



Intermediate Body for the Promotion of the Information Society

Concept Paper - State aid memorandum -

Priority Axis 3 (PA3) - ICT for Private and Public Sectors

Key Area of Intervention (KAI 1) - Supporting the ICT use

Support for setting up broadband networks in the underserved areas

May 2011





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1. EXECUTIVE SUMMARY

Context

Backbone infrastructure is already available to all parts of Romania. However, similarly to other regions in the European Union, the studies carried on by ANCOM and MCIS established that broadband services are available for citizens and businesses in more densely populated areas. Currently, approximately 10% of the Romanian population is excluded from any possibility to access broadband services. These areas, where economies of scale and scope are absent, are not commercially attractive for electronic communication operators and this leaves citizens and businesses in such areas without the possibility of adequate broadband access and services.

In order to set up the proper support measure, the Romanian authorities started a consultation process involving all the major operators on the electronic communication market and the associations of various operators. Within this process, the operators expressed their opinion that, as a direct result of the **market failure** manifested in the "white areas", they would not be interested in the development of their own backhaul infrastructure (even with State funding) because of the large costs involved considering the fact that the "white areas" are not characterized by a reasonable easy to foreseen demand, and the State does not offer enough guarantees for the recovery of the investment costs. They are more interested in using a backhaul infrastructure built by the state and the Local Broadband Access Points (LBAPs) created as consequence, and to support from their own resources only the costs incurred by the development of the local loop.

Objectives

The general objective of the project is to develop an infrastructure of electronic networks offering wholesale broadband services in rural areas of Romania which are currently not served and where there are no plans for coverage in the near future.

The Romanian authorities will use the structural funds to support the roll-out of broadband networks in the underserved areas of Romania and to offer retail broadband to end-users at affordable prices. The MCIS estimates based on the results carried out from an independent study, that the available funds (approximately 86 million Euros) will be sufficient to cover at least 90% of all 3648 identified "white areas" in Romania.

The backhaul infrastructure will allow the development of governmental electronic services, will extend the background for commercial electronic services (e-business), and will lead to economic growth in underserved areas.





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The achievement of the SOP IEC objective to offer broadband services to the end users has to be achieved using other initiatives, supported or not from state funds, measures which are not a subject of this notification (e.g. the funds available to the Ministry of Agriculture and Rural Development through the Recovery Package Plan).

Project description

In order to develop and maintain a new backhaul infrastructure in the "white areas", MCIS will create a new structure within the ministry (hereby named "PIU") entrusted with a mission of providing **services of general economic interest** in the existing "white areas".

The whole territory will be covered by one single project, promoted by the MCSI. In the first phase of the project, the construction works (civil works, ducts, dark fiber, etc.) will be carried out by operators selected by the means of an open tender. In the second phase, the maintenance and technical support of the network will be tendered out selecting the most economically advantageous offers. All tender procedures will be conducted in full compliance with the EU and national public procurement rules. To ensure the technological neutrality, the PIU will define, through the tender organized in order to construct the backhaul infrastructure, the service requirements, not the technical solution.

The model is based on:

- the use of the existing backbone infrastructure resources (based on protocols which will be established by MCSI with different entities);
- the creation of the backhaul network through implementing the fiber optic links between the backbone connection points and local service access points inside the white areas administrative-territorial units;
- the acquisition of equipment for the backbone insertion points and for the local points of service access inside the white areas administrative-territorial units;

The beneficiary of the aid is PIU. MCIS, through PIU will be (remain) the owner of the subsidized infrastructure. The **wholesale** access services that PIU will be obliged to offer to third operators are the following: bitstream access, unbundled access to the local loop and unbundled access to the backhaul segments. Where applicable, the **wholesale tariffs** for the mentioned access products shall be benchmarked by MCIS, based on the wholesale prices regulated by ANCOM, and shall not be lower than the regulated level.

PIU will not offer retail services. These kinds of services will be offered by the operators which will develop their own local loops and local networks inside administrative-territorial units.









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2. INTRODUCTION

The Sectorial Operational Program "Increase of Economic Competitiveness" (hereby referred to as SOP IEC), approved by EC Decision no. 1437/2007, is one of the structural instruments used by Romania, under the Convergence objective, for achieving the priorities of the National Strategic Reference Framework (NSRF) derived from the National Development Plan 2007 – 2013 (NDP), which aims to strengthen the strategic focus of the Economic and Social Cohesion policies across Romania, and to make the correct and appropriate linkages to the European policies.

The general objective of SOP IEC is the increase of Romanian companies' productivity, in compliance with the principle of sustainable development, and reducing the disparities compared to the average productivity of EU. In order to fulfill this objective, the SOP IEC supports the development and the valorization of the ICT potential and its application in the public (administration) and private sector (enterprises, citizens).

ICT is vital to boosting productivity, improving competitiveness and reduces regional economic disparities. Economic gains from ICT stem directly from growth and innovation in markets for ICT goods and services and from the use of ICT in raising the performance of businesses.

From this perspective, IT investments are required in order to facilitate the development of a knowledge-based society, especially for spreading of IT equipment, services and software applications. It is extremely important to increase investments in the ICT field and to reduce the gaps between the actual expenditure level and the desired development level. The importance of the development of the ICT was also underlined by the Romanian National Strategy concerning the development of the broadband communications for the period 2009 - 2015.

The Romanian progress in information society and its future opportunities are far from being satisfactory. The lagging behind especially regards Internet access, Information Society services and up-take of IT applications in economy.

This is the reason for including the development of the broadband infrastructure in Romania within the framework provided by the Priority Axis 3, "ICT for Private and Public Sectors" of the SOP IEC.

The objective of Priority Axis 3 is to "support economic competitiveness through increasing the interactions between the public sector and enterprises/citizens by fully exploiting the ICT potential".

Achievement of this objective envisages three Key Areas (KA) of intervention as follows:

KA1 - Supporting the ICT use

KA2 - Developing and increasing the efficiency of electronic public services

KA3 - Sustaining the E-Economy





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KA1, Supporting ICT Use, envisages supporting access to broadband connectivity in "white areas" where broadband is currently not available and where there are no plans for the **next three years**, according to the results of the consultations carried on by the Ministry of Communication and Informational Society with the operators on the market.

The present notification document outlines the necessity of public intervention, estimates the potential effects of the support measures in the Romanian economy and offers to the European Commission all the necessary information in order to evaluate the State aid compatibility with the regulations in the field provided by the *Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks* (OJ C 235, 30.09.2009) (hereby named "the Guidelines").

The present notification is subject to the provisions of the art. 106 (2) of the TFEU that states that: "Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in the Treaties, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Union."





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3. ANALYSIS OF THE CURRENT SITUATION

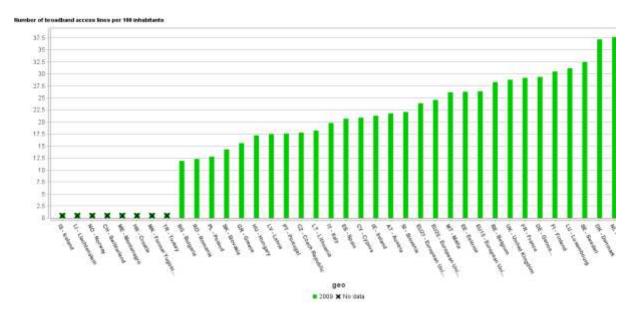
Any planned intervention must be based on an analysis of the current status of deployment of broadband in Romania. Consequently, this section highlights relevant results from the studies carried out by EUROSTAT in 2009 and by the National Authority for Management and Regulation in Communications of Romania (ANCOM) in 2010.

3.1. EUROSTAT data on deployment of broadband in Romania.

EUROSTAT conducts annual surveys concerning the broadband access in the European Union that defined the broadband as connections characterized by downstream capacities equal or higher than 144 kbps.

According to the most recent studies, **Romania** was ranked second lowest among the **EU27** Member States in terms of broadband penetration rate per 100 populations and lowest in terms of households which have broadband access.

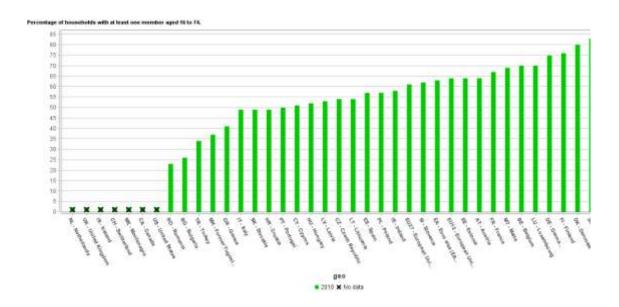
The data are presented below.



