera network department;
- 2.** this network department in turn supplies evolved products (such as IP Stream or bitstream) to both the sales departments of Telia Sonera and to Telia Sonera Network Sales;
- 3.** the latter, finally, sells directly the more sophisticated and perfected products that use the active section of the Operator's network to the sales departments of the alternative Operators, apart from one specific product (SDH Sweden), which is also purchased by Telia Sonera Mobile Networks.

There are differences between Open Access and Skanova regarding on-site interventions: Skanova in fact out-sources all these operations to third party companies, unlike Open Access. In both cases, appointments are frequently rescheduled for “customer reasons”.

### **The Delivery process indicators**

Regarding the indicators relating to the Delivery Process, the Swedish operator does not have KPIs similar to the Telecom Italia indicators, such as the percentage of Work Orders executed within 20 calendar days - for voice - or within 10 calendar days - for broadband - but instead calculates the percentage of orders fulfilled within the times agreed.

The average time needed to execute an order “*from order to delivery*” is also calculated, as it is for Open Access.

### **Analysis of the causes of rejection of Work Orders**

On the question of refusals of Work Orders (KOs), Telia Sonera only started measuring this indicator on unbundling in 2011.

Specifically, there are two indicators for the voice service:

- 1.** percentage of Work Orders rejected even though correctly filled in;
- 2.** percentage of Work Orders rejected that do not fall into the previous category.

For Telia Sonera, the causes of rejection of Work Orders were very similar - both in nature and in relative weight - to those found by Telecom Italia; moreover, for the Swedish operator, rejection of an order determines cancellation of the order and the subsequent reissue of a new one, as in the Open Access model, in contrast to the Openreach model.

### **The Assurance process indicators**

Regarding the Assurance process indicators, Telia Sonera, like Open Access, measures the average time to repair faults (in hours or days) on both voice and broadband, calculated from the time of receipt of the Trouble Ticket to informing the customer that service has been restored.

Finally, the Scandinavian operator - in contrast to Open Access - does not calculate the percentage of faults repaired within two days, but instead calculates the percentage of Trouble Tickets closed within the agreed time.

### **The meeting with the Equality of Access Board, Telia Sonera and Skanova Access**

In October 2011 the Supervisory Office met with the Equality of Access Board of Telia Sonera, Skanova Access and representatives of some Departments of this Scandinavian Operator.

The aim of the meeting was to exchange information on KPIs and start a comparison of the Delivery and Assurance processes of the Italian and Swedish Operators, to examine in greater depth the similarities and differences between the “Open Access model” and the “Skanova model”.

During the meeting the Supervisory Office illustrated the Italian processes, particularly those regarding Delivery, the main issues that are encountered and the solutions adopted to deal with them.

Telia Sonera then explained the arrangements by which the Delivery and Assurance services are supplied, and the flows of Work Orders and Trouble Tickets. Significant similarities emerged between the two models, regarding the types of issues dealt with on a day to day basis.

Skanova then illustrated the IT supports used to manage the Delivery and Assurance processes, and the activities carried out on the systems to ensure that the principle of equality of treatment is respected.

#### 4.2.3 Conclusions

The comparison of performance indicators conducted at international level with the other supervisory bodies allowed us to collect information on the arrangements put in place by other electronic communications Operators to design and conduct analyses of the KPIs, as well as being able to examine in detail the characteristic features of the Delivery and Assurance processes adopted by the other countries' incumbents.

After the analysis activities conducted in 2011, the Supervisory Board identified certain aspects of the Open Access work processes that, in the light of the information acquired in these international comparisons, could potentially be improved.

Preliminarily, to permit more sharing of information between all the Operators involved in the processes, Telecom Italia could set up a database, to be made available on-line, containing the network registers and toponymic data, thus replicating the model already adopted by Openreach in the United Kingdom.

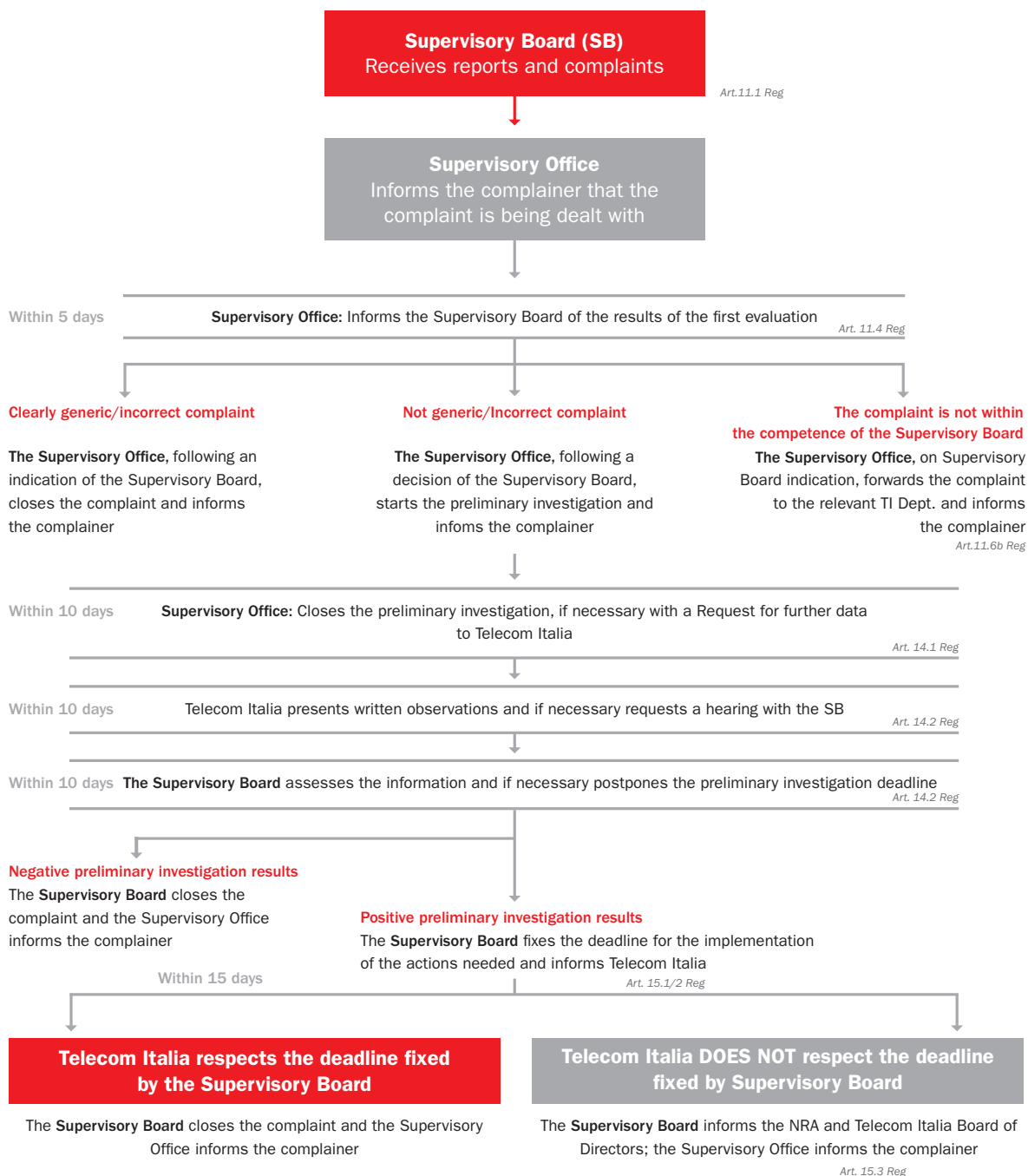
And regarding the critical points that occur during the processing of the Work Orders of the Delivery process, to loosen up this process and improve its performance, the working arrangements used by Openreach could be considered. In fact, the British Operator, unlike Open Access, does not reject the critical Order and then re-issue it, nor does it notify so-called "KOs" to the OLO; it simply suspends the aforementioned Order, and waits for the necessary actions to be taken to overcome the causes that led to its suspension: once these critical points have been eliminated, the Order resumes its progress to achieve the connection. Managing the Delivery process in this way guarantees Openreach itself, which manages considerably lesser flows of Work Orders than Open Access, since there is no reprocessing due to formal errors, on the one hand, and on the other, the alternative Operators themselves are also guaranteed, since they acquire the possibility of managing their Work Orders directly, accessing the centralised procedures on-line.

# 5 | Complaints

Alternative operators can send the Supervisory Board reports and complaints, using a special form, about alleged breaches of the Undertakings by Telecom Italia. In cases in which a breach by Telecom Italia is ascertained, which the latter has not taken steps to remedy within the times and in the manner required, the Supervisory Board is obliged to notify it to AGCom and to the Board of Directors of Telecom Italia itself.

Reports sent to the Supervisory Board are managed according to the process described in the same Board's Regulations, and described in detail in Supervisory Board Resolution no. 2/2009, which specifies a first phase of verifying the admissibility of the complaint, after which an investigation is started. Upon completion of this investigation, the Supervisory Board makes a decision, stating its reasons. The details of the procedural stages specified are illustrated schematically below.

## MANAGEMENT FLOW OF REPORTS AND COMPLAINTS





## 5.1 COMPLAINTS BY THE OLOS

During the three-year mandate, the Supervisory Board received many complaints that led to just as many investigations, at the end of which Telecom Italia was required to make significant improvements to the Company processes concerned each time, in order to ensure the full equality of treatment not to discriminate the alternative Operators.

### 5.1.1 Complaints received during the years 2009 and 2010

*The summaries below detail the complaints dealt with by the Supervisory Board in 2009 and 2010:*

*Complaint no. 01/09 “Fastweb/Provisioning processes of the SMP wholesale services provided by Telecom Italia”*

SUBJECT OF THE COMPLAINT	PRELIMINARY ASSESSMENT BY THE SUPERVISORY BOARD	REQUESTS MADE BY THE SUPERVISORY BOARD	INTERVENTIONS BY TELECOM ITALIA
The Operator Fastweb complained of: i) an excessive number of activation requests rejected by Open Access giving the reasons “customer KO” and “network KO”; ii) some problems in the co-location service relative to exchanges with a lack of spaces.	The SB started the procedure for presumed critical aspects concerning, among others, the supply of wholesale SMP services provided by Telecom Italia.	At the end of the procedure, the SB did not find any breach of the Undertakings, welcoming Telecom Italia’s decision, called for by the SB itself, to extend the computer application “SWAP” to the whole of the Italian territory starting from September 2009.	Telecom Italia extended the “SWAP” application to the whole of the Italian territory, anticipating the main functionalities of the policy of contact with the customer provided for by the New Delivery Process (NDP).

*Complaint no. 02/09 “Fastweb-Wind/Exchange of information between the internal departments of Telecom Italia on migration procedures”*

SUBJECT OF THE COMPLAINT	PRELIMINARY ASSESSMENT BY THE SUPERVISORY BOARD	REQUESTS MADE BY THE SUPERVISORY BOARD	INTERVENTIONS BY TELECOM ITALIA
The Operators Fastweb and Wind complained about conduct on the part of Telecom Italia that was not in line with the equality of treatment, for both defensive (the bringing of action against Fastweb under Article 700 of the Code of Civil Procedure) and commercial purposes (retention and winback practices aimed at Fastweb customers). The Operators questioned an exchange of information on procedures for the migration of customers between operators and the self-generation of the migration code.	The SB started the proceedings for an alleged violation of the principle of equality of treatment, with reference to some exchanges of sensitive information between the internal departments of Telecom Italia.	At the end of the proceedings, the SB did not find any breach of the Undertakings. Nevertheless, at the same time it required Telecom Italia to: i) integrate the Code of Conduct, explicitly specifying some prohibitions on the dissemination of information and ii) implement a procedure to make customer data available to the OLOs for jurisdictional action and protection purposes.	Telecom Italia explicitly specified, in the Code of Conduct, the prohibition for the Legal and Regulatory Departments to divulge, for commercial purposes, the information acquired by the Wholesale Department and published a procedure for OLOs to access the data of the Wholesale Department for jurisdictional action and protection purposes, welcoming the findings and proposals for amendments put forward by the SB.

*Complaint no. S01/10 “British Telecom-Fastweb-Vodafone-Wind/information deficiencies in the Technical Plans for the Quality of Telecom Italia’s fixed access network”*

SUBJECT OF THE COMPLAINT	PRELIMINARY ASSESSMENT BY THE SUPERVISORY BOARD	REQUESTS MADE BY THE SUPERVISORY BOARD	INTERVENTIONS BY TELECOM ITALIA
The four Operators complained about: i) the absence of prior notification by Telecom Italia to the OLOs of operational works to the access network, as happened on the occasion of the closure to bitstream services of a considerable number of exchanges due to saturation problems; ii) the lack of information in the annual Plans as regards the list of interventions planned or already executed, without the OLOs being provided with precise information of activities by exchange area but only the aggregate details of the action planned by macro territorial area.	The SB started the proceedings for an alleged violation of the principle of the transparency of information that Telecom Italia must ensure the OLOs within the context of the Technical Plans for the quality of the fixed access network.	At the end of the proceedings, the SB did not find any breach of the Undertakings. Nevertheless, the SB required Telecom Italia to: i) adopt suitable remedies for resolving the lack of information highlighted in the course of the works to desaturate the DSLAM equipment and upgrade the capacity of the network; ii) set up a shared mechanism to indicate the pre-alert status of exchanges close to saturation; iii) publish a detailed operating plan which, within a reasonable time, makes it possible to overcome problems relating to the closures experienced at the beginning of 2010.	Telecom Italia set up a pre-alarm warning system (so-called “amber traffic lights”) for highlighting to OLOs, and to Telecom Italia Retail, exchanges at risk of closure to new users due to saturation of the ADSL resource (in terms both of DSLAM ports and backhaul bandwidth). With reference to the closure of exchanges to bitstream services, during the course of a hearing Telecom Italia provided the operating plans for reversing the trend, laying down details of the timing for taking the action necessary for overcoming the critical conditions encountered.

*Complaint no. S02/10 "British Telecom-Fastweb-Tiscali-Vodafone-Wind/information deficiencies in the Technical Plans for the development of Telecom Italia's fixed access network"*

SUBJECT OF THE COMPLAINT	PRELIMINARY ASSESSMENT BY THE SUPERVISORY BOARD	REQUESTS MADE BY THE SUPERVISORY BOARD	INTERVENTIONS BY TELECOM ITALIA
The complainant Operators reported: i) a discrepancy between the information supplied by Telecom Italia to the press and the details contained in the mentioned Technical Plans, relating to the number of properties affected by the advent of optical fibre; ii) the absence of a wholesale Reference Offer for NGA services over optical fibre.	The SB started the proceedings for an alleged violation of the principle of the transparency of information that Telecom Italia must ensure the OLOs within the context of the Technical Plans for the development of the fixed access network	At the end of the proceedings, the SB did not find any breach of the Undertakings. Nevertheless, in order to improve the qualitative level of the information, the SB called on the Company to add to the Quarterly Programmes the details of the number of properties - broken down by exchange area - which it intends to reach in the reference period, both in the primary network and in the secondary network.	Telecom Italia added detailed information to the Quarterly Programmes on the number of properties "passed" with the primary and the secondary networks, broken down by territorial subdivision, and the potential customers servable by exchange area

### 5.1.2 Complaints received in 2011

Also during the course of 2011, as in previous years, many reports were sent to the Supervisory Board by alternative Operators as well as by customers of Telecom Italia and the OLOs. These include two complaints, respectively submitted by the Companies Welcome Italia S.p.A. and Fastweb S.p.A., proved to be within the competence of the Supervisory Board for investigation and resulted in two investigations being started.

At the end of the procedures started by the complaint received from Welcome Italia relative to saturation problems on bitstream services, the Supervisory Board deemed that Telecom Italia's conduct, albeit in a limited number of cases, was such as to compromise the requirements for transparency emphasized in the Undertakings, as complained about by the Operator.

Differently, the procedure started following the complaint by the Operator Fastweb relative to compliance with the principle of the equality of treatment, with specific reference to the content of the clauses laid down in the contracts signed between Telecom Italia and contractors, is still in progress.

More details on the aforementioned procedures are given below.

*Complaint by the Operator Welcome Italia S.p.A. "S01/11 - Welcome Italia/Saturation problems on bitstream services - Implementation of Undertakings Group no. 5 relating to the guarantees of transparency of the technical plans for the quality of the fixed access network"*

In the month of February 2011 the Operator Welcome Italia sent the Supervisory Board a complaint concerning an alleged breach of the principle of the transparency of information that Telecom Italia must ensure the OLOs on desaturation operations in the exchanges open to bitstream services.

The Operator complained about the difficulty caused by the saturation of the Telecom Italia exchanges for the delivery of bitstream services and the lack of desaturation operations, already planned and communicated to the market during 2010.

On 7 February 2011, the SB received a complaint from the Operator Welcome Italia S.p.A, regarding an alleged breach of the Undertakings by Telecom Italia.

Specifically, the Operator complained of inconvenience caused to its customers due to the saturation of the Telecom Italia exchanges for the supply of bitstream services and the fact that the Company disregarded some communications made in 2010 regarding desaturation operations planned but then not implemented on the reference exchange

This situation, according to the claimant, as well as making it impossible to guarantee customers due regularity in supply of the service, could potentially have compromised the alternative Operators' capacity to plan network development strategies and marketing of retail services sufficiently in advance.

The Supervisory Board, having assessed that the facts highlighted by the Operator Welcome Italia placed question marks on Telecom Italia's effective implementation of all the measures necessary to ensure compliance with the principles of transparency concerning the information provided by the alternative Operators and the levels of quality and development of the fixed access network and the relative services, for the purpose of the correct implementation of Telecom Italia's obligations, started the verification activities with Resolution no. 2/2011 of 8 February 2011, calling on the interested parties to supply any information useful in determining this case.

In response to the request for information made by the Supervisory Board, Telecom Italia sent a note on 3 March 2011 in which it asked to be formally heard in a hearing to illustrate, in an extensive and comprehensive way, its position with regard to the facts of the complaint made by the Operator Welcome Italia.

After having arranged the extension to the time-limit for concluding the investigative stage with Resolution no. 10/2011 of 10 March 2011, the Supervisory Board called Telecom Italia to attend a hearing on 24 March 2011.

At this meeting, Telecom Italia pointed out that the critical issues relating to complaints of "slow navigation" raised by Welcome Italia derive from problems of a more general character concerning the growth in broadband traffic at a higher rate than expected.

This continuous growth of broadband traffic has forced Telecom Italia to constantly reconsider its plans to upgrade the band capacity of the saturated ATM DSLAMs, increasing the number of expansion operations.

During 2010, in fact, the number of operations went from the 380 initially planned to 1,918 (data from the final figures at 31 December 2010). Similarly, in relation to the growing average requirements of 2011, the number of interventions planned for that year (1,882) appeared insufficient; in consideration of this, the objectives of the Annual Plan were reformulated, providing for at least 2,500 expansion interventions.

The difficulties deriving from the need to continuously adapt the content of the Plans in order to handle the increasing traffic are compounded by problems connected with desaturation operations for exchanges served by ATM DSLAMs. In fact, ATM technology, according to Telecom Italia, is now no longer produced; therefore the only way to desaturate the DSLAMs would be to install IP DSLAMs alongside existing systems and migrate Telecom Italia retail customers onto these.

This solution would nevertheless have presented limitations connected to the impossibility of migrating the wholesale customers to the IP DSLAMs, at least until the alternative Operators were equipped with Ethernet interconnection Kits in exchanges in which currently only have ATM interconnection Kits.

In order to boost the desaturation activities and make them suitable for a continuous increase in traffic, Telecom Italia has also undertaken some initiatives.

The first initiative, which is commercial, was brought into operation with the approval, by AGCom, of the bitstream Reference Offer 2010 as stated in Resolution no. 105/10/CIR, after which the price of the Ethernet band, acquired at parent node level, is around 30% lower than that of the ATM band. This made the bitstream on Ethernet

offer more convenient than that on ATM, at least for all the main alternative Operators, which includes most of the active bitstream accesses. For Operators also interested in acquiring the transport network within the “macro area” the price of the Ethernet band is similar to that of the ATM band.

In view of the question formulated by the Supervisory Board on whether in the cases covered by Complaint no. S01/11 critical elements were detected in Telecom Italia’s management of information flows with regards to the Operator Welcome Italia, the Company acknowledged that the decisive interventions had actually been implemented later than was necessary and at times this caused problems of this nature.

Subsequently, Telecom Italia sent the Supervisory Board a note on 27 April 2011 stating: i) the chronological history of the actions to manage the critical elements that Welcome Italia complained of and the actions taken to overcome them; ii) a detailed description of the process that, starting with the customers’ complaints, determines the issuing of a Master Trouble Ticket (MTT) and the description of the procedures for handling the issued MTT up to the criteria to define the date of overcoming the mentioned malfunction complaint; iii) the territorial distribution of the recorded percentage increase in bandwidth in the period between and inclusive of June 2010 and January 2011; iv) the representation of the number of systems desaturated in 2010 and 2011, broken down into interventions carried out on exchanges open to LLU and exchanges not open to LLU.

