# **NATIONAL REGULATORY AGENCY** FOR ELECTRONIC COMMUNICATIONS AND INFORMATION TECHNOLOGY

REPORT
On Activity of and Evolution of Electronic Communications Markets in



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# **About the Agency**

The National Regulatory Agency for Electronic Communications and Information Technology (ANRCETI) is a central public authority entitled to regulate the activity in this sector, ensure the implementation of electronic communications development and supervise compliance of electronic communications network/service providers with the relevant legislation. On August 17, 2010 the Agency celebrated its 10th anniversary.

The institution named the National Regulatory Agency for Telecommunications and Informatics (ANRTI) was founded on August 17, 2000, being one of the first telecommunications regulators created on the ex-USSR territory. The regulator was established as a result of a telecommunications sector reform, under way in the 90-s, intended to separate policy-making, regulatory and operational functions, to liberalize the telecommunications market and create a modern infrastructure capable to ensure the integration of national telecommunications networks with the European ones and provide a large range of services, meant to meet the citizens' increasing demands.

On March 14, 2008, as the new Law on Electronic Communications no. 241-XVI of 15.11.2007 entered in force, the regulator ANRTI was re-organized in the National Regulatory Agency for Electronic Communications and Information Technology (ANRCETI). ANRCETI is the legal successor of ANRTI and performs its functions and duties according to its Regulations, approved by Government Decree no. 905 of 28.07.2008.

# The following are the main objectives pursued by the Agency:

 (i) contribute to the development of the electronic communications market by removing the barriers impeding the provision of services, networks and associated facilities;

- (ii) promote competition in the provision of services, networks and associated facilities by encouraging efficient investments and innovation, ensure technologically-neutral character of its regulations;
- (iii) ensure interconnection and interoperability of public electronic communications services;

(iv) protect end-users interests.

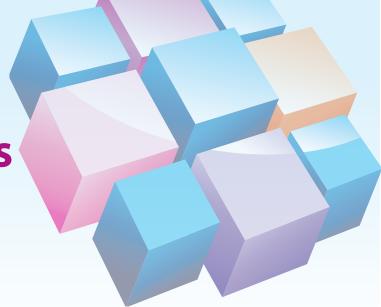
Performing the role of an arbitrator on the electronic communications market, the Agency promotes an active and fair policy, supported by a team of young and conscientious staff, fully aware of their responsibilities. The measures taken by the Agency for the development of the market are based on the principles of non-discrimination and technological neutrality, the need to remove barriers to the provision of electronic communications networks/services and associated facilities. The Agency analyses and provides remedies for the problems occurring on the market for the benefit of end users. The Decisions adopted by the Agency are subject to public consultations and are aimed at ensuring equal conditions for all providers of electronic communications networks/services. In its activity, the Agency is guided by the principles of transparency, non-discrimination, predictability, timeliness, proportionality, technological neutrality, efficiency.

Pursuant to Art. 11 (9) of the Law on Electronic Communications, on yearly basis, before April 30, the Agency publishes the Report on its activity, on the implementation of the electronic communications development strategy and its regulations, as well as a statistical yearbook on the development of electronic communications in the Republic of Moldova in the previous year.









# **1** OBJECTIVES AND PRIORITIES

In the timeframe under report, the activities performed by the Agency were focused on three basic priorities:

- identification of relevant markets susceptible to exante regulation, their detailed analysis for the purpose of designating providers with SMP and imposing special ex-ante obligations for these providers;
- development of technical regulations and prescriptions in order to ensure the users' rights to high-quality electronic communications services.

In 2010 the Agency issued and approved 80 Administrative Board decisions, of which 63 – with significant impact on the sector and 17 – pertaining to ANRCETI's internal activity.

It is notable that in 2010 the Agency started a new stage in the process of promoting competition on the electronic communications market: identification and analysis of relevant markets, designation of providers with SMP on those markets and imposition of special ex-ante obligations for SMP providers, for the purpose of solving competition problems and enhance fair competition. Of the 10 electronic communications markets defined in 2009 to be further reviewed for susceptibility to ex-ante regulation, the Agency analyzed and identified 6 markets, designated, based on detailed analysis, SMP providers on 4 relevant markets and imposed special ex-ante obligations on 2 markets: the one for voice call termination on individual fixed telephone networks and voice call termination on individual on individual mobile telephone networks. The Agency decided to start applying the new competition protection tool namely on the mentioned markets, for the reason that they are the most monopolized and play a primary role in the electronic communications sector.

As it takes a long time to go through all the stages preceding the decision on imposing special *ex-ante* obligations on designated SMP providers, including the consultations of draft decisions, in 2010, the Agency did not manage to complete the work for all the 10 markets. However, the Agency continues this work and is committed to complete it by the end of 2011.

The regulator considers that its decisions will contribute to solving competition problems and setting favorable conditions to enhance fair competition on these electronic communications markets.

Another priority in the Agency's performance in 2010 was to adopt regulatory measures intended to ensure the providers' access to the cross-border global Internet traffic, as well as the end-users' access to the services offered by these providers. In 2010, the Agency authorized three companies to perform activities of operation, management and maintenance of their networks at the state border of the R.Moldova, which fact enabled the extension of the market for direct access to the global Internet. The Agency considers that assisting the providers to have access of to the global Internet will boost the broadband market development, a factor that will contribute to the improvement of high-speed Internet offers for end users in terms of price and service quality.

One of the measures taken by the Agency in order to ensure the end users' access to services was the Administrative Board decision cancelling the access deficit charge that alternative operators, connected to JSC Moldtelecom's network, previously had to pay for IP-telephony service provision via access codes "1600-



1639" and set new interconnection rules for the services provided via those access codes, for the benefit of the users of such services.

The Agency's list of priorities also contained the issue of promoting end users legal rights, enhancing their protection in relations with public electronic communications service providers. In order to ensure the enforcement of the legal provisions protecting the end users' rights, the Agency issued a prescription ordering providers of public electronic communications services to bring their contracts with end users into line with the requirements of normative acts in force. The Agency issued this prescription as a result of verifications of service provision contracts, which showed that providers do not fully comply with the legal requirement to introducing minimum obligatory clauses in contracts and eliminate abusive clauses. The Deci-

sion of the Agency aims at preventing and eliminating non-compliance with the legal provisions protecting end users' rights.

The Agency also continued its activity to ensure end users' right to high-quality services. During the reporting period, the Agency approved the standard forms for reporting quality parameters for the provision of five types of public electronic communications services (fixed telephony, Internet access, communications services provided via IP protocol networks, ISDN services and leased line services) and developed draft quality indicators for mobile telephony service provision, due to be approved in 2011. The Agency required providers to measure the quality parameters for the provision of five types of services and to periodically report and publish information on how these parameters are ensured.

# **2** GENERAL AUTHORIZATION AND LICENSING

Pursuant to the Law on Electronic Communications no. 241-XVI of 15.11.2007 (hereinafter *Law 241/2007*), the provision of public electronic communications networks/services is subject to general authorization by ANRCETI, whereas the state's limited resources (radio frequencies/channels and numbering resources) are used on basis of licenses, as well issued by ANRCETI.

General authorization is a legal regime, establishing the rights and obligations of electronic communications network/service providers. It has been applied by the Agency since September 15, 2008, the date when Chapter IV of Law 241/2007 entered in force. Authorization and licensing procedures are prescribed by the Regulations on general authorization regime and license issuance for the use of limited resources in the provision of public electronic communications networks and services. Through its decision no. 57 of 21.12.2010, ANRCETI Administrative Board adopted a revised version of this document.

By approving the revised version of the Regulations, the Agency updated the general authorization conditions and the license issuance procedure for the use of radio frequencies/channels and numbering resources. Practically, all aspects related to the general authorization and license issuance for the use of the state's limited resources were brought into line with the cur-

rent situation in the electronic communications sector without new legal norms being established or the essence of the old Regulations being changed. The new version of the Regulations establishes the types of electronic communications networks/services, conditions of their provision, general authorization and licensing procedure, sample forms for licenses, notifications and informative declaration. All the forms were updated and simplified.

# 2.1 General authorization regime

The application of the general authorization regime for the provision of public electronic communications networks/services simplified market entry and reduced to minimum the costs incurred by new entrants. The procedure requires that the applicant lodges a notification with the Agency, informing of his intent to provide public electronic communications networks and/or services at least 7 days before launching the operation. Within maximum 7 days from the date of notification, the Agency issues an informative declaration, confirming the notification and the inclusion of the applicant's data in the Public Register of Electronic Communications Network/Service Providers, this giving the applicant all the rights to operate on the given market.



By applying the general authorization regime, in 2010, the Agency authorized **168** applicants to operate on the electronic communications market. **67** of these are new entrants and **101** – "old" providers, authorized by the Agency due to the expiry of their previously granted licenses or due to their voluntary waiver of licenses in favor of the new general authorization regime. Of the 168 companies **116** – are authorized to provide public electronic communications

networks and **147** – public electronic communications services. Most of the companies – **62** – notified the Agency that they provide audiovisual program retransmission services, **46** – Internet access services, **40** – data transmission, the others – telephone and leased line services.

The table below provides data regarding the number of providers authorized by the Agency in 2008-2010:

	2008	2009	2010	Total
otal electronic communications network and service providers, authorized	45	161	168	374
electronic communications <b>networks</b>	32	109	116	257
Electronic communications services	32	141	147	320

In the timeframe under report, the Agency continued to authorize electronic communications activities in the border zone, pursuant to the provisions of the Regulations on performing activities of installation, operation, management, maintenance and/or liquidation of electronic communications networks at state border of R. Moldova, approved by Government Decree no. 974 of August 12, 2008. According to the situation as per 31.12.2010, 4 electronic communications providers: JSC "Moldtelecom", "Starnet" LLC, "Norma" LLC, JV "Orange Moldova" had the right to perform activities of installation, operation, management and maintenance of electronic communications networks in border zone.

As per the same date, **911** providers (natural and/or legal persons, registered as required had the right to operate on the electronic communications market, including **4** holders of **8** individual licenses, **374** providers authorized according to the general authorization regime pursuant to *Law 241/2007* and **533** holders of **564** general and technical licenses for different types of activities in telecommunications and informatics, obtained according to the Law on Telecommunications, in force before 15.09.2008.

# 2.2 Authorization for the use of radio communications stations

The use of radio communications stations is authorized by the Agency pursuant to Law 241/2007 through the issuance of the technical permit, which represents the document attesting the right of use, under compliance with a number of technical parameters, of one or more radio communications stations on assigned radio frequencies or channels. This procedure is prescribed by the Instruction on technical permit issuance for radio communications stations, an act approved by ANRCE-TI Administrative Board Decision no. 16 of 23.09.2008.

In 2010, The Agency issued, upon request, **668** technical permits, including **135** permits – for stationary radio communications stations, **522**- for mobile and **11** – for radio amateurs. On the whole, in the timeframe 2008 – 2010, the Agency issued **3 401** technical permits, of which **200** – for stationary radio communications stations, **2 918** – for mobile radio communications stations, **265** – for radio amateurs and 18 – international permits.

# 2.3 License issuance for the use of radio frequencies/channels

Pursuant to Law 241/2007, the radio frequency spectrum for non-governmental use is under the administration of the central sector body – the Ministry of Information Technology and Communications, whereas radio frequencies and/or channels for non-governmental use, in particular for electronic communications networks and services, are assigned by the Agency.

Licenses for the use of radio frequencies/channels for providers of TV/radio networks and/or stations are issued by the Agency on basis of an application, with attached copies of broadcasting license or retransmis-



sion authorization and the approval by the National Radio Frequency Center, which includes the result of selection, calculation and coordination of the given radio frequency or channel requested for use.

In the timeframe September 2008 – December 2010, the Agency issued 57 licenses for the use of radio frequencies and channels in the provision of radio networks and services, of which 3 licenses were issued in 2008, **13** – in 2009 and **41** – (including **6** – updated) – in 2010.

The licenses issued in 2010 by the Agency are distributed as follows:

- for the use of channels **11** licenses (of which 2 updated);
- for the use of frequencies **30** licenses (of which 4 updated).

Most providers, holding such licenses, are operating in Chisinau municipality.

# 2.4 License issuance for the use of numbering resources

Among the most important ANRCETI's functions are the development and management of the National Numbering Plan (NNP) and the efficient allocation and management of numbering resources. In this respect, in 2010, the Agency contributed to the enhancement of free competition on this market by providing electronic communications network/service providers with numbering resources sufficient for market development.

Pursuant to the NNP, in the reporting timeframe, the Agency issued 78 licenses for the use of numbering resources in the provision of electronic communications networks/services.

Thus, 358 thousand numbers were requested by and allocated to electronic communications network/service providers: of which:

- **300 thousand** numbers for public electronic communications networks/services provided at mobile locations ("Orange Moldova" JSC 200 thousand, "Moldcell" JSC 100 thousand);
- **57 thousand numbers** for public electronic communications networks/services provided at fixed locations ("Moldtelecom" JSC 23 thousand, alternative providers of public electronic communications networks/services provided at fixed locations 34 thousand);
- **300 numbers** for Freephone service;
- **1002 numbers** for Premium rate service;
- **35 numbers** auto transportation services, IP-telephony services, dial-up, non-electronic communications services and other services.

In the same period, in accordance with the Procedure of Signaling Point Code Administration, the Agency granted the right to use signaling point codes to **12** providers.

#### Tab. 2 Numbering resources allocated by the Agency in 2008 – 2010

	2008	2009	2010
Total allocations, including:	778 101	840 089	358 349
- numbers for public electronic communications networks/ services provided at mobile locations	700 000	700 000	300 000
- numbers for public electronic communications networks/ services provided at fixed locations	78 000	130 749	57007
-"Freephone" service	39	7 500	300
-"Premium rate" service	40	1 764	1002
- numbers for local service provision (taxi service, medical services, etc.)	14	41	31
- IP - telephony services, dial - up, non-electronic communications services	8	35	9

Source:





# 2.5 License issuance for types of information technology activities

Since November 10, 2010, when the amendments to Law no.451-XV/30.07.2001 on regulation of entrepreneurial activity by licensing entered in force, the Agency has been issuing licenses for one single type of information technology activity: for services of creation, implementation and ensuring the functionality of automated information systems of state importance, including software. The license is granted upon applicant's request. ANRCETI Administrative Board adopts the license issuance decision within 10 days from the date of application. The license is prepared and delivered to the applicant within 3 working days following the receipt of a document confirming license fee payment. The license fee amount, as established by law, is 2500 lei, which is integrally transferred to the state budget.

With the license, the applicant receives license conditions. These provide for the license holders' obligations in terms of service provision, his rights and responsibilities. The License conditions were approved by ANRCETI Administrative Board Decision no.33 of 4.11.2010. According to the decision, the mentioned services can be provided both by legal

persons duly registered in the Republic of Moldova as enterprises and organizations, regardless of their type of property and legal organizational form and by natural persons that can perform some types of activity subject to licensing pursuant to other legislative acts.

Before November 10, 2010, the Agency issued, pursuant to the abovementioned law, licenses for two types of activity in the field of information technology: (a) for provision of services such as development, maintenance and implementation of software, equipment and informatics systems of state importance and (b) for provision of services such as projecting, development, implementation of automated informational resources and systems of state importance (data base creation, operation and information provision services) and services to ensure their operation. The validity term of these licenses is 1 year, whereas the new license term of validity is 5 years. This term can be extended, under the law, for the same period.

