OBSERVATOIRE EUROPÉEN DE L'AUDIOVISUEL
EUROPEAN AUDIOVISUAL OBSERVATORY
EUROPÄISCHE AUDIOVISUELLE INFORMATIONSSTELLE

Television and On-Demand Audiovisual Services in the Russian Federation

October 2011

A report for the
European Audiovisual Observatory
by J'son & Partners Consulting

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TELEVISION AND ON-DEMAND AUDIOVISUAL SERVICES IN THE RUSSIAN FEDERATION

A report by J'son & Partners Consulting for the European Audiovisual Observatory

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European Audiovisual Observatory (Council of Europe) **October 2011**

Table of contents

List of Figures

List of tables

Introduction. Marketing and technological classification of TV services

This report, commissioned by European Audiovisual Observatory, has been prepared by J'son & Partners Consulting. The classification of services used in this report is proposed by J'son & Partners Consulting.

Classification

This study includes several types of classification and covers all types of existing television broadcasting technologies, all types of terminals (devices that allow you to view the TV picture), as well as all the major business models for television and video services.

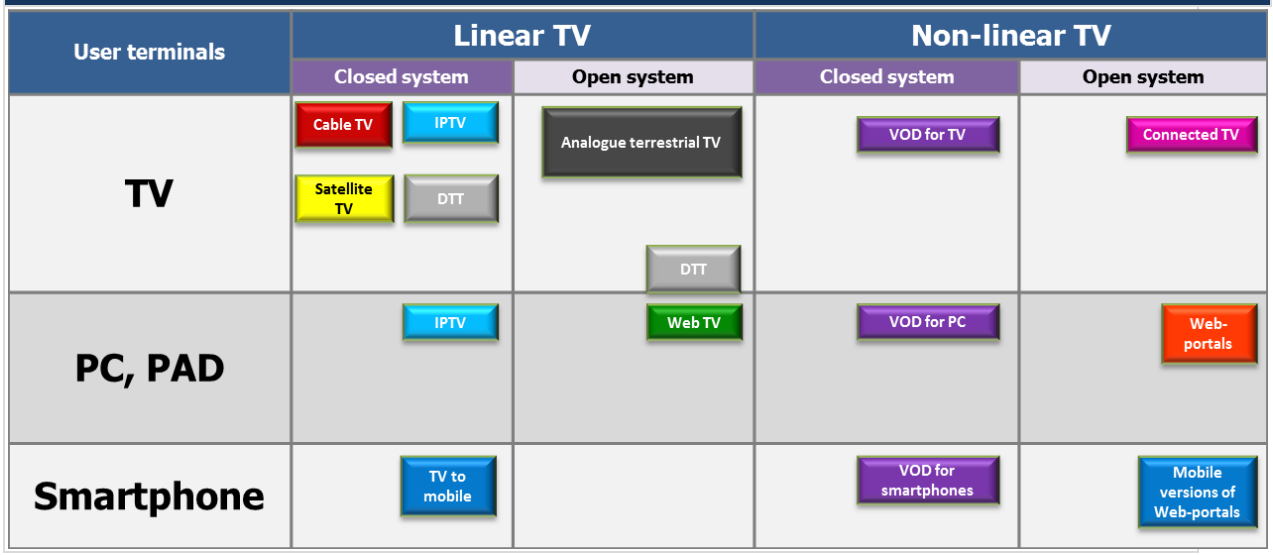
Technological and marketing classification covers linear and non-linear TV services and uses the terms of open and closed TV systems[1]:

- Closed systems allow access to content only over the network of the customer's service provider, who is the gatekeeper of all provided content.

- Open systems are not controlled by a single provider. Anyone having broadband access can access service providers' distributed content.

All TV services are also divided by type of receivers.

Fig. 1. Technological and marketing classification



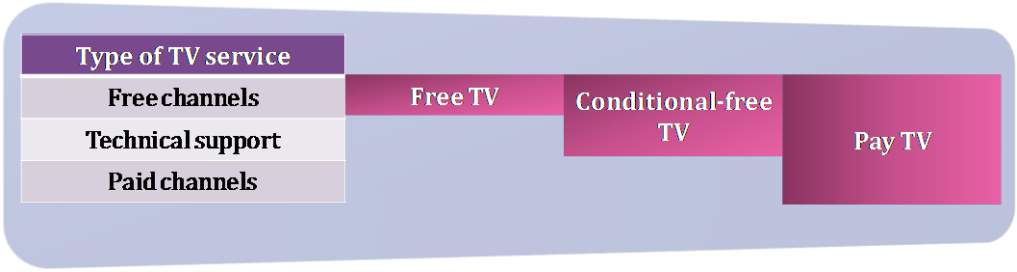
Source: J'son & Partners Consulting

In Russia, the concepts of "Free TV", "Pay TV" and "Conditionally-free TV" are commonly used, but are frequently confused. We define these three terms by the types of available channels

[1] This classification does not correspond to the legal classification of the EU Directive on Audiovisual Media Services (not applicable in the Russian Federation). The Directive opposes linear services (television) and on-demand audiovisual services (including VOD and catch-up TV).

(paid or free[2]) in conjunction with the technical support that is paid for all viewers who use the shared access systems in the cities[3].

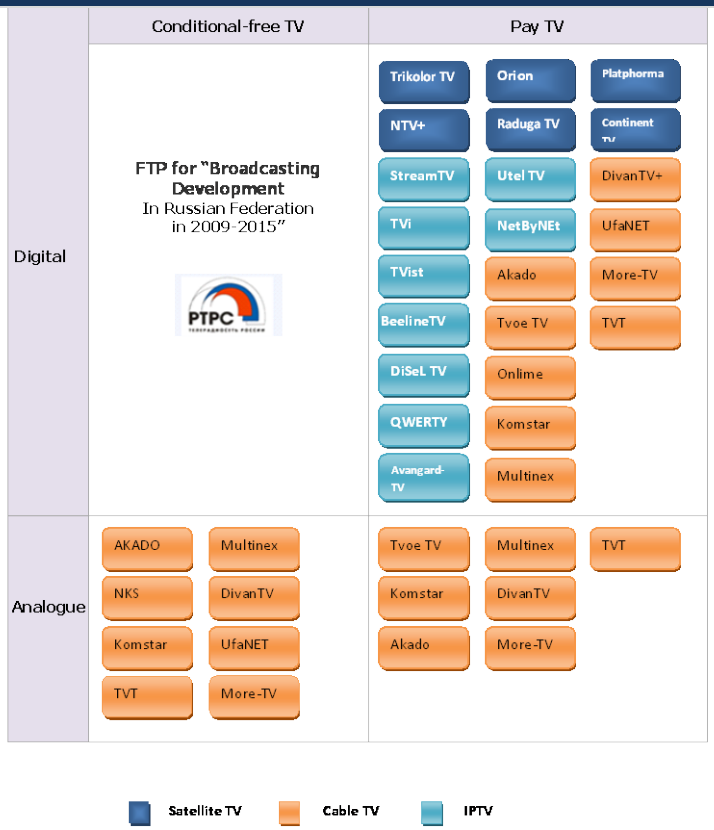
Fig. 2. Free, Conditionally-free and Pay TV services



Source: J'son & Partners Consulting

Considering the substantial consumption of analogue TV in Russia, and, accordingly, a large number of analogue TV operators in the market, as well as differences in the legal status of analogue and digital TV channels, it is useful to differentiate the digital vs. analogue TV market.

Fig. 3. The main players on the conditional-free and pay TV markets



Source: J'son & Partners Consulting

[2] In accordance with the Russian legislation, some TV channels are offered to the public for free (see Chapter 1)
[3] In the utility billing documents, this service can be called "payment for antenna", "payment for TV cable", etc.

Note that many operators provide both digital and analogue TV services, and they all have the analogue TV subscriber base (usually Conditionally-free), significantly exceeding the number of digital TV subscribers (which is always paid!).

The picture above also shows that **currently Conditionally-free digital TV in Russia does not exist**. It will appear only after implementation of the Federal Target Program "Development of Broadcasting in the Russian Federation".[4]

Russian TV companies today can be classified by the type of ownership as public, private and mixed-ownership types; by the financing sources as budgetary, commercial and budgetary-commercial; by the type of program policy and target audiences as universal and subject-oriented; by the content they all are mostly commercial. Commercialization of content and tendency of audience aggregation characterize the policies of almost all TV channels.

Lately they also have had to deal with the phenomenon of audience reduction and fragmentation due to the emergence of diverse media content delivery channels (terrestrial TV, cable and satellite TV, video on VHS and DVD, high speed Internet access, including wireless channels - Wi-Fi / WiMAX, mobile phones) and reception and playback devices (traditional TV sets, VHS- and DVD-players, iPod, mobile communicators and smartphones). Audience segmentation was a result of the development of “niche” and subject-oriented broadcasting.

Nevertheless, the dual system of Russian TV (state vs. commercial), in contrast to European and worldwide triad system (public, commercial, state) did not encourage the media community to make a deliberate departure from the commercialization of content and “rating-mania”. The presence of quality programs and movies on almost every federal channel does not exclude contra-programming and format cloning between them, and a confrontational approach to interpretation of Russia’s historical past and present in the programs of the same channel.

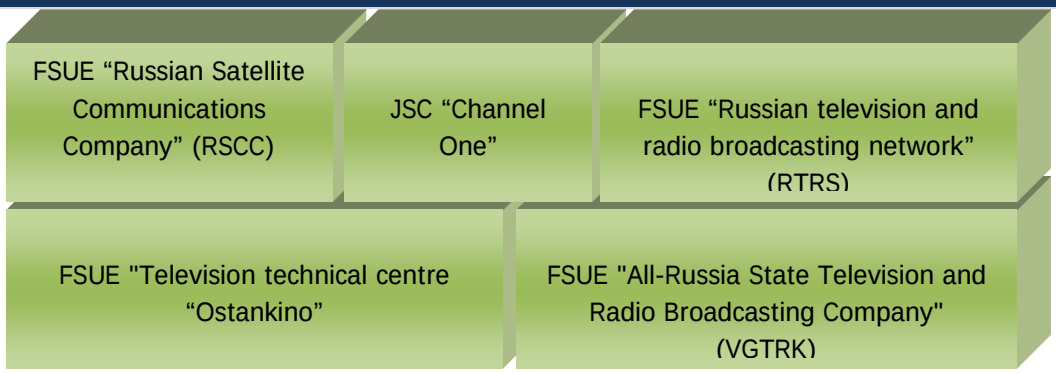
The legislative state of broadcasting does not define any of such fundamental conditions for its establishment and operation, such as the definition of broadcast media as a public good, and the frequency resources as national domain, or indeed the division of channels into public and commercial ones, single and multi-media environments and platforms, and TV structures - as producing, broadcasting and provider.

[4] For details see Section 1.4.1

The State system for terrestrial television

Presently the base of the state broadcasting system is composed of six organisations.

Fig. 4. The basis of the state system of TV and radio broadcasting in RF



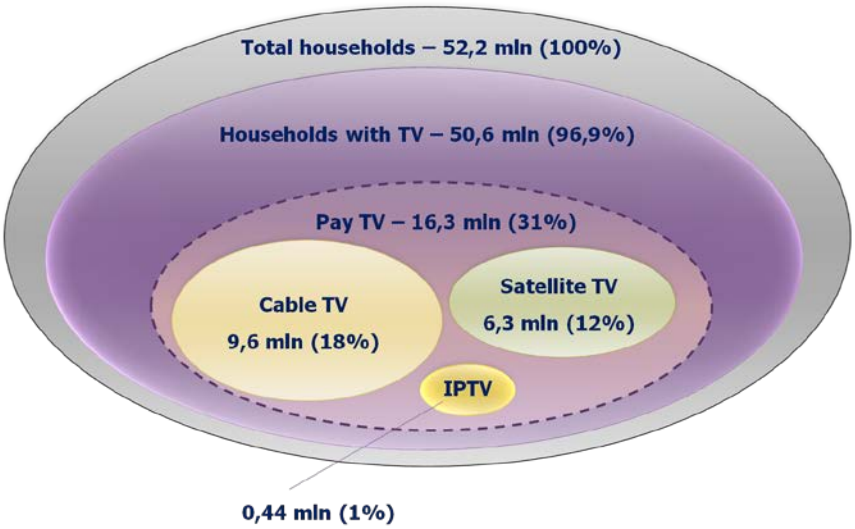
Source: Ministry of Communications and Mass Media

The Federal state unitary enterprise (FSUE) "RTRS" includes regional, republican and district terrestrial TV and radio broadcasting centres. RTRS provides nationwide terrestrial broadcasting (in analogue format) of programs by Russian TV and radio companies "Channel One", VGTRK and NTV.

Russian television structure

The television in Russia is available to 137 million people (96,9% of the population). The Russian television structure is shown in the figure below, in population coverage statistics it corresponds with the average world indicators.

Fig. 5. The structure of Russian television, 2010



**Household includes 2,1 persons*

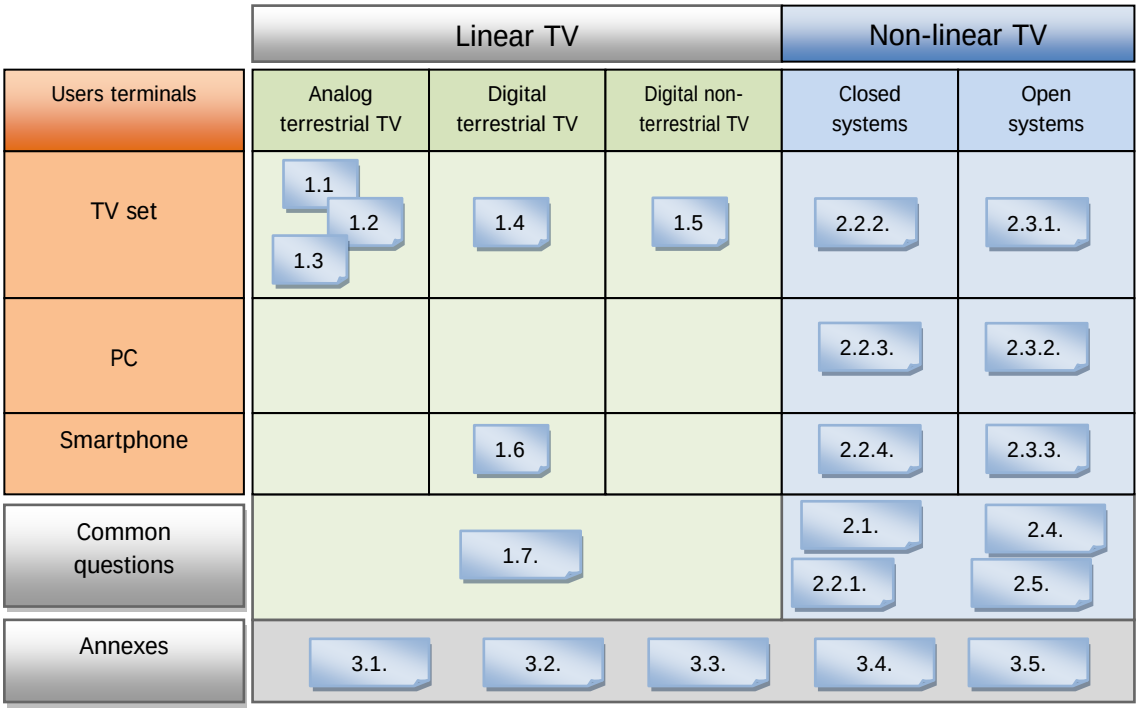
Source: J'son & Partners Consulting

Pay TV occupies 31% of the entire Russian television audience, by the number of households. Details of the Pay TV market structure are provided in the part 1.5.

Research structure

Correspondence of the research sections with the accepted classification is shown in the next figure.

Fig. 6. Research structure



Research geography

8 federal districts, including 83 federal subjects of Russian Federation.

Sources

Study by J'son & Partners Consulting conducted on the basis of their own information sources:

- Telephone interviews with representatives of companies-operators. To clarify and re-market data J'son & Partners Consulting conducts telephone interviews with representatives of the largest providers (Press Service, PR-department or department of development / marketing).
- Monitoring desk research of the market
- Open free and paid sources on M&A transactions
- Industry information, including private and public sources
- The accumulated information. J'son & Partners Consulting has been conducting detailed monitoring of the Russian broadband market for over four years. Twice a year we update the database (number of subscribers, market share, profits, mergers and

acquisitions M&A) by more than 900 providers. The accumulated experience and extensive historical information allow reconstruction of a detailed picture of the market and accurate development forecasts.

Methodology

- Processing of the results of telephone interviews with representatives of companies-operators
- Search for open public information
- Quality Control:
  - Data checking by consultant-analyst
  - Verification of the obtained data with market experts
  - Verification of the obtained data with market players
  - Spot results checking

1. Linear TV in Russia

1.1. The rules and regulations of the mass media market of the Russian Federation

Competence of state bodies

The Ministry of Communications of Russia is the federal body of executive power, which is developing and implementing state policy and normative-legal regulation in the following areas:

- Information Technology
- Telecommunications (including radio frequency spectrum's use and conversion)
- Postal services
- Mass Communications and media (including broadband development, television systems (including digital TV), radio broadcasting and new technologies in these areas)
- Publishing and printing
- Personal data processing

http://www.minsvyaz.ru

The Federal Service for Supervision of Communications, Information Technology and Communications (Roskomnadzor) is an authorized federal executive authority responsible for control and supervision over the following areas:

- media (including digital media)
- mass communications
- information technology and communications control and supervision of personal data processing's compliance with the requirements of Russian legislation
- organization of radio frequency service functioning
- personal data protection

Roskomnadzor is under the Ministry of Communications of the Russian Federation and operates directly and through its regional offices in coordination with other federal executive bodies, local self-government, public associations and other organizations.

http://www.rsoc.ru

The Federal Agency for Press and Mass Communications (Rospechat) is the federal executive authority responsible for providing public services and managing state property in the area of print media and mass communications, including computer networks in the field of digital media, publishing and printing activities. **Rospechat** is under the Ministry of Communications of the Russian Federation.

http://www.fapmc.ru

The Federal Communications Agency (Rossvyaz) is a federal executive authority responsible for managing state property and provision of public services in the field of telecommunications and postal services, including the creation, development and use of

communication networks, satellite communications systems, television and radio broadcasting.
Rossvyaz is under the Ministry of Communications of the Russian Federation.

http://www.rossvyaz.ru

Main professional organisations

The National Association of Broadcasters (NAT) is a professional association of broadcasting companies of Russia, the largest non-profit professional association of broadcasting companies in Russia.

- Protects the rights and interests of broadcasters
- Coordinates and represents its members in legislative and executive authorities
- Involved in developing the legal framework governing the activities of digital media
- Provides legal, informational and consulting support to companies
- Publishes professional literature, weekly newsletter reference materials

http://www.nat.ru

The Public Chamber Commission for Communications, Information Policy and Freedom of Expression in Mass Media – is responsible for interaction of citizens and journalists with state and local authorities to take into account their needs and interests, protect their rights and freedoms in the development and implementation of public policies, and to exercise public control over the activities of government.

http://www.oprf.ru/structure/comissions/comissions2010/180

Statistics regulation

The sphere of Media and Mass Communications of Russia is an unidentified object in the structure of all-Russian classifiers of technical and economic information and, firstly, in the All-Russian Classifier of Types of Economic Activity (OKVED). In its current edition, individual segments of the industry of media and mass communications are scattered across a number of sections.

In the European analogue of OKVED, the classification NACE Rev.2 (implemented since 2008) – "Statistical classification of economic activities in the European Union", the activities in the field of media, telecommunication record and film industry are combined into the section "Information and communication".[5]

On the basis of harmonisation with the UN classification of economic activities (ISIC), Russia is working to integrate the activities of the media and mass communication in the same section.

Per proposal of the Ministry of Media and Mass Communications, major elements of this section will be publishing, film and sound producing, TV and radio broadcasting services, creation of

[5]http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-RA-07-015

television and radio programs, implementation of telecommunications, information technology and other information services.

The possibility of including a new group of services in the field of mass communication into the structure of Russian Classification of public services is being studied.

Regulation of Media and Mass Communication

The objective of this report is not to provide a detailed analysis of the Russian regulatory framework for mass media and television in particular. This framework is analysed in other publications of the European Audiovisual Observatory[6].

The table below shows the main provisions of the official documents dealing with regulation of broadcasting.

Table 1. The main legal documents in the sphere of mass media regulation

Document, adopting authority	Dates of adoption or amendments	Main provisions or amendments, relating to TV and radio broadcasting
"Primary proposals on the process of transition to digital TV and radio broadcasting", NAT	November, 2006	• In the area of licensing: preservation of the principle of “two keys,” i.e., the two licenses - for broadcasting and communication activities; • In the area of social guarantees to the population: all channels licensed to broadcasting must be logged in packages of free access at the time of introduction of digital broadcasting in a particular locality; • in the sphere of relations of broadcasters and cable TV operators: a mandatory basis to provide “last mile” service to all the channels included in the packages of free access and to approve the tariff policy on the provision of telecommunications services for operators of digital broadcasting and for operators, providing “last mile” so that economic instruments do not become “pseudo-market” filter of access of broadcasters to audience.
"On some principles of program policy formation in the transition to digital	February, 2007	• The procedure of forming a mandatory package of public programs, advanced package of free access and package of conditional access

[6] For a detailed presentation of the Russian regulatory framework on media and mass communication, and, in particular, of the regulation of the television market, see : A. RICHTER, *The Regulatory Framework for Audiovisual Media Services in Russia*, IRIS Special, European Audiovisual Observatory, Strasbourg, 2010; A. RICHTER and T. SHEVCHENKO, “The development of the digital terrestrial television in Russia and in Ukraine” in Digital television, IRIS Plus, European Audiovisual Observatory, Strasbourg, 2010 and A. RICHTER, *A Landmark for Mass Media in Russia*, IRIS Plus, European Audiovisual Observatory, Strasbourg, 2011. Recent legal development are reported in the IRIS newsletter : http://merlin.obs.coe.int/newsletter.php

broadcasting", NAT and Public Chamber Commission for Communications and Information Policy of Russian Federation		channels.
Presidential Decree "On nationwide mandatory public TV and radio channels" No. 715	June 24, 2009	• Initially determined the composition of the first multiplex.
Federal Law "On Amendments to Articles 14, 33, 36 of the Federal Law" On Advertising", "Section 3.1, 3.2, Article 14	December 27, 2009	• A prohibition on contracting out the advertising distribution services to an entity that holds a privileged position in the distribution of television advertising. *"The preferred position of the entity in the distribution of television advertising on federal TV channels is when its share in this area exceeds thirty-five percent at the national or regional placement".* • Approval of promotional or contest principle of contracting out the TV advertising distribution services in the federal TV channels with the state participation.
The list of federal channels, Roskomnadzor on request of the Federal Antimonopoly Service (FAS)	March, 2010 (changes in May, 2010)	• There are 15 approved federal channels: "Channel One", "Russia 1", "Russia 2", "Russia K", "Russia 24", "Channel 5", NTV, "TV Center", CTC, "Domashniy", "DTV" (now "Peretz"), "MUZ", "Semerka", TV-3 and MTV. In May 2010 the list grew by another four places – REN TV, TNT, "Zvezda" and "Mir". In total – 19 TV channels.
Supreme Court of the Russian Federation adopted Resolution No. 16 "On the Judicial Practice Related to the Statute of the Russian Federation 'On the Mass Media'"	June 15, 2010	In several of the 38 points contained in the Resolution, the Supreme Court instructs lower courts as to how to interpret and apply the Statute on the Mass Media of 1991 to digital and Internet based services in today's market. Through these instructions, as well as via its comments on other areas relevant to the media, the Supreme Court fills in the gaps in the overall legal framework applicable to mass media.
Federal law No. 221-FZ "On amending to the Federal Law "On communication" of 27.07.2010"	October 2010	• Approval of free distribution of eight public television channels in Russia that are determined by the President of the Russian Federation. • Legally binding definitions of terms "operator", "channel" and "broadcasting".
Decree of the President of the Russian	May 12, 2011	• This act amends the list of the eight mandatory TV channels on all platforms (including the first

Federation of 12 May 2011 No. 637 “On amending the Decree of the President of the Russian Federation of 24 June 2009 No. 715 “On National Mandatory Free Television Channels and Radio Stations” and the list approved by this Decree”		multiplex of digital terrestrial television) as several of them have changed their names (and programme policies) since 2009: 1. Channel One (OJSC “Channel One”) 2. TV-channel “Russia” (Russia-1) (federal state unitary enterprise "All-Russian State Television and Broadcasting Company") 3. TV Channel "Russia-2" (Russia-2) (federal state unitary enterprise "All-Russian State Television and Broadcasting Company") 4. NTV Broadcasting Company (OJSC "TV NTV") 5. Petersburg - Channel 5 (OJSC "Television and Radio Company "Petersburg"). 6. TV Channel "Russia - Culture" (Russia-K) (federal state unitary enterprise "Russian State Television and Radio Company") 7. Russian news channel "Russia-24" (Russia-24) (Federal State Unitary Enterprise "Russian State TV and Radio Company") 8. Children and youth channel "Carousel" (CJSC "Carousel")
Federal Law No. 142-FZ “On amendments to individual legislative acts of Russian Federation in connection with the improvement of legal regulation in the media”	14 June, 2011	• There are new legal terms “multiplex”, “domain name” and “location of the domain name” (registered address), as well as “network edition”. The term “universal license” for distribution in any environments (terrestrial, cable, satellite broadcasting) appeared for the first time. According to the document the license’s validity will be up to 10 years. • There are requirements for the provision of documents to obtain licenses. • There is a procedure for the distribution of foreign television channels in Russia.

Source: The Russian State Duma, NAT (Russian National Association of Broadcasters), Roskomnadzor, Public Chamber Commission for Communications and Information Policy of Russian Federation, Supreme Court of the Russian Federation

Latest developments: a clearer regulation of on-line media[7]

The Federal Assembly (parliament) of the Russian Federation adopted in June 2011 the Statute "On amending some legal acts of the Russian Federation in order to improve legal regulation in the sphere of mass information". The Bill was introduced on 29 November 2010 by the chair of the parliamentary committee on the mass media, adopted in the first reading by the State Duma (lower chamber) on 22 February 2011, and in the 2nd and 3rd readings in one day - on 3 June 2011. The Council of the Federation (upper chamber) approved it on 8 June 2011, and the statute was signed by the President of the Russian Federation on 14 June 2011. Most of the provisions of the statute are to enter into force on 10 November 2011.

About 90% of the statute amends and expands the Statute of the Russian Federation "On the mass media" (No. 2124-I of 27 December 1991). In several ways the new act counteracts the recent Resolution of the Plenary of the Supreme Court of the Russian Federation "On Judicial Practice Related to the Statute of the Russian Federation 'On the Mass Media'" of 15 June 2010.

The amended statute provides a systematic regulation of online media instead of the vaguely-formulated Article 24 ("Other mass media"), now abolished. In particular it includes a "network publication" as one of the types of the mass media, considers a single issue or renewal of a network publication as a form of the product of the mass media, while providing access to a network publication is considered to be a form of dissemination of the product of a mass media outlet. Under a "network publication" the statute defines "any site in information-telecommunications network Internet registered as a mass media outlet". While such registration of a network publication is optional, no editorial office of a mass media outlet may engage in professional activity without such registration.

Article 31 of the Statute "On the mass media" gets new parts that detail licensing of broadcasting. In particular it stipulates that licensing may be based on a tender, competition or auction as shall be determined by the Government. The procedures for them as well as fees for participants shall be determined by the Government. The programme policy, a blueprint document in which the applicant should conceptualise and describe the range of programmes it proposes to offer now becomes part of the licence of the winner, which may not be violated. Other conditions of the license shall be determined by the Government. The new act leaves it open for the Government to license broadcasting online.

The term of the licence shall increase to ten years from the current five. It may be extended by a decision of the licensing body to be determined by the Government (currently such body is Roskomnadzor at the Ministry of Communications and Mass Communications) in case, inter alia, there are no uncorrected violations of the terms of the licence. A licence shall not be transferred to a different legal entity.

According to a new article of the Statute "On the mass media" (31-7), the licensing body has powers to issue a written prescript to any broadcaster for any violation of the law as well as to suspend its activity for up to three months. Any violation is to be corrected within the term

[7] Reproduction of the article A. RICHTER, «Regulation of Broadcasting and Internet now Part of Media Statute", *IRIS 2011-7*:1/42, European Audiovisual Observatory, July 2011

stated in the prescript and its acknowledgement shall be reported back to the licensing body. A licence is revoked by a decision of the court of law (earlier it could be done by the decision of the licensing body alone) on a petition of the licensing body in cases when its prescript has not led to a correction of the violation or when a broadcaster makes "a gross violation" of its licence terms for the second time within 12 months. In addition other grounds for revoking the licence remain in force such as repeated violations of Article 4 of the Statute on the mass media ("Inadmissibility of abuse of the freedom of the mass media") and provisions set by the Federal Statute "On licensing of certain types of activity".

Article 32-1 gives powers to the President of the Russian Federation to approve the list of must-carry channels on all platforms. The channels that enter the list obtain licences without tender (competition, auction).

The statute redrafts article 19-1 of the Statute "On the mass media" to restrict establishment of radio stations by foreign companies. Article 54 has a new provision that bans dissemination of a foreign radio or TV programme without its registration in accordance with the rules set in the Statute on the mass media. Article 31 is also amended to ban TV or radio rebroadcasting unless the original broadcaster has a Russian licence and there is a contract between the rebroadcaster and broadcasting company.

1.2. Current Russian TV broadcasting market (Q4 2010)

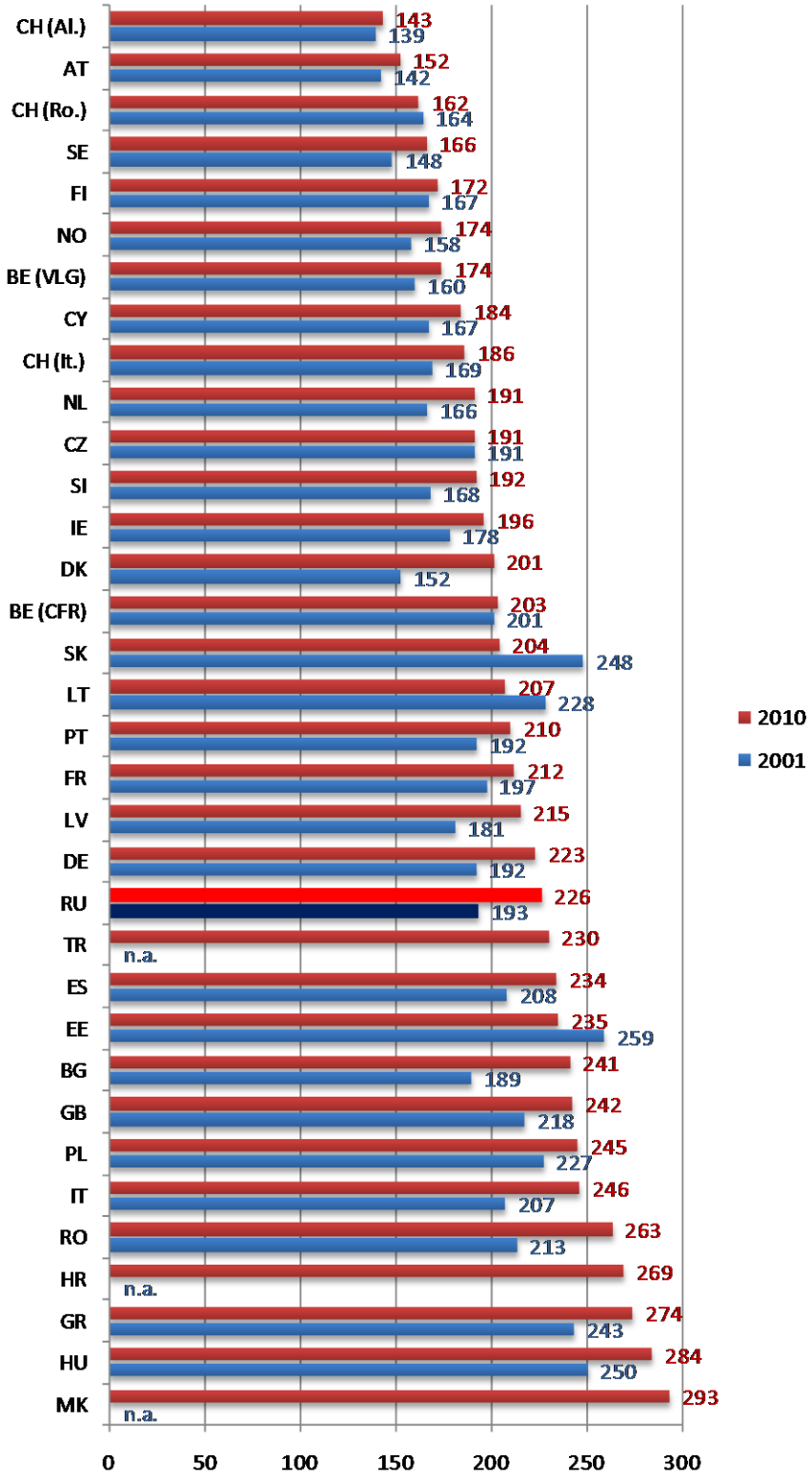
1.2.1. Russia on the television world map

Despite the creation of new media, and general activation of the video industry, television still controls the largest of all mass media audiences.
According to Eurodata-TV Worldwide, the average daily viewing time in the world per person grew from 3 hours 6 minutes in 2003 to 3 hours 10 minutes in 2010.[8]

The European leader in the daily TV viewing time television is "The former Yugoslav Republic of Macedonia", with 4 hours 53 minutes. Hungary holds second place with 4 hours 44 minutes. In Russia, there was 3 hours 46 minutes in 2010 (vs. 3 hours 13 minutes in 2001). In USA, the daily viewing time in 2010 was 4 hours 43 minutes.

