

Workshop on "Models of Network Separation"

London, 6th March 2009

Equivalence and Regulatory Affairs

Market Analyses, Regulatory Economics & International Regulation
Giovanni Battista Amendola



Equivalence and Regulatory Affairs

MISSION

Managing the regulatory process to increase the company's value by affecting market changes in the mid-long term

VISION

Leading the change, as an influential team and a strategic reference for the company in the development of its business and in consumer protection; establishing a loyal dialogue with the other market players, Authorities and Institutions for the achievement of a simple, efficient and symmetric regulation.



Outline

- **▶** Standard remedies vs. vertical separation remedies
- ► The Italian "Operational Separation" model introduced in 2002
- ► Consolidating the "Operational Separation" model: the creation of Open Access
- Completing the "Operational Separation" model: objectives and structure of Tl's undertakings
- Concluding Remarks

Which is the market failure to be addressed? The potential competition problems associated with vertical integration

- When a vertically integrated firm owns bottleneck facilities in the upstream market, regulators usually express concerns about the possibility for "vertical leveraging" to occur. The most common competitive problems include:
 - refusing to provide wholesale access to the bottleneck service;
 - pricing competitors out of the market by implementing a margin squeeze;
 - providing preferential treatment to the incumbent's retail unit in respect of non-price terms,
 for example by providing superior service quality levels;
 - misusing confidential wholesale customer information to benefit the retail unit's marketing activities.
- The EU regulatory framework provides the necessary instruments the so-called standard remedies to address the potential competition problems stemming from the vertical integration of incumbent operators.



The role of vertical separation remedies

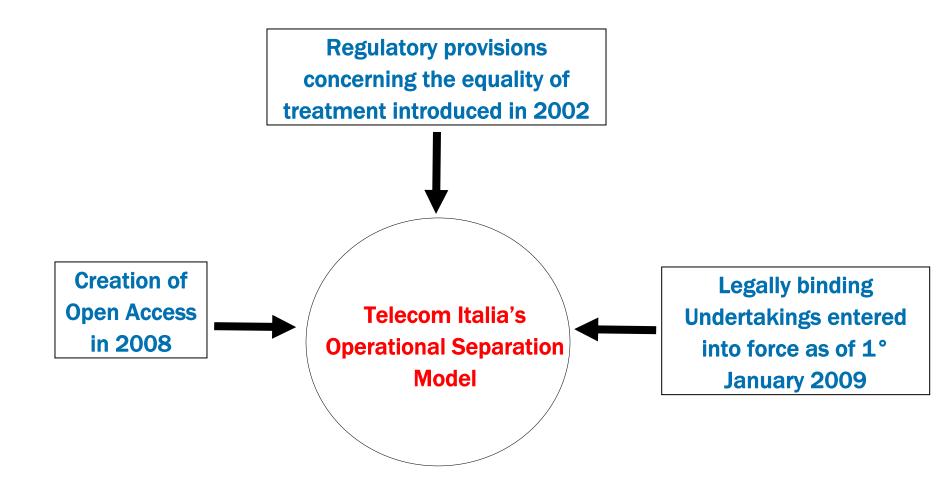
- Standard remedies might however fail to address the competition problems raised by vertical integration.
- In case an NRA maintains on the basis of concrete market evidence that standard remedies in place have failed, and will fail in a forward-looking perspective, to address the competition problems raised by vertical leveraging of significant market power in the access network, "exceptional" vertical separation remedies may be considered.
- The separation of the fixed access network from the retail activities can be characterised by several intensity degrees related to their effects on vertical integration:
 - Accounting Separation;
 - Operational Separation (including Functional Separation);
 - Legal Separation;
 - Ownership Separation.



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Overview of Telecom Italia's Operational Separation



The "Operational separation" model adopted by Telecom Italia in 2002 (1/3)

- It is not widely known that the very first case of enforcement of organisational remedies by a European NRA has been the operational separation of TI's fixed network (named administrative separation) introduced in 2002 with AGCom Decision 152/02/CONS, on the basis of the Italian law n. 481 dated 14/11/1995.
- Decision 152/02/CONS imposed a number of vertical separation measures aimed at implementing effective equal treatment conditions for the "internal" (i.e. to TI's Retail Divisions) and "external" (i.e. to OLOs) supply of TI's wholesale network services.