Before November 10, 2010, the Agency issued to **46** companies licenses for two types of activity in the field of information technology, whereas in the timeframe November 11 – December 31, 2010 – to **5** companies – licenses for one single type of activity in this field.

# **3** ECONOMIC REGULATION

# 3.1 Market Analysis

In 2010, The Agency's activity in terms of economic regulation of electronic communications markets mainly focused on the implementation of the new ex-ante market regulatory tool. In this timeframe the Agency developed **54** draft documents and approved 51 economic regulation decisions, which constitutes about 80% of the number of documents adopted by ANRCETI Administrative Board in 2010.

According to Law 241/2007, the Agency identifies the relevant markets and analyses them in order to determine whether a given market is effectively competitive. The market analysis is aimed at imposing, maintaining, modifying or withdrawing special ex-ante obligations as regards SMP providers. These measures are intended to prevent the abusive use of SMP to the detriment of competition and to contribute to solving competition problems in the relevant markets.

The relevant market analysis procedure was established by ANRCETI Administrative Board Decision no. 55 of 29.12.2008 on identification and analysis of relevant electronic communications markets and designation of providers with SMP on those markets. According to the Decision, the analysis procedure consists of two stages: the first is to analyze a particular market to find whether it is susceptible to ex-ante regulation and the second – to analyze the relevant markets in detail to find whether there is significant market power.

By its Decision no.85 of 28.04.2009, the Agency defined the list of markets to be analyzed in order to identify the relevant ones. In defining the markets, the Agency was guided by the corresponding European Commission recommendations on the one hand and took into consideration the specific national conditions on the other. The decision provides for the definition of 10 relevant markets of electronic communications networks and/or services.





During the first stage, the Agency analyzed and identified 6 relevant markets, as follows:

- the market for wholesale access to network infrastructure at a fixed location (market 4);
- the market for wholesale broadband access (market 5);
- the market for voice call termination in individual fixed telephone network (market 3);
- the market for voice call termination in individual mobile telephone network (market 7);
- the market for traffic transit in the public telephone network (market 9);
- the market for call origination at fixed locations from the public telephone network (market 2).

In the process of market identification the Agency applied two district tools. By means of the SSNIP test (Small but Significant and Non-transitory Increase in Price), it established the relevant product market and the geographic product market. Also, the Agency applied the test of the three criteria recommended by the European commission for determining whether the market is susceptible to *ex-ante* regulation. As a result of the analysis, it was found that the features of all the six markets justify *ex-ante* regulation.

During the second stage, the Agency, conducted detailed analysis of 4 markets and designated SMP providers on those markets, as follows:

- 17 providers on the market for voice call termination in individual fixed telephone networks (market 3);
- 3 providers on the market for voice call termination in individual mobile telephone networks (market 7);
- JSC "Moldtelecom" on the market for wholesale access to network infrastructure at a fixed location (market 4);
- JSC "Moldtelecom" on the market for wholesale broadband access (market 5).

The Agency conducted the detailed analysis of the first two markets (voice call termination in individual fixed telephone networks and mobile networks) in order to find whether there are providers with SMP on those markets. For this purpose the Agency analyzed every one of the criteria prescribed in Annex no.1 to the Regulations on identification and analysis of relevant electronic communications markets and designation of providers with SMP, relating them to the current situation on the two markets.

In every case, the Agency evaluated, by reasoning, the importance of every criteria on each market and analyzed whether the given criteria supported or did not support the hypothesis that every fixed network provider has SMP on the market for call termination in his individual network. The given hypothesis occurs, first

of all where providers hold over 35% of the relevant market. The analysis allowed the Agency to test the hypothesis on SMP both qualitatively and semi-quantitatively. The analysis showed that all providers have SMP on the relevant markets for call termination on their individual telephone networks, whereas the power of JSC "Moldtelecom" to influence the wholesale markets is substantially more significant than the power of the other fixed telephone providers. However, the analysis of the market for voice call termination in individual mobile networks proved that all the providers have SMP on those markets, whereas their power to influence the market is different. In both cases, it was proposed to take decisions on designating providers with SMP on the given markets and apply remedies to prevent abuse of market power to the detriment of competition.

Based on the conclusions made as a result of detailed analysis of the two markets ANRCETI Administrative Board approved Decisions no. 37-53 of 18.11.2010 on designating 17 providers with SMP on the market for voice call termination in individual fixed telephone networks and Decisions no. 54 – 56 of 18.11.2010 on designating 3 providers with SMP on the market for voice call termination in individual mobile telephone networks.

Similar actions were taken in relation to other two relevant markets: the market for wholesale access to network infrastructure at a fixed location and the market for wholesale broadband access. The analysis conducted by the Agency consisted of evaluation of competition, identification of SMP providers on the given markets, determination of risks to distort the market and identification of specific ex-ante obligations to be imposed on SMP providers in order to prevent eventual negative effects of SMP on competition. The analysis proved that JSC "Moldtelecom" has SMP both on the market for wholesale access to network infrastructure at a fixed location and the market for wholesale broadband access. Consequently, the Administrative Board by its Decisions no.29 and 30 of 28.09.2010 designated JSC "Moldtelecom" as an SMP provider on the markets for wholesale access to network infrastructure at a fixed location and the market for wholesale broadband access.

It is notable that all the draft documents related to market analysis prepared by the Agency were subject to public consultations, being made available on the Website and then discussed during public sessions attended by stakeholders. The process of market analysis was accomplished with the support of the international consultants as part of the technical assistance project delivered to ANRCETI by the European Bank for Reconstruction and Development.



# **3.2** Obligations for SMP providers

Pursuant to the provisions of *Law 241/2007*, where as a result of market analysis the Agency finds that a relevant market is not effectively competitive, it designates the providers of electronic communications networks and/or services with SMP on this specific relevant market and has the right to impose one or more obligations prescribed by the Law.

Law 241/2007 provides for the following obligations:

- to ensure the transparency of interconnection and access to networks, or to associated facilities, including to make a reference interconnection/access offer publicly available;
- 2) to admit of no discrimination in terms of interconnection and access;
- 3) to apply separate accounting;
- 4) to provide interconnection and access to certain specific elements of the network, associated facilities and their use;
- 5) to apply price control and cost orientation of prices, investment recovery.

Pursuant to Law 241/2007 and based on ANRCETI Administrative Board Decisions on designating SMP providers on the markets for voice call termination in individual fixed and mobile networks, the Board approved a set of special ex-ante obligations for these providers, capable to contribute to the settlement of competition problems on the given markets. The Administrative Board decisions no. 60 – 76 of 23.12.2010 impose special ex-ante obligations for 17 providers designated as having SMP on the markets for voice call termination in their individual fixed telephone networks, and Decisions no. 77 - 79 of 23.12.2010 - for three providers (JSC "Moldtelecom", JSC "Orange Moldova" and JSC "Moldcell") as having SMP on the market for voice call termination in their individual mobile telephone networks.

The biggest number of special *ex-ante* obligations lay on "Moldtelecom", "Orange Moldova" and "Moldcell". The first two companies have obligations due to their SMP on both relevant markets: the markets for voice call termination in their individual fixed and mobile telephone networks, whereas JSC "Moldcell" – on the market for voice call termination in their individual mobile telephone networks. The three providers are liable to offer, upon the request of other providers, interconnection with their networks for call termination, to ensure the provision of these services in a non-discriminatory and transparent manner. Thus, these providers must make their reference interconnection offers publicly available. JSC "Moldtelecom" has the obligation to apply separate accounting for its activities.

According to the Administrative Board Decisions, 18 providers with SMP on the aforementioned markets have the obligation to cost-orient their prices for call termination services. For the implementation of this obligation, the Agency set a transitional period for the gradual reduction of tariffs for call termination in fixed and mobile networks. These tariffs are reduced every six months, starting with January 1, 2011. According to ANRCETI estimations, these tariffs will be cut down, by January 1, 2010, by more than 3 times. In 2010, the tariff for call termination in mobile networks was 7 US cents per minute, whereas the tariff for mobile to fixed termination – 3,19 US cents per minute. By the same Decisions, the Agency imposed on the 18 providers the special obligations to allow of no discrimination of traffic by call origination. The price discrimination in relation to traffic origination is due to be eliminated before January 1, 2014.

The Agency believes that the fulfillment of special *ex-ante* obligations imposed on "Moldtelecom" "Orange" "Moldcell" and other suppliers will help simplify the network interconnection and facilitate market entry. At the same time, the reduction of fixed and mobile termination rates will boost competition on retail mobile, fixed and broadband markets, a factor further leading to long-term benefits for end-users.

#### 3.3 Interconnection and access

According to *Law 241/2007*, one of the specific rights applicable to the activities of public electronic communications network/service provision is the right to negotiate and conclude interconnection/access agreements to ensure connectivity between end users and interoperability of networks and services, promotion of competition and users' rights protection.

For this purpose, by its Decision no.11 of 7.04.2010, the Administrative Board set new interconnection rules for public services provided via "1600-1639" access codes, for the benefit of users. According to this decision, the end users from all the public electronic communications networks will have access to public services provided via those access codes, whereas the connected alternative operators or those who are going to connect to JSC "Moldtelecom" network will no longer have to pay the access deficit charge.

The Agency allocates the "1600-1639" access codes to providers for the provision of IP-telephony services. In 2001, the Agency adopted, on basis of a Government Decree, a decision on regulating IP-telephony services and approving the access deficit charge. In 2001 – 2004 the charge for one minute international IP-telephony



calls varied between 2,48 and 0,50 lei. In the timeframe January 2005 – April 2010, the 0,39 lei charge was applied. By paying the access deficit charge, the IP-telephony operators, connected to JSC "Moldtelecom" network, subsidized revenue deficit necessary to cover the costs incurred by the company for maintenance of local infrastructure, a deficit caused by the application of below-costs tariffs for local fixed calls.

Having analyzed the situation on the market, the Agency found that the access to the services provided via "1600-1639" access codes is limited, whereas the access deficit charge became a barrier for new entrants, for the reason that they could not compete with the incumbent due to disproportional regulation. Taking into account the situation, as well as the tendency of tariff decrease for international calls for end users, which directly influences the quantum of the access deficit charge, the Agency decided to eliminate this charge and establish new interconnection rules for the services provided via "1600-1639" access codes, for the benefit of end users.

The decision makes the providers of public electronic communications networks liable to conclude, at the request of other providers, interconnection agreements or modify the ones previously signed for the provision of services via the "1600-1639" access codes. The agreement must provide for the obligation of the first provider to ensure the access of his own users (except roaming users), to the access codes of the other provider, in compliance with the provisions of the Administrative Board Decision. The Decision also prescribes the obligations of the interconnected provider in terms of transportation and transfer of calls to the "1600-1639" access codes, the use of signaling codes, methods of charging for calls and settlements for these services.

By another decision – on access to special tariff numbers (Premium rate) provided via public electronic communications networks (no.16 of 19.05.2010) the Administrative Board obliged the public fixed and mobile telephony providers to negotiate, upon the request of other providers, interconnection agreements to provide access for end users to Premium rate services.

The adoption of this decision was necessary because the Premium rate services (provided by means of number blocks from range,9") used to be offered only within some telephony networks, restricted only to the subscribers of those networks. Other subscribers could not access the services for the providers were unable to find an acceptable settlement solution for transit and call termination services, in order to be able to sign due interconnection agreements. The Agency

investigated this issue and proposed solutions, which were discussed with the stakeholders and subsequently included in the mentioned decision.

The Decision requires that the providers who have concluded interconnection agreements are liable to ensure the access of their own end users to *Premium* rate numbers, under the terms of the contract for content provision, signed between the providers controlling the access to the end users and the content service provider. However, the providers ensuring the access to the *Premium* rate numbers must make the following items publicly available on their Websites: type of content services provided, tariffs applied, the *Premium* rate numbers used for these services.

The Agency believes that offering access to all subscribers from all public telephone networks to the services provided by means of Premium rate numbers will enhance the demand for these services and their development, which will be an advantage for both providers and users of these services.

In 2010, at the request of several providers of public mobile telephone networks/services, ANRCETI Administrative Board approved a decision to modify the conditions of the licenses held by mobile providers JSC "Orange Moldova", JSC "Moldcell" and JSC "Moldtelecom" so as to give them the right to provide traffic transit services via their mobile networks. These providers complained about license conditions restricting the use of network equipment for the provision of traffic transit in mobile networks. The Agency investigated the complaints and concluded that this restriction is discriminatory against providers of mobile telephone networks/services in relation to providers of fixed telephone networks/services, who have the right to provide traffic transit services. To ensure compliance with the principle of non-discrimination against providers of public mobile networks/services, the Board decided, with the providers' consent, to modify the license conditions by giving their owners the right to provide traffic transit services in their own mobile telephone networks.

According to the Decision, the new provision in the license conditions stipulates that the traffic supported by the broadcasting equipment of license holders will be originated or terminated both in his own mobile and other networks. The phrase: "The use of these capacities for other purposes shall not be permitted" was excluded from license conditions.

The Agency believes that the mentioned decision will remove barriers to entering the transit market and contribute to the development of this market.



# **4** TECHNICAL REGULATIONS

#### 4.1 Administration of limited resources

As numbering resources and radio frequencies/channels are limited state resources necessary for the provision of public electronic communications networks and services, their efficient administration is of a strategic importance for their optimal use. For this purpose, as well as for the purpose of ensuring the right of license holders to transfer, with ANRCETI consent, one or more limited resources to other authorized providers of electronic communications networks/services, the Administrative Board approved the Procedure for transfer of licenses for the use of limited resources, in its decision no.08 of 25.02.2010.

This decision allows the transfer of licenses for the use of radio frequencies and/or channels and numbering resources, issued for the provision of public electronic communications networks and/or services. In particular, the transfer is applicable to the licenses for the provision of cell mobile telephony services, in GSM and CDMA standards, technical licenses for construction, maintenance, operation and creation of air and/or cable radio and/or TV stations.

According to the procedure, the license transfer applicant has to submit to the Agency a written application on a pre-established form, with all due documents attached, as required by the transfer procedure. These include: contract on license transfer, applicant's engagement to assume the responsibility for compliance with the transfer conditions, license issuance conditions, and where applicable, with the conditions and obligations prescribed in the license, as well as for the veracity of documents. The Agency, within 7 days from the date the application was received, issues a license transfer decision and within 3 days notifies the applicant of the decision

The Agency has the right to refuse license transfer in the following situations:

- license transfer may cause restriction, impediment or distortion of competition, or change the destination of the limited resources covered by the license;
- -the cedent and/or the applicant are indebted with regulatory and monitoring fees to ANRCETI, or with

payments for the use of limited resources (frequencies/channels and/or numbering resources), other payments related to the transferable license and/or other licenses issued by ANRCETI, or other obligations to ANRCETI.

#### 4.1.1 Administration of numbering resources

In 2010, the activity of the Agency in the administration of numbering resources from the National Numbering Plan (NNP) was focused on the development of a new version of the NNP, a procedure for numbering resources administration, special conditions for the use of these resources by all the providers of electronic communications networks and/or services, in compliance with the principles of transparency and non-discrimination, reasonable and efficient use of numbering resources. These activities included the following:

1) Modifications and additions to the NNP. The new version of the NNP was developed to harmonize the document with ITU Recommendation E.129 regarding the presentation of NNPs, encouraging the process of implementation of new public electronic communications services, promotion of competition and end user protection. The document was approved by order of the Ministry of Information Technology and Communications no.15 of 04.03.2010 and entered in force on May 21, 2010.

