

Mobistar's comments on the Media regulator's - VRM, CSA, Medienrat, BIPT- draft decision concerning the Market analysis of the Broadcast Market

We thank the VRM, CSA, Medienrat and the BIPT for the consultations on the "Draft decision regarding the Market analysis of the broadcast Market"¹, hereafter referred to as Broadcast Market Analysis.

While we fully understand and support the need for the regulatory authorities to have issued separate decisions, we have preferred to develop a single, common answer in English for the full set of 4 decisions. Taking resource and timing constraints into account this was considered as being the most pragmatic and practical approach to answer to the consultation. We consider it self-explanatory when certain parts of our answer do not apply to a given market analysis, but of course we are available to address any questions this, or other elements in our answer, would generate.

This document constitutes a joined contribution of Mobistar SA and Mobistar Enterprise Services SA (MES).

Please note that some parts of this document are confidential. These confidential parts including pictures and graphs have been removed from this public version. They are referred to by a space highlighted with a grey background.

¹ **BIPT**: Draft decision of the BIPT Council on the analysis of the television broadcasting market
(<http://www.bipt.be/ShowDoc.aspx?objectID=3385&lang=en>)

VRM: Ontwerpbeslissing marktanalyse

(<http://www.vlaamseregulatormedia.be/media/14460/ontwerpbesluit%20marktanalyse.pdf>)

CSA: Projet de décision concernant l'analyse du marché de la radiodiffusion télévisuelle

(http://www.csa.be/system/document_consultation/nom/99/CSA_20101221def_Projet_de_d_cision_march__radiodiffusion_tv.pdf)

Medienrat: Den Beschlussentwurf der Beschlusskammer des Medienrates zur Regulierung des Fernsehmarktes im Gebiet deutscher Sprache finden (<http://www.medienrat.be/pdf/Medienrat-FRZ-211210-mit-BRF.pdf>)



Executive Summary

Market definition and SMP

- The media regulators have correctly analyzed the retail broadcast markets and their trends, and in particular the growing importance of bundled offers. They correctly conclude to a lack of competition on the broadcast markets.
- Mobistar agrees with the regulators respective conclusions on the definition of the different retail markets. The exclusion of satellite TV, DVB-T, Mobile TV, Web TV is justified while we share the view that analogue, digital, cable and IP TV are substitutes belonging to the same market.
- Even if the broadcast market does not belong to the list of the recommended markets susceptible to ex ante regulation, it is clear that the 3-criteria required to allow ex ante regulatory intervention (non transitory barriers to entry, no market evolution towards effective competition, no solution through the application of competition law alone) are fulfilled.
- Within its geographical area of competence, each regulator has found each cable network operator having significant market power on its respective network. Mobistar shares this view which is further supported by the fact that after many years of competition the cable networks still have markets shares well above 60% (significantly higher than the threshold for dominance), while also the additional 'dominance' criteria support the significant market power assumption.

Remedies

Access obligations

The regulators have proposed three main access obligations. Those measures remedy adequately the lack of competition on the retail market as they enable the competitive entry of new players. These remedies are the more required as any commercial wholesale access offer has been refused so far.

- o ***Access to the digital TV platform***

This access is necessary when considering the current market trends towards digital offers. Access to the digital TV platform additionally allows the new entrant to diversify the channels offered and thus promotes competition.

Such access is proportionate as it does not impose excessive technical difficulties on the SMP operator and as it is a minimum requirement to increase competition.

- o ***Access to a resale offer for analogue TV***

Despite the growth of the digital TV market, analogue TV access remains very important in two respects.

First, for sole analogue customers (which still represent a very significant part of the market), the absence of this access obligation would lead to the foreclosure of the analogue retail market segment by cable operators. Cable operators are indeed the only players offering analogue broadcast services.

Second, for the digital TV customers, analogue television provides a convenient solution for multi-room services (which is important as a significant and increasing number of households has 2 or more televisions).

As it concerns a resale offer, there are no major technical developments necessary and the proposed obligation constitutes the minimum required to allow competition in the analogue segment of the broadcast market and to support multi-room offers.

- o ***Access to a resale offer for broadband***

Without a broadband component, a new entrant would not be able to address the end users' demand for bundled offers. Access to a resale broadband offer in combination with a TV service is therefore necessary. This is all the more justified due to the retention effect of the bundles on customers. If new players cannot provide bundled services based on a single end-user network technology, they would be unable to compete with those operators who can as these would foreclose the different markets covered by the bundled offers.

In addition the increasing end-user requirement to be able to access any content on any screen implies that TV content is now also expected to be provided on different devices (PC, Tablets, smart phones, ...) via a broadband connection. The inclusion of broadband access when combined with a broadcast offer is thus justified.

The proposed remedy is proportionate as it is required to allow competitors to build competitive bundled offers while no major technical developments are necessary since the SMP operator already provides the service to itself.

- ***Auxiliary remedies***

The proposed auxiliary remedies to the main access obligations (fair negotiation & access to the supporting system) are fully justified in order to allow a smooth and effective implementation of the main access obligations.

Transparency

Transparency obligations are implemented through (1) the publication of a reference offer, (2) the communication of wholesale access contracts to the regulators, (3) the imposition of Key Performance Indicators and the related Service Level Agreements.

These obligations are justified because they are necessary to enforce the non-discrimination obligation and are proportionate because they don't entail excessive costs for the SMP operator.

Non-discrimination

The non discrimination obligations covering both external and internal discrimination are necessary in order to create a level playing field. Mobistar stresses that both technical as operational aspects must be taken into account.

Price control

Price control ensures the effectiveness of the access obligations. The regulators have imposed a retail minus obligation for the access remedies without a detailed description of the measure.

The correct level of the retail prices as well as the costs to be deducted from such prices still needs to be defined.

In any case the regulators must ensure that price control measures guarantee the absence of price squeeze or predatory pricing practices. Unfortunately, the regulators do not expand on the definition of the retail-minus price. Mobistar provides some elements it considers required to determine the appropriate retail-minus price level.

Additional comments on remedies

Mobistar welcomes and fully supports the above mentioned obligations as proposed by the regulators but Mobistar's past experience in the telecom market clearly shows that such obligations may not be sufficient. Mobistar therefore proposes to consider a set of additional obligations such as equivalence of input in order to fully create a level playing field.



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1 Introduction & General comments

1.1 Need for regulation

The draft decisions of the media regulators intervene at a turning point of the television market : the move from analogue and linear services towards digital and non linear services.

The evolution of the broadcasting market towards interactive digital TV (iDTV) is in addition marked by the emergence of bundled offers. An increasing part of the broadcasting services are now commercially sold together with broadband and/or telephony services.

Bundled products have an important impact on customer loyalty: the churn of these customers is indeed very low. Television distributors acknowledge this themselves by developing a strategy for bundles with television.

Under such circumstances the effective competitiveness of the market needs to be assessed as the market risks to be foreclosed by players who are deriving uncompetitive advantages.

Mobistar observes a lack of effective competitiveness on the broadcast retail market which should be addressed by regulation.

1.2 Competence of each media regulator

The different media regulators are competent for broadcasting matters on their respective regional area of competence. As a result, in order to assess the broadcasting market, each regulator must determine what the competition conditions are in the respective region.

Despite their different territorial competences, the regulators identify similar competition issues requiring similar remedies.

In the current market analysis, the regulators decided to work in full cooperation, leading to more efficiency and more coherence on the market analysis and we welcome that they imposed similar remedies for similar competition issues. They conclude to the dominance of the different cable operators on their own networks.

- BIPT imposes remedies to
 - Brutele
 - Numéricable
 - Telenet
- CSA imposes remedies to
 - Brutélé
 - Tecteo
 - Telenet
 - A.I.E.S.H. (limited remedies)
- VRM imposes remedies to
 - Numéricable
 - Tecteo
 - Telenet
- Medienrat imposes remedies to
 - Tecteo

1.3 Broadcasting services do fall under the regulatory framework of electronic communications

The adoption of the first telecom regulatory package has resulted in a new and broader definition of electronic communications in order to include all transmission networks and services. Recital 5 of the Framework Directive provides indeed that :

“The convergence of the telecommunications, media and information technology sectors means all transmission networks and services should be covered by a single regulatory framework. That regulatory framework consists of this Directive and four specific Directives: Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive)(5), Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive)(6), Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive)(7), Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector(8), (hereinafter referred to as "the Specific Directives"). It is necessary to separate the regulation of transmission from the regulation of content. This framework does not therefore cover the content of services delivered over electronic communications networks using electronic communications services, such as broadcasting content, financial services and certain information society services, and is therefore without prejudice to measures taken at Community or national level in respect of such services, in compliance with Community law, in order to promote cultural and linguistic diversity and to ensure the defence of media pluralism. The content of television programmes is covered by Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities(9). The separation between the regulation of transmission and the regulation of content does not prejudice the taking into account of the links existing between them, in particular in order to guarantee media pluralism, cultural diversity and consumer protection.”

Also, the electronic communications framework is the appropriate regulatory tool to regulate the transmission of broadcasting signals to the extent that the regulation does not relate to the content of these broadcasting services.

This is also confirmed by the Explanatory Note to the European Commission recommendation on relevant product and service markets²:

“Electronic communications networks and services are defined in the Framework Directive Electronic communications services include telecommunications services and transmission services in networks used for broadcasting, but exclude services providing or exercising editorial control over content transmitted using electronic communications networks and services. They do not include information society services, as defined in Directive 98/34/EC, which do not consist wholly or mainly in the conveyance of signals on electronic communications networks.”

In addition, as the media regulators qualify as a national regulatory authority under the EU regulatory framework, the media regulators can apply the electronic

² Explanatory note, SEC (2007) 1483/2 to Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (Second edition)
http://ec.europa.eu/information_society/policy/comm/doc/implementation_enforcement/eu_consultation_procedures/sec_2007_1483_2.pdf

communications framework. Article 2g of the Framework Directive defines indeed a national regulatory authority as “*the body or bodies charged by a Member State with any of the regulatory tasks assigned in this Directive and the Specific Directives*”;

1.4 Structure of the present comments

First, we will elaborate on the television broadcast market trends and the increasing importance of bundles on this market.

Secondly, we will provide some information on the different technologies used for television broadcasting and the different market players for each technology.

Thirdly, we will address the market definition and the geographic scope of this market in light of the elements provided in the previous sections.

Fourthly, we comment the proposed remedies and describe why these remedies are proportionate and adequate to solve the market failures.

Finally, we propose some additional obligations such as equivalence of input in order to ensure a level playing field between dominant operators and competitors.

2 Comments on the Broadcast market

In this section we provide information on the broadcast market as well as on the market trends based on public information and on Mobistar's market studies. We first describe the broadcast market and underline the importance of analogue TV in this market. We then highlight the increasing importance of digital television and more particularly of interactive digital television services. Finally we stress the influence of bundles in the consumer's decision when purchasing television and/or telecommunication services.

2.1 Market trends

At the moment, nearly all (>95 %) ³ households have access to television in the traditional linear format as known since many years.

The broadcasting market is however evolving from a pure analogue television service to digital television (DTV) and more particularly towards Interactive Digital Television (iDTV). The customer indeed wants a more personalized TV experience by playing an active role in his consumption of broadcasting services. He does not only want to have access to an Electronic Program Guide (EPG) and easy recording facilities (the possibility to pause a program), but also to choose what to watch via Video On Demand (VOD) possibilities (catch-up and film catalogue). In summary, the customer want to choose how, when and what he will watch on his television. This corresponds exactly with the main message from all the iDTV providers in Belgium (Telenet, VOO, Belgacom and Numericable) in their recent marketing campaigns.

Currently, approximately half of the TV subscribers are watching TV via an analogue offer while the other half are making use of a digital TV offer.

The trend to digitalization is driven by the main iDTV actors, which are Belgacom and the major cable operators (Telenet & VOO) as illustrated in Figure 1.

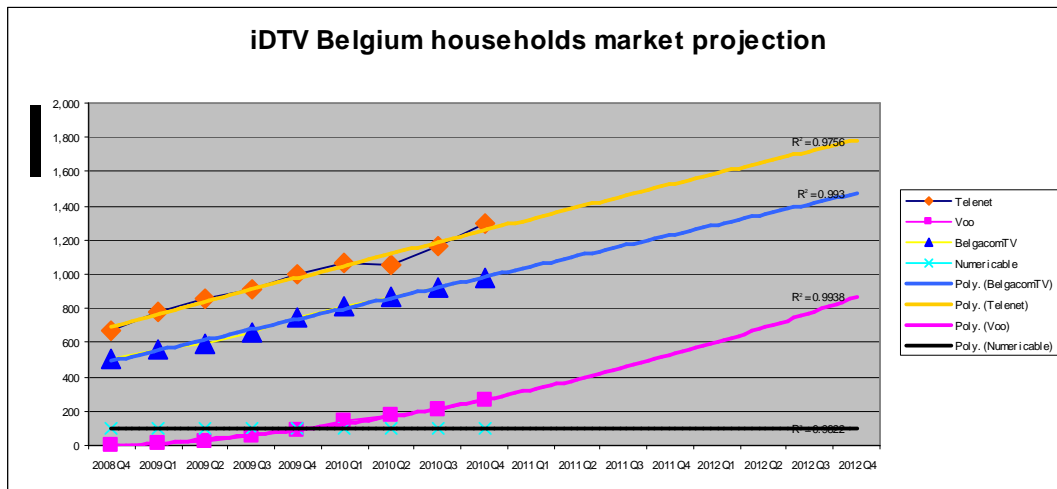


Figure 1: iDTV Market trend evolution Belgacom & cable operators

The growth of the iDTV penetration is building on de facto historical monopolies: Belgacom is up-selling iDTV to their telecommunication customer base while the cable operators are converting their existing analogue TV customer base to digital services.

