REPORT
On Activity of the National Regulatory Agency for Electronic Communications and Information Technology and Evolution of Electronic Communications Market in 2008
Art. 11 (9) of the Law on Electronic Communications no. 241-XVI of 15.11.2007 provides for the following:

„Every year by April 30, the Agency shall publish an annual report on its activity regarding the implementation of the electronic communications development strategy and enforcement of its regulations, as well as a statistical yearbook on the electronic communications development in the Republic of Moldova in the previous year.”
Pursuant to the Law on Electronic Communications no. 241-XVI of 15.11.2007, in force since March 14, 2008, the National Regulatory Agency for Telecommunications and Informatics (ANRTI) was re-organized in The National Regulatory Agency for Electronic Communications and Information Technology (ANRCETI). ANRTI was founded on August 17, 2000, being one of the first regulatory telecommunications authorities in the post-Soviet space. ANRCETI is the legal successor of ANRTI. The regulator honors its functions and attributions pursuant to ANRCETI Regulations, developed in accordance with the Law on Electronic Communications and approved by Government Decree no. 905 of 28.07.2008.

ANRCETI is a central public authority whose mission is to regulate the activity in electronic communications and information technology sector, to ensure the implementation of sector development strategies and supervise compliance of electronic communications network and/or service providers with the legislation. ANRCETI has the status of a legal person, funded from an autonomous budget, an entity independent from service and network providers, from manufacturers of communications equipment and from the Government, except for the following:
- the Agency fulfils its functions pursuant to Government-approved Regulations;
- the Agency approves, after preliminary consultation with the Government, tariffs for public electronic communications services, provided by service providers with significant market power on the relevant fixed telephony market;
- the Government approves the Agency Director and Deputy Directors.

By its Regulations, the Agency seeks to promote competition in the provision of electronic communications networks, services and associated facilities, takes due action to ensure that users benefit from the possibility to choose services, prices and quality, encourages efficient investment in infrastructure, supports efficient infrastructure investments, innovations and reasonable use of limited resources.
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FOREWORD

The year 2008 was a special one both for the Agency and for all players of the country’s electronic communications market. The new Law on Electronic Communications, a legislative act of major importance for the development of electronic communications and information technology in the Republic of Moldova, entered in force and the process of its implementation started. This process became a no.1 priority for the entire activity of the Agency. In 2008, the regulator was engaged mainly in the development and approval of new regulatory acts, as required by the mentioned Law, in the process of bringing old acts into line with the new Law provisions. The Report herein describes the main elements of a number of regulatory acts, issued by the Agency in 2008. Here I would like to make one remark - all these acts are targeted towards the following goals: to facilitate market entry for new network and service providers, to create optimal conditions for the activity of all market players and to enhance competition for the benefit of end-users.

In this context, I consider as relevant the assessment of the regulatory framework of the Republic of Moldova by the European Bank for Reconstruction and Development (EBRD) in its Study “Comparative Assessment of the Telecommunications Sector in the Transition Economies”, made publicly available in March 2009. The Assessment shows that the Republic of Moldova is the first CIS country to have harmonized its legislation with the European Union regulatory framework in the field of electronic communications and is currently applying the general authorization regime, which simplifies market entry. In terms of regulatory framework conformity with the EU electronic communications norms, the Study assesses Moldova to have “medium compliance” and be the second in CIS, after Georgia. The assessment imposes high responsibility on us, and mainly the responsibility for providing the electronic communications market with a regulatory framework of a high-degree compliance with EU norms.

2008 was marked by one more event of utmost importance for us: the Agency rebranding process started. After Agency internal structure had been re-organized, new objectives and priorities for all its sub-divisions had been set, a new site (www.anrceti.md) and a new logo were designed and launched. The activity of the Agency became more transparent, its Administrative Board – more open for dialogue with all market players. Suffice it to remind that all the draft decisions, deemed to have a major impact on the market, were subject to public consultations, having most of providers of electronic communications networks and services as participants. We can certainly say that 2008 was the year when the foundation was laid for a durable partnership between the Agency and the professional participants of the electronic communications market. I am convinced that this constructive collaboration will continue further.

The Report also highlights other actions taken by the Agency team of specialists in 2008. The Agency activity covered a wide range of aspects connected with market segment analysis, examination of hundreds of dossiers submitted by license applicants and notification documents from entities intending to operate on the market, solving a number of disputes between providers, between providers and end-users, conducting control and monitoring actions with respect to service providers. Details on these activities are available in the Part I of this Report.

Part II of the Report contains comprehensive analysis of the evolution of electronic communications market in 2008, commentaries and prognoses of the Agency
concerning the perspectives of development in the years to come. It’s worth underlining that in the reporting timeframe, the electronic communications kept on the top of the most dynamic national economy sectors: the total sales volume in 2008 increased by 12.3% over 2007 and was estimated at 5 billion 725.4 million lei. Correlated to the GDP, the market value reached 9.11%. The most significant increases were estimated on mobile telephony market and on broadband Internet access market. According to the Agency assessment, these markets will continue growing in the next 4-5 years. The basic factors of this ascension are the fast increase of demand for new electronic communications services, especially broadband Internet access and the extension of coverage area of 3G electronic communications networks, launched for the first time in the Republic of Moldova in the autumn of 2008. Proceeding from the importance of broadband Internet access services for building the information society in this country, the Agency set the priority of its activity in 2009: to create optimal conditions for the extension and more efficient operation of the market of these services.

I am convinced that the Report, drawn up by the Agency, will be useful for all those who follow the evolution of the electronic communications market in the Republic of Moldova. It will help the interested persons to get a clear impression about the real state of things on the electronic communications market in this country, as well as about the preoccupations and future projects of the Agency.

Sergiu SITNIC, Director of the National Regulatory Agency for Electronic Communications and Information Technology
I. ACTIVITY OF THE AGENCY IN 2008

1. Objectives and Priorities

2008 was an outstanding year marked by the entry in force, on March 14, of the Law on Electronic Communications no.241-XVI of 15.11.2007 (hereinafter Law on Electronic Communications) that transposes onto national level the European Union basic regulatory principles applicable to this sector. The new law sets forth the long-term objectives and priorities of the national regulator. In 2008 the Agency focused on the development and adoption of the basic normative documents, as required by the Law on Electronic Communications, as well as on harmonization of all regulatory acts with the provisions thereof. For this purpose, during the reporting period, the Administrative Board made 59 decisions, most of them of normative nature.

The aforementioned law enabled the Agency to set new rules of market entry and operation for providers of public electronic communications networks and services. Those rules cover an array of issues, such as: the general authorization and licensing regime, procedures for granting licenses for the use of limited resources, procedures for organizing tenders and issuing technical permits, network interconnection, universal service implementation, development of digital television, etc. As the Law on Electronic Communications provides, on 15.09.2008 the Agency started to apply the general authorization regime for the provision of public electronic communications networks and/or services, which is by far a simpler procedure to enable market entry and implies minimum costs incurred by potential providers.

In order to favor the development of electronic communications service market, in particular broadband Internet access, the Agency developed and approved the mechanism for enforcing the Regulations on Deployment, Operation, Management, Maintenance and/or Liquidation of Electronic Communications Networks at State Border of the Republic of Moldova, approved by Government Decree no. 974 of August 12, 2008. The implementation of this mechanism that includes a procedure of authorizing the providers of electronic communications networks with the right to run such business, as well as the enforcement of the legal general authorization regime, will lead in 2009 to an increase in the number of direct Internet access providers, as well as to better Internet access offers for end-users and lower rates for these services.

Another priority established by the Agency for 2008 was the promotion of fair competition on the electronic communications networks and services market and prevention of anti-competitive actions leading to market distortion or competition restriction. For this purpose, the Agency developed and adopted the Regulations on Identification and Analysis of Relevant Electronic Communications Markets and Designation of Electronic Communications Networks and/or Service Providers with Significant Market Power. The new regulatory document, in force since 17.02.2009, will enable the regulator to impose on providers, designated as having significant market power on relevant markets, a number of special obligations provided by both the Law and by the Regulations on Interconnection.

In the reporting period, one of the top priority concerns of the Agency was to promote innovations and new technologies in electronic communications. Therefore, striving to facilitate the implementation of 3G cell mobile services, the regulator contributed to the drafting of relevant normative acts and approved license conditions for the provision of these services. Throughout 2008 the Agency issued three licenses
authorizing the use of radio frequencies and channels for the provision of 3G networks and services. In the autumn of 2008 two of the three license holders already launched their networks in Chisinau municipality and other cities of the country.

Noteworthy for 2008 was the participation of the Agency specialists in drafting the Concept of Digital Television Implementation in the Republic of Moldova, by providing input meant to hasten the process of transition to digital television. Proceeding from the fact that this is currently a burning issue for the Republic of Moldova – the regulator assumed the responsibility for integral transition from analog to digital television by 2015 - it intends to further continue dealing with this matter by developing both license conditions for the use of frequencies in providing digital television networks and services.

1.1 Major Market Impact Decisions

- ANRCETI Administrative Board Decision no.10 of 28.08.2008, approving the Regulations on General Authorization Regime and License Issuance Authorizing the Use of Limited Resources in the Provision of Public Electronic Communications Networks and Services.
- ANRCETI Administrative Board Decision no.12 of 15.09.2008, approving the Forms for General Authorization and License Issuance Authorizing the Use of Limited Resources in the Provision of Public Electronic Communications Networks and Services.
- ANRCETI Administrative Board Decision no. 52 of 25.12.2008, approving General License Conditions for the Use of Radio Frequencies or Channels in the Provision of Public Electronic Communications Networks and Services.
- ANRCETI Administrative Board Decision no. 16 of 23.09.2008, on Regulating the Procedure of Technical Permit Issuance for the Use of Radio communications Stations.
- ANRCETI Administrative Board Decision no. 55 of 29.12.2008, approving the Regulations on Identification and Analysis of Relevant Electronic Communications Markets and Designation of Networks and/or Service Providers with Significant Market Power.
- ANRCETI Administrative Board Decision no. 24 din 28.10.2008 Establishing the Quantum of Regulatory and Monitoring Fee for 2009.
- ANRCETI Administrative Board Decision no. 25 of 03.11.2008, approving the Regulations Administration and Management of the National Numbering Plan.
- ANRCETI Administrative Board Decision no. 09 of 18.08.2008 approving the Regulations on Monitoring and Control Procedure in Electronic Communications.
- ANRCETI Administrative Board Decision no. 15 of 23.09.2008, approving the Regulations on Dispute Resolution Procedure in Electronic Communications.