Having assessed the elements described above and taken favourable note of the commitment formally made by Telecom Italia to take whatever steps are necessary to improve the process of handling the deterioration of the network, with particular reference to adhering to the specified dates for resolving the problems highlighted by the complainant Operator, the Supervisory Board therefore set a new time-limit for the conclusion of the investigation, with the adoption of Resolution no. 13/2011 of 3 May 2011, at the same time requiring clarification on certain aspects of the new process for handling the alternative Operators complaints over slow navigation.

Telecom Italia responded to the mentioned Resolution no. 13/2011 by sending the Supervisory Board a note on 7 June 2011 containing some information on the subject and a request to be heard at a hearing in order to be able to explain in greater detail its interventions for improving the processes for handling complaints by the OLOs.

After Telecom Italia’s hearing, held on 13 July 2011, the Supervisory Board extended the time-limit for the completion of the investigation with Resolution no. 17/2011 of 19 July 2011. This in consideration of the need to express a direct overall assessment of the remedies required of Telecom Italia as part of the proceedings, also taking into account the decisions taken with Resolution no. 12/2011 of 3 May 2011 concerning the pre-alarm system for signalling exchange saturation, and to assess the effectiveness of the new procedure for handling malfunctions due to “slow navigation” in terms of the correct implementation of the principle of the transparency of information that Telecom Italia must guarantee to alternative Operators and customers, together with the actual incidence, on the entire bitstream services market, of the type of malfunction raised in the Operator Welcome’s complaint.

At the end of the analysis of the documentation sent by Telecom Italia on 31 August 2011, stating the additional information required in the continuation of the investigation, the Supervisory Board ordered the complaint in question to be closed with Resolution no. 20/2011.

Specifically, although it considers the remedial steps prepared by Telecom Italia appropriate for the purpose of the mentioned closure of proceedings, the Supervisory Board asked the Company to provide, with effect from October 2011 and on a monthly basis, the complete and progressive data relating to the percentage of deteriorated systems repaired within the times indicated by the Service Level Agreement, equal to 50 calendar days, and to adopt all the necessary measures to ensure compliance with the principle of transparency of the information released to the alternative Operators and of the quality and development levels of the fixed access network and relative services.

*Complaint by the Operator Fastweb S.p.A. “S02/11 - Fastweb/Assessment of the clauses of contracts signed between Telecom Italia and contractors - respect of the principle of equality of treatment pursuant to Undertakings Group no. 2”*

In October 2011, the Operator Fastweb S.p.A. requested some information in the possession of the Telecom Italia Wholesale department for jurisdictional action and protection purposes, activating the corresponding procedure created by the Company in accordance with Resolutions no. 21/2009 and no. 4/2010 of the Supervisory Board.

Fastweb, giving the Supervisory Board an account of the reasons behind this request, mainly concerning the content of contracts signed between Telecom Italia and the contractors it uses for the activation of the unbundling services for the OLOs and for the activation of services for its own retail customers, indicated that it suspected a violation of the equality of treatment deriving from the possible presence of clauses that acted as impediments to ensuring identical conditions (technical and economic).

On 27 October 2011, Fastweb S.p.A. requested some information in the possession of the Telecom Italia Wholesale department for jurisdictional action and protection purposes, activating the corresponding procedure created by the Company in accordance with Resolutions no. 21/2009 and no. 4/2010 of the Supervisory Board.

Specifically, the Operator’s request concerned the following information:

1. the contracts signed between Telecom Italia and certain suppliers used to activate the unbundling services for Fastweb and for the activation of services for its own retail customers, in the years 2008, 2009, 2010 and the first half of 2011;
2. the relative total annual fees, for all the activities carried out, paid by Telecom Italia;
3. the extraction certified by Telecom Italia’s WFM (Work Force Management) system of the data relating to the 31,817 work orders sent by Fastweb, for which a “KO” was provided.

In a letter dated 10 November 2011, Telecom Italia refused to provide the information under the aforementioned points 1 and 2, considering it outside the objective scope of application of the specific procedure activated by Fastweb, while in relation to the information under point 3, although claiming it is already available to Fastweb, given that the Company had communicated this information as part of the arbitration proceedings brought by the alternative Operator on 24 January 2011, it demonstrated its willingness to provide the information requested, with any necessary integrations.

After listening to both Fastweb and Telecom Italia in two separate hearings, on 16 and 25 November 2011, respectively, and assessing the responses of the alternative Operator to the arguments on which Telecom Italia's refusal is based, the Supervisory Board adopted Resolution no. 23/2011 on 2 December 2011. This resolution preliminarily required Telecom Italia to provide some information on the matter under consideration, ordering the start of activities to verify, also by sampling, that the principle of internal and external equality is respected in the contractual conditions imposed by the Company on the suppliers it uses for the activation of services for alternative Operators and Retail customers.

At the same time, the Supervisory Board assessed that the facts raised by Fastweb were relevant to the audit of Telecom Italia's compliance with the principal of equality of treatment, and in particular its own Recommendations on this topic, and on 19 December 2011 adopted Resolution no. 27/2011, with which it ordered the start of audit activities to examine the validity of the facts cited, pursuant to article 11, subsection 3 of its Regulations.

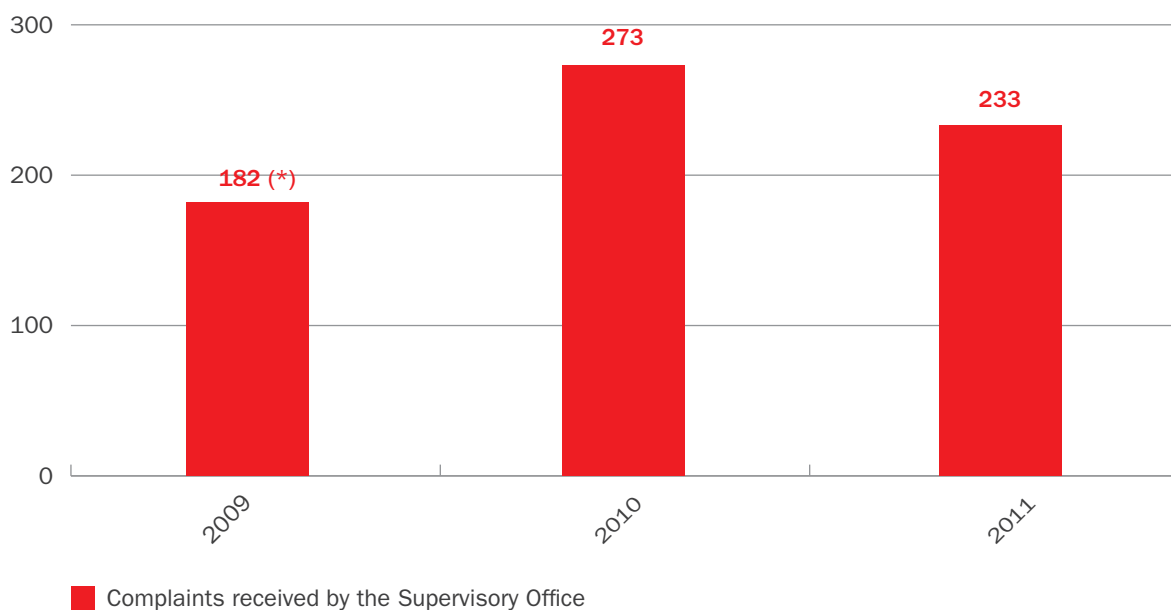


## 5.2 REPORTS AND COMPLAINTS NOT WITHIN THE COMPETENCE OF THE SUPERVISORY BOARD

The Supervisory Office received 233 complaints in the course of 2011 regarding breakdowns in service and problems relating to the management of commercial relations with Telecom Italia and OLO customers, as such not within the competence of the Supervisory Board.

In accordance with the Regulations of the Supervisory Board, all the above mentioned complaints were sent by the Supervisory Office to the competent internal departments of Telecom Italia, and a timely response was sent to the interested customers.

The diagram below shows the trend of the number of complaints received by the Supervisory Board during the three-year mandate.



(\*) In the 2009 the data relates to the April-December period only

# 6 | Actions carried out and main results obtained

This chapter provides a description of the work carried out by the Supervisory Board and the main results achieved during 2011 with regard to actual compliance by Telecom Italia with the content of the individual Undertakings, putting the work done into the context of the operations carried out over the course of the three-year mandate.

## 6.A PROGRESS REGARDING THE TRANSITION TO THE NEW DELIVERY PROCESS

As required by Undertakings Group no. 1 (*establishment of: (i) a new delivery process for SMP services; (ii) additional operational procedures for the management of Co-Location Services; (iii) new wholesale customer management systems*), in the first few months of 2009 the consultative technical workshops were held on the New Delivery Process (NDP) for SMP services and the new Wholesale CRM. In this context, the Supervisory Board acted with Resolution no. 5/2009, urging Telecom Italia to be as open as possible to accepting requests from the OLOs, with particular reference to the timing of carrying out the modifications connected with such requests. Following Complaint no. S01/09 in which Fastweb S.p.A. made various requests, among them the possibility of making advance use of some of the distinctive features of the New Delivery Process, Telecom Italia, upon Supervisory Board's recommendation, enabled this advance use by launching the computer system known as SWAP, which was made available to all Operators from September 2009 onwards. On 1 December 2009, as specified in the operating plan defined by the Undertakings, the New Delivery Process management software system relating to asymmetric bitstream connections came into operation. In April 2010, as required by the Undertakings, Telecom Italia made ready the segment of the New Process for LLU and WLR services. Over the course of 2010, the trial phase for the bitstream segment continued, involving the participation, among others, of the Operator Tiscali and, over a limited geographical area, the Operator Fastweb. At the end of 2010, a total of 29 Operators had signed up to the NDP, at least in part, of whom 25 had signed up only for bitstream ATM, one for bitstream ATM and WLR, one for bitstream ATM services, WLR and LLU, another Operator for LLU only and another for WLR. As regards the major Operators, the trial phase for bitstream had concluded positively for Tiscali (September 2010) and Fastweb (May 2011), while the trial phase for LLU had seemed to be more critical, as the implementation of the changeover to the XML protocol, required by the New Delivery Process for unbundling, presented numerous irregularities which required a number of new software releases onto the system.

With Resolution no. 8/2011 of 8 February 2011, the Supervisory Board started the examination of the real state of progress and current level of effectiveness of the New Delivery Process. Coinciding with the major alternative Operators signing up to the new procedure, and in accordance with the above-mentioned Resolution no. 8/2011, the Supervisory Board set in train an audit of the handling of Work Orders (WO) originated by Telecom Italia Retail and the OLOs, with the aim of verifying compliance with the principle of equality of treatment. In particular, the Supervisory Office was assigned the task of obtaining further information, with suitable on-site checks, about procedures for handling Work Orders in the so-called "single queue" waiting lists, set up in accordance with paragraph 1.5 of the Undertakings in the event of unavailability of resources on the fixed access network. The site visits were spread over two days. The first meeting took place in October 2011, at the Telecom Italia Headquarter, and its object was to explain the operating procedures for the New Delivery Process and highlight the differences with the process previously in force. The second meeting took place in the same month at the Southern Lazio field operating unit in Latina, and its aim was to check in detail, through

the analysis of a sample of Delivery orders chosen at random, whether the New Delivery Process was being correctly applied. In particular, a number of Work Orders were examined during the inspection, with the intention of checking the operation of the system in different conditions of saturation.

For each of the Orders under examination, the following stages were examined in detail:

1. the opening of the Work Order in the Delivery system;
2. the opening of the Work Request in "network denial" status because of non-availability of network resources;
3. the closure of the network denial;
4. the unlocking of the Work Order as a result of the activation of the "awakening" procedure in a night-time batch according to the order determined by the queue.
5. the closure of the Delivery WO.

In all the cases examined, it was found that Work Orders were handled consistently with the requirements of the operation of the Single Queue specified by the New Delivery Process, as described in paragraph 1.5 of Undertakings Group no. 1.

Below is a list of the alternative Operators, divided by type of services, who had signed up to the NDP at 31 December 2011 (Source: Telecom Italia).

*ATM bitstream service (36 Operators):*

OPERATORE	DATA ADESIONE	OPERATORE	DATA ADESIONE
INTERNET ONE S.r.l.	02/12/2009	ITELSI	09/06/2010
Interactive Network S.r.l.	09/12/2009	Trivenet S.p.A.	15/07/2010
Omninet S.r.l.	15/12/2009	UNO COMMUNICATION	10/08/2010
Raiffeisen Online Scarl	15/12/2009	TISCALI Italia S.p.A.	30/09/2010
CONVERGENZE S.p.A.	16/12/2009	S.P.E. S.a.s.	02/11/2010
Raising Unified Network S.p.A.	21/12/2009	TWT S.p.A.	22/11/2010
CDLAN S.r.l.	04/01/2010	IFINET S.r.l.	01/12/2010
UTILITY LINE	04/01/2010	FASTWEB	23/05/2011
Terralink S.r.l.	04/01/2010	ACTIVE NETWORK S.p.A.	01/01/2011
Consorzio METROLINK	05/01/2010	SPIN	01/02/2011
Infracom NA	11/01/2010	Eutelia	01/04/2011
Interplanet S.r.l.	20/01/2010	SISTEMI UNO S.r.l.	26/05/2011
Abilene	15/02/2010	AEMNET S.p.A.	30/06/2011
Telemedia.net	22/02/2010	ALIDA S.r.l.	01/07/2011
Easynet Italia S.p.a	22/03/2010	COLT TECN. SERVICES S.p.A.	01/07/2011
Skywebtv	01/04/2010	IT.GATE S.p.a.	18/07/2011
Fontel	12/04/2010	MNET S.r.l.	16/09/ 2011
EHINET	12/04/2010	INTERCOM S.r.l.	19/10/2011

*Ethernet bitstream service (3 Operators):*

OPERATORE	DATA ADESIONE
CONVERGENZE S.p.A.	01/02/2011
Interactive Network S.r.l.	29/08/2011
MNET S.r.l.	16/09/2011

*LLU service (6 Operators):*

OPERATORE	DATA ADESIONE
CONVERGENZE S.p.A.	16/12/2009
Eutelia	01/04/2011
SIX COMM S.r.l.	01/06/2011
AMT SERVICES	30/06/2011
MNET S.r.l.	18/07/2011
Skywebtv	02/11/2011

*WLR service (3 Operators):*

OPERATORE	DATA ADESIONE
T.W.T.	30/04/2010
Eutelia	10/08/2010
CONVERGENZE S.p.A.	16/12/2009

*SHA service (3 Operators):*

OPERATORE	DATA ADESIONE
AMT SERVICES S.r.l.	30/06/2011
MNET S.r.l.	18/07/2011
Skywebtv	02/11/2011

Finally, by 30 April 2012 it is expected that all the remaining alternative Operators with major market shares will have signed up, according to the following calendar:

*Wind: bitstream by 13 January 2012; LLU by end of 1st Q 2012.*

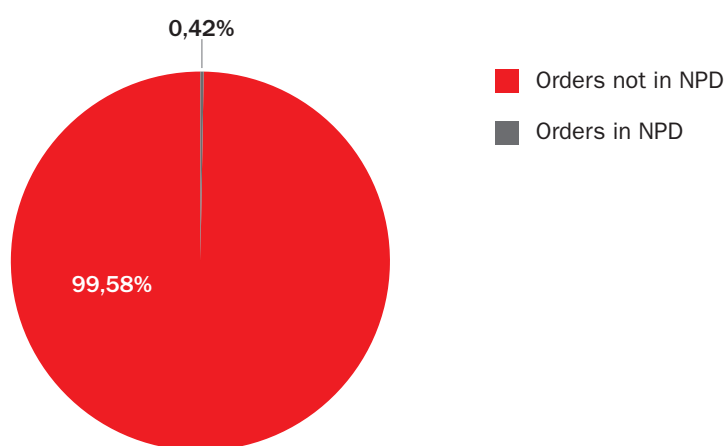
*Vodafone: bitstream by 5 February 2012; LLU by end of 1st Q 2012.*

*Fastweb: LLU by 30 April 2012.*

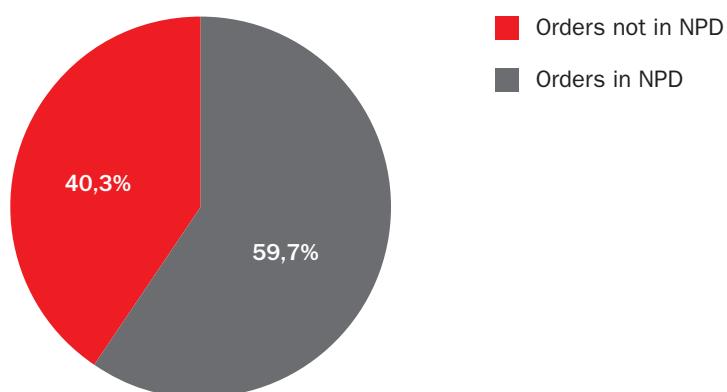
*Tiscali: LLU by end of 1st Q 2012.*

*British Telecom: LLU by 10 January 2012; bitstream by end of 1st Q 2012.*

The charts below show orders received in January 2012 handled in NDP as a percentage of total OLOs orders received during the month, respectively for regulated services (LLU-WLR-SHA-VULL) and asymmetric bitstream services.



**Figure 1 - Percentage of orders in NDP for regulated services (LLU-WLR-SHA-VULL)**



**Figure 2 - Percentage of orders in NDP for asymmetric bitstream services**

## 6.B THE “RETAIL KOs ANALYSIS” PROJECT

### 6.B.1 Objectives of the analysis

The subject of cancellations of Work Orders issued by alternative Operators (so-called KOs) was submitted to the attention of the Supervisory Board at almost the same time as its foundation, through Complaint no. S01/09, presented in June 2009 by Fastweb S.p.A, who complained about the high number of KOs.

Even though the investigations carried out in connection with the above complaint did not show evidence of incorrect behaviour by Telecom Italia, the Supervisory Board decided in January 2010 to launch a detailed examination of the problem by examining all the orders submitted by the Operators to the Wholesale department of Telecom Italia. This examination brought to light many elements which at first sight might not have been considered important but which, in a more comprehensive view of the process, assumed more definite outlines. In particular the investigation took as its reference the requests of the end customer, i.e. the user of the requested telecommunications service, and with the aid of a number of pattern-matching algorithms, reconstructed the sequence of actions taken to satisfy this request.

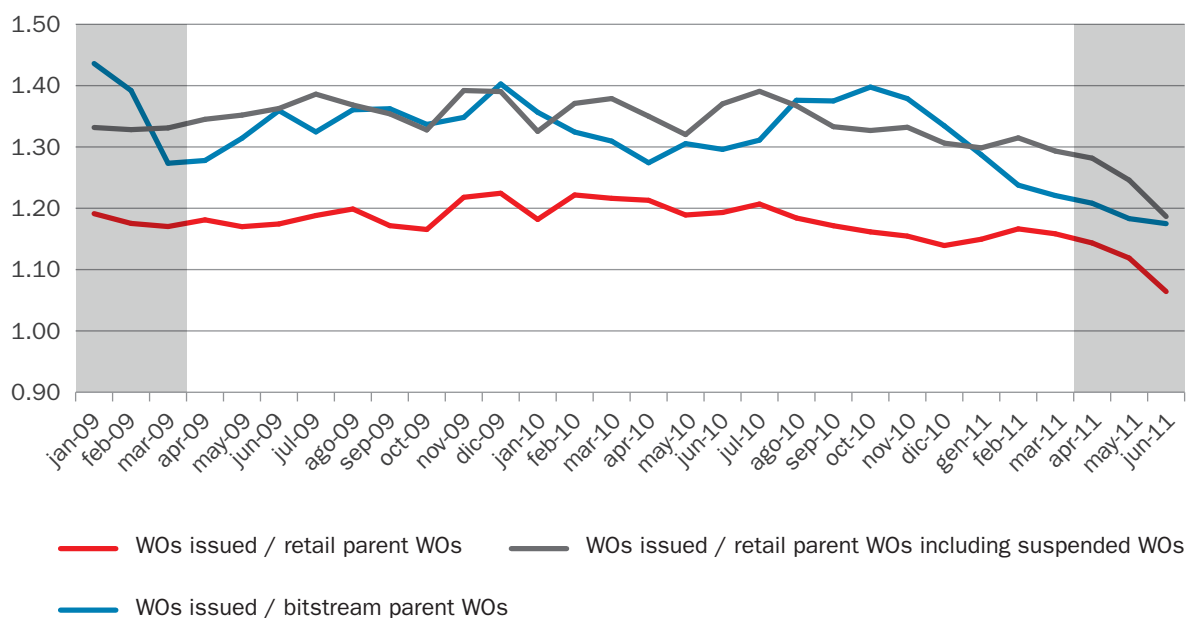
A picture emerged which gave objectivity to many variables such as the overall efficiency of the process, the total processing time of a request independently of the number of orders needed to satisfy it, and the average processing times spent by the various parties involved: on the one hand by the alternative Operators and on the other by the Wholesale Department of Telecom Italia and the Open Access Department.

