

EXPERIENCE PROJECT

MARKET 18

**BROADCASTING TRANSMISSION SERVICES
TO DELIVER BROADCAST CONTENT TO END-USERS**

September 1, 2006

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SUMMARY OF ANSWERS

Table 1. Summary of market 18

	Summary of answers				Decision Status				Result of Market Analysis
	Answers	Market Def.	Market Analysis	Remedies	Final Decision	Notif. Process	National Consult.	Vet oed	
ANACOM (Portugal)									
ANRC (Romania)	X								
COMREG (Ireland)	X	X	X	X	X				Single SMP
FICORA (Finland)	X	X	X	X	X				Single SMP
NCAH (Hungary)	X								
PTS (Sweden)	X	X	X	X	X				Single SMP
BNETZA (Germany)									
ARCEP (France)	X	X	X	X	X				Single SMP
AGCOM (Italy)	X	X	X			X	X*		Joint Dominance
NITA (Denmark)									
OFCOM (UK)	X	X	X	X	X				Single SMP, Joint dominance
RTR (Austria)	X	X	X	X	X				Single SMP
APEK (Slovenia)									
CMT (Spain)	X	X	X	X	X				Single SMP
EETT (Greece)									
UKE (Poland)									
BIPT (Belgium)									
CRC (Bulgaria)									
SIDEAMET (Estonia)									
SPRK (Latvia)									
MCA (Malta)									
NPT (Norway)	X	X	X	X					No ex-ante
OPTA (Netherlands)	X	X	X	X	X				Single SMP
PTA (Iceland)	X								
RRT (Lithuania)	X	X	X	X		X			
OCTPR (Cyprus)	X								

* AGCOM has not yet completed the National Consultation process because the actual Consultation does not include the remedies; all data provided in this document rely and refer only to the published Consultation Document available in the AGCOM Web Site

CTU (Czech Republic)	X	X	X	X	X				Single SMP
TUSR (Slovakia)									
ILR (Luxemburg)									
Total	14	11	11	10	7	2	1	0	

I SCOPE OF THE PAPER

The paper follows the Report on Experiences with Market Definition, Market Analysis and Applied Remedies and focuses on market 18 of the Recommendation. the Report on Experiences on markets 10, 11, 12, 15 and 16 was made in 2005.

This paper describes the market analysis process of broadcasting transmission services market included in the Recommendation identifying, where possible, common problems and trends. In so doing, the report elaborates on terrestrial and cable broadcasting transmission market definition, market analysis and remedies imposed in broadcasting transmission markets. It has to be taken into account that national circumstances vary substantially from one country to another and therefore, this document is merely a starting point to understand why the final output in some cases has been different.

II OVERVIEW OF THE OUTCOMES OF MARKET ANALYSIS

Broadcasting markets and susceptibility to *ex-ante* regulation

Table No.1

	ANALOGUE TERRESTRIAL		DIGITAL TERRESTRIAL		CABLE
	Radio	TV	Radio	TV	
AGCOM	Yes	Yes	-	Yes	-
ARCEP	No <i>ex-ante</i>	Yes*	-	Yes*	No <i>ex-ante</i>
COMREG	National yes/ Local no	Yes	-	-	No <i>ex-ante</i> **
CMT	-	Yes*	-	Yes*	-
CTU	Yes***	Yes***	-	-	-
FICORA	Yes	Yes	Yes	Yes	No <i>ex-ante</i>
NPT	No <i>ex-ante</i>	No <i>ex-ante</i>	No <i>ex-ante</i>	No <i>ex-ante</i>	No <i>ex-ante</i>
OFCOM	Yes (2 markets)	Yes (2 markets)	-	-	-
OPTA	No <i>ex-ante</i>	-	-	-	Yes (and also retail cable market 19 was defined)
PTS	Yes	Yes	No <i>ex-ante</i>	Yes	No <i>ex-ante</i>
RRT	Yes (2 markets)	Yes (2 markets)	-	-	No <i>ex-ante</i>
RTR	FM-Yes/ AM- No	Yes	-	-	No – must-carry and CBP of broadcasters (only TV, radio – not commercially relevant)

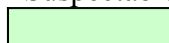
* Broadcasting transmission services market (analogue and digital terrestrial transmission services are included in the same market).

** Cable/ satellite market was defined.

*** National-wide analogue terrestrial radio and television transmission services market was defined.



Susceptible to *ex-ante* regulation



Not susceptible to *ex-ante* regulation



Not defined

III MARKET DEFINITION

III.1 Commission definition

Broadcasting transmission services, to deliver broadcast content to end users are defined in the Recommendation.