In order to meet the market requirements, the NNP pursues the following objectives:

- a) to make the process of numbering resource administration more efficient;
- b) to ensure compliance with the principle of nondiscrimination in the allocation of numbering resources:
- c) to add to the flexibility of the NNP, by ensuring adequate numbering resources for new electronic communications networks and services.

To achieve these objectives the new version of the NNP provides definitions for a set of new services and establishes the numbering resources to be used in the provision of these services.





Additional numbering resources were allocated from the range "7" for services offered by mobile virtual network operators (MVNO). The implementation of these services is caused by the limitation in the radio frequencies available for the provision of electronic communications services at mobile locations.

The choice of services provided by means of "8" and "9" number ranges has extended. For this purpose, a number block "814xxxxx" was allocated for transportation services, to be used nationwide. In this way an alternative was provided for the same services currently accessed through local short numbers "14xx". Other two number blocks ("905xxxxx" and "906xxxxx") were additionally allocated for Premium rate services. The new version of the NNP also included short numbers of national interest, some numbers harmonized at European level. Initially, the NNP included three harmonized numbers - "116000" (emergency number for missing children), "116111" (child helpline) and "116123" (emotional support helpline).

According to the NNP, national short codes and numbers from range "1" are accessed from different geographic areas and from different public fixed and mobile telephone networks without prefix "0". The implementation of "no-0-prefix" access to range "1" numbers is conditioned both by the regulations in force and by the need to ensure national access to services harmonized at European level, such as: "112" – the national single system for emergency calls; "116xxx" – services of social character; "118xxx" - directory assistance services etc.

Under the new provisions of the NNP, the technological codes "18xx", which currently are used for testing fixed networks, will be withdrawn.

**2) Procedure for telephone numbering resource allocation.** The document was approved by ANRCETI Administrative Board no. 58 of 21.12.2010 and entered in force on January 1, 2011. This procedure is applicable to all the categories of codes and numbers from the NNP, except the national short numbers for emergency services and for other services harmonized at European level, which will be allocated and used according to special obligations. The latter are to be developed by ANRCETI.

The procedure defines the rules and conditions for allocation of telephone numbering resources, calculation and payment for allocated resources, for reporting on the use of resources and ensuring the transparency in administration of NNP numbering resources. According to the mentioned procedure, the Agency allocates telephone numbering resources by issuing due licenses to providers of public electronic communications networks and services, authorized under the law. The latter further allocate the numbering resources (except national short numbers) to end users/subscribers, providers of content services or use them for the provision of their own content services, according to destination and the format as required by the NNP.

# 3) Regulation of access to numbering resources for the provision of the following services:

- a) mobile telephone services provided by virtual operators using the numbers from "71xxxxxx" block. The relevant ANRCETI Administrative Board Decision (no.28 of 21.09.2010) is targeted at ensuring the efficient use of spectrum for public mobile services, at creating necessary conditions for the new providers of virtual mobile networks MVNOto be able to compete with the providers with SMP by offering service packages: mobile, fixed telephony, Internet and audiovisual programs. Regretfully, no virtual operators came into the market before the end of 2010, which reveals limited competition on this market segment.
- b) content services provided via special tariff numbers Premium rate (900xxxxx, 905xxxxx and **906xxxxx).** The numbering resources from these blocks are allocated to the providers of public electronic communications networks for the provision of content services, such as: consultations, contests, entertainment, interactive games, live greetings and congratulations, various information (of general nature, news, business, marketing, exchange rates, weather forecasts, current time, job offers), entertainment for adults or for minors, etc. Providers can use Premium rate numbers for providing their own content services or they can allocate them under contractual terms to content service providers. Such contracts must contain the conditions and obligations to be complied with in the provision of content services, including a Code of Conduct. The Agency developed a draft Code of Conduct based on best practices applied in other countries, which can be used by content service providers interested in signing such contracts. The draft document was coordinated with the Ministry of Culture and the Agency for Morality Protection.





#### 4.1.2 Telephone Number Portability

In order to ensure the end user's right to choose a provider of public telephone services, without changing the telephone number, without being stopped by legal, technical or practical obstacles, the Agency developed the *Program of Number Portability Implementation in the Republic of Moldova for 2011-2013.* Is was subject to discussions and then finalized during the sessions of a specially created Working Group for number portability implementation, its membership including representatives of ANRCETI, Ministry of Information Technology and Communications (MTIC), providers of public fixed and mobile networks/services. According to the provisions of *Law 241/2007*, the Program us due to be approved by the MTIC.

The program provides for mobile number portability to be implemented in 2012 and fixed number portability – in 2013. The Program provides for the following issues: objectives, actions to be taken, executives in charge, stages and terms, expected results, reporting and evaluation procedures of the number portability implementation process. The implementation process is scheduled for three stages. During the first stage (2011), the Agency is planning to implement the proper regulatory framework for number portability and to hold a contest in order to select the entity to implement and manage the centralized database, which will contain all ported numbers and routing numbers and other information necessary for number portability implementation. During the second stage (2012), the centralized data base will be implemented and all the necessary modifications and testing of mobile networks will be performed before the mobile number portability is launched. Similar operations will take place in fixed telephone networks during the third stage (2013). Number portability will be performed only within the same type of networks: mobile - mobile, fixed - fixed.

A number will be ported at the subscriber's request, when the latter decides to switch from one provider of public telephone services (donor) to another one (acceptor). The acceptor will be responsible for implementation of the porting service. He will port the number within one day from the date he concludes a contract with the user. The program developed by the Agency provides for a number portability tariff affordable for the end user.

The Agency believes that the implementation of number portability service will remove a significant barrier to competition development and cause the providers to make additional efforts in order to keep and attract customers by more attractive services at acceptable prices.

On a long-term perspective, number portability will contribute to the reduction of price difference for calls in the same network and to other networks.

#### 4.2 Administrarea resurselor tehnice

Technical resources are the resources necessary for the identification of certain electronic communications networks or network elements in order to operate them or to provide a number of electronic communications services. The main objective pursued by the Agency in the administration of technical resources consists in making available adequate technical resources for the providers of public electronic communications networks and/or services, to ensure their non-discriminatory access to and reasonable and efficient use of those resources. In respect to this issue, the Agency developed the Procedure of signaling point codes administration, which was approved by Administrative Board Decision no.37 of 21.09.2010. This Decision abrogated a previous Administrative Board Decision, no.25 of 19.07.2004, according to which the national signaling point codes were assigned to providers by JSC "Moldtelecom". After taking over the function of signaling point codes assignment from JSC,,Moldtelecom", the Agency reconfirmed, at the request of service providers, that the signaling point codes held by service providers were included in AN-RCETI data base.

The mentioned *Procedure* provides for the structure, destination, conditions of assignment, use, transfer, modification and withdrawal of signaling point codes. It is applicable to the following categories of technical codes: (1) National Signaling Point Codes - NSPC); (2) International Signaling Point Codes - ISPC; (3) Mobile Network Codes - MNC).

The NSPC is allocated by the Agency to providers of public electronic communications networks using the SS7 signaling system for their interconnection with other public electronic communications networks on the territory of the Republic of Moldova. The NSPC is allocated, as a rule, consecutively, proportionally with the number of interconnection points with other public electronic communications networks, which are to be established. The ISPC is assigned by the Agency, one per provider of public electronic communications networks using the SS7 for their interconnection with at least one public electronic communications network outside Moldova. Normally, a provider of public electronic communications networks can have the right to use only one ISPC. The MNC is allocated by the Agency to providers of public mobile and fixed electronic communications networks. As a rule one provider can have the right to use only one MNC.





# 5 INTERNATIONAL RELATIONS

# 5.1 General description

In the context of international relations, the activities the Agency in 2010 were marked by significant events of collaboration and changes in terms of promoting nationwide implementation of European electronic communications regulatory standards. In order to attain this objective, the Agency focused its efforts on the following issues:

- Efficient collaboration with the group of EBRD consultants;
- Development of collaboration relations with similar authorities in the region;
- Enhancing the status of the Republic of Moldova as a Eastern Partnership country;
- Increasing ANRCETI's representation in international organizations.

In performing these activities, ANRCETI focused on achieving higher efficiency in the joint activity with the team of consultants of the technical project "Communications Regulation Development" currently delivered to the Agency, on participation in the Cooperation Committee Republic of Moldova – European Union, strengthening its collaboration with similar authorities from EU countries, Eastern Partnership, Community of Independent States (CIS), European Commission, European and international sector institutions, such as the International Telecommunications Union (ITU), European Conference for Post and Telecommunications (CEPT), Group of European Regulators for Electronic Communications (BEREC), Regional Communications Community (RCC), etc.

2010 was marked by enhanced collaboration relations between ANRCETI and the National Authority for Management and Regulation in Communications from Romania (ANCOM). During the visit made to Bucharest, in April 2010, by ANRCETI representatives and the visit made to Chisinau, in August 2010, by ANCOM representatives the parties initiated negotiations on signing a Memorandum of Understanding regarding facilitation of cooperation and exchange of information pertaining to electronic communications. The procedures of negotiation and coordination of the Memorandum are over and the document is planned to be signed during the first quarter of 2011. Previously, ANRCETI signed an agreement of collaboration and exchange of information with the Regulatory Authority from Bulgaria.

In the reporting year, ANRCETI representatives attended many international and regional forums, held by European and international organizations in electronic communications sector. Some of them are listed below:

- V Conference of Regulatory Authorities from Black Sea and Caspian Countries "Future of Broadband Internet" (Istanbul, Turkey, April 29-30, 2010);
- Seminar organized by the ITU on current tariff policy and network interconnection issues (Odessa, Ukraine, September 15 17, 2010);
- Meeting of representatives of regulatory authorities from Eastern Partnership countries (Vienna, Austria, October 7-8, 2010);
- XI meeting of the Cooperation Committee Republic of Moldova-European Union – (Bruxelles, Belgium, October 8, 2010);
- Global Symposium of Regulators 2010 (Dakar, Senegal, November 10-12, 2010);
- VIII World Telecommunication/ICT Indicators Meeting (WTIM) (Geneva, Switzerland, November 24-26, 2010).

An important event was the meeting of the regulatory authorities' representatives from Eastern Partnership countries, in Vienna, Austria. The purpose of this meeting was to promote exchange of experience and ideas between EU regulators (BEREC) and regulators of the Eastern Partnership countries. Since most countries are facing the same problems in the regulation of electronic communications markets, it was proposed to create an informal group of regulators from Eastern Partnership countries which will collaborate with BEREC and will identify joint optimal solutions to streamline the process of electronic communications regulation.

A special event for the Agency was the visit of Sami Al Basheer Al Morshid, Director of ITU Telecommunication Development Bureau to Chisinau, on August 15-18 2010. During his visit to ANRCETI, the high official declared of ITU's readiness to assist the R. Moldova in the implementation of telephone number portability, the transition from analogue to digital television, other projects related to the development of communications and information technologies.

An equally important activity performed by the Agency in 2010 was the identification of external assistance for the improvement of the national regulatory framework. Thus, the Agency negotiated with the European Commission representatives the possibility to obtain a technical assistance project, by means of TAIEX funding tool, for the implementation of telephone number portability in the Republic of Moldova. The Commission's response was positive. The TAIEX experts' mission is due to arrive in Chisinau in early April 2011.





# 5.2 Technical assistance project

The technical assistance project "Communications Regulation Development" delivered to the Agency by the European Bank for Reconstruction and Development (EBRD), was launched in October 2009. The project aims to offer to the Government and Agency technical assistance in the implementation of a modern, transparent and predictable regulatory framework harmonized to the EU electronic communications regulatory framework of 2003 and to strengthen ANRCETI's institutional capacities.

The intermediary conclusions regarding the results of the first year of project delivery show that the objectives proposed by the parties involved have been largely attained. In 2010, project consultants worked in 14 missions to Chisinau, every mission lasting 3-5 days. 11 international experts offered assistance and expertise to the Agency specialists in the development and implementation of new regulations aimed to promote competition on electronic communications markets, modern technologies and services of European level and quality. Besides, the experts conducted a comprehensive training program for the Agency specialists and representatives of local telecommunications companies, consisting of 11 seminars and workshops.

The main result of the first-year project activity lies in the fact that the Agency staff, due to the training and assistance of foreign experts, learned the best European practices related to market analysis, designation of providers with significant market power, determination of special ex-ante obligations to be imposed to those providers, development of cost models for interconnection and access, elements of special importance for the current state of things in terms of electronic communications market regulation. With the experts' support, the Agency started the development of draft regulatory acts on telephone number portability, separate accounting, access to the local loop, which will be applied in 2011.

In 2010, the Agency benefitted from the BERD experts' help in terms of developing amendments to the Law on Electronic Communications in accordance with the EU Directives and the average-term draft Strategy for electronic communications regulation.

"Communications Regulatory Development" is the second technical assistance project delivered to AN-RCETI. The first project was offered to ANRCETI at the stage the authority was created, in 2000 – 2002, by the United State Agency for international Development (USAID).

# **6** MONITORING AND CONTROL

The monitoring and control activity is one of the basic functions of the Agency, established by *Law 241/2007* and is aimed at ensuring compliance with the normative acts in the field of electronic communications for the purpose of promoting competition, protection of rights and interests of end users.

#### **6.1** Monitoring activities

The monitoring process involves specific operational procedures and consists in the systemic and complex analysis of data and information pertaining to the activity of electronic communications market participants, to information technology services, the development, where necessary, of due reports containing proposals for taking *ex-ante* measures intended to avoid certain eventual deviations or appropriate *post-factum* measures, under the law, in order to eliminate the violations committed by providers, without direct interference in their activities. In the situations where the Agency

detects cases of highly probable misconduct, it will consider initiating on-site inspections of those providers.

During the monitoring process, the Agency staff in charge analyze both the information available within the public informational environment as well as the official one, presented by providers periodically, as required by normative acts and, where appropriate, *adhoc* information requested by the Agency.

Throughout 2010, this activity was focused on monitoring the implementation of the following Administrative Board Decisions:

1) Decision no. 07 of August 01, 2008 on transition from the DSS1 signaling to SS7 signaling for the interconnection of JSC Moldtelecom's public fixed telephone network with fixed voice telephone networks of alternative providers. As a result of monitoring, it was found that the purpose of this decision – to optimize the interconnection of networks, to implement modern and ef-





ficient electronic communications technologies and services - was achieved. Most providers took specific steps to implement the advanced protocols at the interconnection interfaces between their network and the network of JSC Moldtelecom, thus, ensuring the appropriate technical conditions for a broad and diversified range of high-quality modern services.

- 2) Decision no. 11 of April 07, 2010 on regulating the access to public electronic communications services provided via access codes 1600 1639. Monitoring the implementation of this legislation showed a more efficient contractual relationship between providers of electronic communications networks/services as well as decreasing prices for IP-telephony services provided through such access codes, a factor which will have a positive impact on the development of this market segment.
- 3) Decision no. 16 of May 19, 2010 on access to special tariff services (Premium rate) provided in public electronic communications networks. This regulation is aimed at ensuring the access of end users to content services provided via Premium rate numbers allocated to be used in public electronic communications networks and sets a number conditions for the origination, transportation and transfer of calls to Premium rate services, regardless of call-originating network. As a result of monitoring, it was found that there is a positive tendency in the evolution of relations between providers that ensure the access to such services, as well as between providers and content service suppliers. No breaches of terms and conditions set in the mentioned decisions have so far been detected.
- 4) Decision no.17 of June 02, 2010 on approving the Instruction on regulatory and monitoring fee payment. The Instruction regulates the procedure of reporting the revenues generated from electronic communications activities, manner of calculation and terms of regulatory and monitoring fee payment. The monitoring activity showed that there was an increase in the degree of discipline in terms of reporting on revenues from electronic communications activities. It was also found that a part of the persons authorized to perform electronic communications activities, committed breach of several requirements of the Instruction. As a result, ANRCETI Administrative Board issued Decision 35 of November 08, 2010, which prescribed that the mentioned persons stop the breaches and fully comply with the reporting deadlines. Later, for non-compliance with the prescription, contravention reports were prepared for 5 providers, sent to the competent court for examination.