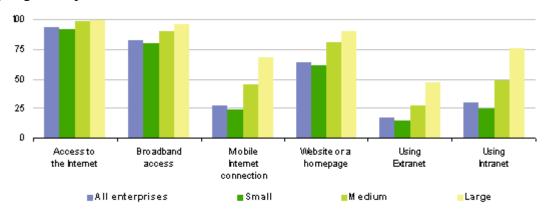




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Eurostat statistical data on many different aspects of the information society in the European Union (EU), referring to Broadband access also (see Figure below). About six in every ten enterprises (64 %) in the EU-27 had their own website in 2009, and this proportion rose to 90 % among large enterprises <u>.</u>



Source: Eurostat (isoc_ci_it_en 2, isoc_ci_in_en 2 and isoc_ci_cd_en 2)

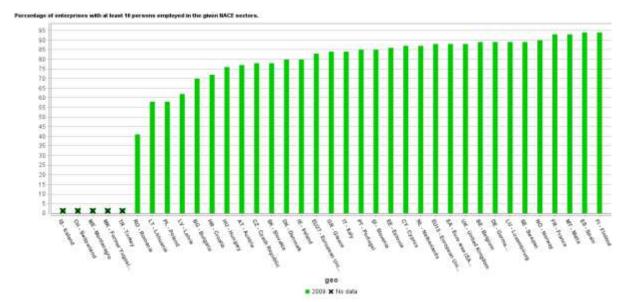
In Romania the percentage of enterprises having a *broadband connection was 41%* and this proportion rises among large enterprises to 81%. See figures below.

Enterprises having a broadband connection; All (10 employed persons or more):

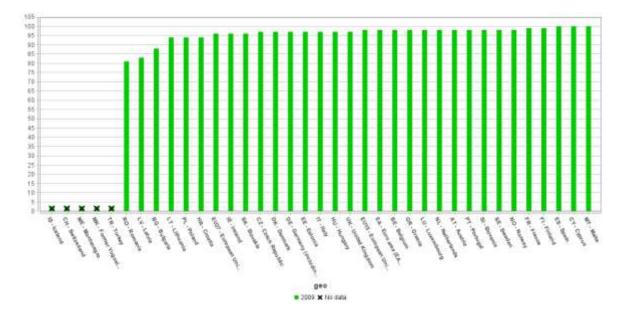




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Enterprises having a broadband connection; Large enterprises (250 employed persons or more):



3.2. Broadband concept in Romania.

According to the National Strategy concerning the development of the broadband communications for the period 2009 – 2015, approved by the Government Decision no. 444/2009, the concept of broadband is defined as "that type of electronic communications that, through a large number of available technological solutions, insures the permanent access to internet, with a transfer speed of minimum 1 Mbps shared (progressively increasing value) and a monthly availability degree of minimum 98%, offering the maximum degree of interactivity and access to the whole spectrum of applications and digital content possible to be accessed through the internet".





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In order to apply this definition, the following characteristics shall be taken into account:

- the minimum transfer rate of 1 Mbps is to be periodically updated in order to allow the use of all applications and digital content possible to be accessed through internet;
- the minimum transfer rate of 1 Mbps is applied for the residential broadband connections. The corresponding transfer rate for the projects developed for the public administration entities/economic operators shall be minimum 4 Mbps.

For the moment, because of the low level of coverage with broadband services, the Romanian authorities do not take into account the modification of the national Strategy in terms of increasing the above presented thresholds. In the Romanian authorities' view, the coverage of the largest area possible of the Romanian territory with basic broadband services is considered the priority for the programming period 2007 – 2013. An update of the existing definition of the broadband services is considered to be made in the next programming period. At that moment, a development of the NGN will be considered and supported. The present scheme will only support the development of a broadband network that can be upgraded in the view of future development of the NGN.

3.3. Underserved areas – European concept

Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks define three types of areas depending on the level of broadband connectivity that is already available:

- "white areas" those areas where broadband is currently not available and where there are no plans by private investors to roll-out such an infrastructure in the **next three vears**:
- "grey areas" those areas where only one broadband network operator is present and
 certain categories of users may still not be adequately served in the sense that either
 some broadband services requested by the users are not available to them or, in the
 absence of regulated wholesale access tariffs, retail prices are not affordable compared
 to the same services offered in other more competitive areas or regions of a country;
- "black areas" those areas where at least two broadband operators are present and broadband services are provided under competitive conditions.

The Guidelines stipulate that the State aid support is allowed, generally in the "white areas". Such support can be granted in "grey areas" only after a more detailed analysis and careful compatibility assessment.

3.4. Deployment of broadband in Romania





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I. This section outlines the results of the broadband¹ markets analysis carried out by ANCOM during 2009 and 2010 assessed by the Romanian Ministry of Communications and the Information Society (MCIS) with the contribution of the National Institute for Research and Development in Informatics (ICI). The relevant data will be updated based on more recent data collected by ANCOM specifically for this project.

The purpose of the assessment was to identify areas of the country which are underserved in terms of broadband supply.

The analysis provides a breakdown at national, urban/rural and county levels.

Coverage Analysis

Romania is divided into 41 counties for administrative purposes. Each county is further divided into administrative territorial units. The coverage analysis is made at locality² level (level 3), which is a part of an administrative territorial unit. The locality, because of its small size, is the ideal unit for analyzing the supply of broadband to homes, businesses and public buildings within specific geographic areas. There are 13,746 localities in total, giving an average of 335 localities per county.

With the aim of mapping the supply of broadband in each of the 13,746 localities, a collection of data from some 1094 Internet Service Providers (ISPs) was analyzed by MCIS in 2008 and the situation of the broadband coverage, broken down by the number of ISPs, was then presented:

- a. 66% of the population (14.2 mil.) was situated in "black areas", where there are more then two ISPs, out of which:
 - i. 39% of the population (8.4 mil.) are in cities with more than 50.000 inhabitants the list of localities is in Appendix 1
 - ii. 27% of the population (5.8 mil.) are in cities with less than 50.000 inhabitants
- b. 16% of the population (3.4 mil.) was situated in "grey areas", where there is only one
- c. 19% of the population (4 mil.) was situated in "white areas", where there is no ISP.

¹ In this research broadband lines are defined as those with a capacity equal or higher than 128 kbps best effort.

² The methodology used in the Information System Registry of Territorial–Administrative Units (SIRUTA) defines:

LEVEL 1	LEVEL 2	LEVEL 3
1. Counties, Bucharest Town	2. Towns	5.Component localities
	3. Cities	6.Villages
	4. Communes	7.Sectors of the capital

^{*} **component locality** - is a human settlement mostly developed as town household and with the urban population

^{*} **village** - is a human settlement less developed than a town household, where steady population especially deals with agriculture; which is composed of an agglomeration of households and annexes in a rural area.





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Underserved Areas

Taking into account that Bucharest is covered by more than 2 operators and as territorial—administrative units is on the same level with a county, it was excluded from the analysis performed.

The result of the coverage analysis, representing where there was no broadband provider, showed that 68% of the localities, 20% of the population (total population without Bucharest).

Table - White zones

No. of counties	Population				Households				Localities			
	noISP		Total	%	noISP		Total	%	noISP		Total	%
41	Rural	Urban			Rural	Urban			Rural	Urban		
	3.992.294	0	19.494.925	20%	1.415.458	0	6.531.580	22%	9.315	0	13.746	68%
	3.992.294				1.415.4	158			9.315			

For assessing the needs of these 9,315 localities in order to receive broadband services, at MCSI request, ANCOM carried out another study in 2010. The purpose of this new study was to identify which of these 9,315 localities were "white areas" in terms of availability of network infrastructure (local loop and backhaul segments) capable of supporting broadband services with the parameters referred to in the National Broadband Strategy (speeds of 1 Mbps for residential users and 4 Mbps for business users). A questionnaire was sent to all electronic communication network providers in which they had to indicate the localities with backhaul segments, the localities with local loop, dividing the local loop by technology (metallic, cable, fiber or radio) capable of supporting broadband services with the parameters referred to in the National Broadband Strategy and localities with 3 years forecast to provide broadband services according to a feasible business plan.

According to the responses received from the operators resulted that in a number of 3,648 localities there is no broadband infrastructure (backhaul and local loop) and no documented intentions to invest in the next 3 years. (See the attached list)



The result of the analysis for these 3648, presented in the following table, shows that 27% of the localities, 5% of the population (total population without Bucharest), are in the "white" zones:

Table – White zones





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No. of counties Population					Households				Localities			
	"white zones"		Total	%	"white zones"		Total	%	"white zones"		Total	%
41	Rural	Urb an	19,494, 925	5%	Rural	Urba n	6,531,		Rural	Urban	13,746	27%
	902,384	0			337,298	0	580	5%	3,648	0		
	902,38	902,384 337,298		98			3,648					

The "white" zones in each county are mapped (by geoSIRUTA application) and are attached.



The actual list of localities included in the "white areas" category was previously placed on the MCIS website in order to offer to the operators the possibility to express their intention to invest in a three years horizon of time. All areas where investment intentions were documented by the operators were discarded from the list.

The documentation required to the operators in order to sustain their intention to invest in an area was the one provided by the Guidelines: business plan and a detailed calendar deployment plan as well as a proof of adequate financing or any other type of evidence that would demonstrate the credible and plausible character of the planned investment.