The "Operational separation" model adopted by Telecom Italia in 2002 (2/3)

Non -discrimination rule	 "Equal Treatment" consists in providing the same: service level and assistance to TI retail and OLOs; technical conditions and quality of service for network services to TI retail and to OLOs.
Separation of the functions	 Three operationally separate functions: 1. TI Retail → which serves end users 2. TI Wholesale → which serves OLOs 3. TI Network → for access, transport and interconnection services, which serves both TI retail and TI wholesale:
Separation of employees & management	> Physical separation of TI wholesale staff and management from TI retail ones

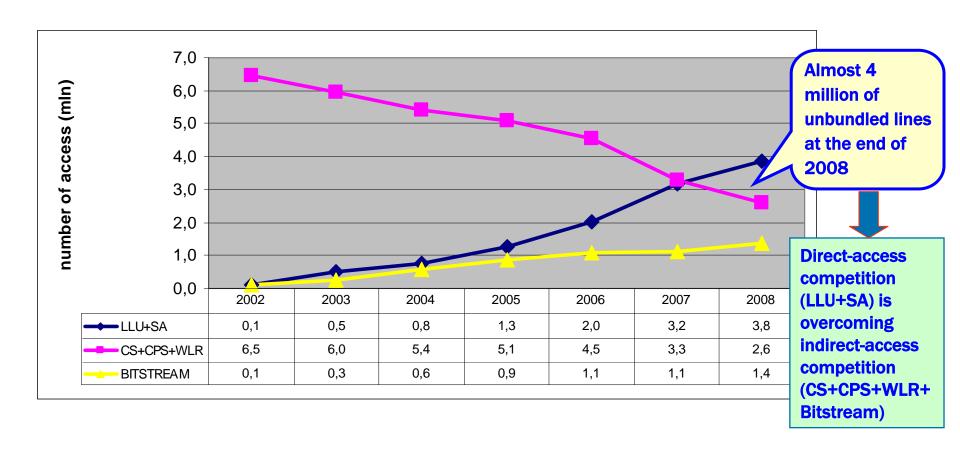


The "Operational separation" model adopted by Telecom Italia in 2002 (3/3)

Separation of	> Logical/physical separation of network/wholesale systems from the retail systems
information	aiming at avoiding access to OLO's data by the retail units, is in place by: 1. definition of dedicated systems for OLO's data management;
	2. single operator password - user id to protect access to the systems hosting OLO's data;
	3. introduction of firewall systems that contain both retail and wholesale data;
	4. procedures to allow only authorised employees to access systems containing OLO's data;
	5. functions tracing access data (such as name and access hour) of authorised employees on the systems containing OLO's data.
Financial Separation	> Accounting separation
-	> TI retail and TI wholesale separate budgets & business plans
Compliance & Reporting	> Equal Treatment Compliance report submitted to Agcom every six months (includes QoS indicators for services provided to competitors).
	> Annual Report, certified and approved by an independent body submitted to Agcom on:
	1. information systems separation compliance between TI retail and TI network/ wholesale;
	2. existence of procedures designed to avoid retail unit employees to have access to network department data;
	3. introduction and implementation of a "code of conduct" for employees to comply with the operational separation obligations.



Trends of Telecom Italia's wholesale access services





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The creation of Open Access (1/3)

The Open Access division has been created at the beginning of 2008 to achieve efficiencies both in operational and maintenance costs and network investments.