1.2 Draft Documents

- New revised version of the Regulations on Interconnection
2. Regulatory Acts

2.1 Simpler Market Entry Rules

Pursuant to the Law on Electronic Communications and for the purpose of facilitating the procedure of electronic communications market entry, the Agency developed and approved the Regulations on General Authorization Regime and License Issuance for the Use of Limited Resources in the Provision of Electronic Communications Networks and/or Services, in force since September 15, 2008.

The general authorization is a legal regime applicable to the provision of public electronic communications networks and services, which determines the rights and obligations for providers of all types of networks or services. According to this regime, a person intending to provide public electronic communications networks or services, needs to submit a notification to ANRCETI about this intention at least 7 days before starting the provision. The Agency, in maximum 7 days from the date of the notification shall provide the applicant with an informative declaration to confirm notification receipt and his being registered in the Public Register of Providers of Electronic Communications Networks and Services, after which the applicant’s status is that of a provider of public networks and/or services, indicated in the notification.

The application of the new general authorization regime reduced to a minimum the costs incurred by those interested to run business on the electronic communications network and service market. If compared, prior licenses per type of activity were issued by the Agency for a legally-established fee and expired after 5 years, whereas the general authorization is not time-limited and is free of charge.

The above-mentioned Regulations sets forth the procedure of license issuance for the use of radio frequencies and channels and numbering resources for authorized public electronic communications network and service providers. The procedure is applied for radio frequencies and channels for non-governmental use, according to National Frequency Assignment Chart, used for the provision of public electronic communications networks and services.

According to the Regulations the Agency is entitled to take decisions to the effect of limiting the number of issued licenses only provided that such a limitation is justified by the need to efficiently use limited resources or to avoid unwanted interference. Where the number of licenses is limited, they are granted to legal persons through a tender or through direct commitment, on condition that the granted right is a successive evolution for a network already in place and it is provided under authorization.

In 2008, the Agency issued three licenses authorizing the use of radio frequencies for the provision of 3G mobile networks and services, to companies "Orange-Moldova”, "MOLDCELL” and JSC „MOLDTELECOM”. The licenses were granted by direct
commitment, pursuant to the Law on Electronic Communications and considering the recommendations of Government Decrees no. 660 of 02.06.2008 and no. 892 of 24.07.2008 on Implementation of 3G Cell Mobile Communications Services that provide for a 3G license granted in 2008, without a tender, to every currently active mobile operator, to authorize the latter for the use of radio channels and frequencies for the provision of 3G networks and services.

2.2 Interconnection and Access

As provided by the Law on Electronic Communications, one of the specific rights applicable to the activities of public electronic communications networks and/or service provision is the right to negotiate and conclude access and interconnection agreements, for the purpose of ensuring connectivity between the end-users of the interconnected networks and interoperability of networks and services, competition promotion and protection of end-users’ rights.

To accomplish this objective, the Agency developed a draft of revised Regulations on Interconnection that provides for the principles and procedure of interconnection between public electronic communications networks and/or services and access to networks and associated facilities, including to the local loop /sub-loop. The document was drawn up in line with the requirements of the Law on Electronic Communications and with due regard to the input provided by industry representatives during the public consultations hosted by the Agency in December 2008 - January 2009. The final Regulations on Interconnection was approved by the Administrative Board on January 31, 2009, in a public session and entered in force on the date of publication in the Official Gazette of the Republic of Moldova, on March 13, 2009.

Unlike the previous Regulations, the revised act sets forth clear rules for providers designated by the Agency as having significant market power, in terms of interconnection of their networks. These obligations include transparency and non-discrimination in relation to other market players, the obligation of making an interconnection reference offer publicly available, cost-orientation of interconnection prices, specific terms for negotiating and concluding interconnection agreements.

Another new aspect of the Regulations is the section establishing the principles and procedure of access to associated facilities, including to the local loop. It provides that providers designated by as having significant market power on the local loop market must provide this service, under non-discriminatory conditions, to all providers requesting it. They must also publish a reference offer containing both the minimum set of local loop access services and prices and conditions of provision.

The Agency considers that the new Regulations provide for equal conditions of for providing interconnection and access services, which will enhance retail market development, in particular broadband access, VoIP fixed telephony service and multimedia service markets. Enforcing the clauses of the Regulations will favor the availability of network elements, such as local loop/sub-loop of the fixed telephony service providers, which will subsequently lead to enhanced competition on fixed and mobile markets.

2.3 New Competition Promotion Tool

For the purpose of promoting fair competition on the electronic communications market, the Agency draw up and approved, in 2008, the Regulations on Identification and Analysis of Relevant Electronic Communications Market and Designation of Providers
with Significant Market Power. It was published in the Official Gazette of the Republic of Moldova on 17.02.2009 - the date of its entry in force.

The new normative act sets forth the methods and criteria for identification of relevant markets, whose characteristics justify the regulatory obligations imposed on electronic communications network and/or service providers with significant market power, as well as the rules to be applied by the Agency in conducting the analysis of the identified relevant market and determining significant market power on a particular relevant market.

The Regulations also stipulates that providers designated in 2007 by the National Agency for Competition Protection as having significant market power on a particular telecommunications and informatics market shall be considered electronic communications networks and/or service providers with significant market power on that market, until a new market analysis is conducted.

According to the Regulations, the Agency is entitled to approve, pursuant to the applicable EC recommendations, the List of relevant markets to be subsequently subject to analysis for designation of providers with significant market power.

It is considered that applying this new regulatory tool will empower the Agency to impose special obligations on providers designated as having significant market power, as required by the Law on Electronic Communications and the Regulations on Interconnection - a factor that will enhance competition, development of alternative providers and market entry. This process, in its turn, will foster diversification of services intended for end-users, especially fixed telephony service, broadband Internet access, multimedia services, etc.

2.4 New Elements in National Numbering Plan Management

Pursuing the implementation of the Law on Electronic Communications and the modifications applied to the National Numbering Plan (NNP) by the Ministry of Information Development, the Agency developed and approved, in 2008, a revised version of the Regulations on National Numbering Plan Management and Administration.

The Regulations was completed with new clauses meant to promote new electronic communications services and enhance the demand for numbering resources for such new services. It provides for assignment, regardless of location, of numbers from the 38XXXXXX block for services using IP-packet-switched technologies, in particular provided at fixed locations, including broadband, as well as numbers from 808XXXXX block for shared-cost telephone services. In the latter case the charge for the telephone call is shared and partially paid by both – the calling and the called parties.

The new Regulations provides for numbering resources to be assigned by the Agency to providers of electronic communications networks and services through licenses authorizing such use. These are issued following a justified application from a person authorized to provide electronic communications services and networks. The Agency decides on accepting the application and issuing a license or rejecting the request, which takes up to 15 days.

Licenses for the use of numbering resources expire in 10 years, except the cases when they are issued for shorter terms, if so requested by applicants and when issued to holders of licenses for the use radio frequencies or channels, obtained through a tender and valid for 15 years.
Pursuant to the regulatory acts in force, in 2008 the Agency assigned over 778 thousand numbers to electronic communications networks and service providers. In particular, 700 thousand numbers were assigned for public telephone networks („Orange Moldova” JSC - 500 thousand, „MOLDCELL” JSC – 200 thousand), about 78 thousand – for public fixed telephone networks (including „MOLDTELECOM” JSC - 72 960, alternative providers of public local fixed telephone networks and services – 5 thousand), 40 – for access to value-added services, 39 – for „Freephone” service, 14 – for “Taxi” services, 8 numbers – for IP-telephony SERVICES, dial-up, non-communications services, etc.

Relative to 2007, in the reporting period the total of numbering resources assigned by the Agency to electronic communications network and service providers decreased by 22%, as explained by the Agency, due to a lower demand for numbering resources for fixed and mobile markets, the latter undergoing the stage of maturity.

2.5 Establishing the Technical Permits Issuance Procedure

As the Law on Electronic Communications provides, the Agency is the authority empowered to issue technical permits for the use of radio-communications stations, namely where the Law does not provide for issuance of licenses for the use of radio frequencies and channels. Driven by the necessity of clear and transparent permit-issuance rules, the Agency developed and approved The Instruction on Technical Permit Issuance to Authorize Use of Radio Communications stations.

According to the Instruction, the technical permit is issued by the Agency for radio communications stations used for corporative and individual needs (radio amateurs stations, CB (Citizen Band), taxi, electric networks, guard systems, occasional transmissions, including via satellite, associated technology), but without conferring the right to provide electronic communications services, as well as for radio relay stations within electronic communications networks. The radio frequencies and channels for the aforementioned radio communications stations are not licensed.

The Instruction provides for the technical permit issuance procedure, which also includes issuance of a set of documents by the National Radio Frequency Center (CNFR), the certification of radio communications equipment, coordinating work prior to equipment deployment with the State Sanitary-Epidemiologic Service, the grounds for issuance, refusal, suspension and cancellation of permits by ANRCETI, as well as the permits standard forms.

The technical permit for mobile radio relay stations is valid for 15 years, for radio amateur stations - 3 years, for other types of stations – 5 years.

Based on the above-mentioned instruction and the submitted applications, in 2008 the Agency issued 329 technical permits for 12 users, including 10 permits for stationary and 319 for mobile radio communications stations.

3. Data about Authorized Companies

In the reporting timeframe, the Agency authorized 201 companies to provide electronic communications and information technology networks and services. Compared to 2007, the number of authorized companies reduced in 2008 by 26,6%. As per December 31, 2008 the number of such companies was 1209.

The Agency considers this number reduced mainly due to the modifications to the authorization procedure, applied in 2008. In the timeframe January 1 – June 10 2008, the Agency, in compliance with the legislation in force, issued, like in the previous years,
general licenses for local fixed telephone service provision, informatics services and technical licenses for construction and/or maintenance, operation and creation of cable networks, TV and radio stations. For these types of activity the agency issued 152 licenses to 139 companies.

After June 10, 2008, as the modifications to the Law on Regulating Entrepreneurial Activity by Licensing no.451-XV of 30.07.2001 entered in force, the Agency started issuing licenses for the following types of activity: the use of radio frequencies and channels and numbering resources in the provision of electronic communications network and/or services, services of development, maintenance and implementation of software, equipment and information system of state interest and services of projecting, development and implementation of automated systems and resources of state interest (data base creation, their operation and information provision services) and services of ensuring their functioning.