The actual list of "white areas" will be permanently updated. All the localities where operators will manifest their documented intention to invest, in accordance with the above mentioned conditions, will be discarded from the list and no State aid shall be granted in order to support the development of the broadband infrastructure in those areas.

On the other hand, MCIS conducted a study concerning the quality/prices of the internet connections using the 3G technology, taking into consideration the broadband definition provided by the national Strategy. The study revealed that the average 3G service available in Romania, at this time, is not complying with the minimum technical conditions within the Strategy, taking into consideration similar quality/prices of the services. Detailed information concerning the quality/price level of the service is presented in Appendix X.

Concerning the technical possibility to obtain broadband services using the satellite solution, the latest statistical data available from ANCOM shows that there are 8 satellite providers operating in Romania. At least one of these operators, SN RADIOCOMUNICATII SA, could provide a footprint across the entire Romanian territory. Information presented in Appendix 3.4 proves that the satellite services are too expensive compared to other technologies and solutions. Information regarding the price level is presented in Appendix XXXXX.





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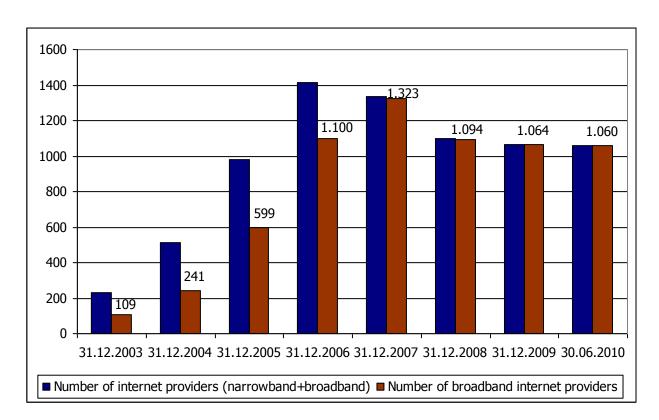
3.5. The electronic communications services market in Romania

The current state of competition in electronic communications services market in Romania is presented below based mainly on data provided by the National Authority for Communications (ANCOM). The Ministry of Communications and Information Society (MCIS) have supplemented this data with information provided by their own staff, particularly in relation to sample tariff data and broadband networks.

The Romanian Government finalized the process of liberalizing the telecommunications sector on January 1st, 2003 in parallel with the decision to accelerate the transition to an Information Society and a knowledge-based economy in order to reduce the digital divide, improve the living standard of Romanian citizens and increase the overall competitiveness of the economy.

Under the new general authorization regime a lot of providers registered with the National Authority for Regulation.

The consequent positive impact of this policy change and regulatory measures is demonstrated by the increased number of internet providers operating in the market (see graphic below). The slow decrease of internet providers after 2006 is due to the mergers of companies and consolidation of the market.







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Source: ANCOM, based on data from providers

The progress in the development of the market was generated by the mix of providers of telephone services, cable operators and Internet service providers active in the Romanian market.

Please find more quantitative information in Appendix 3.

3.6. National Regulatory Authority for Communications (ANCOM)

The national legislation in Romania does not assign a formal role for ANCOM in the design of State Aid broadband schemes and monitoring of the subsidized networks. However, ANCOM is part of the team designing this State Aid scheme, its task being to design efficient open access conditions, including pricing. Nevertheless, the monitoring of the subsidized scheme will be performed by the State Aid Granting Authority, MCSI. According to its legal competencies, ANCOM focuses on the core activity of Significant Market Power (SMP) regulation.

SMP-based access obligations and State Aid-based access obligations could be imposed in parallel because they follow separate processes and are underpinned by different rationales, although both are intended to ensure viable competition and to deliver benefits for end users. Whereas State aid access obligations are imposed in exchange of receiving public funds for rolling-out network infrastructures, SMP obligations are imposed to achieve a level-playing field and enhance competition.

During the State Aid application phase, prior to the subsidy being granted, ANCOM will advise MCSI on the appropriate access conditions and prices that are needed in order to replicate, as appropriate, the market or regulatory conditions in the area considered.

During the term of the State Aid contract, that is the period of mandated access for the subsidised network (which must be a minimum of seven years), ANCOM may complete another market analysis which may (or may not) result in a finding of SMP for the operator of the subsidised network. In that process, SMP designation and specific regulatory obligations may be imposed on the operator. If the operator in receipt of State Aid was already designated as having SMP, its existing regulatory obligations may be changed. However, these SMP specific obligations would co-exist with, and be independent from, the obligations derived through the State Aid contract.

After the termination of the State Aid contract, ANCOM can impose access obligations only after carrying out a market analysis and after a finding of SMP (or under article 12 of the Framework Directive and article 5 of the Access Directive) and where the imposition of obligations was deemed to be appropriate, reasonable and proportionate. In practice, there is potential for the State Aid requirements to end, and new, separate, obligations to begin under the SMP framework. This may or may not occur at the same time as the State Aid requirements come to an end and the regulatory obligations may or may not be the same as the State Aid ones.





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4. THE IMPORTANCE OF BROADBAND FOR ROMANIA

4.1. Strategic framework.

The broadband communications have become a priority at global level in the second half of the '90s, as a result of the fact that knowledge-based society has a significant impact on competitiveness, fast development of communications and IT technologies as well as on the liberalization of telecom markets.

In a global society which faces a significant transforming process at the beginning of the third millennium, the European authorities have acknowledged the necessity of a common vision to modernize the society and to develop the European economy's competitiveness. This vision, presented following the Lisbon European Council in 2000 (Lisbon Strategy), end to set up the guidelines for the strategies and policies representing an adequate answer for the challenges issued by the aging process of the European population as well as for the increasingly competition at global level.

In accomplishing the fundamental objectives of the Lisbon Strategy – sustaining economic growth and job creation – one of the main instruments identified was the development of the economy based on knowledge in cooperation with the incentive of the ITC sector. Thus, there were recognized the advantages of using ITC services and equipments on the creation of an informational society able to stimulate the increase of the degree of economic competitiveness as well as social cohesion.

The action plans, namely eEurope 2002, eEurope 2005, i2010, Digital Agenda for Europe 2020, aimed to implement the objectives established within the Lisbon Strategy were focused on the desire to create "an informational society for all" by extending the internet access and use degree, as an environment to disseminate information and offer services, create new markets, contributing this way to the increase of economic productivity. In order to accomplish the action plans, the European Commission suggests three priorities:

- the creation of an unique and competitive market for the informational society;
- the increase of the investments in ITC research:
- the promotion of a comprehensive informational society.

Having in mind the fact that the spread of the internet's benefits depend more and more on the availability of broadband internet access amongst the citizens and companies, the increased use of broadband services was identified as a major objective.





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In this context, Romania has set up its own national strategy to support the development of broadband communications as a major factor in creating the informational society. The National Broadband Strategy sets out the main elements to take into account for developing the broadband networks through public intervention.

4.2. Expected effects of the development of the broadband communication in Romania.

The benefits of the broadband access is not materialized by the performances registered by the activities, the last ones being possible to be carried on even without access but more difficult, in a smaller area, geographically limited. The great benefit is that it will allow the achievement of the activities in a new form. This possibility as well as its impact on the whole society has just started to show up. Working at home through electronic communication systems represents a solution for problems such as: unemployment, transport or environment. Another example is e-education which brings an alternative to the traditional learning method, giving freedom to the applicants in terms of time and space management by the specific institutions, creating the possibility to adapt the performance rythm to each person's skills and needs. The access to broadband shall also play a highly important role for the applications to be developed simultaneously with the creation of new needs generated by the informational society and knowledge based economy.

The quantificable benefits of the access to broadband communications include the following:

- a faster and easier manner to search for information information is widely spread, unlimited in terms of space and time;
- supporting continuous education without any geographic or social barriers;
- simplifying the relations between citizens, undertakings, businesses, companies, public administration bodies and other organizations;
- creating new opportunities on the labor market, for example working at home;
- a more efficient management of the undertakings, especially for SMEs which will lead to increasing efficiency and competitiveness;
- new opportunities of entertainment and cultural life;
- improving the quality of life of the population from rural or disadvantaged areas by supporting the development of the disadvantaged areas through turism;
- implementing telemedicine solutions, the communication between doctors in order to exchange experience.

From the point of view of the type of effects we consider that the benefits of broadband communications shall be noticed in the following fields:

Education:

Broadband communication can contribute to the increase in the quality and efficiency of the educational system in Romania through:





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- creating the technical facilities necessary to implement the advanced educational methodologies based on the use of ITC (eLearning);
- increased access for students and teachers to electronic educational resources;
- increase of the cooperative opportunities between the schools from Romania and those from other countries within the European programmes;
- increase of the opportunities to continuously train the personnel in the public and private sector by accessing distance training programmes.

Increasing the percentage of households connected to broadband communication services will facilitate the access to new non-formal and informal learning opportunities for all the inhabitants of the country, regardless they are in urban and rural environment.