³ Analogue/Digital Cable and IPTV subscription ScreenDigest Belgium TV Market 2010

The relatively late take-off of digital services from VOO can be explained by the recent conversion of its customer base with the launch of the VOO-recorder only in June 2009.

The trend to consume any content on any screen implies that TV content is now also provided on different devices (PC, Tablets, smart phones, ...) via a broadband connection. Recently internet majors and television equipment suppliers started to propose TV products that transform the TV market into a convergent (broadcast/internet) service. For example, Google TV & Apple TV have launched their Over-The-Top decoder to bring their huge volume of content and core assets (music, video, search engine, ads...) to the consumer TV market. Most of the TV-set manufacturers propose "Connected TV sets" in their portfolio which allow to bring fully convergent services to the end-users: internet widgets (social networks...), on demand content, picture albums, etc...

The market shows a clear evolution towards Interactive Digital Television and iDTV penetration is growing rapidly, but the market for digital television is not yet saturated (Figure 2).

Figure 2: Confidential -

2.2 Importance of bundles

We fully share the regulator's analysis concerning the growing importance of bundled service offers. These bundles are not only requested by the customer but also actively pushed by the service providers.

First, the demand of end-users for bundles is increasing. Our market studies show that 80% of the customers are willing to combine Internet and DTV with fixed telephony if they had to choose an internet and DTV provider tomorrow. This is probably driven by the facility to have one provider, one customer service and one bill for several services. This results in an increasing share of bundles on the market (see Figure 3).

Figure 3: Confidential -

[...]

Figure 4: Confidential -

Secondly, bundling services in general and television in particular has a positive effect for the service providers as it does not only reduce churn but also protects other revenue streams. This is noticed by Robert van Apeldoorn in his article "*Pourquoi les opérateurs télécoms passent à la télé*" in Trends-Tendances of 14 October. In this article the reporter notes that television is not as such the primary service target of Belgacom⁴ but that television is: "*a loss leader in a bundled offer which will play a role to ensure other revenue categories*"⁵. He concludes that: "*the battle for television is hiding a war to maintain revenues of fix and mobile telephony*"⁶.

⁴ We note that is indirectly confirmed by Belgacom's own commercials, where Belgacom is offering TV *for free* when the end-user is purchasing a bundle with at least two products (fix or mobile telephony with a broadband connection)

⁵ Free translation of: "[...] *joue de plus en plus un rôle de produit d'appel dans une offre combinée, qui va jouer un rôle dans d'autres catégories de revenus.*"

⁶ Free translation of "*la bataille de la télé cache donc une guerre de tranchées pour maintenir les revenus du mobile et du fixe.*"

Mobistar is convinced that triple and quadruple play packs with a television component will become essential not only for television service providers but also for telecom operators. [...]

Bundles with a television component are becoming increasingly important. The end-user increasingly desires to acquire broadcast and telecommunication services from a single provider.

2.3 The different technologies & players on the market

From the end-user’s point of view, the digital TV market is shared among four important players. The three main cable operators (VOO, Telenet and Numericable)⁷ are having an important market share in specific regions while Belgacom is active at a national level (Figure 5).

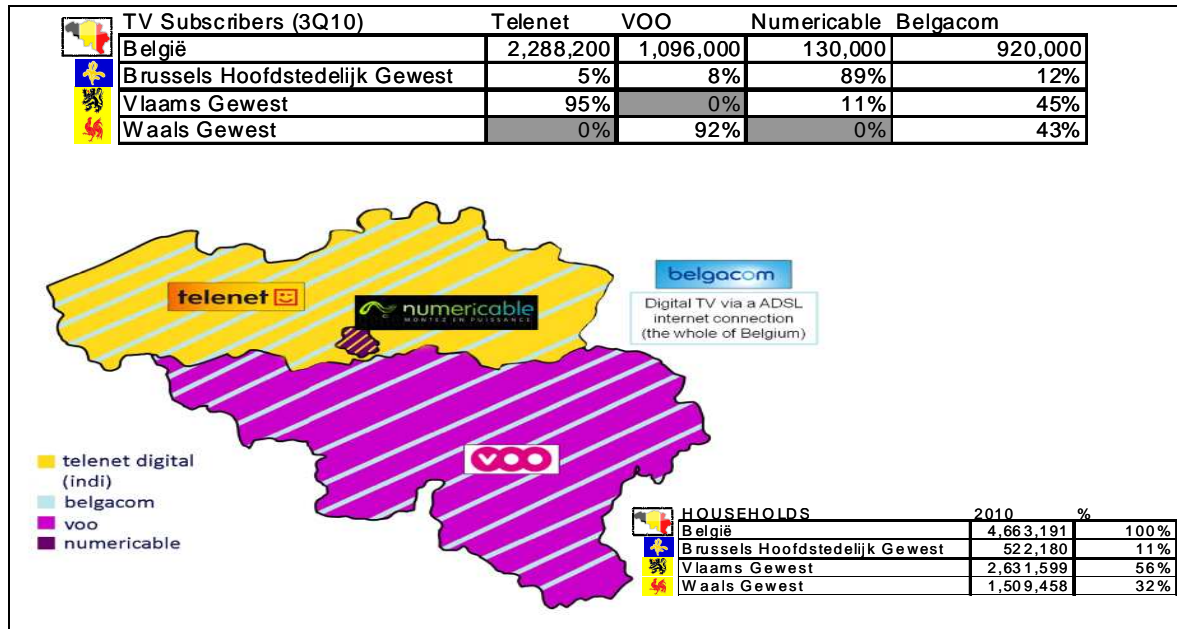


Figure 5: Market players digital Television

2.3.1 Cable TV

First, cable is the preferred access for television in Belgium. It has one of the highest penetration rates in terms of household passed in the world (more than 90%). This can easily be concluded by the high market penetration of the cable operators in the different regions as analyzed by the four media regulators.

⁷ AIESH is still not a Digital TV player in its limited geographical zone.



Network	Operators	Market share
Tecteo	Tecteo	70-80 %
	Belgacom	20-30 %
	Billi	0-5 %
Numericable	Numericable	70-80 %
	Belgacom	20-30 %
	Billi	0-5 %
BruTele	Brutele	70-80 %
	Belgacom	20-30 %
	Billi	0-5 %
Telenet	Telenet	80-90 %
	Belgacom	10-20 %
AIESH	AIESH	80-90 %
	Belgacom	10-20 %

Figure 6: Market share different operators in area covered by a specific cable operator

Secondly, cable TV provides some advantages (as identified by the regulators) compared to IP TV. In particular the presence of an analogue component appears to offer an important advantage.

Analogue cable TV is still widely used

In 2010, half of the population was still using an analogue signal to watch television. Currently the only means to access analogue TV services is through the cable. As a consequence, the cable operators do have a competitive advantage as they already own the traditional analogue customer. Several reasons can explain this situation. First, the transition towards digital television is still ongoing and the current trends indicate that in 2014 around one third of the households will still use an analogue signal for watching television (see Figure 2). In addition, not everybody is willing to install a TV set-top box with the additional complexity it brings just to watch television. A part of the population wants to use only linear TV and to watch TV just by plugging the existing coax cable in the television set.

Analogue TV provides an easy solution for multi-room usage

Multi-room usage must not be underestimated as around 40 % of households have at least 2 television sets⁸. Analogue TV provides a substantial advantage as it easily supports multiple televisions without the need to install any additional equipment.

[...]

Figure 7: Confidential -

2.3.2 IP TV

As mentioned in the draft decisions the key IP TV operator in Belgium is Belgacom. Besides Belgacom only a marginal part of the market can be addressed by the alternative operators for an IP TV offer. Two main reasons explain this situation :

(i) In the current regulatory frame it is impossible for an alternative operator to build an IP TV service based on Belgacom's bitstream offer (BROBA⁹). Multicast, being an essential functionality, is indeed explicitly forbidden in the current reference offer.

⁸ 40 % as measured by Mobistar Omnibus Dec 2009. More than 30% measured by StatBel in 2008)

⁹ Belgacom's Reference Offer for Bitstream Access

(http://www.belgacomwholesale.be/wholesale/en/jsp/dynamic/product.jsp?dcrName=nws_broba)

Without the multicast functionality, the alternative operators can only create an IP TV service based on Belgacom's unbundling offer (BRUO¹⁰), but such alternative allows to address a small part of the market only.

(ii) IP TV is possible based on the BRUO offer, as the alternative operator has full control over the network. However, even Mobistar as national operator can not deploy IP TV on BRUO due to the very small addressable market via this solution.

[...]¹¹

Furthermore, the effective BRUO coverage of the alternative operators will decrease with the migration of Belgacom's network to all IP. Indeed, Belgacom's plan to close several local exchanges reduces the possibility for unbundling and reduces the BRUO coverage area.

As a result, only a very limited coverage area can be addressed via IP TV by an alternative operator. There is currently only one operator active on this market which is Billi with a very limited footprint¹².

2.3.3 Satellite TV

Although satellite is an excellent technology that offers a nearly unlimited number of channels (including HD and 3D) and although it is the first access technology for television broadcasting in Europe¹³, it is not a fully competitive alternative to cable TV or IP TV in any of the markets addressed by the draft decisions.

Customers' reluctance to opt for a satellite TV offer

In the markets considered, satellite TV is negatively perceived by the customer¹⁴.

[...]

Figure 8: Confidential -

[...]

Financial analysts confirm these findings. In the article "*Pourquoi les opérateurs télécoms passent à la télé*" (Trends-Tendances of 14 October)¹⁵, Nico Melsens, financial analyst for KBC Securities confirms: "*I do not expect an important impact on the short term for Belgacom and Telenet. The Mobistar TV offer is a very nice product, but it is not sure that it will seduce. The offer is based on satellite and, in Belgium, people do not like the fact to install a satellite dish.*"¹⁶

[...]

Figure 9: Confidential -

[...]

¹⁰ Belgacom Reference Unbundled Local Loop Offer

(http://www.belgacomwholesale.be/wholesale/en/jsp/dynamic/product.jsp?dcrName=nws_bruo)

¹¹ [...]

¹² Partly 9 municipalities in Brussels and 10 in Wallonia (<http://www.billi.be/-villes-couvertes-.html?lang=fr>)

¹³ SES Astra & Eutelsat Hotbird have together approximately 120mio households connected in DTH for DTV

¹⁴ We also refer to barriers to the satellite dish mentioned by end-user

¹⁵ We also refer to our comment in section 2.2 Importance of bundles

¹⁶ Free translation of : "*Je n'anticipe pas d'impact important à court terme sur Belgacom et Telenet. L'offre Mobistar TV est un beau produit, mais rien ne dit que le switch s'opérera. Il s'agit d'une offre satellite, et, en Belgique, les gens n'aiment pas trop le fait d'installer une antenne.*"

Interactivity is provided by combining satellite services with broadband technology

As explained in section 2.1 and Figure 7, the customer expects features than only classical linear TV watching when opting for a digital TV service. Interactivity of services, such as EPG or VOD, is perceived as an intrinsic and natural component of digital TV services. However, for satellite TV services, meaningful interactivity is not possible unless the satellite technology is combined broadband technology.

To address this requirement, Mobistar combined the satellite TV solution with its broadband connection offer (see Figure 10).

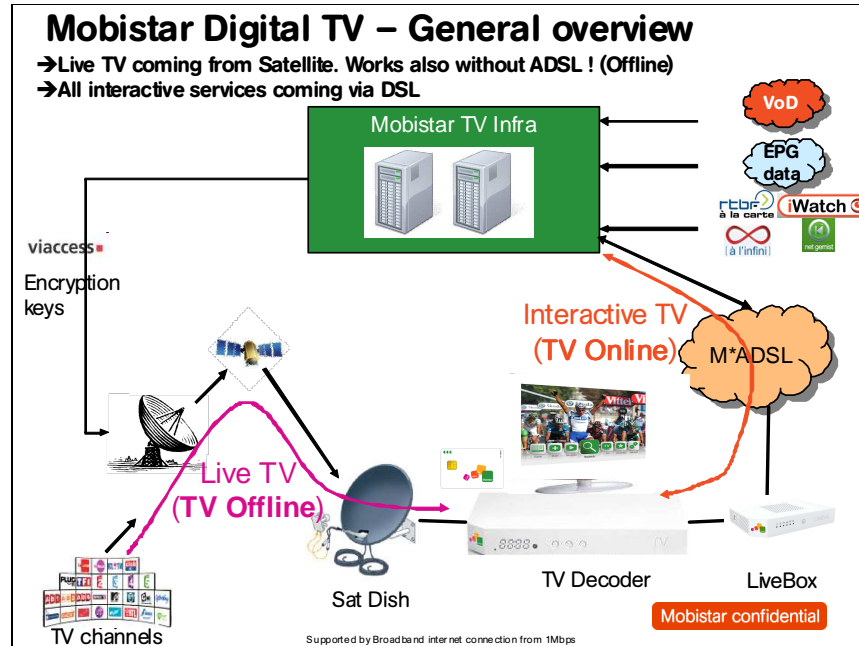


Figure 10: General overview Mobistar digital TV

This combination of two access technologies (one for TV broadcasting and one for the interactive services) results in a significant increase of not only the activation and operating costs but also in additional operational difficulties. These difficulties exist for Mobistar as well as for the end-user (for example the installation of a satellite dish, the arrangement of additional cables between the dish and the set-top box and the broadband modem, ...). Other TV service providers, already present in the end user's living room either via the telephone or the cable plug, don't encounter the same difficulties.