A number of Recommendations arose from this examination, aimed at improving the Delivery process and shortening order processing times, wherever possible preventing errors which are inevitably a cause of extended processing times.

In January 2011 the Supervisory Board decided to complete the study, turning its attention to the orders issued by Telecom Italia's Retail sales departments, to verify whether equality of treatment was or was not respected.

### 6.B.2 Summary of the results

The study carried out on Telecom Italia's retail customers covered all Work Orders issued in 2009, 2010 and the first six months of 2011. A slight fall in demand for new activations occurred over this period in the xDSL market, whereas demand was almost constant in the voice market.

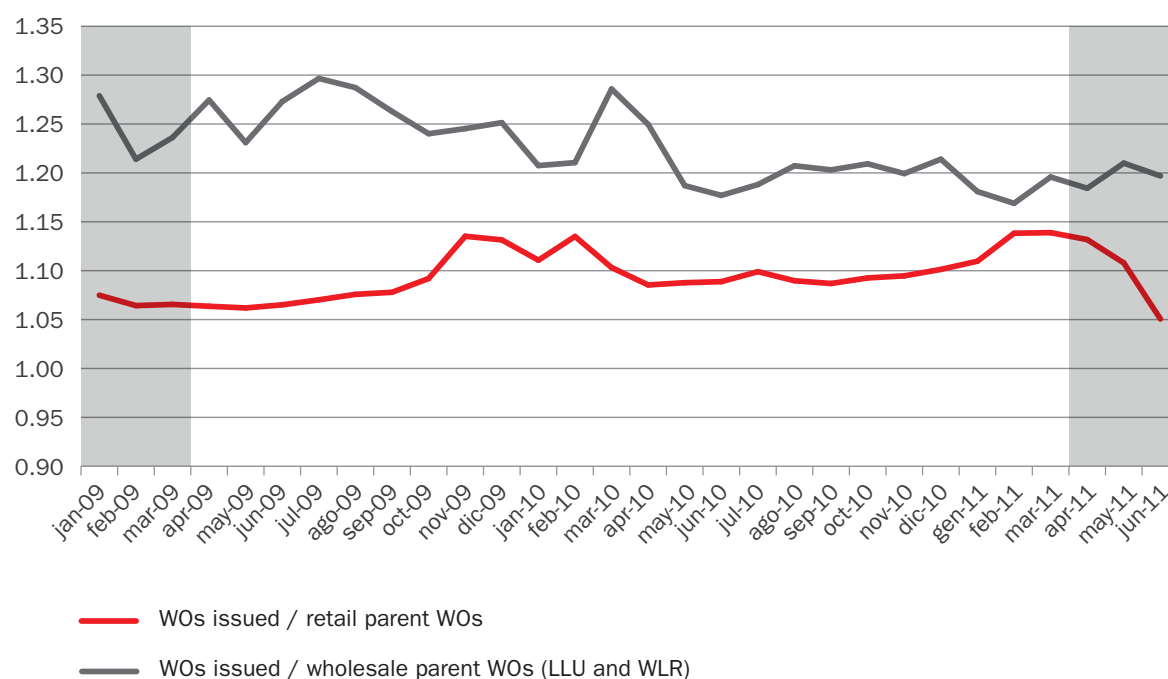


**Figure 1 - Efficiency of the xDSL Delivery process**

With reference to the efficiency indicators related to the Delivery process, i.e. the average number of Work Orders needed for a positive or negative response to an Elementary Request, the first thing to note is that it is only with the SWAP procedure and the adoption of the New Delivery Process (NDP) that the OLOs Work Orders can be suspended rather than cancelled, exactly like the Telecom Italia Retail orders are.

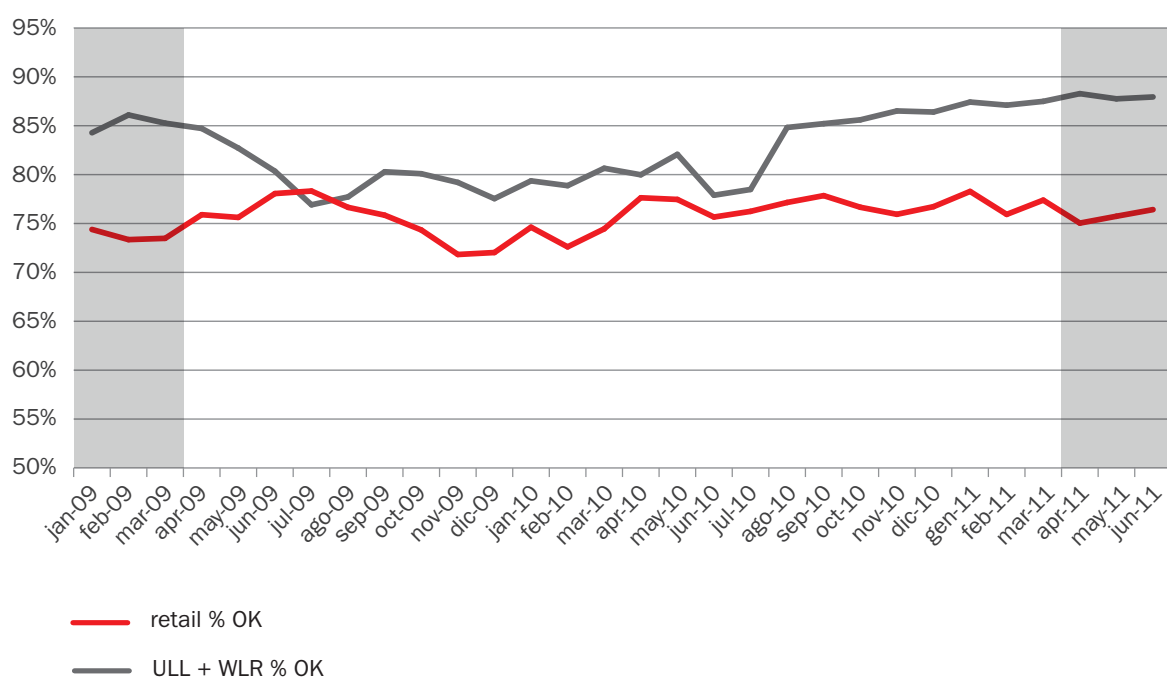


Suspension allows an Operator to intervene in the management of the relationship with the end customer during the process of activating a service, in order to resolve problems of losing track of the customer or verifying whether they have had second thoughts about activation, before a final KO is reached. As can be seen from the chart, a direct comparison between the efficiency indicator for the retail xDSL/bitstream services market (red line indicates Telecom Italia customers) compared with the wholesale market (blue line indicates wholesale customers) is to the former's advantage: if, however, states of suspension of retail Work Orders (grey line) are also taken into account, the performances are fairly similar.



**Figure 2 - Efficiency of the voice Delivery process**

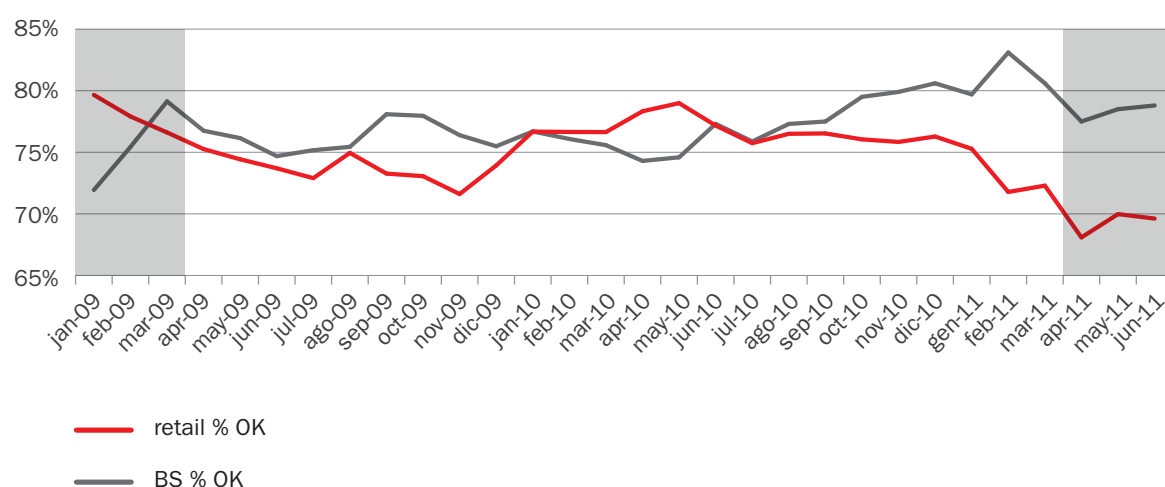
The efficiency of the process of delivering voice services is still to Telecom Italia's advantage with a progressive reduction in the difference between the two curves; it should however be taken into account that at present no alternative Operator with significant volumes of orders has signed up to the New Delivery Process for these services.



**Figure 3 - Rate of satisfaction of Elementary Requests for voice services**

As regards the rates of activation of voice services, i.e. the percentage of Elementary Requests which are successfully concluded, the performance of the wholesale process is always superior to the retail process. Even excluding the first and last months of the study (Jan-Mar 2009 and Apr-Jun 2011) from the calculations, in order to avoid distortions due to order chains in progress and not yet completed, the average difference is about 7 percentage points.

The rates of activation for xDSL services, by contrast, show similar patterns, although on average there is a slight advantage in favour of the alternative Operators.



**Figure 4 - Rate of satisfaction of Elementary Requests for xDSL services**

For both services, if the reasons behind the cancellation of Work Orders are examined, two obvious facts emerge:

1. the number of cancellations due to technical reasons has a lower incidence for Telecom Italia by about 2 percentage points. This difference can be traced to the procedures for processing activation requests on saturated network elements (so-called “network denials”). It is worth remembering that before signing up to the New Delivery Process the alternative Operators did not take advantage of the “Single Queue” process, which prevents rejection of an order in the event of unavailability or saturation of network elements;
2. the percentage of cancellations requested by the customer or by the commercial service is greater for Telecom Italia’s Delivery process, although it remains the largest cause of rejections for alternative Operators as well.

### **6.B.3 Conclusions**

The analysis did not detect inequality of treatment between wholesale and retail orders. There remains however a difference in efficiency in favour of Telecom Italia with regard to the voice Delivery process. The smaller number of Work Orders issued to satisfy a customer request has a positive impact on response times because of the reduced incidence of delays due to the reiteration of orders.

The fact of alternative Operators signing up to the NDP, and the improvement in the quality and usability of the databases required for the issue of an order, ought to lead to an overall improvement in efficiency.

However, the percentage of successful Elementary Requests is not completely satisfactory: a significant number of negative outcomes, for retail customers of Telecom Italia as well as for OLOs' customers, are due to reasons connected with the interaction with the end customer (customer KOs).

This suggests further thinking about contact policies, as these could cause losing track of customers, and more generally about the sales strategies adopted by the Operators, which could induce many customers to change their original intention.

## **6.C MONITORING ACTIVITIES CONDUCTED ON THE MANAGEMENT INCENTIVE SYSTEM, THE CODE OF CONDUCT AND THE PROFESSIONAL TRAINING SYSTEM**

### **Introduction**

This paragraph summarises the investigations carried out by the Supervisory Board in its first three years of work, in connection with the management incentive system, the Code of Conduct and the professional training system for the staff of Open Access and the Wholesale Department at Telecom Italia, and briefly reviews the significant results achieved.

As provided by Undertakings Group no. 2, Telecom Italia has introduced a system of incentives and bonuses for the management of Open Access and Wholesale and has drawn up a Code of Conduct for the staff and management of these Departments. Telecom Italia has also created training programmes for staff, to disseminate the contents of the Undertakings and the Code of Conduct.

In May 2009, the Supervisory Board verified that Telecom Italia was in correct formal compliance with the measures described above, and adopted Resolution no. 4/2009, with which it also directed the Company as follows:

1. to provide further clarification in relation to the objectives correlated with measurement of the satisfaction of Operators who purchase SMP and co-location services from Telecom Italia; also, in relation to the system of bonuses and incentives for the management of the Wholesale Department, to clarify both the way in which customer satisfaction is to be measured and the presence of objectives linked to co-location services and customer care activities;

2. to reconsider, at the earliest available opportunity, the percentages and the range of variance between maximum and minimum values assigned to the achievement of the objectives for implementing the Undertakings when determining the remuneration of the responsible managers, in order to strengthen the motivational pressures to adopt virtuous behaviour, and to proceed in a similar way to revise the incentive system for subordinate structures;
3. to provide more detailed evidence of the rules and procedures put in place by Telecom Italia to ensure compliance with the Undertakings - for example, with reference to the “operating procedures” mentioned in the last paragraph of page 10 of the Code of Conduct; furthermore to provide examples of conduct in the more frequent or delicate situations encountered by Open Access employees, for instance on how they should present themselves to the public and on how they should communicate with technical network services and commercial services;
4. to give timely notice of any contractual adjustments consequent on the renewal of contracts with external companies used by Telecom Italia as they are signed, in order to keep AGCom informed about the obligation to include clauses in new contracts to ensure compliance with the Code of Conduct by employees of such companies in carrying out activities on behalf of Telecom Italia;
5. to use its acquired experience to review the consistency of, and the procedures for applying, the various rules applicable to Open Access and Wholesale staff, including the Regulatory Code, the Employment Contract and the Code of Ethics.

### 6.C.1 The management incentive system

In response to the above Recommendations, Telecom Italia provided, in particular, a description of the MBO (Management By Objectives) management incentive system, which outlines the logic defining the objectives assigned to management and some of the people in senior roles. In making these requests, the specific intention of the Supervisory Board was to pursue the aim of bringing the structure of MBO as far as possible in line with the contents of Telecom Italia’s obligations.

In response to the Supervisory Board’s request to reconsider, at the earliest available opportunity, the percentages and the range of variance between maximum and minimum values assigned to the achievement of the objectives, Telecom Italia stated that the assigned values were correlated with the relevant scenario as it stood at the time, emphasising that the opportunity for modifying the applicable incentive system, starting from 2010, would be considered in the light of the results recorded in 2009.

The Supervisory Board asked Telecom Italia for an explanation of the criteria used to define the 2010 MBOs and their consistency with the relative obligations assumed by Telecom Italia, and required Telecom Italia to insert, among the objectives for the management of Open Access, the objective correlated with the reduction in the number of “network KOs” and “customer KOs”, with reference both to retail and to wholesale customers.

In the matter of the 2010 MBOs, objectives were fixed consistent with the scheme of the Undertakings and, unlike the 2009 MBOs, objectives were specified relating to “*equality of treatment between Retail and OLOs*” and “*end-to-end quality-SLA provisioning and assurance*”.

A comparison between the 2009 and the 2010 MBOs shows that, broadly speaking, the latter assigned objectives more closely connected with the Undertakings and that these objectives had a greater influence, compared with the total objectives, than in 2009.

The results achieved in 2009 and 2010 represented the basis for further refining the stated objectives for the year 2011, making them more conceptually oriented to the realisation of actual equality of treatment.

In particular, the significant feature is that for the first time an objective has been specified for the management of the Network Operations and Network Planning Departments that is directly connected with operations for desaturating the exchanges.

The Supervisory Board stated its appreciation for the willingness demonstrated in this regard by Telecom Italia, in view of the fact that this amendment to the management incentive system makes a significant contribution to positively orienting the behaviour of the staff members involved in the above processes.

#### **6.C.2 The Code of Conduct and the Professional Training System**

With regard to the Supervisory Board's requests:

- to disseminate among the staff a practical awareness of the Code of Conduct, supplementing this with specific expectations aimed at conforming the behaviour of employees to the principle of equality of treatment, as a fundamental principle around which company processes should develop;
- to create supplementary modules for the training course for Open Access staff, which can be taken via e-learning, aimed at more fully emphasising the conduct with which the addressees must conform to ensure compliance with the Code of Conduct;

Telecom Italia took action to:

- insert into the Code of Conduct a specific prohibition, for the "Legal" and "Regulatory" departments, of transferring information obtained from National Wholesale Services to the Retail Department for commercial purposes;
- draw up a "handbook" on equality of treatment, intended for technicians operating on-site;
- launch a series of initiatives in the area of staff training, to grow the culture of equality of treatment and test the efficacy of the training courses.

The Code of Conduct consists of a statement of the fundamental objectives and values which must inspire the conduct of the staff of Telecom Italia, with reference to the Undertakings, and the actions which the Company takes to ensure actual compliance with the aforementioned conduct; it also specifies the responsibilities of the Company's staff and management; finally, a paragraph is dedicated to the sanctions aspect for cases of failing to comply with the obligations contained in the Code.

Telecom Italia had also emphasised that the Code of Conduct is "values-based", suitable for providing a model to which the addressees should conform their own behaviour. The subject of the need to amend the Code of Conduct was also examined in depth by the Supervisory Board which - as part of Complaint no. S02-09 "Fastweb-

*Wind/Exchange of information between Telecom Italia internal departments on the subject of migration procedures* - had required an amendment (which was incorporated by Telecom Italia) in the terms explained above, having found inadequacies of content that it felt could compromise the guarantees of transparency and equality of treatment for OLOs.

With reference to the Supervisory Board's request to give timely notice of any contractual adjustments consequent on the renewal of contracts with external companies used by Telecom Italia, the Company arranged to have clauses inserted which would require observance of the Code of Conduct. In July 2009 Telecom Italia notified the Supervisory Board that the contractors used by Open Access had accepted the obligation to comply with the requirements of the Code of Conduct.

Finally, Telecom Italia responded to the Supervisory Board's call to jointly publish on the company Intranet the Code of Conduct required by Undertakings Group no. 2 and the Regulatory Code adopted pursuant to AGCom Resolution no. 152/02/CONS.

With specific regard to the training designed for employees, on the themes and content of the Code of Conduct, in addition to the aforementioned supplementary modules which could be accessed by e-learning, Telecom Italia gave effect to the requests of the Supervisory Board, by introducing further initiatives aimed at auditing "on-site" the efficacy of the initiatives undertaken, by directly involving employees.

In view of the results found on completion of the training programmes provided in 2010, the Supervisory Board verified i) that Telecom Italia in 2011 increased its own commitment in this area and ii) that all the personnel in Wholesale have completed the course dedicated to the study of AGCom Resolutions nos. 152/02/CONS and 718/08/CONS.

Again in the Wholesale area, Telecom Italia then reviewed the operation of its marketing processes, introducing a new organisation and making available to customers skills that would ensure them a better quality of offer and reduced completion times.

As regards newly-recruited Open Access staff, following up what had been started in 2010, a number of classroom training sessions were organised and completed, dedicated to the study of the aforementioned AGCom Resolutions nos. 152/02/CONS and 718/08/CONS.

On the initiative of the management of Open Access, the objective "Equality of treatment" was introduced into the "Archimede" Company competition, whose object is to reward the most creative ideas. In particular, a prize was awarded for the idea of drawing up a "Handbook on equality of treatment", in the form of a brochure, to be distributed to Open Access technicians operating on-site. The Handbook was also published in a special section of the Open Access portal. The Supervisory Board assessed this initiative as a positive manifestation of the integration of equality of treatment into managerial processes.

At the request of the Supervisory Board, Telecom Italia then launched other projects, notable among them being the one with the object of effectively managing the relationship with alternative Operators and their customers.

### **6.C.3 Procedure for the OLOs to have access to Wholesale data for jurisdictional action and protection purposes**

In July 2009 the Operators Fastweb and Wind sent the Supervisory Board a complaint about the presumed violation by Telecom Italia of the principle of equality of treatment with reference to certain exchanges of sensitive information between the internal departments of Telecom Italia.

The complaint alleged behaviour by Telecom Italia that was not compliant with the applicable regulations on the principle of equality of treatment between internal and external parties, originating from an interrelationship between two distinct Company departments in Telecom Italia, both for defensive purposes (involving a proposed claim against Fastweb under Article 700 of the Civil Procedure Code) and for commercial purposes (commercial retention and winback practices aimed at Fastweb customers).

The investigation was then started, with requests for a full report being addressed to the OLOs concerned and to Telecom Italia.

On 28 October 2009 the Supervisory Board declared the proceedings closed with Resolution no. 21/2009, finding that Telecom Italia's conduct did not constitute a formal violation of the Undertakings; it ordered the Company to formulate a proposal designed to specify criteria, procedures and fulfilment times for any requests from the OLOs for access to data and information in the possession of the Wholesale Department for jurisdictional action and protection purposes.

Following this request, Telecom Italia defined the procedure for OLOs to access data in the possession of the Wholesale Department, for the purposes indicated above; however, Telecom Italia acknowledged the comments of the Supervisory Board, and particularly those referring to the need to make explicit the principle of equality of treatment between internal and external parties, and to the procedure, times and costs applied in the case of requests for access made either by internal departments of Telecom Italia or by OLOs. This procedure was used in 2011 by the Operator Fastweb to require Telecom Italia to provide certain data and information about the contents of contracts made between the Company and the third-party suppliers used for activating network services, and certain work orders "refused" by Telecom Italia.