5) Decision no. 22 of August 02, 2010 on enforcing the legal provisions related to end users rights protection. This decision is targeted at ensuring the minimum necessary level of transparency of information and legal security, guaranteed by law, with relation to end users, as well as a higher degree of end users protection in their relations with providers. As a result, it was found that most providers took specific steps in order to comply with the established requirements, in particular by developing sample contracts so as to include a minimum set of clauses, as required. Given the fact that the requirements prescribed in the decision are permanent, verification of compliance therewith will be going on in 2011.

Another aspect of the monitoring the activity performed in 2010 pertains to verification of quality and continuity of public mobile telephony services. As a results of the monitoring activity, including on-site measurements, the Agency specialists jointly with the specialists from the National Radio Frequency Center (NRFC), found that rates of territory mobile coverage constitutes 92 – 99 %, a rate exceeding the indicators established in the licenses held by mobile providers. However, there are multiple uncovered spots on the national roads and adjacent localities, specified in the mobile providers' license conditions. (shadow zones).

To remedy the situation, in July 2010, ANRCETI created a working group consisting of representatives of the Agency, Ministry of Information Technology and Communications, National Radio Frequency Center and the three mobile telephony companies. The working group developed an Action Plan for the improvement of mobile service quality, which provides for specific actions to cover the shadow zones and to ensure continuity of mobile communications. The Agency is monitoring the fulfillment of these actions. Thus, as a result of the actions taken by mobile telephony providers, including the shared use of network infrastructure, in the IV quarter of 2010, 15 shadow zones were covered with mobile signal.

The rest of the work intended to cover the other 37 shadow zones on national roads and adjacent localities are to be completed by the end of the first quarter 2011. Upon the Agency's request, the working group decided to analyze, in the first quarter of 2011, the degree of radio signal coverage on other nine major roads in the country and to plan on the actions to be taken in order to increase the mobile coverage rate on those roads.





#### **6.2** Control activities

The control activities performed by the Agency in 2010 consisted of 85 inspections, of which 22 – planned inspections and 63 – unplanned. The inspections were conducted in accordance with the provisions of the *Regulations on inspection procedure in electronic communications*, approved by ANRCETI Administrative Board Decision no. 9 of 18.08.2008, in compliance with the principles of transparency, non-discrimination, impartiality and objectivity.

The planned inspections were mainly focused on evaluation of conditions and quality of electronic communications services, verification of efficiency and correctness in the use of numbering resources, verification of compliance with the provisions of the electronic communications and user protection normative acts, as well as verification of breach elimination, as required by prescriptions.

The objectives of unplanned inspections were to verify and gather materials necessary for the examination and solving, under due ANRCETI competence, the problems referred to the Agency in complaints, as well as in notifications from other entities competence in this field.

Tab. 3 Inspections performed by the Agency in 2008 – 2010

INSPECTIONS	2008	2009	2010
Total Number of inspections:	167	120	87
Planned:	157	63	22
Unplanned:	10	57	65

The data in the table above show that the number of verifications performed by the Agency in 2010, reduced against 2009, by about 27%, against 2008 – by

about 48%. The reduction was caused by the ongoing improvement of the normative framework and the shift of emphasis in the control activity of the Agency. Now the Agency is focusing on the quality of inspections and on the measures taken to prevent eventual violations of the legislation in force, without direct interference in the activity of providers.

The total number of inspections was distributed as follows: 29 inspections – providers of audiovisual program retransmission, 16 – providers of public fixed and mobile telephone services, 10 – providers of data transport and Internet access services, 10 – license holders for information technology services and 5 – providers of radio/air TV broadcasting services.

The inspections revealed 40 contraventions reflected in 36 reports. Most frequent contraventions referred to: unauthorized provision of electronic communications networks/services, unauthorized connection to electronic communications networks, non-compliance with the prescriptions issued by the Agency requiring elimination of violations of the normative acts in force.

Additionally, following the notifications from the Ministry of Information Technology and Communications, responsible for the administration of the National System, of Radio Frequency Monitoring, the Agency, as an entity entitled by law to detect contraventions in electronic communications, conducted 15 on-site inspections, finding as a result 13 violations related to unauthorized use of radio frequencies.

All the reports on detected contraventions were submitted for consideration to the competent courts, as required by the provisions of Article 410 (3) of the Contravention Code 218/2008.

It is noteworthy that during the verifications, the Agency staff in charge continued their activity of keeping the providers informed with the normative and regulatory legislation in terms of quality of service according to technical standards and regulations in force, organization of hearings, obligation of providers to ensure the minimum necessary level of information transparency and legal security of end users, as guaranteed by law, conclusion of written contracts with the latter and elimination of abusive clauses from service provision contracts.





# **7** DISPUTE RESOLUTION BETWEEN PROVIDERS

In the activity of dispute resolution between providers of public electronic communications networks/ services, the Agency is guided by the provisions of Law nr. 241/2007, Regulations on dispute resolution procedure in electronic communications, approved by ANRCETI Decision no.15 of 23.09.2008 (hereinafter – the Regulaions), as well as other normative acts in this field. During 2010 the Agency examined five complaints from providers, four of which were amiably solved and one – withdrawn by the provider without any obligatory decision being adopted by ANRCETI, pursuant to Art. 14 (5) of the Law no. 241/2007.

The complaints referred to such aspects as access to networks, in particular offering interconnection and access to infrastructure.

In 2010, the Agency also examined the initiative of JSC "Moldtelecom" to one-sidedly modify its inter-

connection agreements by decreasing the quantum of interconnection traffic. By Decision no.32 of 04.11.2010 on ensuring adequate interconnection the Agency decided to impose to all providers an interdiction to one-sidedly modify the contracted interconnection tariffs, in the absence of a consent from the other contract party, before the entry in force of the special ex-ante obligations, imposed by ANRCETI on SMP providers on the markets for voice call termination in individual fixed and mobile networks. It is an exclusive function of ANRCETI to impose on electronic communications providers the obligation of cost orientation of tariffs, under Law no.241/2007. ANRCETI Administrative Board approved, on 23.12.2010, a set of decisions, imposing on 18 fixed and mobile providers the obligation of cost orientation of tariffs for call termination. The Decisions entered in force on the date of their adoption.

# **8** PROTECTION OF END USERS' RIGHTS

# 8.1 User protection actions

In 2010, the activity of end users rights protection was performed by the Agency pursuant to the tools provided by *Law no.241/2007*. In order to prevent and eliminate the practices affecting the end users interests, to ensure a minimum of necessary transparency of information and legal security, guaranteed by Art.58 and 59 of the *Law no.241/2007*, ANRCETI Administrative Board adopted Decision no. 22 of 02.08.2010 *on ensuring the enforcement of legal provisions for end users protection*.

Under this Decision, providers were required to include in their contracts, signed with end users, a minimum of obligatory clauses and to admit of no abusive clauses, in the sense of the *Law on Consumer Protection* No. 105-XV of 13. 03. 2003, to inform the end users, in writing, about contract modifications, at least at least one month before the modifications enter in force, including about the end user's right to terminate the contract without penalty, where he does not accept the new conditions, unless the newly established conditions are more favorable for the user. After bringing the contracts in line with the legislation in force, providers are required to inform the Agency thereof and further to conclude new contracts, at users' requests.

According to the same Decision, providers are required to supply updated information to the public

regarding applicable prices and tariffs, and other conditions of network and service provision, in order to offer the end users the possibility to make an informed choice of networks and services. The adoption of this decision was necessary because of many cases of noncompliance with the provisions laid down in Article 58 and 59 of *Law No. 241/2007* found by ANRCETI experts, as well as the irregularities notified by users in their complaints.

Another priority of the Agency in 2010 was the fulfillment of the plan for the implementation of the national consumer protection strategy for 2008-2012. Some of the main provisions of the plan require that providers take measures to ensure service quality indicators. For this purpose, in 2010 the Agency continued to work on establishing and updating these indicators. In this respect, the Agency drafted the quality parameters for the provision of mobile telephone services and designed the sample forms to be used by providers for reporting on quality parameters for five types of public electronic communications services (fixed telephony, Internet access, communications services via IP networks, services provided via ISDN networks and public leased line services). By Decision no.278 of 17.11.2009, ANRCETI Administrative Board approved the quality parameters for the five types of services and required providers to measure these parameters, submit the data to the Agency and make the information on service quality publicly available in their commercial offices on their Internet sites.



As well, the inspections performed by the Agency were directed at verifying the providers' compliance with the requirements of the normative acts in force for the quality of services they provide and for the quality parameters declared in their commercial offers. In the reporting period, violation of end users rights of in terms of service quality, lack of providers' identification information on their websites were detected in six cases, for which the providers concerned were sanctioned under the law.

#### 8.2 Requests and complaints

In 2010, the Agency examined **1320** notifications, proposals, other requests from electronic communications market participants, of which **1019** - petitions of technological, legal and economic nature. The Agency also examined **117** complaints, **99** petitions from users, received via the Website and e-mail, **12** – via ANRCETI "Green line", **5** – during hearings and **68** requests for access to information. The Agency provided prompt replies in all cases, in most of them offering information with reference to market entry, legislation and market analysis, its own activity, recommendations on how to

solve various issues raised by service users, useful information for a better awareness of electronic communications services and offers.

The analysis of all the complaints, petitions and requests received by the Agency show that the most frequent issue treated by citizens (in 64 complaints or 55 % of the total number) was, like in 2009, the correctness of telephone service and Internet access service provision, breaches of service provision contract terms, of interconnection agreements and normative acts. The number of users complaints on service quality and functionality of telephone and Internet access networks increased over 2009 by 3 percent points and reached 25 (21%). 12 complaints (10 %) contested the charges for service provisions and data included in bills, whereas 6 (5%) complaints disagreed with service rates increase. 5 (4 %) complaints referred to a number of conditions included by providers in service provision contracts and 3 petitions (2,6 %) - noxious influence of electronic communications equipment on health. One complaint referred to the discriminatory treatment of the provider, another – required recovery of damages by the provider.

 Tab. 4 Requests and complaints examined by the Agency in 2009 - 2010

	2009	2010
Total number of requests and complaints:	1387	1320
■ Requests for access to information	64	68
■ Petitions of technological, legal and economic nature	1108	1019
■ Electronic messages	98	99
■ Via "green line"	11	12
■ During hearings at ANRCETI office	7	5
■ Complaints	99	117
Depending on the area of interest:		
■ Mobile telephone services	16	18
■ Cable TV services	27	37
■ Internet services	17	24
■ Fixed telephone services	13	16
■ Radio broadcasting services	-	1
■ Interconnection, access to infrastructure	20	11
■ Content services	-	1
■ General aspects	4	9
■ Value-added services	2	-
Aspects complained of:		
■ Influence of electromagnetic field generated by basic stations on human health	3	3

See next page ▶▶ Source:





Tab. 4 Requests and complaints examined by the Agency in 2009 - 2010

	2009	2010
■ Data included in bills	12	12
■ Rate increase	1	6
■ Service quality, malfunctions	18	25
■ Disconnections	1	-
■ Discriminatory treatment in service provision	4	1
■ Failures to honor obligations to subscribers in terms of advertising	3	-
■ Abusive clauses in contracts concluded with end users.	3	5
■ Phone call tapping	1	-
<ul> <li>Breaches of contract terms, interconnection agreements and normative acts</li> </ul>	50	64
■ damages	-	1
■ others	3	-
Complaints by network/service provider		
■ JSC "Moldtelecom"	34	33
■JSC"Moldcell"	7	6
■ JSC "Orange Moldova"	9	7
JV "Sun Communications" S.R.L.	18	21
■ LLC "Sicres"	-	2
LLC "Virs"	2	-
■ LLC "Riscom"		1
■ LLC "Starnet"	8	7
■ LLC "Boomtelecom."		1
■ LLC "Extindere"		1
■ LLC "Oldima"	1	2
■ LLC "Radeon Service"	'	2
■ LLC "Alit"	1	1
■ LLC "Data Network Communications"	<u>'</u>	4
■ LLC "Cvazar Sist"		2
■ LLC "Vertamar"		3
■ LLC "AMT"	1	3
■ LLC "Molddata"	<u> </u>	1
■ LLC_"Laritex"		1
■ LLC "Nordlinks"	1	1
■ LLC "Realvit-TV"	2	1
■ LLC "Staslegol"	2	
SC "Radiocomunicații"	2 1	-
· · · · · · · · · · · · · · · · · · ·		- 1 <i>E</i>
No specified provider (in general)	12	15
Content providers	60	3
Complaints from natural persons	68	91
Complaints from legal persons	31	26
Justified complaints	40	33
Unjustified complaints	37	60
Complaints referred by competence	5	2
Withdrawn complaints (at complainant's request)	1	4
Explanations provided	-	10
Pending complaints	16	8

Source: SANRCETI

Most of the complaints received (85 %) were verified from the office, the rest (15 %) – on-site visits. The investigations of ANRCETI specialists showed that the requirements of 33 (28%) complaints were justified,

whereas the facts described in 60 complaints (51 %) did not prove to be true, being qualified as unjustified. Explanations were provided to 10 complaints (8,5%), 4 (3 %) petitions were withdrawn by their authors



2 (2%) – referred to other entities by competence and8 (7%) – are currently pending.

The analysis of the 33 complaints, it was found that their authors had justified claims against the quality of services and disruptions arising in cable TV networks (17 complaints), telephone networks (11 complaints) and Internet (5 complaints). Most of the authors reported faulty service provision and breaches of contract terms. Most complaints came from customers of large companies, including JV "Sun Communications"

LLC (11 complaints), JSC "Moldtelecom" (8 complaints) and LLC "Starnet" (3 complaints). The intervention of the Agency helped in identifying solutions to all the problems raised by complainants.

Like in the previous years, in 2010 the Agency kept its openness in relation to citizens and took a number of organizational measures, in particular involving the citizens in the decision-making process, which significantly contributed to their increased satisfaction with ANRCETI's activity.

# 9 COMMUNICATION ACTIVITY

The main objective of the Agency's communication activity in 2010 was to inform the electronic communications market participants permanently, promptly and comprehensively about the regulator's projects, decisions and activities of public interest, so that the stakeholders directly benefit from a first-source necessary and useful information about ANRCETI's regulations and services. The main communication activity of the regulator in 2010 was to inform: the market participants about the stages of consultation and approval of draft regulations, the users about their rights and obligation in relation to service providers, the public at large, through mass media and Website, about the regulator's activities and decisions of public interest.

# 9.1 Transparency of decision-making process and communication with providers

In the decision-making process, the Agency adheres to the principle of transparency both in relation to providers and in relation to the public by keeping interested persons fully informed through specific communication tools - public consultations, Website, public relation activities, press releases, public Administrative Board meetings etc. Whenever the Agency intends to adopt a resolution / decision likely to cause an impact on the market, the proposed document is subject to a public consultation process, in which any interested person can take part and provide recommendations. The procedure and stages of the decision-making process are set in ANRCETI Administrative Board Decision no. 27 of 21.09.2010 on approving the Rules of development, consultation and approval of acts of normative, individual, recommendable nature and ensuring transparency of the decision-making process.