Limited differentiation possibilities

For the television broadcast provider, the use of satellite TV access limits the possibility to access any TV channel and to easily change the offers from what is currently available on the different satellite constellations.

Indeed, as shown in the figure below, Mobistar is using two pairs of satellite constellations for its broadcast television among three satellites with potentially relevant content towards the Belgian market: Hot Bird 13°E, Astra 19°E and Astra 23°E. Mobistar uses one pair of satellite constellations is used for the French TV bouquet (Hot Bird 13°E & Astra 19°E) and a second pair is used for the Dutch TV bouquet (Astra 19°E & Astra 23°E). This implies also the need to offer two different sets of satellite dish kits¹⁷: one for the FR bouquet and one for the NL bouquet.

¹⁷ In reality, only the dual heads LNB (=active part of the antenna) differs from the FR kit to NL kit as the delta angle between both constellations are different: 6° for Fr bouquet, 4° for NL bouquet

The dish installation is done for either the French bouquet or for the Dutch bouquet, as the azimuth directions are not the same for both bouquets.

As a result, a customer with a Dutch bouquet can not have access to Hotbird 13°E channels, and conversely, a customer with a French bouquet can not have access to the TV channels available on Astra 23°E.¹⁸

The customer has to decide which bouquet he wants to subscribe to before the installation of the dish. To change from the French bouquet to the Dutch bouquet requires to change the antenna head (LNB) and the azimuth which is operationally and financially very hard (typically it implies the need to change the equipment on the roof).



Figure 11: Satellite offer Mobistar

Mobistar's experience with the satellite offers

[...] ¹⁹

The results of Mobistar's TV offers have mostly been considered as disappointing by the analysts: "The installation of a satellite dish and an ADSL connection turns out more cumbersome than expected."²⁰

Mobistar had, at the end of December 2010, almost 10.000 installed and activated TV customers and it expects to sign up 60.000 TV customers by the end of the year.

In January 2011, Mobistar performed a first customer satisfaction survey among the new Mobistar Star Pack customers. Although the scale of the sample is limited, it provides some useful information summarized hereafter.

Figure 12: Confidential -

2.3.4 Digital Terrestrial Broadcast (DVB-T)

With the analogue terrestrial TV switch-off imposed by the European Community by the end of 2011, there is a "Digital dividend" that has been reallocated for new digital services such as DVB-T, DVB-H and mobile data. The three different Belgian communities (Vlaamse Gemeenschap, Communauté Française and Deutschsprachige Gemeinschaft) have received a certain number of allotments (right to emit in a certain

¹⁸ on the satellite market some specific dishes that support 3 or 4 different LNBs exist, however this solution is unrealistic for the residential retail market due to the installation complexity and price.

¹⁹ [...]

²⁰ Mobistar did better than its own growth expectations for 2010 - BELTUG ICT Press Monitor 10 February 2011

frequency over a certain territory) during the Geneva conference in 2006. Today, only few DVB-T TV bouquets are available.

*The size and topology of Belgium*²¹ and the broadcasting market fragmentation render the supply of DVB-T access difficult in order to provide a competitive national TV offer.

In the northern part of Belgium, DVB-T frequencies are operated by Norkring (joint venture between VRT and Telenor). From the three available DVB-T Mux, one is fully reserved for public VRT TV & Radio channels broadcasting and another mux has been taken up by Telenet. The remaining mux is still unused today. This gives very little room for a new DVB-T distributor who wants to enter in the digital broadcasting market.²²

In the southern part of the country, the Communauté Française has received different frequency allotments, covering even smaller areas, due to the territory topology and the nature of the frequencies allocated (higher band UHF channels to be reused for other services). The total capacity for DVB-T services is even more limited than in Flanders.

Some frequencies are allocated to the RTBF to operate a free to air DVB-T offer with mainly public TV channels. There is currently no commercial offer available to reuse the remaining DVB-T space²³.

Besides all the coverage & capacity issues directly related to DVB-T, a complementary broadband network access is required in order to offer Interactive Digital TV.

2.3.5 Mobile TV

Mobistar is providing a Mobile TV service since June 2005. The service is available everywhere in Belgium via Mobistar's EDGE and 3G network.

Via the Mobistar TV portal²⁴, the customer can have access to Live TV²⁵, a collection of video on demand (free or premium VOD) and an electronic program guide (EPG).

Despite the marketing efforts put in the education of the market, the associated promotional campaigns and the introduction of cheap tariffs²⁶, Mobile TV remains a niche service [...]. As innovator, Mobistar was the first in Belgium (in October 2010), to launch a specific application to remotely control the TV decoder, to set recordings and to browse the TV content from a mobile phone.

2.3.6 LTE

Although future mobile technologies may offer higher speed data services than the current 3G technology (i.e. up to 40 Mbps or more in the future), during the foreseeable future such speeds will be available very locally and under ideal conditions only. Therefore mobile technologies do not require further assessment in the context of the current market analysis.

From the above developments, Mobistar notes that two main technologies are important for broadcasting in Belgium:

- cable TV, which provides analogue and digital interactive television
- IP TV, which provides digital interactive television.

²¹ Radio towers DVB-T emitters should be configured very properly with limited power to avoid disturbing neighbor countries)

²² Furthermore, the DVB-T indoor coverage is not optimal for TV broadcasting applications

²³ Indoor coverage in the southern part of Belgium is illustrated in the figure in annex.

²⁴ Screenshots of the Mobistar Mobile TV portal are provided in annex.

²⁵ Today, 27 different channels are available. Mobistar launched Mobile TV HD on its HSDPA network in 2009

²⁶ Access to Mobile TV is now charged 1€ per day of use, or 5€ for the monthly pass.



For cable TV, various cable operators are active and provide broadcast services via their own network.

For IP TV only Belgacom is able to provide IP TV over its own network.

Other technologies exist but these have a limited penetration and/or do not offer the same functionalities and/or are not real alternatives to the other broadcasting means.

3 Comments on the Market definition

We agree with the market definition adopted by the regulators.

The identified market is the retail market for the delivery of broadcasting services to end users. The service provided to the end users concerns three aspects:

- a. the access to the broadcasting platform
- b. the transmission service for the transfer of audiovisual signals
- c. the access to the content of the broadcasting service

Only the two first aspects are dealt with by the regulators in the context of the Electronic Communication Framework as the last one falls outside the scope of that framework.

We totally agree with this definition of the market. As mentioned in sections 1.2 & 1.3, the electronic communications regulatory framework is broader than the traditional telephony services and networks and does also include the transmission of audiovisual signals. The refusal to include the access to content in this market review is in line with the current regulatory framework.

This is also clarified in the draft law proposal for the transposition of the 2009 Directives on electronic communications. In draft Article 6, 2 of the Law on Electronic Communications of 13 June 2005, as amended for the transposition, explicit reference is made to the fact that the transmission of content falls also under the competence of the regulators. The Explanatory Note to the Recommendation on relevant markets also supports this view.²⁷

The retail market identified by the media regulators is a new market which does not belong to a market identified by the European Commission in none of its recommendations on relevant markets (recommendation of 2002 and recommendation of 2007). We agree with the media regulators that the list of relevant markets has never been presented as an exhaustive one. If a harm to consumers can occur that cannot be remedied by imposing a regulation in a market defined by the Commission, NRAs can define a new market.

Mobistar notes the absence of an explicit analysis of the upstream wholesale market for the transmission of, and the wholesale access to, audiovisual signals. The upstream wholesale market is constituted by broadcasting services and distribution networks to the extent that they allow the delivery of broadcasting content to the end users. This market corresponds to former market 18 under the Recommendation of the European Commission on relevant markets of 2002. On such a market an interaction exists between the wholesale market for the transmission of audiovisual services and the retail market.

On such a market, it would have been appropriate to proceed to substitutability tests in order to determine whether the wholesale market corresponds to the retail market to be regulated.

In the Netherlands, the regulator has carried out such analysis and concluded that the wholesale market reflects to an important extent the retail market²⁸.

²⁷ The Explanatory Note to the Recommendation on relevant markets, § 4.4, p. 47-49, http://ec.europa.eu/information_society/policy/ecom/doc/library/proposals/sec.2007-1483_final.pdf

²⁸ Opta Decision of 5 March 2009, « Analyse van de wholesalemarkt voor de doorgifte van rtv signalen via en het op wholesale niveau leveren van de aansluiting op het omroeptransmissieplatform van UPC in het verzorgingsgebied van UPC »



3.1 Market definition

3.1.1 Product

The market contains all products that are sufficiently substitutable for the consumer. The substitutability is usually measured through price tests but also on the basis of the characteristics and/or the intended use or the perception of products.

In the substitutability assessment, the regulators identified seven products likely to be substitutable:

1. Pay-TV and free TV
2. Analogue TV and Digital TV
3. Digital Cable TV and IP TV
4. Digital Cable TV and Satellite TV
5. Digital Cable TV and DVB-T
6. Digital Cable TV and Mobile TV
7. Digital Cable TV and Web TV

1. Substitutability between pay-TV and free-TV

The regulators come to the conclusions that although from a content perspective Pay-TV and Free-TV do not belong to the same market, they do belong to the same market from the distribution platform perspective. There is indeed no difference between the delivery of the two kinds of television services. The fee paid for the access to Pay-TV is not related to the platform but to the content. Therefore Pay-TV services would not fall under the electronic communications framework. The regulators stop their analysis at that stage.

2. Substitutability analogue & digital TV

We fully agree with the regulators that analogue TV and digital TV should be considered as being part of the same market for the coming three years. Indeed, although the existence of clear distinctive characteristics of the two offers is undeniable²⁹, the products tend to fulfil the end users' main expectations: access to *must have* channels & recording functions and are considered as substitutable.

The move towards digital television and the one way substitutability (from analogue towards digital) referred to in the draft decision are insufficient to conclude to the existence of distinct markets.

Conclude on the existence of two distinct markets would moreover ignore the reality, especially given the complementary use of analogue and digital television. On almost all coverage zones of cable operators, more than 70% of end users watch analogue and digital TV.

Although the number of end-users watching analogue television will decrease over time, we fully support the regulator's conclusion that an important part will continue to remain on analogue television (see Figure 2). In addition analogue television provides some complementary features to digital television (see our comments in section 2.3.1).

It is interesting to note that the price for an analogue only offer is usually higher than the price for a *combined analogue & digital* offer when excluding the decoder costs. In addition, prices for *analogue only* offers have increased without a loss of market shares

²⁹ digital TV offers HD quality and more functionalities (such as EPG or VOD, a higher number of channels), while analogue TV is easier to use (one plug, no decoder) and allows multiroom

for cable operators, which are the only actors able to provide analogue TV on the market.

3. Substitutability cable TV & IPTV

From the product characteristics perspective, cable TV and IPTV are substitutable: the additional services provided by the digitalisation and the interactivity such as EPG, VOD, catch-up, etc... are nearly identical independently on the access type (cable TV or IPTV). In addition, prices for the monthly subscription between cable TV and IPTV are similar. Multi-room could have acted as a differentiation factor between both offers especially given the importance of households having more than one TV (40% according to the study quoted by the media regulators³⁰). Indeed, with cable TV the analogue service allows a multi-room usage without any additional set-top box and its related costs. This is not possible with IP TV services. Nevertheless, the developments made by Belgacom enabling the connexion of two TV-sets on the same set-top box indicate that this distinctive factor tends to disappear.

We therefore agree with the regulators' conclusions that cable TV and IP TV are part of the same market.

4. Substitutability cable TV & satellite TV

As extensively explained in section 2.3.3, satellite TV is from the end-user point of view not substitutable to cable TV. In addition to the already mentioned barriers due to the satellite dish and the low end-user acceptance in the geographical markets analysed, regulatory barriers also play an important role. In this respect Mobistar concurs with the media regulators on the identified legal barriers (permitting or contractual rules in founding acts of buildings), the physical barriers (orientation of the dish) and the organisation of channels on different satellites.

As a further illustration of those difficulties, Mobistar refers to the measures taken in some Brussels communes in order to forbid the installation of satellite dishes in the course of October 2010. The communes of Koekelberg and Evere impose fines for illegal satellite dishes varying between 150 and 280 € and even proceeded to the dismantlement of antennas³¹.

Based on the above it appears that no substitutability from demand side exists. From the supply side, no substitutability exists neither, because of the huge investments to develop the needed functionalities. We fully agree with the regulators that entering the market requires technical developments. Mobistar has been able to develop its hybrid satellite –broadband solution (cf section 2.3.3) because Mobistar already had a lot of the infrastructure in place as an operator on the broadband market, but even then the offer is not fully competitive towards a number of customer segments.

