



contribution to the

**BEREC Report on impact of Fixed-Mobile  
Substitution in market definition**

*ACCESSIBLE VERSION*

<b>WIND COMPANY DESCRIPTION</b> .....	<b>2</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>3</b>
<b>OVERALL MARKET SCENARIO</b> .....	<b>4</b>
USAGE PATTERNS.....	4
A SNAP SHOT ON ITALIAN FIXED MARKET SITUATION .....	5
<b>ADDITIONAL INFORMATION FOR FMS ANALYSIS</b> .....	<b>6</b>
ON THE SHARED NATURE OF A WIRELESS ACCESS.....	6
THE FORWARD LOOKING PERSPECTIVE OF MARKET ANALYSIS .....	7
CUSTOMER PERCEPTION OF FM SUBSTITUTABILITY.....	7
REGULATORY EFFECTS OF FMS. ....	8



## WIND company description

Founded in 1997, WIND Telecomunicazioni SpA is one of the few operators in Europe to offer integrated fixed and mobile telecommunication services and Internet services.

WIND is the third largest Italian mobile operator, with 20.8 million subscribers as of September 30, 2011.

WIND is also the leading alternative provider of fixed-line services in Italy with more than 3.09 million voice customers, of which 2.35 million direct subscribers, and 2.07 million broadband customers as of September 30, 2011.

WIND was the first Italian operator to launch MMS and video over GPRS handsets: one of the earliest services to be made available was the first ever pocket news broadcast via videostreaming. WIND was the first in Italy to launch a trading on line service via WAP. New technologies such as WAP and GPRS, UMTS, make a substantial contribution to the creation of new services and applications. WIND offers a particularly wide range of data transmission and Internet services, capable of satisfying the needs of all segments of the corporate market.

In February 2001, WIND became the first alternative operator of fixed-line telephony in Italy to provide access to local loop unbundling, offering the possibility to make fixed-line calls without the need to pay any form of line rental. WIND was the first Italian operator, in May 2002, to launch Number Portability, enabling customers to switch operator whilst keeping their existing telephone number.

In fixed-line telephony, WIND confirmed its status as the leading alternative to the former incumbent for the activation of a new telephone line. By directly choosing Infostrada as their operator, without involving Telecom, from November 2005 users have been able to set up a new line at a highly competitive price.

In 2006 WIND expanded its convergent fixed-Internet product offering, with the introduction of Libero Absolute ADSL, offering bundled domestic calls with only a call-set up charge and a broadband Internet connection for a flat monthly rate. In October 2005 WIND launched the ADSL2+ access network, a new technology offering a considerable increase in connection speed and quality and, consequently, a marked improvement in the fruition of services, especially of the multimedia type, such as audio and video applications.

The WIND Group has a best in class network: more than 21,000 kilometers of optical fibre backbone to 4,440 kilometers of MAN. The company also boasts an extensive and innovative mobile network consisting of more than 12,598 radio base stations and more than 9,000 Node B related to the UMTS coverage. Coverage outside Italy is provided by more than 450 roaming agreements.



## Executive Summary

WIND welcomes the reporting activity performed by the BEREC offices on a such relevant and topical issue as the impact of fixed-mobile substitution in market definition, and suggests that such activity should be performed on a regular basis, for instance at least every two years, in order to detects markets and technological evolutions that could affect the NRA analysis in the evaluation of its effects.

Providing a guidance to the NRA regarding the aspects to be analysed while performing the substitutability analysis will enhance the harmonization of the market definition and contribute to the creation of a single internal market.

The current report shows how fixed-mobile substitution, currently doesn't impact both access market definition, the SMP determination and the remedies to be imposed, at least as far as Italy is concerned, and, accounting for the macroeconomic scenario and the market trends, seems not to be an impacting issue even for the next round of market analysis.

It could become a relevant issue only after that LTE solutions have unfold their full potential, and a more significant substitutability analysis could be performed for broadband and for voice services.

The BEREC report indications provided to NRA would also avoid that an incomplete evaluation of fixed-mobile substitution could alter negatively the competition level addressing improperly an SMP identification or even simply reduce the obligations imposed to an SMP operator.

Removal, or simply a mere reduction, of remedies [ *omissis* ]

,would deprive markets of Altnets pro-competitive role, hampering significantly their capability to contribute to achieve the challenging DAE targets, vanishing the regulatory efforts already performed by the Commission and the ones already in the pipeline.

Wind believes that the identified types of information that NRAs may consider in order to assess whether fixed and mobile services should be considered in the same market are properly identified and some, more detailed, points are illustrated in the following sections.

Wind believes that the substitutability analysis should be performed both separately in the retail voice and broadband markets, but also in a joint way because being the same platform (fixed or mobile) used to provide both voice and broadband services their substitutability should be evaluated accordingly to the double play ( voice and BB) service provided.

Our conclusion is that the degree of substitution is [ *omissis* ] restricted not to be enough to justify a revision of the definition of a relevant market such as the fixed one.

[ omissis ].