In 2010, the Agency did the utmost to maintain an active dialogue with the providers of electronic communications networks/services, both through public consultations and a big number of business meetings

organized at ANRCETI's or providers' initiative. During the reporting timeframe, by means of its website, the Agency organized 67 public consultations on draft Board Decisions deemed to have a significant market impact.

All the public consultations are announced on the website by informative articles, comprising summaries of draft documents, arguments in favor of their approval, data about supplementary materials, duration of consultations, deadlines for comments and recommendations. The website also provides information about public hearings and debates, stakeholders' recommendations on draft decisions, materials on public consultations outcomes and approval of decisions by the Administrative Board.

An important role in the process of communication with providers and end users refers to the informative materials which the Agency started, in March 2010, to send to stakeholders electronically. For this purpose, the Agency launched a website module designed to convey informative e-mail messages about the decision-making process to interested stakeholders. In the timeframe April-December 2010, the number of beneficiaries of such information increased to 100 recipients of over one hundred informative articles.

During the public consultations held in 2010, the Agency received from stakeholders a total of 420 recommendations on proposed draft decisions, of which 175 were considered as justified and resulted in modifications and additions applied to several draft administrative Board Decisions.

#### 9.2 Communication with the public

In 2010, in the process of communications with the public the emphasis was placed on keeping the end users informed about their rights and obligations in relation to providers, about the services offered by the Agency and the providers on the market. To attain



# Tab. 5 Public consultations on ANRCETI draft Decisions, 2009 - 2010

2009	2010
14	67
14	67
16	40
313	420
238	175
10	60
o	0
0	0
	0

this objective the Agency developed and adopted, on 2.08.10 a Decision on enforcing the legal provisions related to end users' rights protection, a decision widely publicized in press and on the Agency website.

Users were informed about the obligation of electronic communications service providers to ensure their right to conclude written contracts, obligatorily containing a minimum of seven clauses on contracted services, rates and prices charged for these services, the procedure of damages, minimum of guaranteed service quality, manner of obtaining updated information on rates and prices, the users' right to be informed of contract modifications at least one month before such modifications become effective, their right to terminate contracts without penalty if they do not accept the modifications.

Two of ANRCETI's website sections – "On-line consultations" and "Service Users Guide" were modified for the same purpose – end users' rights protection.

The Agency considers that keeping the end users well-aware is strictly necessary to enable them to make informed choice of services according to their needs and know of their rights and obligations in relation to providers. Therefore, the Agency promptly replied e the 68 requests for information and the 117 complaints received in 2010 from end users. In most of the cases, the Agency provided recommendations on how to solve the issues, as well as useful information for better understanding the services and offers available on the market.

#### 9.3 Communication with mass-media

In 2010, the Agency continued to promote the policy of dialogue and openness in its relations with mass-media. The regulator worked hard to improve the pro-

cess of informing the press on key-subjects of market regulation, draft documents, initiatives and decisions of public interest, developments of electronic communications markets, about the activities dedicated to its 10<sup>th</sup> anniversary.

Source:

For this purpose, throughout the year, the Agency issued 131 news and press releases. They were displayed on the website, the majority being taken over by mass media. The written press published 99 articles on subjects connected with ANRCETI activity and development of electronic communications market, including 64 – in Romanian and 35 – in Russian, all the publications being displayed on the regulator's website. However, the electronic press published additional 150 materials on similar subjects. Most of the materials published by mass – media were provided from ANRCETI sources (press releases, news, replies to requests for information, interviews, participation in events), these being of neutral character, as a rule.

2010 marked a new stage in the development of the Agency's website. It was updated and supplemented with new sections, thus becoming one of the main tool for keeping the public and mass media informed about ANRCETI activity, the situation on the electronic communications market and market players. In the same timeframe, two online surveys were carried out: on the timeliness of number portability implementation and on mobile service quality. 637 online visitors took part in the first (February – July 2010) survey – and 612 visitors – in the second (August – December 2010).

In April 2010, the Agency website took part in the WebTop national competition of websites, VIII edition, winning the merit award "For the best site of a Central Public Administration Authority". It was the first participation in such a competition for the Public Authorities category, comprising 25 competitors.



The statistical data indicate that in 2010 the total number of visits to the Agency website www.anrceti.md was 107,5 thousand, an increase by over 30% against 2009. The number of single visits exceeded 44,1 thousand, an increase by 40% over 2009. Out of the 107,5 thousand visits, 64,6 thousand are visitors who returned to ANRCETI website during the year, 42,9 thousand are new visitors. The website was accessed by visitors from 136 countries of the world: from Moldova – 84,6 thousand,

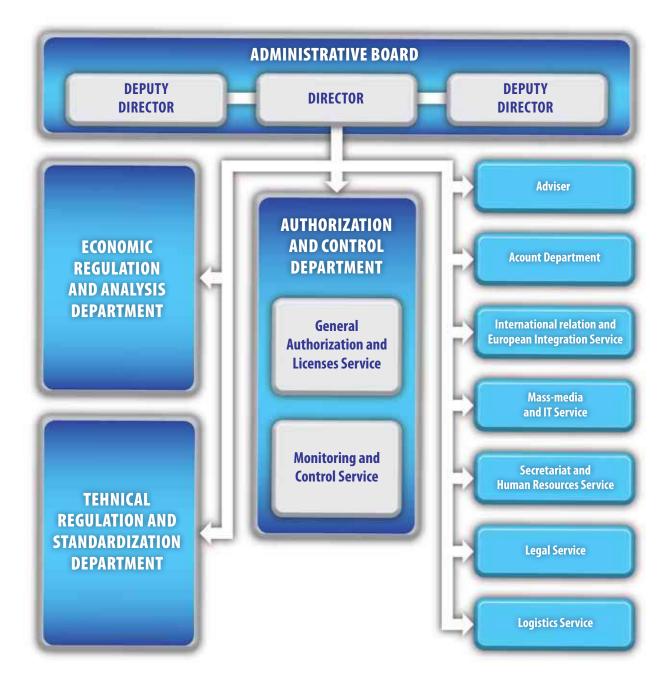
Romania – 11,8 thousand, Russia – 2,1 thousand, USA – 1,1 thousand, Germany, Great Britain and Ukraine – over 800 visits each. Every month of 2010 ANRCETI website was on average visited 9,3 thousand times. The monthly average of visits was about 25,6 thousand. The most visited sections were: News – 82,4 thousand (26% din total), Test your Internet speed – 10,4 thousand (3%), Statistical data – 7,8 thousand (2,5%), Numbering resources – 6,2 thousand (2%).

# **10** GENERAL DATA ABOUT THE AGENCY

# 10.1 Human resources

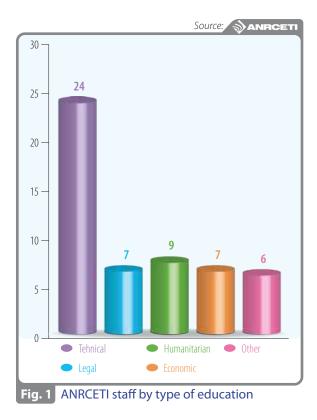
The activity of the Agency is managed by the Administrative Board - a collegial body consisting of Director and two Deputy Directors, appointed by the Govern-

ment. In the reporting timeframe, the organizational structure was not modified. It is divided in 8 departments: 3 divisions and 5 services, das represented in the chart below:



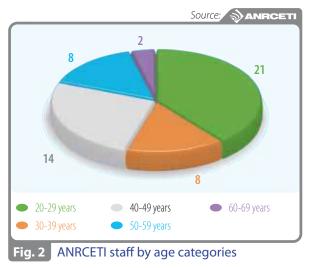


The basic factors of the regulator's human resource policy are: a well-prepared staff, capable to meet the requirements of the electronic communications and information technology sector, cultivated team spirit, duly equipped workspace, legal and operational support for ensuring the employees health, the financial independence and ensuring the adequate functioning of the institution.



As per the situation on December 31, 2010, the staff of the Agency comprised 53 employees (22 women and 31 men), as compared with 51 employees on December 31, 2009. 88.7% of the 53 employees have higher education degrees, the largest part - technical degrees (24), followed by economic degrees (10), legal (7) and humanitarian (7) degrees. The category "other education" comprises 6 employees.

To accomplish its mission, ANRCETI needs a young and dynamic staff, ready to meet the challenges of the electronic communications market. This goal is also reflected in the fact that in 2010, **60** % of the staff employed are 20-30 year-old. Currently, this young staff, which brings an increase of creativity and innovation in the work of the Agency, includes 21 specialists, i.e. 39,63% of the total number of employees. This category of staff is followed by the 40-49 year-old employees (26,42%), 30 – 39 year-old employees and 50 – 59 year-old employees (15,09% of the total for each category), and 60–69 year-old employees - 3,77%.



This structure of age categories allows the Agency to ensure a balanced distribution of human resources by combining the work of highly-experienced professionals with the younger employees gaining the needed expertise.

#### 10.2 Financial Data

Pursuant to the provisions of Art. 12 (1) of the *Law 241/2007*, the Agency budget for 2010, estimated at 14570 thousand lei, was approved by ANRCETI Administrative Board Decision no. 275 of 13.11.2009. The budget was approved in this amount in order to ensure due activity and financial independence of the regulator.

The budget consisted of regulatory and monitoring fees and payments for allocated numbering resources. The quantum of the regulatory and monitoring fee for 2010 was approved by Administrative Board Decision no. 258 of 27.10.2009, as 0,17 % of the total volume of revenue generated from activities performed by network/service providers in the field of electronic communications.

During 2010, the Agency modified the budgetary plan because of modifications to certain normative acts, however the initially approved budget amount was not modified. The annual results show that the budget was forecast accurately, taking into account the actual results of the activity performed by providers of electronic communications networks/services and the Agency needs. Taking into account the balance at the end of the year, 104.90% of the item "Revenue" of the budget was executed. However, at the end of 2010, over three million lei was the debt owed to the Agency.





# Tab. 6 Data on collection and use of special means for 2010

	Initially	Specified	Executed during the reporting timeframe		Debts	
Name	approved per year	approved plan per per year year	Cash revenues/ expenses	Effective revenues/	TOTAL	
				expenses	Debit	Credit
I. REVENUES, TOTAL	14 570,0	14 570,0	12 557,3	15 288,3	3 027,1	
II. EXPENSES, TOTAL	14 570,0	14 570,0	13 944,8	13 935,5	170,8	47,3
2.1 Labor remuneration, including:	8 905,8	9266.0	9 059,0	9 059,0		
2.2 Contribution to obligatory state social insurance	1 899,8	2 093,9	2 034,8	2 003,3	37,0	
2.3 Payments for goods and services, including:	1775,3	1 881,5	1 565,7	1 582,7	116,1	47,3
2.4 Business trips and staff training:	500,0	482,0	445,7	453,6	2,5	
2.5 Contribution to obligatory state medical insurance	289,1	296,6	289,6	289,6		
2.6 Purchase of fixed assets	1 200,0	550,0	550,0	547,3	15,2	
Surplus (+)/Deficit (-)						
Balance at the end of reporting period			995,8	4 366.7		

ource: SANRCETI

The expenses item of the budget was accomplished at a rate of 95.6%. The savings achieved in 2010 reflect the accuracy in the administration of its annual budget.

# Tab. 7 Balance of ANRCETI budget as of 31.12.2010

			(in thousand le
	Dawinning of the year	End of t	he year
	Beginning of the year	Before annual closure	After annual closure
	ASSETS		
FIXED ASSETS	8778,4	9208,6	9208,6
STOCKS OF MATERIALS	203,8	216,5	216,5
LOW-VALUE AND SHORT-TERM OBJECTS	607,3	659,1	659,1
CASH ASSETS	2410,7	1019,6	1019,6
SETTLEMENTS	414,3	3127,0	3127,0
EXPENSES		13935,5	-
REVENUES		3,8	3,8
Total assets	12414,5	28170,1	14234,6
	LIABILITIES		
FUNDS FOR SPECIAL PURPOSES	9385,7	9867,7	9867,7
SETTLEMENTS	14,9	0,2	0,2
SALES OF PRODUCTS			
REVENUES	3013,9	18302,2	4366,7
Total liabilities	12414,5	28170,1	14234,6

Under Article 12 (5) of Law 241/2007, the funds saved and unused during the current financial year and the funds accumulated over the approved budget are to be transferred to next year's budget, adjusting the rate of regulatory payments. Thus, for 2011, the amount of the regulatory and monitoring fee was approved by ANRCEI Administrative Board (Decision no. 31 of 22. 10. 2010), as 0.2 percent of the revenues derived from provision of electronic communications services.

The execution of the Agency's budget for 2010 was audited by company "Moldauditing". The audit revealed no deviations from accounting rules and laws in force. The financial report and the audit report on budget execution for 2010 were submitted to the Government before March 1, 2011.



Source: SANRCETI



# EVOLUTION OF ELECTRONIC COMMUNICATIONS MARKETS IN 2010



# **1** GENERAL DESCRIPTION

In 2010, the total value of electronic communications markets (fixed and mobile telephony, Internet access, audiovisual program broadcasting and retransmission (hereinafter – audiovisual market)) was estimated at 6 billion 142,1 million lei, an 9,1% increase over 2009. Mobile communications had the most significant sales – 3 billion 454,1 million lei – followed by fixed telephony services – 1 billion 914,8 million lei.

The biggest increase - by 25% - occurred on the Internet access and data transmission market. The mobile market grew by 13,9%. However, the volume of sales on the fixed and audiovisual markets declined by 0,7% and 2,1% accordingly.

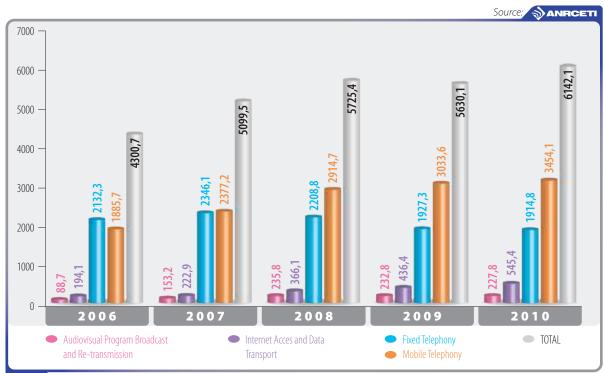


Fig. 1 Evolution of electronic communications market, by volume of sales, in million lei

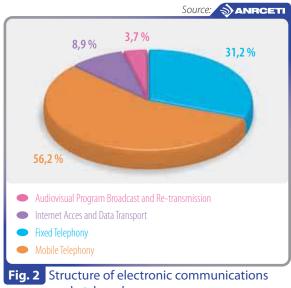




As a result, the mobile share in the structure of the electronic communications market became 56,2%, an increase by 2,3 percentage points (p. p.), whereas the share of Internet access services was 8,9%, increased 1,1 p.p. over 2009. The share of fixed telephony declined by 3 p. p. to 31,2%, and the share of the audiovisual market declined by 0,4 p. p. to 3,7%.