[8] EURODATA-TV Worldwide, "One TV Year in the World. 2011 issue", Médiamétrie, 2011

Fig. 7. Average television viewing per person in Europe (2001, 2010), minutes



Source: Eurodata TV worldwide

1.2.2. Analogue TV broadcasting in Russia – the final stage of evolution

The geographical organisation

Fig. 8. Zones of terrestrial TV broadcasting

Source: Federal Agency for Press and Mass Communications

Russia has the world's most sophisticated spatial broadcast organisation due to its geography (11 time zones) and population structure (the presence of large areas with low population density). This shaped the "television landscape" of the country, in particular, diverse structures of regional broadcasting.

The country is divided into five broadcasting zones: M (-1, 0, +1), G (+2, +3), V (+4, +5), B (+6, +7), A (+7, +8, +9). Most of the national broadcasting channels use satellite transmission with five duplicates of the signal representing the channel versions for different time zones, with programming schedule synchronization throughout Russia. Zero orbital position (MMT 0) creates a program grid, which is then re-broadcast across Russia with a time shift by duplicates. But there are only one to five broadcasting orbital positions in 10 time zones, which leads to a shift in broadcast networks in some of the time zones.

Generally speaking, a program broadcast within one orbital position at 10 a.m., will be released on time at one time zone and with one hour shift in the next one. Ideally, local programming schedule must coincide all over Russia, but this does not happen for the above-mentioned reasons. It is also worth noting that each of the central television channels organises its broadcasting in its own way, by using one, two, three, four or five orbital positions. Several channels use direct broadcasting, and viewers in different time zones watch simultaneously the same "image", regardless of local time ("Russia 2", "Russia 24", "MUZ", "Semerka", "2x2", "Euronews").

Table 2. Time broadcasting schedules of terrestrial TV channels		
Terrestrial TV channel	**Time organisation of broadcasting**	**Level of penetration in cities 100+, %** [9]
Channel One ("Perviy kanal")	5 orbital positions (0, +2, +3, +4, +5, +6, +7, +8)	99
Russia 1	5 orbital positions (-1, 0, +2, +4, +6, +7)	99
NTV	4 orbital positions (0, +2, +4, +7)	96
CTC	4 orbital positions (0, +2, +4, +7)	90
TNT	4 orbital positions (0, +2, +4, +7)	89
Russia K	4 orbital positions (-1, 0, +2, +4, +7), without adaptation to the local time	88
REN TV	4 orbital positions (0, +2, +4, +7)	86
TV-Center	3 orbital positions (0, +2, +4)	78
Russia 2	Direct broadcasting	76
Domashniy	4 orbital positions (0, +2, +4, +7)	76
TV3	3 orbital positions (0, +3, +7)	75
Channel 5	2 orbital positions (0, +3)	72
MUZ TV	3 orbital positions (0, +2, +7)	69
DTV	3 orbital positions (0, +2, +7)	68
Russia 24	Direct broadcasting	67
Zvezda	4 orbital positions (0, +2, +4, +7)	63
MTV	2 orbital positions (0, +4)	61
Semerka	3 orbital positions (0, +2, +7)	52
Euronews	Direct broadcasting	44
2x2	Direct broadcasting	36
Karusel	3 orbital positions (0, +3, +7)	n.a.

Source: Rospechat

The number of analogue TV channels

In a terrestrial television segment there are 21 central channels, claiming to have national coverage. The level of their actual technical penetration varies significantly, from 99% to 36%. The industry has adopted a division of these channels into three groups:

- Russian universal channels (“Channel One”, “Russia 1”, NTV, “Channel 5”),

- Federal network channels (“TV-Center”, CTC, TNT, “REN TV”), one of which is universal - “REN TV”,

- Terrestrial channels, most of which are specialized (“Russia 2”, “Russia K”, “Domashniy”, “MUZ”, MTV, “TV3”, “Peretz”, “Russia 24”, “Euronews”, “2x2”, “Zvezda”, “Semerka”). Almost all terrestrial channels belong to large media holdings. The exceptions are “TV-Center” and “Zvezda”.

The “Channel One”, “Russia 1” and NTV, which inherited the USSR Central Television program distribution network, have the greatest coverage. “Old” TV networks such as CTC, REN TV and

[9] TNS Russia, 2010

TNT (the first Russian TV channels with network-style broadcasting) are catching up with them in coverage.

The network principle of broadcast organisation of terrestrial TV channels is prevalent in Russia. Channel broadcasting in many regions is provided by regional partners (television companies and cable operators).

Table 3. The structure of network broadcasting of large federal TV companies

TV channel	Number of partners	Number of regions RF, where partners work	Average total daily volume of regional programmes, hours
CTC	191	83	2,6
TNT	522	79 (922 cities)	3
REN-TV	1100	80 (787 localities)	3
TV Center	241	33	1,6
Zvezda	335	77	3

Source: NAT

The system of organization of the TV networks broadcasting in Russia is similar to the USA. Television networks have a limited amount of their own stations and a large number of affiliated stations[10] that provide airtime under the TV programs for a particular fee and revenue from regional advertising. The difference is that in the U.S. the amount of stations that a TV network can own (the so-called Owned-and-operated stations) is legally limited: the total coverage of stations must not exceed 39% of all U.S. households. In Russia there are no legal restrictions, and the number of stations depends on the plans of a network's development, its financial capacity and the presence of stations that are available for purchase.

As of January 1, 2010, Russia granted 12,957 television and radio broadcasting licenses , and 19,772 electronic media outlets are registered. Radio and television broadcasting activities are carried out by more than 4,500 companies, including – 2,254 TV-and-radio stations and television-only stations, 2,246 radio stations[11].

As of January 1, 2010, in there were more than 93,500 registered outlets in an all-Russian Media Register.

According to Roskomnadzor, the total number of control and supervision subjects entitled to pursue activities in the field of television and radio broadcasting in Russia, was 3221. 29% of licenses were issued for terrestrial TV broadcasting, 22% - for cable transmissions.

At the final stage of analogue terrestrial TV evolution, this market is institutionally formed by 3 types of organisations: broadcasters, producers and operators.

[10] The Russian name is "regional partners"

[11] According to data of Federal Supervision Agency for Information Technologies and Communications (Roskonmadzor).

The broadcasters include organisations that own and operate registered mass media outlets (TV channels) and have broadcasting licenses.[12]

1. The producers include organisations that mostly do not register mass media outlets and do not hold any licenses, but act as broadcasters' contractors creating the audio-visual content.
2. The operators take charge of the TV signal transmission and appear to be constant counterparties of broadcasters. Actual industry infrastructure that directly shapes the configuration of the geographic market of terrestrial broadcasting is formed by broadcasters and operators.

1.2.3. Major National and Regional Broadcasters, Number of TV Channels

All-Russian TV channels are free for users and mandated for free distribution by the cable networks, satellite and terrestrial television. All operators offer access to free and open terrestrial/satellite channels. The operators are not charged for the retransmission of such channels in their network; channel authorization is sufficient for the broadcast.

Table 4. List of terrestrial TV channels, 2011	
Channel One, Russia 1, Russia 24, TV Center, NTV, Russia K, Russia 2, Peretz, Euronews, CTC, Semerka, Domashniy, TNT, MTV, TV-3, REN-TV, MUZ, Zvezda, 5 Channel, 2X2, Karusel	**Total: 21 channels**

Source: J'son & Partners Consulting

At the end of 2010 the number of nationwide television channels in Russia reached 21. On the 27 of December 2010, TV channel Carousel, which is based on two major children's television channels "Bibigon" and "Telenyanya", translated into the terrestrial net of other channels, has acquired a nationwide statute.

Table 5. Terrestrial channels characteristics, 2011				
Shareholders / Management company	**Channel**	**Date of launch**	**Old names**	**Audience coverage (in percents from Russian population)**
National Media group	Channel One	1995/04/01	ORT from April 1 1995 to September 1, 2002	98,8%
VGTRK	Russia 1	1991/05/13	RTV from May 13 to	98,5%

[12] On the issue of the concept of mass media and registration in the Russian Federation, see A. RICHTER, *The Regulatory Framework for Audiovisual Media Services in Russia*, IRIS Special, European Audiovisual Observatory, Strasbourg, 2010 and A. RICHTER, *A Landmark for Mass Media in Russia*, IRIS Plus, European Audiovisual Observatory, Strasbourg, 2011.

			December 24, 1991, RTR from December 25, 1991 to October 31, 1997 and again from September 8, 1998 to August 31, 2002, RTR-1 from November 1, 1997 to September 7, 1998, Russia from September 1, 2002 to December 31, 2009	
	Russia 2	2010/01/01	-	n.a.
	Russia K	1997/11/01	RTR-2 from November 1 to December 31, 1997, Cultura from January 1, 1998 to December 31, 2009	n.a.
	Russia 24	2006/07/01	Vesti from July 1, 2006 to December 31, 2009	n.a.
OJCV "TV Centr"	TV Center	1997/06/09	TVC from September 6, 1999 to August 13, 2006	57%
Gazprom media	NTV	1993/10/10	-	75%
	TNT	1998/01/01	-	72,5%
CTC Media	Peretz	2011/10/17	Daryal TV from June 7, 1999 to April 14, 2002, ДТВ-VIASAT from April 15, 2002 to August 14, 2005, DTV-VIASAT from August 15, 2005 to February 28, 2007, DTV from March 1, 2007 to October 16, 2011	n.a.
	Domashniy	2005/03/06	31 Kanal from February 13, 1994 to December 11, 1999, M1 to December 12, 1999 to March 5, 2005	45%
	CTC	1996/12/01	-	94%
UTV	MUZ	1996/07/01	Muz-TV from July 1, 1996 to October 31, 2010	56,3%
	Semerka	2000/04/17	"Children Project" from April 17, 2000 to September 16, 2001, 7TV September 17, 2001 to February 28, 2011	72,24%
National Media group	REN TV	1997/01/01	REN TV from 1 January 1997 to September 3, 2006, РЕН ТВ from	80%

			September 4, 2006 to February 7, 2010, REN from February 8 to October 31, 2010.	
	5 Channel	1938/07/07	Leningradskaya programmma from July 7, 1938 to 1992, St. Petersburg - Channel 5 from 1992 to 1998, TRK Petersburg from 1998 to March 31, 2004, St. Petersburg - Channel Five from April 1, 2004 to March 14, 2010	81%
Euronews SA	Euronews	2001/10/02	-	n.a.
Prof Media	MTV	1998/09/25	MTB from April 30 to May 2, 2011	28,2
	TV-3	1994/06/06	-	n.a.
	2X2	1989/11/02	-	15%
Teleradiobroadcasting company of Russian Defense "Zvezda"	Zvezda	2005/02/20	-	45,1%
CJSC "Channel One. World TV network" and VGTRK	Carusel	2010/12/27	The joining on "Telenjanja" and "Bibigon" December 27, 2010	n.a.

Source: J'son & Partners Consulting, TV channels data

The number of terrestrial TV broadcasters varies widely in different regions of the country, the segment saturation also considerably varies in large cities. In general, information on coverage of terrestrial channels, offered by various organisations, differs substantially.

Table 6. Principles of organisation of terrestrial TV broadcasting

Terrestrial TV channel	Principle of organisation of terrestrial broadcasting
Channel One	Independent broadcasting
Russia 1	Independent broadcasting (regional partners – GTRK, part of the VGTRK)
NTV	Independent broadcasting mostly (there is a small number of regional partners)
CTC	Network. With the help of partners and its own TV stations
TNT	Network. With the help of partners and its own TV stations
Russia K	Independent broadcasting mostly (there is a small number of regional partners)
REN TV	Network. With the help of partners and its own TV stations
TV Center	Network. With the help of partners and its own TV stations
Russia 2	Independent broadcasting mostly (there is a small number of regional

	partners)
Domashniy	Network. With the help of partners and its own TV stations
TV3	Network. With the help of partners and its own TV stations
Channel 5	Network
MUZ	Network
Peretz	Network. With the help of partners and its own TV stations
Russia 24	Independent broadcasting mostly (there is a small number of regional partners) and non-terrestrial broadcasting
Zvezda	Network
MTV	Network
Semerka	Network
Euronews	Broadcasting on frequencies and power of channel "Russia K". There is another frequency in Moscow
2x2	Non-terrestrial broadcasting mostly

Source: Rospechat

1.2.4. TV channels shares

- **By production place (central, local, foreign)**

All terrestrial channels, with the exception of "Channel 5" and "Euronews", are produced in Moscow. "Channel 5" is produced in St. Petersburg, the Russian-language version of "Euronews" - in Lyon, France[13].

In addition to the central terrestrial TV channels there are 49 regional (with distribution in individual republics, territories and regions) and municipal (with distribution in one or more cities and municipalities) channels.

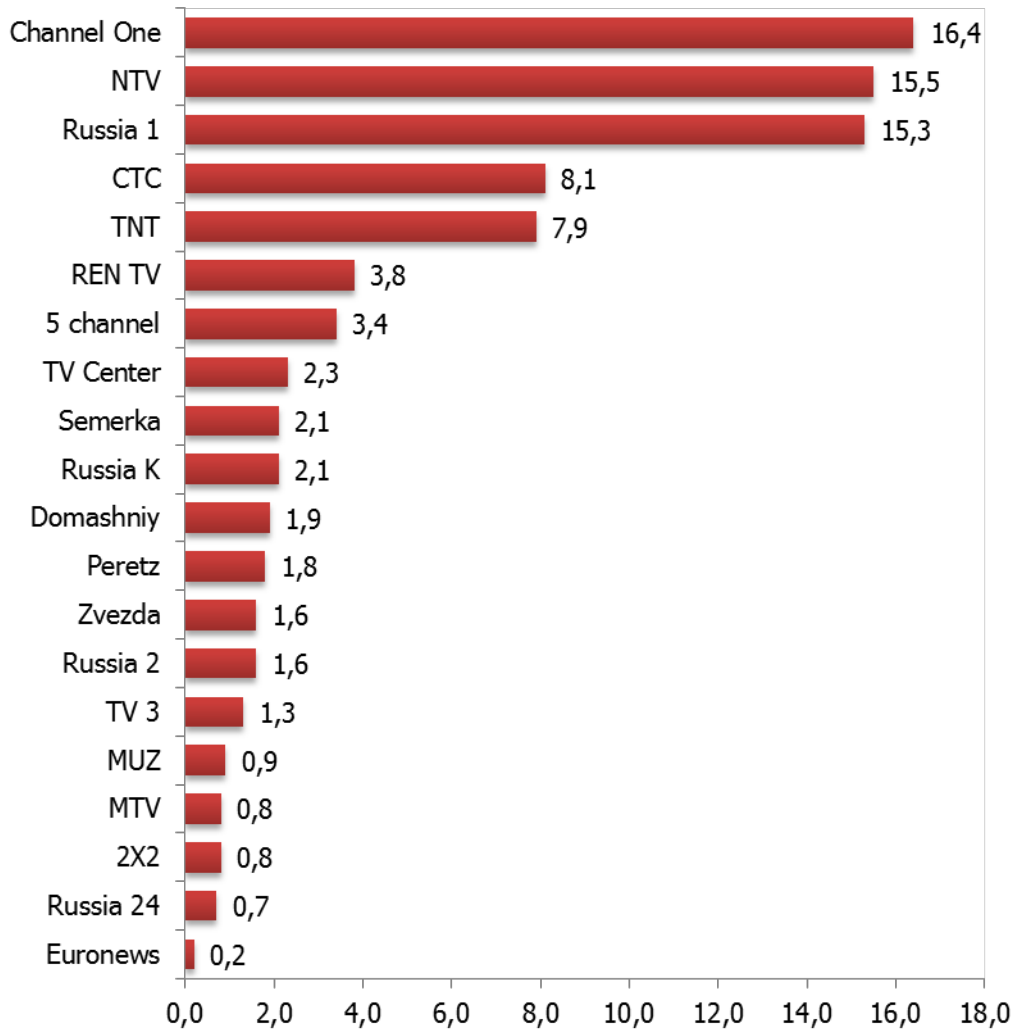
During 2010, more than 50 foreign TV channels obtained the official registration as mass media outlets in Russia (with a license to broadcast).

- **By TV audience size**

The top three on-air TV audience occupy Channel One, NTV, Russia 1. Half as much shares CTC and TNT have.

[13] The VGTRK joined Eurnews in July 2004 by acquiring 16 % of the shares of the French company, of which it is now the fourth major shareholder.

Fig. 9. Average daily audience federal channels, %, Q3 2011,



* Average daily audience – average amount of TV viewers which switch on TVs at least one time at the day during 1 minute (the definition from TNS TV Index), percent from parent population of TNS TV Index

Source: TNS

1.2.5. Sources of financing of the TV broadcasting companies

There are three main sources of financing the activity of TV companies in Russia:

- State budget financing
- Subscriber payments
- Sale of advertising time

In practice, these forms of funding are mostly combined:

- State channels are also financed by sales of advertising time and fees from distributors
- Channels mainly financed by subscription also broadcast advertising
- Channels mainly financed by advertising may also receive fee from distributors

State budget financing

State TV companies (primarily VGTRK) are mainly supported by budgetary funds, of course, but these companies also get revenue from advertising.

Commercial type joint-stock TV companies (for example, "Channel One" and NTV) also receive State financing for the transmission of their signals in cities with population of under 200 thousand people.

In 2010, budgetary allocations to support the broadcasters were identified in the following sizes:

Table 7. Budget provisions for supporting TV companies, 2010

Object	Aim	Sum, thousand RUB
Subsidies to Federal State Unitary Enterprise "All-Russia State Television and Radio Broadcasting Company" (VGTRK)	Financial support for activities and compensation for development of programming , TV and radio broadcasting of the programs, and support of its distribution to viewers and listeners, providing international activities, maintenance of foreign correspondents	15 329 540
Subsidies to Autonomous Non-profit Organisation "TV-Novosti"	Creation and broadcasting of television channels in Arabic, English and Spanish, compensation for development of programming, TV broadcasting of the programs, and support of its distribution to viewers, with the advancement of TV channels on Russian and international markets of television services, as well as the cost of providing international activities and the maintenance of foreign correspondents	6 483 122
Subsidies to OJSC "Channel One" (Perviy Kanal), OJSC "NTV" and OJSC "Teleradiocompaniya "Petersburg"	Payments for services provided by the Federal State Unitary Enterprise "Russian Television and Radio Broadcasting Network" in distribution and broadcasting of their programs in cities with populations of less than 200 thousand	4 679 208
Subsidies to OJSC "United Broadcasting System of the Armed Forces of the Russian Federation"		1 200 000
Subsidies to Federal State Unitary Enterprise "Television Technical Center" Ostankino"	Overhaul of engineering equipment and technical upgrading	190 000

Source: Attachments to the Federal law "On federal budget for 2010 and for the planning period of 2011 and 2012"

Customer payments

The Pay TV market is analysed in detail in the part 1.5.

Advertising sale

The TV advertising market is analysed in detail in the part 1.2.6.

1.2.6. TV advertising market

In 2010 the television advertising market amounted to 131 billion RUB, 15% more than in 2009, although it is still less than in the pre-crisis 2008.

Table 8. Size of Russian TV advertising market, million RUB

Segment	2008	2009	2010	Increase 2010/2009
Total Television	138,9	113,7	130,7	15%
- Terrestrial	137,6	112,2	128,6	15%
- Satellite	1,3	1,5	1,9	26%

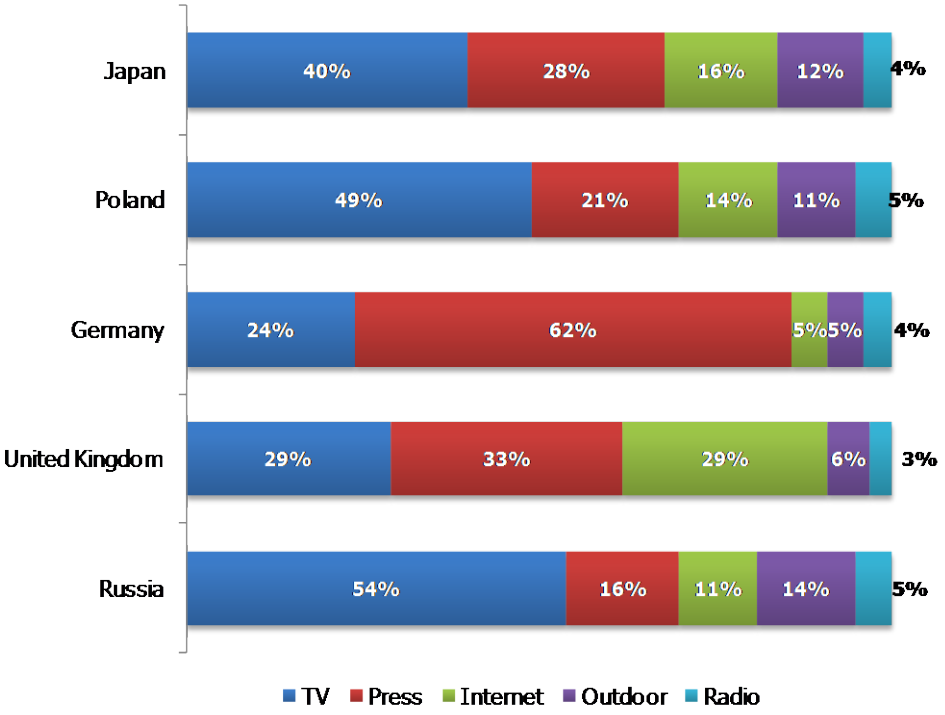
** net of discounts, include agency commission, sponsorship and press classified advertising, exclude production costs*

*** includes Cable, Satellite and Broadcast TV*

Source: AKAR

The TV advertising Russian market is relatively large compared to the markets of foreign countries. Television advertising expenditures in 2010 in Russia amounted to 54% of the total advertising market. This indicator is close to Poland (49%).

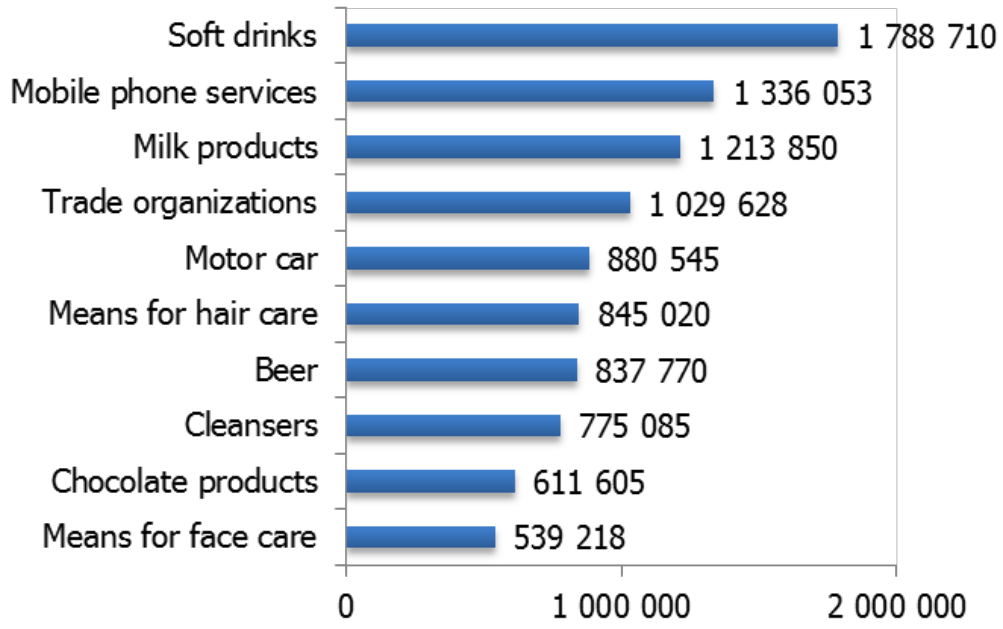
Fig. 10. Shares of advertising expenditures of countries



Source: AKAR, zaw.de, starlink.pl, dentsu.com, tnsglobal.com, adassoc.org.uk

In terms of display length the most demanded is the advertising in the following categories:

Fig. 11. Top-10 advertising categories by time, seconds, Q2 2011



Source: TNS

This rating is quite different from other types of media, where the first place belongs to "retail".

There is a list of Top-10 Russian advertisers below.

Table 9. The largest advertisers in Russia by budget, 2010

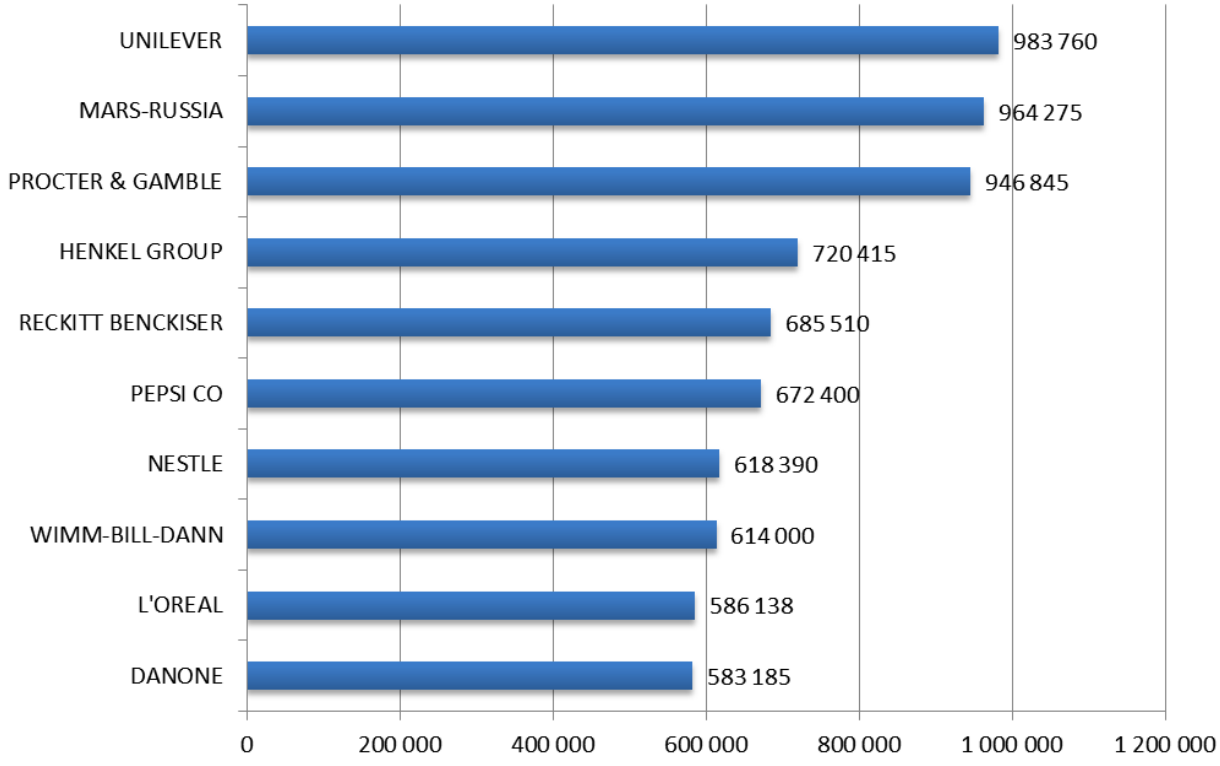
Rank	Advertisers	Budget of the national television, million RUB	The budget of the regional TV, million RUB	The total budget for TV ads, million RUB	Share of television adspend in the total adspend of the groups in monetary terms
1	PROCTER & GAMBLE	6 261	26	6 287	83%
2	L'OREAL	3 321	717	4 038	78%
3	NESTLE	2 647	953	3 600	87%
4	MARS-RUSSIA	3 226	285	3 511	93%
5	HENKEL GROUP	3 350	75	3 424	98%
6	UNILEVER	3 068	47	3 115	91%
7	BEELINE	2 190	235	2 426	78%
8	RECKITT BENCKISER	2 747	28	2 775	95%
9	MTS	1 845	276	2 121	75%
10	WIMM-BILL-DANN	2 342	244	2586	97%

Source: AKAR

The last column of the table illustrates the significant superiority of Television adspend in relation with adspend on other Russian media.

By the time of the on-screen presence concern Unilever is leading (273.3 hours for the second half of 2011). Mars and Procter & Gamble are followed by it with a small lag.

Fig. 12. On-air advertisers' presence, Q2 2011



Source: TNS

1.2.7. TV holdings and major stakeholders on Russian TV Market

Russian Federal TV channels belong to 6 holding structures:

- FSUE "Russian state television and radio broadcasting company" (VGTRK),
- JSC "Gazprom-Media",
- UAB "National Media Group",
- "CTC Media Inc.",
- "Prof Media Management" (Ltd.)
- "UTB-Media" (Ltd.)

and to 4 self-titled independent broadcasters:

- JSC "Channel One",
- JSC "TV Center",
- JSC "TRK VS RF "Zvezda",
- "MTRK "Mir" (Ltd.)

Table 10. Russian TV holdings and Federal TV channels				
Shareholders / Management company	TV Channel	Operating revenues, thousand RUB		General description
		2009	2010	
National Media group	Channel One	21 962 734	24 482 217	Information entertainment channel of general-duty
	REN-TV	380 012	481 481	Information entertainment channel
	Channel 5	1 574 331	3 700 527	Information entertainment channel
VGTRK	Russia 1	n.a.	17 000 000	Information entertainment channel of general-duty
	Russia 2	n.a.	1 100 000	Information entertainment channel of general-duty
	Russia K	n.a.	n.a.	Cultural and educational channel
	Russia 24	n.a.	n.a.	Informational channel
VGTRK total		23 549 959 000	27 467 670	
CJSC "Channel One. World TV network" and VGTRK	Carusel	n.a.	n.a.	Children channel
The Moscow City Government	TV Center	1 754 687	2 250 163	Information channel
Euronews SA	Euronews	n.a.	n.a.	Information channel
CTC Media	CTC	10 357	11 707	Entertainment channel (cinema, serials, humor programmes)
	Domashny	1 609	1 987	Entertainment channel, focused on women and family audiences
	Peretz	1 288	1 421	Entertainment channel (detectives, investigation,

				the militants)
Teleradiobroadcasting company of Russian Defense "Zvezda"	Zvezda	171 937	524 629	Information entertainment channel military-patriotic orientation
UTV Russian holding	MUZ	1 400 000	1 500 000	Music and entertainment channel
	Semerka	650 000	750 000	Sports and entertainment channel
UTV Russian holding total		2 050 000	2 250 000	
Gazprom media	NTV	11 867 150	16 195 301	Information entertainment channel of general-duty
	TNT	7 927 569	8 665 864	Entertainment channel (cinema, serials, humor programmes)
Prof Media	MTV	n.a.	1 600 000	Music and entertainment channel
	TV-3	n.a.	2 500 000	Entertainment channel (mysticism, fantasy, adventure)
	2X2	n.a.	550 000	Animation channel

Source: European Audiovisual Observatory from AMADEUS database, J'son & Partners Consulting

Three largest players (NMG, Gazprom Media, VGTRK) control 76% of market by average daily viewing only by means of terrestrial TV-channels while they are also active in the market of non-terrestrial TV channels and Web-TV.

Other players lag far behind the leaders of the local TV channels market, while some of them (AFK "System" and the group Onexim) are active in the market of non-terrestrial TV and Web TV.

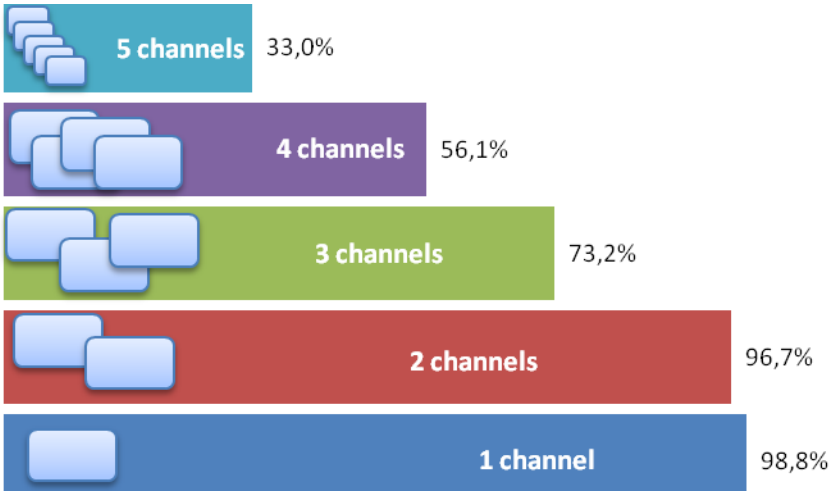
It should be clarified that the JSC “Channel One” is similar in structure to a holding organisation including a number of television broadcasters (in particular, the “Digital telefamily” channels), but in the federal television market it is represented by only one media outlet - “Channel One”.

1.3. Digital TV development drivers

Until 2010, due to geographical, social and economic reasons, **the only source of getting programs of TV and radio channels for 88.5% of population was analogue terrestrial broadcasting**.

At the previous time in Russia there are significant differences in availability of TV channels of free access for population in different regions of country. Thus, 5 TV channels are received only by 33% of population.