5. Substitutability cable TV & DVB-T

As mentioned in section 2.3, there is clearly no substitutability from the demand side. In terms of channels, DVB-T offers differ in an important way from cable TV offers. The number of channels supported by a multiplex is limited (4-6 channels per multiplex) while cable operators are able to provide a substantial amount of channels. The limited capacity of DVB-T does not allow the inclusion of all "must have" channels³². DVB-T therefore does not attract enough customers in order to compensate for the high costs of acquiring a multiplex.

³⁰ Telecom Universe Q4-2008, Households, 2082 f2f interviews (§100 of draft decisions) – we also refer to footnote 8 for Mobistar own figures.

³¹ Le Soir, 23 octobre 2010, Le Parc chaotique des paraboliques, p. 20, La DH, 23 Octobre 2010, Trois antennes démontées

³² Mobistar refers to the study of Key International Facts (2009) quoted at paragraph 82 of the draft decisions. 10 channels hold more than 85 % the total watching time



From the supply side, an operator cannot invest to provide a similar offer as the one available via cable TV or IPTV. Indeed, in addition of the investments required to increase the content offering, huge investments would also be required to provide interactivity to the offer.

6. Substitutability cable TV & Mobile TV

As illustrated in section 2.3, we fully agree with the regulator's conclusion on the absence of substitutability between cable and mobile TV.

Cable TV & Mobile TV do not respond to the same needs (the number of channels on mobile TV is limited and the quality of the image and the sound is not equivalent).

7. Substitutability cable TV & Web TV

Cable TV and Web TV are clearly not substitutable (see section 2.3).

First, because of the clear difference in quality between cable TV and Web TV and because of the clear difference in usage: Web TV is an individual experience where the content is watched on computer, laptop or smartphone. Cable TV is a collective experience where the content is usually watched with the family on a TV screen (typically increasing in size) located in the living.

Secondly, because of the different types of content provided, the end-user will indeed not be able to watch all the "*must have*" channels³² on the Web TV.

From the supply side, it is impossible for a provider to invest in order to increase the quality of its product as he does not have by definition any control over the network which is used to deliver the content.

Mobistar fully supports the regulators' definition of the relevant market: the residential retail market for the delivery of broadcasting services to end-users. Such market consists of analogue and digital cable TV on one hand and digital IP TV on the other hand.

Other technologies such as satellite, DVB-T, mobile TV, or web TV are clearly not considered as substitutes by the end-user for different reasons (among others because a lack of content and/or functionalities or installation difficulties).

3.1.2 Geographic market

The geographic market covers a territory in which conditions of competition are similar or sufficiently homogeneous. Factors such as the demand characteristics (language, culture and life style, ...), supply characteristics or purchasing patterns can also be used in order to identify the relevant geographic market³³.

Mobistar agrees with the regulators' conclusion as to the absence of direct substitutability or substitutability in chain between the offers of cable operators. Concerning the direct substitutability, the coverage of each cable operator being local and not overlapping with the coverage of another cable operator, a cable operator cannot provide services outside the local area of their network. From the supply side, the substantial investments to be made in order to have a suited infrastructure do deter an entry. Concerning the substitutability in chain, Mobistar has not observed reciprocal pressure on cable operator offers via Belgacom.

³³ Richard Wish, Competition Law, 5th Edition, p. 39-42

Finally, as to the competition conditions, Mobistar experienced their heterogeneity when launching its TV offer. From a legal point of view, Mobistar made 4 different declarations as distributor of services. In addition, the existence of two big linguistic groups reinforces the segmentation of the market. Although Mobistar TV is a national offer, Mobistar proposes two TV packs according to the prevailing language. Satellite constraints impeded indeed to gather the *must have* Dutch and French speaking channels in one single pack. Faced with these limits and the will to develop an offer meeting the market requirements, different packs had to be launched.

3.2 Significant Market Player definition (SMP)

As we already mentioned in section 1.2, each regulator has a competence limited to a certain area. As a result, when they identified the significant market power of market players, each focused on the operators located on their area of competence. In the below comments we did not decide to analyse each operator alone on the basis of each regulator's analysis. We chose, instead, to present a global overview of the market power assessment insisting on differences when appropriate.

In a nutshell the market definition of the regulators can be described as the access to and the delivery of broadcasting services to end users by each cable operator on its own network. On these markets, the regulators first analysed the market shares of the different players and found market shares far above 50% for cable operators. They concluded, in compliance with EU case law, to the existence of a presumption of dominance of each cable operator on its network. They then examined whether other factors could rebut or strengthen such dominance. They concluded that most other factors reinforce rather than rebut the dominant position of the cable operators.

1. Presumption of dominance of each cable operator in its zone of coverage: market shares above 50%

On the coverage zone of each of those operators, the media regulator has first analyzed market shares and their evolution and found that each cable operator has a market share above 50% and that such market shares have not substantially changed over time despite the entry of competitors. According to the European Court of Justice case law, market shares above 50% entail a presumption of dominance.

On the Telenet coverage zone, only two operators are active: Telenet and Belgacom. Telenet has 80-90 % market share while Belgacom has a market share of 10-20%. Although Telenet's market shares decreased with the entry of Belgacom TV in 2005, market shares remained homogeneous on all the communes in the coverage zone of Telenet. In addition, more than half of the market still has analogue TV which is only provided by Telenet. The entry of Belgacom's TV in 2005 has not precluded Telenet to raise its prices for analogue TV to align those with digital TV without losing an important part of its customers given the still very high overall market shares of 80-90%.

On the Tecteo coverage zone, three operators are active: Tecteo (VOO), Belgacom and Alpha networks (Billi). Tecteo has a market share of 70-80% that has decreased with the entry of Belgacom and Alpha networks. Tecteo's market shares are homogeneous on its coverage zone. The entry of Belgacom TV in 2005 and Alpha networks in 2010 – having together between 20-30 % market share- has not precluded Tecteo of raising its prices for analogue TV to align those with digital TV without losing an important part of its customers given the still high overall market shares of 70-80 %.

On the Brutélé coverage zone, three operators are active: Brutélé (VOO), Belgacom TV and Alpha networks (Billi). Brutélé has a market share of 70-80% that has decreased with the entry of Belgacom and Alpha networks. Brutélé's market shares are

homogeneous on its coverage zone. The entry of Belgacom TV in 2005 and Alpha networks in 2010– having together between 20-30 % market share - has not precluded Brutélé of raising its prices for analogue TV to align those with digital TV without losing an important part of its customers given the still high overall market shares of 70-80 %.

On AIESH's coverage zone, two operators are active: Belgacom and AIESH. AIESH has a market share of 80-90% that has decreased with the entry of Belgacom. AIESH market shares are homogeneous on its coverage zone. The entry of Belgacom TV in 2005 has not precluded AIESH of raising its prices for analogue TV without losing an important part of its customers given the still very high overall market share of 80-90 %.

On Numéricable's coverage zone, three operators are active: Numéricable, Belgacom TV and Alpha networks (Billi). Numéricable has a market share of 70-80% that has decreased with the entry of Belgacom and Alpha networks. Numéricable's market shares are homogeneous on its coverage zone. The entry of Belgacom TV in 2005 and Alpha networks in 2010– having together between 20-30 % market share - has not precluded Numéricable of raising its prices for analogue TV to align those with digital TV without losing an important part of its customers given the still high overall market share of 70-80 %.

2. No rebuttal of dominance by other factors

In a nutshell

The presumed dominance of each cable operator on its coverage zone has been assessed towards other factors likely to rebut the dominance, such as (1) the control of infrastructure hard to duplicate, (2) barriers to change, (3) economies of scale, (4) economies of scope, (5) privileged access to capital markets, (6) countervailing buying power, (7) existence of a distribution and sales network that are very developed, (8) vertical integration. The media regulators concluded that most of the factors analysed strengthen rather than rebut the dominance of the cable operators. Mobistar fully supports this view.

In detail

(1) Control of infrastructure hard to duplicate

On the coverage zone of Telenet, Tecteo, Brutélé, Numéricable and AIESH, the cable infrastructure is hard to duplicate as it would imply important technical and construction works amounting to fixed irrecoverable costs. In addition analogue TV still represents 80-90% of the retail market on Telenet's and AIESH's coverage zone and 70-80 % of the retail market on Tecteo's and Brutélé's coverage zone. The possibility for Belgacom to develop an analogue offer on the basis of a fibre to the home network on each cable operators' network coverage area is highly unlikely in the coming three years. Given the importance of analogue TV and the unlikely entry of another operator offering analogue TV on the market, the non replicability of the cable network strengthens rather than rebuts the dominant position of each cable operator on its network.

(2) Barriers to change

Mobistar agrees with the regulators' conclusions. First, barriers to change, specific to digital TV, do further strengthen the dominance of the cable operators offering digital TV (except for AIESH, which does not offer digital TV services) through service characteristics such as the multi-room capability, the purchase of a decoder and the success of multi-play offers (with a very low churn). Indeed, the possibility for Telenet, Tecteo & Brutélé to offer multi-room services via the combination of digital TV with analogue TV provides a competitive advantage towards new entrants or existing players without analogue TV. Secondly, the purchase of a decoder acts as a barrier to change

for customers as they may want to amortize their investments over several years. Thirdly, the possibility to offer multi-play offers does also play a retention role on existent and new customers. The strategy of offering bundles is clear from Telenet, Tecteo and Brutélé, as illustrated in section 2.2.

For AIESH, the possibility to connect several TVs on the cable constitutes a barrier to change that is likely to evolve over the years with the increasing use of digital TV. The fact that AIESH also provides electricity will also constitute a barrier to change.

(3) Economies of scale

Telenet, Tecteo and Brutélé benefit from important economies of scale due to their large client base [2 000 000 – 2 500 000] for Telenet, [800 000 – 900 000] for Tecteo and [200 000 – 300 000] for Brutélé. A new entrant will not have such advantage at the start of its activities. AIESH with only [20 000 – 50 000 households] is unlikely to benefit from economies of scale.

(4) Economies of scope

Important economies of scope favour Telenet, Numéricable, Tecteo and Brutélé as they allocate common costs on the different services they provide (TV, Internet and Telephone). Around 33% of Telenet clients and 10-20 % of Tecteo and Brutélé's customers are taking several services together. Telenet, Tecteo and Brutélé's strategy to push multi-play products are significant in this respect. Given the absence of digital TV, AIESH enjoys limited economies of scope.

(5) Privileged access to capital markets

We consider that mainly Telenet has to a certain extent a privileged access to capital markets via its mother company Liberty Global. We don't consider that Tecteo, Brutélé and AIESH have such privileged access.

(6) Countervailing buying power,

Countervailing buying power does not diminish Telenet's, Tecteo's, Numéricable's, Brutélé's and AIESH's dominance given the customer profile on their retail market which consists of individual households only.

(7) Existence of a very developed distribution and sales network,

Telenet, Tecteo and Brutélé dispose of an important sales network (Telenet shops and distributors, VOO shops and distributors). Over the last years the cable network operators have systematically increased their distribution network further, e.g. Telenet acquired 60 shops of the BelCompany in 2009.

(8) Vertical integration

Telenet, Numéricable, Tecteo, Brutélé and AIESH are fully vertically integrated as network operator and retail service provider. In addition they are present on both the upstream wholesale market as television platform buying content and on the downstream retail market providing retail access to broadcasting services.

3. The three criteria tests

A. The existence of high and non transitory barriers to entry

Mobistar agrees with the conclusion of the media regulators as to the existence of high and non transitory barriers to entry on the market. The key barrier to entry is obviously the development of a competitive network infrastructure which is not realistic. All cable operators except AIESH enjoy important economies of scale and scope. The market implies important marketing costs. The possibility for Telenet, Tecteo, Brutélé and Numéricable to retain their large customers base with multiple-play products for which churn is substantially lower also constitutes an important barrier to entry.

B. The structure of the market does not tend towards effective competition
Rightly the media regulators conclude that the structure of the different markets does not tend to competition. The still very high usage of analogue TV on the market is significant, on the Tecteo and Brutélé coverage zones above [70-80 %] of the end users have analogue TV alone or combine it with digital TV. On Telenet's network the use of analogue TV is between [80-90%]. Although Belgacom tried to enter the market 5 years ago and spend significant amounts to acquire exclusive content rights, the important and stable market shares of the cable operators for analogue and digital TV do not allow to suppose a tendency towards effective competition.

The number of operators is limited. The entry on the market is difficult especially given the refusal of the existent players to provide a commercially viable wholesale access to competitors. Mobistar's attempts to obtain resale offers [...] were unsuccessful.

C. The application of competition law alone would not adequately address the competition issues

The way to address the market power of the cable operators through competition law rules would be to demonstrate that the refusal to provide access to their distribution platform would qualify as an abuse of dominant position. In general refusal to supply products or services cannot qualify per se as an abuse of dominant position. Specific circumstances need to be fulfilled such as the effect of the refusal to supply (for instance when this would lead to the elimination of a competitor on a downstream market). This has been further developed in the EU case law through the essential facility doctrine. The essential facility doctrine is nevertheless applied with cautious by competition authorities as it should not lead to allow access to players wishing to free-ride on other parties' investments and discourage investments in infrastructure.

We concur with the media regulator's analysis as to the difficulty to obtain access from cable operators based on the essential facility doctrine. First, as already mentioned the theory is applied cautiously. Second, even if were admitted it is hard to be used to formalize the access (price and the extent of the access) conditions.