# 1.1 Dynamics of basic indicators

Though the sales on the four electronic communications markets displayed different tendencies, the number of service users increased. The total number was 4 million 825,9 thousand, 10,9% increase over 2009. (Figure 3). The number of users increased as follows: Internet access at fixed locations - 32,6%, mobile - by 13,65%, fixed telephony - 1,97% and multichannel TV users - 1,69%.



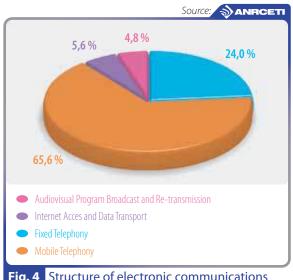
market, by sales



Fig. 3 Evolution of number of electronic communications users, thousand

65,6% of the number of users are mobile users, 24% fixed telephony users, 5,6% - Internet access users and 4,8% - multichannel TV users (Figure 4).

The increase in the number of users on the four electronic communications markets increased the penetration rates per 100 population: mobile - to 88,8%, fixed telephony– to 32,6%, Internet access at fixed locations - to 7,6% and cable TV services - to 6,5%.



**Fig. 4** Structure of electronic communications market by number of users





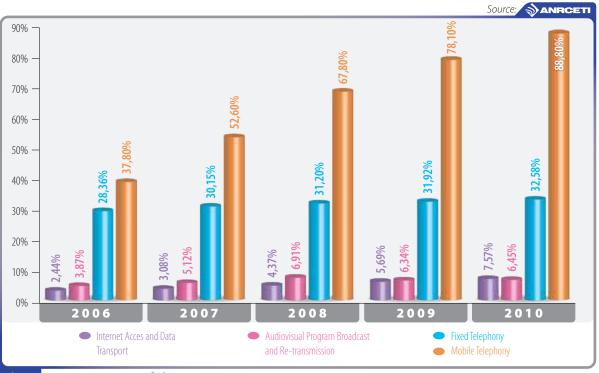


Fig. 5 Penetration rates of electronic communications services

#### 1.2 Investments

In 2010 a total of 1 billion 725 million lei was invested in development of electronic communications markets, less by 1,4% than in 2009. The decline was mainly caused by investments in mobile networks, reduced by 17,2% - 941,1 million lei. The investments in fixed networks, due to the increased allocations to optical networks and trunks, increased by 28% to 741,4 mil-

lion lei, whereas the investments in audiovisual networks were 42,7 million lei, 24,7% increase over 2009. (Figure 6).

54,6% of the total investments was allocated to the development of mobile communications, 43,0% - to fixed and 2,5% - to audiovisual services (Figure 7).

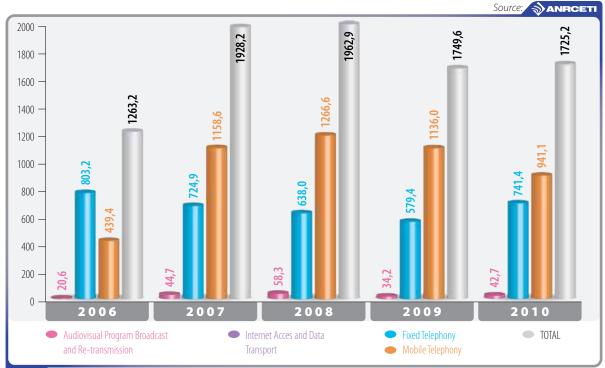


Fig. 6 Evolution of investments in electronic communications markets, million lei

<sup>&</sup>lt;sup>1</sup> Investments in fixed networks comprise allocations in fixed networks, fixed data transport and Internet access networks.





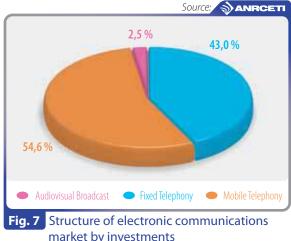
According to ANRCETI data, in 2010 the main investors were companies "Moldtelecom" JSC, "Orange Moldova" JSC and "Moldcell" JSC, jointly investing 97,7% of the total. "Moldtelecom" JSC invested 976 million lei - 56,6% of the total, "Orange Moldova" JSC - 443,1 million lei or 25,7% and "Moldcell" JSC - 266,6 million lei or 15,4% of the total.

# **2** FIXED TELEPHONY

# 2.1 General description

In the reporting timeframe, the fixed telephony market was operated by 17 companies, the main company being the incumbent JSC "Moldtelecom".

Compared to 2009, the total volume of sales on this market was 1 billion 915 million lei, decreased by 0,66%. The sales of the incumbent grew by 0,09%, reaching 1 billion 893 million lei, the sales of alterna-



market by investments

tive providers decreased by 39,4% to 22,18 million lei. As a result, the consolidated market share of alternative providers declined from 1,9%, in 2009, to 1,16%, in 2010.

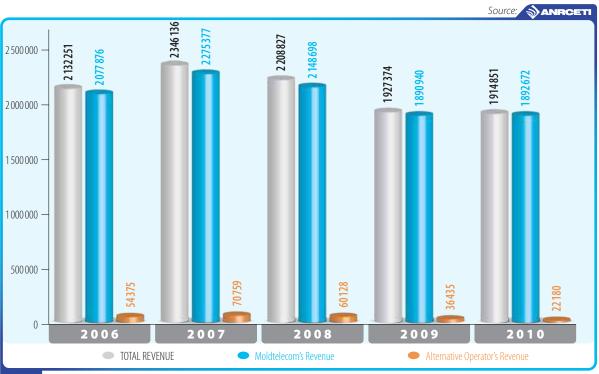


Fig. 8 Evolution of fixed telephony market, by turnover, thousand lei

Like in the previous years, in 2010 the highest share – de 53,8% - of the structure of fixed providers' turnover referred to the revenues from international calls. The revenues from calls to mobile networks and subscriptions made 13,3%, whereas the revenues from long-

distance and local calls - 6,6%. The most significant was the decrease in the revenues from calls to mobile networks - from 16,4%, in 2009, to 13,3%, in 2010 (Figure 9).

<sup>&</sup>lt;sup>2</sup> International calls include international calls placed by fixed telephone users and incoming international calls, originated by the users of foreign providers and directed to the users from R. Moldova.



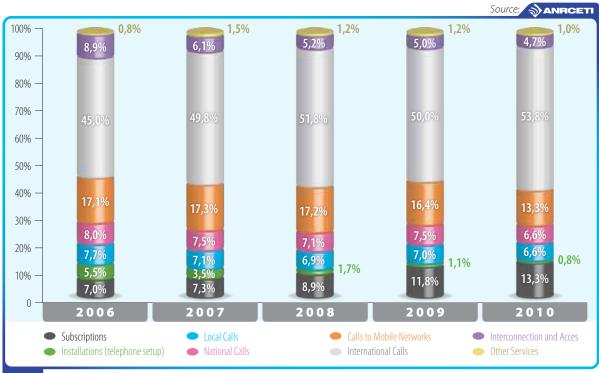


Fig. 9 Structure of revenues from service provision

The average monthly revenue per user (ARPU) of fixed telephony providers increased by 0,67% and was 143,52 lei. This increase against the lower consumption of retail fixed services occurred due to the 11%-increase of international call termination rates in 2010.

#### 2.2 Subscribers. Penetration rates

The number of subscribers to fixed telephony services increased over 2009 by 22,4 thousand or by 1,97% and reached 1 million 161 thousand subscribers. JSC

"Moldtelecom" connected to its network 13,4 thousand new subscribers or 59,9% of the total connections, alternative providers connected over 9 thousand or 40,1% of the total. As per 31.12.2010, the incumbent had 1 million 123,7 thousand subscribers, the alternative providers - 37,4 thousand, the biggest number being recorded by companies "Arax-Impex" LLC, "Orange Moldova" JSC and "Sicres" LLC. Their market shares were 0,97%, 0,77% and 0,28%.

The fixed penetration rate increased by 0,69 p. p. and reached 32,6% (Figure 10).

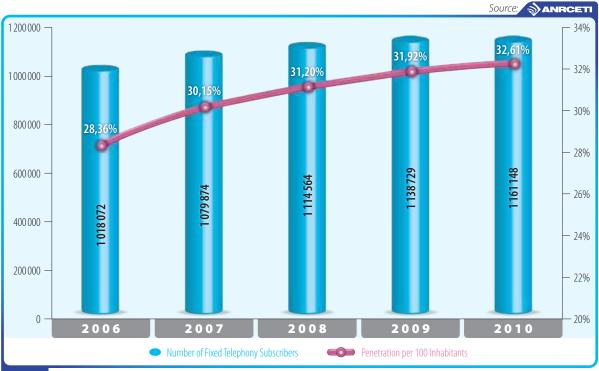


Fig. 10 Number of subscribers and fixed penetration rates



Out of the total of 1 million 161 thousand subscribers, recorded at the end of 2010, 619,8 thousand or 53% are urban residents and 541,3 thousand or 47% - rural residents (Figure 11). The fixed penetration rate per 100 population was 42% in urban areas and 25,9% in rural ones.

In 2010, the market share of the incumbent JSC "Moldtelecom" by number of subscribers was 96,8%, less by 0,7 p. p than in 2009. The market share of incumbent operators reached 3,2% (Table 8).



of residence

Tab. 8 Market shares of providers holding more than 0,1% of the market, by number of subscribers

Provider	2006	2007	2008	2009	2010
Moldtelecom	98,64%	97,87%	97,67%	97,50%	96,80%
Arax-Impex	0,28%	0,62%	0,64%	0,83%	0,97%
Sicres	0,30%	0,58%	0,56%	0,42%	0,28%
Riscom	0,24%	0,28%	0,29%	0,30%	0,29%
Moldova Railway (Calea Ferată din Moldova)	0,43%	0,44%	0,36%	0,29%	0,28%
Orange Moldova	0,08%	0,10%	0,33%	0,26%	0,77%

Source:

#### 2.3 Traffic

In the year under review, the total volume of traffic in fixed networks decreased by 12,48% and constituted 3 billion 858 million minutes (Figure 12). This decrease was caused by reduced volumes of traffic in most types of networks. So, the traffic in fixed individual networks dropped by 9,13%, the interconnection traffic - by 38%, international traffic - by

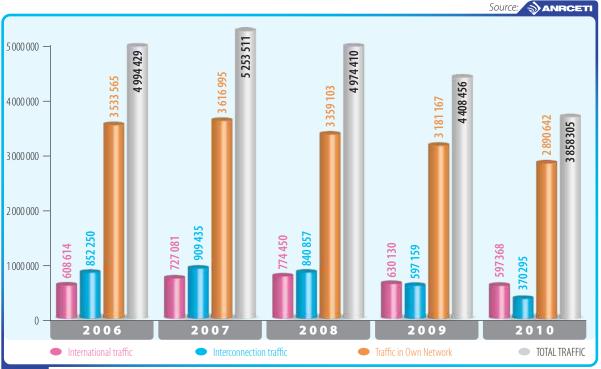


Fig. 12 Evolution of traffic on fixed telephony market, thousand minutes



The traffic dynamics shows that the fixed telephone is mainly used by subscribers for communications with fixed numbers. The largest share of the total

voice traffic carried in fixed telephone networks – over 75% - is fixed telephone traffic. (Figure 13).



Fig. 12 Evolution of traffic structure in fixed networks

# **3 MOBILE TELEPHONY**

# 3.1 General description

In 2010, the mobile market was operated by three providers: "Orange Moldova" JSC, "Moldcell" JSC, - GSM and UMTS standards, "Moldtelecom" JSC, under the brand

"Unite", - CDMA 2000 and UMTS standards (Table 9). JSC "Moldtelecom" launched its UMTS mobile networks in 2010. The holder of the fourth license for GSM mobile service provision – "Eventis Mobile" LLC was not operating in 2010, being in insolvency process.

PROVIDER	GSM	CDMA 1x/ EV-DO	UMTS/ HSPA
"Orange Moldova" JSC	+	-	+
"Moldcell" JSC	+	-	+
"Moldtelecom" JSC	-	+	+
"Eventis Mobile" JSC	+	_	+





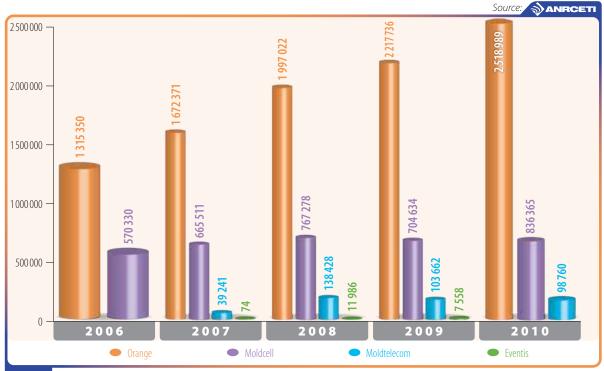


Fig. 14 Evolution of turnover of mobile telephony providers

The total sales recorded in 2010 by the three providers increased over 2009 by 420,5 million lei or by 13,86% and exceeded 3 billion 454,1 million lei. The sales of JSC "Moldcell" increased by 18,7% and constituted 836,4 million lei, the sales of "Orange Moldova" JSC – by 13,6% and reached 2 billion 519 million lei.

The turnover of JSC "Moldtelecom" dropped by 4,7% to about 98,8 million lei. (Figure 14).

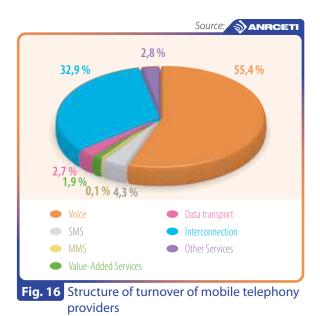
By turnover in 2010, JSC "Orange Moldova" held 72,93% market share, "Moldcell" JSC – 24,21% and "Moldtelecom" JSC – 2,86%.



Fig. 15 Market structure, by turnover

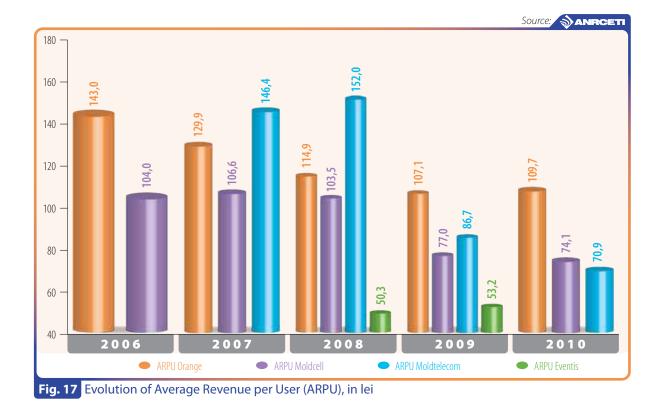






The most significant share - 55,4% - of the total volume of mobile revenues referred to voice services. Interconnection revenues made 32,9%, revenues from other services - 11,7% (Figure 16).

The average revenue per user (ARPU) dropped by 0,3 lei: from 97,1 lei, in 2009, to 96,8 lei, in 2010. The only provider capable to increase this indicator – by 2,5% - was "Orange Moldova" JSC. The ARPU of the other two providers was lower compared to 2009. (Figure 17).



According to the data submitted by providers, as per 31.12.2010, "Orange Moldova" JSC provided coverage of 99,0% territory and 99,5% population. JSC

"Moldcell" covered 97,2% territory and 96,8% population, "Moldtelecom" JSC – 97,0% territory and 94,6% population. (Figures 18 and 19).