Fig. 13. Coverage of Russian population by terrestrial analogue broadcasting



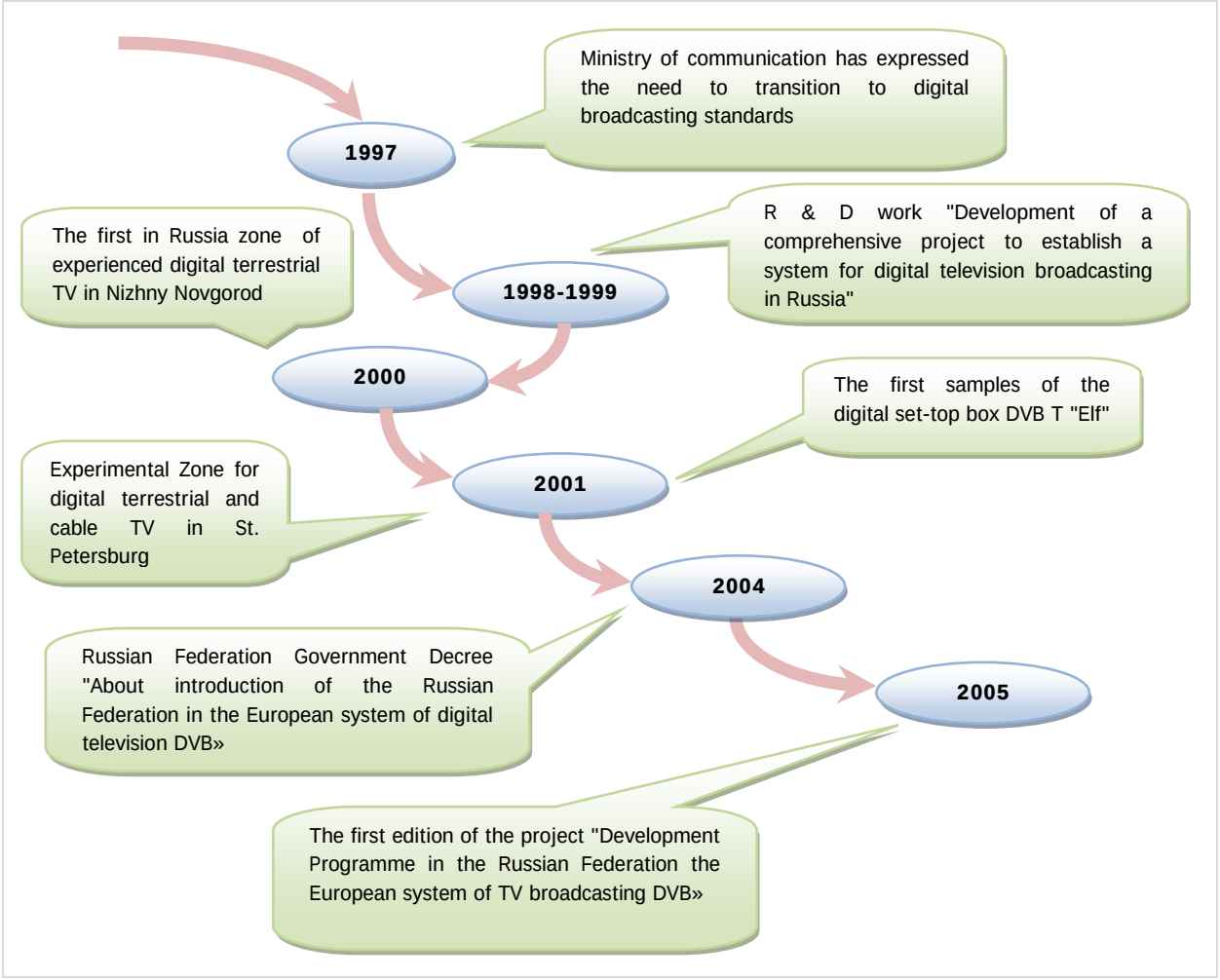
Source: Rospechat

In addition, about 1.5 million of people, who live in about 10 thousand localities of Russian Federation, do not receive any terrestrial TV channels, and about 4 million people have the opportunity to get only one terrestrial TV service.

Technical means used to broadcast nationwide TV and radio channels mostly exhausted their active life and require replacement and modernization.

The period 1997 - 2005 can be called a preparatory step on the way to digital TV in Russia.

Fig. 14. First steps to the digital TV in Russia



Source: J'son & Partners Consulting

Prominent role in the practical promotion of this process was played by international conferences NAT "Digital Russia today and tomorrow", traditionally taking place in Khanty-Mansiysk - a recognized centre of creation of information and communications environment (ICE) and the television digitalisation. The last conference was held at the exhibition IBC in Amsterdam in 2009.

Technical, technological and legislative issues of developing digital TV, mobile TV, high-definition television, broadband multiservice networks, television over IP, advanced domestic equipment for digital broadcasting are always discussed at Russian and international conferences: “SvyazEkspokom”, CSTB, “The development of digital broadcasting in Russia", "Modern television technology”, forums "Investing to the Digit” conducted by the Ministry of Communications, Association of Cable TV of Russia, Moscow Scientific Research Television Institute, The Bonch-Bruevich St. Petersburg State University of Telecommunications, CJSC "Expo-Telecom", "round tables" of the Federal Agency of Press and Mass Communications, SRI radio and the All-Russian Scientific Research Institute of TV and Radio.

1.4. DTT

1.4.1. Russian Federal TV digitalisation Program[14]

The diversity and complexity of the digital television and radio transition problems made it necessary to develop a strategy, a coordinated action plan for the public administration and management agencies, enterprises, professional and social organizations. The experience of many countries indicates the need for plans and strategies of various status and priority levels. Predominantly, they are focused on the problems of selecting the timing and methods for disabling the analog broadcast (regional or national), image encoding and compression technologies (MPEG-2, MPEG-4, DVB-T and DVB-T2, AVC (H.264 264) and others), thus including more programs in a digital packet and offering multimedia services; development of signal delivery methods; development of high-definition television; achieving a balance between free and fee-based components of multi-channel proposals; motivation and promotion of consumer activity.

Presence of high-level government programs is the special feature of design and implementation of the transition to modern broadcasting technology in Russia. In November 2007, the Government of the Russian Federation endorsed the “Concept of the development of broadcasting in the Russian Federation (2008-2015)". It provided for updating the existing laws and the development of new ones, as well as a number of standards, without which the transition could not be held. It also identified the principal players of the broadcast market and their relationship structure.

Federal Target Program (FTP) for the development of broadcasting for 2009-2015 was adopted in November 2009, defining the goals and objectives of the transition to digital technology, program indicators and metrics, dates and stages of its implementation, the amount and sources of its funding.

In preparation of this program, various options for addressing the issues of broadcasting development and the transition to digital technology were analyzed, and the benefits and risks of different approaches to this problem were assessed.

The results of the analysis are summarized in FTP as follows: in the case of development of TV and radio broadcasting on a commercial basis, without the use of State support measures, the major cities will be the first to be converted to digital broadcasting to assure the return on investment required for the implementation of the program, and in rural and remote regions that process could take decades. For the same reason, free broadcasting services to the population will decrease (and in some regions, will be eliminated).

As a result, in order to avoid imbalances in public multichannel broadcasting coverage and reducing social tensions, the need to support the existing public infrastructure of analog broadcasting, including the federal budget support, will continue indefinitely. In addition, there is a risk of exceeding the 2015 deadline set by the International telecommunication Union for transition from analogue to digital broadcasting, even in critically important cross-border regions.

[14] The chapter is compiled from the documents of The Ministry of Communication and Media of the RF

This risk may be fully eliminated by the socially oriented approach based on the application of the State support measures for the development of broadcasting. This implies, inter alia, the priority allocation of radio spectrum for the purposes of the terrestrial digital broadcasting of mandatory TV and radio channels, the creation and deployment of federally-funded, State-operated digital terrestrial networks in all regions of the Russian Federation for broadcasting of mandatory TV and radio channels, as well as budget subsidies for digital broadcasts of mandatory TV and radio channels.

The existing arrangements for the provision of free public broadcasting services shall continue, ensuring creation of a common informational and cultural continuum, an acceptable balance between socially relevant and commercial public broadcasting services, as well as uniformity of development of accessibility of broadcasting in all areas of the Russian Federation. FTP stressed the importance of digital terrestrial broadcasting platforms which is fully consistent with the position of the European Broadcasting Union for terrestrial broadcasting in Europe.

FTP envisions a staged approach to conversion to digital broadcasting in Russia.

Table 11. Plan of digital TV broadcasting roll-out by RF regions

Stage 1 (2010). Total of 12 regions. Number of transmitter sites: 2089. Required capital – **2862 million RUB**	Republic of Altai, Buryatia, Republic of Tuva, Republic of Khakassia, Altai Territory, Zabaikalye Territory, Kamchatka, Primorye, Khabarovsk Territory, Amur Region, Sakhalin Region, Jewish Autonomous Region.
Stage 2 (2011-12). Total of 27 regions. Number of transmitter sites: 1554. Required capital – **3299 million RUB**	Republic of Adygea, Dagestan, Ingushetia, Kabardino-Balkaria, Kalmykia, Karachai-Cherkess Republic, Republic of Karelia, Republic of North Ossetia - Alania, Chechen Republic, Krasnodar region, Astrakhan, Belgorod, Bryansk, Volgograd Region, Voronezh Region, Irkutsk Region, Kaliningrad, Kursk, Leningrad Region, Murmansk Region, Orenburg Region, Pskov Region, Rostov Region, Smolensk Region, Tyumen Region, St. Petersburg, Khanty-Mansiisk Autonomous District - Ugra.
Stage 3 (2012-13). Total of 39 regions. Number of transmitter sites: 1582. Required capital – **4286 million RUB**	Republic of Komi, Mari El, Mordovia, Tatarstan, Udmurtia, Chuvashia, Perm Territory, Stavropol Territory, Arkhangelsk Region, Vladimir Region, Vologda Region, Ivanovo Region, Kaluga, Kemerovo Region, Kirov Region, Kostroma, Kurgan Region, Lipetsk Region, Magadan Region, Moscow Region, Nizhny Novgorod Region, Novgorod Region, Novosibirsk Region, Omsk, Orel Region, the Penza Region, Ryazan Region, Samara Region, Saratov Region, Sverdlovsk Region, Tambov Region, Tver Region, Tomsk Region, Tula Region, Ulyanovsk Region, Chelyabinsk Region, Yaroslavl Region, Moscow, Nenets Autonomous District.
Stage 4 (2013). Total of 5 regions. Number of transmitter sites: 1275. Required capital – **1549 million RUB**	Republic of Bashkortostan, Republic of Sakha (Yakutia), Krasnoyarsk Territory, Chukotka Autonomous Area, Yamal-Nenets Autonomous District

Source: FTP

Implementation of the first phase, which began with the Far East regions and southern Siberia, started in 2010, and currently this phase is successfully completed. **The deadline for ending the analog broadcasting is set for the year 2015.**

The planned Program budget is 127 billion RUB, i.e. about 3.8 billion USD at current exchange rate. Of this amount, 80 billion Rub is planned to be drawn from the State budget, and the rest from extrabudgetary sources. The main cost article of about 60 billion RUB shall be the construction of digital terrestrial television networks. This includes the modernization of the Russian TV and radio broadcasting network (RTRN) - replacement of some existing antenna mast structures and construction of new ones, replacement of transmitters with ones suitable for digital broadcasting. The program objectives are to provide up to 100% of Russian population with multichannel broadcasting with guaranteed provision of nationwide public television programs of appropriate quality, and improving the operational efficiency of broadcasting.

Among the tasks that need to be addressed to achieve the objectives of the Program are the following:

- Modernization of State TV and radio network infrastructure;
- Conversion of State networks to digital technologies;
- Meeting the satellite resource requirements of TV and radio channel broadcasting;
- Enabling the widespread regional digital broadcasting;
- Development of radio broadcasting networks;
- Development of new types of television broadcasting, including high definition, mobile and interactive television.

The Program shall be implemented in two stages.

In the first stage of the Program (2009) the conditions for the transition to digital broadcasting were to be provided. This stage includes: development, examination and approval of the system projects for 1st phase of construction of the digital television broadcasting networks in the regions; construction of pilot digital broadcasting networks in regions intended to fine-tune the technological solutions planned for implementation; spacecraft design and development to assure the orbital launch in time for providing the necessary broadcasting frequency resources.

The second stage of the Program (2010-2015) includes implementation of planned broadcasting development activities, widespread transition to digital broadcasting, creation of conditions for sequential shutdown of analog broadcasting in the country, and complete establishment of common information area in the Russian Federation, including modernization and expansion of existing TV and radio broadcasting infrastructure (upgrading, retooling of antenna mast structures and engineering utilities, replacement of emergency facilities and structures); construction of digital terrestrial broadcasting networks for delivery of mandatory TV and radio channels and other free access channels; construction and launch of communications and broadcasting satellites; construction of digital and VHF-FM radio networks; awareness-raising activities to ensure successful and smooth introduction of digital broadcasting in the Russian Federation; creation of an archival digitalization system.

The following target indicators should be reached in the Program:

Table 12. Target indicators of the Program	
Population of the Russian Federation not covered by broadcasting at the final stage of the Program	<10 000 people
Share of population able to receive the required TV channels	100%

The number of Russian regions covered by digital terrestrial TV broadcasting of the required channels	83
Area of coverage	17 103 thousands sq km
Share of population able to receive 20 free access channels	100%
Share of population able to receive terrestrial digital TV channels	98,8%
Share of population not covered by regional TV broadcasting	1,2%
Share of population covered by broadcasting of specified quality	100%
Share of population covered by the TV/radio emergency warning system	100%

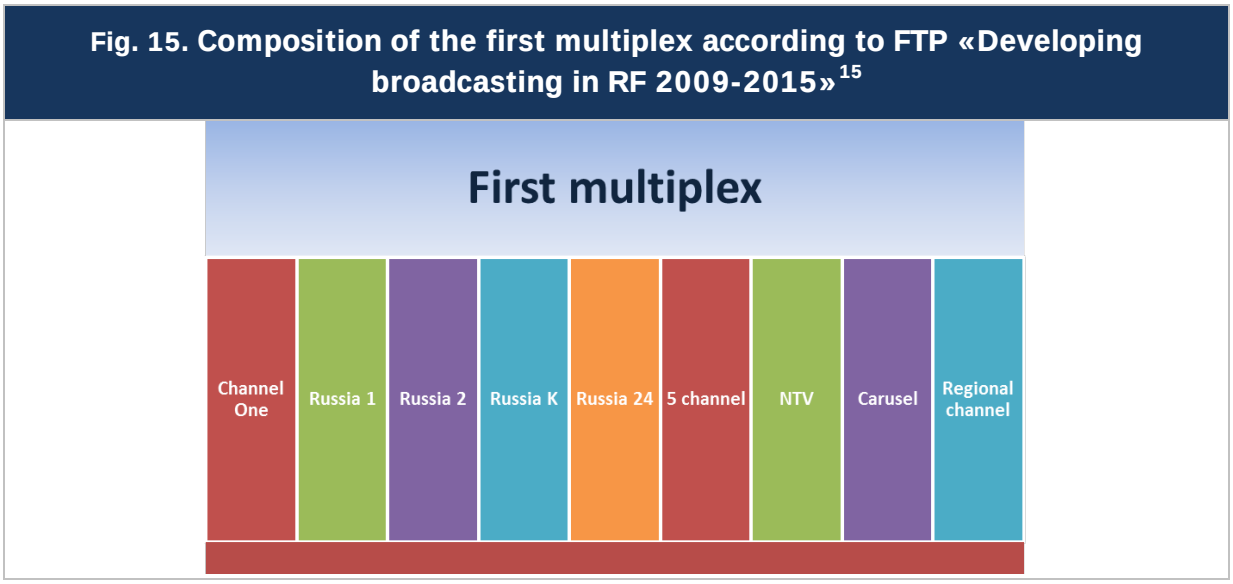
Source: Ministry of Communications and Mass Media

Construction of the first multiplex broadcasting network will be phased in 2009-2013 period, the second and third multiplexes in 2013-2015. Construction of multiplex creation and delivery centers is planned for 2010-2013.

The federal budget cost of construction of the first multiplex is estimated at more than 12 billion RUB The included TV channels will be distributed both in analogue and digital formats until more than 95% of the Russian Federation population will be provided with digital TVs or tuners. FTP allocates over 23 billion RUB from the federal budget on parallel broadcasting during the transitional period.

20 channels of the first three multiplexes are planned to be delivered free of charge, however, unlike the first multiplex, the second and third will be partly or entirely funded by commercial entities. It has not yet been determined who will act as investors, and on what basis the composition of the multiplexes will be determined (they can include 12-16 additional TV channels). It is known that they will be formed as the released frequencies emerge. The distribution network construction costs are estimated in the program at about 23 billion RUB.

Fig. 15. Composition of the first multiplex according to FTP «Developing broadcasting in RF 2009-2015»[15]



Source: Ministry of Communications and Mass Media

[15] President of the National Association of Broadcasters (NAT) Edward Sagalaev announced including the regional companies into the first multiplex on October 22, 2011 at the press conference in Ufa Information Center. /ITAR-TASS/

In early May 2011, Rostelekom expressed its willingness to cooperate in development of land-based digital content delivery networks to provide TV broadcasting in Russian regions, and signed an agreement to that effect with the State enterprise RTRS.

In addition to infrastructure creation, major cost items of the Program include switching to digital broadcasting in the DRM format (almost 14 billion RUB) and replenishment of satellite resources (about 26 billion RUB, of which 13 billion RUB will be provided from the Federal budget).

Another **important task of digitalization program is protection of the frequencies allocated to Russia**. Switch to digital broadcasting format shall release the frequencies previously occupied by analogue TV.

Ministry of Communications and Mass Media emphasized that if 95% of the population of Russia would not be able to adopt digital TV signal by January 1, 2015, then **analog broadcasts will continue in parallel with digital**. Most experts agree that it will be shut down much later than scheduled, because in addition to broadcasting the digital signal, its reception must still be ensured. Thus, to achieve the program targets, 100% of Russian population by 2015 should have special TV set-top boxes or televisions supporting MPEG-4 compression format (this format shall be used for digital broadcasting in Russia). But, as already noted, FTP does not subsidize the acquisition of digital consoles for the population.

Ministry of Communications and Mass Media provided only for supplying the low-income users with free digital TV tuners, paid for by the regional budget funds.

Switch to digital broadcasting provides **a number of substantial benefits**:

1. it would unify the information transmission channels and make them multiservice, because almost all the information will be in digital format;
2. it will be possible to store, compose and distribute information without loss of quality;
3. operators and the State as a whole would benefit from more efficient use of frequencies, transmission channels, significant increase in the amount of distributed programming, significant reduction of energy consumption by the broadcasting transmitters. This assures quick recovery of the additional costs of digital transmitting equipment and partial release of a scarce frequency resource.

At the same time there are **some problems** capable of delaying the scheduled implementation of FTP, specifically:

1. **Certain distrust** of Russian population to any new actions initiated by the government.
2. **Lack of innovation behavior and culture, unpreparedness to any innovations, especially those related to the additional financial expenditures**: potentially negative attitudes of the population towards the digital TV introduction program, associated with the need to abandon traditional analog televisions and radios and to purchase receivers with their own money.
3. **Low purchasing power of some population groups,** caused, on the one hand, by inability of the State to finance or subsidize supply of the receiver devices, and on the other hand, by **objective difficulty** of to purchase additional devices.

4. **Low quality of Russian TV receivers** and low quality of available content may neutralize the benefits of digital TV – its multi-program and multimedia capabilities, high picture and sound quality.
5. **Lack of understanding** of the benefits of digital broadcasting among the population, resulting in a lack of interest in abandoning the analog broadcasting: the majority of the population is satisfied with the existing level and quality of broadcasting. Potentially negative attitudes towards the introduction of digital TV, connected with a misunderstanding of the program's true objectives and the lack of information about the circumstances making its introduction necessary.
6. **Insufficient public awareness** about the specific details of the acquisition, usage and connection of digital broadcasting equipment, which may lead the acquisition of substandard consoles and kits from unscrupulous manufacturers: Russians' confused views on digital television.
7. **Lack of consensus**, and as a result, lack of a single publicly expressed position among the project stakeholders, including industry experts and media representatives, resulting in dissemination of different, often controversial messages among the mass audience. And this, in turn, leads to a loss of popular understanding of the subject, causing distrust to FTP as a whole.

In addition to the above mentioned risks, there are **other risks**, indicated by the experts involved in FTP implementation process:

1. **Financial risk** – insufficient and irregular funding of the program, systemic increase of FTP implementation costs.
2. Lack of **overall detailed action plan**. The FTP does not highlight with sufficient clarity the important transitional issues, such as the ratio of paid and free broadcasting, format of regional television representation, etc.
3. Delay of **legislative regulation and absence of digital standards**.
4. Too brief, **compressed transition period**, potential failure to achieve delivery of digital broadcasting to 96-98% of Russian population by 2015.
5. **Substantial technical problems** with implementation of FTP.
6. **Insufficient information campaign** to support the transfer to digital format.

To overcome the above mentioned problems, it seems appropriate to examine and use the **experience of countries** that have successfully completed the transition to digital broadcasting.

Study of foreign experience is extremely useful for the analysis of the status and development trends in the media industry of the Russian Federation up to 2020, for definition of the key problems of transition to digital broadcasting (institutional, economic, technological and social) and for development of proposals for State participation, as well as **public-private partnership** in the development of media industry and improvement of transition to digital TV and radio broadcasting in the Russian Federation.

1.4.2. Main participants of TV digitalisation process

Practical steps in creation of the State program of radio and television development began after the establishment of the Government Commission on the broadcasting development in May 2006.

In accordance with the Commission's decision made at the first meeting, the working group was formed to finalize the concept of the Federal Target Program "Development of Broadcasting in the Russian Federation (2009 - 2015)". It included five subgroups:

- To improve the functioning of the television and radio distribution systems in the Russian Federation;

- To develop proposals for keeping the analogue broadcasting network in serviceable condition;

- To establish the number and structure of the "social package" programs, and their status;

- To improve the legislative framework for regulation of broadcasters' and telecom operators' broadcasting services;

- To develop a single consolidated glossary of broadcasting terms and definitions.

The subgroups included in their activities the representatives of the Ministry of Information Technologies and Communications, Ministry of Culture and Mass Communications, Federal Agency for Press and Mass Communications (Rospechat), Roskomnadzor, Rossvyaz, RTRS, science-research institutes, the National Association of Broadcasters and other public professional associations, representatives of the broadcasting market players:

- Producers of audio-visual products, e.g. registered media

- The largest media holdings, television and radio companies

- Telecom operators

These agencies and organisations have become major players of planning and implementation of the digitalisation of broadcasting in Russia.

The Ministry of Information Technologies and Communications is appointed as the State client-coordinator of the Federal target program, State clients are The Ministry of Communications and Media, The Federal Communications Agency (Rossvyaz), The Federal Agency for Press and Mass Communications (Rospechat). The main developers of the Program are the Ministry of Communications and Media, Federal State Unitary Enterprise "Russian Television and Radio Broadcasting Network" (RTRS), Federal State Unitary Enterprise "The Russian Satellite Communications Company".

However, it is clear that convergence and integration of media and mass communications, the appearance of new subjects of media market in the near future will change the composition of the participants of the digitalisation process. Even now the role of content aggregators and operators of multimedia platforms is growing, the ratio and the roles of producers and distributors of content, linear and non-linear TV are changing.

1.4.3. DTT standard choice problem (DVB-T vs. DVB-T2)[16]

The issue of transition to the new standard DVB-T2 in Russia has become especially relevant after the discussion at the meeting of the Government Commission for TV and radio Broadcasting Development on July 7, 2011.

The Commission supported the proposal of the Ministry of Communications on pilot deployment of the terrestrial network for digital terrestrial television broadcasting standard DVB-T2.

Test broadcasting in this mode preceded this decision. It was held by RTRS in June 2011 in Moscow and Moscow Region.

During the tests, various operating parameters of DVB-T and DVB-T2 standards were measured for the following characteristics: the signal/noise ratio, field density, the effective speed, image quality, etc. The results led to the conclusion that the effectiveness of the evolutionary channel exceeds the earlier one by about 1.5 times, in particular, the data transmission speed in the 20 MHz band.

Table 13. DVB-T, DVB-T2 and LTE comparison

LTE	DVB-T	DVB-T2
Maximum data transfer rate in the band 20 MHz		
100 Mbps (to subscriber)	111 Mbps	154 Mbps
50 Mbps (from subscriber)		
Comparison of spectral efficiency (Mbps at 1 MHz)		
2.5	1.7	3,3

Source: Ministry of Communications and Media

Novosibirsk laboratory of R&D enterprise “Triada TV” conducted the same tests to examine directly the standard DVB-T2 equipment. The laboratory and field tests confirmed all the theoretical assumptions about the positive features of DVB-T2 broadcasting standard, among them: high spectral efficiency, high noise immunity and, therefore, qualitatively better and larger area of signal propagation.

By the end of 2011 RTRS shall organize the trial broadcasting areas for the new standard in the cities of Sochi and Kazan. In addition, RTRS will develop a plan for transition of existing digital TV networks to DVB-T2 standard.

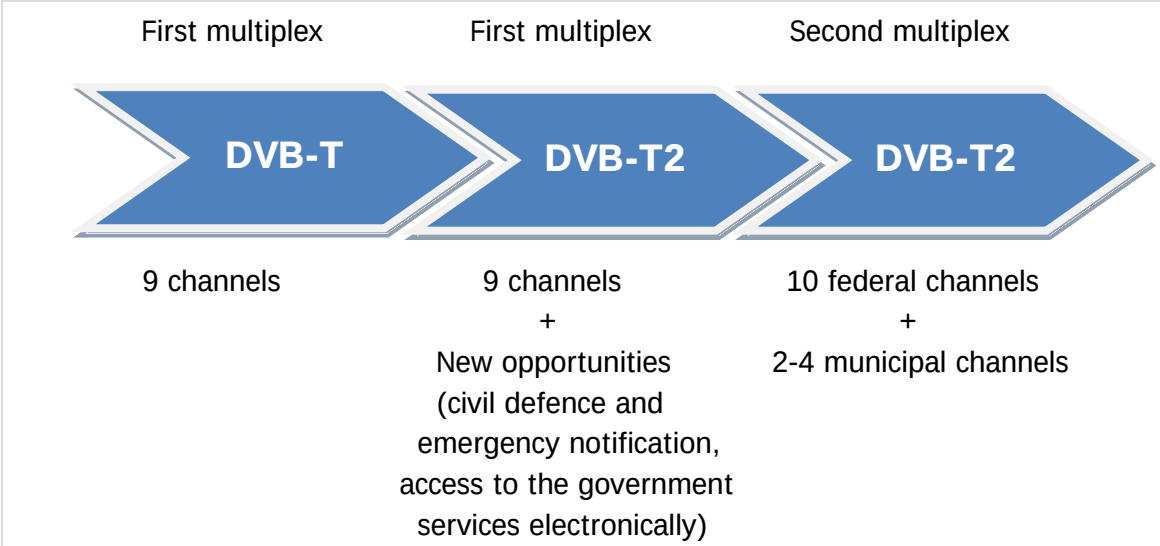
From the perspective of the Ministry of Communications, the main results of implementing the DVB-T2 standard will be:

- Ability to implement socially important services (emergency notifications, access to Digital Government services)
- Improving the quality of services provided for the purpose of broadcasting
- Convergence of broadcasting technologies with the broadband access technologies

[16] At the beginning of October 2011 a government commission chaired by vice prime minister Igor Shuvalov approved digital television transition in Russia on a new standard DVB-T2.

- Reduction of the transmission cost or increase of the coverage area while maintaining the power output.
- Ability to broadcast on 12 to 15 TV channels in standard definition or 4-5 high definition channels in one multiplex.

Fig. 16. The evolution of the formation of multiplexes with the introduction of the new format DVB-T2



Source: Ministry of Communications and Media

For regional broadcasting, the necessity of introducing the new standard is due to the fact that DVB-T2 standard will increase the maximum duration of the guard interval to 500 microseconds (mcs), which will increase its effective use in the construction of major regional single frequency networks, as well as provide more stable reception in problematic areas.

An important issue to consider when integrating DVB-T2 in Russia will be the need to avoid potential mistiming of networks in the former Soviet republics.

Today there is no sign of agreement on a single broadcasting standard among the CIS countries. Thus, DVB-T standard is proposed in Armenia, Azerbaijan, Belarus, while in Russia, Kazakhstan and Ukraine introduction of DVB-T2 is planned, and Kyrgyzstan shall use two formats at once.

In the future, DVB-T2 will not become obsolete as quickly as DVB-T: its spectral efficiency indicators have come close to the theoretical limit, and to improve them within the existing model of terrestrial broadcast television in the near future is unlikely. Obviously, the format of DVB-T2 in Russia will become a fundamental part of the development of digital terrestrial broadcasting in the foreseeable future.

1.4.4. HDTV

According to Russian experts, the need for introduction of a HDTV standard is caused by the following circumstances:
- increased possibility of using the existing content without distortion in viewing;

- liquidation of the digital inequality arising in the transition to digital high definition television in other countries;
- advance introduction of national standards for digital widescreen high-definition television system opens up opportunities for television equipment producers and users to make the transition to production and use of high-definition digital television equipment;
- opportunity to create additional national standards for digital high-definition television to ensure its implementation in Russia;
- improving the efficiency of investment in long-term predictable development of digital TV broadcasting.[17]

The first step in the development of HDTV in Russia has been the development of national standards, which was carried out in accordance with the "Long-term program of development of national standards, ensuring their harmonization with international standards in scientific and technical and manufacturing spheres for 2008-2012" of the Federal Agency for Technical Regulation and metrology of the Russian Federation.

Standard development was made on the basis of open bidding conducted by the agency, as well as the FSUE "NIIT" prior experience in development of high-definition television systems.

As a result, the following standards have been developed for digital high-definition television broadcasting:

National Standard GOST R 53 533, "Digital high-definition television. The main parameters of digital high-definition television. General Requirements".

This standard defines the basic parameters and elements of digital high definition television broadcasting system, image decomposition parameters in the digital signal source path, the parameters of digital television signals.

Widescreen HDTV defined therein as a high definition television with 16:9 aspect ratio, with square picture elements (pixels). The proposed standard eliminates distortion usually observed during normal playback of a standard definition image with an aspect ratio of 4:3 on the screens with 16:9 aspect ratio of. In this case, the additional information field, which is formed at the widescreen with 1920x1080 ratio of active pixels to active lines per frame, can be used by broadcasters to transmit additional information without imposition on the frame information field. This additional information includes alphanumeric narration for the hearing impaired, multi-language narration, etc.

GOST R 53534-2009 "Digital High Definition Television. Measuring signals. Methods of measurement. Common demands".

This standard defines the measuring signals and components thereof for control of the main quality indicators of the widescreen high-definition television digital broadcast signals, the general requirement for measuring signals and measurement instruments.

[17] L. POLOSIN, Chief Scientific Officer FSUE "NIIT", from a speech at the II International Conference "Digital TV and Mass Communications of Russia 2011"

GOST R 53534-2009 defines the transmission path of digital widescreen high-definition television, digital measuring signals of widescreen high-definition television in analogue and digital modes, and basic technical requirements for measuring equipment.

GOST R 53536-2009 "Digital high-definition television. The main parameters of the digital system with line scanning. Analogue and digital signal representations. Parallel Digital Interface".

GOST R 53540-2009 "Digital TV. Widescreen digital system. The main parameters. Analogue and digital representations of signals. Parallel Digital Interface".

The launch of HDTV

According to Russian Association "HD Union", the market of HDTV-channels in Russia for June 2011 is as follows:

I. Russian broadcasters of HDTV-channels:
- NTV+ (HD Movie, HD Sport, HD football)
- VGTRK and "Channel One" (Sport HD)
- Red Media (HD Life)
- CJSC "HD Media" (Perpetuum Mobile, Mir Estetiki, Terra Incognita)
- First HD (Kinopokaz HD-1, Kinopokaz HD-2, Teleputeshestvija HD, High Life HD)
- Sto Let (Zhenskii mir HD)
- Mediaholding "Expert" (Expert-TV HD)
- Mediaholding "Dozhd" (Dozhd HD)

Total: 15 HDTV-channels

II. Number of HDTV-channels in basic packages provided by satellite, IPTV and cable operators:
- NTV+ (11 channels): HD Movie, HD Sport, HD Football, HD Life, Eurosport HD, Discovery HD Showcase, MTV Live HD, Nat Geo Wild HD, Mezzo Live HD, Animal Planet HD
- Platform HD (12 channels): Kinopokaz HD-1, Kinopokaz HD-2, Teleputeshestvija HD, High Life HD, National Geographic HD, Nat Geo Wild HD, HD Life, Eurosport HD, MTVN HD, Sport 1 HD, Zhensky mir HD, HD Sport
- AKADO (16 channels): National Geographic HD, Teleputeshestvija HD, HD Life, Nat Geo Wild HD, Kinopokaz HD-1, Kinopokaz HD-2, Fox Live HD, Eurosport HD, RUSH HD, Sport 1 HD, Expert-TV HD, Dozhd HD, Luxe TV HD, Fashion TV HD, Mezzo Live HD, myZen.tv
- R-telecom holding (10 channels): Kinopokaz HD-1, Kinopokaz HD-2, Teleputeshestvija HD, Eurosport HD, Mezzo Live HD, Nat Geo Wild HD, MTVN HD, Sport 1 HD, Animal Planet HD, Discovery HD Showcase
- Beeline-TV (16 channels): Discovery HD Showcase, Animal Planet HD, Eurosport HD, Fox Live HD, HD Life, HD Media, Luxe TV HD, Mezzo Live HD, MTVN HD, Nat Geo Wild HD, myZen.tv, National Geographic HD, Kinopokaz HD-1, Kinopokaz HD-2, Sport 1 HD, Expert-TV HD

Total HDTV-channels: 25, from which 15 - Russian and 10 - foreign.