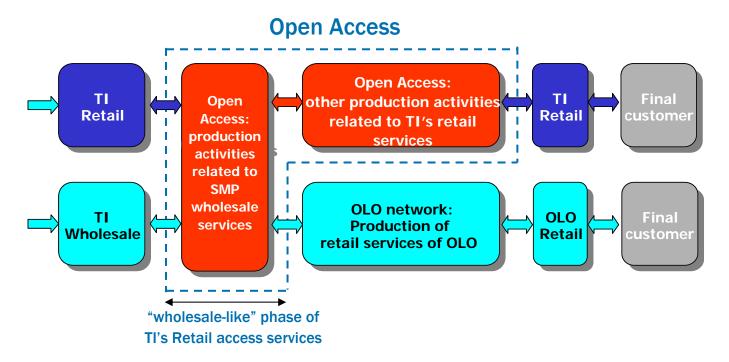
Open Access manages the access infrastructures of TI in an autonomous and transparent way, in order to provide wholesale access services to TI's commercial departments and to the alterative Operators (OLOs) by means of TI's Wholesale department.

Open Access' main services include:

- Copper physical link supply between client and local exchange for TI and OLO
- Wholesale Line Rental (WLR) service
- Co-location service supply in the central exchange spaces
- Optical fibre physical link supply
- Maintenance services on copper and fibre links
- Access to ducts



The creation of Open Access (2/3)



- In the provision of network access services to TI Retail, a "wholesale-like" phase can be outlined.
- The provision of the "wholesale-like" phase of an SMP access service for TI Retail is taken into account when granting and evaluating equivalence of access between TI Retail and OLOs.

(For instance, to provide a TI's final customers with a PSTN access line, you need a preliminary wholesale access service (corresponding to the LLU) and additional activities for the configuration of the service in the TI's node, including the allotment of a telephone number and the service activation).



The creation of Open Access (3/3)

Open Access plays a key role in ensuring the implementation of TI's undertakings due to the fact that most of the undertakings concern the equivalence in the provision of SMP network access services produced by Open Access. Therefore, Open Access is the organisational tool to achieve access equivalence for both TI retail divisions and OLOs.

For these reasons, even if the creation of Open Access is clearly not part of TI's Undertakings, any significant organisational change of both Open Access and TI Wholesale, is to be previously submitted to AGCom approval.



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The trigger of the undertakings: the Article 14-bis of the so called "Bersani" decree (2006)

- The art. 14-bis of the legislative decree 4/7/2006, n. 223, converted by the law 4/8/06, n. 248 has introduced in the Italian legislation as a *unicum* in the European Union the legal institution of the "undertakings" to be adopted in the context of regulatory proceedings before AGCOM.
- This Italian legislation mimics the corresponding European antitrust legislation concerning the undertakings that can be assumed by firms in the framework of competition proceedings
- ▶ With Decision n. 645/06/CONS, modified by the subsequent Decision. n. 131/08/CONS, AGCom introduced specific regulations for the implementation of the "undertaking procedure" by operators involved in regulatory proceeding aimed at promoting competition in the provision of electronic communications network and services
- Possible submission and approval of undertakings are without prejudice of the provisions stated by the European Regulatory Framework as far as the market analysis procedure and the corresponding imposition of remedies in the relevant markets are concerned



Objectives of TI's Undertakings approved by AGCOM (Decision 718/08/CONS)

TI's Undertakings are intended to:

- strengthen the operational separation model by offering additional guarantees of equal treatment between TI's commercial functions and OLOs that purchase TI's wholesale "SMP access services", whose production and delivery activities are carried out by TI's "Open Access" function;
- provide benefits to OLOs and final users, through the qualitative development and improvement of the fixed access network and related services;
- make the evolution of TI's fixed access network more transparent for OLOs;
- ensure the maintaining of competitive conditions in the migration towards new generation networks.

For these Undertakings "SMP access services" stand for (synthetic aggregate list):

- unbundling services and co-location services;
- bitstream services (including "naked ADSL");
- terminating segments of leased lines;
- WLR.

TI's Undertakings are <u>not</u> in any way intended to modify current regulatory remedies imposed by AGCom on TI. The undertakings have been voluntarily added by TI to the current remedies.