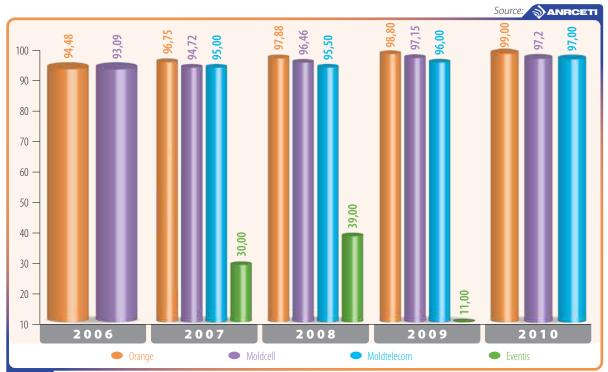


Fig. 18 Evolution of territory coverage, %



Fig. 19 Evolution of population coverage, in %

# 3.2 Users. Penetration rates

In 2010 the mobile user base continued to grow, their number increasing by 13,65% over 2009 and

exceeding 3 million 165,1 thousand, whereas the mobile penetration rate increased by 10,7 p.p and reached 88,8% (Figure 20).





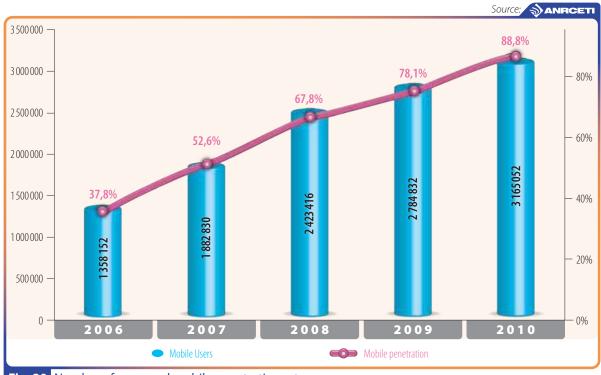


Fig. 20 Number of users and mobile penetration rates

In the reporting timeframe, "Moldcell" JSC had the biggest number of new mobile users connected to its individual mobile network – about 188,2 thousand, the total number of users reaching 1 million 34,2 thou-

sand. The number of users of JSC "Orange Moldova" increased by 173,6 thousand and reached 2 million, the number of users of "Moldtelecom" JSC – by 30,2 thousand and reached 131,2 thousand. (Figure 21).

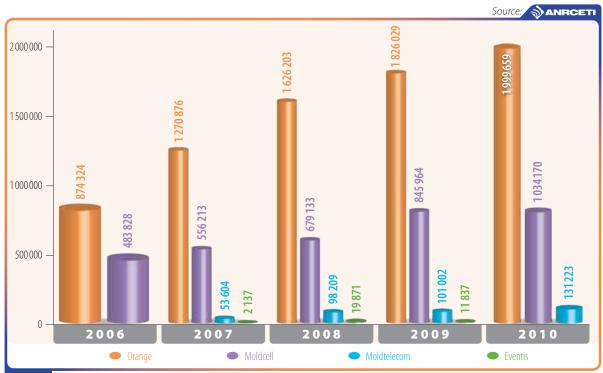


Fig. 21 Evolution of number of mobile subscribers per provider







Fig. 22 Market structure by number of users

By number of users, "Orange Moldova" JSC held the most significant market share – 63,18%. In comparison with 2009, it reduced by 2,39 p.p. The market share of JSC "Moldcell" increased by 2,29 p.p. and reached 32,7%, the market share of "Moldtelecom" JSC increased by 0,52 p.p. and constituted 4,15% (Figure 22).

In 2010, the ascending trend in the number of subscription-based mobile users became more prominent. Their number, in relation to the total mobile telephony users, increased over 2009 by 2,8 p.p. to 30,5% (Figure 23).



Fig. 23 Market Structure, by types of subscribers

### 3.3 Traffic

In 2010, it was for the first time that the total volume of voice traffic in mobile networks exceeded the volume of fixed voice traffic. It increased over

2009 by 18,5% and exceeded 4,10 billion minutes. All the categories of traffic in mobile networks, except the mobile-to-fixed traffic, increased as compared to 2009. The mobile-to-fixed traffic



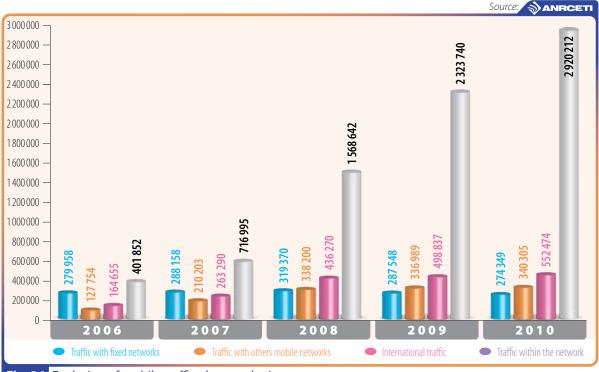


Fig. 24 Evolution of mobile traffic, thousand minutes

continued to decrease for two years running. (Figure 24).

The traffic to fixed networks (ingoing and outgoing) reduced due to the substitution of fixed calls and fixed-mobile calls by mobile-mobile calls. So, the total volume of mobile-mobile traffic made about 79,6% of the traffic carried by mobile networks. The share of in-network (within the same network of a provider) increased over 2009, by 4,1 p. p. and made 71,3% of the total volume of mobile traffic (Figure 25).

In the structure of the traffic originated in an individual mobile network, the most significant share of in-network calls – 87% - was held by JSC "Orange Moldova". The share of in-network calls held by JSC "Moldcell" was 77%, by "Moldtelecom" JSC – 28%.

The number of messages (SMS) sent via mobile networks has been decreasing for two years running. In 2010 the decrease was 3%. It is mainly caused by the substitution of SMS messages by voice calls and Internet-based communications.



Fig. 25 Structure of traffic in mobile networks



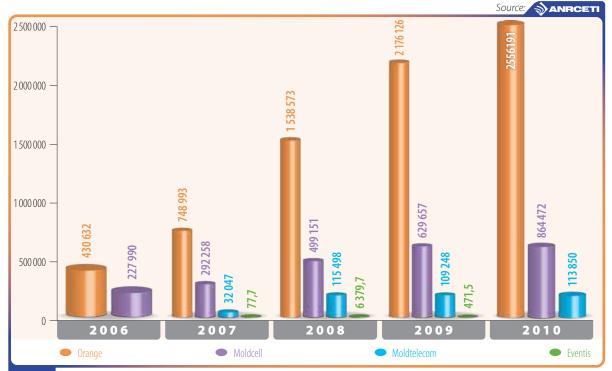


Fig. 26 Volume of traffic originated on mobile networks, thousand minutes

However, the number of SMS via JSC "Moldcell" network increased by 27,8% (Figure 27).

### 3.4 Multimedia mobile services

In the reporting timeframe, the total number of users of multimedia services, provided be means of GPRS/EDGE, CDMA 2000 1x EV-DO and HSPA technologies, including mobile Internet access, increased by 18,0% over 2009 and constituted 2 million 414 thousand users.

These services are used for personification of mobile devices and Internet access (including from mobile phone screen), for multiple applications, such as: MMS, video calls, etc., requiring data transmission capacities of mobile providers. With the increase in the number of multimedia service users, the total number of MMS dropped by 23% compared to 2009, it was 3,4 million.

Other data about broadband mobile access are available in the next Chapter of the Report.



Fig. 27 Evolution of number of SMS sent via mobile networks, in thousands



# **4** INTERNET AND DATA TRANSMISSION

## 4.1 General description

In 2010, 54 providers operated on the Internet and data transmission market. The total volume of sales on this market increased over 2009 by 25% and constituted 545,43 million lei. The most significant sales

increase was achieved by JSC "Moldtelecom" and "Starnet" LLC. The turnover of JSC "Moldtelecom" was 348,2 million lei, increased by 16,5%, the turnover of "Starnet" LLC was 79,0 million lei, increased by 95%. JSC "Orange Moldova" recorded 22,7 million lei sales, less than in 2009 by 4,7%. (Figure 28).

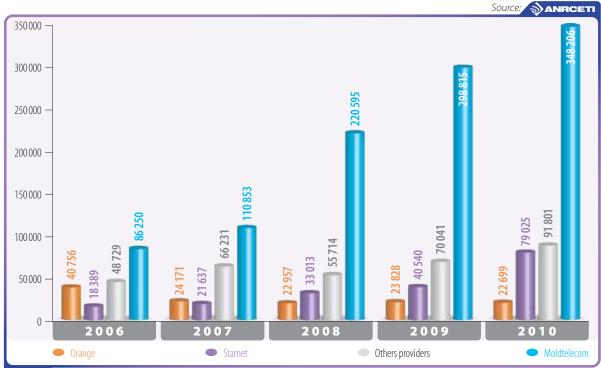


Fig. 28 Market structure by turnover, thousand lei

As a result of this development, the market share of "Starnet" LLC reached 14,6% (increase by 5,2 p.p.) the market share of "Moldtelecom" JSC was 64,3% (de-

crease by 4,7 p. p.), market share of "Orange Moldova" JSC was 4,2% (decrease by 1,3 p. p.) (Figure 29).

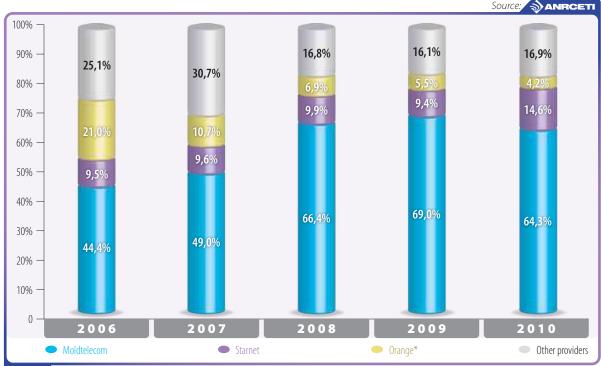


Fig. 29 Market shares, in terms of turnover

<sup>\*</sup> Data for 2005-2008 include Telemedia Group JSC, subsequently acquired by Orange Moldova JSC





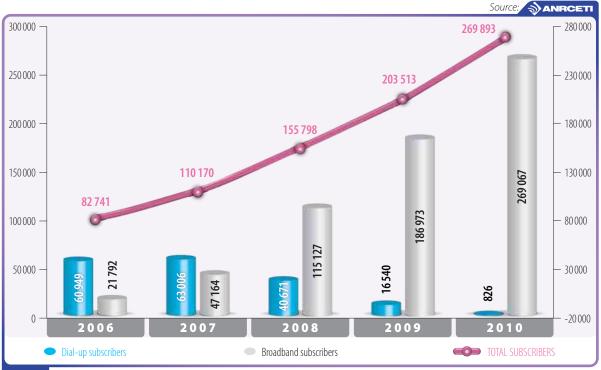


Fig. 30 Evolution of number of subscribers to Internet at fixed location

### 4.2 Subscribers. Penetration rates

In 2010, the total number of subscribers to Internet access services at fixed locations increased over 2009 by 32,6% and became 269,9 thousand, most of them (99,7%) connected to the global Internet by means of broadband technologies (Figure 30).

The number of subscribers to broadband access services increased by 43,9%, whereas the narrowband connections were almost entirely replaced by broadband services at mobile and fixed locations.

The penetration rate of Internet access services at fixed locations, per 100 population increased by 1,88 p. p. to 7,57%, the penetration rate of broadband Internet access increased by 2,32 p.p to 7,55% (Figure 31).

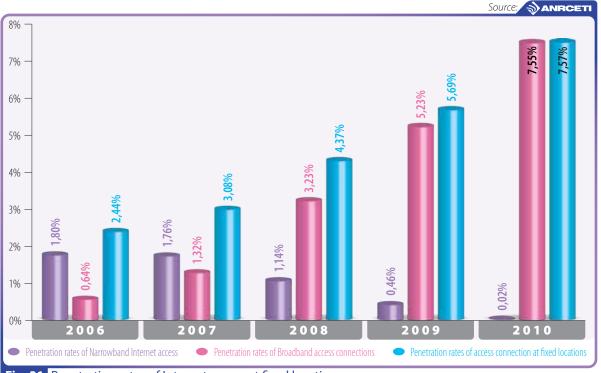


Fig. 31 Penetration rates of Internet access at fixed locations





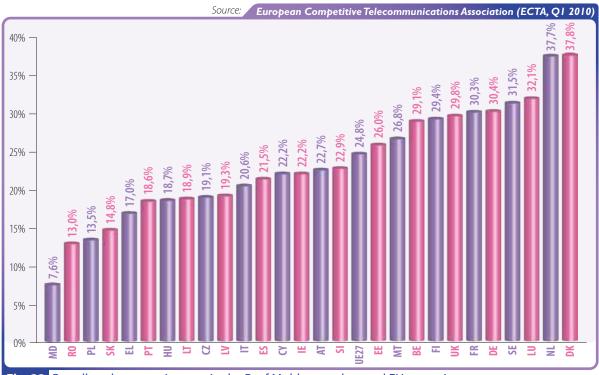


Fig. 32 Broadband penetration rate in the R. of Moldova and several EU countries

Though the penetration rate of these services increased significantly, the value of this indicator is much lower than the average of 24,8% in European Union countries (Figure 32).

### 4.3 Access to broadband Internet

Though in 2010 the share of JSC "Moldtelecom" by the number of broadband subscribers dropped by 1,1 p. p., this company still holds the highest share -70,4% - of this market. The market share of "Starnet" LLC increased by 2,5 p.p. to 18% (Figure 33).



Fig. 33 Market shares on terms of number of subscribers





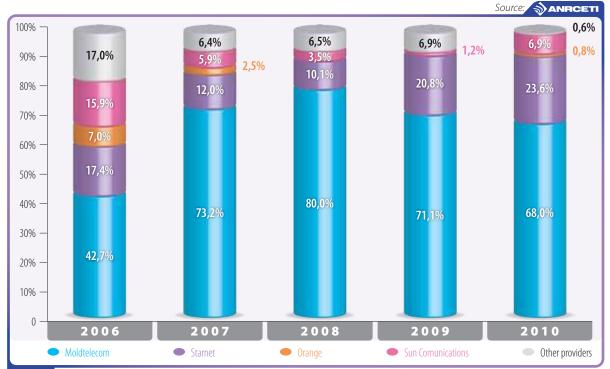


Fig. 34 Shares of providers, by connection of new subscribers to broadband services

JSC "Moldtelecom" connected the highest number of subscribers to its network - 55,9 thousand new subscribers (68,0%). "Starnet" LLC connected 19,4 thousand new subscribers (23,6%), the other providers jointly - 6,8 thousand (8,4%) (Figure 34).

In 2010, ADSL and FTTx (access via optical networks) were the most widely used technologies applied for

the connection of broadband subscribers at fixed locations. The number of subscribers connected to the networks through ADSL technology increased by 18,6% and exceeded 167,8 thousand, the number of subscribers connected via FTTx increased by 151,6% and reached 92 thousand. (Figure 35).