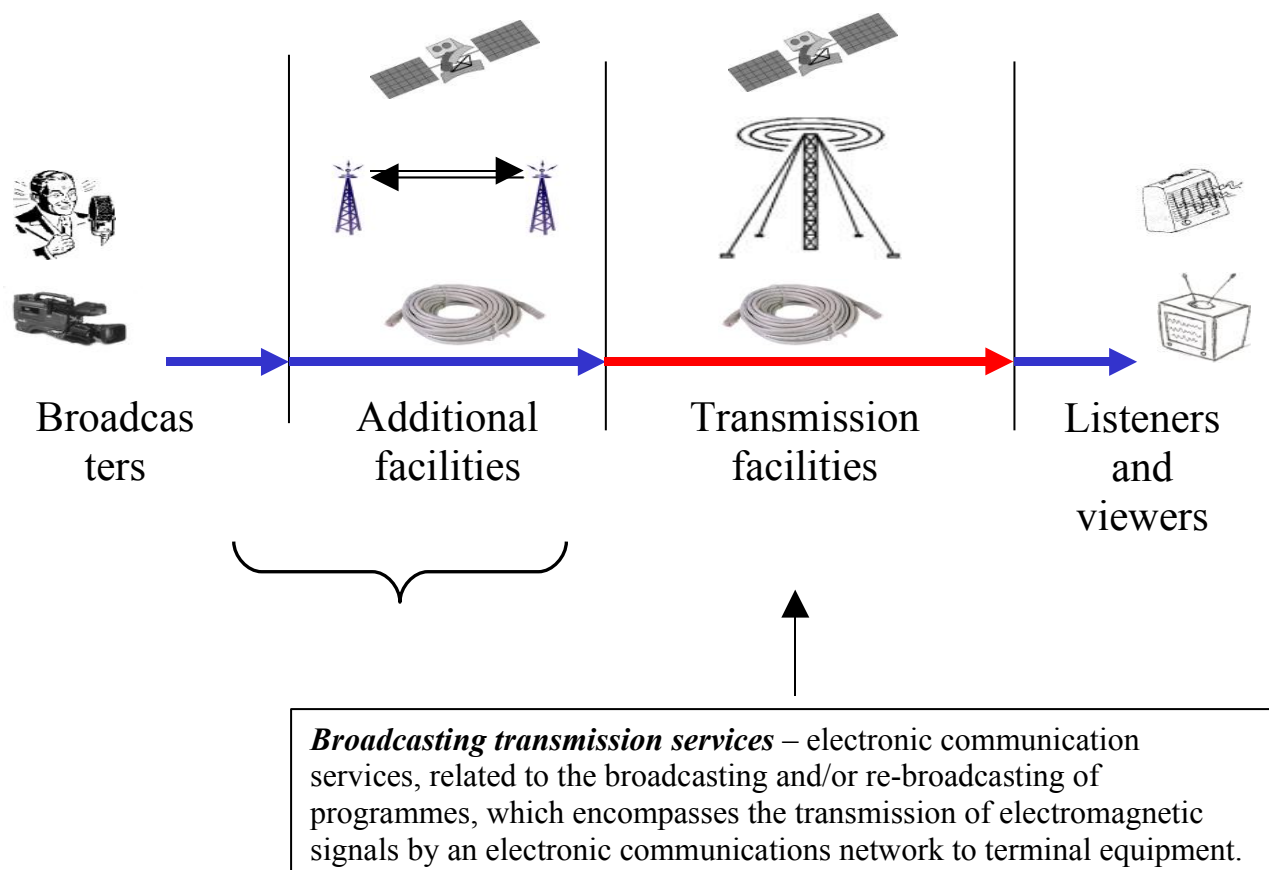
It is stated in the Explanatory Memorandum of the Recommendation that *“electronic communications services include transmission services in networks used for broadcasting but exclude services providing or exercising control over content transmitted using electronic communication networks and services. The provision of broadcasting services therefore lies outside the scope of this regulatory framework, but the networks and associated facilities used for delivery of broadcast services are within the scope”*.

Also it is pointed: *“it is possible to characterise the market both in terms of the services that are delivered and the transmission network over which they are delivered”*.

General picture of broadcasting transmission services see in Picture 1 below.

General picture of broadcasting transmission services

Picture 1



III.2 Overview of the markets defined

In general all the NRAs found that the defined markets operate in a narrower way to the market identified in the Recommendation of the Commission.

Most of the twelve NRAs which have conducted the market 18 analysis have defined terrestrial, cable and satellite broadcasting transmission markets, but not all of the defined markets were found susceptible to *ex-ante* regulation (as it seen from the table No. 1 above).

Satellite broadcasting transmission market has not been defined as relevant by any NRA because it is considered as a transnational market.

III.2.1 Substitutability between services: radio and TV

In most terrestrial broadcasting transmission markets cases there was no substitutability found between radio and TV, but in some cases radio and TV broadcasting services were not separated on cable and satellite platforms.

AGCOM, ARCEP, CMT, CTU, OFCOM, RRT and RTR have not found substitutability between radio and TV in all the defined markets.

COMREG, FICORA, NPT and PTS have not found separate radio and TV transmission services markets in cable and satellite networks.

It is worth mentioning that RTR have found the markets for cable and satellite radio broadcasting not commercially relevant and the markets were not defined.

III.2.2 Substitutability between platforms (terrestrial, cable, satellite)

Broadcasting transmission services are provided via different transmission platforms: terrestrial, cable, DSL and satellite networks.

Most of the NRAs did not found any substitutability between these platforms.

However, in its notification, COMREG stated that there is a single market for radio and television transmission services over cable and satellite. Also the Commission noted that COMREG concluded that broadcasters would be unlikely to switch from cable to satellite transmission.

III.2.3 Substitutability between analogue and digital signals

AGCOM and PTS have defined separate analogue and digital television broadcasting markets.

ARCEP defined national wholesale market for terrestrial TV transmission (whether analogue or digital).

In OFCOM's opinion analogue and digital terrestrial services are in the same market on the supply side and appear to be cluster markets. Also CMT didn't separate analogue and digital markets.

COMREG, NPT, OPTA, RTR and RRT did not analyze separate digital markets, because they were still in an emerging phase.

III.2.4 Geographic scope of the markets

Most of the NRAs have defined national geographic markets (ARCEP, AGCOM, CMT, COMREG, CTU, FICORA, NPT, PTS, RRT, RTR).