Research and development:

The globalisation and opening towards large companies of certain R&D centres in areas with major human potential, where the operating costs are lower, imply exchange of specialized information with global distribution, access to specific applications which generate large volume of data. At the same time, they imply the existence of certain broadband infrastructures as well as the existence of certain human resources specialized in working with the new technologies, including those of communications.

The successful implementation of the communication technologies has tangible effects in increasing the innovation degree by the possibility to virtually aggregate the best resources and ideas from all over the world. Free access to information and increased interactivity lead to the growth of the number of new solutions and products.

At the same time, new knowledge opportunities are opened at the level of the universities through the possibility to develop and intensify the academic research programmes by combining the efforts of researchers from different centres in Romania and by intensifying the cooperation within international projects (eLearning), also facilitating and increasing the access to new information.

Economy:

The interconnectivity degree between the business environment and the digital communication field is still in an early stage, and the development of new business models depends on participation of a critical number of users. In the context of the present development of Romania and its opening towards the European and global economy, the business environment will become a major broadband services consumer. Therefore, it is aimed to create a spill-over effect of based on which the development of the business environment would lead to the increase of the demand and, implicitly, to the stimulation of competition and the creation of value-added services. Furthermore, the development of the broadband sector will contribute to Romania's attractiveness as destination for foreign investments.





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Broadband communications as facilitator of the ITC development favoures the creation of new jobs and the increase of the GDP per inhabitant, being forecasted that between 40% and 50% from the productivity growth from the last ten years are owed to the ITC.

Second, the broadband communications allow a revolution of the business processes. For example, it is not necessary anymore for the production facilities to be placed in the proximity of the research facilities as the communication can be done using virtual technologies in most of the cases. Broadband communications also contribute to the development of eBusiness, with major advantages materialized in a significant decrease of commercialization costs and in an increase of the transfer speed between firms.

Cultural activities and entertainment:

Broadband communications may have a significant impact on cultural activities as well as on entertainment, by allowing a higher accessibility, changing the consumers' behaviour as well as by allowing the access to a higher number of options. Also, as the broadband communication performances increase, the interactivity of the on-line environment also increases attracting new users.

From the point of view of the main influence areas, the benefits of the broadband communications are mirrored at level of the public administration, private companies, communities and the common citizen.

By facilitating the international and national access as well as by the possibility to rapidly disseminate the information, the broadband communications may constitute a catalyst for the promotion of cultural values and diversity within Romania. This way, electronic databases can be developed (eTurism, eCultura) which favour the development of the digital content of cultural and touristic nature, by introducing the necessary information for promoting the national attractions, contributing to the increase of the Romanian values as well as the number of tourists.

Public administration:

The public administration is a supplier of public information services such as tax collection, education, health etc, all of a major importance for the citizens. The broadband technologies and communications may improve the efficiency and flexibility of the public administration, may contribute to the increase of the availability and access to governmental services.

The development, by the public administration, of these electronic services are targeted towards the citizens' needs, in order to maximize the efficiency of their time. This refers to the payment of local and administrative taxes, submission of requests, reception of answers in electronic form and presenting useful information in order to obtain formal opinions and authorizations (eGovernment and eAdministration). This also includes the increase of the efficiency of public health services by setting up a database on national level on the health condition of the patients (eSanatate) and the





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development of telemedicine services which lead to the continuous monitoring of the patients' health condition, especially of those suffering from severe illness or handicaps.

Private companies:

For private companies, the broadband represents a facilitator of the e-Business type applications and practices, creating new business opportunities and helping the companies to obtain productivity increases based on an improvement of the access to information and transactions. For companies, as well as for their employees, broadband communications have the role to minimize the importance of their location, allowing the establishment of headquarters in smaller rural or remote localities, as well as by facilitating the teleworking.

For Romanian companies, the development of the electronic commerce may bring important advantages in terms of the significant reduction of the transactional costs and the increase of the speed necessary to interact with their business partners. Secondly, the broadband communications allow a revolution of the business processes, contributing to the increase of the competitiveness of the Romanian companies within the Central and Eastern Europe (CEE) but also at global level, supporting the local companies to go international, the decentralization of the undertakings' functions (such as production, marketing activity etc.).

Communities: For the small, rural or remote communities, the development of broadband communications may favour the economic and social integration, by facilitating the access to new, superior goods and services, as well as by offering opportunities to participate to the digital economy or informational society.

For the common consumer, besides the facilities offered by the already-mentioned broadband communications (such as e-Education, teleworking etc.) the positive effects are also materialised in an increased access to interactive content and the interconnection of different equipments, regardless if their basic function is or not of communication or the personalization of the consumption.

Furthermore, in sparsely populated areas the access to broadband may significantly reduce the distances, compensating the adverse effects of a poor transport network (which usually characterizes these areas). The access to broadband can also open up a marketing channel for businesses in peripheral areas, offer the opportunity to practice a profession regardless its place of residence or location, earn livelihood that depends on local resources.

Moreover, the development of the broadband infrastructure is expected to play a significant role in addressing the negative effects of the last financial and economic crisis. In this respect, we quote the considerations provided by the European Economic Recovery Plan which states that "The Commission will work together with Member States to, if necessary, modify the existing cohesion policy programs with a greater emphasis on smart investment (for example, investing in energy efficiency, clean technologies, environmental services, infrastructure and interconnections,





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broadband networks, forecasting and matching skills with future labor market needs or opening up new finance for SMEs (i.e. research-intensive and innovative SMEs).

5. NEED FOR INTERVENTION

Backbone infrastructure is already available to all parts of Romania. There are operators that have invested in their own transport infrastructure, becoming active or potential providers for transport services for other operators and not just for their own activity³. In general, there are no technical differences between retail and wholesale provision of transport services, so that these operators may use their transport infrastructure to provide services on both markets.

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³ See point 2.2.3.2. in the Approval Request for ANCOM measures for identification, analysis and regulation of leased-lines terminal segments markets:

 $[\]underline{\text{http://www.ancom.org.ro/DesktopModules/Interogation/DownloadFile.aspx?intSurveyID=1001\&intSurveyFilledInstancesID=1283911}$





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Lack of broadband coverage is due, among other factors, to some of the typical economic problems associated with networks industries. Similarly to other regions in the European Union, the studies carried on by ANCOM and MCIS established that broadband services are available for citizens and businesses in more densely populated areas. Due to economics of density, broadband networks are generally more profitable to roll-out where potential demand is higher and concentrated, i.e. in densely populated areas. Because of high fixed costs, unit costs escalate dramatically as population densities drop, becoming a major barrier to roll-out in the development of the broadband infrastructure.

By contrast, the **backhaul** (distribution) and access (local loop) network from the backbone into "white areas" is inadequate or outright lacking in rural, mountainous and geographically disadvantaged areas. Certain geographical characteristics of Romanian territory (the mountainous nature of parts of the territory, the presence of other geographical obstacles (such as the rivers) and remoteness of some localities identified to be underserved by the above mentioned studies also play a role, requiring bridging longer distances in the backhaul and in the last mile. In these conditions, the equipment and infrastructure costs significantly increase.

These areas, where economies of scale and scope are absent, are not commercially attractive for electronic communication operators and this leaves citizens and businesses in such areas without the possibility of adequate broadband access and services. The challenge is to extend the reach of this backbone into the "white areas" by building backhaul (distribution) links – which includes the construction of new Local Broadband Access Points or LBAPs capable of delivering broadband services and by building also the according local loops.

In the recent years, although public and private investments in broadband networks have endeavoured to reduce the digital divide, yet there are many localities to be covered.

Currently, approximately 10% of the Romanian population is excluded from any possibility to access broadband services.

The notified measure seeks to strengthen broadband service competition delivered across a shared open infrastructure (backhaul and local loop).

The public consultation with the stakeholders

In order to set up the proper support measure, the Romanian authorities started a consultation process involving all the major operators on the electronic communication market and the associations of various operators.

The topics of the consultation process referred to the following issues:





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The consultation process found that:

















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6. DESCRIPTION OF THE MEASURE

6.1. General objectives

Romania will use structural funds to support the roll-out of broadband networks in the underserved areas of Romania and to offer retail broadband to end-users at affordable prices. In line with the objectives set out in community policies such as the eEurope 2002, eEurope 2005 and the Commission's i2010 initiative, the measure aims to strengthen the territorial cohesion by preventing the creation of a broadband digital divide between communities and businesses that can get access to broadband services at a competitive market price and those that cannot.

The general objective of the project is to develop an infrastructure of electronic networks offering wholesale broadband services in rural areas of Romania which are currently not served and where there are no plans for coverage in the near future.

The notified measure aims at bringing broadband connectivity in rural or low-density localities which are currently facing an infrastructure and connectivity deficit. The final goal is to give to end-users access to new, innovative services, in order to allow all citizens to participate in knowledge –based society.

The project will contribute to the fulfillment of the Sectoral Operational Program "Increasing of the Economic Competitiveness" general objective to have an average annual growth of GDP per employed person by about 5.5%., which will allow Romania to reach approx. 55% of the EU average productivity by 2015.