In the interval June 10 – December 31 the Agency issued three licenses for the use of radio frequencies in the provision of 3G electronic communications networks and services, as well as license per activity in information technology to 14 companies. They were issued 14 licenses for provision of services implying, development, maintenance and implementation of software, equipment and information systems of state importance and 13 licenses for the provision of services implying projecting, elaboration, implementation of automated information systems and resources of state interest (data base creation and exploitation and information provision services) and ensuring their functioning.

Beginning with September 15, 2008, as the general authorization regime became effective by 31.12.2008 pursuant to the Law on Electronic Communications, the Agency authorized 48 companies to provide electronic communications networks and services under the newly-enforced regime.

According to the data available with the Agency on December 31, 2008, the 1209 companies authorized by the Agency to operate on the market had a total of 8 individual licenses and 1253 general and technical licenses, including:

- 1 individual license for fixed local, long-distance and international telephone service provision (JSC „MOLDTELECOM”);
- 4 individual licenses for cell mobile telephone service provision („Orange Moldova” JSC, „MOLDCELL” JSC, „EVENTIS MOBILE” LLC and JSC „MOLDTELECOM”);
- 3 licenses for the use of radio frequencies and channels in the provision of 3G mobile telephony networks and services („ORANGE MOLDOVA” JSC, „MOLDCELL” JSC and JSC „MOLDTELECOM”);
- 163 general licenses for local fixed telephone service provision;
- 854 general licenses for informatics service provision;
- 46 technical licenses for construction, maintenance, operation and creation of cable and/or air radio stations;
- 190 technical licenses for construction, maintenance, operation and creation of cable and/or air television stations.
- 46 technical licenses for construction, maintenance, operation and creation of cable and/or air radio stations.
4. Monitoring and Control

The activity of surveillance and control is one of the basic functions of the Agency, as provided by the Law on Electronic Communications. It is targeted at promoting competition and protecting the rights and interests of users, under transparent impartial and objective conditions.

In 2008, the monitoring of the activity performed by electronic communications network and service providers was carried out by a number of actions related to regular analysis of information about providers, with no direct implication in their business. The monitoring was targeted at assessing the degree of providers’ compliance with relevant legal and normative sector-governing acts and taking action to prevent eventual non-compliance. Depending on the degree of the deviations identified in the monitoring process, measures were applied to remedy them.

The results of the monitoring activity revealed deviations from legislation with 70 cable television network and service providers. The prescriptions and warnings of the Agency were duly considered and most of the breaches were remedied.

The control actions were performed in compliance with the Regulations on Control Procedure in Electronic Communications, approved by ANRCETI Administrative Board Decision no. 9 of 18.08.2008.

The Agency specialists performed 167 control actions, of which 157 – planned and 10 – unplanned.

Planned controls were mainly focused on verifying service quality, conditions of work with customers, degree of security and integrity of electronic communications networks, degree of compliance with license conditions, provisions of the normative acts in force, with network parameters/indicators, transparency of rates and conditions of public electronic communications service provision and use.

Unplanned control actions were targeted at collecting the information necessary for dealing with the problems notified to the Agency.

<table>
<thead>
<tr>
<th>Action</th>
<th>2007</th>
<th>2008</th>
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<tbody>
<tr>
<td>Total number of control actions:</td>
<td>230</td>
<td>167</td>
</tr>
<tr>
<td>Planned:</td>
<td>226</td>
<td>157</td>
</tr>
<tr>
<td>- fixed telephony</td>
<td>76</td>
<td>45</td>
</tr>
<tr>
<td>- informatics</td>
<td>95</td>
<td>57</td>
</tr>
<tr>
<td>- audio-visual</td>
<td>53</td>
<td>49</td>
</tr>
<tr>
<td>- cell mobile telephony</td>
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<td>6</td>
</tr>
<tr>
<td>Unplanned:</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>- fixed telephony</td>
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<td>2</td>
</tr>
<tr>
<td>- informatics</td>
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<td>3</td>
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<tr>
<td>- audio-visual</td>
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<td>- cell mobile telephony</td>
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REPORTS ACKNOWLEDGING ADMINISTRATIVE CONTRAVENTIONS

<table>
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<tr>
<th>Reports:</th>
<th>19</th>
<th>31</th>
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<tbody>
<tr>
<td>- fixed telephony</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
It is noteworthy that in most of the cases, no breaches of the legislation in force were detected, whereas in relation to other detected shortcomings, the providers obeyed the prescriptions of the Agency. However, a number of providers that failed to remove the breaches within the prescribed terms were subject to administrative sanctions under the law.

Most frequent breaches were detected with regard to the following matters:
- Exceeding the deadline for license update or renewal due to changes of providers’ legal addresses (26%);
- Unconformity between the electronic communications networks and technical projects (15%);
- Service launching under inappropriate technical conditions (15%);
- Exceeding the deadlines for submitting statistical reports (9%);
- Use of uncertified and/or unmarked equipment (9%);
- Failure to pay the regulatory and monitoring fee (9%);
- Unauthorized maintenance and operation of electronic communications networks (3%).

In the reporting timeframe, the entire control process resulted in a total of 31 reports acknowledging administrative contraventions by providers, subsequently sanctioned according to the provisions of the Administrative Contravention Code.

The control actions revealed four providers of electronic communications networks and services operating under expired licenses, sanctioned for that, as established and one provider operating under no license whatsoever, this act being counteracted by immediate measures.

As the analysis of the monitoring and control activity shows, the number of control actions reduced by 30% over 2007. The reduction is due to the improvement of the normative framework and the Agency being re-organized, which brought into focus quality of planned controls and timely action-taking to prevent providers from eventual violations of effective legislation with no direct intervention in their business.

5. Dispute Resolution

The Law on Electronic Communications introduced important changes in the methods of dispute resolution both between providers of electronic communications networks and/or services and between providers and end-users. The Law provides, under general title, for ANRCETI to be the decision-taking authority in resolving disputes so as to ensure free competition and protection of users’ rights. In this respect, the Agency became entitled to set forth a procedure of dispute resolution under the scope of its competence. This procedure is laid down in the new Regulations on Dispute Resolution in Electronic Communications, approved by Administrative Board Decision no. 15 of 23.09.2008.

According to the Regulations, where a dispute occurs between the providers of electronic communications networks and/or services related to their rights and obligations given by the Law on Electronic Communications, and where it cannot be amiably settled, any of the parties has the right to notify the Agency for dispute
resolution. Where the dispute occurs between the provider of electronic communications networks and/or services and an end-user related to the enforcement of the aforementioned Law and it has not been amiably settled, pursuant to the procedure set forth in the signed contracts, the latter has the right to request that ANRCETI intervene for dispute resolution.

The Regulations provide for two methods of dispute resolution between providers of electronic communications networks and/or services: through mediation and by means of a contentious procedure. Such procedures are optional and free of charge. The mediation procedure is a structured process, in which the Agency is the third party, neutral and impartial, assisting the parties’ in a dispute, during face-to-face meetings, targeted at reaching an acceptable solution for both disputing parties. Where the mediation procedure is successful, the parties conclude a transaction. Otherwise the dispute is further subject to a contentious procedure.

The interested party may chose a contentious procedure skipping mediation. The contentious procedure launches automatically, where the mediation procedure has failed. However the parties may conclude a transaction as to the dispute, at any moment of the contentious procedure. The Agency is supposed to adopt a dispute-solving decision within 30 days of being notified. The decision is legally-effective and obligatory for the parties involved. However, such a decision may be appealed against in court, according to the legislation in force.

The Regulations also provide that, where end-users allege that electronic communications service providers infringe on their rights given by the Law on Electronic Communications, they may address to the Agency for dispute mediation. Unless an acceptable solution has been agreed upon within 30 days of the complaint, the Agency will convey to both parties involved its duly motivated opinion regarding the possibilities of dispute resolution, under the title of a recommendation.

In the timeframe covered by this report, the Agency examined all the disputes for which electronic communications network and/or service providers sought assistance from the Agency. The disputes were amiably solved during multiple consultations held by the Agency with the parties involved. So was the case of JSC „Orange Moldova” seeking the Agency consent to suspend interconnection services on contract basis provided to companies „Sicres” LLC, „ARAX-IMPEX” LLC, CC „Starnet” LLC, for the reason that the latter failed to pay for services. This dispute was solved as a result of the consultations held by the Agency with the parties involved. Similar was the result of the disputes between JSC “MOLDTELECOM” and alternative providers “Arax-Impex” LLC, “Sicres” LLC, “Telemedia Group” JSC – disputes generated by lack of valid interconnection agreements between parties. The disputes were also solved with the assistance of the Agency. As a result of the consultations, JSC “MOLDTELECOM” and the alternative providers signed agreements on extending contractual relations, subsequently being submitted to the Agency.

6. End-Users’ Rights Protection
6.1 User Protection Measures

As provided in Art. 13 of the Law on Electronic Communications and Art. 23 of the Law on Consumer Protection, ANRCETI is assigned with the function to protect the users of electronic communications. In this respect, the Agency is authorized to develop regulations on user protection, examine and solve users’ petitions, collaborate with organizations representing users’ interests, provide the latter, as well as the users with
information concerning the activity of public electronic communications network and/or service providers.

The Agency promotes end-users interests in their relation to providers by applying the dispute resolution procedure, defined by the new Regulations on Dispute Resolution Procedure in Electronic Communications. It provides that, where the users and providers fail to amiably solve the dispute, they have the right call for the Agency to act as mediator. The Agency, in its turn, is bound to take all legal steps to assist the parties in the matter.

In exercising its consumer protection function, in 2008, the Agency focused on moving on with activities meant to inform end-users regarding their rights and the provider’s user-related obligations. Therefore, in 2008, the Agency completed its Web site with the “User’s Page”, comprising several compartments, including the “User’s Guide”, with useful data for the users of electronic communications services on their rights and obligations, with recommendations helpful in choosing the services they need. The „User’s Page” offers answers to FAQs referred to the Agency and practical advice on fixed, mobile and Internet access issues.

Visitors may request consultations and answers both on-line and by telephone hotline 080080080, free of charge. Calls are taken by the Agency on business days, during business hours. Users alleging infringement of their rights and interests, use the hotline to address to the Agency for help. Such calls are duly registered and examined. Responses are offered by phone or by mail.

Another priority for the Agency in 2008 was the realization of the Plan for the Implementation of the National Consumer Protection Strategy for 2008-2012. The Plan provides for measures to be taken by electronic communications service providers in order to ensure service quality indicators, to have clauses meant to protect the legal rights and interests of end-users included in service provision contracts.