AGCOM defined local and national geographic markets for broadcasting transmission services.

OPTA defined national geographical wholesale cable market and retail cable markets according to the coverage areas of the operators. Markets were defined per area (of a cable company).

IV SUSCEPTIBILITY TO EX-ANTE REGULATION

IV.1 Terrestrial transmission markets

IV.1.1 Overview of conclusions

AGCOM has found three markets susceptible to *ex-ante* regulation: analogue TV broadcasting market, Digital TV broadcasting transmission market, Analogue radio broadcasting market (the three corresponding analysis are available in the national consultation document published on AGCOM Web Site).

ARCEP has defined one national wholesale market for terrestrial TV transmission services (whether analogue or digital).

CMT has defined susceptible to *ex-ante* regulation the market for broadcasting transmission services (analogue and digital terrestrial TV) market.

CTU defined national-wide analogue terrestrial radio and television transmission services market.

COMREG defined two wholesale markets: radio broadcasting transmission services on national analogue terrestrial networks and TV broadcasting transmission services on analogue terrestrial networks

FICORA found susceptible to *ex-ante* four markets :

- national analogue television transmission services in the terrestrial analogue network,
- national analogue radio transmission services in the terrestrial analogue network,
- digital TV transmission services in terrestrial digital television network in multiplexes A, B and C as referred to in network licenses
- and national digital radio transmission services in the terrestrial digital network.

OFCOM defined two markets for the provision of terrestrial transmission services for the purpose of providing analogue and/or digital terrestrial transmission services within the UK to deliver a National Broadcast Service (in this market SMP was found) and to deliver other than a National Broadcast Service (SMP wasn't found).

PTS have found three markets that have passed all three of the criteria in the Recommendation: digital terrestrial TV, analogue terrestrial TV and national analogue terrestrial radio.

RTR have found the market for terrestrial television broadcasting and the market for FM radio broadcasting susceptible to *ex-ante* regulation.

RRT have found four relevant terrestrial broadcasting transmission markets:

1. Market of terrestrial radio broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to a transmission (service) provider;
2. Market of terrestrial television broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to a transmission (service) provider;
3. Market of terrestrial radio broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to a broadcaster;
4. Market of terrestrial television broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to a broadcaster.

NPT has not found any broadcasting transmission market susceptible to *ex-ante*.

IV.1.2 Analysis of the details

ARCEP specified, that the relevant market corresponds to the access granted by the incumbent transmission service provider (TDF) to its competitors. ARCEP have therefore defined **the upstream market**. TDF has to offer access to its sites, its pylons and its antennae system (use of the antenna, the feeder and the multiplexer of the terrestrial broadcasting transmission services provider which has SMP). The seller and the customer on this market are the transmission services providers. Access is granted in order to allow them to build their own offer to the multiplex operators. The downstream market for the provision of wholesale terrestrial TV transmission services will be analyzed later.

CMT noticed that the relevant market includes: broadcasting, masts, associated facilities, interconnection and access.

OFCOM indicated differences in separate stages in the vertical supply chain. The access to masts/sites at the wholesale level and at the intermediate managed transmission services level relevant markets were identified. OFCOM distinguished markets for the provision of access to the masts and sites network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis. This market was designated as a relevant one because there is no substitute for access to sites and masts. It is essentially a bottleneck.

RRT defined four terrestrial transmission services markets due to different competition conditions and possibilities to choose broadcasting transmission services for broadcaster: market of terrestrial radio (and television) broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to transmission (services) provider and market of terrestrial radio (and television) broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to broadcaster.

It is also worth mentioning that RRT found that vertically integrated transmission facilities (i.e. the access to masts/sites) services play an important role in identifying competition problems in the terrestrial broadcasting transmission services markets. The incumbent LRTC provides transmission facilities services and terrestrial broadcasting transmission services, but

transmission facilities (i.e. the access to masts/sites) services market was not defined as a separate one (as it was done by OFCOM).

IV.1.3 Reasons for national circumstances

COMREG established that some radio operators ***only provide services on a local basis*** and do not compete with those, which provide services on a national basis – no demand side substitution could be found between these products. Additionally, due to the different retail services provided (analogue Vs digital), COMREG found there to be no demand side substitution.

IV. 2Cable transmission markets

IV.2.1 Overview of conclusions

Cable transmission markets were analyzed as susceptible to *ex-ante* only by OPTA. On the wholesale level market of transmission radio/TV signals via cable network was found. Wholesale remedies are aiming on program providers and do not stipulate retail market. Two retail markets presenting imperfect competition conditions have been found susceptible of *ex-ante* regulation: retail cable free available RTV-packages per cable company area and retail cable pay-TV per cable company area. Indeed, market analysis showed that wholesale remedies were not sufficient, so retail markets were defined.

In all other countries it seems that broadcasting transmission services via cable television networks do not passed all three criteria (especially the second one) and it was proved that the market went towards effective competition and therefore no *ex-ante* regulation was warranted.

IV.2.2 Reasons for national circumstances

Historically approximately 60 cable broadcasting suppliers are in the Netherlands with less than 50 percent of national territory coverage. 95 of households in country have access to cable broadcasting network.

V MARKET ANALYSIS

v. 1 Results of market analysis

This chapter provides a comparative overview of the findings on market analysis. Out of 11 NRAs, 10 made the market analysis – 9 NRAs on wholesale terrestrial transmission markets and one NRA on wholesale cable transmission and retail cable deliverance of RTV signal. Notably, all NRAs decided the relevant markets defined susceptible to *ex-ante* are not effectively competitive and found *single dominance or joint dominance* (OFCOM for this later case). The results of market analysis are presented within the table below.