Mobistar fully agrees with the regulators' analysis that the different cable operators are dominant on their own network. Apart from the continuous very high market share, there are no additional elements that diminish the presumption of dominance. On the contrary, the additional elements assessed typically provide further evidence of the dominant position detained by the cable operators in the related market.

4 Comments on the proposed remedies

Mobistar fully supports the imposition of remedies on the different cable operators as they will ensure a level playing field that will allow other operators to compete on the retail market.

First, the remedies are justified as this will allow new entrants to effectively enter the market. Indeed, the proposed remedies answer, to an important extent, to the key elements identified by Mobistar as indispensable in order to effectively enter the market.

These elements are important since, on the one hand, the end-user must clearly identify and associate its service with Mobistar, and, on the other hand, Mobistar must be able to control and differentiate its services and provide end-to-end quality to its customers.

The key characteristics that have to be met by the remedies imposed in order to ensure that they will lead to effective competition on the retail television broadcast market are :

- Customer “ownership”:

The wholesale customer must have direct ownership and access control to the end-user via the control of the Conditional Access System.

- One Stop Shopping:

The wholesale customer must get access to the services allowing to build a one stop shopping solution, whether or not in the form of multi-play packs. The retail customer wants one customer care, one bill, one brand.

- Control of the content:

In order to allow differentiation and innovation, the wholesale customers must be able to provide the content (standard or premium) of their choice and to be autonomous in terms of content definition.

- Control of the Set Top Box (and choice/branding regarding broadband modem):

As the end-user equipment has a significant impact on the end-user experience, it is important that the wholesale customers have sufficient flexibility and independence on the dominant operator’s equipment. Even if the same equipment as that of the SMP operator is used, this should not be visible for the end-user.

- Electronic Program Guide:

The wholesale customer must also be able to use its own EPG. The branding, look and feel of the provider must be controllable for the various elements of the TV offer, including the EPG.

- Being able to develop a multi-region (‘national’) offer:

Although we acknowledge that there are technical differences between the various regions covered by the set of market analysis decisions, the remedies imposed on the various SMP-operators should be as coherent as possible in order to allow the wholesale customers to build homogeneous service offers covering several geographical markets.

- Multi-room and high definition possibilities:

Multi-room is clearly requested by the end-users as shown in section 2.3.1, while high definition (HD) is becoming a de facto standard expectation from the customers.

Secondly, these remedies are proportionate as they do not constitute an excessive burden for the cable operators. The remedies are technically possible without excessive costs and do answer new entrants' needs while the absence of the measures would not allow effective competition to develop.

We will comment the different remedies imposed on the cable operators in sections 4.1 to 4.3. Auxiliary obligations to the access obligations (access to the supporting systems, transparency, non-discrimination and price control) are addressed in section 4.4 as these obligations are common to the three main access obligations.

4.1 Access to the digital TV platform

Mobistar supports the obligation to provide access to the digital television platform. Such access remedy is justified as it allows the operators to define their own product offering and to have full control of their own customers. The possibility to use the SMP operator's digital infrastructure reduces the barrier to entry. In addition, it allows the creation of a differentiated offer given that the new entrant has the possibility to add or remove channels.

Confidential Note:

Such remedy is proportionate as it does not entail excessive technical difficulties for the SMP operator. Moreover the sharing of a the same infrastructure by different TV service providers already exists.

Sharing of infrastructure exists in satellite broadcasting

The possibility to have several providers on the same infrastructure has been thoroughly described by the European Broadcasting Union³⁴ and is common for satellite broadcasting (DVB-S). It is used by Mobistar for its satellite TV offer for which it shares the transponder capacity with other TV operators (see Figure 13).

Confidential Note:

³⁴ We refer to the document *A functional model of a conditional access system for use with digital television broadcasts* (http://www.ebu.ch/en/technical/trev/trev_266-ca.pdf) as well as to Figure 13 describing the different ways to share infrastructure via conditional access control.

This figure below illustrates the sharing of satellite infrastructure by different players. The TV stream is encrypted with the different secret keys of the operators who want to share this TV channel (arrows in green, red and purple for Mobistar, Telesat and ABSat in the figure). The TV stream (amber arrow) is broadcasted only once over the air for the different operators sharing the capacity (=bandwidth saving). The different subscribers' secret keys for the different operators are also broadcasted simultaneously. The transmission of these subscribers' keys is consuming only a very small amount of bandwidth.

The different customers can thus decode the encrypted TV stream according to their TV smartcard (and their own customer content subscription), provided by their TV operator.

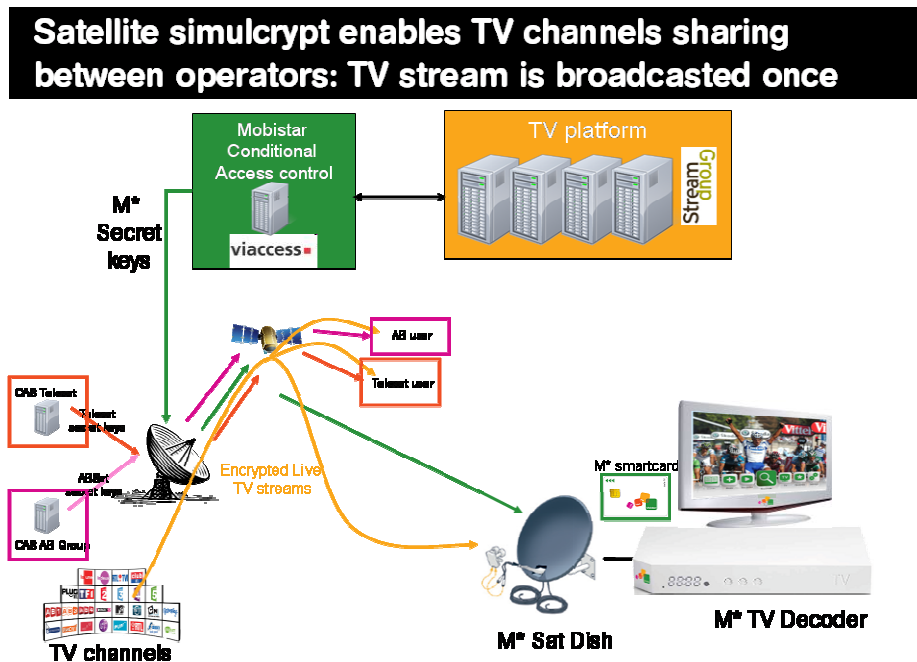


Figure 13: TV simulcrypt for Satellite

Infrastructure sharing can be easily extended to DVB-C.

Infrastructure sharing over Cable does not entail any technical difficulties. In this chapter, we consider DVB-C as a pure one-way broadcasting solution and that interactive TV services are offered via a separated return channel technology (ADSL or Cable TV DOCSIS). Only two adaptations would be needed for the cable operator: first, the creation of an interconnection between the Customer Access Control (CAC) systems of the hosting and hosted operators; second the provisioning of content by the hosted operator to the cable operator where the case may be.

The current infrastructure is illustrated in Figure 14. The Cable operator manages his TV subscribers via its Conditional Access System (CO CAS).

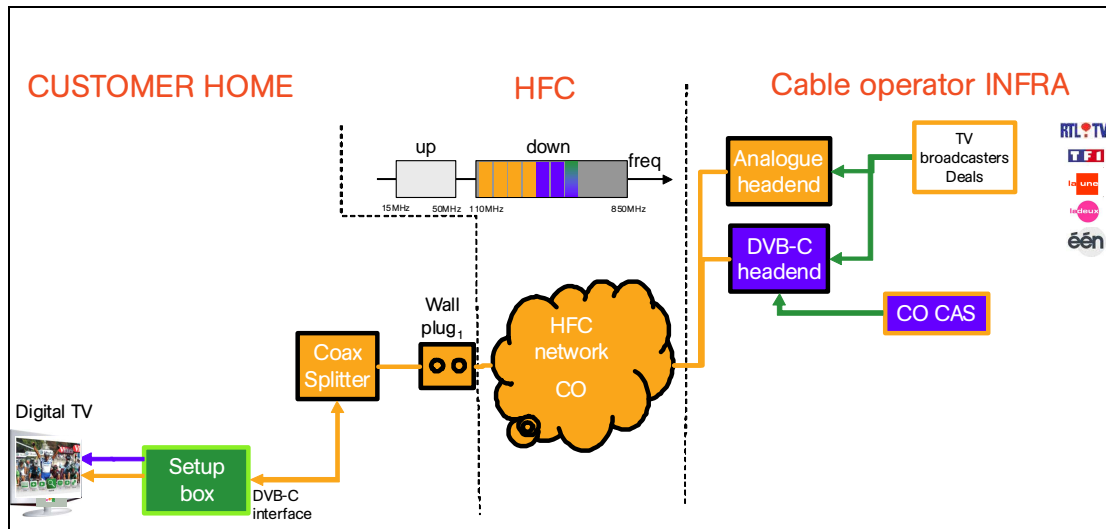


Figure 14: Existing cable operator infrastructure

The different necessary steps are:

- The creation of a link between the new operator's CAC and the cable operator's CAC (1 in Figure 15),
- The provisioning of TV content streams to the cable operators' DVB-C headends (2 in Figure 15).

When some additional content is provided by a new operator to differentiate its content offer, the new operator's TV content streams must be provided to the cable operators: either the new operator encodes the TV channel to the destination streaming format, or the cable TV operator offers this transcoding service, according to the new operator's quality expectations. Some DVB-C capacity (part of a MUX, in green on the scheme) is allocated to the new operator

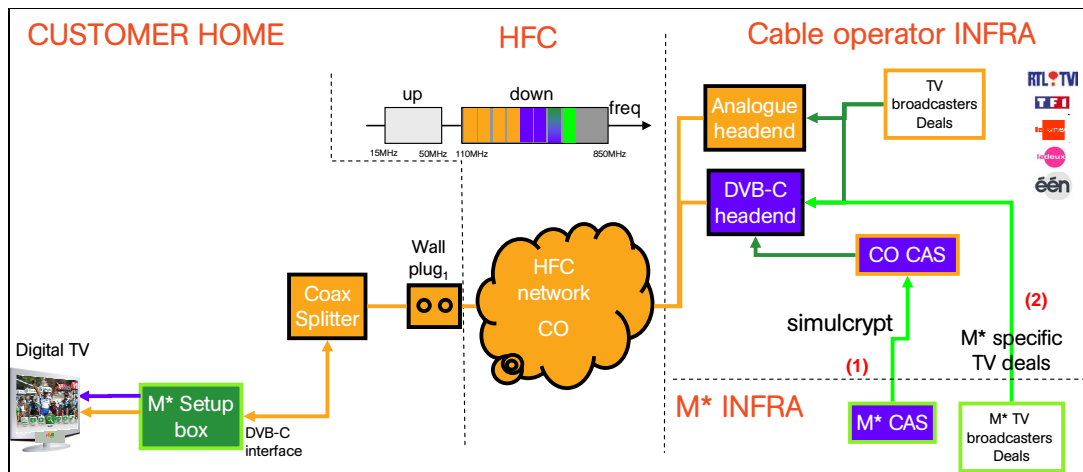


Figure 15: Access to Digital TV platform by other operator

Additional comments

We understand from the draft decisions that the cable operators are obliged to answer any reasonable request for access within 4 months. In our view it is important that candidate wholesale access customers can request access with the view to starting some preliminary tests (DVB-C reuse, decoder tests, CAS & simulcrypt,...) as from the publication of the decision. This would allow these operators to start to develop a service offer before the adoption of the reference offer.

Finally, it should be very clear that the provision of a digital service will include an analogue TV offer since all the cable operators provide an analogue TV offer in conjunction with their digital TV offer. This is a requirement taking the importance of analogue TV in order to allow multi-room services (we refer to section 2.3.1) into account. Should this not be the case this will result in a de facto discrimination between the cable operator's retail arm and the beneficiary of the cable operator's wholesale offer.

4.2 Access to a Resale offer for Analogue TV

As described previously, an access to the analogue TV offer will remain important in the coming years although the number of end-users watching analogue television will decrease over time. Indeed, an important part of the customers will remain on analogue television (see Figure 2). Imposing access to a resale offer for analogue TV is fully justified as it will allow the new entrant to effectively compete with the cable operators. Analogue TV also provides certain advantages, like multi-room applications, which are requested by the end-users and promoted by the cable operators. The access obligation will allow the new entrant to provide the same service compared to the service actually provided by the cable operators.

Additionally such remedy is proportionate as this does not have any impact on the broadcasting network. In addition, the obligation is limited to the resale of the cable operator's analogue offer, which means that no changes must occur on the service offer and that no technical adaptations are necessary (obviously, to benefit from multi-room services the end-user will need to install additional wall plugs (see Figure 16) when these are not yet present). It will not impose any adaptations on the SMP operator's broadcasting infrastructure.