### **6.C.4 Analysis of Operators' satisfaction**

With reference to the required definition of the bonuses and incentives to be assigned to the Wholesale department, correlated with the satisfaction of the Operators who purchase SMP and co-location services, Telecom Italia carried out the surveys for 2009, 2010 and 2011 and explained the results to the Supervisory Board during several specific meetings.



## 6.D CERTIFICATION OF THE PERFORMANCE INDICATORS FOR EQUALITY OF TREATMENT

Undertakings Groups nos. 3 and 4 provide for the institution of a performance monitoring system for SMP services and the provision of suitable guarantees of transparency for this system; the object of this is to allow effective monitoring of actual compliance with the principle of equality of treatment between internal and external parties in relation to the supply of SMP services by Open Access and thus to guarantee, in the interest of the OLOs, transparent and certain comparisons regarding the treatment which Open Access provides both to OLO and Retail customers.

Telecom Italia initially defined a series of indicators, relating to the Delivery and Assurance processes, which were then supplemented by others, shared with the alternative Operators, in the 2009 and 2010 technical workshops. In the course of successive meetings with Gruppo Monitoraggio Impegni (GMI), the Undertakings monitoring group set up by AGCom, the OLOs proposed the introduction into the monitoring system of additional KPIs for measuring the so-called “end-to-end crossing times”, including therefore the activities performed within the Wholesale department of Telecom Italia.

It emerged that, to protect the OLOs, there was a need for providing suitable guarantees about the level of reliability and veracity of the indicators and the information that they convey, and ensuring that the KPIs possess the maximum formal and substantial correctness.

To this end, the Supervisory Board, with Resolution no. 6/2009, emphasised the advisability of setting up a mechanism for certifying the data relating to the KPIs, the methods of calculating them and the mechanism for extracting the basic data from Telecom Italia’s databases. In 2010, therefore, under the supervision of the Supervisory Board, Telecom Italia started the project of certification of the Key Performance Indicators (KPIs), validated by the University of Catania.

In particular, a “bulletproof” database was created, which uses an access monitoring system to guarantee the integrity and unalterability of the data used for calculating the performance indicators. In order to be able to carry out appropriate checks on the correspondence between the results provided by Telecom Italia and the data extracted from the systems, a model was set up for sampling the data itself. This model defines the minimum number of samples to be drawn from the population, ensuring that the variance between the data extracted and the results provided by Telecom Italia is less than a tolerance threshold, fixed at a value of 3%.

This project led to the certification in 2011 of the first group of indicators, initially proposed by Telecom Italia, and the second group, comprising the KPIs arising from the 2010 joint technical workshops between Telecom Italia and the OLOs.

October 2011 saw the start of the studies aimed at the validation, by the University of Catania, of the KPIs aimed at measuring the so-called “*end-to-end crossing times*”, thus including the activities performed within the Wholesale Department of Telecom Italia; these KPIs were chosen by the OLOs during meetings held with the (UMG) of the Regulatory Authority Undertakings monitoring group, GMI (third group of indicators).

Once the above certification system had become operative, the Supervisory Board started with Resolution no. 4/2011 of 8 February 2011 a programme of regular checks, assigned to the Supervisory Office, on the cor-

rectness of the basic data, to be performed by examining a statistically significant sample of this data. In the results of these checks, which covered a time-span of 12 months starting from January 2011, no significant discrepancies emerged. In order to investigate the reasons why one field in the data extracted from the systems was unpopulated, it was thought advisable to carry out some on-the-spot enquiries at the relevant Open Access territorial structures; as a result of these checks it was possible to identify the reasons for the irregularity, which were traced to a delay in alignment between computer systems.

The Supervisory Office drafted the concluding report on the analysis which had been carried out, including its own assessments about possible corrective actions to be taken. This report was approved by the Supervisory Board at its meeting on 8 February 2012 with Resolution no. 4/2002.

The method which has been established for the certification of the monitoring system has been used for the checks carried out on all the performance indicators in the basket of KPIs.

In the last few months of 2011, meetings were started between Telecom Italia, the OLOs and AGCom's Undertakings monitoring group, GMI, with the aim of simplifying and lightening the basket of indicators. This work is still in progress.

Once a precise definition of the new set of KPIs is in place, it is confirmed that the method will be able to be replicated with the object of reaching a validation of the new monitoring system and of the new basic data used in the calculations, which will ensure the same level of confidence as is guaranteed by the present basket of indicators.

The activities and timescales for the implementation of this initiative will be scaled to the volume of data and the number of indicators which will represent a novelty compared with the basket currently in use.

## 6.E ANALYSIS OF EQUALITY OF TREATMENT KPIs

As provided in Undertakings Groups no. 3 and no. 4, Telecom Italia has created a performance monitoring system for SMP services, to make the services supplied by the Open Access division transparent. The results of this diverse basket of Key Performance Indicators (KPIs) are periodically communicated to AGCom, the OLOs and the Supervisory Board.

This has enabled the Supervisory Board to ascertain, since 2009, if there have been any cases of inequality of treatment of the Telecom Italia Retail department compared to the alternative Operators.

Overall, the analysis of the indicators has indicated that the overall picture is substantially positive regarding compliance with the principle of equality of treatment.

In particular, on KPI 1 - voice and broadband Delivery, almost all the indicators show performance that is in line for both segments or comparatively better for the OLOs. In some cases, performance that slightly favours Telecom Italia may be explained by the differences in the process used: this is the case, for example, for the indicator recording the percentage compliance with the appointment made for POTS Delivery, which is affected by the fact that Open Access receives a so-called “Expected Delivery Date” (EDD) for OLOs customers. This is the date by which the system must be activated, while for Telecom Italia customers it is an actual appointment date.

With reference to KPI 2 - POTS and broadband Assurance, all the indicators for POTS services show that the best performances are those of the Wholesale department, while for broadband the comparison of the percentage of symmetrical bitstream faults recurring within 30 days, displays some inequalities in performance - albeit small ones - to the advantage of Telecom Italia, although this is of little significance, due to the low volumes.

There were no critical points regarding KPI 3 - Services availability, and KPI 4 - Unavailability of wholesale Systems.

However, more positive values for some indicators were recorded constantly throughout 2011 for the Retail department than for the Wholesale department: the most critical, from this perspective, were the results of the indicator for *average Business connection working time*, for KPI 1 - Delivery, and the percentage of *ADSL faults recurring within 30 days*, for KPI 2 - Assurance.

Regarding the first of the two KPIs, the processing time for the Retail department was approximately 16.5 calendar days in 2011, compared to 23 for the Wholesale department (a difference of around 6.5 calendar days). On the second of these indicators, the percentage of faults recurring within 30 days, the figures were 17.1% for Retail compared to 20.9% for Wholesale (a difference of 3.8%).

With reference to these two indicators, the Supervisory Board has started an in-depth investigation, asking Telecom Italia to clarify the reasons that underlie these performances, with Resolution no. 16/2011 of 5 July 2011.

In particular, the Resolution required Telecom Italia to start monitoring to “*highlight the presence of any possible process changes or the operation of exogenous factors*” that could have caused the disparity in the figures recorded, and then suggested suitable intervention that was needed to obviate the inequalities found. The Supervisory Board also asked Telecom Italia to provide specific details about the values recorded for the two KPIs cited. In September 2011, Telecom Italia provided information on this to the Supervisory Board, explaining the technical reasons for the critical points mentioned.

In the case of the first of the two indicators, on the *average Business connection working time*, Telecom Italia explained that the major OLOs who request Symmetrical Bitstream services from Telecom Italia had all moved to an experimental order management model during 2010, and this involves possible suspension of an order for up to 50 days, when network resources are not available, before the incident is flagged as a KO, while the traditional process involves an immediate KO if network resources are not available, for both the Wholesale and the Retail departments. This led to longer average Delivery times for the Wholesale department.

And regarding the second of the two indicators (*percentage of ADSL faults recurring within 30 days*), the percentage of recurring faults reflected the differences between the wholesale market (60% naked system - dedicated to data services only - and 40% “shared” systems - providing both POTS and data services) and the retail market (almost entirely “shared” systems, with a negligible percentage of *naked* systems). In fact, while the faults recorded on shares lines can be attributed by the customer to either POTS or ADSL, the faults on *naked* lines are always ADSL faults, even if linked to the POTS service, and this has also an impact on repetition rates. The wholesale SLA (as of Reference Offer) specifies fault resolution within 24 calendar hours of the complaint, while the retail SLA specifies fault resolution by the end of the second working day after the complaint. For the Wholesale department, this difference squeezes the available time frame despite more difficult repairs: the 24 calendar hours deadline often means that work has to be done on faults at the most antisocial times, with poor customer availability, sub-optimal logistic and environmental conditions and a higher probability of recurring faults.

In response to the new information provided by Telecom Italia, with Resolution no. 21/2011 the Supervisory Board extended the deadline for the conclusion of the analysis to 28 February.

At the same time, the Supervisory Board asked Telecom to provide a report containing the figures for the 2011 financial year, adjusted to remove the effects of any process changes that might have been made, to enable the Board to express an appropriate assessment of the emerging results.

With reference to the indicator on “*percentage of faults occurring within 14 days of activation of service*” (KPI 2 - broadband Assurance), the Supervisory Board has observed that this KPI indicates that performance is comparatively worse for the OLOs. It is obtained by calculating the number of Trouble Tickets opened within 14 days of activation as a proportion of total Trouble Tickets in the reference period. Since the total number of Trouble Tickets in the Retail department is much higher than the total number of Trouble Tickets for OLOs, the percentage is higher for the OLOs. The Supervisory Board therefore asked Telecom Italia to reformulate this indicator, recalculating it to include the total number of systems activated in the period in the denominator, and to insert the results obtained in the aforementioned final report.

Telecom Italia has responded to the requests of the Supervisory Board, applying a correction factor to the indicators examined, and by also pointing out that the numbers reported are unconfirmed. On this topic, Telecom Italia commented as follows:

1. Regarding the indicator “*average S/HDSL broadband connection working time*”, which, as noted above, has been affected by a change to the process adopted during the year regarding the introduction of an experimental order management model, it should be noted that the difference in the performance of the Retail and Wholesale departments is reduced from 6.5 calendar days to approximately 2 calendar days, once the effects of this change have been removed.
2. As far as the indicator for “*percentage of broadband ADSL Trouble Tickets recurring within 30 days*” is concerned, the unconfirmed values show that the trend recorded for the first half of the year continued in the second half, and hence the considerations made by Telecom Italia in its response to Resolution no. 16/2011 regarding the different incidences for naked lines and for the SLAs remain valid.
3. Finally, regarding the indicator “*percentage of faults reported within 14 days of service activation*”, which shows a considerable difference between retail and wholesale in terms of performance, Telecom Italia attributed this, primarily, as stated above, to a misleading formulation of the KPI. When the 2011 values are recalculated using the method considered to be correct (which takes into account the number of activations during the period, by segment, as denominator, instead of the total number of Trouble Tickets in the period), there is a difference of 0.8 percentage points to the advantage of wholesale (7.6% for retail compared to 6.8% for wholesale), which overturns the 12.9 percentage point difference to the advantage of the retail department (2.8% for retail compared to 15.7% for wholesale) that resulted from the values initially reported.

The table below summarises the above information:

KPI REFERENCE GROUP	INDICATOR	2011 VALUES	CRITICAL POINTS HIGHLIGHTED	EXPLANATIONS PROVIDED BY TELECOM ITALIA	2011 VALUES WITH CRITICAL FACTORS REMOVED
KPI 1 - Symmetric broadband Delivery	Average Business symmetric connection working time	(calendar days)  Retail= 16,5 Wholesale= 22,9 Difference= +6,4	Wholesale working times much higher than retail ones.	New models for managing Work Orders causing delays in Delivery times for OLO customers.	(calendar days)  Retail= nd Wholesale= nd Difference= +2,0

KPI REFERENCE GROUP	INDICATOR	2011 VALUES	CRITICAL POINTS HIGHLIGHTED	EXPLANATIONS PROVIDED BY TELECOM ITALIA	2011 VALUES WITH CRITICAL FACTORS REMOVED
KPI 2 - Symmetric broadband Assurance	Percentage of ADSL faults recurring within 30 days	<i>(percentage of recurring faults)</i>  Retail= 17,1% Wholesale= 20,9% Differenza= +3,8%	Percentage of faults recurring within 30 days constantly higher for Wholesale than for Retail.	The different percentages that naked lines (lines for data transmission only) assume in the two sectors considered make the comparison invalid. Moreover, the more stringent SLAs for Wholesale mean there is a higher probability of error and more recurring faults than for retail customers.	
KPI 2 - Symmetric broadband Assurance	Percentage of ADSL faults within 14 days of activation	<i>(percentage of occurring faults)</i>  Retail= 2,8% Wholesale= 15,7% Differenza= +12,9%	Percentage of Trouble Tickets opened within 14 days of activation constantly and significantly higher for OLO customers than Telecom Italia Retail customers.	This indicator is defined as the number of Trouble Tickets opened within 14 days of activation as a proportion of total Trouble Tickets in the reference period. This ratio is invalidated by the fact that the number of Retail Trouble Tickets is much higher than the number of Trouble Tickets for the OLO segment: so the percentage is necessarily higher for the OLOs, invalidating the comparison. If the indicator is recalculated with the number of activations during the period as denominator, by segment, then the result is in Wholesale's favour.	<i>(percentage of occurring faults)</i>  Retail= 7,6% Wholesale= 6,8% Difference= -0,8%

Resolution no. 16/2011 ordered the Supervisory Office to report the outcome of the audits carried out to the Supervisory Board, and to draw up at the end of the supervisory activity a final report on *“the actions carried out and the results achieved”* in the analysis of the performance indicators.

With Resolution no. 5/2012, the Supervisory Board approved the final report on the analysis carried out and the results obtained during its meeting on 8 February 2012.

Specifically, after examining the information provided by Telecom Italia, the Supervisory Board highlighted how the KPIs performances were not critical, once the calculation values of the factors considered had been adjusted, and hence do not indicate non-compliance with the principle of equality of internal-external treatment.

The Supervisory Board therefore hoped that Telecom Italia would be increasingly willing, in the future, to provide more detailed information, particularly regarding those indicators that present results that are apparently critical, and not in accordance with the principle of internal-external equality of treatment, that can provide an exhaustive explanation of the reasons that determine the values resulting from the calculation of the KPIs - which may, for example, be related to the processes used, or to exogenous factors. This would allow the Board itself to undertake appropriate and thorough analysis of the actual respect of the principle of equality of treatment with reference to the basket of indicators regarding Undertakings Groups no. 3 and no.4, as specified in Resolution no. 718/08/CONS.

## 6.F BITSTREAM SERVICES AND SATURATION OF THE LOCAL TRANSMISSION NETWORK

Among the subjects relevant to Undertakings Group no. 5, one which has acquired particular importance during the three-year mandate of the Supervisory Board is the problem relating to the saturation of DSLAMs, which developed following Telecom Italia's decision to close about 500 exchanges to marketing of bitstream services due to unavailability of transmission resources. The implementation of this measure aroused a reaction from the alternative Operators who, with Complaint no. S01/10 requested the intervention of the Supervisory Board.

In accordance with the provisions of Resolutions nos. 12/2010 and 16/2010, adopted by the Supervisory Board in June and August 2010 during the proceedings arising from the aforementioned complaint, Telecom Italia reviewed and adapted the technical plans for the desaturation of exchanges, expanding them and making them more effective, and instituted a pre-warning mechanism for highlighting the exchanges close to saturation. The pre-warning status report, called “amber light”, is communicated monthly to the alternative Operators, and is also shown on the Telecom Italia Wholesale portal; it indicates that the highlighted exchange could become “saturated” within a period of three months if no action is taken.

The Supervisory Office then established an internal database for the weekly monitoring of ADSL exchange desaturation activities and the pre-warning system, both to check that it reflects the declarations made by Telecom Italia in its quarterly reports and to assess the efficacy of the pre-warning reporting system itself. The database

is updated once a week by means of an extraction carried out directly from the Telecom Italia Wholesale portal.

The revision of the technical plans produced a considerable increase in the number of desaturation operations planned for 2010 which led over the course of the year to a reduction of 67% in the number of exchanges closed to marketing.

With Resolution no. 6/2011 of February 2011, the Supervisory Board asked Telecom Italia for several detailed statements on the saturation status of the exchange areas served by miniDSLAM equipment.

In particular, clarification was requested on the criteria for planning and intervention underlying the use of this type of apparatus and the management of critical situations connected with the saturation status of the equipment.

Furthermore, in order to assess the consequences resulting from the saturation of the exchanges for the number of customers potentially not connectable to the miniDSLAM systems which will not be desaturated, a request was made to Telecom Italia to find out the size per geographical area in terms of telephone users of the areas served by miniDSLAMs.

The Supervisory Board then took measures, with Resolution no. 7/2011 of 8 February 2011 to continue with the investigations to assess the pre-warning mechanism for the saturation status of the exchanges (so-called "amber light") and, as in the previous case, asked Telecom Italia to find out the size per geographical area in terms of telephone users of the areas served by saturated DSLAMs. Monitoring the data extracted from the Wholesale portal made it possible to check how the total number of exchanges served by 7 Mbit/s DSLAMs declared saturated during the course of 2011 has transited through "amber light" status (69 out of 69 exchanges) and to show a significant reduction in the number of saturated exchanges (-57%) compared with an increase in those declared to be in pre-warning status (+38%). In particular in the last quarter of the year a considerable increase is to be noted in the number of exchanges in "amber light" status (+116%) because of the impossibility of finding new ports for ATM DSLAMs (with subsequent possible geometrical saturation of the equipment) arising from the fact that ATM technology has for a long time been declared out of production by the supplier firms.

Analysis of the data has also highlighted a sharp increase in the number of saturated miniDSLAMs (+91%), confirming Telecom Italia's forecast in which it declared that it did not envisage a desaturation intervention plan for systems of this type which, for the most part, are covering areas of little market interest. In this connection, the Supervisory Board directed Telecom Italia to publish any plan for expansion of miniDSLAMs which might be launched as a result of any specific agreements concluded with local authorities.

In the course of the checks concerning the implementation of the pre-warning system to detect exchange saturation, the Supervisory Board, on 3 May 2011, approved Resolution no. 12/2011, with which it noted the excessive frequency of rescheduling of the dates for reopening exchanges for marketing bitstream services, as indicated in the Wholesale portal, and called on Telecom Italia to take appropriate action to improve the reliability of planned exchange desaturation dates, notified to the alternative Operators by means of the same Wholesale portal.

In response to this Resolution, and meeting the requirements contained in it, Telecom Italia revised the process



of handling notifications to the alternative Operators so as to ensure that the information provided was more stable and reliable.

The procedure, in the new version, requires that notification of saturated exchanges (in "red light" status) should contain an indication of the plans for intervention with the following possible details:

1. month/year of reopening the service, if this information is already available, and always in any event when the intervention is planned in the quarter following the notification;
2. quarter/year of reopening the service, where the month/year is not available. The web Portal of National Wholesale Services also indicates, in a special notes field, the categories of intervention planned, following the classification laid down in the "planning guidelines" which are published via the same Portal and in which the resolution times are displayed for each category of intervention. At the beginning of the planned quarter, the indication of the quarter is replaced by the indication of the specific month in the quarter in which the service is planned to reopen;
3. expansion in course of technical assessment;
4. expansion not planned.

In the same notification, in a special field, there is a separate display of any grounds for medium and long term planning attributable to actions and conduct of third parties.

On the instructions of the Supervisory Board, Telecom Italia also introduced into the 2011 management incentive system (2011 MBO) a specific objective correlated with exchange desaturation operations, with the aim of maximising both meeting the declared volumes and meeting the reopening dates for the exchanges indicated in the plans.

Finally, intervening as a result of Complaint no. S01/11 brought up by the Operator Welcome Italia S.p.A. (see chapter 5 for details), the Supervisory Board obtained the agreement of Telecom Italia to the adoption of a new and more effective procedure for handling malfunctions due to "slow navigation", aimed at ensuring more precise fulfilment of the ADSL deterioration resolution dates for announced to the alternative Operators (Resolution no. 20/2011).

## **6.G THE QUALITY OF THE FIXED ACCESS NETWORK**

Undertakings Group No. 5 (Guarantees of transparency of Technical Plans for the Quality of the Fixed Access Network) impose obligations on Telecom Italia intended to make public and transparent the structural interventions on the fixed access network that are more than ordinary maintenance.

To that end, Open Access prepared a number of detailed operational plans which provide information about each intervention, clearly illustrating the impact on the overall quality of the access network.

The activity of the Supervisory Board over the years has not been limited to checking the documentation produced by Telecom Italia. Through its Resolutions and Recommendations, it has requested further in-depth information to check the consistency of the plans and their real impact on the incidence of faults.

In particular, with Resolutions no. 22/2009 and no. 6/2010 it asked Telecom Italia to send a periodic report on the number of exchanges that had exceeded the planned fault rate during the year, and some information on the percentage breakdown of Trouble Tickets by reason for the fault, as well as a series of additional data on the on-going project.