In this respect, the control actions performed by the Agency in 2008 focused on verifying compliance with the service quality requirements contained in the normative acts in force and quality indicators as declared in the commercial offers.

6.2 Petition Examination

For the purpose of end-user protection, the Agency is assigned with another priority task – to examine and solve petitions sent by end-users of electronic communications services. In the reporting period the Agency examined 108 petitions by end-users – legal and natural persons – complaining on different aspects of electronic communications service provision. Also, the Agency processed and replied to 50 requests for access to information and 582 solicitations of technological, economic and legal nature from market players.

In respect to the issues raised in petitions, noteworthy is that in most of them the signees claimed defective fixed and mobile services; their unconformity with the conditions laid down in legal and normative acts, in service provision contracts (35%) and contested the amounts charged for services (18%). Part of the petitioners (17%) claimed poor service quality, clandestine connections or malfunctions in telephone or Internet service provision, whereas another part (10%) contested various conditions included in service provision contracts and the lawfulness of the provision of certain services. The rest (12%) complained on other aspects related to the use of electronic communications services. The Agency also received 9 joint petitions (8%) signed by groups of users, who are seriously concerned about the electromagnetic waves
propagated by electronic communications equipment having a negative impacts on their health.

The absolute majority of claims notified by petitioners were subject to investigation: 80% from the office and 20% on the site. The investigation work revealed 34 (35%) grounded petitions and 62 (65%) groundless. 12 petitions were processed in January 2009.

Table 1.2 Petitions Processed in 2008

<table>
<thead>
<tr>
<th>Total Number</th>
<th>108</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petitions per issue of interest</td>
<td></td>
</tr>
<tr>
<td>▪ Fixed telephone services</td>
<td>28</td>
</tr>
<tr>
<td>▪ Mobile telephone services</td>
<td>32</td>
</tr>
<tr>
<td>▪ Cable TV services</td>
<td>14</td>
</tr>
<tr>
<td>▪ Internet Services</td>
<td>13</td>
</tr>
<tr>
<td>▪ Interconnection, access to infrastructure services</td>
<td>16</td>
</tr>
<tr>
<td>▪ Others</td>
<td>5</td>
</tr>
<tr>
<td>Aspects of complaints</td>
<td></td>
</tr>
<tr>
<td>▪ Correctness of fixed and mobile telephone service provision</td>
<td>38</td>
</tr>
<tr>
<td>▪ Data included in bills</td>
<td>19</td>
</tr>
<tr>
<td>▪ Service quality</td>
<td>18</td>
</tr>
<tr>
<td>▪ Concerns about negative impact of electromagnetic waves on human health</td>
<td>9</td>
</tr>
<tr>
<td>▪ Conditions included in service provision contracts, lawfulness of service provision</td>
<td>16</td>
</tr>
<tr>
<td>▪ Others</td>
<td>8</td>
</tr>
<tr>
<td>Providers mentioned in petitions</td>
<td></td>
</tr>
<tr>
<td>▪ JSC “MOLDTELECOM”</td>
<td>39</td>
</tr>
<tr>
<td>▪ JSC “MOLDCELL”</td>
<td>19</td>
</tr>
<tr>
<td>▪ JV “Sun Communications” LLC</td>
<td>10</td>
</tr>
<tr>
<td>▪ JSC ”Orange - Moldova”</td>
<td>13</td>
</tr>
<tr>
<td>▪ LLC “Eventis”</td>
<td>3</td>
</tr>
<tr>
<td>▪ LLC “Telcom Technologies”</td>
<td>3</td>
</tr>
<tr>
<td>▪ others</td>
<td>21</td>
</tr>
<tr>
<td>Petitions signed by natural persons</td>
<td>67</td>
</tr>
<tr>
<td>Petitions signed by legal persons</td>
<td>41</td>
</tr>
<tr>
<td>Founded petitions</td>
<td>34</td>
</tr>
<tr>
<td>Unfounded petitions</td>
<td>62</td>
</tr>
<tr>
<td>Pending petitions</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: ANRCETI
As a result of ANRCETI interference, 24 petitions were integrally or partially solved, whereas alternative solutions were proposed to 10 petitions. The Agency notified the providers on the complaints and required that they take actions to cease breaches.

7. Relations with the Public and Mass Media

In the reporting period, the communication between the Agency and the public, in particular with mass media was mainly focused on three issues:

- providing information to all the participants to electronic communications market and the public at large about the new regulatory acts developed and adopted by the Agency for the enforcement of the Law on Electronic Communications;
- developing, launching and updating on timely basis the new Web site of the Agency;
- Implementation of actions proposed for the development of the Agency informational system, creation of an Intranet network and ensuring its functionality, as well as the internal data base.

Informing the public about the Agency, its activities of public interest, decisions and evolutions of the electronic communications market was the task assigned to Mass Media and IT Service. The Service prepared and disseminated information concerning all the approved regulations and Administrative Board decisions, that exert a major impact on the market, as well as press releases reflecting the trends of market development in terms of fixed, mobile and Internet access services, the latter being issued after the service providers presented their annual and quarterly statistical reports. All this information is available on the Web site, part of it was published in the written and electronic press.

In the reporting timeframe, two press conferences and a round-table, attended by representatives of the major press institutions of the country were hosted by the Agency. During one of the press-conferences, held on 20.05.2008, the Agency leadership made a comprehensive presentation of the Report on Activity and Evolution of Electronic Communications Market on 2007. During the other conference - on 31.07.2008 - The Agency presented the decision inviting the four mobile operators to apply for licenses for the use of radio frequencies and channels in the provision of 3G cell mobile networks and services. The round-table, held on 30.09.2008, brought to discussion the new facilities of access to the market for potential providers, established by the Law on Electronic Communications.

The Mass Media Service was in charge of coordinating the works for the creation of a new Web site of the Agency, held since August through December, 2008 – the day the Web site was launched.

The graphic formula and structure of the new Web site are absolutely new compared to the preceding one. It is a comprehensive information system providing access to multiple services, data bases and other useful sources. It is structured into 11 compartments, every one of which being divided into sub-compartments and reflecting practically all aspects pertaining to the Agency activity and the performance of the electronic communications and information technology market.

The new Web site offers downloadable electronic documents and standard forms for operating and potential providers. Both providers and users may choose to fill in the “On-line Letter Form” and receive response from the Agency concerning the matters of their interest. By means of the “Polls” on-line the Agency is inviting citizens to express opinions about its activity and about the situation on different market segments. The Web
site also provides search engines, enabling visitors to find information classified by certain criteria, including useful data about more than a thousand providers entered in the Public Register of Electronic Communications Network and Service Providers, statistical data on most recent market evolution.

In terms of the development of the Agency informational system, noteworthy is that in the reporting period the Mass-Media and IT Service took a number of steps of technical and organizational nature, related to the creation of data bases, Intranet network, ensuring viable operation of the local network and the servers. Therefore, an UPS system with additional batteries was installed to allow extension of servers’ functionality during power cuts. An internal (Intranet) site – an efficient working tool for the Agency staff - was launched for the purpose of facilitating the document-processing work. In the reporting period the conference room of the Agency was technically re-equipped, in particular by launching a wireless Wi-Fi network, installing a projector and a modern audio system, meant to ensure optimal conditions for public events organized under the auspices of the Agency.

8. International Relations and European Integration

The electronic communications sector in the Republic of Moldova has developed in close connection with the evolution of this sector globally and in particular, at European level, given that Moldova pursues European integration. Therefore, the dialogue with European partners made the Agency more responsive the implementation of European norms in the regulation of electronic communications sector in the Republic of Moldova. In 2008 ANRCETI met representatives of regulatory authorities from EU member Romania and Lithuania, for exchange of experience with respect to adapting EU regulatory practices to national electronic communications market, as well as for information exchange with European experts on building the administrative capacity of the Agency and improving the staff performance.

In June 2008, the Agency took part in a negotiation round with European Commission representatives within the 4th Cooperation Committee „Transport, energy, environment, information society, research, innovations and science“, where the participants analyzed the evolution of the electronic communications and information technology sectors in the Republic of Moldova in terms of its harmonization with EU norms.

In the reporting timeframe, the Agency continued to take part in the seminars and conferences organized by the International Telecommunications Union (ITU) and to provide the required data on the situation in the electronic communications sector of the Republic of Moldova. The Agency representatives attended the following ITU events:

- The first Global ICT Industry Leaders Forum and the Eighth Annual Global Symposium for Regulators (GSR), Pattaya, Thailand.
- Workshop on Transition from Analogue to Digital TV Networks, Bucharest, Romania
- Workshop on Broadband Connectivity: Technologies, Business Models, Policies and Strategies, Bucharest, Romania
- Workshop on Tariff Policy and Networks Interconnection, Odessa, Ukraine
- Workshop on Transition from Analogue to Digital Radio, Moscow, Russia

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In 2008, the Agency was also party to the regional project „Communications Sector Assessment“ financed by EBRD and implemented by the consulting company „Cullen International“. The purpose of the project lay in conducting a comparative analysis of the electronic communications development and looking into the legal and regulatory frameworks applied in a number of East European countries and in CIS, including the Republic of Moldova. The experts are to present to participant countries comments and proposals on how to improve the legal and regulatory frameworks, to implement international standards in this field.

One of the achievements of 2008 was the negotiation with the European Bank for reconstruction and Development (EBRD) on the technical assistance project for ANRCETI – “Communications Regulatory Development Project” - that received all the necessary approvals for funding. It is aimed at offering technical assistance for the implementation of a modern, transparent and predictable regulatory system, consistent with the EU norms and standards. The project is estimated at about 898,3 thousand euro, due to start in April 2009 and planned to last for 2 years.

The project will be mainly focused on two aspects: implementation of the regulations provided for in the Law on Electronic Communications and training the Agency staff in correct application of the theory and practice pertaining to electronic communications regulation, as required by EU norms. Foreign experts will also analyze in detail the legislation and the regulatory acts governing the electronic communications field in Moldova and provide recommendations for their improvement.

“Communications Regulatory Development Project” is the first technical assistance project offered by EBRD to the electronic communications regulatory authority from the Republic of Moldova, under the conditions of a fully liberalized market. At its origin, in 2000 – 2003, ANRCETI availed itself of a similar project financed by the United States of America for International Development (USAID).
II. EVOLUTION OF ELECTRONIC COMMUNICATIONS SERVICE MARKET IN 2008

1. General description

1.1 Methodology applied

This Report presents the information regarding market development in 2008, submitted to the Agency by electronic communications service and networks providers, as well as the data provided by the National Statistical Bureau (NSB) with respect to the Gross Domestic Product (GDP), number of stable population, households and their geographic distribution.