Table No. 2

<i>Broadcasting transmission service provider</i>	<i>Wholesale market/markets where the broadcasting transmission service was designated having SMP</i>
AGCOM	1. The market for National Analogue Terrestrial Television broadcasting. (sentence omitted)
ARCEP : TéléDiffusion de France (TDF)	National wholesale market for terrestrial TV transmission services
CMT: Abertis Telecom S.A.U.	Broadcasting transmission services (analogue and digital terrestrial TV transmission)
COMREG: RTNL	1. National Analogue Terrestrial Radio broadcasting transmission market 2. National Analogue Terrestrial Television broadcasting transmission market
CTU	1. National-wide analogue terrestrial radio and television transmission services market
PTS: Teracom	1. Digital terrestrial TV 2. Analogue terrestrial TV 3. National Analogue terrestrial radio
FICORA: Digita Ltd	1. Digital terrestrial TV 2. National digital terrestrial radio 3. National analogue terrestrial TV 4. National analogue terrestrial radio
RTR: ORS	1. The market for analogue terrestrial television broadcasting 2. The market for analogue terrestrial FM radio broadcasting
RRT: LRTC	1. Market of terrestrial radio broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to a transmission (service) provider; 2. Market of terrestrial television broadcasting transmission

	<p>services, to deliver broadcast content to end users when a radio frequency is assigned to a transmission (service) provider;.</p> <p>3. Market of terrestrial radio broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to a broadcaster;</p> <p>4. Market of terrestrial television broadcasting transmission services, to deliver broadcast content to end users when a radio frequency is assigned to a broadcaster.</p>
OPTA: five largest providers	Wholesale cable (free available RTV-packages and pay TV) per cable company area
OFCOM: <p>1. Crown Castle and NTL (single dominance in two separate markets)</p> <p>2. Any other operators other than Crown Castle and NTL</p> <p>3. Crown castle (joint SMP with NTL)</p> <p>4. NTL (joint SMP with CC)</p> <p>5. Competitive (no SMP)</p>	<p>1. Markets for the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle/NTL for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis.</p> <p>2. Market for the provision of access to other masts, sites and shared or shareable antenna systems used for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users</p> <p>3. The provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver a National Broadcast Service.</p> <p>4. The provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver a National Broadcast Service.</p> <p>5. The provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver <i>other than National Broadcast Service</i>.</p>

V. 2 Most important criteria

Answers to the questionnaire sent to NRA's show a consistent choice of criteria among NRAs to assess SMP or effective competition for radio/TV transmission services, without any remarkable differences between analogue and digital technologies, but with a few differences between terrestrial and cable platforms.

In the case of **terrestrial transmission**: *market shares, control of infrastructures not easily duplicated, barriers to entry, lack of countervailing buying power* were the criteria most often used by NRAs. Other criteria included within the list are *economies of scale and economies of scope, vertical integration, and overall size of the undertaking*.

As for **wholesale cable transmission**, the most mentioned criteria were *control of infrastructures not easily duplicated, absence of or low countervailing buying power, product/services diversification, economies of scale, easy or privileged access to capital markets/financial resources*, while for **retail cable** the criteria were *control of infrastructures not easily duplicated, absence of or low countervailing buying power, product/services diversification, excessive pricing, market shares*.

V.2.1 Terrestrial transmission services (Single dominance criteria)

V.2.1.1 Market shares

The criterion used by all NRAs on the wholesale terrestrial transmission market was **market shares**, as can be seen from the following sample of details of NRA's analysis of the concerned operators market shares. As a general view, for analogue radio and TV transmission services, most of the market shares of the SMPs providers are over 60% in terms of sites and transmitters and close to 100% in terms of revenues. It is important to mention that in countries like Austria and Lithuania (broadcasters self supply services in particular markets) the SMP operator is not the only provider, mainly in the case of radio transmission services. Although there are operators providing broadcasting services, SMP operator is the only supplier at national level.

RTR - SMP operator has over 90% of revenues for radio transmission and 100% of revenues for TV transmission, over 60% of sites for radio and over 95% for TV, over 80% of transmitters for radio and over 95% for TV, over 70% coverage in case of radio and over 95% in case of TV.

FICORA - Digita is the only provider (100 % market share) on digital and analogue TV and radio.

ARCEP - TDF owns 100% of the ATT transmission sites and 94% of the DTT transmission sites for analogue and digital TV transmission services.

AGCOM – RAI and Mediaset own respectively about 46% and 36% of the total transmission infrastructures/frequencies for analogue TV transmission services.

CMT – Aberis Telecom S.A.U holds more than 85% of market shares on analogue and digital terrestrial TV transmission.

CTU - RADIOKOMUNIKACE a.s. has 100% market share in providing national-wide transmission services.

COMREG – there is only one supplier of wholesale national analogue radio and TV terrestrial transmission.

OFCOM – each operator on its own relevant market has 100% market share (operator – specific market).

RRT - LRTC is the only supplier on wholesale analogue radio and TV terrestrial transmission markets, in the case where the frequency is assigned to a broadcaster. It is noteworthy that LRTC is the only undertaking providing broadcasting transmission services to other undertakings and is the largest provider of broadcasting transmission facilities services in all the markets.

PTS – Teracom has 100% market share (there is only one supplier of wholesale national analogue radio and TV terrestrial transmission).