The project will also contribute to the fulfillment of the Priority Axis 3 "IT&C for private and public sectors" target: the **increase of broadband penetration rate in Romania (number of broadband connections/100 inhabitants) from 12.5% in 2009 up to 80% in 2015**, ensuring the uptake of ICT in the productive system, in the administrative processes, in day-to-day life, and development of a new and better generation of products and services, able to compete on a globalised market.

The MCIS estimates, based on the results carried out from an independent study, that the available funds provided by the SOP IEC will be sufficient to cover at least 90% of all identified "white areas" in Romania. The achievement of the SOP IEC objective to offer broadband services to the end users has to be achieved also using other initiatives, supported or not from state funds, measures which are not a subject of this notification.

In this respect, MCIS has already started discussions with the Ministry of Agriculture and Rural Development (MARD), in order to coordinate their project with the funds available to the MARD through the Recovery Package Plan. These funds will be used to complete the present Project, proposed by MCIS, by financing the development of the local loop.





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This way, it would be ensured the complementarities of the two structural funds and it will be also met the operators' desire to benefit from State support in order to develop the local loop.

6.2. Legal basis

The support measure is notified based on the provisions of the:

- The Treaty on the Functioning of the European Union, Article 106 paragraph 2;
- Communication from the Commission 2009/C 235/04 on Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks (OJ C 235, 30.09.2009).

The national legislation providing the legal framework for granting the State support is the following:

• The Government Strategy for the development of broadband electronic communications networks and services for 2009-2015, approved by the Government Decision no. 444/2009:



• The Sectoral Operational Program "Increase of Economic Competitiveness" 2007 – 2013, approved by EC Decision no. 1437/2007.

6.3. Target areas

In accordance with the provisions of the *Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks*, the Romanian authorities conducted a detailed mapping and coverage areas analysis, to identify the "white areas" where state intervention is necessary. The detailed procedure and the results of the analysis are presented at point 2.4 from the present document.

The proposed measure will not support the creation of a new broadband infrastructure in "grey areas" or in "black areas". Taking into account that Bucharest-Ilfov region is covered by more than 2 broadband operators, no state or structural funds will be granted in order to develop new broadband infrastructure in this area.

As mentioned before, the "white areas" list is placed on the MCIS website and it is permanently updated. Any locality where the operators will express their documented intention to develop a





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broadband network, from their own resources, will be discarded from this list. Hence the objective of the measure is in line with paragraphs 37-40 of the Broadband Guidelines.

6.4. Budget and funding instruments

For the intervention under SOP IEC, approximately 86 million Euros are available (approximately 70 mil. Euros from ERDF and 16 mil. Euros co-financing from the national budget).

6.5. Aid instrument, aid amount and aid intensity

In order to develop and maintain a new backhaul infrastructure in the "white areas", MCIS will create a new structure within the ministry (hereby named "PIU") entrusted with a mission of providing a service of general economic interest in the existing "white areas".

The structural funds available within SOP IEC will be used only for the construction of the infrastructure. The construction will be entrusted to private entities following a biding procedure. The construction costs will be covered 100%.

The effective operation of the newly created backhaul infrastructure and the later development of this one will be covered by the structure within MCIS from its own budget. For this purpose, the structure will be entitled to benefit from compensations supported from the MCIS budget for all the period when the backhaul infrastructure will function. The eventual compensation will meet the specific conditions provided by the EC Decision from 28 November 2005 on the application of Article 86 (2) of the EC Treaty to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest (notified under document number C(2005) 2673). All these conditions will be included in a Entrustment Act issued by the MCIS.

No overcompensation will be allowed.

6.6. Duration of the measure

The scheme will be put into effect as soon as possible after the European Commission's decision to approve the State aid scheme. Aid may be granted until December the 31st, 2013 and payments may be effectuated until December the 31st, 2015.

6.7. Project design

Taking into consideration the results of the consultation process involving the existing broadband operators and the complementarities with the MARD through the Recovery Package Plan, SOP IEC decided to support in this Project only the development of the backhaul infrastructure in the





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"white areas". The development of the local loop and networks inside the "white areas" will be made by the private operators from their own resources or using the funds managed by the MARD.

The proposed model is also in line with the recommendations issued by the EC/DG REGIO/01992 in 04.03.2010

The whole territory will be covered by one single project, promoted by the MCSI. Support is planned for the creation of backhaul infrastructure that must be available for multiple operators. MCSI will remain the owner of the basic backhaul network.

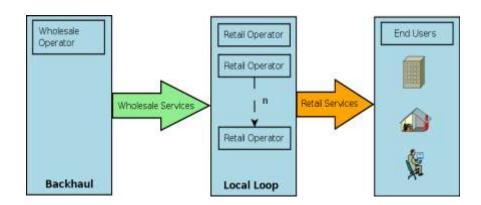
In the first phase of the project, the construction works (civil works, ducts, dark fiber, etc.) will be carried out by private operators selected by the means of an open tender. In the second phase, the maintenance and technical support of the network will be tendered out selecting the most economically advantageous offers. All tender procedures will be conducted in full compliance with the EU and national public procurement rules.

Through the project will not be installed any data communication equipment for retail services. PIU will only provide wholesale services to electronic communication enterprises on equal conditions and on an open, non-discriminatory basis, but not for the end-users of the service. PIU will offer open access to the backhaul network to all operators and will give them access to distribution points to connect to the network. All operators renting the fibers or capacity will be able to use equipment space, power supply, etc, and install their equipment to these terminals of the network. Electronic communication enterprises can decide on their own which technology they will use (for instance fiber, ADSL, cable, wireless or mobile networks) to provide connections to their end users. They can also decide which data transfer rates the connections they provide will have and which services they will provide with their connections. PIU will not offer retail services.

The backhaul infrastructure will allow the development of governmental electronic services (e-government, e-health, e-safety, etc), will extend the background for commercial electronic services (e-business), and will lead to economic growth in underserved areas.

No public funding will be provided for developing backbone structures.

A conceptual model is given below:





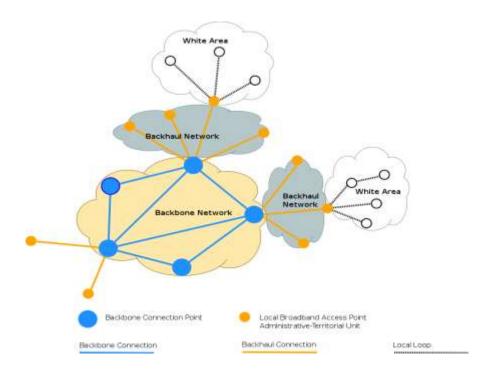


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The technical model is based on:

- the use of the existing backbone infrastructure resources;
- the creation of the backhaul network through implementing the fiber optic links between the backbone connection points and local service access points inside the white areas administrative-territorial units;
- the acquisition of equipment for the backbone insertion points and for the local points of service access inside the white areas administrative-territorial units;

An indicative broadband infrastructure model is given below:



where:





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- "Backbone" means the main high capacity, high reliability, low latency data routes between large, strategically interconnected networks and core routers in the Internet;
- "Backbone connection point" means the connection point between the backbone and the backhaul;
- "Local Broadband Access Points" (LBAPs) will comprise of the buildings and related physical structures, as well as the telecommunications equipment housed within. It is likely that every administrative-territorial unit will have a LBAP;
- "Backhaul network (distribution)" is defined as the intermediate network links between the backbone and the access sections of the network, consisting in connections of the individual LBAPs to backbone, via broadband links. In the area of the intervention of this project, the backhaul consists of the intermediate links extending from the existing backbone network to the newly constructed LBAPs or among the newly constructed LBAPs, including the equipment in the LBAP:
- "Local loop (last mile)" means the physical circuit connecting the customer premises to a distribution frame or equivalent facility/aggregation point (LBAP);

Regarding the access to the existing backbone infrastructure, MCIS will establish collaboration protocols with the involved entities of the state.

The Project schedules the building of fiber-optics based broadband Internet network channels to all administrative-territorial units that do not have broadband Internet connectivity.

There will be the possibility to interconnect to any other infrastructure holders. The possibilities to use the infrastructure are guaranteed for all broadband service providers, technical solutions must ensure that. The created network will be designed to freely use the resources and allow operators to use different broadband technologies and deliver different services for all potential users, without dependence on backhaul technology platform.

The adopted technological solutions must stimulate the development of competitive environment, the end user should be able to choose the service providers and the service itself.

6.8. Service definition

PIU will organize an open tender in line with the relevant national and EU procurement rules in order to select the private entities which will construct the backhaul infrastructure within the Project. The respective private entities will be asked to build an infrastructure that is capable of adapting to future upgrades and technology evolution, including much higher data rates in the future and gradual increase in demand for more broadband applications, such as real-time applications, telemedicine, e-health, e-safety, e-government, e-learning, IPTV, etc.