According to analysts of SCC "Skolkovo", the satellite direct broadcasting in Russia in mid-2010 reached more than 570 channels and the number of HDTV channels for September 2010

reached a total of 18, representing 3.2% of the satellite channels total number. In addition, HD-broadcast in Russia in 2018 will not exceed 20% of the total number of TV satellite channels[18]. Obviously, the number of HD-channels, raised by one or another satellite operator, is closely linked to the demand of this kind of broadcasting market.

Currently there are over 5 million television sets in Russia which are capable of receiving HD-signals, and, according to experts, the annual increase in number of these TV sets is almost 3 million units. At the turn of 2010, high-definition television was used by the 1.3% of subscribers (including 20 thousand subscribers of HD-channels provided by cable operators "AKADO-Stolitsa" and "Stream"). Moreover, almost 85% of HDTV viewers are concentrated in the Central region and in the southern part of the country. In general, despite the large number of HDTV sets, this television format is not popular yet. The operators say that HDTV is of little interest even in Moscow, and outside the capital demand for it is virtually absent. The main problem of HDTV is not the absence of sufficient content, but the fact that TV viewers in Russia are not ready to subscribe to expensive high-definition channels. In addition, high-definition content delivery via satellite is more expensive than delivery of standard format channels. The major HD broadcasting problem for cable operators is that infrastructure suitable for distribution of this broadcast format does not exist yet and its development requires large capital investments. Thus, any marked increase in the subscriber base and consequently a rapid HD-channel build-up by operators in the coming years is unlikely.

Development prospects

High definition television in Europe and in Russia is not growing as rapidly as the analysts suggested only recently. According to the estimate made by SCC "Skolkovo" experts, it will not be more than 20-22% of the total broadcasting by 2018.[19]

Table 14. The main operators' subscriber base of paid HDTV-channels, thousand subscribers	
Satellite broadcasting	
NTV+	28
Platform HD	42
Cable broadcasting	
AKADO	19
IPTV-broadcasting	
NetbyNet	21
Beeline-TV	7
Iskratelecom	3

Other toll HDTV-channels operators - 19 thousand; total toll HDTV-channels subscribers - 139 thousand

Source: HD Union Association

[18] Satellite Communications & Broadcasting Market Survey Prospects to 2018. Euroconsult, 2009
[19] Specialized publication "Satellite communications and broadcasting" - 2011

Table 15. The subscriber base of open (free) HDTV-channels, thousand of subscribers	
Satellite broadcasting (open, free)	
HDTV-channels Luxe TV HD, Fasion TV HD	35
Internet-TV broadcasting	
CSJC "HD Media": HDTV-channels HD Media	54
Broadcast on local networks of Internet providers	
CSJC "HD Media": HDTV-channels HD Media	33
Luxe TV HD, Fasion TV HD	35

Source: HD Union Association

Total open (free) HDTV-channel subscribers - 157 thousand
Total paid and free HDTV channels subscribers - 296 thousand

Russia takes part in international developments. One of them is transition from alternate-linear scanning to progressive (sequential) 1080 50 Hz scan. This will greatly improve the image quality.

1.4.5. TV Channel Multiplex scenarios

The first multiplex of the terrestrial digital TV broadcasting network in Russian Federation.

In accordance with the Concept of the Federal Target Program “Development of Broadcasting in the Russian Federation for 2009-2015” (hereinafter referred to as “FTP”), approved by the Government of the Russian Federation on 21 September 2009 No. 1349-r, as part of the federal program, “it is planned to organize broadcasting of 3 digital multiplexes that contain 20-24 free access TV channels in all localities, covered in the present by terrestrial television”.

The composition of the first multiplex was initially determined by the presidential Decree “On nationwide mandatory public TV and radio channels" No. 715 of 24 June 2009 and subsequently updated by the Decree No. 637 of May 12, 2011

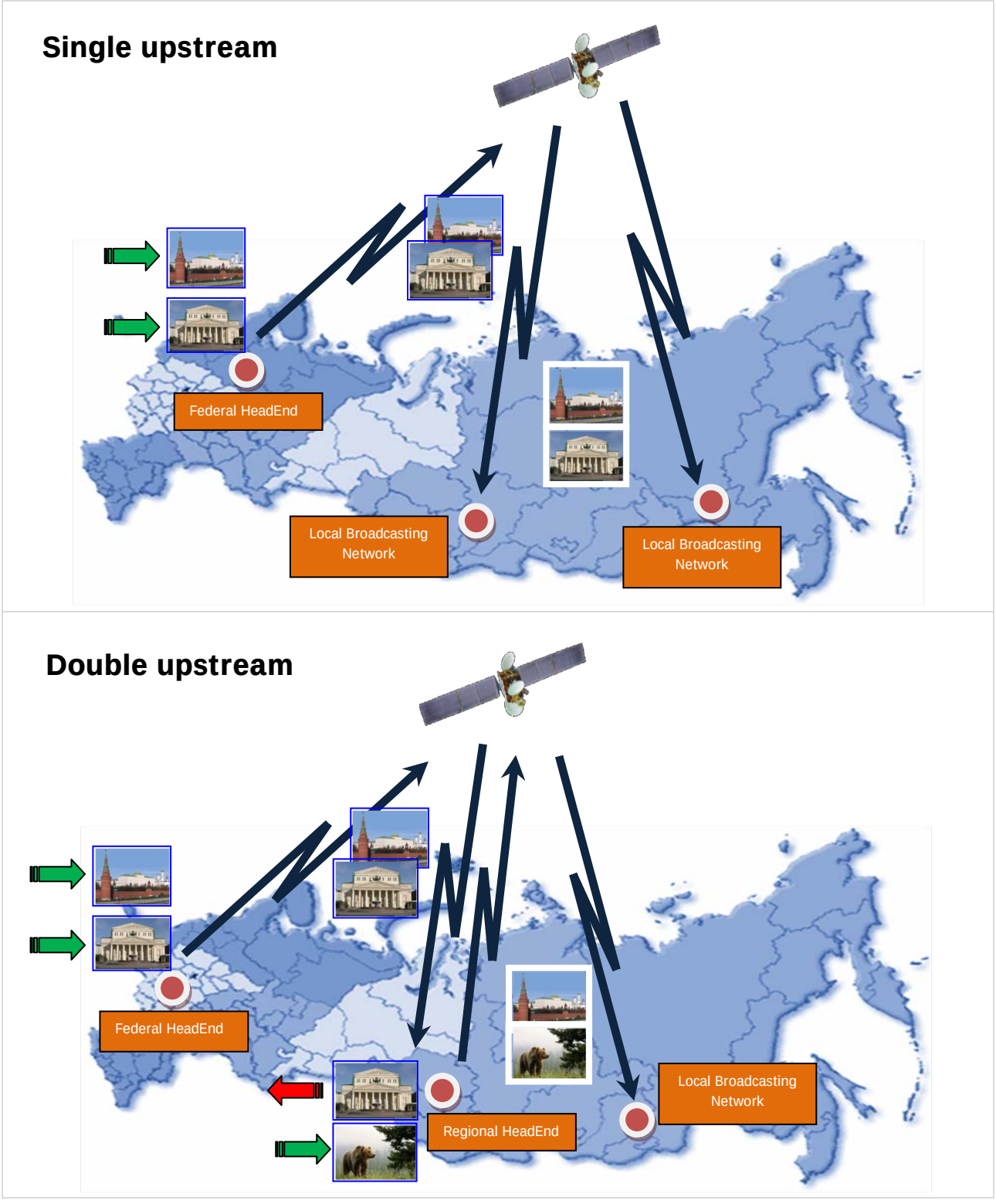
A decree dated May 12, 2011 provides changes of the order of subsidizing the compensation for telecommunication services, provided by Federal State Unitary Enterprise RTRS for aims of terrestrial analogue broadcast of nationwide mandatory public TV channels in localities with fewer than 100 thousand people - since 2011 until the end of analogue translation, and for the purposes of digital terrestrial broadcasting of these TV channels in localities with population less than 100,000 people - since 2012. Also the Decree No. 637 instructs the Russian government to implement the State regulation of tariffs for communication services provided by RTRS to broadcasters, and communications services provided to the company by other operators.

It should be emphasized that the regional channels in the first multiplex (with maximum number of 83, equal to the number of subjects of the Russian Federation), will not have the status of a “nationwide public mandatory” channels, as opposed to the eight federal channels. Consequently, they will not get state compensation for communication services (for more details on the criteria for selection of regional TV channels in the first multiplex see Section 1.4.6.).

The first multiplex uses single frequency (synchronous) broadcasting principle; it includes TV channels not only with transparent, but also with the network distribution technology (VGTRK

channels 2-5); it also provides local distribution of regional channels exclusively within the relevant Federal subjects of the Federation. All these reasons cause the need for double upstream of signal on the satellite for the first multiplex.

Fig. 17. First multiplex concepts of single and double upstream on the satellite



Source: J'son & Partners Consulting

The initial preconditions of the principles of formation of the second and the third multiplexes (approved by the Government commission for the development of broadcasting):

- licensing for broadcasting in localities of more than 200 thousand inhabitants is, in accordance with the law, on a competitive basis;
- presence of sufficient amount of TV channels of federal distribution that are not included in the number of mandatory public channels of the first multiplex;
- need for broadcasting of those regional TV channels that will not be broadcasted together with mandatory public channels of the first multiplex;
- need for preservation of small city and municipal TV channels that provide the information needs of population at particular localities;
- existence of developed frequency-territory plan for the second multiplex of the terrestrial digital broadcasting network in Russian Federation.

In accordance with the FTP, construction of physical infrastructure for the second and third multiplexes is planned for 2013-2015; however, as the infrastructure for broadcasting of the first multiplex is being created, it is supposed that the construction of the broadcasting networks of the second multiplex may be completed earlier than it was proposed in FTP.

As a result of meetings with the Ministry of Communications of Russia, the National Association of Broadcasters and the Federal State Unitary Enterprise “RTRS” it was decided that the 2nd multiplex network deployment should be started in major cities, where broadcasting is profitable for TV and radio operators, because of the economic (and advertising) appeal. In order to reduce the financial burden on broadcasters whose expenditures on distribution of the second multiplex are not subsidized, the second multiplex broadcast organization will be divided into two stages.

The first stage is the organisation of 2nd multiplex broadcasting in 144 localities - regional centres and cities with population over 100 thousand. The inclusion of second terrestrial common access digital TV package will be staged as follows:

- regions of the 1st and 2nd priority -- 2011 - 2012;
- regions of the 3rd priority -- 2013 - 2014;
- regions of the 4th priority -- 2014 - 2015.

The list of regions of the 1st, 2nd, 3rd and 4th priority is determined by FTP "The development of broadcasting in the Russian Federation for 2009 - 2015", approved by the Decree of the Government of Russian Federation of 3 December, 2009 No. 985.

The second stage consists of bringing the coverage of second terrestrial digital TV package to the equivalent of the 1st multiplex in localities with population under 100 thousand. The main problem is that broadcasters will have to pay for broadcasting services both in digital and analogue formats. Thus, it is appropriate to start the 2nd multiplex on the second stage after the analogue broadcasting will be phased off.

The principles of formation of the 2nd multiplex:

- the 2nd multiplex is going to contain 9 TV channels throughout Russian Federation and one radio-frequency channel;
- broadcasting is free for consumers;
- structure of the 2nd multiplex is determined by the Federal Tender commission (FTC, [*Федеральная конкурсная комиссия*], attached to Ministry of Communication and Mass Media) on a bidding basis, according to the present procedure and developed frequency-territory plan of the 2nd multiplex;
- the bidding shall establish 9 TV and radio broadcasters which shall be granted licenses for TV broadcasting in Russian Federation;
- cost of services of one 2nd multiplex TV channel broadcasting is defined as the ratio of total costs to the number of channels in the multiplex;
- broadcasting of the 2nd multiplex TV channels may include regional and local programming inserts, but the operator expenses for these inserts shall be covered by the TV and radio broadcaster.

The main criteria for selecting channels of the 2nd multiplex:

- 24/7 broadcasting;
- broadcasting concept proposed to FTC;
- financial and economic position of TV and radio organisation (opportunity to pay for distribution services throughout Russian Federation, considering stages of creating of the 2nd multiplex networks);
- presence of active analogue broadcasting network, level of public interest in the TV channel (according to media studies);
- social significance of the TV channel.

National Association of Broadcasters issued a preliminary request for applications for the right to join the 2nd multiplex. As the result, 17 broadcasters made bids for nine slots of multiplex in 2010. Applications for participation in the second multiplex were submitted by the following TV companies: “TV Center”, Interstate TV and Radio Company “Mir”, “Zvezda”, media holdings "CTC Media" (“Domashniy”, “CTC” and “Peretz” channels), Gazprom-Media Holding (“TNT” channel), National Media Group (TV channel “REN”), ProfMedia (“TV3”, “MTV Russia” and “2x2”), a group of companies UTV Media (“MUZ“ and ”Semerka“), TV channels “Russia Today”, “O2TV”, channel “A1“ and the media group “Zhivi!”.

Later, NAT also received applications from TV channels “RU.TV” (UAB “Russian Media Group”), “First Game Channel”, “TTN: Television Trade Network”, “Home shop”, “SGU-TV” (all-Russian TV channel “First educational”), National educational TV channel “Prosveshenie”.

Principles of formation of the 3rd multiplex:

- the 3rd multiplex is formed with 4 municipal TV channels and one TV channel in the high definition TV format, broadcasted over one radio frequency channel;
- broadcasting if free for consumers;
- the structure of the 3rd multiplex is determined on a bidding basis, with biddings held for each locality or designated territory of Russian Federation;

- as a result of the bidding, 4 TV and radio organisations shall be granted licenses for TV broadcasting in particular locality or territory;
- one TV and radio broadcasting organisation that will be broadcasting in HD throughout Russian Federation, is defined by the results of separate bidding by FTC;
- 3rd multiplex networks shall be launched when municipal TV and radio organisations are ready and radio frequencies are available. Upon submission of applications, FTC shall designate the localities for which the bidding will take place;
- bidding municipal TV and radio companies can engage TV and radio broadcasting organisations that are not included in the 2nd multiplex as their network partners;
- cost of services of one TV channel broadcasting is defined as the ratio of total costs to the number of channels in the multiplex, considering that one HDTV channel equals 4 standard definition (720 x 576) TV channels.

The main criteria for choosing municipal TV channels for the 3rd multiplex:

- 24/7 broadcasting;
- broadcasting concept proposed to FTC (in case of the network partner engagement, the municipal TV channel broadcasting concept will be considered alongside with the broadcasting concept of the network partner);
- most available amount of self-produced and/or purchased programs;
- level of public interest in the TV channel (according to media studies);
- financial and economic position of company (opportunity to pay for signal broadcasting services);
- presence of active analogue broadcasting network;
- social significance of the TV channel.

The selection of single HDTV channel will be made on the basis of the same criteria.

Preserving the potential of city and municipal television companies in transition to digital broadcasting.

When existing television channels of the city and municipal television companies that provide no more than 2 - 3 hours of proprietary broadcasting, are integrated into second multiplex as federal channels, , they may lose their network partners and will be forced to stop their terrestrial broadcasting.

However, proprietary content of such channels has a great social importance for urban and municipal communities.

National Association of Broadcasters suggested the following measures aimed at preserving the potential of the high demand of these television stations:

- in order to enable the broadcast of the regional stations, broadcast networks of the third multiplex should be built on the multi-frequency (asynchronous) principle. It will help in preserving the municipal television and radio companies broadcasting in small territories (assuring the local broadcasts);

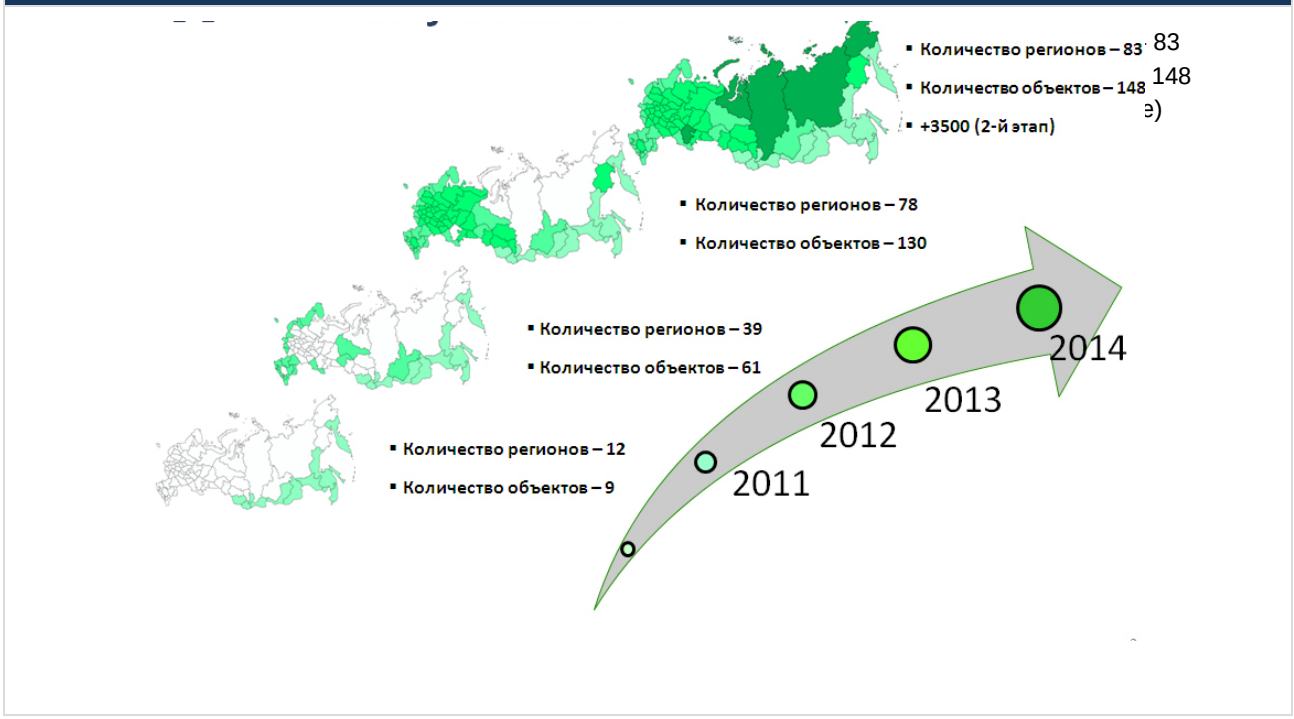
- frequencies freed up after the launch of the 2nd and 3rd multiplexes should be used, above all, for TV and radio broadcasting;

- to increase the proprietary broadcasting of the local companies, the Joint Bank of video content shall be created on the principles of syndication, sourced with programming of regional and local companies, as well as materials of Gosteleradiofond, Gosfilmofond, archival materials of TV and radio companies, etc.

Organisation of the second multiplex's broadcasting

In the end of 2010, FSUE "RTRS" provided the broadcasters with the second multiplex network construction schedule.

Fig. 18. The stages of organisation of the second multiplex's broadcasting



Source: RTRS

Thus, FSUE "RTRS", which in 2011 began construction of the second multiplex facilities, is going to finish it simultaneously with objects of the first multiplex by 2015.

1.4.6. Regional strategies and features of TV digitalisation

Regional TV digitalisation strategy is determined by the features of its development in Russia: a large number of broadcasters operating in all 83 federal entities, primarily the network nature of their operation, lack of developed advertising markets in most regions.

According to the Concept of broadcasting development, the regional broadcasters are the organisations with TV and radio broadcasting licenses, "who broadcast within the territory of one or two contiguous RF regions". There's also a provision stating that "regional (interregional) mandatory public channel is required for the broadcasting by operator on the entire territory of one or several subjects of the Federation".

NAT approved the following Basic conditions implementation of which will allow the regional companies to apply for entry into the first multiplex:

- proprietary programming;
- native broadcasting (availability of certain amount of proprietary and acquired programs) and the opportunity to quickly reach the full amount of broadcasting;
- thematic and genre content diversity;
- popularity of programs;
- financial and economic status, allowing the company to pay for communication services of program distribution over the serviced territory.

NAT surveyed the market of regional companies, and identified those able to qualify for participation in bidding for entry into the 1st multiplex in case of network partnership termination and increase of native broadcasting. The review included major regional companies with the volume of the broadcast of at least 18 hours per day, as well as companies with lower amounts of native broadcasting in cases when there are companies on the territory of Federation subject that operate the over the largest area of broadcasting or with the highest volume of native broadcasting.

De facto there are about 40-45 regions in Russia with competitive local broadcasters which are worthy of taking place in the first multiplex[20].

However, the broadcasters of almost all Russian regions have declared their ambitions to apply for participation in the bidding.

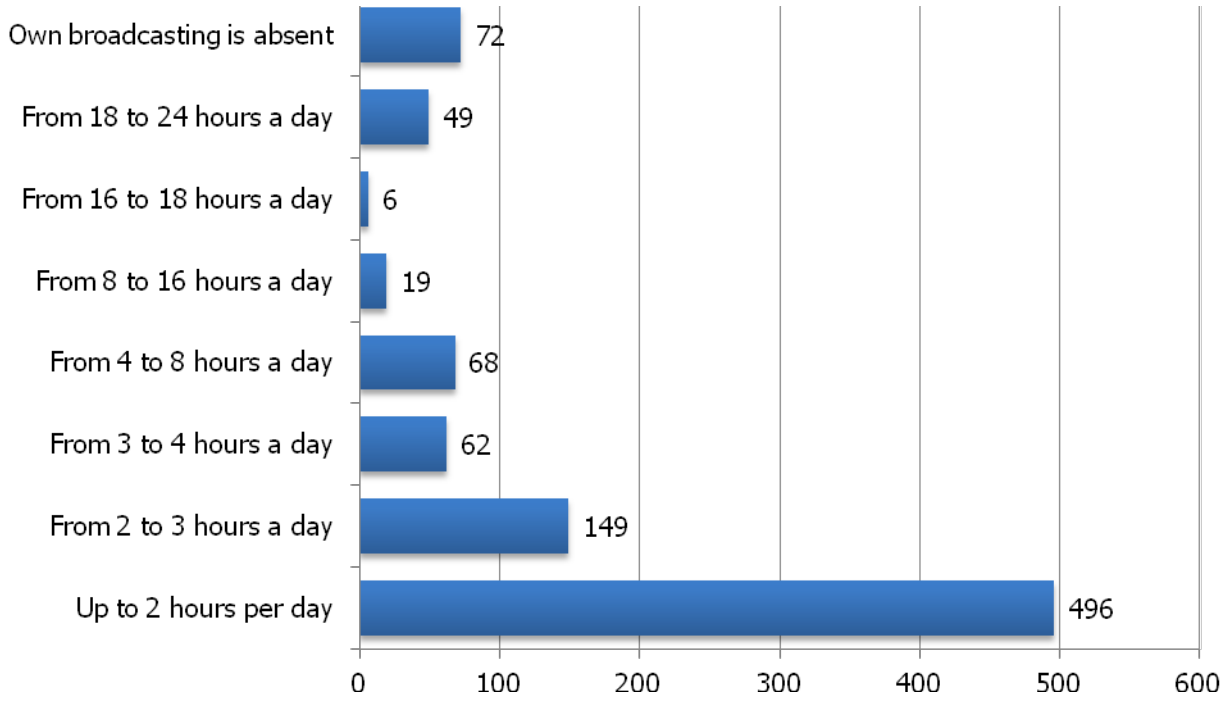
Development alternatives (models) were also considered for regional broadcasting companies which do not pass a competition for entry into the first multiplex:

- continuation of the work in an analogue format before it is turned off, with a gradual transition to independent programming and increase of native broadcast, with the intent to create a meaningful channel and to enter the third multiplex on a competitive basis;
- continuation of operation on a basis of network partnership with the federal networks which have joined the 2nd multiplex, in case of availability of the economic, technical and other conditions,;
- establishment of a national unified regional TV channel with content formed by local companies, to enter the third multiplex (or creating a similar satellite TV channel);
- formation of local multiplexes;
- direct satellite broadcasting;
- transition to non-terrestrial broadcasting environment or creation of a full-fledged cable channel;
- permanent transition into the category of content producers for a regional channel which has joined the first multiplex;
- merger of several small companies into one large company with independent programming.

The volumes of native broadcasting by the NAT survey are shown in table.

[20] "Ninth in the first", “Standard” magazine No. 7 (90), July 2010

Fig. 19. The volumes of regional broadcasting in cities with populations over 10 thousand people, number of broadcasters



Note: The regional broadcasting is absent in Chuvash Republic, Ingushetia and the Nenets Autonomous District

Source: NAT

It should be noted that the broadcasting volumes of many regional and local TV companies are regulated by the treaties ("regional windows") with the federal network companies and may be increased.

There was identified a number of problems hindering the creation of digital format development models at the end of 2010.

The main problems are:

- lack of specific information about the principles of formation of tariffs for communication services for distribution of regional channels in the territory of the Federation subjects, confirmed by the technical and economic calculations, as well as availability of the financial support from the federal and local budgets for regional broadcasting companies with the channels that shall be included in the 1st multiplex;
- possible refusals of the federal network channels to continue the regional partnerships in the future;
- limited penetration of cable networks in the regions and the size subscriber base make it premature to confirm a model of transition from terrestrial to satellite TV, as indicated by most of the TV companies;
- poor broadcasters' knowledge of the new technologies of content distribution and delivery in digital media;

- lack of media studies in many areas, both in terms of market and commercial attractiveness, and electoral point of view (time of viewing), which is critically important for regional companies;
- lack of affordable, quality, versatile content as a key component for the transition to independent programming and twenty-four-hour broadcasting.

New trends and risks are reflected in the draft Resolution of Media forum "Enisey.RF - 2011" (published on the site www.nat.ru).

The idea of "Digital Partnership" has been developed and proposed for further discussion of by the forum. It represents the multilateral cooperation of all market participants as a business transformation in the new business models in the digital segment. Building partnerships along the entire chain of entities that in some extent influence the process of digitalisation is considered in the Resolution as the main factor of further successful operation of regional broadcasting, and timely critical decision-making by the local companies.

Today the regional broadcasters see the following main threats:

- possible escalation of the conflict of interest among the market participants, including the government, television companies, telecom operators, telecom companies and end users;

- possibility of a mass withdrawal from the market of regional and local TV channels. This will lead to the threat of loss of Russian citizens' rights to obtain local information and to be involved in its production and exchange, as provided by the Constitution of the Russian Federation.

Many regional broadcasters today are in search of a new program concept, new optimal business models, new programming distribution media.

However, along with interest in further successful development demonstrated by a small group of regional companies, the following can be stated:

1. Regional television mainly loses its position as a strong, dynamic component of the nationwide television space.
2. Predominantly, the regional TV companies do not anticipate any further development of their business in non-terrestrial environment. Many of them are not ready to generate new ideas, seek new ways of development. Established business moving on a certain track, lulled the vigilance of many broadcasters, and formed the inertial-dependency approach.
3. Over the past 15 years, so-called "network" broadcasting has developed in Russia. It allowed the federal networks to achieve significant distribution without any special investment, and the regional companies - to increase the loyal audience. Until recently, the situation has made everybody happy, but it negatively affected the production of proprietary programming by the local broadcasters - many of them don't have neither independent programming, nor optimal output. The volume of network partnerships is currently on decline.
4. "Natural Selection" will allow to evolve only those regional and municipal broadcasters who are ready for change, who are actively involved in shaping their own future.

1.4.7. Old and new method of approaching to technological chain of broadcasting (production, aggregation, distribution, broadcasting)[21]

Classical model of linear television includes several links: content creators, aggregators, translators, content distributors, and users. All of these elements (except users) may belong to one company.

Developing of a business model takes place with attraction of new distribution channels: IPTV, mobile and Internet TV.

In IPTV model, the television chain is shrunk because distributor carries the functions of aggregator and broadcaster.

Technological breakthroughs are dictated by the changing of preferences among the most active part of the television audience. According to the analytical studies, 75% of youth under 25 years of age watch online video and IPTV, and only 25% - terrestrial TV, but with the development of services and diversity of content this percentage changes in favour of IPTV. At this time, 80% of the audience at the age of 44 and above watches terrestrial TV and only 20% - online video and IPTV.

Departure into the Internet space

Terrestrial and cable broadcasters are increasingly beginning to explore the Internet space. Fairly successful example is the VGTRK. This holding has developed its own broadcasting platform common to all Internet resources contained in it, made emphasis on promoting high-quality licensed video content in all media, with help of its partners and social networks. Right from the start it employed competent monetization of the content through the advertising channels, through the introduction of video subscription and sales of HD-quality video content.

The new player structure

The new player structure actively forms in the Russian media market. The players are the paid web content aggregators, content providers, Pay TV operators, equipment manufacturers. New media companies are beginning to explore the market, their costs are constantly increasing in the market, but the investments in production and provision of services for content delivery are also increasing, which results in overall growth of attracted capital.

Using a CDN

The tendency of creation of new TV channels directly from the online broadcast should be noted as well. Thus, channel "Dozhd" has chosen as its partner such an operator as NGENIX that uses CDN (Content Delivery Network) content delivery technology integrated into Broadband Access. CDN allows for platform scalability which is extremely important, for example, during the bursts of traffic. The TV channel cooperation with CDN operators provides real advantages to channels created in the online environment. Such cooperation allowed to minimize the initial capital costs due to complete lack of spending on proprietary infrastructure maintenance and development, as well as to outsource any of the non-core tasks. For example, channel "Dozhd" achieved the rapid deployment of service in 7 days, as well as the scalability under any loads and technical support from the operator. This is a real example of a modern system of cooperation between the content producer and operator in the digital TV market.

[21] The chapter is compiled from the materials of informational-analytical centre of National Association of Broadcasters

1.4.8. DTT signal coding and DTT commercialization in Russia

Introduction of terrestrial TV signal coding (conditional access) is regarded in Russia not only as a limitation of unauthorized viewing of content, but also as a possible tool for income generation and development of additional paid services, as well as an effective method to comply with copyright law. Rights holders and broadcasters with exclusive paid content, producers of receiving equipment, scrambling system designers and cellular operators are interested in it, especially when they add in streams of digital multiplexes additional services, interactive, high-definition channels, etc.

Currently, terrestrial TV signal protection systems are used only in broadcasting of the leading Federal channels, primarily the “Channel One”, “Russia 1” and “Russia 2”, with program content for distribution in Russia only. Encryption of signal is at the level of “ground - satellite - receiving station”, and then the signal is distributed in the open access mode. Such a measure is due to the fact that the signal should not reach the territories of neighbouring countries, which would entail a violation of license agreements with suppliers and rights holders of TV programs, and cause penalty sanctions.

The introduction of conditional access in digital multiplexes at the level of receiving equipment has other goals. Firstly, it is to protect the legal market of receiving equipment from the mass penetration of non-certified set-top boxes made in other countries. In Russia the algorithm of coding system will belong to RTRS, and any set-top boxes producer will have to get it from RTRS.

If it is decided to apply a conditional access to all digital broadcasting multiplexes, it will cause obsolescence of the digital consoles purchased by the viewers earlier.

The use of conditional access to channels of broadcasting digital TV will allow introduction of a variety of additional services, including interactive ones. That includes, apparently, Internet access via terrestrial digital television network, the possibility of which was mentioned by the Minister of Mass Communications of Russia.

FTP has a provision for guaranteed reception of 20 open access and high quality channels by the viewers; today it is the main advantage of digital broadcasting.

If the introduction of conditional access will require only purchase of a console-decoder and later the access to TV channels (within the multiplex) and to interactive services will be free, then it will be perceived positively. Obviously, in case of multiple coding systems there will be a need for increase of consumers’ expenses to purchase more expensive multi-receiving decoders and additional access cards. It is more appropriate to adopt a united encryption system within which each broadcaster will be able to selectively block its broadcasted channels.

If such a decision shall be made, a common standardization may be distributed only on the basic free channels, while the paid channels and paid services are likely to have their own subscription-based coding system.

Currently there are three conditional access systems under discussion: **Roscryp, BISS and Pro Crypt**. In order to choose one of them, special selection criteria tables were composed, which were provided to one of the initiators of digitalisation program - Federal Agency on Press and Mass Communications (Rospechat). The main criteria in the selection will be the ease of use, versatility, reliability and a high degree of protection against hacking.

The cost of complex coding solution for the package of 8-10 TV channels in minimal configuration, depending on the brand of equipment, ranges from 30 to 100 thousand USD. However, many systems require license royalties for their use, as well as the surcharge for each additional channel or package. The cost of subscriber devices and SAM-modules used to expand functionality of receivers, TVs and set-top boxes with support for one encryption system, amounts to 50 - 400 USD, depending on the system.