In most of European countries, competition between mobile and fixed networks won't be able to reduce the market power of the fixed incumbents. So Wind believes that FMS is far to be able to justify revision on ex-ante regulation assessment and in defining the appropriate ex ante obligations to impose at fixed SMP player.

## Overall market scenario

Fixed-Mobile Substitution currently cannot be considered a widespread tendency and still shows a high level of heterogeneity across Europe. Data published by the European Commission through the Implementation reports, the Digital Agenda Scoreboard and the E-communication Household Survey provides indicators that give picture of FMS across countries highly variable and with degree of FMS depending on factors peculiar for each country.

Just to give some figures that prove this heterogeneity among European countries<sup>1</sup>:

- mobile only households range from 2% to 81%,
- dual access from 15% to 94%

The markets show also a correlation between the penetration of bundles and presumed fixed mobile substitution patterns. Countries such as Finland (14%) or the Czech Republic (19%) that exhibit an increasing number of mobile only households have the lowest rate of bundle penetration. Countries that exhibit high and steady rates of fixed access penetration, such as Sweden (50%), the Netherlands (67%) and France (55%), also have higher rates of bundles penetration.

The development of quadruple play bundles (TV, fixed telephony, mobile telephony, Internet access) in certain countries tends to show that mobile and fixed telephony services are regarded (or at least offered) **as complements and not substitutes**.

The preliminary analysis carried out in the Report correctly focuses on residential retail markets. These trends are definitively not the same for businesses retail markets where fixed and mobile services shows clearly their complementarity. As a matter of fact even the Austrian NRA (RTR) concluded that mobile broadband was a substitute for DSL broadband only for residential customers, but not for business customers.

### **Usage Patterns**

It's worthy to highlight that future trend in usage pattern will stress the complementarity of Fixed and Mobile data services.

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<sup>1</sup> See also ELECTRONIC COMMUNICATIONS MARKET INDICATORS - Digital Agenda Scoreboard 2011 E-communication household survey – 2011.



The role of Fixed Mobile convergence should not be confused with fixed mobile substitution. Fixed and Mobile services are going to experience in a medium term a convergence experience rather than substitution, mainly in BB and content access services.

As reported by the BEREC Report on convergent services (2010), that '*one service may be provided over a number of different networks*' means not a switch by a technology to another but a simultaneous use of two networks to integrate the same service (see the multi-screen and multi-access approach of new services).

Moreover usage pattern evolution will move more and more versus band demanding application such as video content streaming, sharing and cloud computing applications; In this case, the differences between the mobile broadband offers and the fixed broadband suggest to exclude mobile broadband access from the retail product market definition offers.

TV and video services, linear or on demand, that will have an increasing weight in BB application usage, could be an important obstacle to substitutability between fixed and mobile broadband services.

### ***A snap shot on Italian fixed market situation***

The current situation of the Italian market is well described by [ *omissis* ]

[ *omissis* ]

## Additional information for FMS Analysis

In order to assess the existence of asymmetric substitutability between mobile and fixed, NRAs should consider all the matters identified in paragraph 6 of the Report but should also evaluate the relevance of the aspects described in the following points.

### ***On the shared nature of a wireless access***

When evaluating the differences in the retail offer characteristics between fixed and mobile services attention must be reserved to the shared nature of a wireless access.

It's widely known that a radio access is performed by means of a fixed, limited, amount of capacity (bit/sec) depending of the frequencies used and the modulation techniques adopted.

Customers **share** such capacity experiencing different access performance depending of the number of contemporary users accessing the same antenna or RBS (Radio Base Station) at the same time.

Backhauling capacity (the link connecting the RBS to the backbone network) are precisely definable and should be equal to the maximum capacity of the frequencies available on that RBS.

In a fixed access (for sake of simplicity an xDSL broadband connection) each customer knows exactly the available access capacity ( i.e 8 or 20 Mb/s), being it associated to the DSLAM configuration and to the commercial offer.

On the opposite backhauling capacity from the DSLAM to the backbone network is a shared resource dimensioned on the basis of typical contemporary number of users on the DLSAM.

As described above it seems that both the wired and wireless access experience a certain level of sharing of transmitting resources but the two cases shows very different features.

The level of sharing in the fixed (xDSL) case relate to a resource easily upgradable<sup>2</sup> and under full and exclusive control of the network operator.

On the opposite upgrading capacity of a RBS involves frequency availability, with a set of related issues like notification for interference coordination purposes, on field installation

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<sup>2</sup> typically DLSAM are linked to a fibre which capacity could be enhanced for example with a proper reconfiguration of DWDM equipment that could be performed remotely from a Network Operation Centre

and verification for electromagnetic limits, and so on. Several of these issues are not depending on network operator willingness and could require a long time to be performed.

It's now clear that wireless access has a unique feature: being a shared resource, the capacity it can provide to the single customer can hardly be guaranteed.

### ***The forward looking perspective of market analysis***

The concepts of substitutability are typically applied in the framework of the SSNIP test, where interchangeability is assessed based on non-transitory changes in relative prices.

In case of mobile service provisioning must be carefully evaluated the negative effects that a massive move of customers from one service to another one, ***initially considered*** as a substitute, could produce.