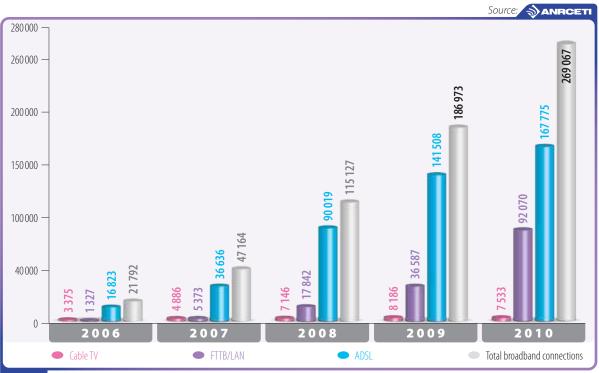


Fig. 35 Number of broadband subscribers, by technology used







Fig. 36 Shares of broadband Internet technologies

In the reporting timeframe, the share of broadband FTTx-based Internet connections increased by 14,7 p. p. to 34,2% of the total, whereas the share of ADSL-based connections dropped by 13,3 p. p. to 62,4% (Figure 36).

The growth rate of FTTx connections is explained by the expansion of these types of networks in densely populated urban areas, in particular in Chisinau municipality and the substitution of ADSL connections or DOCSIS (via cable TV networks) with FTTx connections, where they are geographically available. However, the ADSL technology has a high potential

for expansion in low-density rural and urban areas, where the active optical networks cannot provide comparable economies of scale and density and the traditional telephone infrastructure can be used more efficiently.

The territorial development of broadband services is characterized by a high concentration of subscribers in Chisinau municipality, the place of residence for half of subscribers to these services (51,2%). In Chisinau, the number of subscribers, per 100 households, is 56,2, whereas in most of the districts this indicator ranges between 8 and 18 (Table 10).

Tab. 10 Access to broadband services at fixed locations provided inside administrative-territorial units of the Republic of Moldova, as per 31.12.2010

	Administrative- territorial unit	TOTAL broadband subscrib- ers	Penetration of broadband services per 100 households	Subscribers				Broadband access technologies			
no.				via ADSL	via FTTB	via Cablu TV	via Radio	ADSL	FTTB Lan	Cablu TV	Radio
1	Chisinau municipality	137.906	56,2	48.550	80.563	7.109	1.684	35,2%	58,4%	5,15%	1,2%
2	Balţi municipality	11.999	25,7	9.749	1.806	444	0	81%	15%	4%	0%
3	District Anenii noi	4.490	16,9	4.489	1	0	0	100%	0%	0%	0%
4	District Basarabeasca	1.844	19,6	1.806	38	0	0	98%	2%	0%	0%
5	District Briceni	4.183	14,5	3.697	486	0	0	88%	12%	0%	0%
6	District Cahul	6.815	18,6	6.160	655	0	0	90%	10%	0%	0%
7	District Cantemir	2.944	16,9	2.795	149	0	0	95%	5%	0%	0%
8	District Calarasi	2.972	11,4	2.694	278	0	0	91%	9%	0%	0%
9	District Causeni	3.687	12,7	3.524	163	0	0	96%	4%	0%	0%
10	District Cimislia	3.088	15,9	2.832	256	0	0	92%	8%	0%	0%
11	District Criuleni	2.682	11,7	2.682	0	0	0	100%	0%	0%	0%
12	District Donduseni	1.588	8,7	1.540	48	0	0	97%	3%	0%	0%

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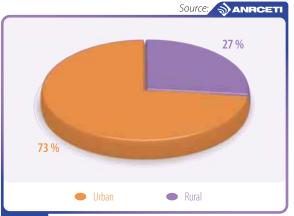
Source.

Tab. 10 Access to broadband services at fixed locations provided inside administrative-territorial units of the Republic of Moldova, as per 31.12.2010

no.	Administrative- territorial unit	TOTAL broadband subscrib- ers	Penetration of broadband services per 100 households	Subscribers				Broadband access technologies			
				via ADSL	via FTTB	via Cablu TV	via Radio	ADSL	FTTB Lan	Cablu TV	Radio
13	District Drochia	4.499	14,2	4.088	411	0	0	91%	9%	0%	0%
14	District Dubasari	1.010	9,8	1.010	0	0	0	100%	0%	0%	0%
15	District Edinet	4.421	14,8	3.928	493	0	0	89%	11%	0%	0%
16	District Falesti	3.209	10,1	3.142	67	0	0	98%	2%	0%	0%
17	District Floresti	3.240	10,0	3.119	121	0	0	96%	4%	0%	0%
18	District Glodeni	2.293	10,6	2.187	106	0	0	95%	5%	0%	0%
19	District Hinceşti	5.019	13,6	4.601	418	0	0	92%	8%	0%	0%
20	District laloveni	5.675	19,7	5.226	449	0	0	92%	8%	0%	0%
21	District Leova	2.298	14,4	2.093	205	0	0	91%	9%	0%	0%
22	District Nisporeni	2.500	12,5	2.500	0	0	0	100%	0%	0%	0%
23	District Ocnita	2.543	12,1	2.423	120	0	0	95%	5%	0%	0%
24	District Orhei	6.286	16,7	4.484	1.797	0	5	71,3%	28,6%	0,0%	0,1%
25	District Rezina	2.267	13,9	2.000	267	0	0	88%	12%	0%	0%
26	District Riscani	3.091	11,9	2.958	133	0	0	96%	4%	0%	0%
27	District Singerei	3.748	13,0	3.505	243	0	0	94%	6%	0%	0%
28	District Soroca	4.228	12,3	4.052	176	0	0	96%	4%	0%	0%
29	District Straseni	4.949	18,2	4.342	607	0	0	88%	12%	0%	0%
30	District Şoldanesti	1.243	8,2	1.243	0	0	0	100%	0%	0%	0%
31	District Ştefan Voda	2.677	11,7	2.443	234	0	0	91%	9%	0%	0%
32	District Taraclia	2.520	19,9	2.520	0	0	0	100%	0%	0%	0%
33	District Telenesti	2.526	11,1	2.385	141	0	0	94%	6%	0%	0%
34	District Ungheni	4.809	13,3	3.635	1.174	0	0	76%	24%	0%	0%
35	UTA Gagauz-Eri	9.838	22,1	9.373	465	0	0	95%	5%	0%	0%
	TOTAL	269.087	23,8	167.775	92.070	7.553	1.689	62,3%	34,2%	2,8%	0,6%

Source: SANRCETI

The data in the table above show that the number of broadband subscribers residing in urban areas significantly exceeds the number of subscribers in rural areas.



**Fig. 37** Number of broadband subscribers, by place of residence

In 2010, urban areas registered 196,5 thousand subscribers (43,2 subscribers per 100 households), which makes 73% of the total number. The number of subscribers in rural areas was estimated at 72,6 thousand (10,7 per 100 households) or 27% of the total. This is due to the lower purchasing power of rural population, different degrees of digital readiness, the gap in infrastructure, availability of broadband services and lack of effective competition.

# 4.4 Access to mobile broadband Internet

In 2010, the number of mobile users accessing the Internet via the 3G networks and consuming at least 1 MB of traffic, increased over 2009 by 52,4% and was estimated at 121,6 thousand. 59% of these are users of "Orange Moldova" JSC, 33,5% -"Moldcell" JSC and 7,5% - of "Moldtelecom" JSC (Figure 38).







Fig. 38 Evolution of number of 3G users that accessed the Internet and consumed at least 1MB traffic

## 5 BROADCASTING AND RETRANSMISSION OF AUDIOVISUAL PROGRAMS

### 5.1 General description

In 2010, the audiovisual market was subject to the implementation of new multichannel TV access technologies, by the launching of IPTV–based services, development and extension of cable and digital MMDS TV services. These factors boosted the number of subscribers to multichannel TV services. According to the data available from providers of these services, the number of subscribers to multichannel TV services increased over 2009 by 1,6% and reached 230 thousand.

The same data show that the total volume of sales accomplished by providers decreased by 2,12% and was 227,8 million lei. The decrease occurred as a result of lower sales of air TV program broadcasting and retransmission services by 3,81% and air radio broadcasting services - by 18,86%. However, cable TV sales grew by 4,99% and totaled 100,4 million lei. (Figure 39).

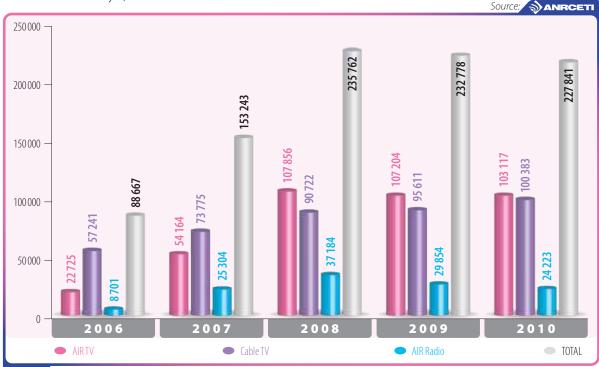


Fig. 39 Evolution of turnover in cable/air TV and radio market, thousand lei



<sup>\*</sup> in the lst quarter of 2009, data from JSC "Moldtelecom" were not available.

Like in the previous years, the highest share - 45,26% - in the structure of the audiovisual market referred to air TV services. The share of revenues derived from cable TV services made 44,06%, the share of air radio services - 10,63%.

The average monthly revenue per user (ARPU), recorded by cable TV service providers was 40,12 lei, increased over 2009 by 4,65 p. p. The ARPU of the

biggest provider on this market segment - LLC "Sun Communications - was 45,42 lei.

In the reporting timeframe, the biggest shares of the cable TV market, by turnover, were held by: "Sun Communications" LLC – 58,27% (+3,01 p.p.), "AMT" LLC – 7,12% (-0,1 p.p.), Commercial Technical Center "ALFA" – 3,98% (-2,73 p.p.) (Figure 40).



Fig. 40 Structure of cable TV market, by turnover

#### 5.2 Subscribers. Structure and evolution

As per 31.12.2010, the number of subscribers to multichannel TV services was 230 thousand, ascending

by 1,6% over 2009. The penetration rate of these services, per 100 population, increased by 0,11 p. p. to 6,45% (Figure 41).

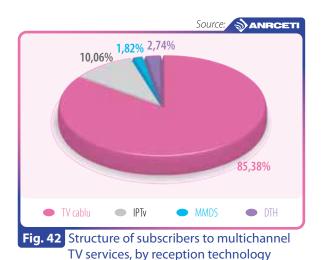


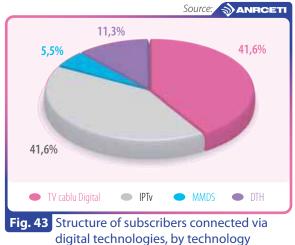
Fig. 41 Number of subscribers and penetration rates for multi-channel TV services



196,2 thousand (85,38%) of the total subscribers to multichannel TV services are subscribers to cable TV networks. Their share in the market structure reduced by 12,3 p.p., due to the increase in the number of IPTV subscribers up to 23,1 thousand (10,06%). The number of subscribers to DTH audiovisual services was estimated at 6,3 thousand (2,74%), those to MMDS networks – 4,2 thousand (1,82% of the total) (Figure 42).

In 2010 the trend of increased use of digital multichannel TV services became ever more prominent. The number of subscribers to these services increased over 2009 by 181% and reached 55,6 thousand. Most of the subscribers use cable digital TV and IPTV services (Figure 43). Thus, the share of subscribers to digital services in the structure of multichannel TV market, almost tripled: from 8,8%, in 2009, to 24,2%, in 2010.





The biggest share by number of subscribers to multichannel TV services – 46,2% (106 thousand subscribers) – was held by "Sun Communications" LLC,

descending by 7,8 p. p., compared to 2009. JSC "Moldtelecom" had 10,9% market share and "AMT" LLC - 8,7% (Figure 44).

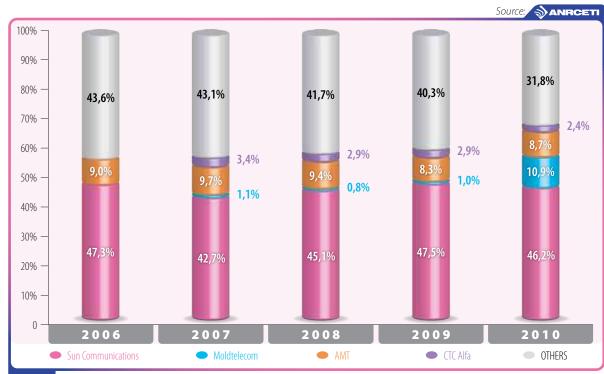


Fig. 44 Structure of the market, by number of subscribers





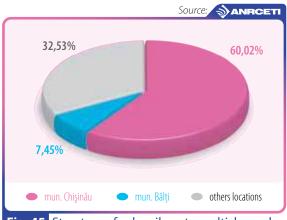


Fig. 45 Structure of subscribers to multichannel TV services, by residence area

60,02% of the total number of subscribers to multichannel TV services are residents of Chisinau municipality, 7,45% - of Balti municipality and 32,53% other localities of Moldova. (Figure 45).

In 2010, the number of TV channels received by subscribers continued to steadily increase. The data submitted by providers show that 69,7% of subscribers to multichannel TV services had subscriptions for over 50 channels, an increase by 14,27 p. p., over 2009, whereas 6,5% had subscriptions for less than 30 channels. (Figure 45).



Fig. 46 Structure of cable TV subscribers, by number of channels





# **6** CONCLUSIONS. FORECAST FOR 2011

After 1.7% reduction in 2009, in 2010 the electronic communications sector resumed the tendency of growth after the economic recession, the advance being 9.1%. The main growth-fostering sectors were mobile telephony services and broadband Internet access, which, according to the estimations of the Agency, will remain the key factors for sector development in 2011. The fixed telephony market, due to the increase of tariffs for international calls termination by JSC "Moldtelecom", avoided the recession, however was in a state of revenue stagnation. The audiovisual market registered a small decrease, due to lower revenues derived from TV and air radio services.

The Agency's forecast for 2011 expects the total value of the four electronic communications markets (fixed telephony, mobile telephony, Internet access, audiovisual program broadcasting and retransmission) to grow by 3-4% and reach 6,3-6,4 billion lei. The slowdown will be largely determined by the 23-24% reduction of revenues generated from national traffic termination in mobile and fixed networks and by 5-6% reduction of sales on the fixed telephony market. On the other hand, these tendencies will be offset by the 10% increase of mobile sales (corrected by the factor of decreasing revenue from traffic termination, this growth will make 6-7%) and 20-22% increase of Internet access and data transmission sales.

In 2011, the number of subscribers on mobile market is expected to increase by about 10-12% and exceed 3,5 million. The mobile penetration rate is estimated to reach 98%. A slight decrease in the ARPU is expected

due to the reduction of tariffs for national traffic termination in mobile networks. However, the number of mobile broadband subscribers will increase by 35-40% and will reach 165 thousand.

The Agency believes that in 2011 the number of fixed telephone subscribers will increase by1,5-2% and will reach 1.18 million, whereas the penetration rate of these services will exceed 33%. This growth is driven by the rapid development of voice-over-broadband services (broadband telephony). At the same time the traffic in fixed networks will continue to drop due to the fixed-mobile substitution.

The Agency expects a more dynamic growth of the market for broadband access at fixed locations. The number of subscribers to these services will increase with the availability of necessary infrastructure by increasing coverage and bandwidth. The number of these subscribers will increase by 30-35% and reach 350 thousand and the penetration rate - 10%. The broadband speed-up will be caused by the development of optical fiber networks, liberalization of access to the infrastructure of the incumbent JSC "Moldtelecom" and a growing demand for these services. The Agency believes that in 2011 the shift of users from dial-up to broadband connections at fixed and mobile locations will come to an end

The audiovisual market will also undergo dynamic development, driven by increasing competition in IPTV, DTH and digital cable TV services. The Agency expects the share of digital subscribers to increase to 33-35% in 2011.