During 2011 the Supervisory Board continued the analysis of the quality levels offered by the network platform, as performed in the previous year. As reference for network quality control, the summary indicator that shows, on a quarterly basis, the trend in the number of exchange areas that do not achieve the planned Failure Rate for the current year (set at 11.2% for POTS and 18% for ADSL services for 2011) was confirmed.

The analysis carried out also showed that there are still significant difference between regions in terms of network quality, despite the improvement in quality levels, compared to 2010, encountered in all areas.

In particular, the analysis of the 2011 data, still being consolidated, has shown that despite the evidence for a fall in the fault rate throughout the country, six regions (Calabria, Campania, Lazio, Sardinia and Molise) presented fault rates for POTS services higher than the average national rate for 2011.

To evidence more explicitly the quality level of the network in terms of its geography and the distribution of customers, the Supervisory Board introduced a specific indicator represented by the percentage of customers served by exchanges that exceed the planned fault rate back in 2009. For any particular geographical area, this indicator is obtained by the total number of customers served by exchanges that exceed the planned fault rate as a percentage of the total number of customers served.

Comparison with the data recorded in 2010, considering that the data for 2011 are still being consolidated, shows that this indicator, calculated for POTS services, has shown an 11.3% fall nationally, but the fall in values varies greatly in terms of geographical area. In particular the North West Region and the North East Region recorded falls of 7.2% and 5.6% from the 2010 values, respectively, and the percentage of customers served by exchanges that exceed the fault rate will be below 8% for 2011, while the Central Region and the South Region still present fairly high percentages (29.1% Central Region and 61% South Region), despite falls in the indicator of 17% and 12% from the 2010 values.

The Supervisory Board has also continued its analysis of the periodic reports on the progress of activities and plans intended to improve the quality of the fixed access network, to ensure they correspond with the Technical Plans published by Telecom Italia. In particular, regarding the assurance processes, it was noted that the “On Going”, “Bonifica Permutatori” (Main Distribution Frame Rectifications) and “Sostituzione Pali” (Pole Replacement) projects had, by the end of 2011, recorded unconfirmed results in line with the declared objectives.

The “Pressurizzatori” project reported positive results regarding activities to replace obsolete pressurisation stations, with the number of restoration of stations to normal in line with the plan. Regarding the “Armadi Ripartilinea” (Switching Cabinets) project, the results are better than the initial estimates, apart from rectification activities, which recorded fewer interventions than planned in the unconfirmed figures. Particular attention was paid to the planned extraordinary maintenance of the copper access network and optic fibre network, something new this year. The Rectification plan, started later than initially announced by Telecom Italia, meant that 68,582 km of copper access network pairs and 13.552 km of optic fibre of the regional transport network were replaced, essentially in line with the objectives set for the annual programme. Finally, as far as the Delivery process is concerned, the unconfirmed results of the access network desaturation plan are broadly as expected.

## 6.H PROGRESS IN THE DEVELOPMENT OF THE FIXED ACCESS NETWORK

The activities of the Supervisory Board in relation to Undertakings Group no. 6 (*Guarantees of transparency of Technical Plans for the Development of the fixed access network*) are not limited to acknowledging formal compliance with the Undertakings adopted: in fact, as well as the analyses of periodic reports on the progress of the development of the fixed access network, some investigations were carried out to check that the Technical Plans met the requirements contained in the Resolutions and Recommendations formulated at the end of the investigation concerning Complaint no. S02/10 by some alternative Operators. With this complaint the OLOs complained about the discrepancy between the information supplied by Telecom Italia to the press and the details contained in the Technical Plans, relating to the number of property units affected by the advent of optical fibre.

The Supervisory Board then intervened with Resolution no. 13/2010 of 7 July 2010, calling on Telecom Italia to make some amendments to the documentation provided for the development of the NGA Network, to improve the clarity of the information that it contains. Telecom Italia responded to the suggestions of the Supervisory Board later that month, adding further elements and data to the reports on the development of the Next Generation Access Network.

In particular, detailed information at exchange area level was added to the quarterly plans for the Property Units that could potentially be reached and the Property Units connected in the quarter, distinguishing between those that had first distribution network infrastructure “passed” and those that had second distribution network infrastructure “passed”.

With reference to the analysis, carried out in 2011, of periodic reports on the progress of the development of the Telecom Italia fixed access network, the following was observed.

The long term Technical Plan for the development of the NGA Network launched by Telecom Italia in December 2010 predicted, for 2011, an increase of 370,000 Property Units “passed” with the first distribution network infrastructure and 250,000 Property Units “passed” with the second distribution network infrastructure, reaching, in 2013, a total of 2,500,000 properties “passed” with the first distribution infrastructure, of which 1,330,000 also “passed” with the second distribution infrastructure, distributed over 172 exchange areas, in 40 municipalities.

Specifically, the Technical Plan defined by Telecom Italia for the year 2011, in its initial version (December 2010), predicted further development over 21 exchange areas (10 in the municipality of Milan, 2 in the municipality of Rome, 1 in the municipality of Bari, 3 in the municipality of Venice, 2 in the municipality of Settimo Torinese and 1 for each of the municipalities of Bologna, Genoa and Naples). In the new edition of the Technical Plan published in August 2011, the new exchange areas involved in the works rose to 23 (10 in the municipality of Milan, 2 in the municipality of Rome, 3 in the municipality of Turin, 2 in the municipality of Bari, 3 in the municipality of Venice and 1 for each of the municipalities of Bologna, Genoa and Naples), while the Property Units to be reached have undergone a substantial downsizing. In fact, the properties “passed” with the first distribution network infrastructure were reduced by 21.6% (from 370,000 to 290,000) and the properties “passed” with the second distribution infrastructure dropped by 40% (from 250,000 to 149,000).

As a result, even the long term Technical Plan, a new version of which was published in August 2011, saw the substantial downsizing of the Property Units “passed” incremental for 2011 and a corresponding increase of the share expected in 2012 and 2013 in order to maintain the overall volume objectives predicted for 2013.

The results of the work carried out in 2011 show a correspondence with the aims set at national level in the latest version of the programme, redimensioned from those of the initial programme, in terms of Property Units to which first and second distribution infrastructure had been passed. As regards the geographical breakdown of the interventions carried out, some differences should be noted compared with the annual programme. These consist essentially in the failure to start network developments in the municipality of Naples and in a considerable downsizing of the operations in the area of Venice and Genoa (this latter regards those “passed” with the secondary network) benefiting Rome, Catania and Turin.

The development plan for the broadband network aimed at reducing the “digital divide”, which initially specified 343 new active exchanges and 299 new municipalities covered by 7 Mbit/s ADSL services, was reviewed in July 2011 and the objectives were considerably reduced. Specifically, the final version of the plan envisaged covering 184 new municipalities (-38.5% compared to the initial plan) with 197 new exchanges open to the service (-42.6% compared to the original version). It is important to emphasise that a municipality is considered covered by the service when its gross coverage is 70% or more. The final recorded data in any case shows results in line with the provisions of the Technical Plan published in July 2011, both in terms of the number of new exchanges open to the service (+10.7%) and in terms of the number of new municipalities covered (+6%).

Finally, the copper network development plan for new development sites ended in 2011 with 111,172 new housing units connected at national level, highlighting a result that exceeded the objectives set in the plan (+5.8%).

## 6.1 REGULATORY ACCOUNTING

Undertakings Group no. 8 (*Integration of Telecom Italia regulatory accounting and calculation of transfer charges*) provides for Telecom Italia to prepare the economic conditions for the internal transfer of SMP (Significant Market Power) services that Open Access provides to the Retail department, as part of special service contracts that must be made available to AGCom for its approval; Telecom Italia must also provide separate accounting records relative to Open Access, containing the necessary details to verify the equivalence of the *transfer charges* and the corresponding economic conditions offered to the OLOs.

The obligations mentioned are incorporated into the existing provisions of the current regulations on Regulatory Accounting, representing a further step forward in the general Italian and European regulatory framework started with Law no. 249/97 and subsequently developed with the Electronic Communications Code, AGCom Resolution no. 152/02/CONS and other Resolutions on the analyses of relevant markets.

The Supervisory Board verified that Telecom Italia had sent AGCom, within the deadline set for 1 March 2009, its proposed models of Regulatory Accounting and *transfer charges*.

As regards the model for these latter, the proposal contained a list of the SMP services offered by Open Access and the relations between these services and the services offered by the commercial departments of Telecom Italia: for each of these a *transfer charge* per unit was specified, including the quantities transferred by Open Access to the commercial departments and the internal revenues originated given by the product of the two previous factors: the prices stated in the internal transfer contracts correspond to those set out in the Reference Offers.

The second model submitted concerned the annual Regulatory Accounting results for the SMP services provided by Open Access, with the preparation of the Profit and Loss Account, Reports on the invested capital, *transfer charges* and quantities.

In 2010 AGCom established a joint working group with Telecom Italia that made it possible to acquire further information and to analyse issues linked to the preparation of models and the setting of deadlines for sending the documentation, thus permitting a comparison that made it possible to consolidate the working approach. Once the aforementioned working group had completed its activities, AGCom, with Resolution no. 2/11/CONS of 11 January 2011, submitted for public consultation the definition of the Guidelines for the application of new Regulatory Accounting reference models.

The analysis of the contributions and the process of drafting the final dictates on the issue led to the adoption, in December 2011, of Resolution no. 678/11/CONS containing "*Guidelines on service contracts and fixed network Regulatory Accounting*".

The Resolution defines the methods of implementing the obligations imposed on Telecom Italia concerning fixed network Regulatory Accounting, previously identified with Resolutions no. 731/09/CONS and no. 2/10/CONS.

In summary, these implementation methods provide for:

1. the introduction of “*Service Contracts*”, which define the methods of supplying and improving the internal transfers (namely to the commercial departments of Telecom Italia) of SMP services under conditions equivalent to those in effect for the OLOs;
2. the adoption of the “*Transfer Charges to price*”, that define, using a specific model, the internal transfer values of the services transferred by Open Access to the commercial departments of Telecom Italia for each individual retail service;
3. the adoption of separate accounting records for the resources used for the production of SMP access services both for internal use and for transfer to the outside (“*Equivalent Open Access*” model).

The new obligations come into full effect from 2011.

Note, lastly, the recent Resolution no. 1/12/CONS containing the “*Identification of regulatory obligations relative to access services for the next generation network*”, which provides for the start of a procedure aimed at identifying the criteria for the determination and application of internal transfers also for access services on next generation networks.

The issue of Regulatory Accounting and *transfer charges* shows the complexity of the procedures for achieving Telecom Italia’s obligations, and their occasional deferred implementation over time. Resolution no. 678/11/CONS of 12 December 2011, in fact, formally sanctions the compliance of the obligations required by Undertakings Group no. 8, as a result of a long and complex process of further investigation, on the regulatory level, of numerous issues connected to the scope and efficiency of the measures provided for therein.

## **6.J REGULATION OF THE NEXT GENERATION ACCESS NETWORKS**

Undertakings Group no. 9 (*Measures related to next generation access networks*) contains different obligations that Telecom Italia adopted concerning issues for the creation of next generation access networks.

Specifically, Telecom was obliged to inform the AGCom of the offer for access to and the sharing of cable-laying infrastructures, if necessary offering alternative methods for accessing dark fibres, and a proposal for sharing the investments for the creation of new infrastructures with the interested Operators (points 9.1, 9.2 and 9.3). Moreover, the Company had to extend the Undertakings to intermediate access services provided through next generation networks, for which AGCom had appointed the historical Operator as the SMP Operator (point 9.4), and had to join the Italian NGN Committee, intended to propose guidelines for the process of migrating the OLOs to the next generation networks (9.5) and prepare guidelines containing the minimum notice periods guaranteed to Operators co-located at exchanges that may be phased out (9.6).

The Supervisory Board verified Telecom Italia's compliance with the deadlines and the latter, with reference to points 9.1, 9.2, 9.3 and 9.5, sent the following to AGCom on 30 June 2009:

1. the offer of infrastructures for laying cables for the development of FTTX networks, which consists of the possibility of acquiring rights of use on sections of Telecom Italia's local infrastructures; Telecom Italia also formulated an offer for the temporary transfer of dark fibre in the event that sections of the local infrastructure were saturated;
2. the proposal of sharing investments with the OLOs for the creation of new infrastructures for laying cables for the development of FTTX networks;
3. the guidelines for migration to the NGAN networks, containing the minimum notice periods (so as to minimize the economic impact for Operators) and the methods of communicating with the OLOs during the transition to the next generation network.

In relation to the obligation to join the Italian NGN Committee, said Committee, set up by AGCom with Resolution no. 64/09/CONS in an advisory capacity as regards the process of transition to the Next Generation Networks, and open to the participation of the Operators involved, became effectively operational during 2009 - with the participation of Telecom Italia - concluding its activities in 2010, with the publication of the document containing the non-binding draft of *"Guidelines for managing the transition to NGN Networks"*.

With reference, lastly, to the mentioned point 9.4, 2011 saw the publication of AGCom's Resolution no. 1/11/CONS, containing *"Public consultation on the regulation of services for accessing next generation networks"*, subsequently incorporated by Resolution no. 301/11/CONS.

These Resolutions incorporate, and partly reinforce, provisions already contained in both the previous Resolution no. 731/09/CONS and the Recommendation of the European Commission on the NGNs. Specifically, it stressed the SMP Operator's obligation to ensure the OLOs have access to both pipes and dark fibre, independently of whether or not there is space in the pipes. These access obligations are also valid not only for the primary section and the secondary section, but also in the adduction section and the section providing access to the exchange. The document then contains measures aimed at promoting any projects for joint investment in the new network, the obligation of unbundling the fibre, and of bitstream without territorial restriction at least until the obligation to provide a fibre optic unbundling service, envisaged for 2013, comes into force.

Lastly, AGCom's recent Resolution no. 1/12/CONS of 11 January 2012 completed the regulations applicable to the services and the next generation networks, as explained in more detail in Chapter 3 of this Report, also determining effects on the current structure of the Undertakings. In this respect, with Resolution no. 3/2012 of 18 January 2012, the Supervisory Board started an analysis and evaluation of the existing relationship between the content of the mentioned point 9.4 and the scope of the provisions of this Resolution, in order to identify the new areas of intervention and start the required control activities.

## **6.K SETTLEMENT OF DISPUTES**

Undertakings Group no. 10 (*Setting up of a dispute resolution body for technical and operative matters related to network access services*) requires Telecom Italia to adhere to the contract scheme established by AGCom related to the setting up of a body tasked with resolving disputes of a technical and operational nature with reference to the supply of access services to the network called OTA Italia.

Following the establishment of OTA Italia with Resolution no. 121/09/CONS of 18 March 2009 and the approval of the relative operating regulations and the proposed membership agreement with Resolution no. 478/09/CONS of 14 September 2009, Telecom Italia signed the agreement to join OTA Italia on 15 October 2009.

This body was established on the basis of experience gained in the United Kingdom with the *Office of Telecommunications Adjudicator*, whose purpose is to speed up the proceedings necessary to guarantee full equality of access to the network by all the Operators active in the British telecommunications market. It also has the task of facilitating the settlement of disputes that arise between the Operators with regard to operational issues.

OTA Italia has been entrusted with the task, which should be carried out through continuous dialogue with the Operators and on the basis of the approved regulatory scheme, of preventing possible disputes of a technical and operational nature that may arise between Operators, primarily over the supply of network access services, as well as making attempts to settle disputes that have arisen.

The body's contractual scheme requires a commitment on the part of Operators that have signed up to it to comply with the provisions of the regulations in order for OTA Italia to function and not to submit applications to AGCom for the settlement of disputes pursuant to Article 23 of the Electronic Communications Code, before the settlement attempt has been unsuccessfully pursued.

In Italy, the Body was set up in March 2009, with Resolution no. 121/09/CONS, and was called OTA Italia.

AGCom subsequently approved the new body's operating regulations as well as the scheme of the three-year term membership agreement (Resolution no. 478/09/CONS). These operating regulations were agreed at meetings attended by all the main Operators and Telecom Italia.

In 2009 voluntary memberships of the main Operators were registered and at the same time the body became fully operative. The issues recently faced by OTA Italia include co-location, use of the so called "System Unico", deterioration testing, fruitless interventions, complaint management, the billing report and the management of related technical problems concerning LLU services in activation.



## 6.1 OBLIGATIONS FOR THE PROTECTION OF THE FINAL USER

As concerns Undertakings group no. 11 (Ban on sales by network engineers and sales force training programmes), the Supervisory Board, from its first meetings, started monitoring the ban, first of all checking its inclusion in the Code of Conduct, aimed at all Open Access personnel involved in the supply of SMP services, on commercial sales activity towards final customers, as well as conducting specific information campaigns aimed at making Open Access network technicians and commercial personnel from the retail department aware of this ban. To supplement and complete the Code of Conduct, Telecom Italia carried out training activities in 2009 aimed at a considerable number of resources in order to improve knowledge of the Undertakings among the personnel involved (for greater detail on the training courses see paragraph 6.c of this chapter). The Supervisory Board made recommendations and observations aimed at providing more specific and effective training on the content of the obligations assumed by Telecom Italia; these recommendations and interventions were welcomed by Telecom Italia which gradually enriched its training program.

The ban on sales by network departments was clearly expressed in the Code of Conduct; the section on “Responsibilities”, in fact, states the following: “Open Access personnel who work, even occasionally, to produce SMP services shall not carry out any commercial sales activity towards final customers; senior managers of Open Access shall ensure that personnel involved in the production of SMP services do not carry out any commercial sales activity towards final customers.”

Specifically, as regards the ban on Open Access personnel engaging in commercial activities, Telecom Italia, in its online training course with multiple choice answers, prepared a specific section intended to make internal resources aware of this issue, illustrating a specific case of contact with a client asking a technician for a commercial opinion: it explains how the latter must maintain a position of impartiality between all the Operators and tell the customer to contact the specific relevant commercial department.

The Supervisory Board continued its monitoring and supervisory activities throughout 2010 and 2011, aimed at ascertaining compliance with the sales ban on the part of Open Access personnel operating, even if only occasionally, in the production of SMP services.

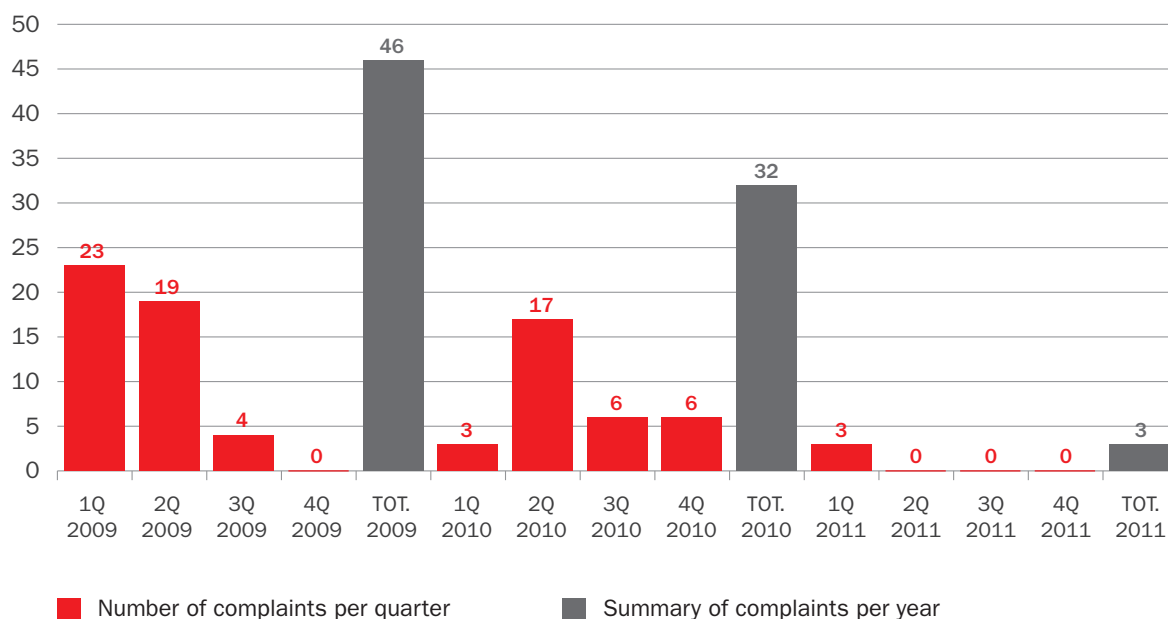
Undertakings Group no. 12 (Obligation to report activation of unrequested services) also requires Open Access to send the Supervisory Board a quarterly report on the cases of activation of unrequested services brought to the attention of network technicians by final customers.

The Supervisory Board immediately started, from the time it took office, the analyses and investigations necessary to monitor the phenomenon of unrequested services reported by Open Access technicians, verifying, over the three-year period, Telecom Italia's compliance with this obligation. However, the Supervisory Board has raised the issue of the advisability of taking targeted action to guarantee the use of correct procedures in the sale of products and services with Telecom Italia several times since 2009. As already emphasised in its last reports, the identification of other cases of unrequested services, of which the Open Access technicians are unaware, is naturally not covered by this obligation to report.