In its Reports for 2004-2007 the Agency used official data provided by NSB with respect to the number of present population. At the beginning of 2009 the NSB made publicly available the number of stable population of the Republic of Moldova and its evolution. Given the fact that the number of stable population more objectively than the previous indicator (present population) reflects the situation regarding penetration rates of electronic communications services, the authors of the Report herein have used the number of stable population as an indicator to calculate the penetration rate.

In order to ensure the comparability of penetration rate indicators in 2008 with the ones of previous years, the Agency re-calculated the penetration rates published in 2004-2007. As a result the fixed telephony penetration rate, in 2007, per 100 residents, was estimated at 30,15%, it being 31,53%, when calculated on basis of the number of present population. The mobile penetration rate for 2007 was estimated at 52,6%, it previously being 55%.

In the Report herein the electronic communications sector is divided into four markets: fixed telephony, mobile telephony, Internet access and data transport, audiovisual programs broadcasting and retransmission. Unlike the Annual Report for 2007, this one does not reflect the market of other services, such as the ones in the field of informatics, telecommunications networks construction and assemblage, etc. with the view of ensuring comparability of data, the Agency re-calculated the market value for the previous years., taking into account the markets presented in the Report herein. So, the re-calculated value of the electronic communications sector in 2007 is estimated at 5 billion 099,5 million lei.

1.2. Basic Indicators

In 2008 electronic communications topped the list of the most dynamic national economy sectors. In this period, most of the market segments were marked by stable tendencies of growth, except the fixed telephony sector, which decreased by 5,85%. As the statistical data submitted to the Agency by providers, the total sales volume on the electronic communications service market increased in 2008, compared to 2007, by 12,3%, and showed 5 billion 725,4 million lei (Chart 1). In relation to the country’s GDP (62,84 billion lei), the value of the electronic communications sector was estimated at 9,11%.
In 2008, in terms of turnover, the electronic communications providers are distributed as follows: SA”MOLDTELEOM” – 42.6%, SA”ORANGE Moldova” – 34.9% and SA”MOLDCELL” -13.4%. The obtained almost 91% of the electronic communications sector revenue.

Though the total sales volume in this sector in 2008 was ascending, the pace of growth -12.3% - was lower than in the previous years. It is the result of the signs of decline, evident on some segments of the fixed telephony market (Chart 2).
Compared to 2007, the fixed telephony share in the market structure decreased, in 2008, by 7.4 percentage points, whereas the share of mobile telephony, Internet access and audiovisual services increased by 4.3; 2 and, accordingly, by 1.1 percentage points. Thus the mobile market share was estimated, in 2008, at 50.9% (Chart 3).
1.3 Investments

In the reporting timeframe, the total investments in electronic communications increased by 1.8%, amounting at 1.96 billion lei (Chart 4). The biggest investors were the three significant providers, who jointly invested over 75% of the total: SA”MOLDTELEOM” – 23.9%, SA”ORANGE Moldova” – 36.6% and SA”MOLDCELL” -14.8%.

The decline in the rhythm of investment increase, compared to the previous years, is explained by the decrease, in 2008, in the volume of investment in fixed networks. Though the investments in mobile networks, Internet and audiovisual networks increased dynamically, the decrease of investments into fixed networks by 21.1% leveled the growing effect on the other market segments (Chart 5).
In the reporting period, the highest per cent of investment belongs to mobile networks – 64.4% of the total volume, a 4.4 percentage points increase over 2007 (Chart 6).
1.4 Subscribers and Penetration

According to the number of subscribers, the mobile telephony was leading the electronic communications market (Chart 7). On the one hand it is due to the characteristics of the service use (mobile services are personal, while fixed, Internet access and audiovisual services belong to all members of a family or staff of a company). On the other hand, the mobile telephony services are most widely used by mobile customers.

Statistical data show that 61.7% of the total number of subscribers/users of electronic communications services are mobile users, whereas 28.4% - fixed telephony user. (Chart 8)

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1 The sector of audiovisual programs broadcasting and re-transmission include the subscribers to multi-channel cable and coded air (MMDS), DTH.
2 The sector of audiovisual programs broadcasting and re-transmission include the subscribers to multi-channel cable TV, MMDS, DHT
As a result, in terms of electronic communications service penetration, the highest rates belong to the fixed telephony market, the lowest – to Internet access market and multi-channel audio-visual service markets. (cable TV, MMDS, DTH) (Chart 9)
2. Fixed Telephony Service Sector

2.1 Providers

In 2008, 16 providers run their activity on the local fixed telephony market, two more joining the market after 2007. The main market player is still SA„MOLDTELECOM”. Other providers, such as IS „Calea Ferata din Moldova”, SA, „Riscom” “Arax-Impex” SRL, “Sieres” SRL, „Starnet” SRL, „Transneogrup” SRL, in terms of turnover, held less than 2,8% of the market.

2.2. Revenue

In 2008, the total sales volume on the fixed telephony market was 2,208 billion lei - 5,85% decrease, compared to 2007 (Chart 10). The alternative providers’ turnover was 60,12 million lei, - 15,02% decrease, whereas their market share decreased from 3,02% to 2,72%. At the same time, the sales of the incumbent SA „MOLDTELECOM” equaled to 2 billion 148, which is a 5,57% decrease, whereas his market share increased from 96,98%, in 2007, to 97,28%, in 2008.

The highest share in the structure of the fixed providers’ turnover–51.7% - referred to the revenues from international calls (Chart 11), 17.3% - calls to mobile and 8.9% - revenues from subscriptions.
In 2008, the average revenue per user (ARPU) was 167.8 lei – a decrease by 18.6 lei or by 9.97%. The decrease occurred mostly due to the fixed-mobile substitution, which generates reduction of traffic volume in fixed networks.

2.3. Investments
In the reporting period, the total investments in fixed networks decreased by about 21.17% (-130.3 million lei), compared to 2007 and equaled to 485.25 million lei.

The bulk – 469.9 million lei or 96.85% of the total was invested by SA „MOLDTELECOM” (Chart 12). Alternative providers invested 15.25 million lei or 3.14% of the total investments in this sector. In 2007, the incumbent invested 607.4 million lei or 98.69% of the total.
The factors that account for the reduction of investment in fixed networks are market maturity, as well as the pressure of mobile communications onto the fixed ones, which increases the market risk of investments in fixed networks. Another reason of reduced investments in fixed networks is the replacement of traditional PSTN and ISDN networks with IP networks, less costly and more economically efficient.

2.4 Subscribers and Penetration

The number of fixed telephony subscribers increased by 34,69 thousand, or by 3,21%, and exceeded 1 million 114 thousand. SA „MOLDTELECOM” connected to its networks 31,39 thousand new subscribers or 90,5% of the total connections, whereas the alternative providers - 2,29 thousand or 9,5% of connections.

About 18,5% of the new fixed subscribers were connected by SA „MOLDTELECOM” by means of radio access, based on CDMA2000 (450 MHz) technology. The number of these subscribers increased by about 8,75%: from 66,32 thousand in 2007, to 72,12 thousand in 2008.

Among alternative providers, „Arax-Impex” SRL and „Sicres” SRL had the highest number of subscribers in 2008 - 0,64% and 0,56% of the total of fixed subscribers.

As a result of the 3,21% increase in the number of fixed telephony subscribers, the fixed penetration rate per 100 inhabitants also increased, from 30,15%, in 2007, to 31,2%, in 2008 (Chart 13).
In terms of fixed penetration rates, the Republic of Moldova is situated among the newly acceding EU member states (Chart 14).

**Source:** European Commission, Progress Report on the Single European Electronic Communications Market 2007 (13th report)
In 2008, according to the number of subscribers, SA „MOLDTELECOM“, like in the previous years held the biggest market share - over 97,6%. The other 15 alternative providers shared the rest 2,33% (Table 2.1).

Table 2.1. Market shares of fixed telephony service providers that hold, in terms of subscribers, over 0,1% of the market

<table>
<thead>
<tr>
<th>Provider</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moldtelecom</td>
<td>100,00%</td>
<td>99,41%</td>
<td>98,64%</td>
<td>97,87%</td>
<td>97,67%</td>
</tr>
<tr>
<td>Arax-Impex</td>
<td>0,00%</td>
<td>0,00%</td>
<td>0,28%</td>
<td>0,62%</td>
<td>0,64%</td>
</tr>
<tr>
<td>Sicres</td>
<td>0,00%</td>
<td>0,00%</td>
<td>0,30%</td>
<td>0,58%</td>
<td>0,56%</td>
</tr>
<tr>
<td>Calea Ferata din Moldova</td>
<td>0,00%</td>
<td>0,57%</td>
<td>0,43%</td>
<td>0,44%</td>
<td>0,36%</td>
</tr>
<tr>
<td>Telemedia Group</td>
<td>0,00%</td>
<td>0,01%</td>
<td>0,24%</td>
<td>0,28%</td>
<td>0,29%</td>
</tr>
<tr>
<td>Riscom</td>
<td>0,00%</td>
<td>0,00%</td>
<td>0,08%</td>
<td>0,10%</td>
<td>0,33%</td>
</tr>
</tbody>
</table>

In 2008, the structure of telephone lines did not undergo essential changes. Of the total number of telephone lines, the basic ones made 88,18%, the coupled ones - 4,12%, the ones with radio access through CDMA2000 1x technology - 6,54 %. In the reporting timeframe, the absolute majority (82,03% ) of the 1,13 million lines that can be connected (the mounted capacity), were the lines connected to digital exchanges or IP-switched exchanges (Chart 15). Their number grew over 2007 by 3,98%. But the number of lines connected to analogue exchanges decreased by 21,12%, their share coming down to 17,97%. The increase of digital exchange mounted capacities occurred due to new network capacities including WLL and IP/NGN, as well as due to the replacement of analogue by digital capacities, channel-switched or package-switched.

2.5. Use of Services

In the reporting timeframe, the total traffic in fixed networks decreased by 5,32%, compared to 2007, constituting 4,974 billion minutes (Chart 16). This decrease was
caused by a lower traffic volume for most traffic types: local, long-distance, interconnection traffic.