Structure of TI's approved Undertakings (1/3)

Equivalence

- Group of Undertakings n. 1
 - Introducing: (i) a new delivery process of SMP Services; (ii) additional procedures for the handling of colocation Services; (iii) a new system for the handling of wholesale customers
- Group of Undertakings n. 2
 - Introducing: (i) a new incentives system for the management of Open Access and of the Wholesale Division; (ii) a Code of Conduct and (iii) training programs on the Code of Conduct and the Undertakings for all employees of Open Access and the Wholesale Division.
- Group of Undertakings n. 3
 Setting up a performance monitoring system for SMP services.
- Group of Undertakings n. 4
 Ensuring transparency of the monitoring system.
- Group of Undertakings n. 5
 Ensuring transparency of the Technical Plans for the Quality of the Fixed Access Network.
- ► Group of Undertakings n. 6
 Ensuring transparency of the Technical Plans for the Development of the Fixed Access Network
- Group of Undertakings n. 8
 Including further specifications in Telecom Italia's regulatory accounting with respect to Open Access and determination of transfer charges



Structure of TI's approved Undertakings (2/3)

Next Generation Access Networks

- Group of Undertakings n. 9
 Introducing measures related to Next Generation Access Network
- Group of Undertakings n. 6 (as far as NGAN plans are concerned)
 Ensuring transparency of the Technical Plans for the Development of the Fixed Access Network.

Governance

- Group of Undertakings n. 7
 - Setting up a Supervisory Board in charge of (i) supervising the proper implementation of the Undertakings; (ii) verifying the compliance of the KPI, monitored and reported to AGCom according to the Groups of Undertakings n. 3 and 4, with the principles of equal treatment and the quality objectives for the fixed network access services.
- Joining a body, to be created by AGCom, in charge of the resolution of technical and operational disputes on the provision of access services (e.g. the British "OTA").
- ► Group of Undertakings n. 9 (as far as the NGN Forum is concerned)

 Joining the "NGN Italian Committee" that is to be created by AGCom with the aim to discuss issues related to the transition towards the new access infrastructures.



Structure of TI's approved Undertakings (3/3)

Consumer Protection

- Group of Undertakings n. 11
 - Ban on commercial activities for Open Access network technicians involved in production activities concerning SMP services.
- Group of Undertakings n. 12
 - Undertaking to report to the Supervisory Board complaints related to the activation of "unsolicited" services to end-users received by Open Access's network technicians.
- Group of Undertakings n. 13
 - Undertaking to interrupt the CPS termination procedure as soon as the concerned OLO forwards a so-called "KO" report due to a modification of the end users decision to move to Telecom Italia even in case Telecom Italia's commercial Divisions subsequently ascertains and reports a different desire from that end user.
- Group of Undertakings n. 14
 - Undertakings aimed at dealing more efficiently with customers' complaints and at reducing the number of disputes with consumers, even through the creation of a single TI organizational unit to manage all the compliant proceedings.



Equivalence (1/5)

Group of Undertakings n. 1

New Single Delivery Process for all the SPM services

The new process aims at:

- improving internal/external equal treatment in the production and provision of SMP Services;
- enhancing the quality of services offered to end users and to Operators that purchase SMP Services from the Wholesale function.
- handling orders, without discriminating between internal and external ones, with the introduction of different "queues" based on:
 - type of service
 - level of quality chosen at the order
 - reception time (first come first served)

In case of network resource unavailability, upon request, OLOs' orders will be held in waiting system based on a "single-queue" and will be automatically processed when the network resource becomes available.

The implementation of the new delivery process is currently discussed with OLOs in a consultative technical forum.

New CRM Wholesale System

The new system provides OLOs with new on-line features, including pre-sale analysis, advanced tracking features and a data warehouse on dismissed orders. The implementation of the new CRM system is currently discussed with OLOs in a consultative technical forum.

New operational procedures for the management of co-location services

New procedures, additional to the current ones, in order to speed up the activities aimed at finding new technical space inside TI switching centres in case of "saturation".



Equivalence (2/5)

Group of Undertakings n. 2

New Incentive Scheme

Telecom Italia is to introduce specific incentives for the management of both Open Access and TI Wholesale. The new MBOs will include: internal-external equal treatment; customers' and OLOs' satisfaction; quality of network and services; security of access network; efficiency of access network.