The range of conditional access systems that are already on the market, is quite broad. Domestic as well as foreign producers claim the role of an encryption system supplier for the Russian digital TV broadcasting. It is worthwhile noting that the first coding system in Russia in the early 2000's was BISS. It was developed in compliance with the recommendations of the European Broadcasting Union by Tandberg Television. BISS is simple to implement, does not use smart cards and requires no license fees. However, according to V. Udalova, Director of the Directorate of network development of the “Channel One”, although this system complies with the content owners’ formal requirements, it was originally designed not for blocking of the broadcast programs, but to encode short report materials not attractive for hackers. Nevertheless, in Russia BISS is used with some of the nationwide VGTRK channels, as well as to protect the content of TV Company “CTC Media”. In turn, the UAB “Kosmos-TV” and JSC “Orion Express” chose the solutions of Dutch company Irdeto Access BV, and television company "NTV-Plus" uses VIAccess system.

Among the other foreign developments, Conax CAS7 and NDS VideoGuard systems are the most widespread with Russian Pay TV operators. As for the Russian scrambling systems, as noted above, the most popular systems, as noted above, include DRE Crypt, Pro Crypt and “Roscrypt-M”. For example, DRE Crypt system is used to encrypt the content of “Tricolor TV”, and the Pro Crypt system, developed by the St. Petersburg company JSC “IK Satprof”, is already installed in some test areas of terrestrial digital broadcasts, including Tatarstan and Yekaterinburg.

“Roscrypt-M”, characterized by high cryptographic strength, is based on the proprietary development of Scientific Research Institute of Radio (NIIR), as well as the Russian symmetric encryption standard GOST 28147-89, introduced in 1990. According to head of television research and development centre of NIIR, since January till April 2006 the “Roscrypt-M” system was in trial operation on a network of Federal State Unitary Enterprise “Kosmicheskaya Svyaz’”. as a result of these trials, in June 2006 “Roscrypt-M” was introduced on all satellite channels of broadcasting network “Channel One”, and in December 2009 - on the first multiplex network in the test region in the Far East.

Domestic terrestrial broadcasters agree that “Roscrypt-M” is the main contender for the role of a universal conditional access system for the protection of broadcasting signals in the framework of the Russian broadcasting digitalisation. It is worth noting that among three systems offered for testing in Rospechat, as mentioned above, the “Roscrypt” was the best.

1.5. Digital non-terrestrial linear TV

In this chapter Pay TV Russian market is analysed. According to J'son & Partners Consulting classification Pat TV is meant TV services, which include technical support, free and pay TV channels.

Thereby J'son & Partners Consulting does not consider the following persons as the Pay TV Subscribers:

1. *Tricolor TV subscribers, who receive the free TV channels package when buying the equipment from authorized dealers of the company;*
2. *Akado subscribers, who have access to a number of the terrestrial and free TV channels as part of the analog TV service with payment for technical support of the transmission line;*
3. *National cable networks Company users, who have access to the terrestrial and free TV channels under the agreement between NCnet and the departments of the Unified Information and Payments Center, with payment for using collective antenna included into the unified payment document.*

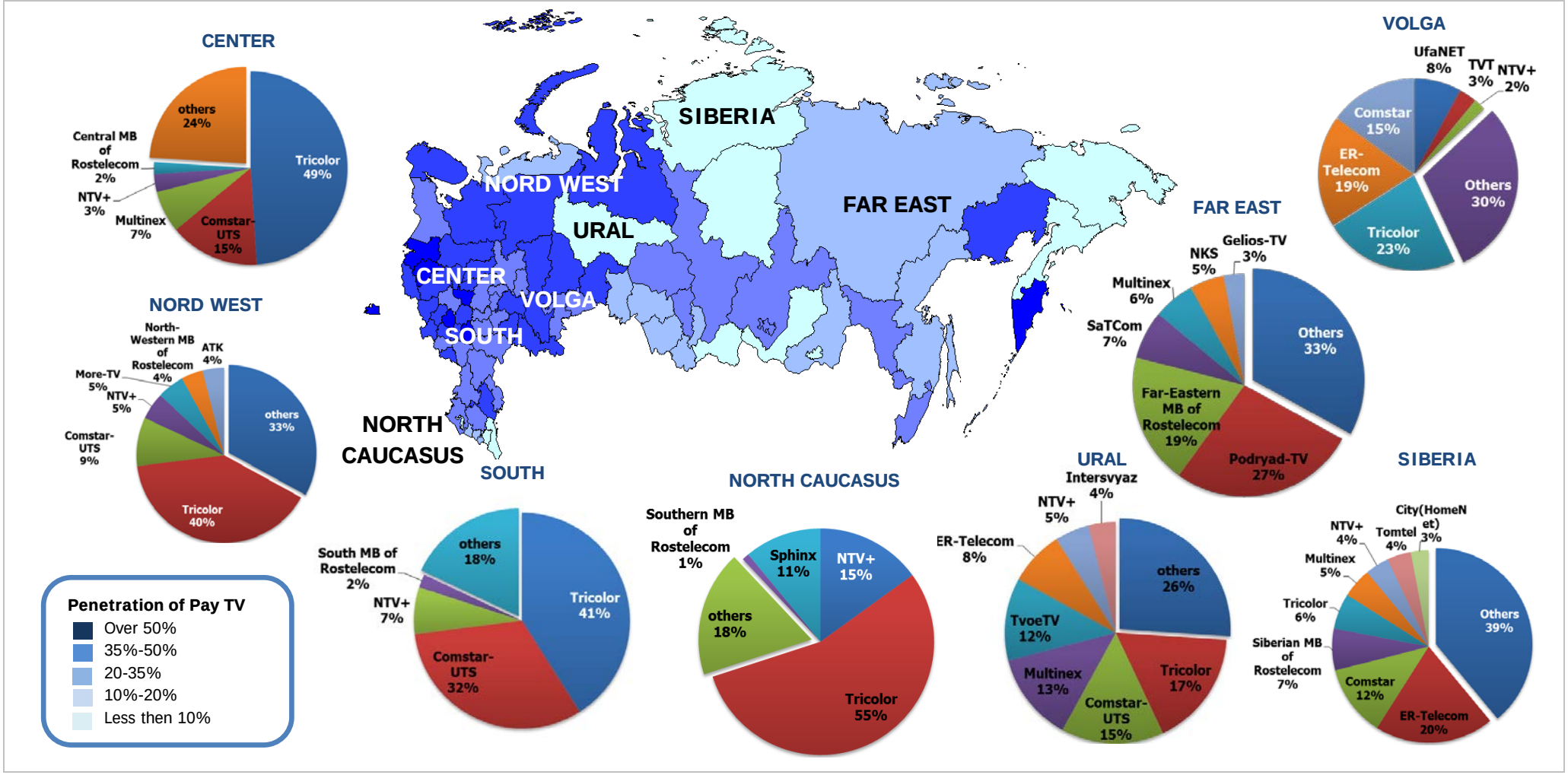
1.5.1. Modern condition of cable TV, satellite TV and IPTV market (throughout Russia)

- **TV channels coverage**

In Russia, the highest Pay TV penetration areas generally match the location of the economically developed centres. The only exception is the Moscow and Moscow Region where the Pay TV penetration is about 24% and 33%, respectively. On the contrary, Kamchatka Territory has surprisingly high level of Pay TV penetration, which reached more than 65% in 2010. Such high Pay TV penetration is an exception for the Far Eastern Federal District, where total Pay TV penetration is minimal, and the Pay TV user base accounts for just about 3% of the total national user base.

In none of the Federal Districts the Pay TV market may be considered as highly monopolized one. In some of the Federal Districts located in the western and central parts of Russia, such as Central FD, Southern FD, North Caucasus FD, Ural FD and North-Western FD Tricolor-TV Company holds the leading positions, however, the Pay TV services are also offered by other operators, which share most of the market among themselves. Thereby, there is no nationwide Pay TV operator in Russia.

Fig. 20. Penetration and Pay TV operators in Russia, 2010



Source: J'son & Partners Consulting fieldwork data, companies data

Subscribers base

J'son & Partners Consulting noted the following major tendencies of Pay TV market development in Russia a 2010 year, which are mostly related to the economic crisis after-effects:

1. Slowdown of Pay TV market growth rates in 2009-2010 in Moscow as well as in the Regions
2. Decrease of operator's cable net development rates
3. Suspension of regional expansion of companies in connection with difficulties of obtaining large long-term loans
4. Content confrontation expressed in broadening of content by the operators in expectation of transfer to a digital broadcasting

However, Pay TV market in Russia continues to grow as a whole, because of demand for non-terrestrial TV as a relatively inexpensive form of leisure that remains highly popular during the economic crisis.

According to J'son & Partners Consulting estimate, Pay TV services were used by more than 18.1 million subscribers in Russia at H1 2011. Comparing with the end of 2010, Pay TV service user subscribers base increased by 11%.

The most active growth was noted in satellite television (due to Tricolor TV operator) and IPTV segments.

Table 16. Current Pay TV subscribers base evolution in 2010 – H1 2011, million households[22]

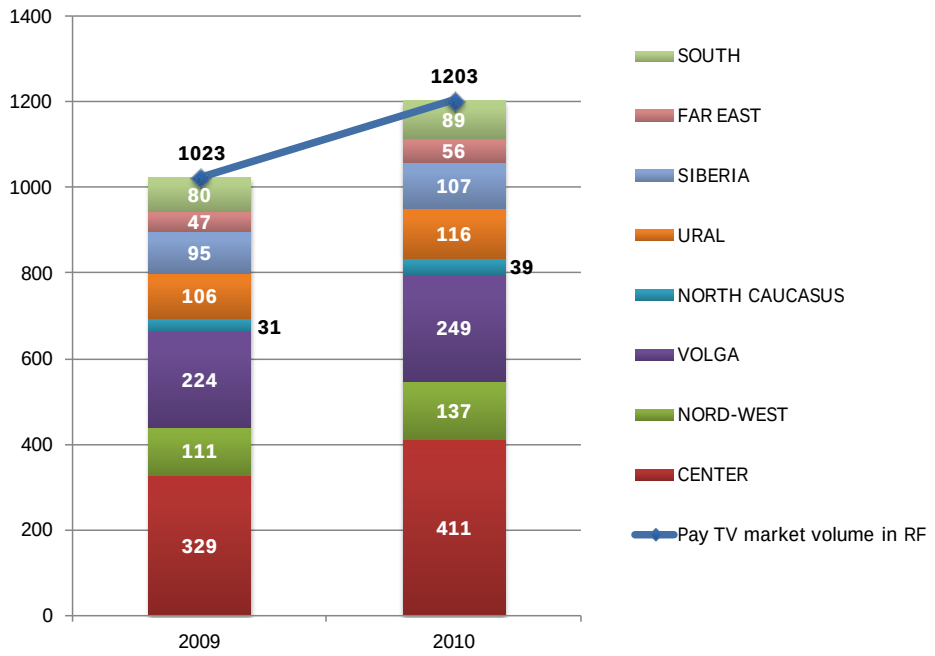
	2010	H1 2011
Total	16.3	18.1
Satellite	6.3	7.5
Cable	9.6	9.9
IPTV	0.44	0.7

Source: J'son & Partners Consulting, companies data

Market size in monetary terms

Pay TV market totalled over 1 billion USD by the end of 2009. According to J'son & Partners Consulting estimate, Pay TV market size increased to 1.2 billion at the end of year 2010, which is a 17.5% increase over 2009.

Fig. 21. Dynamics of Pay TV market volume in Russia and Federal districts, million USD



Source: J'son & Partners Consulting

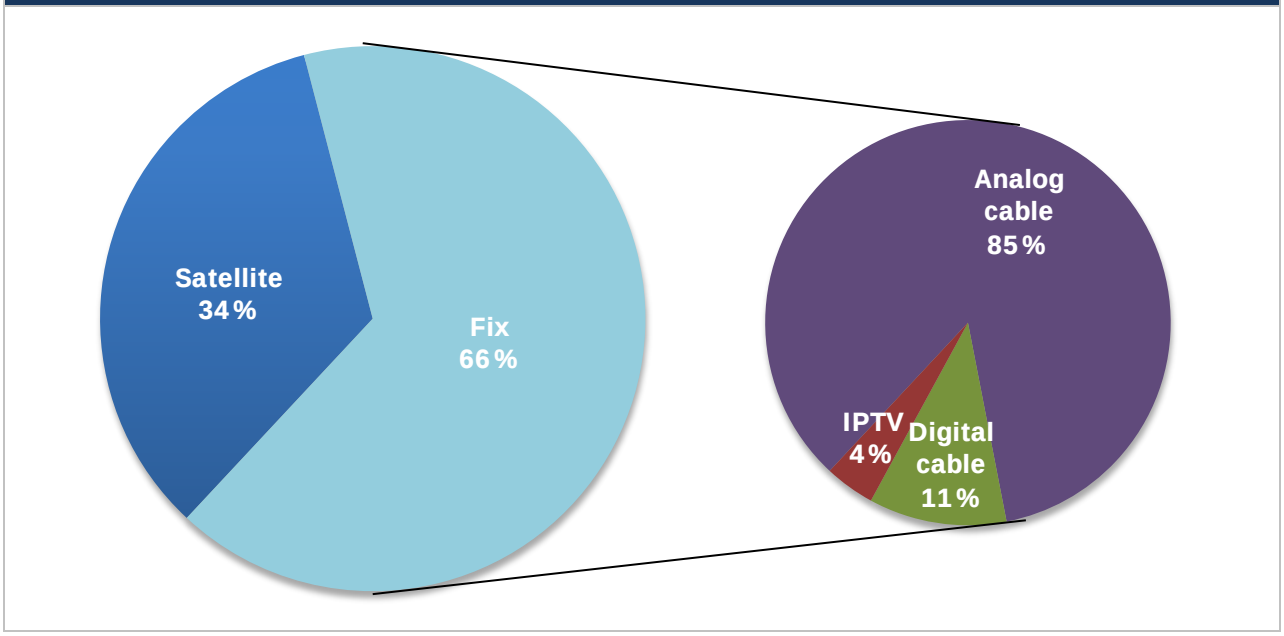
Dynamic growth of Russian Pay TV market is caused by acquisition of new subscribers as well as switching subscribers of Conditional-free TV ("Social TV" in Russia) within the operator's network to the extended service packages.

Penetration of technologies

In 2010, share of analogue Pay TV subscribers was about 85% of all fixed Pay TV subscribers. IPTV subscriber share accounts for about 4%.

To date, the following big operators render services on commercial base at the segment of satellite television in Russia: NTV+, Tricolor TV, Orion Express and Raduga-TV. Satellite Pay TV subscriber base share in Russia accounted for about 34% by the end of 2010.

Fig. 22. Russian TV market structure by technologies, 2010



Source: J'son & Partners Consulting fieldwork data, companies data

According to J'son & Partners Consulting estimate, to date every 24th subscriber of fixed Pay TV and every 4th subscriber of fixed digital TV is IPTV user.

- **Key players**

The largest players in the Pay TV market of Russia are the following: Tricolor TV, COMSTAR-UTS, regional providers of ER-Telecom and Multiregion, NTV+ and macroregional branches of "Rostelecom".

Table 17. Pay TV market key players in Russia, 2010

Holding	Type of broadcasting	Subscribers, million HH	Revenue, million USD
Tricolor TV	Satellite	5,1	92
MTS (inc. COMSTAR-UTS and Multiregion)	Cable, IPTV	2,92	112
Divan-TV (ER-Telecom)	Cable	1,2	58,6
NTV+	Satellite	0,63	163,8
Rostelecom (inc. macroregional branches)	Cable, IPTV	0,51	30,6

Source: J'son & Partners Consulting, companies data

According to J'son & Partners Consulting estimate, overall share of large holdings and regional companies is more than 60% of all Pay TV market in Russia.

- **Tricolor TV**

Regions: Russia, with the exception of some regions of Siberia and the Far East. The company provides satellite television services in the budget price segment, with no monthly fees or minimum payment, in order to spread the affordable television throughout Russia.

Tricolor TV offers a basic package of 12 live channels for free. In addition it has a paid package “Optimum” consisting of 13 additional channels at a price of 600 RUB per year. The company also offers a subscription to an "adult" package for 500 RUB per year.

On July 1, 2011 Tricolor TV has started providing the service "Cinema Tricolor TV". The service allows users to watch on a daily basis up to 12 movies. Until the end of 2011 the service will be free.

- **MTS**

The company provides Pay TV services in more than 140 cities in six federal districts of Russian Federation.

In October 2009 MTS has acquired a 50.91% stake in COMSTAR – United TeleSystems (“COMSTAR-UTS”), a leading supplier of integrated telecommunication solutions in Russia and the CIS, from AFK Sistema and on April 1, 2011 the reorganization was finalized. Comstar provides iptv and cable services under the brand STREAM-TV.

CJSC Multiregion (“Multiregion”), one of the leading groups of cable TV providers with presence in 37 cities of the Russian Federation. Multiregion has approximately 700,000 cable TV subscribers. It has been acquired by MTS in July 2010. The company’s network expansion is conducted in two ways: by acquiring the regional operators, and with start-up projects in key regions for the company.

- **ER-Telecom**

ER-Telecom Cable television service is provided under a single brand "Divan-TV” in 37 cities, with the primary subscriber base concentrated in the Volga Federal District. The total population of the cities where the company provides its services is more than 13 million people.

The coverage through the construction of new networks is typical of ER-Telecom. The majority of development took place in 2006, when the company launched start-up projects in 12 Russian cities. In some cities, their network coverage is 100%.

The company provides cable television services using the technology of "optical fibre to the home". ER-Telecom has announced the launch of its leadership strategy in 2010. **General purpose is to achieve leadership in the Russian market of broadband access and cable TV in terms of revenue (20 % of Russian market).**

- **NTV+**

NTV+ services are positioned as premium segment oriented, and this is why the company hadn’t received a substantial increase in subscribers lately, which is associated primarily with the advent of satellite operators offering affordable tariffs.

NTV+ programming is available to the recipients in all federal districts, but the Far Eastern Federal District is represented by a single region on the operator's coverage map. This region is the Republic of Sakha (Yakutia). The total population of the regions covered by NTV+ is over 130 million people.

NTV+ offers its users two main packages of channels, identical for all regions of European part of Russia, and the only package in the "NTV+ East" coverage.

The essential advantage of this operator is providing a large number of additional packages of TV channels on different subjects, including proprietary channel programming.

Since June 2011 NTV started to provide IPTV service based on the latest version of the technology platform CTI TVEngine 3.5.

- **Rostelecom**

Apart from its main activities, Rostelecom provides through its macroregional branches Pay TV services via traditional cable as well as IPTV (Center, Volga, Southern, Ural, North-Western, Siberian, Far Eastern, regions).

Rostelecom provides television services to more than 40 regions of all federal districts. The total population covered by the television services of Rostelecom is over 69 million people.

A characteristic feature of Rostelecom as a Pay TV market player is delivery of television services not only to regional centres but also to other settlements of the region, regardless of the population size.

At the same time, only one package is available in most regions where the company is providing cable television services.

Market structural changes review - Most significant mergers and takeovers

Russian Pay TV market traditionally was characterized by high level of investments both in development of proprietary networks and in purchasing of existing operators. However, the financial crisis decreased activity of M&A market in 2009. Many deals were either postponed indefinitely, or were completely cancelled; generally the successfully closed deals were prepared earlier.

The most significant deal in 2009 is the purchase of controlling stake of "National satellite company" (NSC), a satellite TV operator under "Tricolor TV", brand name by media holding "Gasprom-media". Holding "Gasprom-media" includes satellite TV operator "NTV+" oriented to premium subscribers. Purchasing of "Tricolor TV" gave the holding numerous but low-income audience: only 3.7 million out of 5 million subscriber base paid for services in 2009 (1,3 million used only free basic package consisting of 13 TV channel). So this deal brought "Gasprom-media" extension of satellite TV audience (after the acquisition, joined audience of partners consisted of over 6 million subscribers) and besides, "NTV+" gained a possibility to sell its proprietary premium channel package of to larger audience.

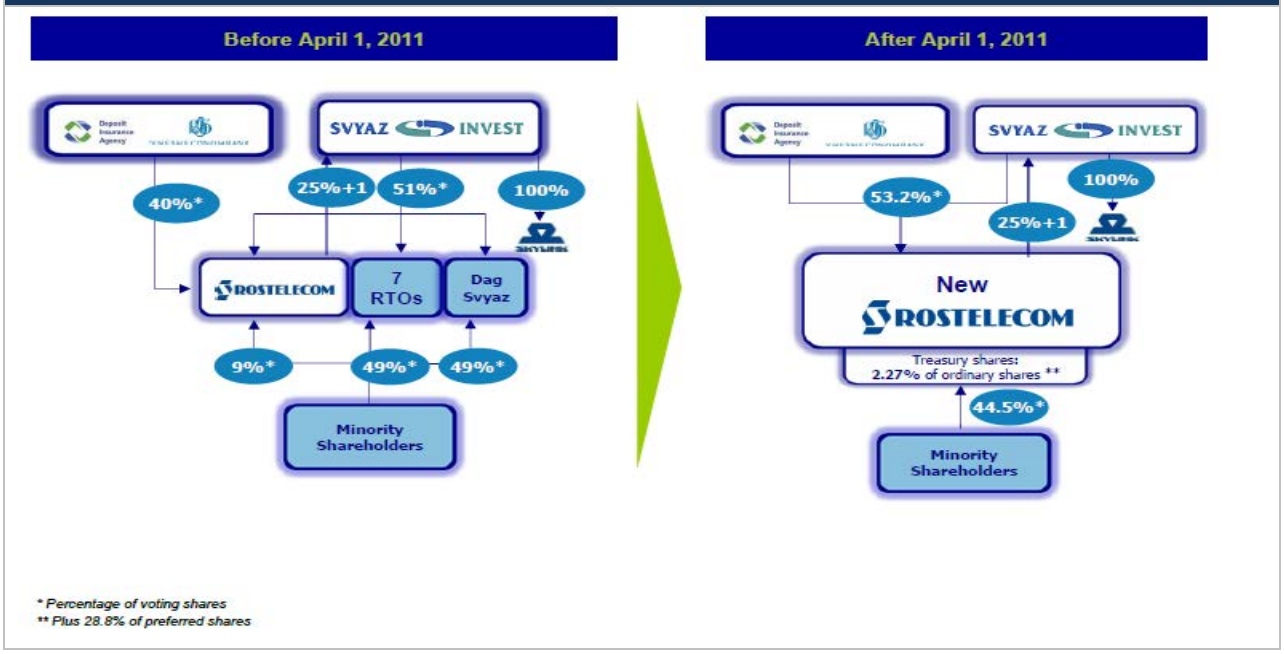
In 2010 Pay TV market most significant deal can be called the purchaising 100% shares of Multiregion by MTS Company.

February 2011 saw the purchase by Rostelecom and its macroregional branches 72% shares of JSC "National Cable Networks", numbering 4.5 million pay TV subscribers (including social TV).

On April 1, 2011 the legal process of creating an integrated company based on Rostelecom has been completed. OJSC CentreTelecom, OJSC SibirTelecom, OJSC Dalsvyaz, OJSC Uralsvyazinform, OJSC VolgaTelecom, OJSC North-West Telecom, OJSC Southern Telecommunications Company and OJSC Dagsvyazinform ("the merged companies") have been excluded from the Unified State Register of Legal Entities following their merger with OJSC Rostelecom, which has assumed all rights and obligations of the merged companies.

Now "Rostelecom" includes seven Macroregional Branches: OJSC "Rostelecom Center", OJSC "Rostelecom North-West", OJSC "Rostelecom South", OJSC "Rostelecom Volga", OJSC "Rostelecom Ural", OJSC "Rostelecom Siberia", OJSC "Rostelecom Far East".

Fig. 23. Rostelecom's Reorganization on April 1, 2011



Source: company data

On June 3, 2011 Rostelecom has acquired 39.87% of the ordinary shares in OJSC Bashinformsvyaz, which IPTV service has 50 thousand subscribers.

In June 2011 Megafon has acquired holding NetByNet for $ 270 million, made better proposal than MTS. NetByNet provides IPTV services since March 2009.

In October 2011 "MTS" has acquired 100% stake in OJSC "Teleradiokompania"TVT" ("TVT"), a leading provider of cable TV in the republic of Tatarstan with presence in 15 cities.

Table 18. Main Deals on Pay TV market, 2009 – Q3 2011						
Deal date	**Region**	**Target company**	**Acquirer**	**Vendor**	**Price, million USD**	**Acquired Share**
Jan.2009	Several regions	COMSTAR DIRECT CJSC	COMSTAR-UTS JSC	Systema Mass Media	186,6	100%
Jan.2009	Volga	Comtat JSC; Global Telecom Co CJSC	National multiservice nets JSC	Infotelecom CJSC	0,9	100%
May 2009	Several regions	COMSTAR-UTS JSC	MTS JSC	n.a.	1270,0	51%
June 2009	Moscow	Tzentel CJSC (QWERTY)	Tzentralny Telegraph JSC	Pilot LLC (Jeffree Galmond)	n.a.	50%
Sept. 2009	Central	National Satellite Company CJSC (Tricolor TV)	Gazprom-Mediaholding JSC	Natural persons (Olga Orlova, Zinaida Toplekina)	56,6	> 50%
Sept. 2009	Several regions	Sinterra Media CJSC	Sinterra Group of Companies JSC	Share holders	5,8	40%
Nov.2009	Central	CenterTelecom JSC	Russische Commercial Bank AG	n.a.	176,4	22%
Nov.2009	Central	MGTS JSC	COMSTAR-UTS JSC	Rostelecom OJSC	244,8	14%
Dec.2009	Central	MGTS JSC	COMSTAR-UTS JSC	Minoritarian shareholders	220,3	14%
Dec.2009	Ural	Uzhno-uralskaya telephonnaya companiya LLC	Uralsvyazinform JSC	Shareholders	n.a.	100%
Dec.2009	Moscow	NETBYNET Holding	Aton Capital Partners (Ltd.), Ivan Tavrin	Fairlie Holding & Finance Limited" ("FH&FL")	30,0	20%
Jan.2010	Moscow	Uralsvyazinform JSC	Investment bank KIT finance JSC	Rostelecom OJSC	79,4	6%
Feb.2010	Ural	Eurotel LLC	COMSTAR-Regions CJSC	Share holders	3,3	20%
Feb.2010	Several regions	Raduga Holdings S.A (DalGeoCom)	Modern Times Group	Continental Media SA	17,2	50%
Feb.2010	Several regions	Sinterra group of companies	Megafon OJSC	Synterra Cyprus (Ltd.) Synterra Cyprus (Ltd.) (99,99%), Burnham Advisors	705,0	100%

Table 18. Main Deals on Pay TV market, 2009 – Q3 2011						
Deal date	**Region**	**Target company**	**Acquirer**	**Vendor**	**Price, million USD**	**Acquired Share**
				(Ltd.) (0,01%)		
Feb.2010	Several regions	Gars Holdings (Ltd.)	Bester Investments	n.a.	22,5	75%
Apr. 2010	Moscow	Reis Telecom CJSC	Settelecom CJSC	Holding Company Interros CJSC	4,5	100%
Apr. 2010	Moscow	Seti TV CJSC	COMSTAR-UTS JSC	n.a.	n.a.	100%
May 2010	Central	CenterTelecom JSC	Kit Fortis Investment JSC	n.a.	n.a.	5%
May 2010	South	UTK JSC	Rostelecom OJSC	n.a.	1083,7	n.a
May 2010	Central	CenterTelecom JSC	Rostelecom OJSC	n.a.	1877,2	n.a
May 2010	Several regions	Orion Express LLC	Rostelecom OJSC	n.a.	4,0	10%
June 2010	Volga	Penza Telecom CJSC	COMSTAR-UTS JSC	Founders	20,1	100%
July 2010	Several regions	Multiregion CJSC	MTS JSC	Cavolo Traiding (Ltd.)	123,5	100%
Sept. 2010	Volga	Color TV	Radiotelefonnaya companiya	n.a.	n.a.	100%
Oct. 2010	Several regions	Rostelecom OJSC	Rostelecom OJSC	n.a.	n.a.	25%
Oct. 2010	Several regions	COMSTAR-UTS JSC	MTS JSC	Minoritarian shareholders	271,9	9%
Oct. 2010	Several regions	ER-Telecom	Baring Vostok Capital Partners	Perm financially-production Group	80,0	10%
Nov. 2010	Central	MGTS JSC	Sistema AFK JSC	n.a.	23,6	2%
Dec. 2010	North	CityHomeNet CJSC	COMSTAR-UTS JSC	n.a.	23,6	100%
Feb. 2011	Several regions	Nationalnye telecommunicatzii JSC	Severo-zapadny telecom JSC	n.a.	n.a.	25%
Feb. 2011	Central	Nationalnye telecommunicatzii JSC	Rostelecom OJSC	National Media Group CJSC, Surgutnefteg az OJSC, Raybrook Limited	288,7	21,8%
Feb. 2011	Central	Nationalnye telecommunicatzii JSC	Uralsvyazinform OJSC and North-West Telecom OJSC		662,3	50%
Feb.	Moscow	Akado	Renova	A natural	n.a.	7%

Table 18. Main Deals on Pay TV market, 2009 – Q3 2011						
Deal date	**Region**	**Target company**	**Acquirer**	**Vendor**	**Price, million USD**	**Acquired Share**
2011				person (Yuri Pripachkin)		
June 2011	Moscow	NETBYNET Holding	Megafon OJSC	n.a.	270,0	100%
June 2011	Central	Komtel OJCS	MTS JSC	Elektra OJCS	n.a.	30%
June 2011	Volga	Bashinformsvyaz OJCS	Rostelecom OJSC	Bashtelecominvest OJSC	128,6	39,87%
Aug. 2011	Moscow	Nationalnye telecommunicatzii JSC	n.a.	Sberbank Capital OJCS	n.a.	8,3%
Oct. 2011	Volga	“Teleradiokompania ”TVT” OJSC	MTS JSC	Group of investor	162,87	100%

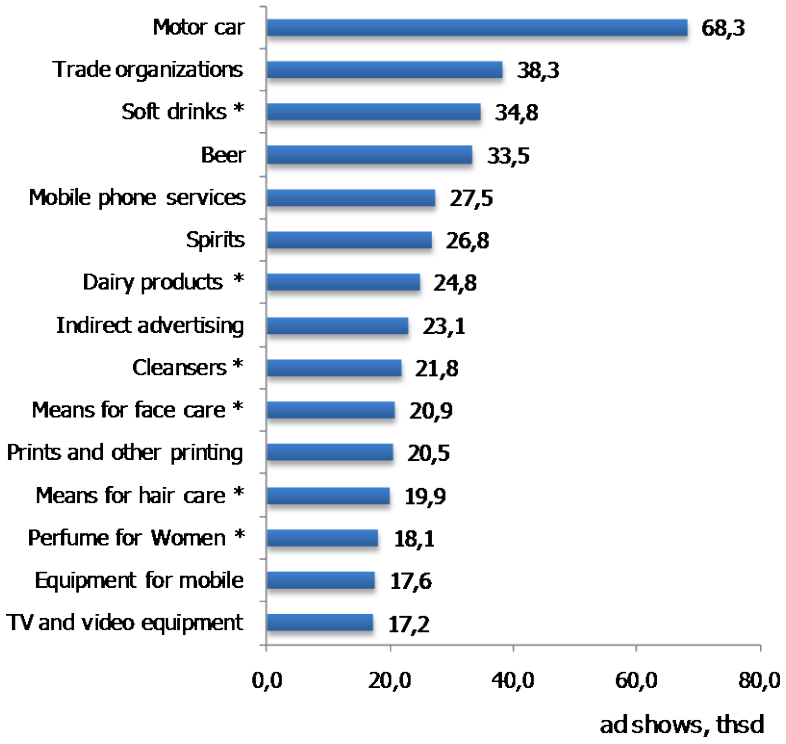
Source: J'son & Partners Consulting

Advertising TV market

The dominating advertising segment of Russian broadcasting in 2010 was advertising of fast moving consumer goods (FMCG), with 34% of the market share. The second place by the number of ad shows is occupied by automobile manufacturers with a market share of 16.5%.

Beer and alcoholic beverages is a category of goods with advertising comparable to the automobile manufacturers. It amounted to about 14.6% for the covered period. Note that the mobile communications and related equipment took up about 11% of the advertising market in 2010.

Fig. 24. Top-15 types of goods which are advertised on thematic (non-terrestrial) TV channels in Russia, 2010



* FMSG goods

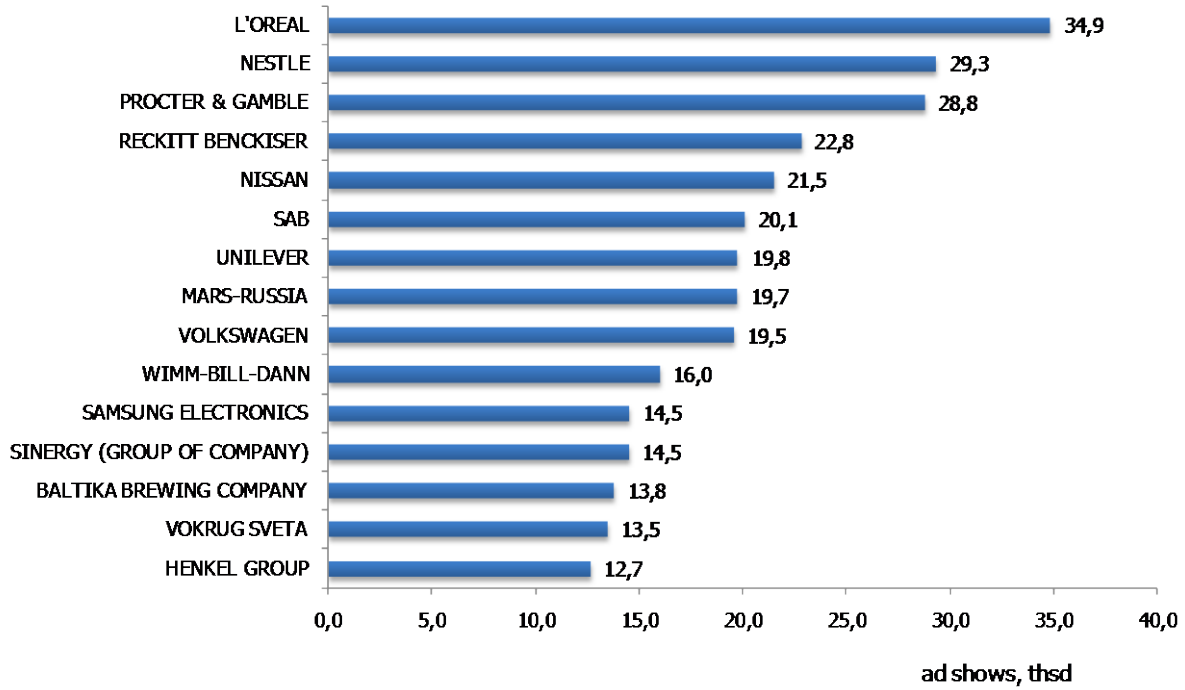
Indirect advertising represents the brands that are not advertised implicitly, and are presented under certain pretext (prizes, obligations to sponsors, copyright law, drawing attention to a brand through other, more popular one, etc.).