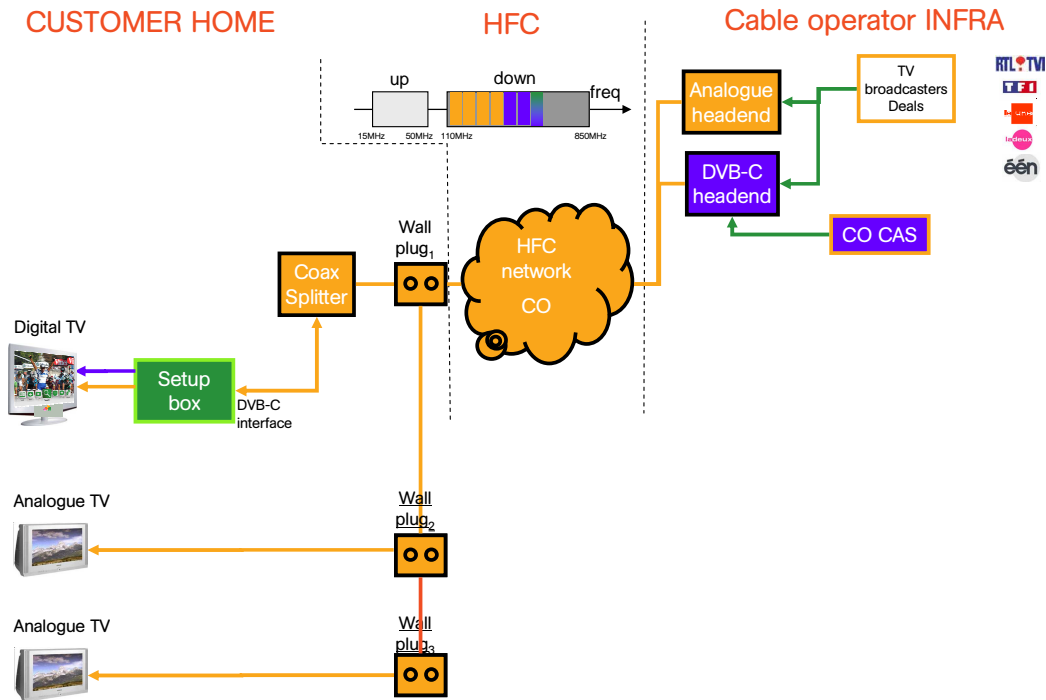


Figure 16: Analogue TV access

4.3 Access to a Resale offer for Broadband

As correctly analysed in the market trends by the regulators and as confirmed by our own market research, the packs bundling broadband and television are becoming essential to compete on the Belgian market (see also section 2.2).

Imposing an access obligation for a broadband resale offer is therefore fully justified when this is only required in combination with a retail television offer. It will allow new entrants to effectively and efficiently enter a market characterised by an increasing demand for bundled services. Additionally, from a business perspective, the provision of broadband and broadcasting services based on the same infrastructure is also justified.

Such remedy is proportionate as it does not entail excessive technical difficulties for the SMP operator. The infrastructure of the cable operators can be used to provide both broadband and broadcasting services³⁵. (beside the analogue and digital channels, some cable spectrum is dedicated to the transmission of IP data via the DOCSIS standard). Mobistar notes that standard voice telephony services are generally offered with VoIP on top of the broadband access.

The necessary steps for a new entrant in order to offer broadband and broadcasting services are on the one hand the establishment of a broadband connection, and on the other hand, a TV connection.

(i) The broadband connection

The alternative operator's infrastructure must be connected to the cable operator's broadband IP head-end (Link 1 on Figure 17).

³⁵ Some Belgian cable operators need a connection between their digital set-top box and the broadband modem to deliver interactive TV services while others have a Docsis modem integrated in their TV STB..

All IP traffic from/to the alternative operator’s customers is sent to the alternative operator’s platforms via this link. The alternative operator will perform broadband user authentication, authorisation and accounting as well as the routing/interconnection of the IP traffic.

Confidential Note:

(ii) The interactive television connection

The access to the digital television platform will be implemented essentially through a connection between the new operator’s and the cable operator’s CAC systems (2 in Figure 17). In addition, in case additional content is provided a TV content stream must be provided to the cable operator’s DVB-C head-ends (3 in Figure 17). We also refer to our comments in section 4.1.

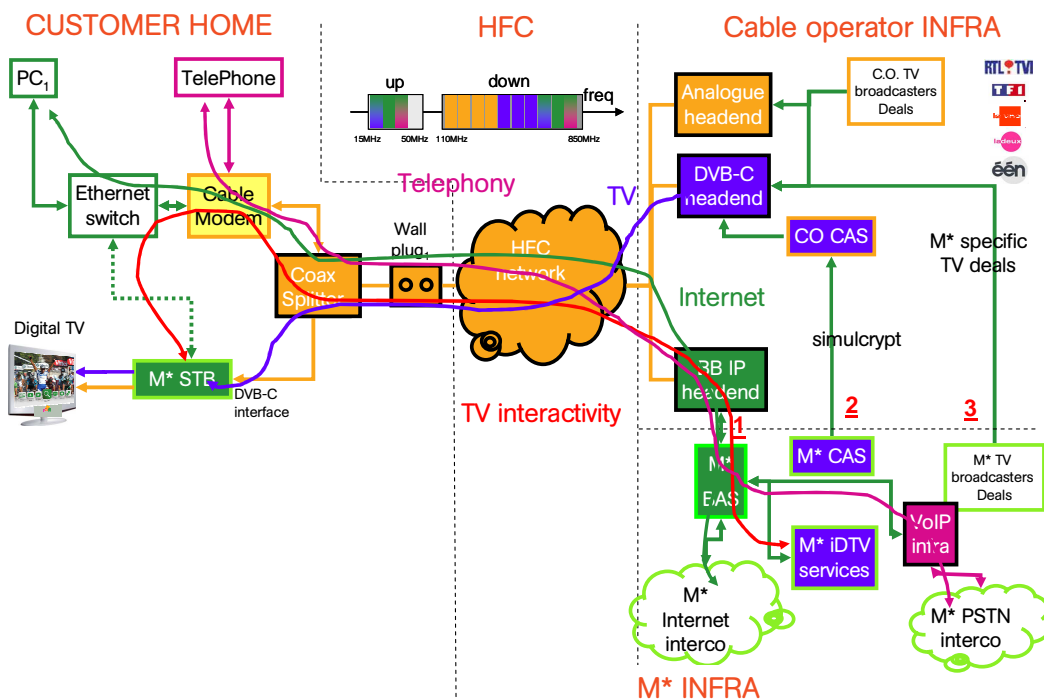


Figure 17: Different traffic flows of triple play offer

Taking the market trend toward bundled offers into account, it is also important to ensure that the broadband access obligation allows the provision of voice services by the alternative operator³⁶. The cable network can thus be considered as a collecting data network (layer-2) from the end-user towards the alternative operator.

Confidential Note

4.4 Additional remedies imposed in conjunction of the access remedies

4.4.1 Auxiliary access obligations

³⁶ The alternative operators must be able to provide the voice service using their own VoIP platforms and voice interconnections.



Fair negotiation

The regulators consider that an access request within the scope of the reference offer should be granted, at the latest, 3 months after the formal access request.

Mobistar considers that the maximum period for such access within the scope of a reference offer should not exceed 14 days as it is the case for broadband.

For an access request outside the scope of a reference offer, a period of 4 months is reasonable. The period of four months should be considered as a maximum period for the completion of the agreement and should not be used by the SMP operator as a way to intentionally delay the negotiations.

Ultimately, any access request should be positively answered as soon as the final decision is published except for justified technical reasons. We strongly invite the regulator to take all necessary measures to intervene should this not be the case.

Access to the supporting systems

For an alternative operator, access to the supporting systems is a mandatory facility in order to become a real alternative to the cable operator. Indeed, access to the SMP operator's OSS/BSS³⁷ systems is necessary in order to ensure fast and automated servicing of the end-user.³⁸

The access to the OSS/BSS systems must also be non-discriminatory and equivalent to the access provided to the retail arm of the vertically integrated SMP operator. Hence access time and the quality of the processes should be similar. The imposition of a SLA on the OSS/BSS systems should be enforced in order to guarantee quality and non-discrimination.³⁹

Effective processes and procedures are crucial for the effective implementation of the access obligations. In this frame the regulators should pay attention to the limits of the non-discrimination obligation which may be insufficient when some services are only provided to alternative operators.

In this context, an efficient and easy access to all the necessary supporting systems is necessary:

- Real-time and online tool to check customer eligibility with CATV network
- Online provisioning interfaces to request orders for new customers, migrations, cancellations, customer moves, profile updates, ...
- Order & installation tracking follow-up and monitoring
- Management of technical installers' appointments (installation or repair)
- TV Service plans: alternative operators must be able to define their own TV playlists. Some mutually agreed processes should be foreseen in order to clearly communicate the technical parameters for the access to the different DVB-C streams

³⁷

OSS (Operations support systems):

computers used by telecommunications service providers to administer and maintain network systems

BSS (Business support systems):

components that a telecom operator uses to run its business operations towards customer

³⁸ The information provided by the OSS/BSS systems allows the alternative operator to verify the possibility to provide the service to the end-user but also to proceed to the ordering and, if necessary, the notification and follow-up of an issue on the line.

³⁹ We also refer to section 5.1 on equivalence of input, in particular the part describing the obligations in the frame of SLAs & compensations for supporting systems, Non-discriminatory evaluation of the priorities of IT-projects and the *Software & process adaptations and developments*

The draft decisions imply the setting up of workgroups with the different stakeholders (the eventual beneficiaries, the cable operators and the regulator) to define the processes and the IT systems. We deplore that no timing has been fixed. Additional measures designed to ensure that the workgroup is not abused by the cable operator to obstruct their regulatory obligations should be put in place.

We invite the regulators to effectively organise and lead these workgroups to properly monitor the implementation of the regulatory obligations. Particular attention for consistency between the different implementations is required. Additionally the OSS/BSS interfaces should be developed based on industry standards.

Where possible, we strongly suggest that the regulators organise parallel work-streams in order to optimize the planning as illustrated in Figure 18⁴⁰.

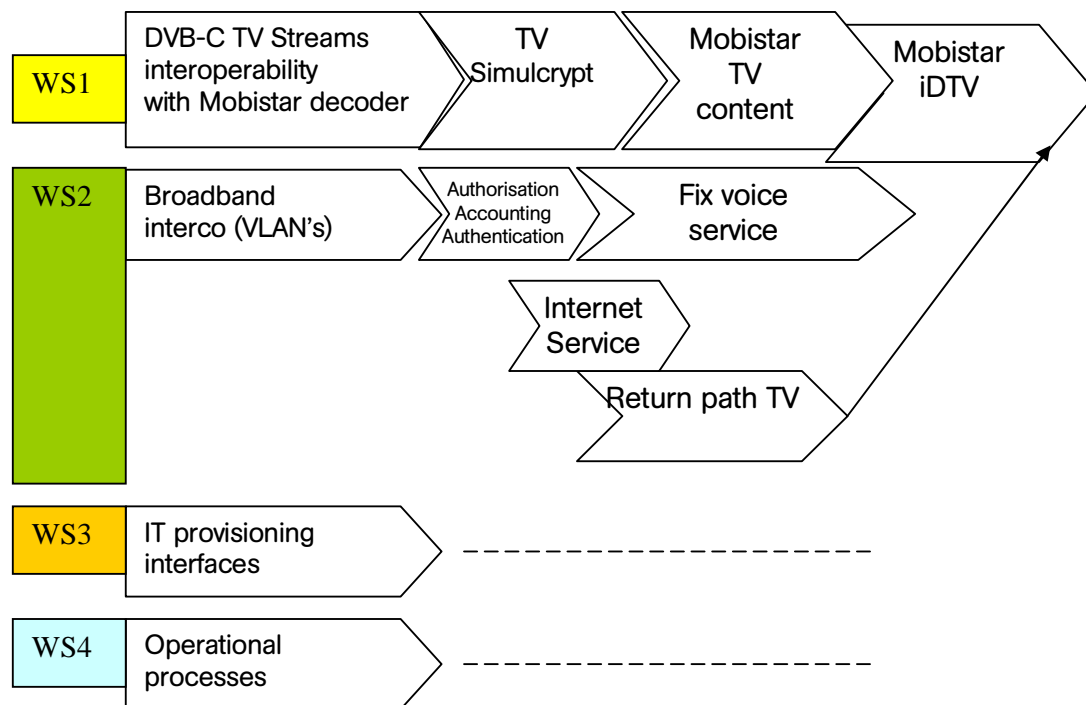


Figure 18: workstreams organisation (illustration)

4.4.2 Transparency

Reference offer

Mobistar supports the obligation on the SMP-operator to publish a reference offer as it allows an alternative operator to develop a business case and its offer based on well defined elements (technical and financial conditions, operational procedures, IT processes and interfaces, ...).

⁴⁰ For example, it is not mandatory to have a fully operational IT interface between OLO and cable operator to start testing DVB-C and/or internet access interoperability.

The reference offer should be detailed enough in order for the alternative operator to purchase only the required services. Additionally, it should contain all the necessary information in relation with the service provided: service description, ordering information, price, SLA, related processes and procedures, etc...

We note that all the necessary elements and information must be provided in the reference offers⁴¹. The reference offer should be kept up to date by the SMP operator and the regulators should be entitled to adapt the reference on their own initiative or on beneficiary's request. Prior approval of all modifications by the regulator is fully justified.

In order to ensure transparency we suggest to the regulators to request that the SMP operator provides the adapted reference offers with the suggested adaptations in track changes and to ensure that the adaptations are coherent between the different regulators when the market characteristics justify such approach. We urge the regulators to define one reference offer per SMP operator and to avoid different regulated offers per regulator insofar the market conditions are similar.