New Code of Conduct

Telecom Italia is also to approve a new Code of Conduct for the management and staff of Open Access and TI Wholesale, which will set out rules and procedures suitable to ensure compliance with the Undertakings.

Telecom is to organize seminars and permanent training programs about the Undertakings and the new Code of Conduct.

Breaches of the new code of conduct will be sanctioned pursuant to collective labour agreements.



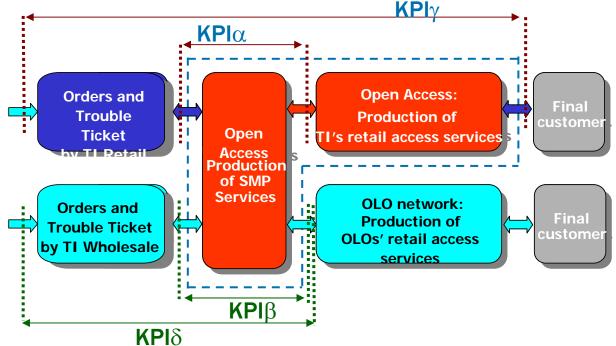
Equivalence (3/5)

Group of Undertakings n. 3

New monitoring system on equal treatment

Current mandatory indicators, imposed by Decision 152/02/CONS, only measure service performance on an end-to-end basis.

The new monitoring system will focus on Open Access's activities by comparing KPIs related to the wholesale phases of SMP services delivered to TI Retail (KPI α) with KPIs related to the production of the SMP Services delivered to OLOs (KPI β). KPIs are to monitor delivery, assurance, service availability and supporting systems quality. Relevant KPOs are to be agreed with AGCom.





Equivalence (4/5)

Group of Undertakings n. 4

Transparency of the new monitoring system

The accountability of the new monitoring system will be ensured by monthly, quarterly and annual reports highlighting the trend of each KPI (including the ones already in force by Decision n. 152/02/CONS) with respect to the corresponding KPO.

Monthly reports are to be transmitted to the Supervisory Body; quarterly and annual reports will also be transmitted to AgCom and OLOs.

TI is to create a new internal office responsible for the monitoring system and the related reports.

Groups of Undertakings n. 5 and 6

<u>Transparency on technical plans for quality of the access network and for development of the access network</u>

Telecom Italia is to present the Supervisory Board, AgCom and OLOs with its annual quality improvement plans for the access network as well as with its annual plans on technological development of the access network.

Telecom Italia will also provide quarterly detailed reports on progressive implementation of its plans and, upon request, more timely information about its major investments.



Equivalence (5/5)

Group of Undertakings n. 8

Introduction of internal transfer charges for SMP access services

TI is to elaborate and submit to AGCom approval a proposal of internal service contracts based on the economic transfer charges related to the provision of SMP services delivered by Open Access.

<u>Integration of TI's Regulatory Accounting to include Open Access</u>

TI is to elaborate and submit to AGCom approval a proposal for a separate regulatory account system related to Open Access.

The new accounting separation of Open Access will provide evidence concerning the equivalence between the transfer charges applied to the internal commercial divisions and the relevant economic conditions applied to alternative operators.

Next Generation Access Networks

Group of Undertakings n. 9

Access to ducts and dark fibre

TI will provide an offer for the access to and sharing of its ducts. If this access is neither technically possible nor economically viable, TI is to provide an alternative solution based on access to dark fibre. Open Access will directly manage the creation of a new system to permit the delivery of the ducts offer directly to OLOs.

Access equivalence to NGAN

With reference to the second round of AGCom market analyses, the current undertakings shall be broadened to all the new wholesale network services, provided over the NGAN, in which Telecom Italia will be found as having SMP.

Migration process

Also on the basis of the discussions within the "NGN Italy Committee", TI is to submit to AGCOM approval a proposal of guidelines for the migration process towards NGAN and the phasing out of some TI local switches.