Indirect advertising includes: logos of sponsors (partners mentioned in the advertisement of cultural or entertainment events (sponsor of the show, information support, assistance, help in the preparation, etc.), logos of sports events sponsored by the company; logos of various popular awards or competitions; brand products offered as gifts, brand related goods or services.

Source: TNS Gallup Media

According to TNS Gallup Media, by the end of 2010 the largest advertiser on non-terrestrial TV advertising market was L'OREAL with 34.9 thousand ad shows.

Fig. 25. Top-15 advertisers on thematic (non-terrestrial) TV channels in Russia, 2010



Source: TNS Gallup Media

Monitoring of advertising during the whole period (2010) was conducted on 40 non-terrestrial channels.

Table 19. List of channels on which commercial were monitored in 2010

Rank	TV Channels
1	24Techno
2	Animal Planet
3	A-One
4	Discovery Channel
5	Diva Universal
6	Fashion TV
7	Fox Crime
8	Fox Life
9	HD kino
10	HD sport
11	Music Box
12	Russian Music Box
13	Style TV
14	Syfy Universal
15	TV 1000
16	TV 1000 Russkoye kino
17	Universal Channels

Table 19. List of channels on which commercial were monitored in 2010	
Rank	**TV Channels**
18	Viasat Explorer
19	Viasat History
20	Viasat Sport
21	World Fashion Channel
22	Detski mir
23	Illusion+
24	Kinoclub
25	Kinosoyuz
26	Kinohit
27	Mat' i Ditya
28	Nashe Kino
29	Nashe novoe kino
30	NTV - PLUS Basketball
31	NTV - PLUS Sport
32	NTV - PLUS Sport Classic
33	NTV - PLUS Sport online
34	NTV - PLUS Tennis
35	NTV - PLUS Football
36	Premiera
37	Russki Illusion
38	Russki extrim
39	TDK
40	Teleclub

Source: TNS Gallup Media

1.5.2. Current non-terrestrial TV regional markets

Pay TV market in Russia has a large number of operators, there is an ongoing process of assets consolidation, therefore Pay TV services, sometimes within one holding company, are often rendered by different brands and legal entities.

Table 20. Marks of holdings and Pay TV operator brands in Russia, 2011	
Holding Name	**Pay TV Brand**
COMSTAR-UTS	Stream TV
	Multinex
	Stream TV (Regions)
	Teleradiobroadcasting company "TVT"
Rostelecom	Rostelecom Center (Domolink TV)
	Rostelecom North-West (Avangard TV)

	Rostelecom Volga (J-TV)	
	Rostelecom South (Disel TV)	
	Rostelecom Urals (Utel.TV)	
	Rostelecom Siberia (Twist)	
	Rostelecom Far East (TVi)	
	Bashtel (39,87%)	
	National cable nets (71,8%)	
	Tvoe TV	OnLime
ER-Telecom Holding	Divan TV	
National Satellite Company	Tricolor TV	
NTV-PLUS	NTV+	
Komkor	AKADO	
Vympelcom	Beeline TV	
Megafon	NETBYNET	

Source: J'son & Partners Consulting

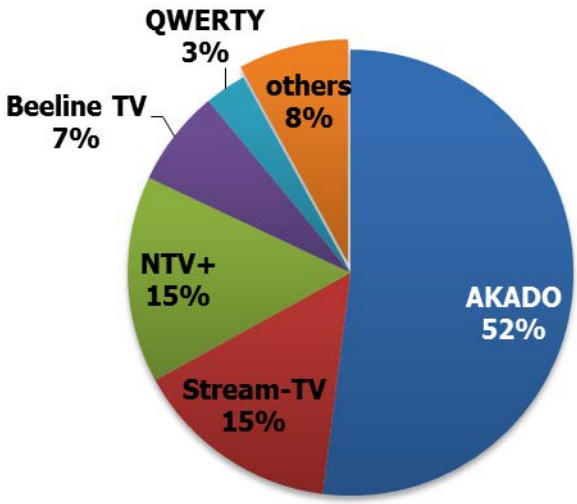
- **Moscow**

Key Moscow Pay TV market players are cable digital TV operator AKADO, which serves more than half of all subscribers (52%), and IPTV operator Stream TV with a share of 15%. Notable is the active growth of Beeline TV Pay TV subscriber base, which provides the service via IPTV technology and had over 60 thousand users (7%) by the end of 2010.

Just as before, the majority of TV users in Moscow are subscribers of Conditional-free TV, which doesn't need any special TV attachments, i.e. it doesn't require a system of conditional access. This category also includes NCnet subscribers (2,8 million households), which get access to terrestrial and open TV channels via common payment process, and AKADO subscribers (about 1 million households), which access a number of terrestrial and open TV channels within the framework of analogue TV service with fee for technical support.

Thereby, most of the households in Moscow are connected to Conditional-free TV Service, which significantly slows down Pay TV Service development.

Fig. 26. Moscow Pay TV market structure by operators, 2010



Source: J'son & Partners Consulting, operators data

By 2010 results, the subscriber base of AKADO digital Pay TV is over 420 thousand subscribers, Stream TV has 121 thousand subscribers, Beeline TV has 60 thousand subscribers. Subscriber base of NTV+ is about 110 thousand subscribers.

The market shares held by the players demonstrate that cable TV and IPTV are the most in demand among the users which is explained by low costs of connection, among other reasons.

At present, availability of TV packages and multimedia services in a service portfolio of a broadband operator is an advantage for users, and quite often is a decisive factor for selecting a particular service provider.

During the last years, several projects of interactive Pay TV, which is currently the most rapidly developing sector of Pay TV market, were launched on a commercial basis.

Table 21. Interactive Pay TV service started commercialisation, 2008-2011

Pay TV operator	Service launch date
Onlime	November 2008
Net-by-Net	December 2008
Corbina (Beeline TV)	January 2009
MGTS	March 2009
Iskratelecom	April 2009
HTB+ IPTV (partnership with Ecotelecom)	March 2011

Source: Operator data

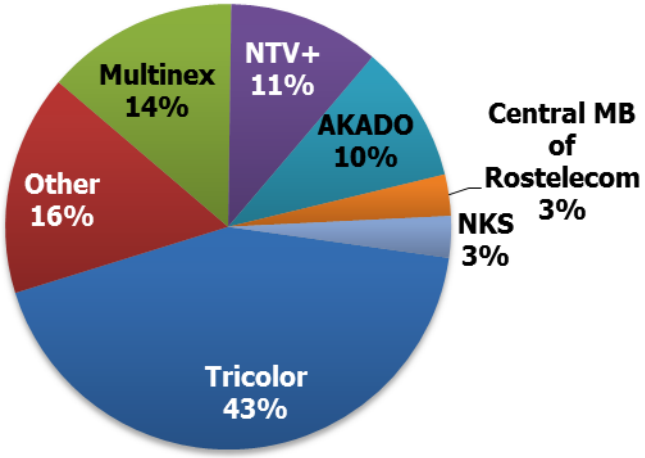
- **Moscow Region**

The main characteristics of Moscow Region are as follows:

- There are no pay cable TV and IPTV operators represented in several cities of the region. The exception is Central Telegraph company that offers its services under QWERTY brand name in 12 cities of Moscow Region, as well as such companies as Kaskad-TV, Garant and Pentabox
- Insufficient presence of the largest holdings that provide the Pay TV services
- High popularity of satellite television services, primarily by Tricolor TV operator

According to J'son & Partners Consulting estimate, Tricolor TV Pay TV subscriber base contained over 350 thousand households by the end of 2010. The second and the third places are held by Multinex and NTV+, which subscriber bases include 114 thousand and 89 thousand households, respectively. Domolink TV (Central MB of Rostelecom) with the subscriber base of 25 thousand households holds the fourth place. AKADO, being the largest Pay TV player in Moscow city market, also operates in the Moscow Region Pay TV market with the subscriber base of about 81 thousand households. Other Pay TV operators providing their services in various cities of Moscow Region account for 16% of the Pay TV market – about 130 thousand subscribers.

Fig. 27. Moscow Region Pay TV market structure by operators, 2010



Source: J'son & Partners Consulting, operator data

Increase in number of the service users in Moscow Region is mainly due to active building up of the subscriber base by the existing operators, primarily by the satellite TV operators that offer relatively cheap services and allow the users not to depend on presence in a city of cable TV players and their coverage.

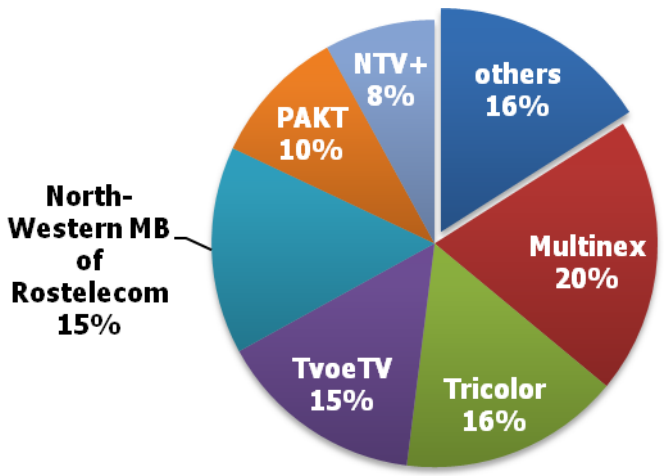
- **St. Petersburg**

St. Petersburg Pay TV market has a significant number of players and most of them provide television in digital format.

Tricolor, Rostelecom-North-West, Tvoe TV companies' hold about equal shares of St. Petersburg Pay TV market: respectively 16% for Tricolor and 15% for each of the other three, while the share of large local operator PAKT fell to 10%. NTV+ share also fell to 8%.

The share of other players does not exceed 5%. In terms of subscriber base, they account in aggregate for about 16% of St. Petersburg Pay TV market.

Fig. 28. St. Petersburg Pay TV market structure by operators, 2010

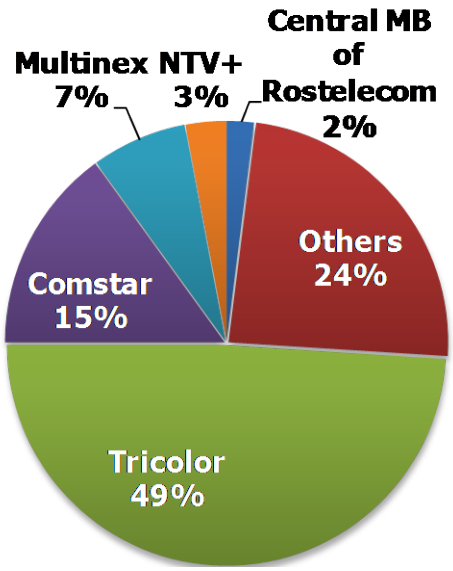


Source: J'son & Partners Consulting, operator data

- **Central Federal District**

Tricolor TV stands out among the Pay TV operators of this Federal District. By the end of the first half of 2010 this operator accounted for 49% of the Central FD total subscriber base. The second place is held by Comstar-UTS with market share of 15% of the total Pay TV subscriber base. There are also big inter-regional operators in the region, such as Multinex, NTV+; their shares of total subscriber base are respectively 7% and 3%.

Fig. 29. Central Federal District Pay TV market structure by operators, 2010



Source: J'son & Partners Consulting, operator data

The above mentioned players are also among the Top-3 operators with the largest subscriber base in their regions of operation.

Table 22. Top Pay TV operators in Central Federal District

Region	Pay TV Operator	Percentage in region	
		2009	2010
Belgorod Region	Multinex	14%	15%
	NTV+	5%	3%
	Tricolor TV	39%	44%
Bryansk Region	Tricolor TV	35%	30%
	BKS	40%	44%
	Bryansktel	20%	16%
Vladimir Region	Multinex	27%	28%
	Tricolor TV	36%	39%
Voronezh Region	Comstar UTS	36%	30%
	Tricolor TV	44%	50%
Ivanovo Region	Comstar UTS	59%	53%
	Tricolor TV	31%	35%
Kaluga Region	Comstar UTS	42%	40%
	Tricolor TV	43%	45%
	NTV+	6%	2%
Kostroma Region	KGTS	26%	18%
	Tricolor TV	51%	55%
Kursk Region	Comstar UTS	62%	60%
	Central MB of Rostelecom	18%	18%
Lipezk Region	Tricolor TV	55%	58%
	LKS	21%	17%

Table 22. Top Pay TV operators in Central Federal District			
Region	Pay TV Operator	Percentage in region	
		2009	2010
Oryol Region	Comstar UTS	42%	29%
	Tricolor TV	33%	40%
Ryazan Region	Tricolor	11%	22%
	Multinex	51%	50%
Smolensk Region	Comstar UTS	14%	15%
	Tricolor TV	49%	50%
Tambov Region	Comstar UTS	23%	25%
	Tricolor TV	58%	60%
Tver Region	Comstar UTS	23%	20%
	Tricolor TV	63%	65%
Tula Region	Altair	30%	25%
	Tricolor TV	55%	62%
Yaroslavl Region	Volna-Service	8%	6%
	NTV+	8%	5%
	Tricolor TV	34%	40%

Source: J'son & Partners Consulting, operator data

There are also several relatively large cable Pay TV operators with subscriber bases of over 10 thousand households each:

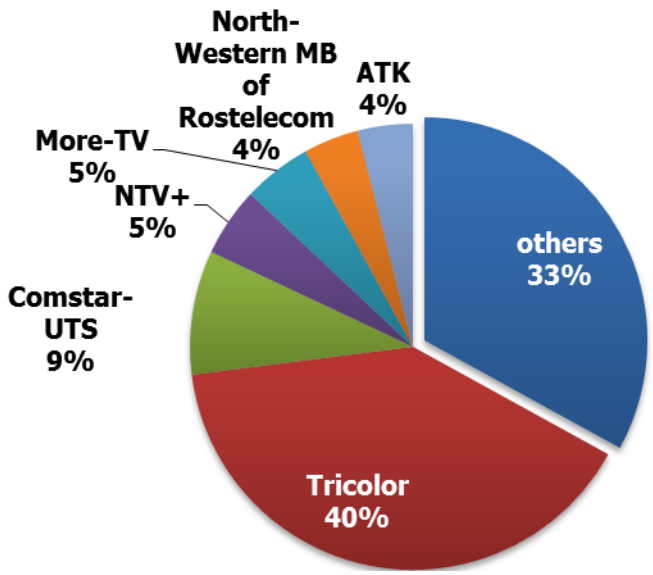
- **Ketis –** the second largest cable Pay TV operator in Vladimir city;
- **Volna-Service –** the second largest cable Pay TV operator in Yaroslavl city**.**

North-Western Federal District Regions

Unlike the Central Federal District, where a large federal-level operator is present and holds the leading positions in almost each region, the North-Western Federal District is featured by a significant number of independent regional operators.

Nevertheless, in terms of subscriber base, the largest player in the North-Western FD Pay TV market is Tricolor-TV, which accounts for 40% of the market. The substantial portion of the market is also held by Comstar-UTS, which operates in three regions of the North-Western Federal District.

Fig. 30. North-Western Federal District Pay TV market breakdown by operators, 2010



Source: J'son & Partners Consulting, operator data

The above players are predominantly the market leaders in terms of subscriber base, in their regions of operation.

Table 23. Top Pay TV operators in North-Western FD

Region	Pat TV Operator	Percentage in Region	
		2009	2010
Arkhangelsk Region	ATK	28%	27%
	COMSTAR-UTS	24%	20%
	Tricolor TV	29%	30%
Vologda Region	Skat-7	28%	20%
	COMSTAR-UTS	23%	24%
	Tricolor TV	27%	31%
Kaliningrad Region	Antennaya sluzhba +	18%	20%
	Ekran-TV	22%	18%
	Tricolor TV	40%	44%
Leningrad Region	Tricolor TV	51%	52%
	NTV+	8%	5%
	Astra-Oreol	11%	10%
Murmansk Region	More-TV	36%	55%
	Tricolor TV	24%	30%
	NTV+	7%	4%
Novgorod Region	COMSTAR-UTS	42%	40%
	Novlain	21%	16%
	Tricolor TV	28%	31%
Pskov Region	Telecom	34%	31%
	Impuls-TV	13%	7%
	Tricolor TV	28%	35%

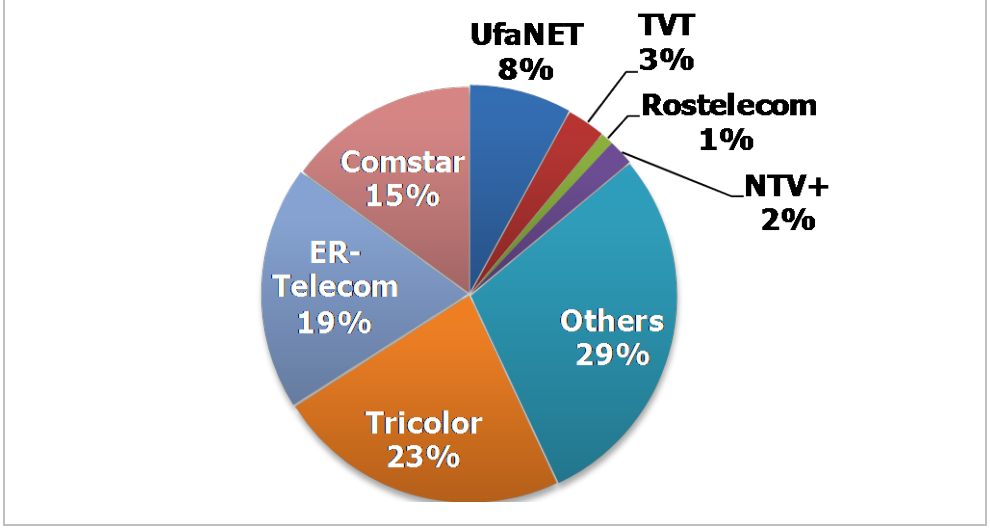
Table 23. Top Pay TV operators in North-Western FD			
Region	Pat TV Operator	Percentage in Region	
		2009	2010
the Karelian Republic	Tricolor TV	44%	50%
	Petronet	16%	12%
	Nika	15%	9%
the Komi Republic	Tricolor TV	41%	49%
	GSP	17%	9%
	Kabelvideoefir	16%	16%

Source: J'son & Partners Consulting, operator data

- **Volga Federal District**

Operating in the Volga Federal Districts are the largest federal and interregional market players. The Volga FD is also featured by the presence of large local players operating in just one (TVT) or two (UfaNET) constituent entities of the Russian Federation.

Fig. 31. Volga FD Pay market TV by operators, 2010



Source: J'son & Partners Consulting, operator data

The largest Volga FD market player accounting for 23% of the subscriber base is satellite operator Tricolor-TV. The second place is held by ER-Telecom with the market share of 19%. If one considers the market in terms of the constituent entities of the Russian Federation, this operator also holds the leading positions among 9 cable operators in four regions of its operation.

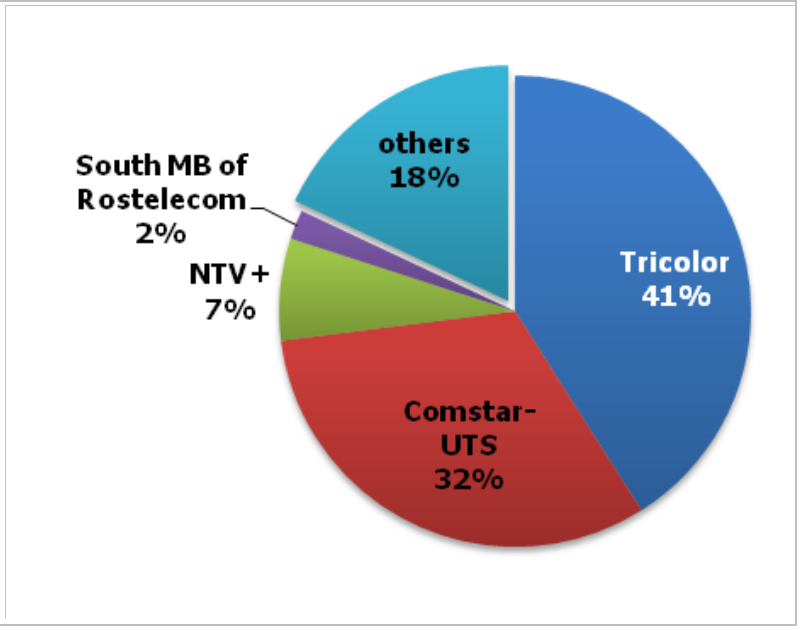
Table 24. Top Pay TV operators in Volga FD			
Region	Pay TV Operator	Percentage in Region	
		2009	2010
Kirov Region	ER-Telecom	38%	35%
	Multinex	32%	30%
Nizhni Novgorod Region	COMSTAR-UTS	38%	40%
	Tricolor TV	22%	22%
	Multinex	7%	4%
Orenburg Region	ER-Telecom	21%	17%
	Ufa (Okean-TV)	15%	10%
	Tricolor TV	21%	25%
Penza Region	ER-Telecom	29%	25%
	Penza-TV	22%	20%
	Tricolor TV	25%	31%
Perm Territory	ER-Telecom	33%	30%
	COMSTAR-UTS	24%	26%
	Volga MB of Rostelecom	19%	14%
the Bashkir Republic	UfaNET	40%	45%
	Tricolor TV	25%	30%
	Kristall	13%	13%
the Mari El Republic	Volga MB of Rostelecom	45%	43%
	ER-Telecom	43%	40%
the Republic of Mordovia	Volga MB of Rostelecom	19%	10%
	Kontakt-TV	64%	63%
the Republic of Tatarstan	TVT	36%	31%
	ER-Telecom	25%	20%
Samara Region	ER-Telecom	32%	29%
	VAZ-TV	9%	6%
	Tricolor TV	13%	14%
	NTV+	6%	6%
Saratov Region	COMSTAR-UTS	57%	51%
	Tricolor TV	22%	25%
	IVK-Solnechny	7%	4%
the Udmurt Republic	COMSTAR-UTS	30%	28%
	ER-Telecom	28%	26%
Ulyanovsk Region	COMSTAR-UTS	54%	48%
	Tricolor TV	30%	35%
the Chuvash Republic	Volga MB of Rostelecom	35%	26%
	Tricolor TV	N/A	29%

Source: J'son & Partners Consulting

Southern Federal District

Southern Federal District Pay TV market has no independent players able to compete in subscriber base size with major federal and inter-regional players.

Fig. 32. Southern FD Pay TV market by operators, 2010



Source: J'son & Partners Consulting, operator data

Thereby, 82% of subscriber base of region belonged to four big operators by the end of 2010, while Tricolor TV carried over 40% of the market.

Table 25. Top Pay TV operators in Southern FD

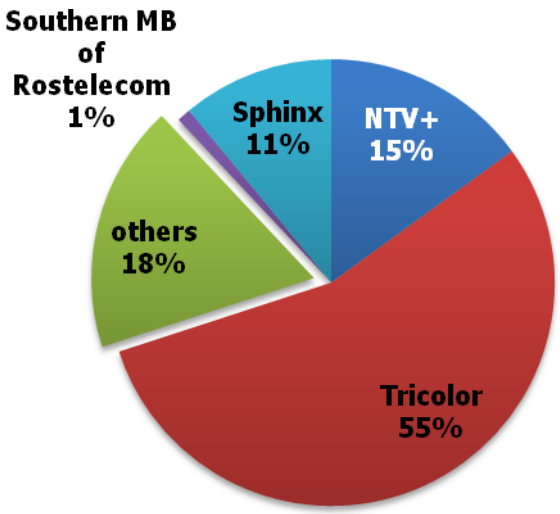
Region	Pay TV Operator	Percentage in region	
		2009	2010
the Adyghe Republic	Tricolor TV	N/A	82%
	NTV+	N/A	6%
the Republic of Kalmykia	Tricolor TV	94%	90%
Krasnodar Territory	Tricolor TV	53%	59%
	Southern MB of rostelecom	11%	15%
	NTV+	14%	12%
Astrakhan Region	COMSTAR-UTS	86%	80%
Volgograd Region	ER-Telecom	44%	40%
	Multinex	22%	11%
	Tricolor TV	16%	19%
Rostov Region	COMSTAR-UTS	48%	39%
	Tricolor TV	32%	35%
	NTV+	3%	3%

Source: J'son & Partners Consulting

North Caucasian Federal District Regions

Pay TV market of North Caucasian Federal District doesn't have any independent player able to compete in subscriber base size with major federal and inter-regional players.

Fig. 33. North Caucasian Federal District Pay TV market by operators, 2010



Source: J'son & Partners Consulting, operator data

Thereby, by the end of 2010, 70% of region subscriber base was carried by two major satellite TV operators Tricolor TV and NTV+. At the same time Tricolor TV has over 55% of the market.

Table 26. North Caucasian Federal District Top Pay TV operators

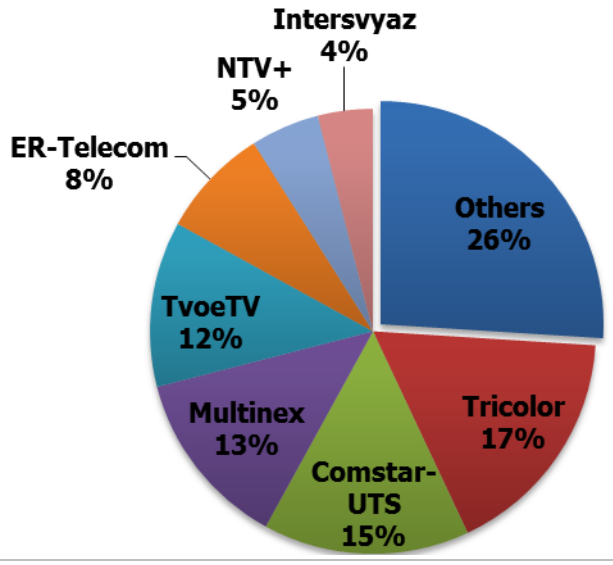
Region	Pay TV Operator	Percentage in Region	
		2009	2010
the Republic of Dagestan	Tricolor TV	N/A	66%
	NTV+	N/A	17%
The Kabardino-Balkar Republic	Tricolor TV	52%	67%
the Karachai-Cherkess Republic	Tricolor TV	78%	71%
	NTV+	N/A	29%
the North Ossetian Republic	Tricolor TV	N/A	40%
	NTV+	53%	43%
the Chechen Republic	Tricolor TV	N/A	75%
Stavropol Territory	Tricolor TV	47%	52%
	NTV+	7%	11%
	Sphinx	20%	16%

Source: J'son & Partners Consulting

Ural Federal District

The Top-3 payers operating in the Urals Federal District include Tricolor (17% of the total subscriber base), COMSTAR-UTS (15%) and Multinex which accounts for 13% of the District subscriber base. It should be noted that COMSTAR-UTS operates in just one region.

Fig. 34. Ural Federal District Pay TV market breakdown by operators, 2010



Source: J'son & Partners Consulting, operator data

Tvoe TV, which accounts for 12% of the total subscriber base in the District, holds the leading position in one of the regions – Kurgan Region, with the market share of 49%.

Table 27. Top Pay TV Operators in Ural FD

Region	Pay TV Operator	Percentage in region	
		2009	2010
Kurgan Region	Tvoe TV	51%	49%
	NCnet	N/A	19%
	Tricolor TV	N/A	13%
Sverdlovsk Region	COMSTAR-UTS	42%	38%
	Tvoe TV	14%	19%
	Tricolor	27%	31%
Tyumen Region	ER-Telecom	8%	10%
	Multinex	30%	29%
	NTV+	N/A	7%
Chelyabinsk Region	ER-Telecom	23%	21%
	Multinex	24%	20%
	Intersvyaz	N/A	13%

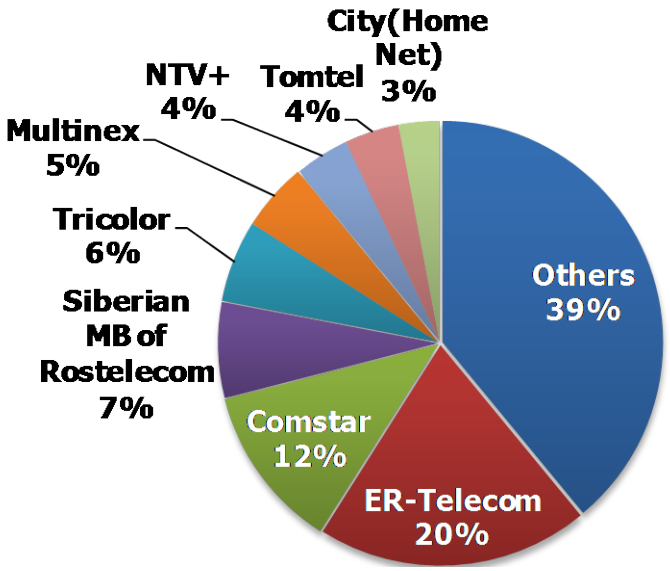
Source: J'son & Partners Consulting

Siberian Federal District

By the end of 2010, ER-Telecom was the Siberian FD Pay TV market leader in terms of subscriber base. ER-Telecom accounts for 20% of the market and operates in several Siberian FD regions. The second place is held by Comstar-UTS with 12% market share.

Siberian MB of Rostelecom, Multinex and Tricolor hold almost equal shares in the District subscriber base and account for 7%, 5% and 6% of the Siberian FD total subscriber base, respectively.

Fig. 35. Siberian Federal District Pay TV Market breakdown by operators, 2010



Source: J'son & Partners Consulting, operator data

Most subscribers of the Republic of Buryatia and the Khakass Republic use local, regional cable operators' services.

Table 28. Top Pay TV operators in Siberian FD

Region	Pay TV Operator	Percentage in region	
		2009	2010
the Republic of Buryatia	Bix	99%	90%
the Khakass Republic	Scat	94%	92%
Altai Territory	Inteleca	28%	31%
	Siberian MB of Rostelecom	N/A	18%
	Tricolor TV	N/A	9%
Transbaikal Territory	Multinex	96%	95%
Krasnoyarsk Territory	Rastr	N/A	13%
	Astron	N/A	8%
	Siberian MB of Rostelecom	N/A	8%
Irkutsk Region	Tricolor	N/A	15%
	Siberian MB of Rostelecom	7%	14%
	Astra	11%	9%
Kemerov Region	COMSTAR-UTS	40%	47%

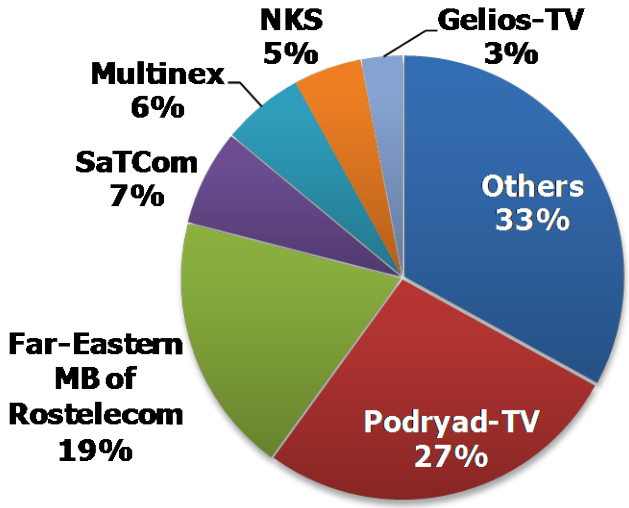
Table 28. Top Pay TV operators in Siberian FD			
Region	Pay TV Operator	Percentage in region	
		2009	2010
	Siberian MB of Rostelecom	4%	4%
Novosibirsk Region	Multinex	11%	12%
	ER-Telecom	18%	27%
	CITY	29%	29%
Omsk Region	ER-Telecom	55%	61%
	Multinex	31%	23%
Tomsk Region	Tomtel	69%	60%

Source: J'son & Partners Consulting

- **Far Eastern Federal District**

In the Far Eastern Federal District two federal-level operators provide the Pay TV services: Far-Eastern MB of Rostelecom and Multinex, which account for 19% and 6% of the District subscriber base, respectively.