Communication of contracts to the regulators

In order for the regulators to ensure that the contracts are indeed in accordance with the regulatory obligations it is important that the regulator has the possibility to verify the contracts. The only way to ensure that there is no discrimination between two beneficiaries is indeed to compare the contracts of both beneficiaries.

Performance indicators

Performance indicators are essential for the measurement of the quality of the service provided. Without this obligation the SMP operator would be able to intentionally reduce the service quality. This would have disastrous effects for the beneficiary. We fully support the requirement to publish Key Performance Indicators (KPI) as well as Service Level Agreements (SLA) in reference with these KPIs.

We confirm the regulators' analysis on the need for strict and enforceable SLAs. We also note that our past experience demonstrates that the obligation for non-discrimination only is not sufficient. We therefore believe that a new obligation concerning equivalence of input should be imposed. We refer to our general comments made in section 5.1.

4.4.3 Non-discrimination

Non-discrimination is an essential remedy in the frame of wholesale access obligations. First it is important to underline that non-discrimination should be applied both internally (between the retail arm and the beneficiaries) but also externally (between different beneficiaries).

Secondly, we support the regulators' analysis on the need for strict non-discrimination. Indeed, without this obligation the SMP operator would be able to intentionally favour or disadvantage a specific beneficiary. The non-discrimination is important on different aspects:

Non-discrimination on technical aspects

Especially in the context of technological developments the non-discrimination principle plays an essential role. As the alternative operators must be able to compete with the SMP operator it is required that the relevant technological evolutions that the SMP operator uses for itself should be provided on a wholesale basis to the alternative operators.

⁴¹ A list of information that should be provided in the reference offer is listed in annex

Additionally, the alternative operators should be able to participate to test-cases or studies on new technologies at the same time than the SMP operator.

Non-discrimination on operational aspects

Also the operational aspects should be subject to non-discrimination. This means that all services that the cable operator provides to itself should be provided in an equivalent way to the beneficiaries⁴².

Non-discrimination regarding both aspects should ensure that the alternative operators are able to launch a similar retail product at the same time as the cable operator's own retail product. Past experiences demonstrate that new obligations concerning equivalence of input should be imposed.

4.4.4 Price control

The access obligation can only be effective if the related price is reasonable. Price-control measures are therefore essential.

The draft decisions propose a retail-minus price measure.

First, the retail price that the regulators will consider when applying the retail-minus must reflect the real applicable price paid by the end-user. Permanent promotions should be taken into account (for example a free 3 months promotion when signing a one year contract results in a retail price of 9x monthly fee and not 12x monthly fee). This is also valid for other kinds of promotions (free modem, free decoder, free installation, free activation, ...)

Secondly, it is important that all the costs which are not related to the provision of the service are correctly evaluated and removed from the retail price:

1. The Value Added Tax (VAT)
2. Content & author rights
3. Subvention to local TV channels
4. The eventual equipment costs (modem and/or set-top box)
5. The Subscriber Acquisition Cost (SAC) which is composed of the Marketing Acquisition Cost (MAC), the Promotion Acquisition Cost (PAC), the Commission Acquisition Cost (CAC) and the Full Time Equivalent Acquisition Cost (FAC).
6. Billing & collection costs
7. Customer care costs
8. Bad debt costs

Specific comments concerning the level of the "minus" to be applied can be found in annex.

Mobistar requests additional measures in order to ensure the absence of (1) a price squeeze, (2) a cross-subsidization

We believe that in order to avoid price squeezes, prior to the commercial launch of new prices or services by the SMP operator, the replicability is verified by the regulator. We therefore request an obligation that imposes a preliminary three month notification to the regulator before any retail price adaptation is allowed by the SMP operator. Such period will allow the regulator to verify that the retail offer can be duplicated by the

⁴² This is applicable to for example the delay for delivery or repair, the capacity to migrate end-users, the applicable procedures, the applicable tariffs, etc...



alternative operator without a price-squeeze.

In summary, Mobistar fully supports the remedies as proposed by the regulators.

These remedies adequately address the lack of competition on the retail market and are proportionate because they do not represent an excessive burden for the SMP operator.

Special care is necessary in order to ensure real transparency and non-discrimination.

Additionally, the price-control is of the utmost importance in order to avoid predatory pricing and price squeezes which would impede new entrants to effectively compete with the SMP operator.

5 Need for additional remedies

Mobistar welcomes and fully supports the obligations proposed by the regulators. Nevertheless Mobistar's past experience in the telecom market clearly shows that such obligations may not be sufficient. Additional obligations are necessary to create a level playing field.

5.1 New obligation: Equivalence of input

Based on its past experience when imposing wholesale obligations on SMP operators the BIPT has included a specific annex regarding "equivalence of input" as Annex 5 of its "Draft decision regarding the Market analysis of the Broadband Market"⁴³.

The BIPT concludes that despite the formal obligations for non-discrimination and transparency, the service provided by Belgacom to its wholesale customers is not equivalent to the service provided to the retail-department. The BIPT therefore proposes to impose *equivalence of input*.

As it is essential for alternative operators to benefit of efficient wholesale processes especially when competing with a vertically integrated SMP operator, we suggest a similar approach in the context of this market analysis.

The quality of service supplied by an alternative operator depends on the quality of the wholesale service provided by the SMP operator. Inefficient procedures or IT processes can have disastrous effects not only on the alternative operators' internal operations and finances⁴⁴, but also on the wider market functioning as these deficiencies will also directly impact the end-users.

The impact should not be underestimated: it will negatively influence the end-user perception of its chosen operator, it is very likely to lead to higher churn, more calls to customer service, more complaints and in general a worse image and reputation of the alternative operator, finally resulting in higher acquisition costs to attract new customers.

In its broadband draft decision, the BIPT has concluded that equivalence of input must be ensured for all the processes involved in the service delivery (cf figure below).

⁴³ <http://www.bipt.be/ShowDoc.aspx?objectid=3382&lang=en>

⁴⁴ for example because of the need of extra manpower to follow-up of issues or by having extra wholesale costs

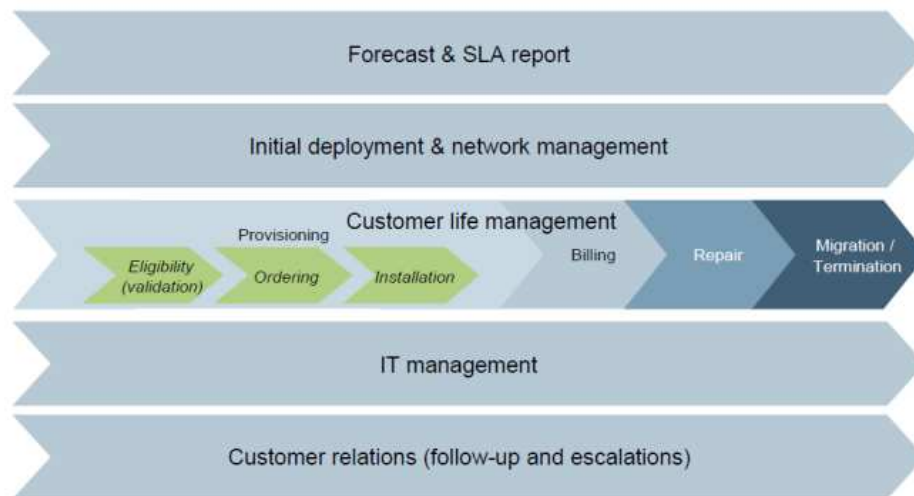


Figure 19: Different aspects for service delivery

Equivalence of input means that an operator provides the same products and services for both its internal and external customers, with the same timings, the same conditions (in terms of price and service levels), using the same processes and with the same reliability and performance. In addition, all the internal and external customers should have the same information concerning the products, services, systems and processes.

Non-discriminatory evaluation of the priorities of IT-projects

The prioritisation of IT-projects should not result in a discrimination between the wholesale department and the retail department. In the context of the broadband market, the alternative operators have already faced situations where they had to wait over two year before IT-system bugs were fixed.

Software & process adaptations and developments in cooperation with beneficiaries

All the software & process adaptations and developments must be done on the basis of clear agreements and communications between the different stakeholders. Additionally the stakeholders' interests and wishes should be taken into account from the beginning of the process. The alternative operators must be informed about the IT projects that relate to the wholesale products.

This is needed to allow the alternative operators to start IT developments and adaptations at the same time as the SMP operator. Otherwise, extra delays will occur for the alternative operator. Because such information is existing and provided internally, it is proportionate and reasonable to provide such information to the alternative operators. The alternative operators must also be able to test the new service/adaptation before it is implemented.

Well-defined and enforceable SLAs

As confirmed by the ERG⁴⁵, Service Level Agreements are an essential tool to measure and ensure a satisfying service level for the services provided by an SMP operator.

Compensation systems must be foreseen to ensure that SMP-operators carefully respect the requirements of their SLAs.

SLAs are essential to ensure non-discrimination and a certain quality of services. Without any SLA, alternative operators would not be able to guarantee a specific quality

⁴⁵ http://www.erg.eu.int/doc/publications/erg_07_53_wla_wba_bp_final_080604.pdf

of service level to their end-users (for example to be able to provide a maximum installation time for a new service).

Obligations concerning customer visits in the frame of activations & repair

The visit date of the cable operator's technician should be fixed with the same efficiency and flexibility as for a visit to the cable operator's own end-users.

The end-user should be correctly informed about the visit date as he has to be at home. Date and time of the appointment need to be fixed in cooperation with the end-user. This appointment must also be respected by the technician.

Obligations in the frame of billing

An efficient, correct and clear wholesale billing process is mandatory as it would otherwise result in a huge operational burden⁴⁶ for the alternative operators.

5.2 New obligation: Separate accounts

Separate accounts are a necessary tool in order to avoid cross-subsidization and price discrimination between the internal and external transactions. Such remedy is especially important when the SMP operator is vertically integrated and is providing bundled services or services in adjacent markets. This is particularly applicable to the main cable operators which are vertically integrated and provide adjacent services like pay TV. Such obligation allows to control the existence of cross-subsidization and price squeeze between the wholesale and retail prices and also to identify cross-subsidisation between premium services and basic retail services.

5.3 Additional obligation on transparency

5.3.1 Replicability

To ensure a level playing field, ensuring the replicability of the regulated operator's retail offers by the alternative operators is crucial. The principle of replicability of offers within a reasonable timeframe (6 months) has been stated by the European Commission in its NGA recommendation.⁴⁷ Although applied within the framework of next generation access networks, the principle has a general scope which is also valid in the current situation. The principle of replicability has also been pointed out by the French Competition Council⁴⁸.

We deplore that the draft decisions don't introduce a formal replicability principle. We invite the regulators to request the publication of an approved reference offer before the commercial launch of an SMP operator's retail service. We additionally request that the retail service may not be launched minimum **6 months** after the publication of an approved wholesale reference offer.

⁴⁶ A lot of man-power could be required in order to verify and follow-up the invoices and credit-notes sent by the cable operator

⁴⁷ The recommendations provides that "...wholesale broadband offers should be available at least six months before the SMP or its subsidiary markets its corresponding NGA retail service" 2010/572/EU: Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32010H0572:EN:NOT>

⁴⁸ Avis n° 05-A-03 du 31 janvier 2005 relatif à une demande d'avis présentée par l'Autorité de régulation des télécommunications en application de l'article L. 37-1 du code des postes et communications électroniques, § 27, <http://www.autoritedelaconcurrence.fr/pdf/avis/05a03.pdf>

6 Annexes – Comments on retail minus.

[...]

7 Annexes: Additional information

7.1 List of additional figures

Figure 20: Confidential

Figure 21: Confidential

Pack Telephony + Internet + TV send to a friend

This pack contains :
 a fixed line with or without the Happy Time option
 an internet subscription
 a FREE subscription to Belgacom TV Comfort

With this pack, you save at least €18.50/month

Free installation and activation for new Internet Favorite and Intense customers.
 Webdeal: buy online = free activation even if you are already Internet customer or for new Internet Comfort customers
 Offer valid from 16/06/2010 till 19/10/2010
 Valid for a new contract of 12 months.



Pack Mobile + Internet + TV

This pack contains :
 a mobile telephony subscription
 an Internet subscription
 a FREE subscription to Belgacom TV Comfort

Free installation and activation for new Internet customers
 Webdeal: buy online = free activation even if you are already Internet customer

[more info](#)



Figure 22: Belgacom TV commercials

Figure 23: Confidential

HUISHOUBUDGETONDERZOEK 2008			delta	delta%
Uitsplitsing van de gezinnen volgens aantal tv-toestellen in huis in België				
Tabel 2 :				
Aantal tv-toestellen	Aantal huishoudens	Percentage (%)		
0	178,302	3.95%	-13,328	-0.36%
1	2,924,130	64.85%	113,513	1.52%
2	1,024,822	22.73%	-57,696	-1.66%
3	271,646	6.02%	12,954	0.20%
4	92,759	2.06%	16,878	0.35%
5	8,824	0.20%	-3,536	-0.08%
6 et +	8,775	0.19%	2,021	0.04%
Totaal	4,509,258	100.00%	70,806	

Bron: Algemene Directie Statistiek en Economische Informatie van de FOD Economie.