Group of Undertakings n. 6

Transparency on NGAN development plans

TI undertakes to release the "New Generation Access Network Plan (NGAN)", which is to outline the percentage of new generation lines for each local exchange area and municipality, with reference to the so-called "passed home". In addition, it will include technical information on wholesale services, if any, which might become locally available on the new network platform.



Governance: The Supervisory Board (1/4)

Tasks, guarantees of independence, resources

Telecom is to set up an internal independent body ("Supervisory Board") in charge of supervising and verifying:

- the proper implementation of the Undertakings;
- the compliance of Key Performance Indicators (KPIs) with the principles of equal treatment and quality objectives in the supply of fixed network access services.

The Supervisory Board is composed of five members appointed by Telecom. Three members, including the President, are designated by the Authority. All members must be independent from Telecom, other electronic communications operators and television operators.

For the performance of its tasks, the Supervisory Board has adequate resources at its disposal, namely:

- an annual budget amounting to not less then 1.200.000,00 Euro;
- > a Secretary in charge of assisting the Supervisory Board and the President in their activities;
- a technical office (Supervisory Office), which supports the Supervisory Board's activities, by performing preparatory and ancillary activities at the Supervisory Board's request and on the basis of its instructions.



Governance: The Supervisory Board (2/4)

Monitoring activities

The Undertakings and the Regulation of the Supervisory Board ensure that the latter has access to all information necessary for the performance of its monitoring activities. In particular:

- Telecom must provide the Supervisory Board with the documents related to the implementation of the Undertakings without delay;
- the Supervisory Board can ask Telecom for information, clarifications or documents necessary to the performance of its monitoring activities. Telecom must provide the Supervisory Board with the information, clarification or documents requested without delay;
- the Supervisory Board can ask third parties for information and clarifications necessary to the performance of its tasks;
- the Supervisory Board can have direct access to information and data needed for the performance of its tasks at the offices and sites of Open Access, Wholesale, Network and other Telecom divisions concerned.

In addition, the Supervisory Board can require expert opinions, statistical and economic analyses or consulting services, with regard to any aspects relevant to the performance of its tasks.

The Supervisory Board can also receive reports and complaints by alternative operators and other third parties, with regard to potential anomalies or inadequacies in: (i) the implementation of the Undertakings; and (ii) the values of the KPIs. In case of third parties' reports or complaints, the Supervisory Board:

- can use its investigation powers to verify the facts reported;
- communicates the feasible actions to be undertaken to the third parties concerned.



Governance: The Supervisory Board (3/4)

Monitoring activities

When the Supervisory Board detects anomalies or inadequacies in the implementation of the Undertakings, it sets a time limit in which Telecom must remedy the anomalies and inadequacies concerned. If Telecom fails to remedy within the above-mentioned time limit, the Supervisory Board informs immediately the Italian Communications Authority.

When the Supervisory Board detects anomalies or inadequacies in the values of the KPIs, it informs Telecom without delay and asks the company to provide clarifications within 20 days.

In addition, the reports and complaints sent by third parties and the results of the monitoring activities carried out by the Supervisory Board are the subject to:

- a quarterly report, sent to Telecom and the Italian Communications Authority;
- an <u>annual report</u>, sent to Telecom and the Italian Communications Authority and published on a section of Telecom's website dedicated to the Supervisory Board.



Governance: The Supervisory Board (4/4)

Composition of TI's Supervisory Board

On 27th February 2009 TI's Board appointed the members of the Supervisory Board:

- Prof. Giulio Napolitano (Chairman), Professor of Public Law at Roma Tre University
- Prof. Gerard Pogorel, Professor of Economy of Telecommunications at Ecole Nationale Supérieur des Télécommunications in Paris
- Prof. Claudio Leporelli, Professor of Economic-managerial Engineering at La Sapienza University in Rome
- Ing. Sergio Fogli (former Head of TI's Regulatory Affairs Dept.)
- Ing. Francesco Chirichigno (former TI's CEO)

Designated by AGCOM

Designated by TI

Consumer Protection

Group of Undertakings n. 14

Centralized management

Centralized management of the disputes (in particular those related to unsolicited services and premium services) in order to have a quick, free and effective resolution of the complaints not solved by the Customer Operation department.