In 2008, the structure of traffic did not suffer any essential changes over 2007 (Chart 17). The traffic of calls within the providers’ own fixed networks prevailed with 67.53% of the total, however it registered a slight decrease compared to 68.8% of 2007.
The analysis of the traffic in fixed networks shows that the share of the local traffic in the total traffic structure continued to decrease – in 2008 – by 1.32 percentage points. This tendency occurred due to the increase of network externalities for fixed telephony providers, as well as due to the migration of traditionally fixed traffic to mobile or IP networks. Also noteworthy is that in 2008, compared to 2007, the international incoming/outgoing traffic share increased by 4.03 percentage points.

2.6. Access to Fixed Telephony Services in Administrative Units

In 2008, the fixed telephony penetration, per 100 inhabitants, was 31.2%. The penetration rate of these services, according to the mounted capacity, established in the Program for Nationwide Telephone Installation for 2005-2010 (approved by Government Decree no.1234 of 10.11.2004) as 31.1% for 2008, was exceeded by 0.1 percentage points.

The fixed penetration per households reached 96.94%: in urban areas - 132.23%, in rural areas – 73.18% (Table 2.2).

Table 2.2. Penetration of fixed telephony services per administrative units

<table>
<thead>
<tr>
<th>No.</th>
<th>Locality</th>
<th>Penetration of fixed telephony services:</th>
<th>Share of lines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TOTAL per households</td>
<td>in urban localities</td>
</tr>
<tr>
<td>1</td>
<td>Chisinau municipality</td>
<td>139.27%</td>
<td>N/D</td>
</tr>
<tr>
<td>2</td>
<td>UTA Gagauz-Eri</td>
<td>124.23%</td>
<td>112.03%</td>
</tr>
<tr>
<td>3</td>
<td>Balti municipality</td>
<td>108.25%</td>
<td>N/D</td>
</tr>
<tr>
<td>4</td>
<td>District Calarasi</td>
<td>96.20%</td>
<td>118.56%</td>
</tr>
<tr>
<td>5</td>
<td>District Ialoveni</td>
<td>95.36%</td>
<td>123.31%</td>
</tr>
<tr>
<td>6</td>
<td>District Taraclia</td>
<td>90.51%</td>
<td>107.71%</td>
</tr>
<tr>
<td>7</td>
<td>District Cimislița¹</td>
<td>89.69%</td>
<td>118.40%</td>
</tr>
<tr>
<td>8</td>
<td>District Nisporeni</td>
<td>88.07%</td>
<td>118.51%</td>
</tr>
<tr>
<td>9</td>
<td>District Orhei</td>
<td>87.28%</td>
<td>132.14%</td>
</tr>
<tr>
<td>10</td>
<td>District Donduseni</td>
<td>86.49%</td>
<td>97.44%</td>
</tr>
<tr>
<td>11</td>
<td>District Straseni</td>
<td>86.16%</td>
<td>107.41%</td>
</tr>
<tr>
<td>12</td>
<td>District Soroca</td>
<td>84.82%</td>
<td>134.29%</td>
</tr>
<tr>
<td>13</td>
<td>District Causeni</td>
<td>84.59%</td>
<td>107.17%</td>
</tr>
<tr>
<td>14</td>
<td>District Briceni</td>
<td>83.90%</td>
<td>115.42%</td>
</tr>
<tr>
<td>15</td>
<td>District Ghidighici</td>
<td>83.77%</td>
<td>114.58%</td>
</tr>
<tr>
<td>16</td>
<td>District Stefan Voda</td>
<td>83.62%</td>
<td>125.77%</td>
</tr>
<tr>
<td>17</td>
<td>District Hincesti</td>
<td>82.81%</td>
<td>113.26%</td>
</tr>
<tr>
<td>18</td>
<td>District Ungheni</td>
<td>82.78%</td>
<td>105.61%</td>
</tr>
<tr>
<td>19</td>
<td>District Telenesti</td>
<td>81.25%</td>
<td>117.07%</td>
</tr>
<tr>
<td>20</td>
<td>District Anei Noi</td>
<td>81.12%</td>
<td>137.12%</td>
</tr>
<tr>
<td>21</td>
<td>District Criuleni</td>
<td>81.18%</td>
<td>119.66%</td>
</tr>
<tr>
<td>22</td>
<td>District Leova</td>
<td>81.05%</td>
<td>107.06%</td>
</tr>
<tr>
<td>23</td>
<td>District Singerei</td>
<td>80.23%</td>
<td>105.57%</td>
</tr>
<tr>
<td>24</td>
<td>District Edinet</td>
<td>80.19%</td>
<td>106.90%</td>
</tr>
</tbody>
</table>

³ The data regarding penetration in districts Rezina, Cimislița and Criuleni reflect the average weighted value of penetration in districts Rezina and Soldanesti, Cimislița and Basarabeasca, Criuleni and Dubasari, accordingly.
2.7. Conclusions

The fixed telephony sector has reached the stage of maturity, whereas on some segments shows decline. So, in 2008 the number of subscribers, the number of subscriber increased by 3.21%, while the market value decreased by over 5%.

Basically, the fixed telephony market in R. Moldova is developing according to the general trend of becoming more restricted. This trend is caused by the fixed-mobile and by IP-fixed replacement. In future the phenomenon of fixed-mobile replacement is expected to cause continual decrease of traffic in fixed networks and the revenues thereof, while the IP replacement will lead to tariff cuts for fixed telephony services. As a result, the revenues of fixed telephony providers will also drop. With respect to the objective need of re-adjusting the tariffs applied by the main player on the fixed market - SA „MOLDTELECOM”, the alignment to costs will allow short-term stabilization of revenues generated by fixed telephony services. Also, the migration of fixed traffic to mobile networks could be followed by the migration of fixed subscribers to mobile.

As a long-term follow-up, the restriction of traditional fixed telephony service market is inevitable, in terms of revenues, subscribers, traffic. The increase of the fixed penetration rate could stop and a part of the social functions currently exercised by the fixed telephony will be taken over by mobile telephony. In order to stop the decline or even to re-launch the fixed telephony market in terms of subscribers, it is absolutely necessary to develop VoIP services, in particular Voice over Broadband. The experience of European states prove that despite stagnation in this sector, the number of fixed subscribers could increase, provided that the VoIP services are implemented, there is competition on the broadband Internet access segment and a well-balanced interconnection framework, based on cost-oriented prices, is implemented. The imminent decrease of revenues on this sector will impel the providers (especially the incumbent) to run business more efficiently, to ensure gradual migration of PSTN/ISDN networks to IP ones and to invest in broadband.

3. Mobile Telephony Service Sector

3.1 Providers

In 2008, four providers offered mobile telephony services: SA „ORANGE MOLDOVA”, SA „MOLDCELL”, SRL „EVENTIS MOBILE” in GSM standard and SA „MOLDTELECOM”, under the brand „UNITE” in CDMA 2000 standard, 450 MHz frequency.


Table 2.3. Mobile telephony service providers and technologies applied

<table>
<thead>
<tr>
<th>Provider</th>
<th>GSM</th>
<th>CDMA 1x/EV-DO</th>
<th>GPRS</th>
<th>EDGE</th>
<th>HSPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM „ORANGE MOLDOVA” SA</td>
<td>−</td>
<td>−</td>
<td></td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>IM „MOLDCELL” SA</td>
<td>−</td>
<td>−</td>
<td></td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>IS „MOLDTELECOM” SA</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>IM „EVENTIS Mobile” SRL</td>
<td>−</td>
<td>−</td>
<td></td>
<td>−</td>
<td>−</td>
</tr>
</tbody>
</table>

3.2 Revenue

In the reporting period, the total volume of sales realized by mobile telephony providers 2 reached billion 914,7 million lei, which is a 22,6% or 537,5 million lei increase over 2007 (Chart 18).

This increase was determined mostly by the increase in the turnover of SA „ORANGE MOLDOVA” by 19,4% (+324,65 million lei). The sales of SA „MOLDCELL” increased by 15,3% (+101,8 million lei), while the sales of SA „MOLDTELECOM” – 3,5 times (+99,2 million lei). So, in 2008 SA”ORANGE
MOLDOVA’ s turnover exceeded 1,99 billion lei, SA „MOLDCELL” s turnover – 767,2 million lei, SA „MOLDTELECOM” – 138,4 million lei and a SRL” EVENTIS Mobile” – 11,9 million lei (Chart 19).

According to turnover, the mobile market was shared as follows: SA”ORANGE MOLDOVA” - 68,2%, SA „MOLDCELL” – 26,3%, SA „MOLDTELECOM” – 4,7%, and SRL”EVENTIS Mobile” – over 0,4% (Chart 20).
In the structure of the turnover, the highest share of 2008 - 61.8% - referred to the revenues generated by voice services, 29.1% - generated from interconnection services and 6% - from SMS services (Chart 21).

In 2008 the Average Revenue per User (ARPU), estimated by mobile telephony providers, was 112.8 lei or 10.9 USD\(^4\). The highest ARPU – 152 lei – was registered by SA „MOLDTELECOM”. SA ”ORANGE MOLDOVA” ARPU was estimated at 114.9 lei, SA „MOLDCELL” – 103.5 lei, and SRL,, EVENTIS MOBILE” - 90.8 lei (Chart 22).

\(^4\) Determined based on official average exchange rate of MDL/USD 10,3895 lei, according to the National Bank data.
3.3 Investments

In 2008, the volume of investments in mobile telephony sector increased by 5.7% over 2007 and was estimated at 1 billion 224.6 million lei. The most considerable amount was invested by SA „ORANGE MOLDOVA” - 58.62%, followed by SA „MOLDCELL” – 23.75%, SA „MOLDTELECOM” – 9.8% and SRL„EVENTIS MOBILE” - 7.83%.

3.4 Users and Penetration

In 2008, the number of mobile telephony users reached 2 million 423.4 thousand, a 28.7% or 540.6 thousand increase over 2007 (Chart 23).
The highest increase in the subscriber base in 2008 was registered by SA „ORANGE MOLDOVA“ - by 355.3 thousand or by 27.9% over 2007. On December 31 this provider had over 1.6 million users. The number of SA „MOLDCELL“ users increased by 22% and was estimated at 679 thousand. SA „MOLDTELECOM“ subscriber base was estimated at 98 thousand – a 83.2% or +44.6 thousand increase. SRL „EVENTIS MOBILE“ connected 17.7 thousand new subscribers to its network, the total number being estimated at 19.8 thousand (Chart 24).
In 2008, the market structure, according to the number of subscribers, did not undergo essential changes. The market shares were distributed as follows: SA „ORANGE MOLDOVA” - 67.1%, SA „MOLDCELL” - over 28%, SA „MOLDTELECOM” - 4.05% and SRL”EVENTIS MOBILE” – 0.82% (Chart 25).
Due to the significant increase of the number of users, the mobile penetration rate per 100 inhabitants increased in 2008 by 28.9% (15.2 percentage points) over 2007 and was estimated at 67.8% (Chart 26).