V.2.1.2 Control of infrastructure not easily duplicated

Seven NRAs (AGCOM, ARCEP, OFCOM, CMT, CTU, FICORA, PTS, RTR) that have found SMP operators on terrestrial transmission markets considered *control of an infrastructure not easily duplicated* as being one of the most important advantage. FICORA's argument is that, for constructing alternative networks, large investments are necessary, RTR comments that ORS is the only operator that owns a network with national coverage many sites being not replicable, while CMT is of the view that Abertis Telecom has control of the entire broadcast network which is not easily replicable at national level. OFCOM marked large sunk costs, difficulty to duplicate the networks and planning permissions difficult to obtain. CTU pointed that RADIOKOMUNIKACE a.s. is the only owner of infrastructure and sites so it is the sole service provider capable to offer such services in the given range.

V.2.1.3 Barriers to entry

This criterion was used by seven NRAs (AGCOM, ARCEP, COMREG, FICORA, PTS, RTR and RRT) that have found SMP operators on **terrestrial transmission** markets. COMREG mentioned that substantial financial costs and the current public resistance to the construction of masts for radio communications either in centres of population or in scenic rural areas together with the costs would make the proposition unattractive to potential new entrants. As RTNL, the SMP operator, is a national provider, has long term contracts with radio/TV broadcasters and is well established in the market, it would be difficult for a new entrant to offer service that would attract radio/TV broadcasters away from RTNL. FICORA considered that scarcity of frequencies, the need for a licence (digital networks) are important barriers to entry, while RTR's main arguments were that high barriers are particularly for large sites due to economies of scale and sunk costs, technical and legal barriers. In RRT's view a long-time sole provider of broadcasting transmission services LRTC creates a widely developed and hardly substitutable

network of electronic communications in the territory of Lithuania. CMT considered the existence of barriers to entry whenever it is intended to reach coverage above the 80%, since the investment required to cover the marginal 20% results significantly high.

Other criteria that could be considered as high entry barriers were *economies of scale and scope (mentioned by ARCEP and PTS)*, *overall size and notoriety of the undertaking (mentioned by ARCEP)*.

V.2.1.4 Other criteria

Five NRAs (CMT, CTU, OFCOM, RTR and RRT) included assessment of *countervailing buyer power* within the most important criteria list. RTR and RRT consider that CPB is especially low in those cases where possibility of self - supply is restricted, but CMT argues that the CPB is noticeable because buyers are very concentrated too (only seven transmission service buyers) – despite this fact, the mutual dependence between buyer and seller reduces the bargaining power of buyers to prevent the possibility independent behaviour by Abertis. OFCOM sees there vertical integration and mutually agreed terms to share sites and masts.

Vertical integration was analyzed by four NRAs (ARCEP, OFCOM, RRT and RTR). RTR considered that ORF/ORS were vertically integrated and may have incentives to foreclose competitors. In the case of OFCOM, both NTL and Crown Castle (as they were called at time of market review) were considered vertically integrated in sites/masts and MTS, but not in providing content.

Other criteria mentioned are:

- *no potential competition*: COMREG argues that there is and has been only one player active in the national analogue terrestrial radio/TV transmission market and no new parties have entered the market and, also, capacity in the terrestrial radio/TV broadcasting bands is finite.
- *pricing*: RTR found that prices are above costs (2003: +30%, 2004: +16%) despite legal provisions

V.2.2 Terrestrial transmission services (Joint dominance criteria)

Joint dominance in terrestrial transmission services markets was found by OFCOM.

The following criteria were analyzed: mature market, high barriers to entry, lack of potential competition, lack of technical innovation/mature technology, market concentration, homogeneous product, similar market shares, various kinds of informal or other links between the undertakings concerned, lack or reduced scope of price competition, similar cost structures, transparency, retaliatory mechanisms.

It was stated that there are two very established market players and they have similar 50/50 market shares which shows the signs of a mature market. Products are homogeneous. New entrants are unlikely to come to the market due to sunk costs, expertise and skills, economies of

scale and scope. The features of high barriers to entry, which even with upstream remedy remain significant, are: the wish of customers to purchase a turnkey solution from a single provider which is able to guarantee very high service quality. This suggests the need for a national field force as it would be more difficult to maintain quality using local or regional sub-contractors. It also places a premium on track record; the specialised nature of the technology which is outside the experience and expertise of most of the existing national engineering field-forces; and the likelihood that multi-service customers will continue to wish to use a single provider for all of their transmission services. Partly this is due to economies of scope of provision (e.g. in analogue and digital television transmission for the same customer). Partly it results from the enormously complex digital television switchover project which needs to be managed effectively— having to deal with different analogue and digital television providers during such a period would give rise to an unwelcome increase in complexity which could easily place in jeopardy planned switchover dates.

V.2.3 Cable transmission services

Compared to terrestrial transmission market analysis, most of the arguments used for identifying SMPs on cable transmission networks are the same, except for the *market share* which was not the most often used criterion.

Thus, in case of **wholesale transmission of RTV signals via cable networks**, OPTA found five largest providers as being dominant and might have incentive to deny access to programme-suppliers and/or package providers based on the following criteria:

- *control of an infrastructure not easily duplicated* because duplication was very unlikely within the regulation period
- *countervailing buyer power* – is absent
- *product/service diversification* – possible with a risk on bundling
- *large economies of scale*
- *easy or privileged access to capital markets/financial resources*

The market share was not included within the most 5 important criteria list.