On the basis of the quarterly reports sent by the Company, the Supervisory Board checked the inclusion, in the Code of Conduct, of the obligation for network technicians to report cases of activation of unrequested services and the start of the relative information and training courses for Open Access personnel.

As regards the number and type of cases involving the activation of unrequested services detected directly at customer premises by network technicians in the case of an intervention or the installing of certain equipment, the reports sent over the course of the three-year period showed a limited number of activations of unrequested services detected by Open Access technicians, and moreover this number continues to decrease over the course of time.

The graph below shows the trend of the cases of activation of unrequested services, which the Company reported to the Supervisory Board during the three-year period 2009-2011.



Undertakings Group no. 13 (*Obligation of notice for the deactivation of CPS services*) governs a specific aspect of the Carrier Pre-Selection service deactivation process. In the past, in fact, AGCom challenged Telecom Italia to complete the CPS deactivation process in cases where the customer did not recognize the request to interrupt the deactivation process (so-called change of mind) represented by the OLO. In relation to this, Telecom Italia has always declared that its conduct is consistent with the provisions of the current regulations, insofar as the CPS terminations had been carried out by following the so-called urgency procedure (to be applied when the customer confirms to Telecom Italia that it never had a change of mind about the deactivation request, thus repudiating the KO due to a change of mind sent by the OLO to stop the procedure).

With regard to this issue, the Supervisory Board checked the actual termination, carried out by Telecom Italia, of the procedure to deactivate Carrier Pre-Selection (CPS) services at the time the OLO communicated a change of mind on the part of the customer; this obligation also exists when the commercial departments of Telecom Italia subsequently certify and report a different intention on the part of the customer. Specifically, Telecom Italia sent the Supervisory Board and AGCom a notification to provide evidence of operating instructions, already carried out in 2008, addressed in particular to the Customer Care department and aimed at the termination of the activities of the commercial departments designed to ascertain the customer's intention to deactivate the CPS.

Telecom Italia had particularly tight deadlines for complying with this obligation (namely 1 January 2009) and in the last months of 2008 it had already moved in that direction, providing specific instructions to the Company departments involved and indicating the relative implementation measures, later adopted by both the Wholesale and commercial departments.

Telecom Italia informed AGCom and the Supervisory Board of these operating instructions in March 2009, providing, among other things, a copy of the screenshot of the guidelines presented on the business and residential customer care services portal, confirming that the process had been amended.

The Supervisory Board also continued to monitor and verify the fulfilment of this obligation in 2010 and 2011.

Finally, on the basis of Undertakings Group no. 14 (*Reduction of the number of disputes with users*) Telecom Italia is obliged to create a single and detailed system for managing settlement requests submitted by customers, adopting a similar model to that followed for the joint settlement model, developed in the the Framework Agreement signed with Consumer Associations, also for settlement procedures started at Co.Re.Coms and Chambers of Commerce. This obligation meets the need to rapidly and effectively resolve the high number of previous and current disputes that Telecom Italia has with its customers/consumers, above all - but not only - concerning unrequested and premium services, with the aim of reducing the number of requests pending at 31 December 2008 and the time required to handle and settle new dispute cases.

The theme of the creation of the new organizational model, which also applies the operating methods of the joint settlement model to the procedures started at the Co.Re.Coms and Chambers of Commerce, was subject to thorough testing carried out by the Supervisory Board from the very first months of its mandate. The Supervisory Board ascertained its complete implementation during 2009 and 2010, also checking the results obtained in achieving a more effective handling of the settlements in terms of reduced times required to handle and settle new dispute cases and clearing the backlog of disputes accumulated at 31 December 2008.

Specifically, Telecom Italia established an organizational structure within the Company that, operating in conjunction with the organizational structure of Customer Operations (residential and business), appears capable of ensuring the single and detailed management of the obligatory settlement attempt. The foregoing appears confirmed with particular reference to the conciliations carried out at the Co.Re.Coms located at regional level. The Supervisory Board, in fact, ascertained that the managerial responsibilities of handling the settlement procedures at the Co.Re.Coms had been assigned to new organizational structures, with proven expertise in the protection of consumer rights.

Likewise, these organizations, by using professional skills and personnel with a more commercial bias and geared towards careful management of the issues raised by the customers, appeared capable of ensuring a quick and effective solution to the poor services complained of and not resolved during the complaints phase. The organizational model, characterized by satellite offices spread over the territory, similarly to the model used for the joint settlement model, likewise appeared capable, through the use of unified and homogeneous operating procedures, of ensuring customer satisfaction also through shorter management times and the faster settlement of cases.

The introduction of a new and specific procedural phase, so-called “Pre-conciliation” proved to be valuable, which can be activated in advance of the hearing phase at the Co.Re.Coms, aimed at the quick and “friendly” settlement of the dispute and during which a representative of Telecom Italia is entitled to propose a negotiation solution that is truly satisfying for the customer and acceptable for the Company.

The new phase described above, together with the planned use of techniques of negotiation with the customer inspired by and geared towards its satisfaction, have helped to ensure more flexible handling of the procedure and, therefore, to ensure greater compliance with the guarantees for the customer.

The implementation measures of this obligation are in keeping with the operating methods for handling previous settlements and for processing the so-called “current” settlements, which made it possible, among others, to plan specific actions and interventions with reference to particularly important issues such as complaints relating to unrequested services. In this regard, Telecom Italia confirmed that the requests pending at 31/12/08 (so-called backlog) were processed at the Co.Re.Com.

Dispute settlement started at the Chambers of Commerce deserves a separate discussion, where the creation of the new organizational model and the application of logics that inspired the Undertakings concerning the single and detailed management of the obligatory settlement attempt, were completed in different times with respect to those at the Co.Re.Coms.

The Supervisory Board has repeatedly emphasized understanding the reasons behind Telecom Italia's choice to give priority to the handling and managing of settlement procedures at the Co.Re.Coms, in view of the institutional centrality of this mechanism and the extent of the dispute settlement examined by these Committees. In response to the Supervisory Board's suggestions, Telecom Italia provided the information required on the gradual introduction of the new methods for managing settlement requests filed at the Chambers of Commerce, located at provincial level, and effectively started monitoring and participating in the hearings of the Customer Operations structures.

The start of the operations above was also subject to specific disclosure to all the Chambers of Commerce, AGCom and the Unioncamere (Italian Union of Chambers of Commerce) similarly to what had been done before for the start of the same activity at the Co.Re.Coms. This information included the references of the internal resources assigned to monitor this activity as delegates to participate in the hearings on behalf of Telecom Italia. In light of the overall assessment of the actions carried out, represented by the periodic sending of progress reports on the activities, it can be stated that the adoption of the new model actually made it possible to gradually reduce the management times and achieve the faster settlement of cases (average waiting times for the

convening of the hearing from the date the client submitted the application to the Co.Re.Coms), in line with the provisions of AGCom Resolution no. 173/07/CONS and subsequent amendments. The monitoring activities also continued during 2010 and 2011 based on the final data that Telecom Italia is obliged to produce every six months, as well as the sample detection and investigation activities.

In conclusion, the Supervisory Board, in underlining the importance for the customer of the single and detailed management of the obligatory settlement attempt, particularly valued the creation of an organizational model within the Company that made it possible to apply the operating methods, typical of the joint settlement model, to manage disputes with customers before the Co.Re.Coms and the Chambers of Commerce. This procedural model of reference, now uniform at all the places mentioned, made it possible to provide customers with a valid tool capable of significantly reducing the times for dealing with individual cases and clearing outstanding disputes.

# 7 Relations with Institutions and Operators

During the three-year mandate, the Supervisory Board developed and consolidated dialogue and comparison with the main Italian, European and international institutional reference bodies, and with Operators in the electronic communications industry, in an atmosphere of full transparency, harmony and fair collaboration.

The presentation of the Supervisory Board's annual reports, provided for by its Regulations, organized on 23 February 2010, 11 March 2011 and 20 March 2012, called on the participation of the highest representatives of the Italian National Regulatory Authority for Communications, Telecom Italia and the alternative Operators, as well as authoritative representatives of the European Commission and the Equality of Access Board of British Telecom. With specific reference to the presentation of 11 March 2011, the speeches concentrated on the economic and technological evolution of the electronic communication networks and on the strategic value of the NGN networks, also highlighting the detailed and complex relevant regulatory scenario and debating the future application of the Undertakings also to the SMP access services through the next generation networks.

The Annual Reports, together with the Conference proceedings of the presentation, were published and made available on the Supervisory Board's website.

## 7.1 NATIONAL RELATIONS

### *Italian National Regulatory Authority for Communications (AGCom)*

The Supervisory Board paid great attention to consolidating dialogue with the Italian National Regulatory Authority for Communications, its Chairman, the Board and its framework, without whose support and valuable endorsement it would not have been able to achieve any significant results.

In compliance with and implementation of the principles established by Resolution no. 718/08/CONS, and in compliance with its own Regulations, the Supervisory Board provided the AGCom with an ongoing update on the activities carried out and the decisions made concerning monitoring the process of implementing Telecom Italia's various Undertakings. The update was carried out through the transmission of records and documents, which describe in detail all the initiatives introduced to ensure the monitoring of Telecom Italia's conduct in relation to the correct performance of the obligations assumed.

Moreover, dialogue was achieved through regular meetings with the competent AGCom offices and bodies. In this context, in the three-year period 2009-2011, the Supervisory Board was heard, during formal hearings, by the Board of AGCom on 23 September 2009, 10 February 2010 and 9 February 2011. In particular, on the latter occasion, the Chairman of the SB illustrated the actions taken and the main results achieved following the monitoring activities carried out, as well as the development of its future activities, recalling how the Supervisory Board performs its monitoring activities with actions and interventions aimed at transforming the objectives underlying Telecom Italia's obligations into tangible facts and behaviour, particularly those referring to the equality of treatment and the transparency of information that Telecom Italia must guarantee to its competitors, continuing to perform its duty with impartiality, encouraging Telecom Italia to improve its Company processes, listening to the needs and observations of alternative Operators and referring to the activities carried out by AGCom.

The Supervisory Board paid particular attention to maintaining its continuous dialogue also with AGCom's Undertakings Monitoring Group (GMI), examining Telecom Italia's compliance with the obligations. During several specially organised meetings, the principal activities of the Supervisory Board were illustrated relative to its monitoring of Telecom Italia compliance activities, with particular reference to the in-depth investigation into the causes of rejection of the Work Orders within the scope of the Delivery process for wholesale services. As a result of the meeting of 15 April 2011, held for the purpose of investigating some controversial issues on the complete implementation of some obligations, raised by the alternative Operators, the GMI, welcoming the willingness demonstrated by the representatives of the SB, invited the Supervisory Board to carry out some analyses and verification on the updating and rectifying of the databases made available by Telecom Italia, which were reflected in the Recommendations addressed to the Company and contained in Resolution no. 14/2011.

Lastly, the Supervisory Board met the Chairman of OTA Italia several times over the course of the three-year period 2009-2011, in order to reach a constructive comparison of their respective experience and activities, thereby promoting a regular exchange of information between the two bodies, with the chief intention of guaranteeing greater reciprocal visibility for ongoing and planned activities, also with a view to ascertaining any overlap between their interventions.

#### **Telecom Italia**

The Supervisory Board considers that the means and resources provided by Telecom Italia in the three-year period were as a whole suitable for the operating requirements.

Relations between the Supervisory Board and the Company departments of Telecom Italia were distinguished from the start by a spirit of open comparison and fair collaboration, which has allowed the Supervisory Board to not only express its role as control body, but also to suggest the introduction of improvements to the Company's current procedures, for the benefit of the markets and consumers.

It should be emphasized, in fact, how Telecom Italia, going beyond the formal fulfilment of the individual obligations, has achieved, on the recommendation of the Supervisory Board, several managerial and operational changes, in which the Open Access structures are still seriously committed also as a result of clear direction on the part of the Company's top management; this often involved amendments to processes that became necessary to achieve general objectives concerning non-discrimination and quality, benefiting not only competitive equality but also the welfare of consumers.

The Supervisory Board appreciated the collaboration shown by the designated Company departments of Telecom Italia, during their Board meetings, in the answers to the requests for information and in-depth examinations as well as in the context of the investigatory proceedings started on the complaints of the alternative Operators.

The continuity of relations with Telecom Italia, which has marked this three-year work period, and the transparency that has characterized them, has made it possible for the Supervisory Board to fully express not only its own role as a control body, but also that as a "facilitator", with a view to the improved and more efficient achieving of objectives concerning the equality of treatment, the transparency of information and improving the quality of the access network.



The meeting between the Chairman of the Supervisory Board and the Board of Directors of Telecom Italia held in Milan on 6 May 2010 is part of this. At this meeting, the Chairman illustrated to the Directors the state of implementation of the Undertakings by Telecom Italia, and the quantitative data on the activity of the Supervisory Board, as well as the main results it had achieved.

Also worth remembering is the hearing, on 13 September 2011, of the Chief Executive Officer of Telecom Italia, Mr. Marco Patuano, who, in expressing a positive assessment of the work carried out by the Supervisory Board and its contribution to the qualitative reassessment of the copper access network and the promotion of behaviour based on compliance with the principle of the equality of treatment, demonstrated the desire to ensure continuity with respect to what had been done by the Supervisory Board so far, even in the future context of next generation services and networks, and underlined the need not to waste the experiences and results achieved so far, taking as an example the activities and benefits for the entire reference market acquired so far with the data certification process in the context of the assessment of Key Performance Indicators (KPIs).

### **Alternative Operators**

The Supervisory Board met the alternative Operators several times both in the periodic in-depth meetings and in the investigative procedures, with the chief intention of giving a prompt response to the issues they raised. This provided important contributions and assessments on the process of implementing Telecom Italia's obligations. These meetings also made it possible to add to the information available to the Supervisory Board useful knowledge for continuing its monitoring activities, as well as further investigating and intervening on some of the most urgent, current and controversial issues from a technical and regulatory point of view.

In particular, in 2011, in addition to the regular exchanges of correspondence and two complaints submitted pursuant to SB Regulations, which determined the start of just as many investigatory proceedings, note the hearing of the Operator Tiscali which, at the Board meeting on 3 May 2011, made observations on the state of progress of the New Delivery Process and highlighted some critical issues on specific aspects, dealt with by the SB with specific recommendations and Resolutions. The hearing of the Operator Fastweb on 16 November 2011, on the other hand, resulted in the start of Complaint no. S02/11, relative to alleged discrimination contained in the contractual conditions established by Telecom Italia with the suppliers it uses for the activation of the services for alternative Operators and retail customers, which is given greater visibility in Chapter 5.

Finally, the initiative taken by WIND deserves attention, which with two subsequent communications to the SB, during 2011, intended to start some reflections in relation to the obligation for Telecom Italia to define a whole-sale offer for bitstream services on optic fibre and, more generally, the application of the obligations assumed by Telecom Italia in the context of Resolution no. 718/08/CONS to SMP access services through next generation networks. These points were put to the Operator, and in parallel AGCom was sent a request for the interpretation of point 9.4 of the text of the Undertakings, and contributed to the start of the debate on the solution of relevant application issues, such as those concerning their extension to next generation networks access services.

The Supervisory Board, more generally, shows its appreciation for the continuity that marks the dialogue with the alternative Operators and hopes, in this way, to have contributed to the consolidation of a positive pathway in the

implementation of the Undertakings and the development of a climate of trust in all the market Operators on the effectiveness of the current processes.

It also marks the opportunity to encourage a greater participation in the future on the part of the alternative Operators in monitoring the measures adopted to implement the Undertakings, identifying appropriate timescales and methods of involving them, in order to acquire useful information on the issues of greatest interest for the OLOs and that, therefore, are worth examining further.

Finally, again as part of the dialogue and comparison with the institutional bodies, note the hearing, on 13 September 2011, of the Delegate of the Chairman of Confindustria for Communications and Development of Broadband, Mr. Gabriele Galateri di Genola, who gave a positive assessment of the effectiveness of the Open Access model and Telecom Italia's relative obligations, particularly their governance which was shown to be just as effective, and which is proposed as a valid experience to be replicated also in the context of the development of the fibre network.

## **7.2 INTERNATIONAL RELATIONS**

From the start of its work, the Supervisory Board cultivated relations of mutual collaboration with the EU institutions, in particular with the relevant Departments of the European Commission, and regular comparison with the other similar supervisory bodies that operate in European and non-European countries. Particular attention was also paid to the activities and positions expressed by BEREC in relation to problems concerning the functional separation of the access network and the relative governance models.

With particular reference to relations with the European Commission, the Supervisory Board, in 2009 and 2010, sent presentations aimed at illustrating the competences of the Board itself and the activities carried out in the reference period, during the preparation, by the Commission, of the Annual Reports on the development and implementation of the regulatory framework of the European electronic communications markets.

Furthermore, during the presentation of the 2010 Annual Report, the manager of the "Procedures related to National Regulatory Measures" Unit of the Directorate- General of INFOSOC, highlighted, during its speech, the interest the European Commission showed in the Italian experience of the Undertakings and in the activity conducted by the Supervisory Board.

Representatives of the European Commission also participated in the meeting organized by the SB in Brussels on 3 December 2010, described below, which was attended by representatives of the other Supervisory Boards on the equality of access to the fixed network of the incumbent Operators working in foreign countries, with which the SB consolidated regular relationships of exchange and mutual updating, contributing to the development of consultation and comparison practices at international level. In the period 2009-2011, in fact, some bilateral meetings were held between the Supervisory Office and the British and Swedish Offices of the Equality of Access Board. Profitable relations for comparison and information exchange were also developed with the Independent Oversight Group of Telecom New Zealand.

With particular reference to the Equality of Access Board of British Telecom, note that in 2009 the Chairman of the Supervisory Board met some members of the Board and the Supervisory Office, while the Director of the Equality of Access Office spoke at the presentation of the 2010 Annual Report, recalling the profitable relationship based on information exchange and collaboration between the Italian and British Boards.

In addition, in 2010, other bilateral meetings took place with the Swedish Equality of Access Board and again with the British one, and in December of the same year an international meeting of Supervisory Boards was held in Brussels. That meeting, the objective of which was to investigate reciprocal knowledge in greater depth, was also attended by the Japanese operator NTT, interested in the initiative, given the debate that is ongoing in Japan about the possible functional separation of its fibre network. As mentioned, representatives of the European Commission and the Italian National Regulatory Authority for Communications (AGCom) also participated in the meeting.

During the meeting the intention of jointly investigating specific issues of interest emerged, and the Key Performance Indicators, common to all the functional separation models, were identified as one of the first topics for comparison. Therefore, in 2011, meetings and regular exchanges of information on the subject were held - in particular with the Swedish and British offices, as explained in more detail in chapter 4 of this Report.

It would be appropriate for the Supervisory Board to develop, during the course of its activity, new relationships of comparison with particular reference to situations in those countries that, with different routes and schedules and in diverse contexts, have addressed the subject of the equality of access to the electronic communication networks; comforted in this by the interest that the Italian experience of the Open Access model, the Undertakings and the Supervisory Board have raised in the EU institutions and the national regulatory Authorities, as well as in the Operators of countries that are facing similar issues relating to fixed network access.

In this regard, it is also worth remembering the meeting of 16 September 2011 between the Chairman of the Supervisory Board and the Executive Secretary of the Ministry of Communications of Brazil, Cesar Alvarez: it was part of the broader context of relational initiatives by the Supervisory Board aimed at promoting the Italian experience at National institutions and the relative regulatory bodies interested in the issue of equality of treatment, functional separation of the access network and the relative governance models.

8

Summing up  
of the three-year  
mandate

## AUDIT OF THE IMPLEMENTATION OF THE UNDERTAKINGS AND MONITORING OF RESULTS

Due to the individual cases to which they relate, the Undertakings require a variable time before their scope and efficacy can be fully appreciated.

The monitoring of their proper implementation, which is entrusted to the Supervisory Board, has shown the need to ensure continuity of the analysis activity of and assessment of the different implemented measures, considering that, for the most relevant ones, the expected benefits may not materialize within a pre-set time, but may require a longer period.

Compliance with the guarantees given to the alternative Operators by virtue of the Undertakings Proposal and, more generally, with equality of treatment, cardinal principle of the regulation, requires that the supervisory activity includes different areas, such as, for example, employee conduct, the IT system management criteria and the introduction of new technologies.

The fact that the Telecom Italia Undertakings constitute a long-term strategic direction is confirmed by the non-negligible circumstance that they will apply to the access services provided through the next generation networks, as established by the recent legislation adopted by the Italian National Regulatory Authority for Communications. In outlining a summary of their state of implementation, it is useful to distinguish between the many implementing measures planned, and to also consider the many and varied timescales for compliance established on a case by case basis.

On the basis of the provisions laid down in the Resolution no. 718/08/CONS, the Supervisory Board started a number of analyses aimed at verifying if the behaviours and the measures implemented by Telecom Italia duly satisfy the requirements of equality of access and equality of treatment.