Fig. 36. Far Eastern Federal District Pay TV market breakdown by operators, 2010



Source: J'son & Partners Consulting, operator data

Besides that, Podryad-TV is the largest Pay TV operator in the Far Eastern Federal District. This operator provides its services in one region (Primorsky Territory) and holds over 50% market share in this region.

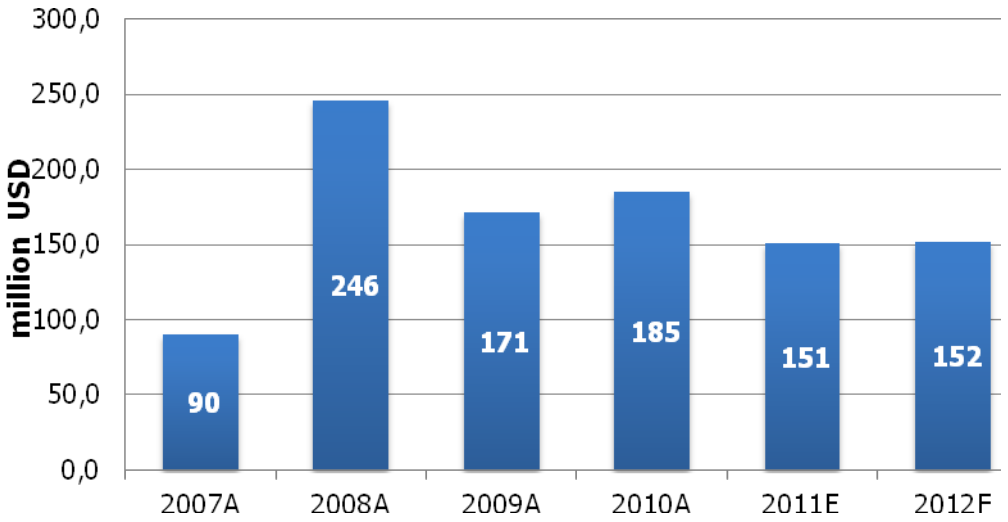
Table 29. Far Eastern FD Regions Top Pay TV operators			
Region	Pay TV operator	Percentage in region	
		2009	2010
the Republic of Sakha	Gelios-TV	55%	53%
Amur Region	SatCom	26%	25%
	Far-Eastern MB of Rostelecom	N/A	13%
Primorye Territory	Far-Eastern MB of Rostelecom	16%	20%
	Podryad-TV	54%	51%
	Vostok-TV	11%	10%
Khabarovsk Territory	Multinex	44%	40%
	Far-Eastern MB of Rostelecom	N/A	11%
Kamchatka Territory	Far-Eastern MB of Rostelecom	N/A	5%
	Multinex	21%	20%
	SKTV Spectr	55%	49%
Magadan Region	Mir Antenn	94%	90%
Sakhalin Region	Sakhalinmorsvyaz	65%	60%
	Far-Eastern MB of Rostelecom	N/A	10%
the Jewish Autonomous Region	RTRS	65%	64%

Source: J'son & Partners Consulting

1.5.3. Set-top-Box market: market size in monetary and in volume terms, its main producers and consumers

More than 2 million units of customer STB equipment were sold in 2010 for over 185 million USD.

Fig. 37. Sales of subscribers' STB equipment in money terms, 2007-2012

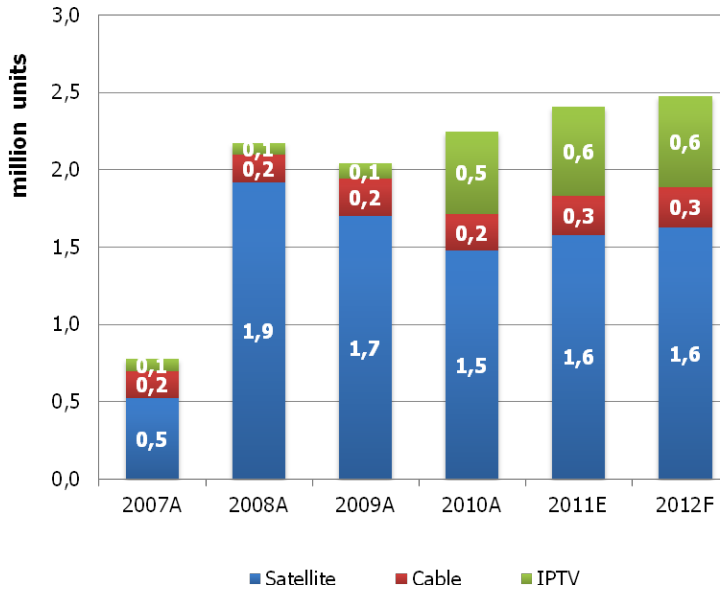


Source: J'son & Partners Consulting

2010 was the first year in the Russian market of STB terminal equipment, during which the share of IPTV set-top boxes significantly increased. Primarily, this is due to growth of subscriber base of IPTV providers, caused by the fact that the Russian broadband providers have begun increasingly developing Pay TV, digital TV and IPTV services.

In the coming years J'son and Partners Consulting expects the continuation of this trend.

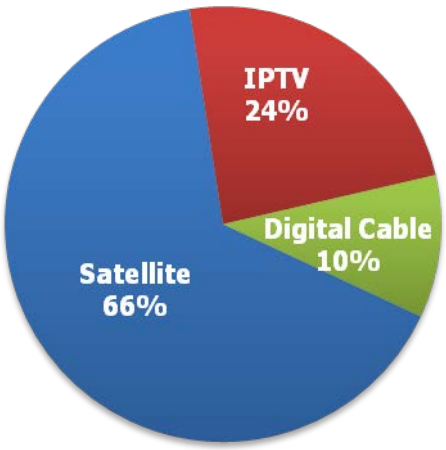
Fig. 38. Sales of subscriber equipment in physical terms by types, 2007-2012



Source: J'son & Partners Consulting

However, the quantity of DVB-S set-top boxes sold is still very significant, due to the fact that satellite TV operators have a much greater coverage of the target audience than TV providers using physical wire connection.

Fig. 39. The structure of sales of subscriber equipment in 2010



Source: J'son & Partners Consulting

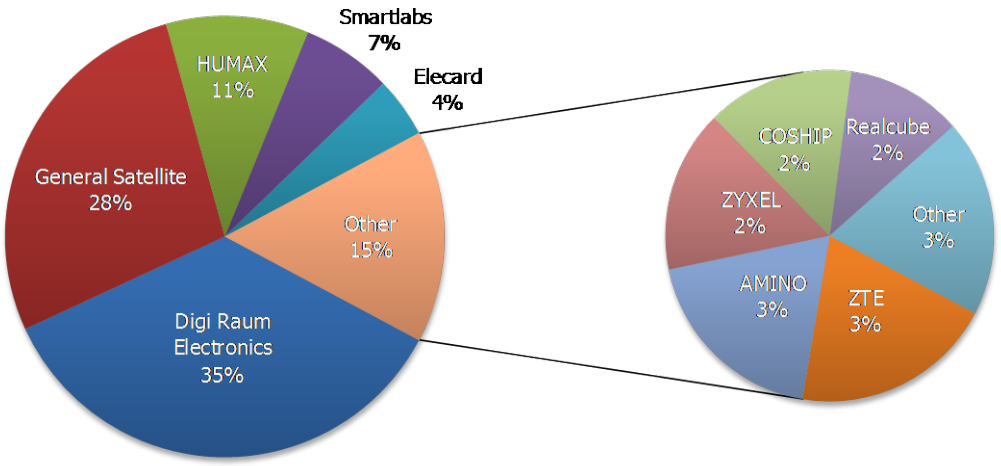
Substantial growth in STB sales in 2010 happened due to the growth of Pay TV market and the end of the world economic crisis.

In 2010, five leading players occupied about 85% of the market:

- Digi Raum Electronics
- General Satellite
- HUMAX
- Smartlabs
- Elecard

At the same time, more than 35% of sales in quantitative terms are the sales of satellite receivers made by Digi Raum Electronics.

Fig. 40. The share of leading players of the Russian market of STB equipment



Source: J'son & Partners Consulting

The main consumers of the terminal STB equipment are the operators, who buy them for resale to their customers. Below are the main consumers of different STB devices:

Table 30. STB vendors collaborated with Pay TV operators in Russia

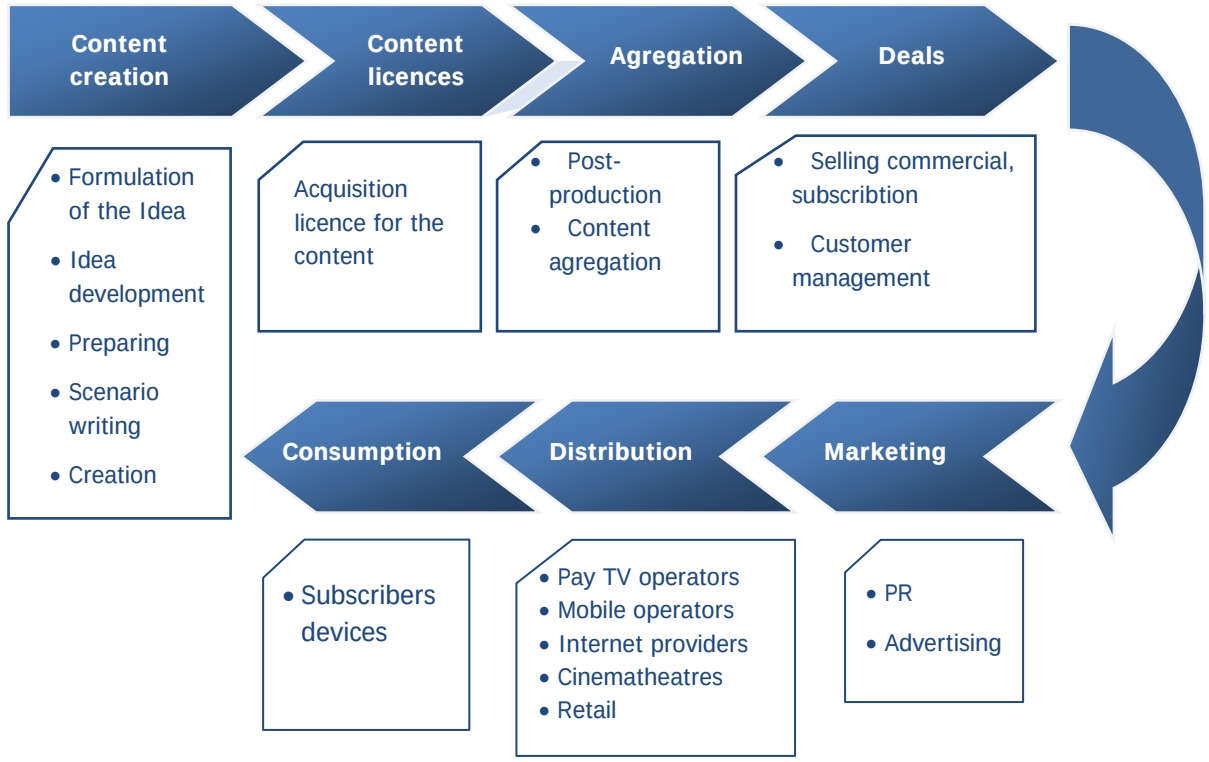
Vendor	Operator
DRE, General Satellite	**Tricolor-TV**
Amino	**MTS**
	DiSeL-TV (Rostelecom)
Arion	**Divan-TV (ER-Telecom)**
GS, Topfield	**HD platform**
Topfield	**Orion – express**
DRE, Humax, Topfield	**Raduga TV**
Smartlabs	**TVi (Rostelecom)**
Motorola, Cisco	**Beeline TV**
Amino, Realcube	**QWERTY**
Zyxel, Elecard	**TWist (Rostelecom)**
Zyxel	**Avangard TV**
Humax	**Akado**
Elecard	**Tomika**
	Neotelecom
	TTK
	Sibinet
	Fast70net
	TOMTEL
	New Telesystems
INFOMIR	**J-TV (Rostelecom)**

Source: companies data

1.5.4. Content producers and distributors

Taking into account the specific nature of the content (service/product) we can identify 7 major stages of content development and delivery:

Fig. 41. Value chain and TV content market participants



Source: Media Management, Westminster University

Content creation

Includes creative and operational processes involved in the production of content both by specialists (composers, song writers, designers, writers, film directors, etc.) and amateurs (user generated content).

Table 31. Video content production participants

Foreign	Russian				
	Movie	Sport	Series	TV shows	
Columbia Pictures	DIXI	Sport leagues:	Amedia	VID	Ostankino
Warner Brothers	Triada	Football	Lean-M	TMK	2B
Walt Disney	Novy Vek	Basketball	Constanta	ATV	TV Igra
Sony Pictures	Other	Hockey	BFG Media	DIXI	Sokho
Universal	Central Partnership	Other	Other	WMedia	Leader TV
XX Century Fox					Sovershenno secretno
Paramount					

Source: J'son & Partners Consulting, companies data

Additionally, the growing popularity of Pay TV services in Russia is leading to the production of video content specifically for distributor companies, particularly for cable TV providers (National Cable Network). Tailor-made video content is created specifically for cable TV channel subscribers either by individual operators or in partnership with the makers of niche channels and/or major media holdings.

Purchasing Content Rights

This phase focuses on the acquisition of rights to the content.

Two ways of using intellectual property rights are common in digital broadcasting.

The first – ***communicating*** to the public (via cable and broadcast), i.e. ensuring the availability of auditory and (or) visual detection, regardless of the actual public perception. The cable broadcasting targets a specific subscriber, who receives encrypted content, whereas terrestrial broadcasting doesn't have a specific target audience.

The second – ***bringing to the notice*** of the public, i.e. ensuring access to the content from any location at any time (for example, downloading content). This model is linked to the so-called "internet rights".

Aggregation and Branding

Aggregation is a set of measures designed to ensure content generation (working with the authors), its management (user preference-based packaging and pricing). This stage also includes postproduction, that is TV content processing period after taking of episodes, preparation and production of computer objects, editing, cutting, translation, technological adaptation for channel distribution (converting to needed formats).

Table 32. Aggregators (distributors) of TV content for Pay TV

Distributor	TV Channels	Channel Description
Media Broadcasting Group (Russian company)	Animal Planet	A channel exploring the world of animals
	Discovery World	Exciting tales about history's most significant events and people who shaped history and determined the fate of civilizations
	AXN Sci-Fi	Youth TV channel with TV series and movies
	Sony Entertainment Television	Comedy entertaining channel
	Discovery Channel	A documentary channel
	Discovery Science	A channel that focuses on the latest scientific and technological achievements
	Investigation Discovery	A channel dedicated to the history of crime and crime science
	Nickelodeon	An entertainment channel for children

Table 32. Aggregators (distributors) of TV content for Pay TV		
	TV-21	A wide choice of European cinematography: Italian, French, Russian movies
	TLC	Channel for women
	MTV Hits	The channel offers the freshest music hits
	MTV Dance	Channel for those who love Dance music
	MTV Rocks	Channel for true music fans
	VH1 Classic	This music channel is aimed to audience at the age from 20 to 45
	VH1 European	24/7 channel offering broad choice of videos by different performers
	World Fashion	TV channel, which reports about last tendencies of fashion world
NBC Universal (international company)	Hallmark	Movie Channel
	Diva Universal	Women entertaining channel
	KidsCo	Children channel, which target audience is viewers at the age from 6 to 10
	Syfy Universal	Entertaining channel dedicated to fantasy
	Universal Channel	Movie Channel: popular movies and TV series
Universal Communications (Russian company)	BBC Entertainment	Channel showcasing comedy, drama, light entertainment and children's programming from the BBC and other UK production houses.
	BBC World News	The most popular BBC channel, international news and current affairs
	High TV	The first worldwide 3D channel, distributed to over 1 billion households around the world
	Fashion One	TV channel about fashion, style, beauty, glamour and luxury
	MEZZO LIFE HD	Classical music and jazz in high quality format
	Gulli	Channel for children and teens of 6-15 years old
	Playboy TV	Adult channel
	English Club TV	Channel for learning English

Table 32. Aggregators (distributors) of TV content for Pay TV		
	FRANCE 24	French channel of politics news, economics, culture, spots and ecology
	ESPN Classic	Classic sport
	Deutche Welle	International broadcasting service
	MCM TOP	TV channel with foreign music videos
	Metro Goldwyn Mayer	TV program of MGM in which 100% of content are Hollywood movies
	Mezzo	Classical music and jazz
	TiJi	Television for babies from 2 to 7 years old
Viasat (subsidiary of Swedish media conglomerate Modern Times Group)	Viasat Explorer	Documentaries on travel, nature, extreme sports, etc.
	Viasat History	Documentaries on politics, society, science and culture
	Viasat Sport	Sports channel
	Viasat Nature	Documentaries on nature, travels and animals.
	TV-1000	Movie channel: from Hollywood hits to Worl movie masterpieces
	TV-1000 Russian movies	Movie channel: Russian movies
	TV-1000 Action	Movie channel in action genre
ArtMediaGroup (Russian company)	24DOC	Firs documentary channel about Russia
	Nastoyasheye smeshnoye televideniye (NST)	24/7 humorous channel
	Nastoyasheye strashnoye televideniye (NSTV)	Channel of horrors and black humor
	Mat' i ditya	24/7 channel about maternity and childhood
	24Techno	Documentary channel
	Feniz-ART	TV channel of Russian TV series
Askon (Russian company)	Eurosport	First-rate pan-European sports channel
	Eurosport 2	European sports channel, differing from other channels in teens types of sport broadcasting
	Eurosport News	Sport news
Channel One.	Vremya	Documentary channel about XX century history

Table 32. Aggregators (distributors) of TV content for Pay TV		
Wordwide net. Digital TV family (Russian company)	Dom Kino	Movie Channel: Russian movies
	Music	24/7 music channel with Russian music
	Telecafe	24/7 culinary channel
REDMEDIA art production association (Russian company)	365 days TV	History channel
	Auto plus TV	Channel for car owners and fans of technical equipment
	Boyez TV	Russian TV channel for martial arts fans
	India TV	Russian TV channel of Indian movies and TV shows
	Comedy TV	Entertaining channel of local and foreign comedies
	Lya-minor TV	Channel dedicated to Russian chanson
	Mnogo TV	Channel of TV series
	Russkaya noch	Adult channel
	Kukhnya-TV	Culinary channel
	TV Bulvar	TV channel about stars of Russian and foreign show business
	HD-LIFE	High quality Information and entertainment channel
	Interenoye TV	TV channel about interesting hobbies and ardours
	Europa Plus TV	Music channel created with the participation of Europa Plus
Stream Television Company (Russian company)	Drive	Entertaining channel about cars and motorcycles
	Zdorovoye TV	Documentary channel about everything, which is related to human health
	Okhota i ribalka	TV channel for men, devoted to the male hobbies and leisure
	Retro TV	Entertaining movie channel, broadcasting network which make movies and the transfer of 60-80th of the XX century
	Usadba	The channel about country life
	Domashniye zhivotniye	TV channels for animal-fanciers
	Psikhologia21	Documentary channel
	Stream. Russkaya zhizn	TV channel about Russia and Russians
	Voporosi i otveti	TV shows and quizes
Telko Media (Russian company)	Euronews	First-rate European news channel

Table 32. Aggregators (distributors) of TV content for Pay TV		
	Disney Channel	Entertaining channel
	Nat Geo Wild	Informatine channel about wild nature
	National Geografic	Documentary channel
	National Geografic HD	Documentary channel about nature in HD
	Fox Life	TV channel, main content of which are popular TV series
	Fox Crime	TV channel, transmitting detective series and shows
"Pleades" Group of companies (international holding)	Fashion TV	24/7 TV channel fashion and beauty to a wide audience of viewers
	AB Moteurs	TV channel about motorsports
	XXL	French adult TV channel
	FTV HD	Version of TV channel Fashion TV in HD
	Escales	French TV channel, broadcasting documentary films about travel and tourism
	Encyclopedie	Documentary channel about science and culture of different countries
	Chasse et Peche	Documentary channel about hunting and fishing
	Wedding TV	Entertainment TV channel about the relationship between humans
	Kids Co	TV channel for children aged 6 to 10 years
	Animaux	French TV channel dedicated to the diversity of wildlife
First HD (Russian company)	Teleputeshestviya	Documentary channel about travels
	Zoo TV	24/7 Documentary channel about animals
	Okhotnik & Rybolov	Educational TV channel on hunting and fishing
	Teen TV	Entertainment TV channel transmitting reality shows and soap operas
	Kinopokaz	Movie TV channel with foreign movies
	Kinopokaz HD-1	Movie TV channel showing extremely topical foreign film last 10 years in the standard of high definition
	Kinopokaz HD-2	Movie TV channel of modern foreign drama, comedy, melodrama.
	Teleputeshestviya HD	Educational TV channel about travel in high definition
	High Life	TV channel about luxury for men
	Nochnoi club	TV channel for adults

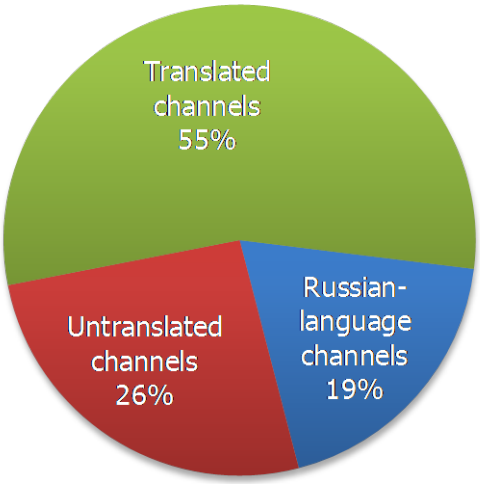
Table 32. Aggregators (distributors) of TV content for Pay TV		
	Zhensky mir	TV channel about women and for women
	Tonus TV	Educational TV channel on a healthy lifestyle
	Discoteka	TV channel with retro songs
	Zagorodny	Educational TV channel for the country house owners

Source: J'son & Partners Consulting, companies data

In addition to companies whose main activity is the creation and distribution of content, it can also note the company's primary activity of which is direct delivery of content to end users. NTV+ satellite TV operator also products the number of TV channels as NTV+ Sport, NTV+ Football, NTV+ Movie, essentially being a distributor of data channels and distributing this content in the networks of cable operators.

About 2/3 of the total number of channels are broadcasted in Russian (or in translation). The other channels are in English, French and German.

Fig. 42. Operator Package Pay TV channels breakdown by provenance and localisation degree



The most popular translated TV channel: Animal Planet, Discovery Channel, National Geographic
The most popular untranslated TV channel: BBC World
The most popular Russian-language TV channel: RBC-TV

Source: J'son & Partners Consulting, company data

Channel broadcasting in Russian requires additional costs from the distributor or holder, which affects the cost of feed for operators. However, a value of the rights to the content from which the channel is formed itself, is determining.

The cost of television channels for Pay TV operators depends on the demand of the TV channel by viewers, on Pay TV operator subscriber base, on the geography of service and exclusivity of the proposed television production. The more popular, the higher its cost.

In general, the market formed the following scheme of work with content providers: the cost of broadcasting is defined per subscriber per month depending on the package, basic or advanced, not counting the stipulated minimum guarantee on the number of subscribers.

When the number of subscribers exceed 100 000, the price may significantly decrease to 35-50% of the base price.

Table 33. Basic price of non-terrestrial TV channel per one subscriber, USD per month

Channel	Price
Russian	0,14
Foreign	0,14
News	0,08
Entertaining	0,08
Children's	0,10
Documentary	0,13
Sport	0,14
Movies	0,16

Source: J'son & Partners Consulting

Cost (license fees) of Chanson-TV music channel in average is about 0.02 USD per subscriber per month, while the cost of subscribing to "MTV Dance" music channel is about 0.12 USD per subscriber per month. We should also note the channels with exclusive content rating, such as "NTV-plus: Our Soccer" or channel "Premiere" - the cost of license fee for 1 user per month for each channel is 6.7 USD. As a rule, the channels like this are not included in the theme packages and are sold separately by *a la carte* (or "pay per view") system.

Therefore, average market price per channel at the rate of one subscriber per month is about 0.08 USD. In this case, variation in prices can range from 0.01 USD (low-rating Russian and non-transferable foreign channels) to 0.40 USD (adult channels and channels in high definition - HD).

Operator's royalty payment to Distributor (or content owner) is the product of TV subscriber's fixed monthly fee multiplied by the number of subscribers.

> Example: Operator Comstar-Regions retransmits television "Discovery" to an audience of 700 thousand subscribers. The cost of fee for Comstar established by the Distributor is about 0.09 USD. Therefore, the monthly payment from Operator to Distributor is about 63 000 USD (0,09 USD x 700,000).

It must be emphasized that the Operators' aggregate channel payments to Distributors can range from 20 to 60% in the service cost structure. The minimum value is typical for the regional monopolist operators with package often consisting of 80-85% free channels. In contrast it is The highest value, on the contrary, is typical of the operators in highly competitive environments, as well as for operators providing double-play service, where the main revenue comes from sales of converged services (e.g.: access to the Internet), and TV service is only a marketing tool to attract the audience. For example, for Beeline TV operator in Moscow, the cost of TV services is more than 50% of ARPU.

The cost of a particular channel is not fixed for all operators. It depends on several factors:

- Number of subscribers – operator with a large subscriber base could count on substantial discounts, up to 50%.
- Package distribution channel - this item is directly related to item 1, e.g., the channel cost for the Basic package (the most populous by the number of subscribers) will always be in 1.5-3.5 times lower than for the Expanded basic package (better quality channels = higher cost of subscriptions = smaller number of subscribers). So, for example, if the "Our Cinema" channel costs about 0.05 USD for the Basic package, then the Expanded one will cost 0.15 USD.
- Area of distribution - for Moscow and St. Petersburg, channels are more expensive by an average of

0.01 - 0.015 USD per subscriber per month.

- The presence of advertising on the channel - if the channel carries commercial advertisements, the operator may insist on reducing the costs or even dropping the licensing fees.
- There is also an arrangement under which the operator, upon reaching a substantial subscriber base, ceases to pay licensing fees to the content owner and even begins to charge fees even from the "top" content owners for the retransmission of their channel in his networks providing the subscriber base, which allows the content owner to receive significant revenues from commercial advertising sales.

  Example: Mostelecom with a significant subscriber base (more than 2 million subscribers) has a one-time charge for each channel (non- federal only) on average, about 0.5 USD per 1 subscriber - the so-called "log on fee ".

- **Consumer management and transactions in the content market**

This phase includes the sales of advertising and subscription between distributors and content aggregators, billing, and relationship management between the company and consumers.

- **Marketing**

This stage includes the content promotion and advertising, content merchandizing (games, toys, stationery and souvenirs), public relations, direct marketing, which establish personal and direct communication with the recipients of the content.

- **Distribution**

According to J'son & Partners Consulting, distributors are the companies that provide content for its subsequent retransmission in cable and satellite television, as well as in mobile communication channels.

Distributors in Russia have a significant impact on the video content industry, because distributors of video content usually take the decision on broadcasting repertoire on the cable networks, including the most advanced cable operators.

Today, in addition to business distributors, distribution is also one of the most attractive areas for major media investors, including such holding companies as Gazprom Media, Prof-Media and the Mass Media System.

- **Retransmission**

Rights to video content broadcasting are usually acquired by television channels. Today in Russia, the main competition takes place between the terrestrial channels which use the advertising model. Channels vying for the high popularity ratings, and actively involving into the process of producing content, are the Channel One, Russia, CTC, RenTV, TNT, NTV and TV Center.

- **Rent**

Rent of video production takes place in a filmmaking segment by the independent companies or directly by movie producers. The main difference between Russian and Western model is that the major players in the West usually grow out from the film companies - content producers, while in Russia the main forces are concentrated at the distributor companies. In particular, this is due to the fact that often the success of, and, accordingly, revenues from the rental video depend on the distributors.

- **Content consumption**:

For this study, the content consumption includes a set of technical devices with which the

consumption of content takes place: mobile phones, televisions, computers, iPods, players, etc. It is interesting to note that the development of digital content market in Russia during 2005-2007 was also characterized by consistent development of all stages of the production chain, including:

- the growth of Russian content production and increased presence of Western majors and distributors;
- rapid construction of transmission networks / channels of distribution throughout the country (broadband internet, mobile internet - GPRS / EDGE, 3G, Wi-Fi, WiMax networks);
- significant demand from consumers for smartphones, mobile phones with multimedia, mp3-players, computers and other subscriber devices.

Up to date, we can note the significant growth over the entire chain of production and consumption of digital content in Russia with the emphasis shifted to the infrastructure (transmission networks and subscriber devices)

- **Providing of TV content on the exceptional rights**

Despite the fact that the provision of television content on the rights of exclusivity is not too common in the Pay TV market, this type of relationship between the aggregator and distributor of content exists, too.

In this case, the content aggregator enters into a contract with Pay TV operator for the exclusive provision of TV content. Thus, the viewers can receive the television content from only one Pay TV operator holding an exclusive contract with the aggregator company.

Under this arrangement, the cost of a TV channel for an operator is significantly higher than in the ordinary contract.

Main players on the market of content production and distributions

Natsionalnaya Media Gruppa	НАЦИОНАЛЬНАЯ МЕДИА ГРУППА
Date of establishment	February, 2008
Key figures	A. S. Ordzhonikidze (CEO), L. P. Sovershaeva (Chairman of the Board of Directors)
Revenue	n/a
Terrestrial TV channels	■ Channel One (25%) ■ CTC Media (25% - CTC, Domashniy, Peretz) ■ RenTV ■ 5 channel
Share of terrestrial TV audience (2010)	37% (in which 11,4% - CTC Media)
Assets of non-terrestrial TV channels	Channel One. Digital family (4 channel)
Online assets	Videomore.ru (via CTC Media)

Modern Times Group (MTG)	
Date of establishment	1997
Key figures	David Chance (Chairman of the Board)
Revenue	2010 - 2 billion USD
Terrestrial TV channels	■ CTC Media (38,2%)
Share of terrestrial TV audience (2010)	11,4%
Assets of non-terrestrial TV channels	■ TV1000, ■ TV1000 ■ Russkoe Kino, ■ TV1000 Action, ■ Viasat History, ■ Viasat Explorer, ■ Viasat Sport, ■ Viasat Nature ■ Raduga TV
Online assets	Videomore.ru (via CTC Media)

Gazprom-Media	
Date of establishment	21 January, 1998
Key figures	Senkevich Nikolay Yuryevich (Chairman of the Board, CEO) Miller Alexey Borisovich (Chairman of the Board)
Revenue	2010 - 1,4 billion USD
Terrestrial TV channels	■ NTV ■ TNT
Share of terrestrial TV audience (2010)	21%
Assets of non-terrestrial TV channels	■ Thematic channels of NTV + (21 channels)
Online assets	■ Rutube.ru ■ now.ru ■ tnt-online.ru

Vserossiyskaya gosudarstvennaya televisionnaya i radioveshatelnaya kompaniya	
Date of establishment	21 June, 1990 13 May, 1991 — TV broadcasting
Key figures	Dobrodeev Oleg Borisovich (CEO)
Revenue	2010 –n/a 2009 – 0,66 billion USD
Terrestrial TV channels	■ Russia 1 ■ Russia 2 ■ Russia 24 ■ Russia K
Share of terrestrial TV audience (2010)	20%
Assets of non-terrestrial TV channels	■ Carusel ■ Nauka 2.0 ■ Moya Planeta ■ Strana ■ Sarafan ■ Sport 1 ■ Sport 2
Online assets	zoomby.ru

Prof Media	
Date of establishment	1997
Key figures	Rafael Akopov (Chairman of the Board of Directors) Yulia Soloveva (President)
Revenue	2010 - 0,32 billion USD
Terrestrial TV channels	■ TV 3 ■ MTV ■ 2x2
Share of terrestrial TV audience (2010)	3,3%
Assets of non-terrestrial TV channels	-
Online assets	ivi.ru

UTV (JSC "UFANET")	
Date of establishment	7 May, 2009
Key figures	Vitaly Noviov (Director)
Revenue	n/a
Terrestrial TV channels	■ 7 TV ■ MuzTV
Share of terrestrial TV audience (2010)	2,7%
Assets of non-terrestrial TV channels	Thematic channels of UTV (17 channels)
Online assets	utou.ru

Sistema Mass Media (JSFC "Sistema")	
Date of establishment	2009
Key figures	Andrey Smirnov (president)
Revenue	2010 - 0,95 billion USD
Terrestrial TV channels	-
Share of terrestrial TV audience (2010)	-
Assets of non-terrestrial TV channels	■ TC Stream ■ Cosmos TV ■ CTV
Online assets	Omlet.ru (via JSFC "Sistema")

ONEKSIM	
Date of establishment	2007
Key figures	Dmitry Razumov (CEO) Mikhail Prokhorov (Founder)
Revenue	2010 – n/a 2009 - 0,22 billion USD

Terrestrial TV channels	-
Share of terrestrial TV audience (2010)	-
Assets of non-terrestrial TV channels	■ RBK-TV ■ Jivi
Online assets	Smotri.com

Rostelecom	Ростелеком
Date of establishment	1993
Key figures	Alexander Provotorov (President) Ivan Rodionov (Chairman of the Board of Directors)
Revenue	2010 - 0,90 billion USD
Terrestrial TV channels	-
Share of terrestrial TV audience (2010)	-
Assets of non-terrestrial TV channels	■ ArtMediaGroup, ■ Noviy Vibor (9 channels)
Online assets	-

1.5.5. User content preferences

As a result of J'son & Partners Consulting field research (online-poll), the television audience was divided according to their main preferences into two age groups : under and over 25. Viewers from 10 to 24 years of age prefer the music channels in the first place, channels with TV series and movies - in the second. In smaller age intervals, the preferences diverge: viewers in the age category from 10 to 17 years preferred TV channels with entertainment content, while viewers aged 18 to 24 marked news channels among their interests.