As for **retail deliverance of RTV signals via cable networks**, where all cable operators were found dominant in their coverage area, main OPTA's arguments represented *control of an infrastructure not easily duplicated* within regulation period, *lack of CBP*, *product/services diversification* possible with a risk on bundling, risk of excessive pricing and existence of market shares of approximately 90%.

III.2.4. Other specific issues

III.2.4.1. Issues of vertical integration

This criterion has been used to assess SMP by a few NRAs (ARCEP, COMREG, RTR) in case of *terrestrial transmission*, where the SMP operator is also a broadcaster, as part of the same group. Since vertically integrated operators control the network and associated facilities,

produce different products at different levels, they could compete with other operators on many products in different levels in the value chain.

RTR considers that the SMP operator (ORS, a subsidiary company of ORF which is providing TV and radio programs) may have an incentive to foreclose private broadcasters to compete with ORF at the retail level.

COMREG explained that RTNL (transmission services provider) and RTE (broadcaster) are part of the same group – RTE. COMREG analyzed as part of the market analysis that at the present time, RTÉ does not have separate accounting systems for its broadcasting (RTÉ) and transmission (RTNL) divisions. It was, therefore, difficult to understand the operating costs of managing the network and to match costs with prices charged for transmission to third parties. This lack of transparency makes it difficult to assess whether transmission services are currently provided on a fair, reasonable and non-discriminatory basis.

OFCOM took into account the fact that the two players - NTL and Crown Castle - were vertically integrated – both provide sites/masts to themselves (and each other) downstream to MTS.

For *cable transmission*, OPTA specified that, since access is needed for other parties at the wholesale level and since the network owner is also active at the retail level, then access denial, or unfavourable terms of access, and (price) squeeze might arise. Concerned services are mainly transmission of broadcast signals, but also may be bundled with internet etc.

III.2.4.2. Issues of countervailing buyer power

The conditions in which the broadcasters have CPB were analyzed by four NRAs in the case of *terrestrial transmission services*.

RTR conclusions of the analysis were that there was some CBP but to a limited extent.

COMREG noted that “barter like” negotiations occur between broadcasters and platform operators at the wholesale level in relation to the carriage of and rights to broadcast programs services. However this relationship did not appear to exist on the national analogue terrestrial radio or television market transmission market. RTÉ’s transmission company, RTNL, is obliged under the Broadcasting Acts 1960 to 2001 to transmit, by analogue means, sound broadcasting services on behalf of the Authority. TV3, the only national television programme services contractor has no alternative national analogue transmission network that it can use, and RTNL does not purchase services from it. Accordingly, it cannot credibly threaten not to purchase from RTNL, or to retaliate against it. COMREG is of the view therefore, that countervailing buyer power does not exist.

In the case of OFCOM, it was considered that broadcasters did not have sufficient CBP to constrain MTS or sites/masts access, due to a lack of an outside option. PSBs were expected to provide near-universal coverage.

CTU concluded that as RADIOKOMUNIKACE a.s. is the sole provider of national-wide terrestrial analogue broadcast transmission services, the broadcasters have very limited countervailing buyer power on this market.

In the case of cable, OPTA noticed a shift in bargaining power from cable companies to broadcasters. In OPTA’s view this should increase with the rise of alternative platforms for RTV transmission (under investigation).

VI REMEDIES

VI.1 SMP operators have been imposed remedies according to the Access Directive and US Directive

Out of the 11 NRAs that have started the action on market 18, 10 finished the market analyses, found SMP operators¹ and 9² of them have imposed remedies. All of them found single dominance or joint dominance on each of the identified relevant markets susceptible to *ex-ante regulation*. Only one NRA (OPTA) defined a relevant retail market and imposed remedies according to the US Directive.

It appears that there are quite a few differences in the way of regulating SMP operators, since the definitions within the member States are slightly different .

VI.2 Remedies imposed are not quite homogeneous

VI.2.1 In the area of terrestrial transmission

As relevant markets were defined according to the national circumstances and, therefore, appear to differ from country to country, implemented regulation is not quite homogeneous. Only four NRAs (ARCEP, CMT, CTU and FICORA) have imposed the whole set of remedies of *article 9* (obligation of transparency), *article 10* (obligation of non-discrimination), *article 11* (obligation of accounting separation), *article 12* (obligation of access to, and use of, specific network facilities), *article 13* (price control and cost accounting obligations) articles to the SMP operator.

Two NRAs *did* not impose the remedy of *art 9 (PTS and RTR* – because the reference offer is based on non-discrimination in Austrian law), three NRA's (OPTA, OFCOM, RRT) did not impose *art.11* obligation, while one NRA (COMREG) did not impose *art 12 and 13 of AD*.

Most of the remedies were imposed on the market for terrestrial TV and/or radio transmission services, analogue and/or digital, *with minor differences between digital and analogue* as regards the type of access imposed. In the case of ARCEP, all the remedies, with one exception (accounting separation which was imposed on the whole relevant market) were imposed only on the sole digital transmission segment of the market.

¹ COMREG, OFCOM, PTS, ARCEP, FICORA, OPTA, CMT, RTR, RRT, AGCOM

² AGCOM's is in the process of national consultation.

VI.2.2 In the area of cable transmission

OPTA, the only NRA that has imposed remedies on a different wholesale relevant market – “*wholesale cable transmission (free available RTV packages and pay TV) per cable company area*” - imposed the remedies of AD - art. 9, 10, 11 and 12, but did not ask for accounting separation.

At the retail level, *OPTA* decided to impose remedies from art 17 USD – transparency and prohibit pure bundling.