Figure 24: Number of TV Set per households

Figure 25: Confidential

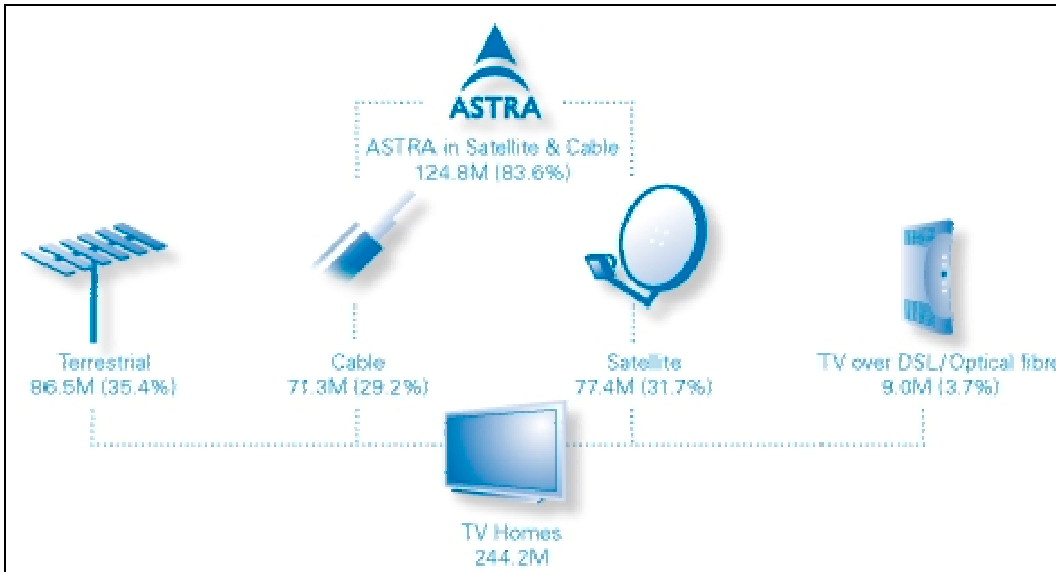


Figure 26: Satellite usage in for TV services in Europe (Source: Astra 2009) – DTH or content sourcing for Cable TV

Figure 27: Confidential

DVB-T coverage – Norkring (VRT)

- <http://www.vrt.be/extra/DSWWk.pdf>
- Indoor reception
- Content
 - Een
 - Canvas
 - Ketnet
 - All VRT Radios

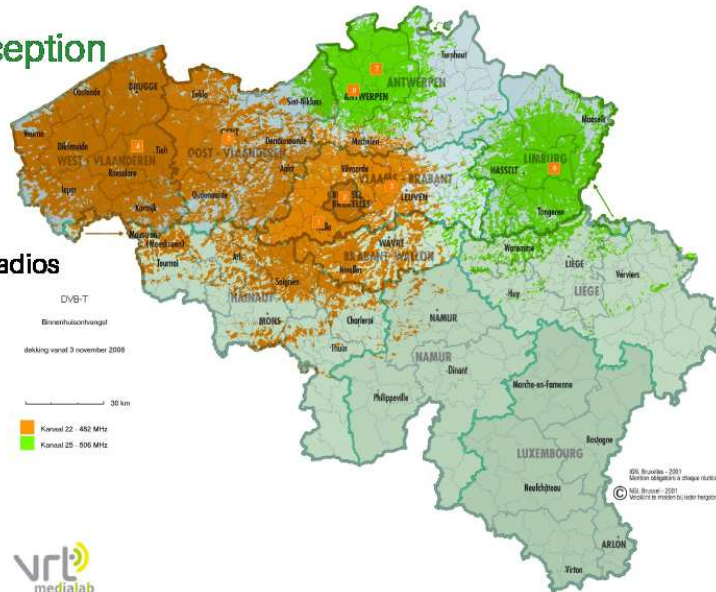


Figure 28: DVB-T coverage in Flanders

DVB-T Coverage Wallonia /Brussels RTBF

Dark blue: internal home antenna

Light blue: Roof top antenna required

- Content available Free to Air:
 - RTBF La Une
 - RTBF La Deux
 - RTBF La Trois
 - Euronews
 - All RTBF Radios



3

Figure 29: DVB-T coverage in Wallonia by RTBF emitters

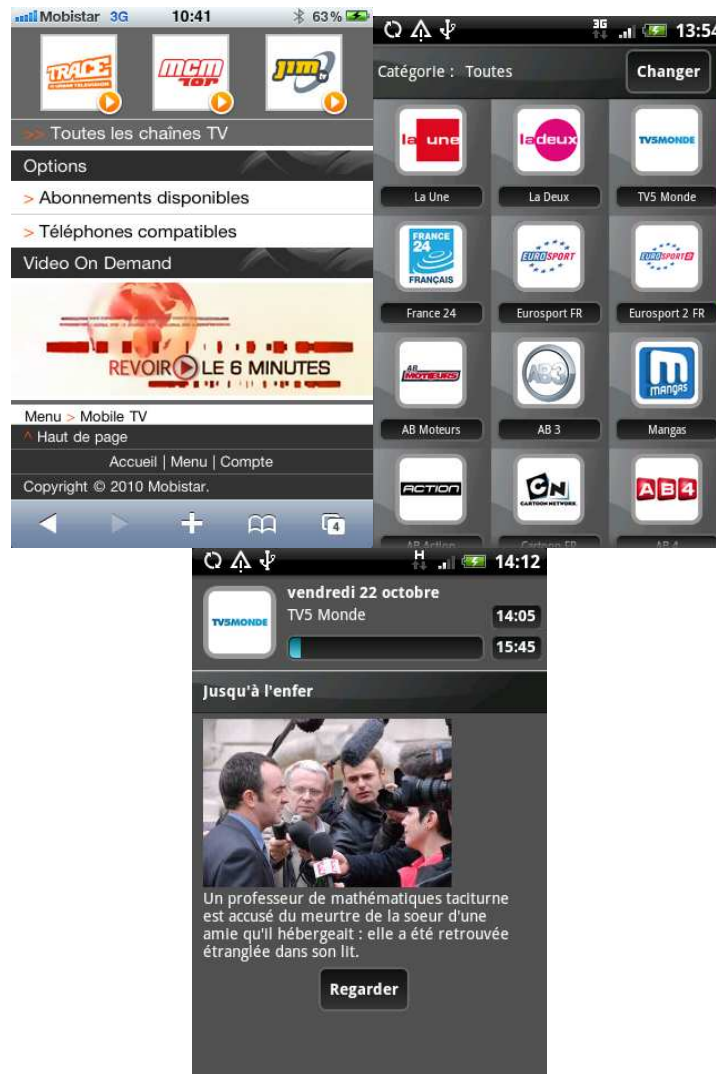


Figure 30: Mobile TV

Figure 1
Vertically-integrated
CA system.

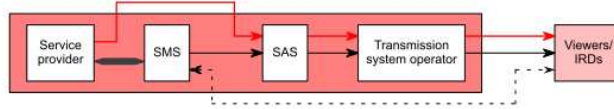


Figure 2
Devolved CA system.

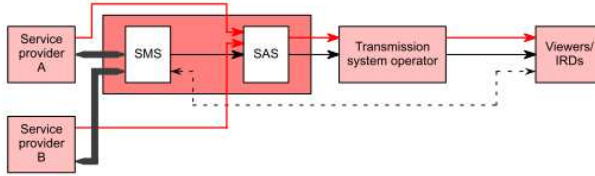
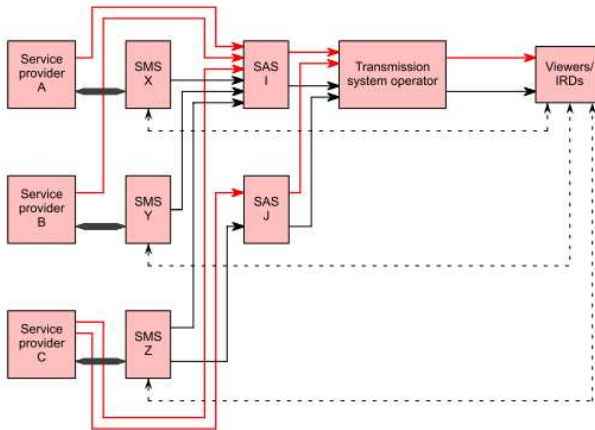


Figure 3
Devolved/shared/common
CA system.



KEY:

- Programmes
- Entitlements to view
- Money, addresses and bills
- ← Money and addresses

SMS = Subscriber Management System
 SAS = Subscriber Authorization System
 IRD = Integrated Receiver Decoder

Figure 31: Schematic presentation conditional access control

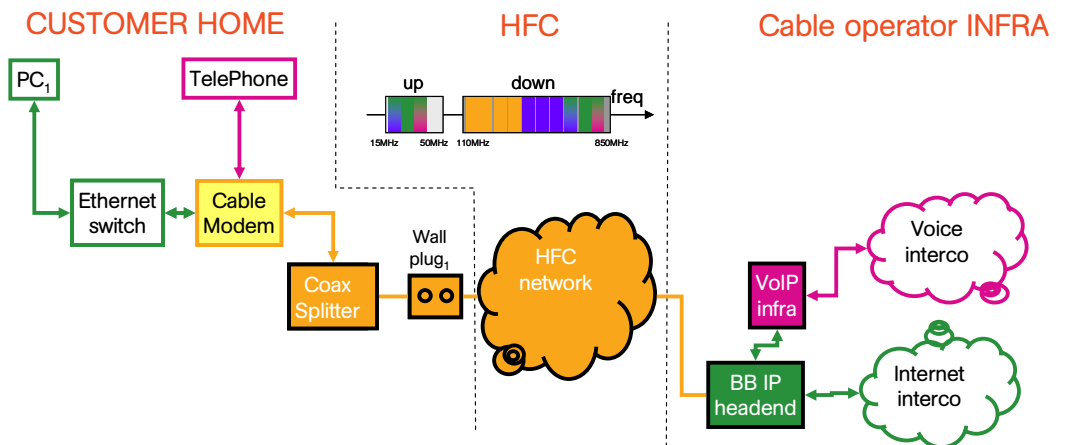


Figure 32: Cable operator infrastructure for broadband & voice services

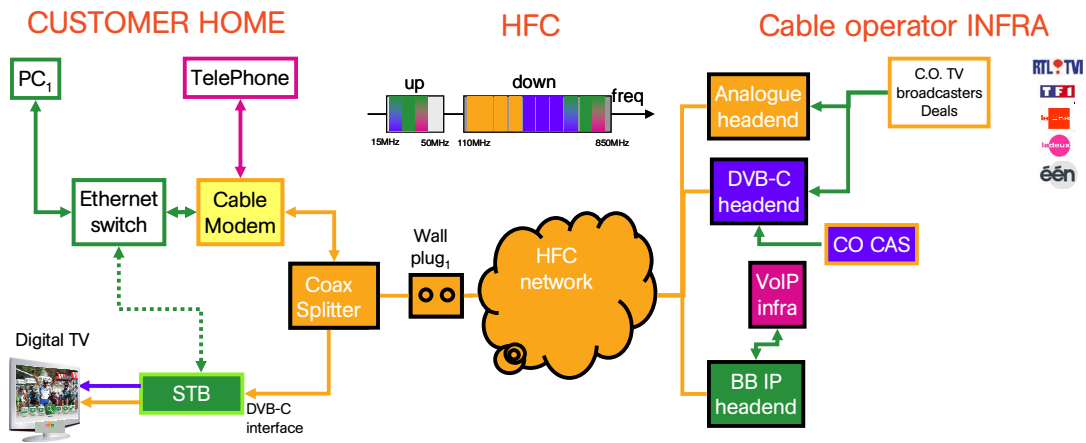


Figure 33: OLO Triple play offer based on wholesale offer cable operator

7.2 List of elements to be provided in the reference offers

- Technical and financial conditions for the access
 - Description of the network elements to which access is granted
 - Description of the end-to-end solution that guarantees the same level of service than retail solution (QoS management, profiles, encoding quality...)
 - Information on the technical limitations of the equipments
 - Procedures for ordering, delivery and usage of the granted access
 - Procedures for troubleshooting and ordering, follow-up and closure of trouble tickets
 - Description of all the financial aspects
 - Description in which cases an access can be denied
- Technical and financial conditions for collocation
 - Description in which cases collocation can be denied and description of the alternative
 - Description of the operational procedures for access to the sites
 - Information on the technical limitations of the equipments
 - Description of the security rules & procedures
- Technical and financial conditions for access/usage of the Information systems
 - Description of the access to the operational supporting systems (OSS)
 - Description of the access to the business supporting systems (BSS)

OSS/BSS systems represent the IT tools and databases used for pre-qualification, ordering, provisioning and follow-up of the processes as well as for maintenance, repair and billing of the service.
- Technical and financial conditions for the delivery of access/service
 - Description of the timers & SLA for pre-qualification, ordering, provisioning of a line and/or service
 - Description of the timers & SLA for maintenance & repair
 - Description of the escalation procedure with timers & SLA
 - Description of the compensations in case of non-respect of the SLAs
- Technical limitations
 - Description of the technical limitations of the access/services
- Technical and financial conditions migration of access/service
 - Description of migration process with among others:
 - the migration of the service/access from one beneficiary to another
 - Description of the operational processes and limitations