The minimum requirements for the backhaul infrastructure to be created within the projects are the following:

• converged network;





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- support for simultaneous provision of voice, data and video services for each user (triple-play packages);
- a minimum bandwidth of 100Mbps for the backhaul segment;
- a minimum of 8Mbps for residential, respectively 11Mbps for business per user data stream for triple-play service packages;
- the adopted technological solutions must be long—term and able to meet the demand for the term not shorter than 10 years;
- a spare capacity of at least 50% from the total initial value for accommodating the provision of new services and the evolution/improvement of the current services;
- the network is designed in such a way that its speed is subject to increase without involving considerable costs;
- availability of the backhaul services will be at least 99% from a month;
- provision of a back-up solution allowing to meet the availability parameter of the service provided to the user;
- allow the access of any technical type of local loop.

As we mentioned before, PIU will not offer retail services. These kinds of services will be offered by the private operators which will develop their own local loops and local networks inside administrative-territorial units.

The minimum requirements for the service provided in the Contracts closed between retail operators and PIU are:

• internet access speeds:

- ➤ home users: a package of services for the home users with a "best-effort" speed of at least 1 Mbps downlink and at least 512 Mbps uplink;
- business users: a package of services for the business users with a "best-effort" speed of at least 4Mbps downlink and at least 1 Mbps uplink.
- **content ratio:** the contention ratio must be at least 1:6 (including the network interconnection of the final beneficiary to the internet as well).
- **service availability**: the availability of service provided is required to be of minimum 98% for both home and business users.

6.9. Wholesale access

The **wholesale access services** that PIU will be obliged to offer to third operators are the following:





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- **bitstream access**; the handover point may be either at one of the LBAPs, or at the backbone connection point. The minimum standard parameters for the bitstream access services will be set according to the parameters imposed by the present scheme for the retail services (1 Mbps for residential users, 4 Mbps for business users) and according to the minimum requirements for the backhaul network;
- **unbundled access to the local loop;** provided that the physical support of the last mile can be feasibly unbundled (open interfaces, open protocols, etc.);
- **unbundled access to the backhaul segments** for the purpose of connecting the third party operators own local loops (open interfaces, open protocols, etc.)

All the above access products shall be offered only for the purpose of providing at least one retail service with at least the minimum broadband characteristics required by the project. This way, it ensures that the subsidized network is used for the intended purpose: to increase the broadband connectivity in the underserved areas.

Where applicable, the **wholesale tariffs** for the mentioned access products shall be based on the wholesale prices regulated by ANCOM, and shall not be lower than the regulated level. For the access products for which there are no similar regulated products, the wholesale prices will be benchmarked against average published wholesale prices that prevail in other comparable, more competitive areas of the country or of other EU member states. This measure will serve to replicate market conditions like those prevailing in other competitive broadband markets, ensuring, in the same time, the minimization of the potential to distort competition.

Information regarding the regulated wholesale tariffs is provided in Annex No. W

In order to insure the wholesale access services, PIU has the **obligation to meet reasonable requests for access to**, and use of, the newly developed broadband infrastructure:

- to give third parties access to specified network elements and/or facilities (including power supply);
- to negotiate in good faith with the undertakings requesting access;
- not to withdraw access to facilities already granted;
- to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services;
- to provide co-location or other forms of facility sharing, including duct, building or mast sharing for at least two other broadband operators;
- to provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services.

6.10. Obligations regarding retail services





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In addition to the above project's specific measures, which are expected to exert a strong impact on improving competition, PIU will impose to the private operators which obtain access to the subsidized network the following obligations regarding the provision of **retail services**:

- the operators shall meet all the end-users' reasonable requests for retail services;
- the operators are kept to grant access to the public authorities bodies in the subsidized network;
- the retail services tariffs shall be similar to those in comparable competitive areas; in
 order to ensure this objective, the retail tariffs will be either benchmarked against those
 for similar services in comparable competitive areas, or capped reported to the
 wholesale tariffs; this measure should avoid both excessive pricing and predatory
 pricing.
- the operators shall publish the standard terms and conditions and the tariffs for the retail services, including the connection tariffs, usage tariffs and other tariffs. Secondary legislation issued by ANCOM on users' rights will be duly taken into consideration;
- the initial connection period shall not exceed 30 days from the end-users' request;
- the operators have the obligation to provide at least one product which includes a stand-alone internet access service as described above (prohibition of unreasonably bundle of services).

The end-users will be free to choose any service provider active in the area, according to their need.

6.11. Pricing

Where applicable, the **wholesale tariffs** for the mentioned access products shall be benchmarked by MCIS, based on the wholesale prices regulated by ANCOM, and shall not be lower than the regulated level. For the access products for which there are no similar regulated products, the wholesale prices will be benchmarked against average published wholesale prices that prevail in other comparable, more competitive areas of the country. The benchmarking criteria will be reevaluated periodically by MCSI, based on the wholesale prices regulated by ANCOM. This measure will serve to replicate market conditions like those prevailing in other competitive broadband markets, ensuring, in the same time, the minimization of the potential to distort competition.

The PIU will have the obligation to comply with it and to adjust its tariffs according with the periodic re-evaluations performed by MCSI.

The PIU will have to comply with the above mentioned obligations for a period of at least **7 years** after the date of entry into service (final inspection) of the subsidized network.





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The Romanian authorities expect that in the light of the wholesale access provisions and the creation of the basis for a future increased competition between broadband service providers, retail prices will decrease on medium term.

6.12. Technological neutrality

To ensure the technological neutrality, the PIU will define, through the tender organized in order to construct the backhaul infrastructure, the service requirements, not the technical solution. The current measure does not favour any particular technology or network platform leaving it to the builder to come up with the most appropriate technological solutions to provide broadband services to end users.

The builder can choose to recourse to fixed (xDSL, fibre, co-axial cable, copper), wireless (Wi-Fi, WiMAX, Fixed Wireless Access, Microwave), satellite and mobile technologies, or a combination thereof for the purposes of deploying the networks. It will also have the possibility to choose how to deploy the networks.

Anyway, in order to favor the further development of the network, the constructor will be asked to build an infrastructure that is capable of adapting to future upgrades and technology evolution. Any project which will offer a NGA migration path will receive additional points within the bidding procedure.

On the other hand, the newly created backhaul infrastructure will have to allow all types of network access that private operators may seek to offer their services to end users. End-users will have the opportunity to choose the retail operator, the services and the last mile technology according to their needs.

Romania expects that the planned project will make it economically feasible for the commercial operators to invest in the last mile solutions and to provide retail services to the end users in rural areas.

6.13. Ownership of the infrastructure

MCIS, through PIU will be (remain) the owner of the subsidized infrastructure.

6.14. Use of existing infrastructure

In order to avoid the unnecessary and wasteful duplication of resources, the Romanian authorities encourage the use of existing infrastructure. Besides, the newly created infrastructure shall be built in areas where no backhaul exists.

6.15. Eligible costs





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The aid granted through this Project will cover only the expenses for the cost incurred by the procurement, development and installation of new backhaul infrastructure such as fiber networks, wireless networks, collocation facilities, local access systems, etc. As we provided above, the intervention will **not** grant aid for the construction of new backbone networks as sufficient backbone connection to all parts of Romania is considered to be already available.

No public funds will be paid out for expenditures done before the entry into force of the present State aid scheme.

The operating costs of the newly created backhaul infrastructure will be compensated within the framework established through the Entrustment Act closed between MCIS and PIU, with the observance of the conditions stipulated by the EC Decision in the field and are not subject of the structural funds.

6.16. State aid beneficiaries

The beneficiary of the aid is PIU.





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7. CALL FOR APPLICATIONS AND PROJECT'S IMPLEMENTATION

The support for the broadband infrastructure development within the present scheme will be granted as a result of a Call for Proposals to be published by the IB-MCIS in the Romanian Official Journal. The Intermediate Body (IB) within the Ministry of Communications and Information Society (MCIS) is the responsible authority for the administration of the present scheme under the coordination of the MA SOP IEC as state aid provider.

The implementation procedure of the scheme consists of:

- **1.** IB MCIS will launch a Call for Proposals under Priority Area 3 (PA3) of the Sectoral Operational Programme "Increase of Economic Competitiveness" (SOP IEC). The Call for Proposal concerns 7 operational areas, previously defined in the present document, with one selected beneficiary for each area;
- **2.** IB MCIS receives and registers all the applications submitted according to the provisions of the Guide for applicants;
- 3. IB MCIS carries out the administrative and eligibility assessment of project proposals and applicants; only the accepted applications within this procedure phase are subject to next phase, i.e. the financial and technical evaluation;
- a. The administrative check consists of verification of existence of all requested documents and that the application has been submitted within the specified time-limit.
- b. The eligibility check consists of: eligibility check of the applicants and eligibility check of the projects

The eligibility criteria for the applicants:

- a1. they are authorized providers of electronic communications networks;
- a2. they are not "firm in difficulty", in accordance with the *Community Guidelines on State aid for rescuing and restructuring firms in difficulty* (OJ C 244/01.10.2004);
- a3. they are not subject of any State aid recovery order/decision, issued following a decision of the Competition Council or of the European Commission, or, if they were subject of such a procedure, the procedure was already carried on and the debt was fully recovered;
- a4. they are able to prove that they are capable to cover their own contribution of at least 40% of the eligible costs of the proposal, plus the non eligible expenditures, from their own resources or from drawn resources in a form not affected of any State aid;
- a5. they comply with any other criteria specified within the Guide for applicants.