VI.2.3 Competitive problems addressed in the area of terrestrial and cable transmission

The remedy of **article 9** is a supporting remedy for external non-discrimination and it was imposed by CMT (*for both digital and analogue TV*), ARCEP (*only for digital TV*), FICORA (*only for digital TV/radio*), *OPTA*, RRT, OFCOM and COMREG. The negotiations and agreements regarding interconnection are time consuming together with the fact that operators need technical and business information from the SMP operator. The obligation is necessary to supervise whether the interconnection terms are reasonable and non-discriminatory as regards price, quality and to prevent denial of supply, cross-subsidisation, delaying tactics, and undue requirements. Along the same lines, FICORA imposed this remedy in order “to promote negotiations on hiring capacity in the digital network”.

The remedy of **article 10** was imposed by COMREG, PTS, *OPTA*, OFCOM, RTR, RRT, ARCEP (*only for digital TV*), CMT and FICORA in order to prevent discrimination in terms, price and quality, to avoid the risk of denial of supply and vertical leveraging of market power.

The remedy of **article 11**, imposed by ARCEP, CMT, FICORA, COMREG, RTR and PTS, is a “supporting remedy for article 13” (RTR) enabling transparency, non discrimination and preventing excessive pricing or price squeeze, it is imposed to guarantee wholesale price transparency and to impede unfair cross-subsidy among the integrated company (the SMP operator) and the alternative operators. In case of ARCEP, the obligation imposed means to make a distinction between the services the SMP operator does provide to itself in order to be able to provide services to broadcasters/ multiplexes, and its upstream wholesale offers (access) and, also, to identify the appropriate repartition between analogue, digital transmission and other services.

The remedy of **article 12** was imposed because of the difficulty to duplicate the SMP operator infrastructure (*only on the DTT transmission segment for ARCEP*), to prevent the risk of leveraging by no incentive to provide, denial of deal or refusal of access by *OPTA*, PTS, RTR, RRT, OFCOM, CMT and “to relinquish capacity in the terrestrial mass communications network”, in case of FICORA. Only COMREG did not impose article 12 remedy, as this obligation was considered unnecessary at the time of analysis, as RTNL currently provides access to all national radio and TV broadcasters. Furthermore, there is provision in national legislation that can mandate access to RTENL’s transmission facilities for the national independent radio and TV broadcasters

The remedy of **article 13** is imposed by FICORA, CMT, PTS, RTR, OFCOM, RRT, *OPTA* and ARCEP in order to prevent excessive pricing, vertical leveraging by margin squeeze,

bundling of products. In case of ARCEP, the obligation not to charge either excessive or eviction prices was imposed on the digital transmission segment of the market. The only NRA that did not impose this remedy was COMREG.

*The obligations of transparency and prohibit pure bundling imposed by OPTA, according to the art.17 USD on the **retail cable**, aim at prevent cross subsidization, bundling, excessive pricing and limited options of choice.*

VI.2.4 Specific content of obligations

VI.2.4.1 In the area of terrestrial transmission

1) Article 9 remedy

ARCEP imposed the remedy on the digital transmission segment and the SMP operator has the obligation to publish an offer (not a reference offer, in the sense that ARCEP does not have the power to modify it).

COMREG: Provide COMREG all agreements and associated documents for the provision of transmission services, including, a description of all terms and conditions and prices; publish schedule of tariffs, written notice (which may be in electronic format) of any new charges or any amendments; the SMP operator shall make available details of the technical specifications, network characteristics and terms and conditions of supply, under a service level agreement (SLA).

FICORA: The SMP company has the obligation to publish the delivery terms and tariff information regarding multiplexing of the channel bouquet and the transfer and transmitter network services needed for the transmission of programmes in digital television network. Furthermore, the company has the obligation to publish the delivery terms and tariff information concerning multiplexing of the channel bouquet and the transfer and transmitter network services needed for the national transmission of programmes in digital radio network. The delivery terms and tariffs shall be published on the company's website and shall be kept available as paper copies for another telecommunications operator at request.

CMT: The remedy imposed on the SMP is based on the obligation of providing the contracts and associated documents subscribed between the parts within the following 10 days since the agreement is signed.

2) Article 10 remedy

As a general observation, all NRAs apply article 10 in the same way: non discrimination is imposed on all necessary technical, legal and economic parameters. Below there are some examples of specific content of obligation regarding non-discrimination.

COMREG specified that the SMP operator is mandated to ensure that it would offer service level agreements (SLA) to broadcasters and all of the details contained in Access Regulations on a non-discriminatory basis. The SLA should address all matter referred to in the transparency obligation.

In the case of FICORA, all the prices as well as all other terms of delivery must be non-discriminatory.

RRT imposed obligation of non-discrimination on broadcasting transmission services and on broadcasting transmission facilities services.

CMT: The remedy on non-discrimination is implemented by applying the same conditions under similar circumstances (economic, technical and legal).

3) Article 11 remedy

COMREG – the details of this obligation shall be contained in decision(s) to be made by COMREG, following further consultation in relation to the detailed requirements for, and practical implementation of accounting separation.

In case of ARCEP, the remedy consists in the obligation to formalize and transmit to ARCEP the tariffs and conditions of internal transactions between the wholesale branch and the retail branch. ARCEP imposes the accounting separation obligation on the entire identified market, in addition ARCEP imposed on the digital segment only the obligation to formalize and transmit to ARCEP the tariffs and conditions of internal transactions between the wholesale branch and the retail branch (this obligation being as a complement to the accounting separation one).