Compared to the average mobile penetration in other European states, the mobile penetration rate in the R. Moldova is still low and has much room for development (Chart 27).

Source: European Commission (data for EU member states at the end of 2007). IKS-Consulting (for Ukraine, data as per 31.07.2008)
Though pre-paid card users continued to prevail in the structure of mobile telephony subscribers, their number decreased, while the number of post-paid subscribers increased over 2007 by 3.9 percentage points (Chart 28).

3.5 Use of Services

In 2008, the total voice traffic in public mobile networks increased by 79.6% over 2007 and was estimated at 2.67 billion minutes (Chart 29).
The analysis of statistical data reported by providers show a significant increase of all traffic types. The intra-mobile traffic was reported to increase at the highest pace (+118.8%), the international traffic - (+65.7%) and the inter-mobile networks traffic - (+60.9%). The traffic with fixed networks increased by 10.8%, this increase being slower than the pace of increase in the number of mobile telephony users.

In the structure of mobile traffic the shares of intra-network calls and international calls increased significantly, whereas the share of other types of traffic slightly decreased (Chart 30).

The tendency of voice traffic increase in mobile networks was maintained by the significant increase in the number of SMS messages sent (Chart 31).
Out of the total 1,03 billion SMS, 71,4% were sent by the users of SA”ORANGE MOLDOVA” and 27,3% - by the users of SA „MOLDCELL”. The rest 1,3% of the total were SMS messages sent by users of SA „MOLDTELECOM” and SRL”EVENTIS MOBILE”.

3.6 Coverage

According to the reports submitted to the Agency by providers, as per December 31, 2008, the 2G network operated by SA „ORANGE MOLDOVA” covered 97,88% (+2,27 percentage points) of Moldova territory and 99,2%(+1,02 percentage points) of the country’s population SA „MOLDCELL” - 96,46% of the territory (+1,63 percentage points) and 96,02% (+3,23 percentage points) of the population. SA „MOLDTELECOM” reported 97,2% geographic coverage of its CDMA 2000 1xRTT network and 92.1% of the country’s population, whereas SRL”EVENTIS MOBILE” - 39,0% and 48,0% accordingly.

3.7 Conclusions

The results accomplished in 2008 prove that mobile telephony continues to be one of the most dynamic sectors of the country’s electronic communications market. Though the mobile penetration rate reached 67,8% in 2008, it is still much lower than the penetration rate in neighboring countries.

In the autumn of 2008 the providers launched new data transport services via mobile networks based on 3G Video Call and 3G mobile Internet technologies. The provision of mobile Internet access services and additional services via mobile networks will constitute an important factor towards the increase in mobile sales. The Agency expects another 3G mobile network to be launched in 2009 - HSPA. As estimated by the Agency, the mobile Internet providers will exercise a certain pressure on wireless broadband access technologies.
The traffic in mobile networks will continue to grow, especially the traffic in the providers’ own networks – a tendency strengthened in the recent years. This can be an indicator of possibly high prices for interconnection services between mobile service providers.

4. Internet Access and Data Transport Service Sector

4.1 Providers

In 2008, the Internet access and data transport market had 56 providers. The first ten providers that jointly held 95% of the market in terms of turnover are: SA “MOLDTELECOM” (60,3%), SRL „Starnet” (9%), SA ”Telemedia Group” (6,3%), SRL” Sun Communications” (5,4%), IS „Centrul de Telecomunicatii Speciale” (4,3%), IS„Molldata” (3,1%), SRL „Arax-Impex” (2,7%), SRL „Globnet” (1,8%), SRL „Danis Net” (0,9%) and AO”Renam” (0,8%).

4.2 Revenue

The volume of sales registered in 2008 by the Internet access and data transport providers was estimated at 366,1 million lei, a 61,8% increase over 2007. Of this total, 220,6 million lei belong to SA”MOLDTELECOM”, 33 million – to SRL”Starnet”, 22,9 million – to SA”Telemedia Group”. The rest of providers had a joint turnover estimated at 89,6 million lei (Chart 32).

![Chart 32. Revenue of the main Internet access and transport data service providers, in thousands lei](image)

The leading position on this market segment, in terms of turnover, was maintained by SA „MOLDTELECOM” - 60,3% in 2008, followed by company „Starnet” - 9,0%, SA „Telemedia Group” – 6,3%, other providers – 24,5% of the market (Chart 33).
4.3 Investments

In the reporting timeframe, the investments in Internet access and data transport sector increased over 2007 by 39.67%, being estimated at 152.7 million lei (Chart 34). SA”MOLDTELECOM” invested - 68.1% of the total and SRL „Starnet” - 20.1%.
4.4 Subscribers and Penetration
The number of subscribers to Internet access services at fixed locations increased, in 2008, by 41.4% and reached 155,78 thousand, of which 40,67 thousand\(^5\) are dial-up subscribers and over 115,1 thousand– broadband subscribers (Chart 35).

It should be mentioned that the number of dial-up clients diminished for the first time in the history of the Internet in Moldova, whereas the number of broadband subscribers significantly increased (Chart 36), due to the launching of new offers for broadband Internet access, geographic extension of services and the migration of dial up clients to broadband.

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\(^{5}\) Including subscribers to dial-up services with no contract.
4.4.1 Internet Users at Mobile Locations

In the reporting timeframe, the total number of users of mobile Internet, based on GPRS/EDGE, HSPA, CDMA 2000 1x and EV-DO technologies, increased over 2007 by 115.4% and was estimated at 1 million 437 thousand, while the penetration rate of these services reached 40.28%. The high number of mobile Internet users is estimated mainly due to the use of WAP connections, GPRS/EDGE connections for personification of mobile phones, the use of phones as terminals and, least of all, due to the use of mobile phones as modems for Internet access from a PC or lap-tops.

4.4.2 3G Users

At the end of 2008, the 3G mobile service providers – SA „MOLDCELL” and SA”ORANGE MOLDOVA” – reported to have 188,3 thousand 3G users, distributed as follows: S.A. SA „MOLDCELL”– over 182,1 thousand users and SA ”ORANGE MOLDOVA” – over 6,2 thousand users. The difference in the number of users of the two providers is conditioned by the fact that, in the reporting timeframe, SA „MOLDCELL”, in order to test its networks, offered its clients the possibility to use 3G services for free.

4.4.3 Penetration of Internet Access Services at Fixed Locations

At the end of 2008 the penetration rates were the following: Internet access at fixed locations, per 100 inhabitants, 4.37%, broadband Internet –3.23% (Chart 37).
The penetration rate of Internet access services per households increased over 2007 by 4 percentage points and was estimated at 13.76 subscribers per 100 households, of which 10.17 are broadband subscribers (Chart 38).
4.4.4. Broadband Internet Access Service

In 2008, the segment of broadband Internet access services grew significantly. Thus, the number of subscribers to these services increased by 144.1%: from 47,2 thousand in 2007 to 115,12 thousand in 2008 (Chart 39).

In the reporting timeframe, SA”MOLDTELECOM” held the biggest share of broadband Internet access market, depending on the number of subscribers – 71.6%, an increase by 15.5 percentage points over 2007 (Chart 40).
The increase of the market share of SA’’MOLDTELECOM’’ was caused by the increase in the number of its newly-connected subscribers, at a faster pace than the one reported by alternative operators (Chart 41).

In 2008, the increase in the number of net connections to the Internet via ADSL was exclusively determined by the connection of new subscribers by
SA”MOLDTELECOM”. As a result of this situation, SA”MOLDTELECOM” connected almost 54 thousand new subscribers to its network via ADSL, whereas all the alternative providers reported a reduction in their joint ADSL subscriber base (Chart 42).

The significant share of SA”MOLDTELECOM” in net broadband connections is owing, on the one hand, to the wide use of ADSL technology, and on the other hand, to the lack of effective access to the local loop for alternative providers, as well as to reduced infrastructure presence outside city Chisinau.

According to the type of technology used in the provision of broadband Internet access services, ADSL was the most widely spread form of access in 2008 (Chart 43).
In 2008, the number of ADSL Internet subscribers increased over 2007 by 145.7\% and was estimated at 78.2\% of the total broadband subscribers (Chart 44). Also the share of FTTH/LAN Internet subscribers increased by 4.1 percentage points.
The significant share of ADSL Internet subscribers is owing to the geographic availability of the telephone local loop, rapidity, simplicity and relatively small investments necessary for ADSL network operation.

Compared to the EU states, the penetration rate of broadband Internet access in R. Moldova is, for the time being, very low (Chart 45).

Chart 45. Penetration rates of broadband Internet access services in R. Moldova and some EU states

Source: European Commission (January 2008)
* The data with respect to Estonia, France, Lithuania, and Netherlands are from October 2007
* The data with respect to Ukraine – 3 quarter 2008. Source: IKS-Consulting

4.4.5. Development of Broadband Access in Territorial Units

The development of broadband Internet access services, territorially, is marked by a high concentration of subscribers in Chisinau municipality - 65.6% of the total of broadband subscriber sin the country. Broadband subscribers in urban areas make 91.78% of the total of country’s subscribers and ADSL subscribers make 78.19% (Table 2.4).

Table 2.4. Access to broadband services depending on territory and technology used

<table>
<thead>
<tr>
<th>No.</th>
<th>Administrative Unit</th>
<th>TOTAL broadband subscribers</th>
<th>Share of the total</th>
<th>Of which in:</th>
<th>Of which:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Urban localities</td>
<td>Rural localities</td>
<td>ADSL</td>
<td>FTTx</td>
</tr>
<tr>
<td>1</td>
<td>Chisinau Municipality</td>
<td>75 543</td>
<td>75 543</td>
<td>N/D</td>
<td>50 895</td>
</tr>
<tr>
<td>2</td>
<td>Balti Municipality</td>
<td>4 944</td>
<td>4 944</td>
<td>N/D</td>
<td>4 944</td>
</tr>
<tr>
<td>3</td>
<td>ATU Gagauz-Eri</td>
<td>3 531</td>
<td>2 524</td>
<td>1 007</td>
<td>3 531</td>
</tr>
<tr>
<td>4</td>
<td>District Ialoveni</td>
<td>2 041</td>
<td>952</td>
<td>1 089</td>
<td>2 041</td>
</tr>
</tbody>
</table>

6 The data refer to access at fixed locations and do not include 3G network users.
7 LAN subscribers
The FTTx/LAN networks and cable TV networks compete with ADSL networks only in Chisinau municipality for the time being. In other districts of the country the ADSL access is absolutely prevailing (Table 2.5).