A massive customers migration could trigger relevant performance degradation due to the intrinsic shared nature of the radio access network and modify the perception of substitutability.

Even more relevant is the exponential growth of broadband mobile traffic induced by the new terminal (Smartphones, tablets, etc) that, until the introduction of LTE technologies, hardly can be satisfied with current frequencies and technologies, [ *omissis* ].

Being a market analysis also an exercise of ***forward looking*** investigation, NRA should be made aware of the technical limitations and the negative effects that mobile shared access limitation can produce if not properly accounted.

### ***Customer perception of FM substitutability***

NRAs should also evaluate the influence of customer usage in substitutability evaluation.

As an example customer used to make very long call could have some concern in performing long call with a mobile terminal after the latest investigation of IARC<sup>3</sup> regarding potential health threats in using mobile phones. Even if there are no certainty about this issue customer perception and precaution principle could impede a migration of fixed voice services users to the mobile service.

Another example relate to the elderly people distribution in some EU countries, and its evolution in time for a correct forward looking perspective. Senior people could have some

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<sup>3</sup> [http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208\\_E.pdf](http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf)

reluctances in leaving the fixed lines ( that until now foreseen tele-powering from the Central Office , making it working even during energy outage) for a mobile only access that in case of prolonged outages could stop accordingly to the terminal equipment battery duration, showing once more the complementary, instead of substitutive, nature of mobile access.

In order to evaluate the relevance of similar matters, NRA should perform statistically relevant survey to complete the FM substitutability analysis.

### **Retail offers analysis**

The report correctly address the issue of Market structure and strategy warning NRAs about the need to “*consider in their analysis of substitution the existence of aggressive strategies of integrated mobile/fixed network operators to gain critical mass in the market*”.

Nonetheless NRAs should also evaluate that incumbent integrated mobile/fixed network operators could pursue an offer strategy aimed to demonstrate full substitutability between fixed and mobile broadband services *in order to get “hands free” on the voice and broadband wholesale market ( M1 and M6, or WBA).*

The effect of such ***induced*** substitutability is detailed described in the following paragraph.

### ***Regulatory effects of FMS.***

The report address the issues that, at least, two ways of considering asymmetric substitution in market analysis have been identified:

- (Practice A): Consider the effects of asymmetric substitution while performing the market definition
- (Practice B): Consider the relevant effects of asymmetric substitution:
  - (i) when analysing whether the three criteria test for imposing ex ante regulation is met;
  - (ii) in the competition assessment, or
  - (iii) when defining the appropriate obligations to impose in the market.

Both practises could show strong impact on the obligation that an incumbent in the fixed market currently could have regarding the wholesale markets affected (WLR and broadband WBA or Bitstream).

NRAs should be properly warned that loosening even some obligations on WBA could hamper Altnet capability to contribute to DAE ( Digital Agenda for Europe) challenging targets reducing their competitiveness on the broadband market or forcing them to limited



lifetime investments that cannot be allocated on a more future proof infrastructure like NGA.

Hereafter two examples are listed.

### **Next Generation Access network evolution (NGA)**

The EU Commission is doing significant efforts in supporting the challenging DAE target set for 2020. Several recommendations has been done ( the NGA one is a paramount example) and others will come ( non discrimination and costing methodologies are in the pipe, jointly with the revision of the Guidelines on broadband state aids).

NGA WBA will play a relevant role in Altnets capability to contest incumbent in market pre-emption, and, removing obligation to provide WBA on the current platforms, could hamper such Altnets capability and reduce both their customer base (that hopefully should migrate on the NGA network) and their financial strength forcing a migration to a physical access wholesale offer ( M4 – LLU) that could became “sunk cost“ if NGA deployment will be performed in that area.

### **ATM to Ethernet platform migration**

The second example relate to the Bitstream platform currently used.

Altnets of member states (MS) earlier adopter of DSL broadband typically started their offer using the ATM (Asynchronous Transfer Mode) incumbent platform provided on regulated basis and setting up their own ATM Broadband backbone network.

Actually such ATM platform assume the feature of a legacy for the Altnet, that invested in following all the interconnection requests submitted by the incumbent<sup>4</sup> and induced by its previous choices.

Currently, in Italy, Incumbent is moving to an Ethernet broadband Wholesale platform requesting Altnet to dismantle their ATM platform with timing and costs unilaterally decided.

Current level of obligation imposed on the incumbent empower NRAs to overview and regulate such platform migration for example collecting the Altnets requests to :

- agree on bilateral basis **timing and modality** of customer migration ;
- access to a **free of charge** migration, due to the direct benefit of incumbent that, after migration, would run only an Ethernet platform, and due to the sunk costs until now sustained by the Altnets.

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<sup>4</sup> In Italy Altnets had to interconnect to up to 80 interconnection points to access the parent node Bitstream prices, *timely* reduced to 30 points after few years due to an unilateral incumbent choice.



Any weakening of the obligation imposed on fixed Incumbent in the WBA market could deprive NRAs of tools to control incumbent behaviour, and so compromise the overall level of competition in the WBA market that in Italy shows dangerous sign of stagnation [ *omissis* ]

[ *omissis* ]