FICORA obliged the SMP operator to separate in its accounts all operations related to the multiplexing of a digital channel bouquet, provision of digital transmitter network services, nationwide analogue transmitter network services and both digital and nationwide analogue transfer services of programs as one entity from other services provided by the company.

In the case of RTR, ORS has to separate costs in the relevant market from other costs. Information required: revenues, costs (split into wages, depreciation, capital costs, and other costs), assets analysis, number of employees, information regarding the transmitters leased to private broadcasters.

RRT obliged SMP operator LRTC to account separately broadcasting transmission services and broadcasting facilities services.

As for CMT, the principles, criteria and conditions that should be considered by the SMP to carry out the cost accounting has been defined by CMT within a decision from the Board with date June, 1st. In particular, the accountancy system that Abertis has to implement should be consistent with the following principles: causality, objectivity, transparency, accountancy, desegregation, neutrality, consistency, sufficiency and non-compensation. These broad principles should be in place in the final accountancy system that Abertis has to provide within 9 months.

4) Article 12 remedy

Remedies imposed under article 12 are quite different and it depends on the type of platform network and the technology included in the market. Most of the NRAs have indeed decided to impose interconnection and access obligations, with one exception: COMREG.

RTR and RRT imposed access to the service of terrestrial broadcasting provided by the SMP operator and also to the masts and sites of this operator. The access obligation gives access to broadcasting and owners of rights over contents.

PTS – in the case of DTT, the remedy consists in providing access to the digital terrestrial network on reasonable request; in the case of ATT and national radio, the SMP operator is

obliged to provide a wholesale product (which includes all the elements that are included in the broadcasting transmission services that the SMP operator delivers to its customers) for distribution on reasonable request.

FICORA - access to the service of terrestrial broadcasting provided by the SMP operator who has the obligation to relinquish access rights to terrestrial mass communications network capacity to electronic communications operators, i.e. to offer a package of services consisting of multiplexing of a channel bouquet, and transfer and transmitter network services.

ARCEP – the obligation consists in access to masts, the pylons and the antennae system (use of the antenna, the feeder and the multiplexer) on fair and reasonable terms.

CMT - The obligation consists of access to masts, the pylons and the antennae systems (use of the antenna, the feeder and the multiplexer) on fair and reasonable terms.

5) Article 13 remedy

Concerning article 13 remedy, except for COMREG that did not impose such a remedy, all NRAs have imposed price control and cost accounting obligations.

ARCEP imposed price control and cost accounting obligation not to charge either excessive or eviction prices for both digital and analogue segments. Thus, ARCEP imposed a price control remedy but in a “moderate way” with a “non excessive pricing and non eviction pricing” obligation; moreover ARCEP made distinctions between the two identified market segments (upstream and downstream).

CMT imposed cost orientation with the obligation of not charging excessive prices in the provision of the regulated service.

FICORA - cost orientation: pricing is based on proved performance-based costs that can be clearly indicated and cost-accounting procedures constitute the means for monitoring the costs and their influence on the profitability of operations, the pricing obligation imposed on Digita Ltd is completed by an obligation to use cost-accounting procedures.

RTR - FDC based on historic costs of ORS but corrected for inefficiencies.

PTS and RRT imposed FDC.

IV.2.4.2 In the area of cable transmission

Wholesale level

To prevent competition problems, OPTA imposed the following obligations:

Article 9 remedy consists of the obligation of UPC, Essent and Casema to provide the necessary information for realizing the requested access, respectively for making a founded request for access within fifteen days.

Article 10 remedy

UPC, Essent and Casema were obliged to provide access on non-discriminatory terms.

Article 11 remedy

OPTA decided not to impose it.

Article 12 remedy

OPTA imposed access to the service of cable broadcasting transmission services provided by each 5 SMP operators and to certain distribution – centers of each SMP operator; the beneficiaries are broadcasting and owners of rights over contents. OPTA is currently thinking of policy regarding wholesale access, but there is also possibility that policy be made in dispute resolution.

Article 13 remedy

The obligation of cost accounting means that the three largest providers must deliver a wholesale cost system to be approved by OPTA and based on criteria imposed by OPTA in the market analysis decisions. For proportionality reasons, this wholesale cost system maintains at an abstract level and mainly consists of causality relations between cost and different type of access. Determination of the actual costs is done in case of actual (access or cost) disputes or on enforcement. Note that this is above (or: notwithstanding) the obligation for the providers to deliver access on cost-orientated base anyhow.

Retail level

The obligation of transparency and pure prohibit bundling were imposed by OPTA for all operators for only one year according to the art. 17 of US Directive.

VII CONCLUSIONS

Market definitions and market analyses carried out by the NRAs up to September 1, 2006 have shown that competitive conditions on broadcasting platforms differ significantly across the IRG members. Thus, the existence and coverage of platforms which vary from country to country as well as their importance (number of subscribers or users) at the retail level, the number of suppliers, barriers to entry and national particularities of the markets, including in some cases specific provisions in national legislation, conducted to a "national" approach of the market for "broadcasting transmission services, to deliver broadcast content to end user".

While most countries have subdivided the market according to platforms (terrestrial, cable and satellite), there have been also further segmentations in terms of services (radio/TV), geographical aspects (local/national), technologies (digital/analogue), frequency (AM/FM) etc. Accordingly, the findings of SMP have also been various, but almost all countries which have analyzed this market so far (except for Norway) found SMP (single or joint) at least in a sub-market.

It is also important to mention that all the NRAs which analyzed this market considered satellite transmission to be a transnational market and did not apply the three criteria test.