Table 2.5. Penetration of broadband access services depending on territory and technology used

<table>
<thead>
<tr>
<th>No.</th>
<th>Administrative Unit</th>
<th>Broadband service penetration:</th>
<th>The use of broadband access technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>per households total</td>
<td>in urban localities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Chisinau municipality</td>
<td>30,8%</td>
<td>33,4%</td>
</tr>
</tbody>
</table>

---

8 Data with respect to subscribers from districts Cimislia, Rezina and Criuleni also include subscribers from districts Basarabeasca, Soldanesti and Dubasari.

9 The number of subscribers from districts Dubasari, Soldanesti and Basarabeasca is included in the number of subscribers from districts Criuleni, Rezina and, accordingly, Cimislia.

10 Subscribers to LAN.
The almost absolute use of ADSL technology for broadband connection in the localities outside Chisinau municipality, and in the majority of districts – only the ADSL technology, is owing to the geographic rollout of telephone networks, small additional investments for deployment of ADSL networks, as well as short time consumed for the works. On the other hand, the almost total lack of alternative high capacity infrastructure and leased line offers at reasonable prices nationwide represent impediments for competition on the broadband access market outside Chisinau municipality.

4.5 Conclusions

In 2008, the Internet access service market, especially broadband access, was the most dynamic segment of the electronic communications sector. This tendency is

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11 Data on service penetration in districts Cimislia, Rezina and Criuleni reflect the average weighted penetration in districts Cimislia and Basarabeasca, Rezina and Soldanesti, Criuleni and Dubasari, accordingly.
expected to last for 4-5 year. At the same time, Internet access penetration, in particular, broadband penetration, is reduced compared to this indicator European countries.

The development of alternative broadband service providers outside Chisinau municipality is more difficult because of the lack of alternative long-distance optic fiber infrastructure and high prices for leased lines. Also, the development of competition of this market is restricted by the lack of effective access of alternative providers to the local loop.

The development of access via FTTB in Chisinau municipality by alternative providers has its own geographic limits, while SA”MOLDTELECOM” could build own FTTB networks, capable to attract big part of the clients.

Presently, there are pre-requisites for the process of this market concentration to one single provider - SA”MOLDTELECOM”. Thus, the extension of broadband subscriber base outside Chisinau municipality can be determined mainly by the increase of SA”MOLDTELECOM” subscriber base.

The development of broadband access services in rural areas requires considerable efforts to reduce the existing digital divide. The Agency’s forecasts show that 3G networks will be developing rather slowly and in the next 4-5 years will cover only the big localities of the country. Under such circumstances, it is necessary to re-consider the spectrum allocations for digital television, especially in the frequency spectrum called Digital dividend (790-862 MHz) which is intended by a series of European countries to be allocated to next generation mobile communications services (LTE), in order to ensure efficient coverage of remote and low-density zones with broadband services.

ADSL is expected to further be the most widely-spread access technology and its share in the structure of total broadband subscriber number could grow to 80-85%.

In Chisinau municipality, namely in the sectors with high density of households (many-storied blocks), the development of broadband access networks will continue, taking into account the essential economies of density ensured by FTTH/LAN networks.

On order to extend broadband networks it is necessary to ensure the access to the local loop and sub-loop for the provision of FTTN/VDSL services. The development of PON networks in the R. Moldova seems to be a remote perspective.

The development of broadband access could be enhanced by regulatory actions, such as: promotion of free access to the local loop and sub-loop for alternative operators, shared use, of associated facilities (for ex. ducts, masts), cost orientation of tariffs applied by SA”MOLDTELECOM” in the provision of telephone services for end-users and prices for interconnection, the implementation of fixed geographic number portability between PSTN networks and Voice over Broadband, etc.

The perspective of alternative wire network development outside Chisinau to a high extent depends on the size of alternative operators and their financial capacities. From this point of view, the consolidation of alternative providers (M&A) or the market entry of other providers with significant financial power could give an impetus to regional competition in broadband access.

5. Audiovisual Program Broadcast and Re-transmission Service Sector
5.1 Providers

In the reporting timeframe, the market of audiovisual programs broadcast and re-transmission services was operated by 252 providers, of which 203 – provided services of television programs broadcast and re-transmission (TV service) and 49 – radio programs
(radio services). Most of the providers on this market (62.7%) operated on cable TV segment, 17.86% provided Radio services, 13.09% – air TV services and 2.38% – TV MMDS services.

5.2 Revenue

In 2008, the turnover reported by the providers of audiovisual programs broadcast and re-transmission services increased by 53.85% over 2007 and reached 235.76 million lei (Chart 46).

According to the data reported by the service providers, the highest turnover – de 107.86 million lei – was recorded in the air TV service sector, representing about 45.75% of the total (Chart 47). The revenues generated from cable TV service provision were estimated at 90.72 million lei, from air radio services – 37.18 million lei.
The Average Revenue per Users (ARPU) of a cable TV service providers was 38,32 lei. The most sizeable provider on this market segment – Sun Communications – reported 44,30 lei ARPU.

In 2008, the most significant market shares, in terms of turnover, were held by the following cable TV service providers: Sun Communications – 51,31% (+1,75 percentage points over 2007), AMT – 12,10% (-0,56 percentage points), CTC ALFA – 4,15% (-0,17 percentage points) (Chart 48).
5.3 Investments

In 2008 the investments in the audiovisual service sector grew over 2007 by 30.20% and was estimated at 58.25 million lei (Chart 49). The – 52.93 million lei (91%) – was invested in network equipment. In the air TV sector the investments grew by 564.54% and were estimated at 22.07 million lei, whereas in cable TV sector the investments decreased by 20.64% and were estimated at 28.1 million lei.
Depending on destination, the bulk of investments was made in cable TV sector – 48.26%.
37.88% of the total of investments were allocated to air TV service and 13.85% - to air radio service sectors (Chart 50).

![Chart 50. Distribution of investment on market segments](image)

5.4 Users and Penetration
In 2008, the number of users of coded cable and air (MMDS standard) multichannel TV services increased over 2007, by more than 37.64% and exceeded 236,6 thousand (Chart 51). The penetration rate of multichannel TV services also increased by about 1.8 percentage points and was estimated at 6.91%.
Most of the cable TV providers operated in district centers and rural localities, 20 of them provided cable TV services in Chisinau municipality. The bulk of the multichannel TV users - 53.02% - live in Chisinau municipality, whereas 46.98% - in other localities of the country (Chart 52).
In terms of the number of subscribers, the company Sun Communications was in the leading position on the cable TV market, with 42.39% share (Chart 53). Two more providers – AMT and Vertamar – held over 3% market shares.

In 2008, the absolute majority of multichannel TV service users – 96.55% - were subscribed to cable TV services, 3.45% - to coded air TV services.

The decrease in the number of coded air TV services by 12.18% is owing to the fact that since October 2008 the provider Sun Communications that used to have the biggest number of subscribers on this market segment, ceased the provision of services via MMDS.

Over 71% of multichannel TV service subscribers had access to over 30 channels (Chart 54).
5.5 Digital Television

The process of digital television implementation in the R. Moldova began in the second half of 2007, Sun Communications and Arax-Impex, using the DVB-C standard in cable TV networks.

At the end of 2008, the number of digital TV users was 5.23% of the total of cable TV users.

In the reporting timeframe, the provider SRL “Focussat Moldova” used the DTH (Direct To Home) standard for providing digital TV services via satellite. As per December 31, 2008 SRL “Focussat Moldova” had about 2 thousand subscribers.

5.6 Conclusions

According to the agency estimations, in 2009 the investments into the market of audiovisual programs broadcast and re-transmission are expected to continue growing. This tendency is determined by, mainly by the fact that the penetration of audiovisual services is still relatively low and this market is operated by providers that can offer comprehensive and diversified content for all the categories of users. The same estimations show that the number of cable TV providers from rural localities is going to reduce owing to their assimilation by more sizeable providers who are undergoing a new stage of extending their own networks. Like in the previous years, the tendency of migration from analogue to digital networks will persist, which will increase the number of digital TV service providers.
6. Conclusions and Prognosis

The analysis conducted by the Agency of the developments on electronic communications market in 2008 and in the previous years, as well as the pre-requisites existing on the market show that the Internet access service and mobile markets will also continue growing dynamically in 2009. As a result of the rapid increase of demand for high speed Internet and the migration of users from dial-up Internet to broadband, in 2009 the Agency expects the number of broadband subscribers at fixed location to increase by at least 50%, i.e. up to 170 -180 thousand subscribers. At the same time, the number of narrowband Internet users will continue to be in a dynamic decline (in 2009 – expected to decline by 50% compared to 2008). Simultaneously with the territorial extension of broadband services, the prices will become more affordable for the users, which will stimulate the process of narrowband-by-broadband replacement.

The mobile market is expected to be one of the most dynamic electronic communications markets. For 2009, the Agency expects the turnover of this market to increase by 18-20% and the penetration rate to reach 76 -79%. This expectation is based on the rationale that, in 2009, the 3G mobile market will extend, especially on the mobile Internet access segment, other additional services will be launched, as well as another 3G mobile network. Moreover, the mobile telephony has sufficient room for development. Though the mobile penetration rate per 100 inhabitants reached, in 2008, 67,8%, it is still lower than the 110% average penetration rate registered in European Union.

With respect to the fixed telephony, the Agency’s estimations show that in 2009 the number of fixed subscribers will grow slowly – by 2% over 2008. But this indicator can be significantly influenced by two essential factors: re-adjustment of tariffs, applied by SA „MOLDTELECOM“ and the development of VoIP offers. The fixed penetration rate could increase, in 2009 to 31,8% - 32%. However, it is unlikely that the fixed penetration rate will reach 35% by the end of 2010.

In 2009-2010 the revenues generated from the provision of fixed telephony services will continue to decrease. This tendency could be temporarily moderated by the adjustment of current fixed telephony tariffs to costs.

With reference to the market of audiovisual programs broadcast and re-transmission, The Agency estimates, for 2009, a more dynamic increase in the number of digital television users, due to the diversification of offers launched by digital TV providers, which give the possibility to the users to select high-quality TV programs at affordable prices.