The eligibility criteria for the projects:

- b1. the project's objectives are in line with the objectives stated in SOP IEC and the National Broadband Strategy;
- b2. the project is implemented in one of the 7 areas in Romania;





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- b3. the activities of the project are/have not been previously financed from other public funds;
- b4. the project complies with national and European law regarding environment protection, public procurement and visibility rules;
- b5. the project will be effectively implemented and the last payment has to be made until 31 December 2015;
- b6. all localities where the project aims to develop the new broadband infrastructure are included in the "white areas" list set in the Guide for applicants posted by IB-MCIS on its own website;
- b7. the project has to guarantee the wholesale access, to respect the ne-discrimination obligation and the transparency obligation set up at point 5.9 from the present notification document;
- b8. the project has to guarantee the fulfillment of the conditions regarding the provision of the retail services to end-users, in accordance with the obligations set up at point 5.10 from the present notification document;
- b9. if radio spectrum is used, the appropriated spectrum licenses must be presented; b10.the project complies with any other criteria specified within the Guide for applicants.

4. the evaluation:

The purpose of the technical and financial evaluation is to identify the most economically advantageous offer presented by the applicants in terms of maximizing the effect of the aid provided and minimizing any potential advantage granted for the selected operator.

The projects will be assessed according to a scoring model attached to the evaluation grid.

The technical and financial evaluation of the proposals submitted within the call procedure is carried out for each project. The evaluation grid, part of the Guide for applicants, is based on strictly factual and measurable criteria, in accordance with the evaluation criteria approved by the Monitoring Committee for SOP IEC:

- C1. Relevance consists of the project's contribution to the objectives of SOP IEC/PA3/broadband operation and the National Broadband Strategy, such as:
 - a. the project ensures more geographical coverage at operational area, both in terms of population/enterprises and number of localities, than the minimum set in the Guide for applicants;
 - b. the contribution to the horizontal objectives of SOP IEC: environment protection and equal opportunities.

The scope of the scheme is to maximize the area where new broadband infrastructure will be developed using the structural funds provided by the notified measure. Therefore, the Call will provide for each operational area a minimum number of localities that it will be mandatory to be covered with broadband services by the winning operator. Within the evaluation, the applicants which develop an extensive network, covering more than the minimum number of localities imposed for the respective area will receive more points.





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- C2. Quality and coherence the objectives and the activities are clearly defined, the planning of the implementation is adequate, the planned objectives are in line with the proposed activities, the implementation chart is in line with the estimated budget, there is an identification of possible risks and of their solutions:
 - a. the intensity of the aid requested by the applicants. The total costs involved by the development of each project are previously set for each operational area (as it is mentioned in the present notification document and it will be stated in the Call, as well). The total cost of each project cannot be used as a criterion in evaluation.

The present scheme sets up a maximum threshold of the aid intensity of 60%. Additional point will be granted, for the applicant that requests a lower public support in comparison with the previously mentioned threshold.

The amount of financial support available within the present scheme is not enough to cover all identified "white areas". From the comprehensive list of localities identified as "white areas", some localities could be more attractive for the operators than others. As a consequence, the specific area where the operators have the obligation to develop their networks is not imposed to the operators

- b. the proposed technological solutions providing services that meet higher technological characteristics than the ones imposed by the present scheme and that are easily to be adapted to future upgrades and technological evolution. As a consequence, better services proposed than the minimum requested or NGA migration path will receive higher points within the evaluation grid.
- c. the retail customer services including elements regarding helpdesk availability, customer services, facilities for disadvantaged users.
- C3. Maturity the possibility to start as soon as possible the project implementation as for eg. the necessary public procurement procedures, the availability of the necessary licenses, authorizations or studies for the project implementation. This may lead to a shorter implementation period.
- C4. Sustainability operating and the maintenance of the investment (technical, financial, human resources) after the implementation period and without public financial support.
- C5. Beneficiary capacity to assure the implementation of the project: project management, previous experience, technical and human resources etc.

5. Projects's election

The evaluated projects are listed top down according to the number of points received (maximum 100 points). Only the projects that receive minimum 60 points and no "zero" scoring to any





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criteria/subcriteria are subject to the selection process. The highest scoring project per defined geographical area is selected (one applicant can be selected for maximum 2 geographical areas)

6. Signing of Financial Contract between the beneficiary and IB-MCIS;

The Contract will expressly stipulate the operator's obligation to keep in use the newly developed broadband infrastructure for at least 10 years after the completion of the project. If the above mentioned infrastructure is to be sold or rented to another operator, the last one has to fulfil the same obligations already undertaken by the winning operator.

- 7. Project implementation;
- 8. Monitoring of the project's implementation and reimbursement of expenses by IB-MCIS;
- 9. Monitoring of the project's post implementation period by IB-MCIS;
- 10. Monitoring of the specific conditions of access and prices.

The evaluation grid is presented below:

No.	Criterion	%
1	C1	35
2	C2	30
3	C3	15
4	C4	10
5	C5	10
	TOTAL	100

The detailed evaluation grid with criteria/subcriteria and points granted for each is part of the Guide for applicants.





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8. MONITORING MECHANISM

7.1 Monitoring and control of the Projects' implementation

Monitoring and control of project implementation are made by the Intermediate Body. The Beneficiary is obliged to comply with the provisions mentioned in the contract - monitoring and control measures.

Description of monitoring and control measures:

Project monitoring is done by the Intermediate Body (IB) in pursuit of measurement of performance indicators established by the agreement for obtaining the results envisaged.

The monitoring consists of tracking the physical and procedural progress made in implementing the project and in collecting and placing in SMIS (Single Management Information System) of all project-related information.

The monitoring process starts from the moment the contracts signed and ends five years after the completion of the project.

The beneficiary must submit IB throughout the project implementation quarterly technical progress reports, and for five years after completion of project activities will submit annual reports on sustainable investment. Reports will be completed in accordance with standard formats provided in Annexes IV and VII the funding contract. (progress report - a standard document that presents monitoring physical progress of project investment sustainability report - standard document certifying that the investment made by the project has suffered / did not undergo substantial changes during the last 5 years from completion, according with Article 57 para. (a) of Regulation (EC) Nr. 1083/2006).

To achieve physical monitoring of projects, the IB will carry out the following activities:

- a) *verification of reporting documents* (quarterly progress reports and final report) drafted and sent by the beneficiary (activities / physical progress);
- b) *monitoring visits* which aim to verify the physical progress of the project implementation on site / at the premises of the beneficiary (scheduled and ad-hoc).
- c) monitoring the sustainability of investment (annual reports on sustainability for five years after project implementation)
- a) Monitoring the progress reported by the beneficiary:

The checks of documents will ensure that progress reports prepared by the beneficiary are complete and correct, that are in full comply with the funding contract, that the project is implemented in accordance with the Community and national laws. They will also monitor the time evolution of the indicators established by funding contract, achievements against the proposed targets, the achievement percentage.

b) Monitoring visits:





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The purpose of the monitoring visit is to check on the spot the physical realization of a project, the management system of the project and to allow the monitoring team to collect some additional data than those in the progress reports, in assessing the value of indicators against the proposed targets and the accuracy of information supplied by the beneficiary.

The purpose of the monitoring visit is:

- to ensure that the project is physically progressing in accordance with the schedule of activities included in the contract
- to identify possible problems as soon as possible and give suggestions to improve the implementation of the project
- to identify successful elements of the project
- to ensure close communication between the beneficiaries and IBs for a good cooperation in the successful implementation of the project (implementation of the indicators listed in the contract, within the deadline time)

The beneficiary is required to attend the visit and provide all information requested monitoring team.

c) Monitoring the sustainability of the project:

For all operations within the Priority Axis III, beneficiaries are required to annually notify the IB, for a period of 5 years from completion of the project, if there has / has not been a substantial change to the project financed through SOP IEC.

Control:

IB / AM carries out on-the-spot checks on a sample basis / referral, established following the completion of a risk analysis carried out in each institution.

Compliance with national laws and contractual provisions on procurement by the beneficiary under the Contract will be verified by the IB and/or other structures that represent the Ministry of Economy, Unit for Coordination and Verification of Public Procurement (UCVAP) and the National Public Procurement Regulatory Authority (NARMAP), the Audit Authority. MA, IB and/or other structures with control/verification /audit of grants from the Structural Funds can perform control tasks throughout the duration of funding.

Date and scheduling planned visits and inspections are communicated to the beneficiary in writing a letter of notice. The letter will specify the IB staff that will participate the on-site staff of the beneficiary that must be available during the period of control and documents required to be submitted. For controls there will be a referral notice, which are unannounced.