One stop shop

Institution of a "dedicated desk" ("sportello unico") with an organizing model similar to "Conciliazione Paritetica" (Alternative Dispute Resolution model agreed with Italian Consumer Associations).

Specific incentive system

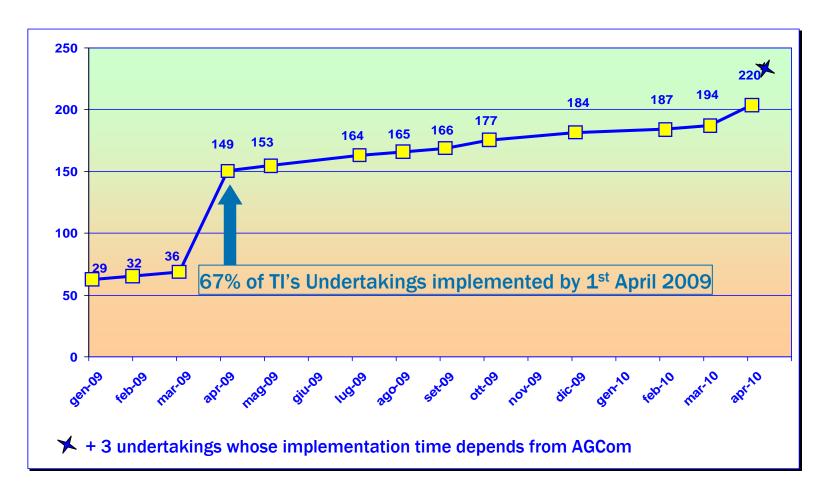
Introduction of management incentives related to the reduction of the number of pending disputes.

New plan for dispute resolution

Communication to AGCOM of a plan for the reduction of the pending disputes and for the management of the new disputes. Periodic communications to AGCOM (by semester) of the results obtained by the implementation of this plan.



Time schedule and cumulative number of Undertakings to be implemented





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Telecom Italia's Operational Separation model: main features

- Telecom Italia's Operational Separation model aims to ensure an effective "equivalence" in the delivery of SMP access services to alternative operators by means of an efficient implementation of the equivalence of output concept.
- Telecom Italia believes that its Operational Separation model is:
 - as effective as the Functional Separation model in achieving an excellent non discriminatory framework;
 - ▶ less expensive in terms of required investments and costs of implementation.
- Telecom Italia's Operational Separation model keeps the company's vertical integration, allowing for an efficient flow of information among retail, network, access and other company's units. Accordingly, efficient planning of investments, including NGAN, is ensured.



The voluntary operational separation of Tl's access network anticipates the spirit of art. 13b of the draft Access Directive

- ▶TI submitted its undertakings to AGCom approval pursuant to Article 14-bis of Law Decree No. 223 of 4/7/2006, converted by Law No. 248 of 4/8/2006, i.e. on the ground of a recent national legislation.
- ► However, the voluntary operational separation of TI's access network would be also fully consistent with the new Article 13b of the draft Access Directive.
- ▶ Paragraph 3 of article 13b synthetically names the aforementioned voluntary separation as either the "legal" or the "operational" separation ("The legally and/or operationally separate entity may be subject to ...").
- ▶TI contends that its undertakings realise a particular model of operational separation of the access network

Impact of TI's Undertakings on competition and on the evolution of regulation

Similarly to the functional separation implemented by BT, the operational separation model of the access network introduced by TI will promote competition in downstream markets by:

- promptly implementing effective technical and economic "equality of output" conditions between TI's retail functions and OLOs;
- removing any possible competitive risk associated with the incumbent's vertical integration.

AGCom Decision 718/08/CONS has stated that TI's Undertakings "are adequate to structurally improve the competitive setting of the markets affected by the undertakings"

AGCom is to assess - in the market analysis proceedings - the competitive impact of TI's Undertakings on each specific relevant market, in order to determine whether to impose, maintain, amend or withdraw obligations according to the provisions of the European regulatory framework.