Said analyses started from the audit of the documents produced by Telecom Italia, according to the pre-set time frame, and were then progressively enriched with information and data acquired through specific requests and/or inspections and checks carried out on-site.

The diagram below shows the main analysis and audit activities undertaken by the Supervisory Board during the 2009-2011 three-year period, with reference to the main Telecom Italia obligations; for further details and information, see Chapter 6 of this Report.

UNDERTAKINGS	MAIN ANALYSES AND AUDITS CARRIED OUT BY THE SUPERVISORY BOARD DURING THE 2009-2011 THREE-YEAR MANDATE
New delivery process for SMP Services, additional operational procedures for the management of Co-location services and new wholesale customer management systems	<ul style="list-style-type: none"> <li>analysis of the reasons behind the failure of alternative Operators (2010) and Telecom Italia Retail (2011) Work Orders in the Delivery process</li> <li>comparative analysis to audit internal-external Equality of Treatment in the management of Work Orders for the bitstream, LLU and WLR markets and for the corresponding services for Telecom Italia (2011) retail customers</li> <li>audit of the on-site launching of the New Delivery Process, through the analysis of the IT procedures developed for the management of Work Orders (2011)</li> <li>application of the New Delivery Process: checks at the Open Access field operating units to monitor the performance of the Work Orders “queuing” system in case of saturation of network resources (the so called “Single Queue”) (2011)</li> </ul>
New incentive system and Code of conduct for the employees of Open Access and the Wholesale Department	<ul style="list-style-type: none"> <li>audit of the correlation of the management incentive system with the content of the Undertakings, in compliance with the Recommendations put forward by the Supervisory Board on this topic (2009-2011)</li> <li>analysis of the effectiveness of the training courses on equality of treatment for the employees of Open Access and National Wholesale Services (2009-2011)</li> <li>monitoring of the correct implementation of the Code of Conduct, as integrated according to the instructions of the Supervisory Board (2009-2011)</li> <li>measurement of the degree of satisfaction of OLOs who purchase intermediate services from Telecom Italia (2009-2011)</li> <li>monitoring of the correct implementation of the procedure for OLO access to the data in possession of the Wholesale Department, for jurisdictional action and protection purposes (2010 and 2011)</li> </ul>
Performance Monitoring for SMP services and guarantees of transparency	<ul style="list-style-type: none"> <li>request for the certification of data published quarterly (2009)</li> <li>audit of the calculation formulas used for the preparation of reports (2011)</li> <li>sample testing (even with on-site visits at field operation units) of the elementary data which contribute to the determination of Key Performance Indicators (2011)</li> <li>audit of the indicators in the basket of Key Performance Indicators</li> </ul>
Guarantees of transparency of Technical Plans for the Quality of the Fixed Access Network	<ul style="list-style-type: none"> <li>audit of the Main Distribution Frames rectification work (2009 and 2010)</li> <li>audit of the plans for Network quality and efficacy of the actions implemented by Open Access to reduce failure rate (2009-2011)</li> <li>Recommendations for the quick revocation of the state of saturation and consequent reopening of about 500 exchanges for the sale of bitstream services (2010)</li> <li>analysis and Recommendations for the revision of the processes for planning the saturation of the DSLAM equipment (2010-2011)</li> <li>Recommendations for improving the quality of communicating to the market the dates of availability of the desaturated equipment (2011)</li> </ul>

UNDERTAKINGS	MAIN ANALYSES AND AUDITS CARRIED OUT BY THE SUPERVISORY BOARD DURING THE 2009-2011 THREE-YEAR MANDATE
Guarantees of transparency of the Technical Plans for the Development of the Fixed Access Network	<ul style="list-style-type: none"> <li>Recommendations for improving the quality of communication to the market about the plans for the development of the optical fibre network (2010)</li> </ul>
Reduction of the number of disputes with customers	<ul style="list-style-type: none"> <li>audit of the actual application of an organizational model similar to that of joint settlement, developed in agreement with the Consumer Associations, and the conciliation procedures carried out at the Co.Re.Com (the Regional Committees for Communications) and at the Chambers of Commerce (2009 and 2010)</li> <li>monitoring of the introduction into the system of bonuses and incentives for the management involved, of objectives related to the significant reduction of pending settlement applications at the date of approval of the Undertakings (2009-2011)</li> </ul>

In performing the supervisory activity during the three-year mandate, the Supervisory Board, in order to achieve the objectives of the Undertakings, deemed it appropriate to suggest to the Company the introduction of improvements to the current procedures under way, to the benefit of the market and, ultimately, consumers.

Among the main results obtained, it is first of all worth mentioning the amendments made by the Company, at the request of the Supervisory Board, to the process for communicating information on the closure and reopening of exchanges for the marketing of bitstream services, which have improved the quality of the network offer, making it more homogeneous throughout the whole country.

The Supervisory Board then completed the extension of the project to analyse so-called “KOs”, with an original in-depth study into the reasons for rejections of Work Orders received by alternative Operators that purchase wholesale services from Telecom Italia and by the Telecom Italia Retail department too. The study allowed an objective comparison between the causes of rejection for the wholesale as well as retail markets to be performed. Moreover, the validation of data generated by the performance Monitoring System for Telecom Italia SMP services was completed. Said certified data allowed an objective comparison of the treatment provided by Open Access to customers of Telecom Italia and those of alternative Operators, for the same Delivery and Assurance activities, to be performed.

Again in this context, once the information technology aspects of the system to calculate the certified indicators were completed at beginning of 2011, the Supervisory Board started the validation phase, which involved the Supervisory Office in sample tests, using the data verification protocol made available to the Supervisory Board by Telecom Italia, according to the standards validated by the Certifying Body (University of Catania). At the same time, the Supervisory Board completed the audit of the main KPIs and invited Telecom Italia to implement the most appropriate action to update the benchmarks, where necessary.

Moreover, the Supervisory Board contributed to the improvement of the understanding of the Code of Conduct by the employees of Open Access, and to increase its visibility, making the Company management incentives more coherent with the obligations undertaken by Telecom Italia, and the results of the monitoring of employee training

plans and OLO satisfaction more transparent, in the conviction that greater sharing of the Undertakings “culture” inside the Company can promote more widespread and aware achievement of their objectives.

The actions undertaken and the results obtained confirm the effectiveness of the interventions of the Supervisory Board, which has always tried to transform the objectives underlying Telecom Italia's obligations of equality of treatment, transparency of information and improvement of the quality of the access network into tangible behaviours and facts.

## **THE WORK METHOD OF THE SUPERVISORY BOARD**

During its first three years of activity, the Supervisory Board monitored the actual implementation of the Undertakings by Telecom Italia, in due time and in the proper manner, by adopting, as of 31 January 2012, 77 Resolutions and putting forward many Recommendations aimed at improving their efficacy, in terms of transparency, flexibility and non-discrimination.

Moreover, the Supervisory Board has strengthened its role in stimulating Telecom Italia to establish adequate improvement processes, to effectively pursue the aims of equality of access, transparency and maintenance of competitive conditions during the transition towards next generation networks, according to the provisions of AGCom's Resolution no. 718/08/CONS.

Particular attention was paid to those problems and topics that, in relation to the issues raised by the alternative Operators, appeared to be priorities, due to their technical and economic implications.

Similarly, the interventions of the Board were directed at contributing to resolve critical issues related to the processes affecting the commercial relations between Telecom Italia and its competitors in the supply of intermediate services, to the potential advantage of the market and consumers.

The Supervisory Board therefore made its contribution in the awareness that the sensitive issues dealt with would take on an increasingly central role, also in view of the evolution of the reference market and its legal and regulatory scenario.

The activities carried out by the Supervisory Board combined the formal monitoring of deadlines for the sending of information and documentation by Telecom Italia and the analysis of the relative content, which could be subject to further and useful investigations, if necessary.

The information and data received, contributed to the preparation of special periodic reports, that enabled monitoring the progress of the different activities which had been started (in this regard, refer to the 2010 and 2011 Annual Reports).



The complaints received from the alternative Operators and the consequent investigations, even when they showed formal compliance with the Undertakings, provided the opportunity to invite Telecom Italia to take the necessary action to improve their efficacy.

In this regard, the results obtained on the issue of saturation of the xDSL resources of about 500 exchanges of Telecom Italia, which had made it impossible for OLOs to sell bitstream services, seem particularly relevant: even though the Company has carried out the desaturation work due and already planned, the Supervisory Board has requested to also redefine the planning processes, so as to prevent the occurrence of similar situations in the future; at the same time, as pointed out before, the procedures for communicating to the market the difficult situation of systems close to saturation have been redefined, and greater reliability of the work completion predictions and reactivation of the service sales processes was recommended.

Moreover, with the above mentioned “KO” analysis project, the Supervisory Board contributed to improve understanding of the causes of rejection of the Delivery process that Telecom Italia will continue to use until completion of the transition to the New Delivery Process, by giving the Company precise instructions on the most urgent interventions required, so as to ensure end-customer satisfaction within the shortest time possible. The results of the study represent useful references for future comparisons to assess the benefits obtained from the introduction of the New Delivery Process, once it is up and running.

The monitoring of compliance with the principles of transparency of information and equality of treatment by Telecom Italia led the Supervisory Board to ask Telecom Italia to improve the quality of the content of the Code of Conduct and to verify, on-site, its actual application by the external companies which provide network services similar or complementary to those provided by Open Access.

Moreover, to guarantee, in the interest of OLOs, true and transparent comparisons of the treatment provided by Open Access to all types of customers (retail and OLOs) which use the access services, a system for the certification of data used for the calculation of KPIs and the relevant calculation formulas was set up, at the request of the Supervisory Board. Hence, an adequate level of reliability and transparency of Open Access indicators has been attained, thus ensuring their full substantial and procedural correctness.

More generally, it may be assumed that the formal and informal complaints of alternative Operators enabled the Supervisory Board to start a process of analysis and study of some complex cases, and to go far beyond the resolution of specific critical elements complained of and assessed within the context of the individual complaints. In hindsight, the activity carried out over the three-year period showed how the Supervisory Board plays a central role in the actual structure of the Undertakings and how the provision of continuous monitoring over time, on the proper implementation of the different measures, increases its scope, in terms of greater efficacy of their ability to influence the business processes.

This was made possible also thanks to the criteria behind the creation and operation of the Supervisory Board, as a body “independent” from Telecom Italia, and at the same time stably integrated into the business reality. This element proved to be essential since it facilitated dialogue and communication during the different audit activities and contributed to consolidate a collaborative attitude by Telecom Italia.

This is compounded by the quality of the human resources and the tools made available to the Supervisory Board, which allowed detailed and in-depth analysis to be carried out on complex issues and the work to be quickly completed, thus attaining concrete and incisive results. In this way it was possible to go into more depth than the regulatory Authorities could do, also thanks to the possibility of combining the audit activity with the proposal of specific management solutions.

The Supervisory Board has also paid attention to consolidating its dialogue with the main national, European and international institutional reference bodies, and with the Operators in the electronic communications industry, as described more fully in chapter 7. In this regard, it is worth mentioning that the Supervisory Board could not have attained any significant result without the valuable support of AGCom, its Chairman, the Board and its structure. The viewpoint of alternative Operators, duly analysed and assessed even when they were not presented in formal complaints, constituted a constant reference point, to understand the most delicate dynamics underlying the Telecom Italia obligations, since the Supervisory Board always tried to reconcile the various conflicting interests, facilitating dialogue and comparison between the parties.

For all the above mentioned reasons, the experience of the Supervisory Board and the work method which was successfully adopted during the first three years of activity deserve further development, given the new reference framework in which the Undertakings and the Supervisory Board are perfectly integrated in the Telecom Italia management process.

As a matter of fact, going far beyond the mere monitoring of the implementation of regulatory principles, the Supervisory Board played a proactive role in supporting Telecom Italia during the development of initiatives aimed at increasingly disseminating and consolidating, among the employees, a market approach based on the respect of equal treatment.

The activities undertaken by the Supervisory Board to spread the knowledge and the extent of Telecom Italia's obligations, as well as their underlying objectives, were numerous and complex; among such activities, it is worth noting the aforementioned interventions carried out on the management incentive system and the many initiatives on employee training.

The path followed by the Supervisory Board leaves a lasting contribution which goes beyond overcoming the individual problems addressed until today, and also involves business sectors which, although crucial to achieving results, were not directly involved in the management and implementation of the measures.

## **THE ACTIVITY OF THE SUPERVISORY BOARD: MOTIVATIONS FOR THE COMPANY AND BENEFITS FOR THE MARKET**

The Supervisory Board dealt with issues and critical elements related to the implementation of the Undertakings though, at times, not expressly regulated by them.

Indeed, very often, the analysis and audit activities carried out were driven by factors not foreseeable at the time of their approval, and due, on the other hand, to pragmatic priorities and market needs, which the stakeholders operating in that field deemed it appropriate to bring to the attention of the Supervisory Board.

Therefore, the Resolutions and Recommendations of the Supervisory Board often had direct and immediate effect on the reference markets, thus contributing to solve complex situations which could potentially compromise competitive dynamics.

Within this context, during the three-year period, the Supervisory Board has carried out, as previously mentioned, many interventions on fixed access network quality and development issues. A clear example concerns the saturation of DSLAMs, registered during 2010, where the Supervisory Board obtained from Telecom Italia implementation of corrective actions to improve the planning process for interventions on the network, in terms of greater transparency and clarity of information provided to the market.

Many Recommendations have been made, in that regard, to Telecom Italia, to guarantee the necessary and preventive transparency of information provided to the OLOs, and safeguard their capacity to schedule their network planning and retail product marketing strategies sufficiently in advance.

In order to guarantee said transparency of information, a pre-warning mechanism to identify exchanges close to saturation has been introduced, at the request of the Supervisory Board. Said pre-warning status report, called an “amber light”, is communicated to the alternative Operators every month, and is also shown on the Telecom Italia Wholesale portal, and indicates that the exchange in question could become “saturated”, within an estimated period of three months if no action is taken.

Moreover, the 2010 Annual Technical Plan for Fixed Access Network Quality was revised on the instructions of the Supervisory Board: the original version of this plan envisaged a total of 381 desaturation interventions for asymmetrical bitstream services. The review of the technical plans resulted in a considerable increase in the number of desaturation interventions scheduled for 2010; this led to a 67% decrease in the number of exchanges closed to marketing in 2011.

Finally, again with regards monitoring the implementation of the exchange saturation pre-warning signalling system, the process to manage communications with the alternative Operators was also reviewed, in order to mitigate the excessively frequent rescheduling of dates for reopening exchanges to the marketing of bitstream services and improve the reliability of the expected dates for desaturation of exchanges, so as to guarantee greater stability of the information given to the market.

Moreover, with reference to the above mentioned "KO" analysis project, the study carried out by the Supervisory Board helped clarify the underlying dynamics of Telecom Italia's procedures for changing Operator, mitigating some of the divergences that exist between the market Operators involved.

Among the new tools offered to the market in terms of greater transparency of information and better guarantees on the compliance with the principle of internal and external equality, it is worth mentioning the procedure for OLO access to the data in possession of Telecom Italia's Wholesale Department, for jurisdictional action and protection purposes, prepared by the Company and incorporating the comments of the Supervisory Board, particularly those referring to the timescale and the costs applied. During the month of October 2011, the fact that Operator Fastweb availed itself of this procedure highlighted some aspects which eventually led to start investigations on the Complaint "S02/11- Fastweb/Assessment of the clauses of contracts signed between Telecom Italia and contractors - respect of the principle of equality of treatment pursuant to Undertakings Group no. 2", details of which can be found in the relevant paragraph of Chapter 5 of this Report.

Other benefits for the market will be properly appreciated only over coming months, because of the complexity of some issues examined, as pointed out above, and the consequences that the new management features introduced will have on the production processes of the companies involved. With reference, for example, to the review of the Delivery process, the assessment of the real advantages can be fully made only once most major Operators have implemented the new work procedures which, most probably, will occur during the first half of 2012. Similarly, the benefits for the market, in terms of actual respect of the principle of equality of treatment, brought about by the new Regulatory Accounting and by the introduction of *transfer charges*, may become visible only after full implementation, during 2012, of the provisions of AGCom's Resolution no. 678/11/CONS of 12 December 2011.

## **CONSOLIDATION AND DEVELOPMENT OF TOOLS TO GUARANTEE EQUALITY OF ACCESS AND NETWORK EVOLUTION**

The Supervisory Board welcomed the expressions of interest and the acknowledgements made on the actions undertaken and on the results obtained, by the Italian and European institutional reference bodies, as well as by the stakeholders of the reference market.

With Resolution no. 731/09/CONS, AGCom, in expressing its positive view towards the whole structure of the Undertakings, transformed many of them, including the one which ordered the establishment of the Supervisory Board, into regulatory obligations (the so called "remedies"), thus confirming the validity of the measures adopted and the utility of the activities of the Board itself.

At EU level, the European Commission, in the aforementioned Recommendation on next generation networks, recognized that the "Open Access model" guarantees conditions for internal and external equivalence, benefiting the market, thanks to the adoption of forms of functional separation.

Even the *Board of European Regulators for Electronic Communications* (BEREC), in a public consultation started in 2010 on the issue of functional separation, gives a full description of the Italian experience, as a useful example to take into account in view of the implementation of articles 13a and 13b of the "Access Directive".

Telecom Italia itself has indeed, on several occasions, firmly supported the role played by the Supervisory Board: in its contribution to the above mentioned consultation by BEREC, the Company in fact emphasized the usefulness of an independent Board, while during the consultation of the Commission in 2011 on the application of non-discrimination obligations, contained in the new "Access Directive", Telecom Italia defined the Supervisory Board as the cornerstone of the Italian model of functional separation (*"the Italian governance model of the operational separation is based (...) on the Supervisory Board"*).

After all, it is precisely the consultation of the Commission that helped to revive the debate on the subject of network separation and on the most appropriate access control models. After the Italian experience, as well as the ones already mentioned of Great Britain, Sweden and New Zealand, other countries are seriously considering the opportunity to adopt forms of network separation and the option of entrusting control to a Board similar to the Italian Supervisory Board.

It is important to place the Undertakings in their proper time frame, and to notice how they do not represent a contingency measure, but are the result of a conscious, long term and comprehensive strategic orientation.

The reasons that led to the establishment of the Supervisory Board are still valid: indeed, the Open Access activity has not stopped, nor has the need to monitor its activity on the actual respect of equality of treatment diminished; even in Great Britain the Equality of Access Board still plays, after many years, a key role with regards to the monitoring of the Undertakings and of Openreach activities.

Finally, it is important to emphasize that the principles laid down to guarantee equality of access and improvement of network quality require ongoing monitoring and auditing of the measures that will be adopted to implement said principles even in the near future.

In this regards, Chapter 9 below outlines the strategic lines of intervention and prospects for development on which the future activities of the Supervisory Board will evolve.

The diagram below summarizes the 77 Resolutions made by the Supervisory Board in the period 1 April 2009 - 31 January 2012, grouped by subject.