7.2. Monitoring of the specific requirements of broadband operations co financed from state budget (national and european)





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- third parties access

- level of prices

In order to ensure that the current measure will not be used to support local monopolies and that alternative operators have fair access to the subsidized broadband infrastructure, the following *safeguard* measures in relation to the wholesale service will be taken into consideration:

- 1) Periodic review of functioning of wholesale services, including pricing, operations and complaints.
- 2) Organisational structures and systems in place to provide transparent rapid access to wholesale services.
- 3) Prices charged must be cost accounting based and equivalent to prices charged in nonmarket failure areas
- 4) Based on industry technical standards, the backbone infrastructure will include all the elements which provide access to all resources of the network and services

Given the scale of this project in the Romanian marketplace, it is expected that these comprehensive measures (prices benchmarking, fair access to wholesale infrastructure, monitoring it) will have a significant impact on the development of third party access, competition and the development of new service bundles for consumers

A more detailed description of each of these four measures is set out below

1) Periodic review of functioning of wholesale services, including pricing, operations and complaints.

The MCIS in collaboration with ANCOM will monitor the PIU in order to ensure that wholesale services are being provided to all the operators in a fair, efficient and cost competitive basis. The PIU will provide an annual audit, which will include the financial situation.

The PIU have specific staff dedicated to this project, and the expertise will be supplemented with external consultants on the following field: telecommunication, legal, financial.

Every 6 month the MCIS together with ANCOM will do a benchmarking regarding wholesale prices, in order to compare the prices used in the projects area vs the prices in non-subsidised areas.

2) Organisational structures and systems in place to provide transparent rapid access to wholesale services.

Taking into consideration the available capacities and the operator's requests, PIU will deicide to provide the service to that operator. In that perspective, they will sign a contract.

3) Prices charged must be equivalent to prices charged in non market failure areas





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Please refer to Section "5.11 Pricing"

4) The list of wholesale services that may be purchased is as follows:

a) Wholesale LBAP Services – Operators must be able to locate compatible telecommunication equipment in any or all LBAPs for the purposes of supplying services to end-user customers.

This will require that adequate physical protection, space, power, air conditioning, security and other services are available at each LBAP (This applies to existing exchanges or high sites being upgraded in the context of this Tender)

It also requires that the equipment installed conforms to open standards prevailing in the telecommunications sector.

b) **Wholesale Distribution Services** – Operators must be able to purchase capacity between any two LBAPs on the distribution network.

7.3. Transparency

The text of the present scheme, as well as the text of the legal act on the approval of the scheme will be integrally published, on the official web-page of the Ministry of Communication and Informational Society at the web-page, after their publishing in the Official Journal of Romania.

As stated before, the same provision is applied for the list with the localities considered as "white areas" in order to be continuously up-dated.

7.4. State aid monitoring and recovery

No other State aids or de minimis aids will be granted, by any grantor, in order to subsidise the development or the operation of the broadband infrastructure financed within the present scheme. The end-users can benefit of aids granted according with the provisions of other State aid schemes or de minimis schemes in order to promote the broadband services' use. This kind of support measures does not make the object of the present notification.

In order to allow to all interested parts to obtain relevant information concerning the projects, all the parts involved, MA SOP IEC and PIU have the obligation to keep the justifying documents related to the project implementation's and monitoring period for a period of at least 10 years starting with the date when the last tranche of aid was granted within the scheme. These documents must contain all necessary information in order to prove the fulfillment of the conditions imposed by the communitarian legislation in the State aid field.





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MA SOP IEC has the obligation to continuously monitor the aids granted and on-going and to take the necessary measures in case of a breach of the conditions imposed by the present scheme or by the national and European legislation in force at that moment, including the recovery of any illegal or supplementary aid already paid to PIU.

MA SOP IEC has the obligation to submit to the Romanian Competition Council in the form and within the time-limit provisioned for by the *Romanian Competition Council Regulation on the State aids monitoring procedures*⁴ all the data and information necessary in order to monitor the State aid at national level.

Based on a written request, MA SOP IEC will submit to the European Commission, through the Competition Council, within 20 working days or the time-limit set up in the request, all the information considered necessary by the European Commission in order to assess the fulfillment of the conditions set up by the present scheme.

8. CLAW-BACK MECHANISM

PIU will be entrusted with an obligation to perform a service of general economic interest defined in conformity with the provision of the EC Decision from <u>28 November 2005</u> on the application of Article 86 (2) of the EC Treaty to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest.

As a consequence, the Entrustment Act will mandatory include provisions concerning the effective modality to calculate the level of compensation, taking into consideration the amount of the expenses necessary in order to provide the public service and all the revenues generated by the newly created backhaul infrastructure.

All eventual revenues exceeding the costs incurred by the effective construction and operation of the newly created broadband infrastructure will be refunded to the MCIS. Thus, no overcompensation will be possible.

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⁴ The Order of the President of the Romanian Competition Council no 175/2007, published in The Official Monitor no 436/28.06.2007.





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Annex W - Wholesale regulated tariffs and considerations on retail tariffs

ANCOM has informed MCSI about the currently regulated wholesale access products and their tariffs.

According to the obligations imposed on the operator designated with significant market power on the relevant national market of wholesale (physical) network infrastructure access,

- the maximum tariffs for the provision of total access to the **local loop** may not exceed 6.02 euro/month, for each local loop starting November 1st 2010;
 - the maximum tariffs for the provision of shared access to the **local loop** may not exceed:
 - 3.17 euro/month for each **local loop** starting November 1st 2010;
 - 2.14 euro/month for each **local loop** starting January 1st 2011;
 - 1.11 euro/month for each **local loop** starting July 1st 2011.

The above mentioned tariffs do not include VAT.

In addition, among other tariffs, the following tariffs were imposed:

Activity	Tariff	Remarks
Connection – total access to the local loop (with standard tests)	29,8 euro/loop	The standard testing of a line includes: bit error rate and frequency spectrum.
Connection – total access to the local loop (with full set of tests)	35,4 euro/loop	The full set of tests includes: bit error rate, frequency spectrum, direct current resistance, attenuation at four frequencies, insulation resistance, impulses noise, crosstalk.
Connection – shared access to the local loop (with standard tests)	31,8 euro/loop	The standard testing of a line includes: bit error rate and frequency spectrum.
Connection – total access to the local loop (with full set of tests)	37,5 euro/loop	The full set of tests includes: bit error rate, frequency spectrum, direct current resistance, attenuation at four frequencies, insulation resistance, impulses noise, crosstalk.





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Activity	Tariff	Remarks
Connection for the backhaul service	44,2 euro	This tariff applies to backhaul services with capacities of 2 Mbps, 34 Mbps, 140 Mbps şi 155 Mbps and includes both the connection and disconnection of the backhaul.
Monthly provision of 2 Mbps	43,4	
backhaul	euro/month/backhaul	
Dackilaul	segment	
Monthly provision of 34 Mbps	156,3	
backhaul	euro/month/backhaul	
Dackilaui	segment	
Monthly provision of 140 Mbps	463,8	
backhaul	euro/month/backhaul	
Dackilaul	segment	
Monthly provision of 155 Mbps	482,4	
backhaul	euro/month/backhaul	
Dackiiaui	segment	

With regard to the relevant national market of wholesale broadband access, ANCOM has informed MCSI that the market analysis performed in 2010 revealed that there is no SMP on the wholesale broadband access market; consequently, no bitstream access obligations were imposed in Romania.

However, ANCOM recommends MCSI to set the **wholesale tariffs for the bitstream products** based on a retail minus method applied to the average retail tariffs of the products with similar characteristics offered in the competitive areas of Romania. At MCSI request, ANCOM may assist in determining these tariffs.

With regard to **retail tariffs**, ANCOM provided MCSI with the some information that was used in the analysis of markets 4 and 5 from the Commission Recommendation 2007/879/EC on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation the relevant markets. According to the information presented in the "Approval request for ANCOM measures of identification, analysis and regulation of relevant markets for wholesale (physical) network infrastructure access and wholesale broadband access"⁵, under chapter 5.3.2.5.: the diversification and increase of the speed capacities was accompanied by price reductions, either directly, through price reduction for a certain speed, or indirectly through

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http://www.ancom.org.ro/DesktopModules/Interogation/DownloadFile.aspx?intSurveyID=10 01&intSurveyFilledInstancesID=1254018





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increased speed for the same price, or a combination of the two. The evolution of the retail tariffs between 2005 and 2009 was presented at page 120 in table no. 27.

As it can be concluded from the above mentioned table, in 2009 there were no important providers having active retail offers for 1Mbps. Continuing the same trend observed during 2005-2009 period, it is very unlikely that in 2011 and beyond there will be important providers offering speed capacities of 1 Mbps in the competitive areas.

As such, benchmarking the retail tariff for the 1 Mbps service against the similar services offered in competitive comparable areas might prove difficult, as there are no more 1 Mbps access to internet services in the competitive areas.

In this situation, ANCOM recommends MCSI to include in the benchmark for the retail tariffs the lowest speed capacities available at the moment of the benchmark in the competitive areas, but in any case not lower than 1 Mbps.