## **SUPERVISORY BOARD RESOLUTIONS**

**1 April 2009 - 31 January 2012**

GROUPS		
Subject	Resolution No	Date
<b>DEFINITION OF THE CRITERIA FOR SENDING AND MANAGING COMPLAINTS</b>		
Preparation of the form for sending complaints	01/09	09 April 2009
General criteria for dealing with complaints	02/09	09 April 2009
<b>ORGANIZATION OF THE SUPERVISORY BOARD</b>		
Regulations concerning the functioning of the supervisory board and the supervisory office	09/09	06 July 2009
<b>PLAN OF ACTIVITIES - 2010</b>		
Plan of activities - 2010	01/10	02 January 2010
Plan of activities - 2011	01/11	18 January 2011
<b>QUARTERLY AND ANNUAL REPORTS</b>		
Q2 2009 Quarterly Report	12/09	14 July 2009
Q3 2009 Quarterly Report	20/09	20 October 2009
Q4 2009 Quarterly Report	02/10	28 January 2010
2010 Annual Report	03/10	22 February 2010
Q1 2010 Quarterly Report	08/10	30 April 2010
Q2 2010 Quarterly Report	15/10	11 August 2010
Q3 2010 Quarterly Report	18/10	20 October 2010
Q4 2010 Quarterly Report	03/11	08 February 2011
2011 Annual Report	09/11	10 March 2011
Q1 2011 Quarterly Report	11/11	03 May 2011
Q2 2011 Quarterly Report	18/11	31 August 2011
Q3 2011 Quarterly Report	22/11	16 November 2011
Q4 2011 Quarterly Report	01/12	18 January 2012

GROUPS		
Subject	Resolution No	Date
<b>BUDGET</b>		
Plan for sb budget use for 2009	10/09	06 July 2009
Plan for sb budget use for 2010	23/09	11 November 2009
Plan for sb budget use for 2011	24/10	22 December 2010
Plan for sb budget use for 2012	24/11	14 December 2011
<b>DATA ACCESS REQUESTS – ANTITRUST PROCEDURES</b>		
Data request Antitrust procedure a428 – Undertakings Groups nos. 1 and 2	21/10	23 November 2010
Data request Antitrust procedure a428 – Undertakings Groups no 2	23/10	15 December 2010
<b>PRIVACY</b>		
Compliance with privacy regulations	15/09	27 August 2009
<b>UNDERTAKINGS GROUP NO. 1 - NEW DELIVERY PROCESS, CRM, KOS ANALYSIS</b>		
Recommendations about Undertakings Group no. 1	05/09	03 June 2009
Preliminary investigation S01/2009	08/09	22 June 2009
Setting of a new time-limit for investigation S01/2009	11/09	06 July 2009
Preliminary statement S01/2009	14/09	29 July 2009
Closure of procedure S01/2009	17/09	23 September 2009
Request for information on Undertakings Group no. 1	05/10	19 March 2010
Wholesale KOs Analysis - Methodological note	14/10	20 July 2010
Wholesale kos analysis - Recommendations - Undertakings Group no. 1	22/10	15 December 2010
Extension of KOs analysis project	05/11	08 February 2011
Progress of New Delivery Process	08/11	08 February 2011
Recommendations about Undertakings Group no. 1	14/11	12 May 2011
Request for information on Undertakings Group no. 1	15/11	05 July 2011
Checking of the information system for managing the “single queue”	25/11	14 December 2011
Retail kos analysis - Equality of treatment - Undertakings group NO. 1	26/11	14 December 2011

GROUPS		
Subject	Resolution No	Date
<b>UNDERTAKINGS GROUP NO.2 - CODE OF CONDUCT, MBO, PROFESSIONAL TRAINING</b>		
RECOMMENDATIONS ABOUT UNDERTAKINGS GROUP NO. 2	04/09	14 May 2009
Preliminary investigation S02/2009	13/09	22 July 2009
Setting of a new time-limit for investigation S02/2009	16/09	27 August 2009
Setting of a new time-limit for investigation S02/2009	18/09	01 October 2009
Preliminary statement S02/2009	19/09	05 October 2009
Closure of procedure S02/2009	21/09	28 October 2009
Compliance to resolution no. 21 / 09	04/10	17 March 2010
Progress of undertakings group no. 2	17/10	28 September 2010
Request for information on compliance with equality of treatment	23/11	02 December 2011
Start of investigation S02/2011	27/11	19 December 2011
Extension of terms of investigation S02/2009	02/12	18 January 2012
<b>UNDERTAKINGS GROUP NO.3 - ESTABLISHMENT OF A MONITORING SYSTEM FOR PERFORMANCE INDICATORS (KPIs)</b>		
Recommendations about undertakings group no. 3	06/09	03 June 2009
Start of certification system supervisory activities	04/11	08 February 2011
<b>UNDERTAKINGS GROUP NO. 4 - TRANSPARENCY OF THE MONITORING SYSTEM FOR PERFORMANCE INDICATORS</b>		
Start of indicators monitoring system supervisory activities	16/11	05 July 2011
Extension of indicators monitoring system supervisory activities	21/11	12 October 2011
<b>UNDERTAKINGS GROUP NO. 5 - QUALITY OF THE FIXED ACCESS NETWORK</b>		
Recommendations about Undertakings Group no. 5	07/09	03 June 2009
Request for information about Undertakings Group no. 5	22/09	11 November 2009
Request for information on Undertakings Group no. 5	06/10	19 March 2010
Preliminary investigation S01/2010	07/10	09 April 2010
Extension of terms of investigation S01/2010	09/10	19 May 2010
Preliminary statement S01/2010	10/10	19 May 2010
End of investigation S01/2010	12/10	16 June 2010
Closure of S01/2010 procedure	16/10	11 August 2010
Technical report on the progress of the "amber light" pre-warning system	19/10	23 November 2010
Progress of Undertakings Group no. 5	20/10	23 November 2010
Start of verification activities S01/2011	02/11	08 February 2011



GROUPS		
Subject	Resolution No	Date
<b>UNDERTAKINGS GROUP NO. 5 - QUALITY OF THE FIXED ACCESS NETWORK</b>		
Request for information on exchange saturation level	06/11	08 February 2011
Request for information on the “amber light” pre-warning system	07/11	08 February 2011
Setting of a new time-limit for investigation S01/2011	10/11	10 March 2011
Recommendations about the “amber light” pre-warning system	12/11	03 May 2011
Setting of a new deadline for investigation S01/2011	13/11	03 May 2011
Setting of a new deadline for investigation S01/2011	17/11	19 July 2011
Report on the management of information on desaturated exchanges reopening dates	19/11	13 September 2011
Closure of complaint S01/2011	20/11	13 September 2011
<b>UNDERTAKINGS GROUP NO. 6 - DEVELOPMENT OF THE FIXED ACCESS NETWORK</b>		
Preliminary investigation S02/2010	11/10	03 June 2010
Closure of complaint S02/2010	13/10	07 July 2010
<b>UNDERTAKINGS GROUP NO. 9 - NEXT GENERATION ACCESS NETWORKS</b>		
Start of the analysis of application of the undertakings to next generation services and networks	03/12	18 January 2012
<b>UNDERTAKINGS GROUP NO. 14 - REDUCTION OF THE NUMBER OF DISPUTES WITH USERS</b>		
Recommendations about undertakings group no. 14	03/09	14 May 2009

# 9 | Lines of intervention and prospects for development

## INTRODUCTION

The information reports, updates, technical programmes and plans for the development and quality of the fixed access network, sent to the Supervisory Board by Telecom Italia in accordance with the provisions of the AGCom Resolution no. 718/08/CONS, have guided the initial interventions of the Supervisory Board, which started work on 1 April 2009.

Over time, progress in these plans has been accompanied by a series of regular and specific periodic reports, expressly requested by the Supervisory Board, which have broadened and qualitatively improved the Board's knowledge of the activities proposed by the Company to fulfil its obligations.

These initiatives to develop in-depth knowledge constituted the basis of the first interventions, through the formulation of Recommendations and invitations for the Company to adopt solutions apt to resolve the technical, economic and regulatory issues raised by the alternative Operators over time; issues which significantly impact on the principles of equality of treatment and transparency of information, and hence risk limiting free competition and hindering further opening up of the reference market.

In this context, Telecom Italia has, at the instigation of the Supervisory Board, made many changes to its management and operations, over and above its formal compliance with the individual obligations; these changes were needed to achieve the objectives for equality of treatment, non-discrimination and quality, benefiting not only the competition, but also the final user.

As described in greater detail in Chapter 8, this has allowed the Supervisory Board to express not only its role as control body, but also its role as "facilitator", to the full, with a view to the better and more efficacious achievement of the objectives formalised in the Undertakings themselves.

The future interventions of the Supervisory Board, necessarily focused on the new priorities emerging from the changes in the technological and regulatory landscape of the electronic communications market, can take this starting point as a useful reference, and guarantee the continuity of the way in which it has carried out its supervisory actions to date.

In this way the experience accrued can guide the future actions of the Supervisory Board, and safeguard the principles of equality of treatment and transparency of information for Operators that use the Telecom Italia access network, also and above all in the evolving context of the regulatory framework applicable to the new models for the development of optic fibre networks.

The Italian electronic communications market will, in fact, be characterised in the short and medium term by a significant technological evolution which will imply the progressive replacement of the copper network by a new optic fibre network.

So there will be great challenges in the immediate future: challenges that will see the Italian National Regulatory Authority for Communications engaged in ensuring that the recently approved innovative regulatory reference framework is respected and applied, and industry Operators and the Government engaged in developing investment and marketing strategies designed to stimulate the creation of demand for new services.

In this context, the network development control mechanisms will be able to develop in tandem with the progress of the works to develop the infrastructure.

Here the Supervisory Board would emphasise the importance of being able to rely on the precious support of the Italian National Regulatory Authority for Communications in executing its institutional activities: it is to be hoped that in future the Board will develop with the NRA a further significant and harmonised coordination of its core activities, namely monitoring and supervising the behaviours and measures adopted by Telecom Italia, as well as directly stimulating the Company.

Equally, the Supervisory Board believes it is opportune to promote greater participation by the alternative Operators in the phase of monitoring the measures implementing Telecom Italia obligations, identifying suitable timings and appropriate arrangement for their involvement, with the aim of obtaining regular information on the subjects of greatest interest to the OLOs, and which hence merit examination in greater depth, as part of the respect for the principles expressed by the Undertakings.

## **CONTINUATION AND EXTENSION OF ONGOING SUPERVISORY ACTIVITIES**

### ***Network saturation and deterioration for bitstream services***

The action of the Supervisory Board during its three year mandate has been guided by a clear rationale of auditing the quality of the services supplied by Open Access. In this context, the Telecom Italia obligations have been supplemented by a sequence of increasingly detailed requests for action from the Board, which over time have enabled a set of indicators, that can provide a clear and transparent overall view of the actions carried out by Open Access, to be constructed, focused on generally improving the quality of the access network.

The Supervisory Board has developed a specific quarterly report on the status of the network, which has enabled the various action plans presented as part of the official documentation specified in Resolution no. 718/08/CONS to be considered in depth.

The action of the Supervisory Board then developed through these reports: it asked Telecom Italia to review some work arrangements, to guarantee more active competition in services.

As better illustrated in the preceding chapter, some important innovations have been introduced by the Company at the request of the Supervisory Board: they have involved the redesign of the process for planning and scheduling desaturation work on the xDSL systems, review of the process used to manage Master Trouble Tickets regarding deteriorations in the performances of the xDSL services and the updating of the arrangements for communicating to the market the dates the desaturated systems will be reopened, to allow the alternative Operators to be able to better organise their broadband service marketing campaigns.

The experience acquired to date suggests that the Supervisory Board should create a permanent observatory

of the quality of services supplied on the Telecom Italia broadband network, particularly regarding the levels of performance achieved in the different geographical areas of the country.

The topics dealt with in the report sent by the Company to the Supervisory Board could in future also focus on auditing the reduction in the digital divide (direct and return) and the census of types of services offered in the various exchange areas (including an update on the type and speed offered by the various DSLAMs).

Other quality-related subjects could usefully find space in these reports, including:

1. the level of saturation of plants;
2. the quality of the access network per reference area;
3. the number and management of deteriorations;
4. the types of services available per geographical area (bitstream, LLU).

For example, in this context, it is evident that there is a need to fully comprehend the causes behind the deteriorations in network service quality, so as to assess the adequacy of the action plans put in place by Telecom Italia to manage their solution.

It should also be borne in mind that these subjects will become even more important in the next three years, because of the imminent start of the process of technological migration, involving the gradual abandonment of the ATM platform in favour of Ethernet/IP. It will therefore be important to audit how this migration process, which is indispensable due to the obsolescence of ATM technology and the consequent impossibility of procuring components for development or replacement, will contribute to change the competitive context of the market.

The Supervisory Board may, therefore, intervene, to raise Telecom Italia's awareness on this topic, so as to simplify the migration process and at the same time identify solutions that can alleviate OLOs difficulties consequent on these technological updating activities, allowing them to adapt their network platforms, maximising the efficiency of the geographical areas in which competition is active and reducing the overall costs of these activities for all market players.

### **New Delivery Process (NDP)**

Telecom Italia has committed to reorganise its Delivery process for equipment and services provided to alternative Operators. The creation of IT procedures to manage orders, and of some work mechanisms that can guarantee greater internal-external equality of treatment were initiatives of particular note during the three year mandate of the Supervisory Board.

Activation of the so called "Single Queue" order management system, designed to enable efficient booking of saturated network elements, is an important example of market opening, accompanied by *contact management* tools that are useful to the alternative Operators for the management of faults that might emerge during plant implementations or service activation.

The monitoring activities of the Supervisory Board took the form of detailed market analyses that involved Work Orders issued over the three year period from 2009 to 2011, so as to understand the reactions of the system as the new IT procedures were gradually started up.

During 2011 these analyses were accompanied by audits of the operations of the “Single Queue” mechanism mentioned above which, while they were able to ascertain the correct operation of the IT procedures, also suggest that their rigorous application over then next few years should be subject to in-depth analyses.

One important consideration related to the start of the New Delivery Process is the gradual pace at which alternative Operators have joined it, over the period. Precisely because of the time it will take for the new system to be up to speed, it will be important to check the improvements in its overall efficiency in the future.

The arrangements for managing orders are in fact notably affected by the changes made to the Delivery process: assessing the efficacy of the new arrangements for the interface between OLO and Wholesale systems, the number and type of refusals, and the rate at which Work Orders are activated are some of the sensitive parameters which it will be important to monitor over time.

Another relevant topic is the question of the quality of the network and toponymic databases, essential to the optimisation of the Delivery process.

This information has proved to be vitally important for the issue of Work Orders, and data quality is the essential parameter to reduce Work Order refusals as much as possible. Some technical comparison workshops are currently under way at the AgCOM Undertakings Monitoring Unit, with the involvement of the alternative Operators and Telecom Italia; all actions on the database will produce changes to the process, and it will be interesting to assess these.

#### **Assessment of the equality of treatment KPIs**

During 2011 Telecom Italia, the OLOs and the AgCOM Undertakings monitoring group (Gruppo di Monitoraggio Impegni, GMI) started a common appraisal, aimed at simplifying the basket of performance indicators required by the Undertakings.

After the work is complete, scheduled for 2012, new Key Performance Indicators will be defined to replace those in the current basket.

The Supervisory Board believes that it might be advisable to proceed to request certification of these new indicators, so as to audit the correctness of the data and calculation processes, in the same way as the KPIs currently in operation were audited.

#### **Quality and “failure-proneness” of the copper access network**

Ensuring an adequate quality level for the Telecom Italia copper access network is the indispensable prerequisite to guarantee a satisfactory level of quality for the services supplied to OLO and retail customers.

Network failure, directly connected to service availability, represents a parameter that is indicative of the quality status of the access infrastructure, and may also be considered to assess the efficacy of ordinary and extraordinary maintenance actions undertaken by the provider.

So it will be important to extend the monitoring action of the Supervisory Board, paying more attention to the pressurisation systems, which are currently used in Open Access to maintain the integrity of signal transmission on copper cables, and to detect and locate the faults that can occur on these cables.

Pressurisation is a technique which involves injecting dry air inside the cable (in normal conditions the cable is leak proof) at a pressure higher than atmospheric pressure. This system, which may only be applied to the primary section of the copper network, prevents the ingress of external humidity inside the cable, if the sheath should break (protection action) and at the same time allow the breakage to be detected and located, thanks to the variations in pressure values it causes along the cable. Monitoring the pressurisation status of the cable network may, therefore, provide further elements of information that can indicate the quality status of the primary access network.

## DEVELOPMENTS OF SUPERVISORY BOARD ACTIVITIES

The subject of the creation and diffusion of ultra broadband networks using optic fibre is a highly topical one that assumes great importance for the future features of the electronic communications market in Italy.

The principal outstanding issue here is how to guarantee joint access to the infrastructure of a network almost all of which has not been built, and which is at present characterised by great architectural uncertainty, which may reduce competitive margins, also risking the development of new monopolies.

The arrangements for implementing the reference regulatory framework, fleshed out by the recent Resolution no. 1/12/CONS, which regulated access services to next generation network, which will be supervised by the Italian National Regulatory Authority for Communications, will be crucial to ensure that the country is able to find the right balance between value for money installation the new infrastructure and protection of the elements that underpin a free and truly competitive market.

The various stakeholders involved have proposed many possible solutions in recent months, although at present no common approach appears to have been identified that incorporates all those aspects needed to guarantee the right balance between the needs of investors and the interests of users.

The Supervisory Board is ready to make its own contribution to define reference guidelines that can adapt the Undertakings system, originally designed primarily for the copper network, to the specific features of the optic fibre access network, particularly regarding:

1. transparency of information and data: the Supervisory Board's contribution to defining the requisites of the information that Telecom Italia must make available to the market;
2. auditing of the Delivery and Assurance processes for the retail and wholesale segments from the perspective of equality of access;

3. monitoring KPIs performances, extending their sphere of application;
4. monitoring the new Regulatory Accounting and *transfer charges* with specific in-depth attention to the so-called *bottom-up* model;
5. auditing the Code of Conduct for the personnel of Open Access and the Wholesale function.

As stated, the new and more recent regulations approved by the AGCom with Resolution no. 1/12/CONS, has supplemented the regulatory reference framework applicable to next generation networks and services, completing the designation of Telecom Italia as SMP operator in these markets and imposing the corresponding regulatory obligations, accompanied by specific measures to implement these obligations.

This regulatory framework is destined to also produce effects on the current structure of the Undertakings, since the subjects dealt with in the provision cited are closely linked to their sphere of application.

In these respects, and in particular regarding the relationship between the content of the point 9.4 of the Undertakings and the impact of the aforementioned regulatory framework, the Supervisory Board, with Resolution no. 3/2012 of 18 January 2012, started to analyse and assess the application of the Undertakings to intermediate access services supplied on next generation networks, the results of which will represent the starting point for the subsequent supervisory activities.

## CONCLUSIONS

The Supervisory Board, during its three year mandate, has monitored the actual formal and substantial implementation of the provisions contained in the Undertakings submitted by Telecom Italia and approved by AGCom with Resolution no. 718/08/CONS.

The Supervisory Board has also consolidated its role as stimulus to the Company, in order to effectively pursue the objectives of equality of treatment and improvement in the quality of the access network.

In the light of its experience to date, the Supervisory Board believes that focusing most of its institutional activity on identifying concrete solutions to recommend to Telecom Italia in order to better achieve the objectives that underpin the Undertakings, has proved to be a correct and balanced choice.

This is substantiated by the the results achieved so far, despite some limitations of its own action, both in terms of adaptation of Company processes and in terms of improvements in the network services supplied to the market.

The Supervisory Board has in this way tried to consolidated a “broader” execution of the original system envisaged in the Undertakings, and in expressing its opinions and making recommendations to the Company on these matters, it has sought to contribute to strengthen the efficacy of the Italian access network separation model and of its governance.



This model, as illustrated in greater detail earlier in this report, has more to offer than the implementing measures adopted to date by Telecom Italia under the control of the Supervisory Board; the deployment of its beneficial effects on the dynamics of competition, in terms of transparency of information and equality of treatment, must play a part in the new challenges that the electronic communications market will have to face, particularly regarding the rearrangement of the regulatory panorama and the definition of models for the development of optic fibre networks.

From this perspective, the institutional roles and responsibilities of the network governance systems must evolve in tandem with the necessary and opportune review of Telecom Italia's obligations, to adapt to the new technological developments which will impact on the Italian access infrastructure in the next few years.

# 10 | Glossary

Glossary			
ADSL	Asymmetric Digital Subscriber Line	ODN	Optical Distribution Network
AGCM	Autorità Garante della Concorrenza e del Mercato (Italian Competition Authority)	Ofcom	Office of Communications
AGCom	Autorità per le Garanzie nelle Comunicazioni (Italian National Regulatory Authority for Communications)	OLO	Other Licensed Operators
AL	Active Line	OLT	Optical Line Termination
AOA	Access Operations Area	ONT	Optical Network Termination
BRAS	Broadband Remote Access Server	OTA	Office of the Telecommunications Adjudicator
BT	British Telecom	OTB	Optical Termination Box
BTP	Building Termination Point	PON	Passive Optical Network
Co.Re.Com.	Comitati Regionali per le Comunicazioni (Regional Committees for Communications)	POTS	Plain Old Telephone Service
CNCU	Consiglio Nazionale dei Consumatori e degli Utenti (National Council of Consumers and Users)	PSTN	Public Switched Telephone Network
CPS	Carrier Pre-Selection	PVC	Permanent Virtual Channel
CRM	Customer Relationship Management	RO	Reference Offer
CS	Carrier Selection	SA	Shared Access
DU	Dwelling Unit	SB	Supervisory Board
DVD	Desired Visit Date	S/HDSL	Single-Pair High-Speed Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer	SLA	Service Level Agreement
EAB	Equality of Access Board	SLU	Sub-Loop Unbundling
EAO	Equality of Access Office	SMP	Significant Market Power
EDD	Expected Delivery Date	PU	Property Unit
Eol	Equivalence of Input	VDSL	Very High Digital Subscriber Line
EoO	Equivalence of Output	VULA	Virtual Unbundled Local Access
FRAR	Frame Relay Access Remotizer	WDM	Wavelength Division Multiplexer
FTTB	Fibre To The Building	WLR	Wholesale Line Rental
FTTCab	Fibre To The Cabinet		
FTTH	Fibre To The Home		
FTTN	Fibre To The Node		
FTTP	Fibre To The Premises		
GPON	Gigabit PON		
GTN	General Telephone Network		
IOG	Independent Oversight Group		
IPTV	Internet Protocol Television		
ISDN	Integrated Services Digital Network		
KPI	Key Performance Indicator		
KPO	Key Performance Objective		
LLU	Local Loop Unbundling		
MBO	Management By Objectives		
MTT	Master Trouble Ticket		
NAL	Non Active Line		
NDP	New Delivery Process		
NGAN	Next Generation Access Network		
NGN	Next Generation Network		
NWS	National Wholesale Services		
OA	Open Access		
ODF	Optical Distribution Frame		

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