All the audience aged over 25 converge in their preferences: they are primarily interested in news channels, the second most popular category is popular science programming, and third place is occupied by the channels that show TV series and movies.

Table 34. Top-3 most popular categories by different age groups			
Age group	**1**	**2**	**3**
10 - 17	Music	Series and movies	Entertainment & Leisure
18 - 24	Music	Series and movies	News channels
25 - 30	News channels	Popular science	Series and movies
31 - 39	News channels	Popular science	Series and movies
40 - 54	News channels	Popular science	Series and movies
55 +	News channels	Popular science	Series and movies

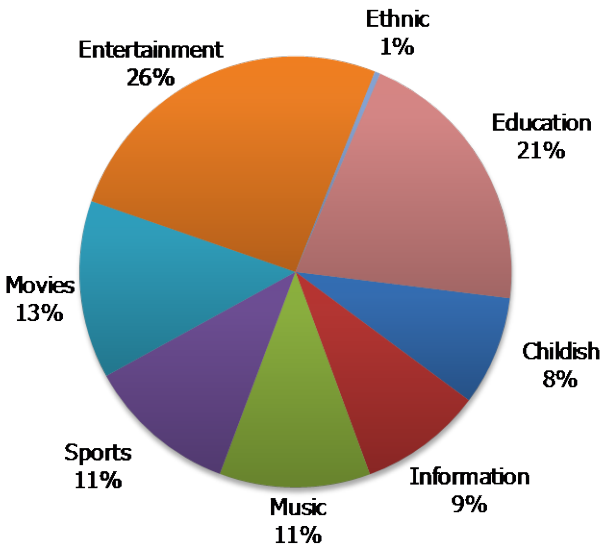
Source: J'son & Partners Consulting, company data

1.5.6. Program bundling and tariff policy

Bundling (qualitative characteristic)

The analysis of the TV content offered by operators showed that the three most popular Pay TV categories include science/education, movies and entertainment, however the terrestrial TV channels are still responsible for a substantial share of an average basic package.

Fig. 43. Operator Pay TV channel bundling by categories, 2010



Source: cableman.ru

This fact highlights a considerable difference between Russian viewers and their Western counterparts who prefer movies and sports channels. It should be noted, however, that the number of movie channels is slowly increasing, unlike the sports channels. The low popularity of

sports channels among Russian subscribers might be explained by availability of the terrestrial sports channels in the country.

Along with the shortage of local content, the niche, or interest-based, content is not well represented either. However, several positive changes are already taking place: Systema Mass Media is currently developing a range of interest-based channels, while NTV+ is beginning to segregate their own channels into the interest-based categories, etc. But this is just the beginning of work in this direction.

Table 35. List of non-terrestrial TV channels considered in this research

Subject area	TV Channels	Representative
Children's channels	JETIX	Telko Media
	JETIX PLAY	Telko Media
	NICKELODEON	Media Brodcasting Group
	BIBIGON	VGTRK
	DETSKY	Content Union Distribution LLC (Club 100)
	DETSKY MIR	Mediamart CJSC
	ZNANIYE	Shkolnik TV LLC
	TELENYANYA	Channel One. World net CJSC
News channels	MIR	MTRK Mir CJSC
	RBC TV	RBC
	EXPERT TV	Mediaholding «Expert»
Fashion and Life style channels	FASHION TV	Group of companies «Pleades»
	STYLE TV	Telekanal Style LLC
	WORLD FASHION CHANNEL	World fashion channel LLC
Sport and Car channels	EUROSPORT	ASKON
	AVTO PLUS TV	TPO Red Media LLC
	DRIVE	TPO Red Media LLC
	RUSSIAN EXTREAM	Content Union Distribution LLC (Club 100)
Movie channels	AXN SCI-FI	Media Broadcasting Group
	DIVA UNIVERSAL	NBC Universal
	TV 1000	Viasat
	TV 1000 ACTION	Viasat
	TV 1000 RUSSIAN MOVIE	Viasat
	TV XXI	TV XXI
	DOM KINO	Channel One. World net CJSC
	ILLUSION+	Content Union Distribution LLC (Club 100)
	Comedija TV	TPO Red Media LLC
	NASTOYASHEYE STRASHNOYE TELEVIDENIYE	NTV-Plus OJSC
	NASHE KINO	NTV-Plus OJSC
	RUSSKI ILLUSION	Content Junion Distribution LLC (Club 100)
	FENIX + KINO	Fenix-T

Music channels	A-ONE	TK Alternative One LLC
	MUSIC BOX	Music Box Group
	RU.TV	Russian Media Group
	RUSSIAN MUSIC BOX	Music Box Group
	MUZYKA PERVOGO	Channel One. World net CJSC
Educational channels	24TECHNO	ArtMediaGroup
	365 DAYS TV	TPO Red Media LLC
	AMAZING LIFE	TV+ LLC
	ANIMAL PLANET	Media Brodcasting Group
	DISCOVERY WORLD	Media Broadcasting Group
	NATIONAL GEOGRAPHIC CHANNEL	Telko Media
	OCEAN TV	ADN Media
	TRAVEL CHANNEL	New Media LLC
	VIASAT EXPLORER	Viasat
	VIASAT HISTORY	Viasat
	ZOOPARK	Content Union Distribution LLC (Club 100)
	VREMYA	Channel One. World net CJSC
	ZDOROVOYE TV	TV company "STRIM" CJSC
	MAT' I DITYA	ArtMediaGroup
	OKHOTA & RYBALKA	TV company "STRIM" CJSC
	SGU TV	TV company SGU TV LLC
	SOVERSHENNO SECRETNO	Novyj vybor
	TDK	TDK LLC
	USADBA	TV company "STRIM" CJSC
Entertaining channels	DISCOVERY CHANNEL	Media Brodcasting Group
	NASTOYASHEYE SMESHNOYE TELEVIDENIYE	ArtMediaGroup
	NOSTALGIYA	Veriselintel LLC (SNG)
	O2TV	Information entertainment channel O2TV
	RETRO	TV company «STRIM» CJSC
	Jumor TV	Music Box Group
Ethnic channels	BELARUS TV	Belarus TV
	INDIA TV	TPO Red Media LLC
	TATARSTAN NEW AGE	TV company «Novyj Vek» OJSC

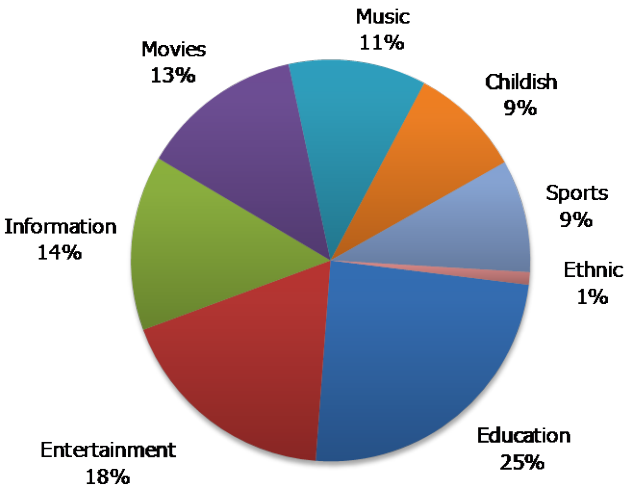
Source: J'son & Partners Consulting

The table below contains data on all Russian and foreign TV channels developed and launched during 2010 in Russian Federation.

Table 36. TV channels, launched in RF territory during 2010		
Period	**Russian TV channels**	**Foreign TV channels**
1Q 2010	Pervy Kavkazsky kanal	Mezzo Live HD
	Zagorodnaya Zhizn	Disney Channel
	Uspekh	
	Muzhskoi	
2Q 2010	KHL TV	
	Dozhd. Optimistic Channel	
3Q 2010	TV Armenia Ru	
	NTCU	
4Q 2010	Carousel	Travel Channel HD

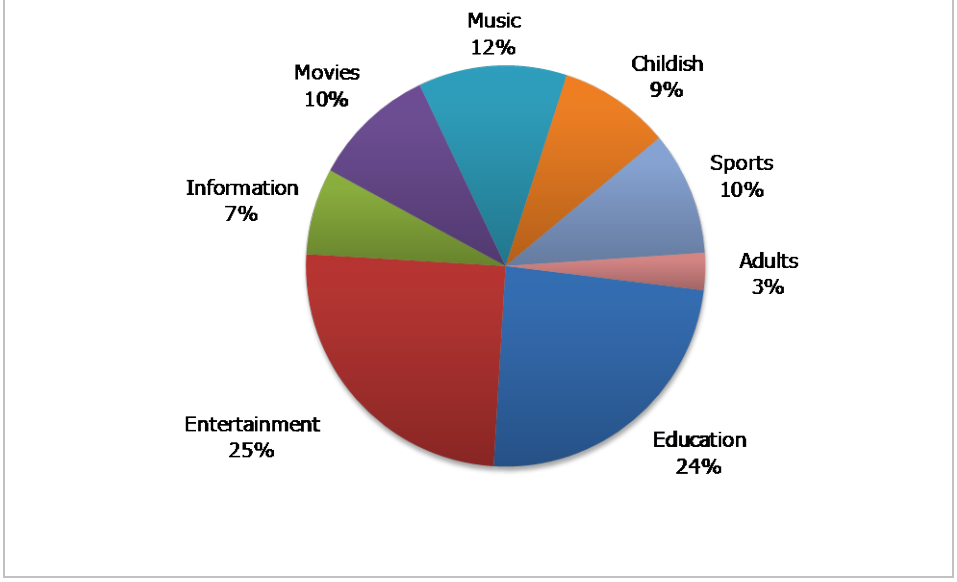
Source: Companies data

Fig. 44. Divan-TV (ER-Telecom) Pay TV channel packages by categories, 2010



Source: J'son & Partners Consulting

Fig. 45. COMSTAR-UTS Pay TV channel packages by categories, 2010



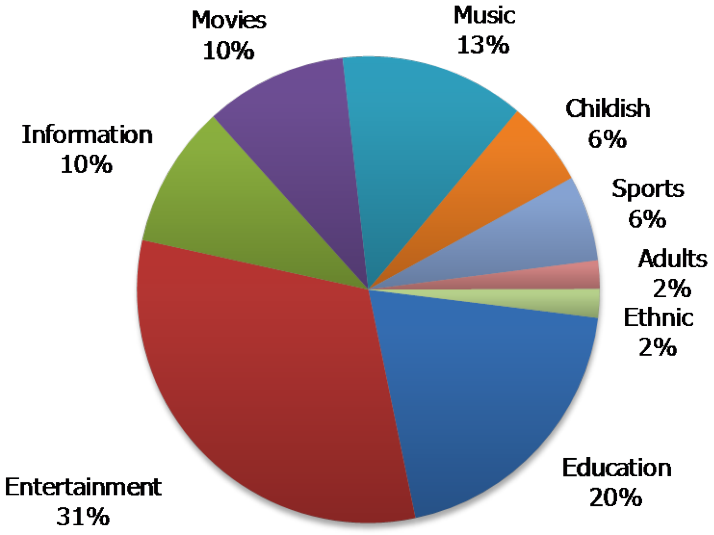
Source: J'son & Partners Consulting

- **Typical channel distribution between packages of Pay TV operators**

The packages of Pay TV operator ER-Telecom, which is offering its services under Divan-TV brand, are dominated by education (25%), entertainment (18%), information and movie (about 14%) channels, and music (11%)

The packages offered by Comstar-UTS are dominated by entertainment cannels (25%), followed by education (24%), while music (12%), sports and movies (10%) channels also enjoy considerable popularity.

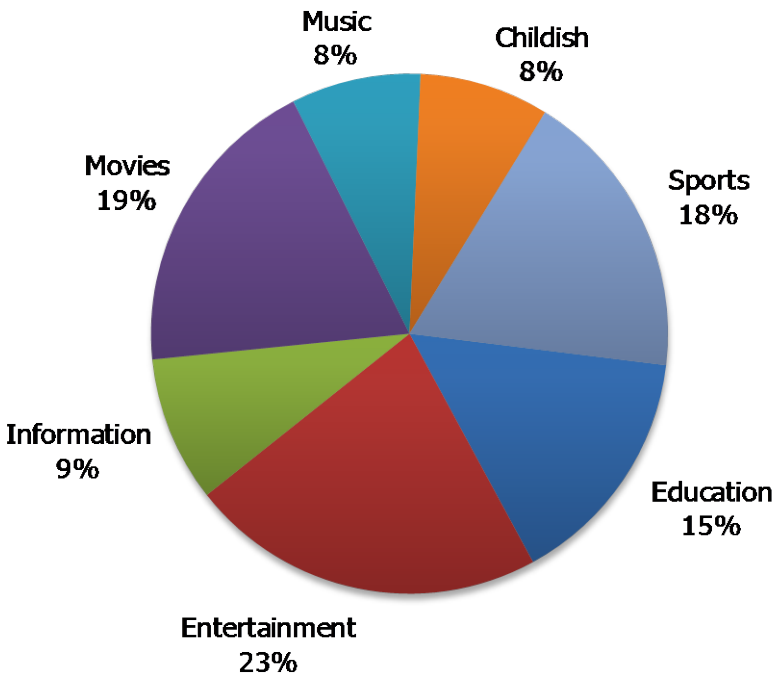
Fig. 46. Multinex Pay TV channel packages by categories, 2010



Source: J'son & Partners Consulting

The packages of Multiregion, which is offering its Pay TV services under Multinex brand, are also dominated by entertainment and education segments. However, the entertainment segment share, unlike in the packages of the above mentioned operators, where both segments are almost identical in size, accounts for 31%, which is 1.5 times more than the educational segment. They are followed by music (13%), information (10%) and movies (10%). The shares of the children's and sports channels are identical at 6%.

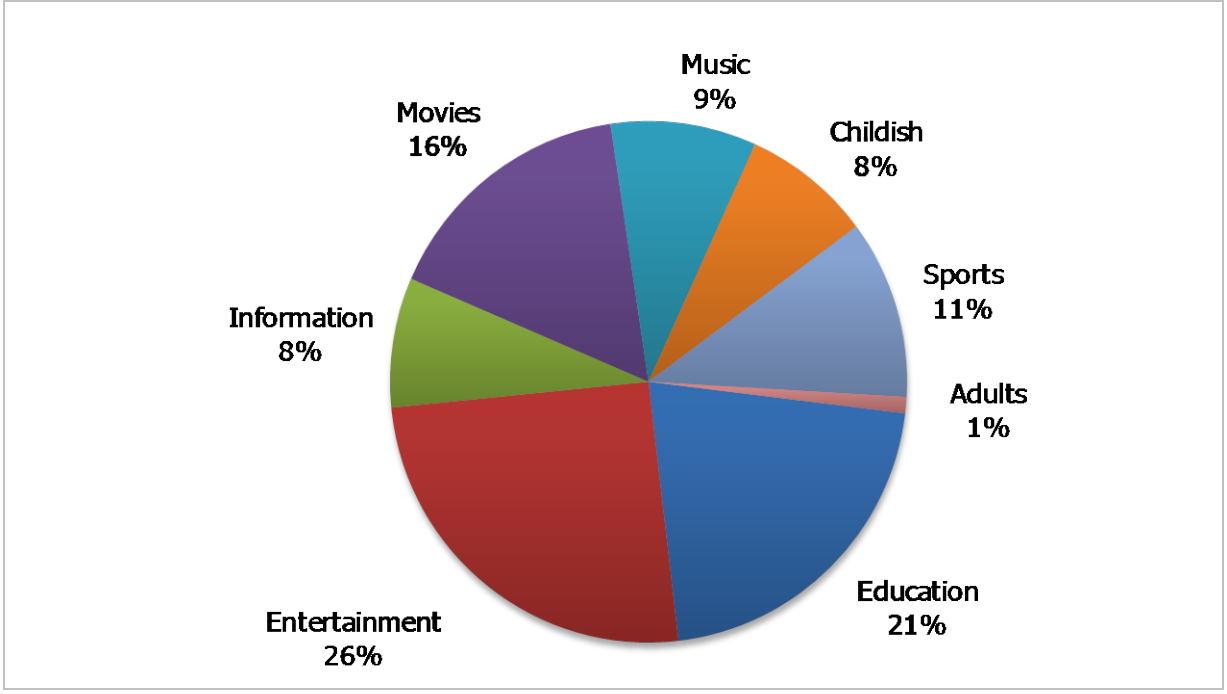
Fig. 47. NTV+ Pay TV channel packages by categories, 2010



Source: J'son & Partners Consulting

The packages of satellite channel NTV+, as other operators, are dominated by entertainment content (22%), followed by the movies (19%), with the most popular channel in this category is "Nostalgia", which broadcasts older, Soviet-era films. What sets NTV+ aside from the rest of the competition is the considerable popularity enjoyed by its sports channels (18%). This is due to the fact that this operator has a large number of proprietary sports channels.

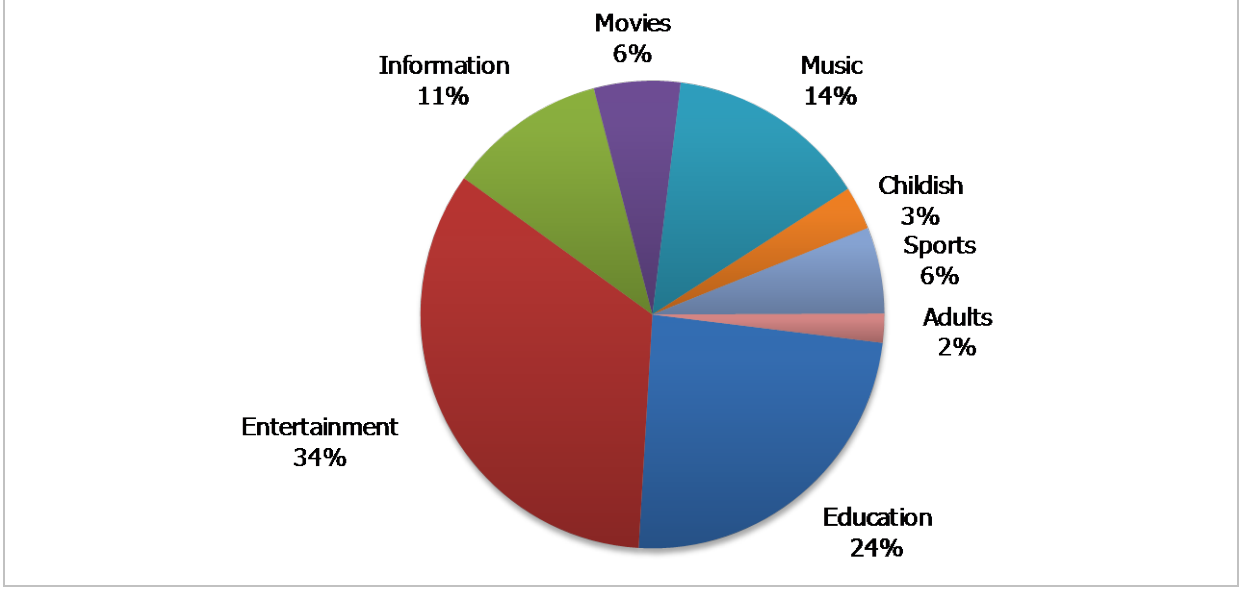
Fig. 48. Rostelecom Pay TV channel packages by categories, 2010



Source: J'son & Partners Consulting

The packages offered by Rostelecom are dominated by entertainment (25%), education (21%) and movie (16%) channels, with "Favorite Movie" channel, which broadcasts soviet-made films, among the last category's most popular.

Fig. 49. Tricolor TV Pay TV channel packages by categories, 2010



Source: J'son & Partners Consulting

The packages offered by Pay TV operator Tricolor-TV are dominated by entertainment (34%) and education (24%) channels, followed by music (14%) and news (11%). The share of the children's content in the packages from Tricolor-TV, in comparison to other operators, is very insignificant and stands at 3%.

Tariff Policies of Major Pay TV Operators

There are quite marked differences in the cost of a basic package between Moscow and the regions - in fact, the average price varies 2-fold, due primarily to the difference in the cost of TV channels to operators, which depends on the region's distribution of television content in Russia. The cost of TV channels for regional operators is generally higher than for operators working in Moscow and St. Petersburg.

It should also be noted that the extended basic packages are practically absent at the regional markets in which operators usually provide just basic packages.

Table 37. Monthly fee by operators, RUB per month

Operator	Packets	
	Basic	Extended
Tricolor TV	0*	50
Divan-TV (ER-Telecom)	225	-
NTV+	550	750
AKADO	290	390
Beeline TV	270	-
COMSTAR-UTS		
Stream TV	110	450
Multiregion (Multinex)	55	250
COMSTAR-Regions	74	255
Rostelecom		
QWERTY	430	-
Avangard TV	150	300
Rostelecom-Volga	210	-
Disel - TV	100	150
TVist	69	179
TVi	120	250

**On conditions of equipment bying it is granted free terrestrial TV channels package*

Source: J'son & Partners Consulting, company data

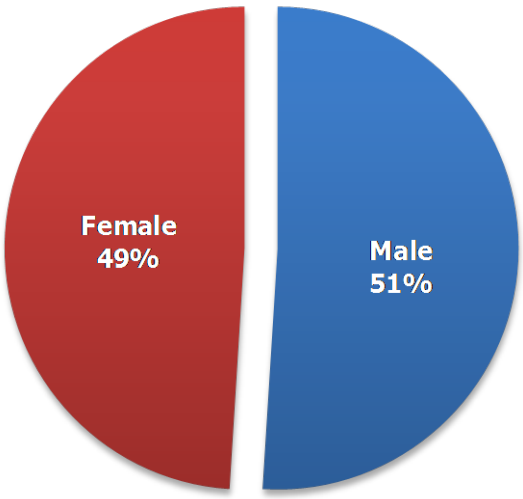
NTV+, which provides services in premium segment, has the highest price for basic (550 RUB per month) and extended (750 RUB per month) packages. ER-Telecom, which provides its Pay TV services by its Divan-TV brand, also has rather high monthly fee: basic package costs 225 RUB per month. The Tricolor TV has the lowest monthly fee; the price of its extended package (Optimum) is 50 RUB per month.

1.5.7. Profile of non-terrestrial digital TV consumer

- **Age and gender structure**

According to J'son & Partners Consulting fieldwork (online-poll), among Pay TV users the male audience slightly prevails over the female audience.

Fig. 50. Gender distribution of Pay TV users in Russia, 2010

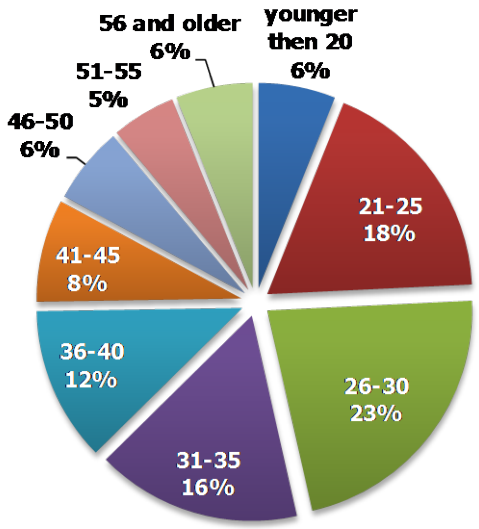


Source: J'son & Partners Consulting fieldwork

A significant percentage of the Pay TV users are under 35 years of age: 62% of respondents fall into this group.

People over 40 constitute 35% of total Pay TV audience, while those over 55 account for 6% of all Pay TV subscribers.

Fig. 51. Age deviding of Pay TV users in Russia, 2010



Source: J'son & Partners Consulting fieldwork

Family structure

Families with the number of members from 2 to 4 prevail at the structure of Pay TV audience, at 84%.

Table 38. Structure of Pay TV users by the amount of people in family, 2010	
One	6%
Two	27%
Three	35%
Four	22%
Five	7%
Six	2%
Seven	1%
Eight and more	Less then 1%

Source: J'son & Partners Consulting fieldwork

Education

The breakdown of Russian Pay TV users by level of education shows that currently people with one college degree or those who are in the process of receiving university degree, account for over 73% of all Pay TV users.

Table 39. Structure of Pay TV users by education, 2010	
Higher	60%
Academic degree	5%
Secondary Education	6%
Specialized secondary education	14%
Incomplete Higher Education (student)	13%
Incomplete Secondary Education (pupil)	3%

Source: J'son & Partners Consulting fieldwork

Social status

The most numerous part of pay TV auditory is unemployed – 19%.

Table 40. Structure of Pay TV users by social status, 2010	
Military Service	1%
Top manager	4%
Skilled worker	13%
Manager in a firm	16%
Unemployed	19%
Unskilled worker	2%
Enterpreneur	5%
Sales manager	1%

Official	5%
Owner of a company	4%
Office employee	18%
Public servant	12%

Source: J'son & Partners Consulting fieldwork

- **Emloyment**

The majority of pay TV users is full time – 69%.

Table 41. Structure of Pay TV users by type of employment, 2010	
Studies	8%
Full employment	69%
Part-time (partial) employment	9%
Military service	0%
Maternity leave / parental leave	4%
Retiree	2%
Unemployed	4%
Housewife	2%
Other	4%

Source: J'son & Partners Consulting fieldwork

- **Income**

The share of the users with per capita income of more than 20 thousand RUB reached more than 50%.

Table 42. Structure of Pay TV users by monthly income, 2010	
< 3000 RUR (< 100 USD)	6%
3000-5999 RUR (100-199,9 USD)	6%
6000-8999 RUR (200-299,9 USD)	6%
9000-14999 RUR (300-499,9 USD)	18%
15000-19999 RUR (500-666,6 USD)	14%
20000-29999 RUR (666,7-999,9 USD)	19%
30000-44999 RUR (1000-1499,9 USD)	16%
45000-74999 RUR (1500-2499,9 USD)	10%
> 75000 RUR (> 2500 USD)	6%

Source: J'son & Partners Consulting fieldwork

1.6. Mobile linear TV

1.6.1. Successful and unsuccessful projects for the last years

Mobile TV was first presented in Russia by Megafon in 2004. Currently the most advanced services are provided by the Big Three operators. There is no traffic-based fee for viewing these services, and subscribers pay only for channel package subscription.

Megafon. Video portal

m.megafonpro.ru/vp

Project launch: February 2009

Ownership structure: OJSC MegaFon

Cost: 4-10 RUB/day, with optional subscription for 3 and 6 weeks at cost of RUB 112 and 240, respectively.

Web traffic payment is included with the subscription

Audience: Megafon subscribers with phones/smartphones supporting streaming video reception.

Content: Currently the subscribers have access to six theme-based channel packages: Basic - **56 cable channels**, Children's Package - 7 **channels**, Sports Package - 7 **channels**, 18+ Package - 9 **channels**, Premium 18+ Package - 5 **channels**, International Package - 4 **channels**.

Beeline. Video-portal

streaming.temafon.ru

Project launch: December 2010

Ownership structure: OJSC Vympelcom

Cost:

Premium TV channel package - 12 RUB;

Basic TV channels package - 12 RUB;

No payment for Internet traffic

Audience: Beeline subscribers with phones/smartphones supporting streaming video.

Content: 34 Basic channels, including nationwide (Federal) channels, and Russia Today, RBC TV, Dozhd, RU.TV.

38 Premium channels

Beeline. Mobile TV

mobiletv.beeline.ru

Project launch: December 2010

Ownership structure: Dominanta LLC

Cost:

Free (included in the cost of Beeline mobile communication service); requires specialized SIM cards supporting Mobile TV.

Audience: Beeline subscribers in Moscow with phones/smartphones supporting DVB-H digital standard (2 phone models).

Content: 12 channels

MTS. Mobile TV

Project launch: июль 2011

Ownership structure: OJSC MTS

Cost: 8 RUB/day without channel separation on a basis of content.

Web traffic payment is included

Audience: MTS subscribers with MTS TV application downloaded to their phones/tablets with 3G and Wi-Fi support.

Content: About 150 TV channels, including nationwide (Federal) ones, and over 100 cable TV channels from 17 countries and 26 languages: Disney, National Geographic, National Geographic WILD, MGM, SET, AXN Sci-Fi, 2x2, MTV, RBC, Expert TV, A-One, Tiji, Gulli, Dozhd – (in Russian), as well as popular foreign channels - France 24, Deutsche Welle, MCM Top, Russia Today. All channels provide real-time viewing mode capability.

Fig. 52. MTS. Mobile TV

Source: company's data

In the near future, MTS plans to expand the TV channel package base, develop target audience packages and enhance the usability and effectiveness of client software by continuous improvement of the video compression algorithms, picture and sound quality/

Sky Link. Mobile TV

Project launch: June 2007

Ownership structure: OJSC Rostelecom

Cost: Payment is based on the channel broadcast airtime for the total amount of inbound and outbound data transfer in accordance with the terms and conditions of the selected service plan.

Audience: SkyLink subscribers.

Content: News, entertainment and music programs.

Service access requires Ubiquam U-300 mobile terminal, installed Vyuga MediaBoard application, availability of RUIM card supporting Sky Turbo service, and subscription to Sky Turbo service.

CTV. DVision

dtb.ru

Project launch: 2003

Ownership structure: AFK Sistema

Cost: for a 6-channel package (RUB):

11,800/monthly

33,600/quarterly

120,000/annually

Audience: about 100 subscribers in Moscow and suburban areas with automobile receivers supporting DVB-T format.

Content: Package of 6 TV channels with informational, journalistic, cultural and sports programming.

Table 43. Mobile TV project comparison

Provider	Launch year	Content delivery technology	Cost, RUB	Benefits	Deficiencies
Beeline	2010	GPRS/EDGE/ 3G	8-12/day	Support of 220 phone models	Symbian and Android smart phones provide reasonably good picture quality over 3G network, but weak video reception in EDGE

Megafon	2009	GPRS/EDGE/ 3G	4-10/day, 112/3 weeks 240/6 weeks	Large selection of interest-based channel packages	Absence of Russian national broadcasting channels. Only cable channels are represented. Weak video reception in EDGE network
MTS	2011	3G, Wi-Fi	8/day	Large selection of channels for minimum fee; TV program guide. Reception quality improvement is planned.	Application needs to be installed
Sky Link	2007	EV-DO	-	-	Service is terminated. Service access required many additional conditions. Tariff structure was inconvenient.
CTV	2003	DVB-T	11 800/ month	Premium in-car digital TV service	Company was unable to obtain DVB-H license and is not developing as a Mobile TV operator.
	Successful service				
	Service terminated or not successful				

Source: Operators' data, J'son & Partners Consulting

At this time, subscribers mostly use 3G data streaming mobile TV technology. Most of the mobile TV users (about 75%) are subscribers of MegaFon, the first company in the Russian market to launch such service for its subscribers. The second largest mobile TV subscription base belongs to MTS.

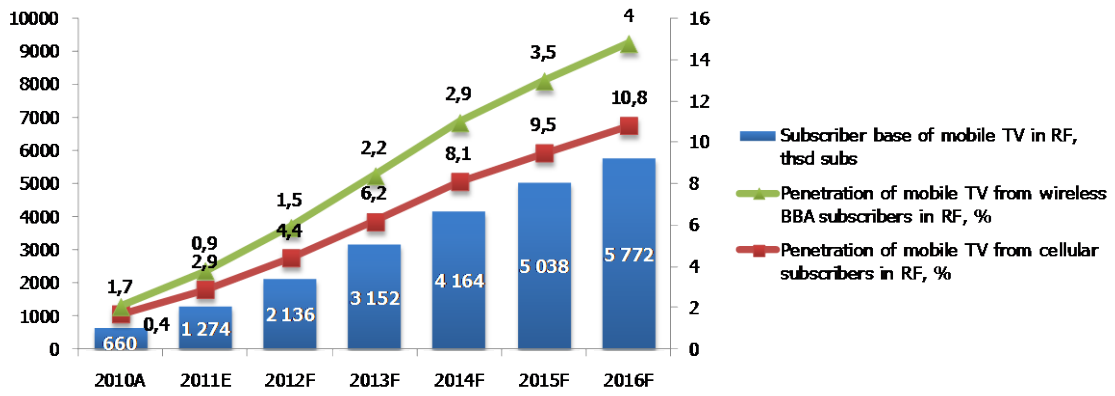
1.6.2. Market size

- **Client base structure of Mobile TV**

At the end of 2010, there were approximately 660 thousand subscribers in Russia which amounts to 0,4% of cellular subscribers and 1,7% of mobile internet subscribers.

The penetration of mobile TV in developed countries is currently from 3% to 5% of cellular subscribers. It is estimated by J'son & Partners Consulting that Russia can achieve a comparable level of penetration of mobile TV (about 4%) in 2015-2016, which amounts to about 11% of penetration of wireless broadband access subscribers.

Fig. 53. The subscriber base and penetration of mobile TV in Russia, thousand of people, 2010-2016



Source: J'son & Partners Consulting

At the moment it is difficult to predict the structure of the subscriber base of mobile TV by the FD. This report used for calculations the structure of the subscriber base of wireless broadband access.

The greatest number of mobile TV users is concentrated in the Central Federal District, Volga Federal District, North-West Federal District, particularly in the major cities of these federal districts. There are two main reasons for this distribution:

- Mobile TV service has first appeared in these regions , with several operators at once
- In these regions, the audience uses additional mobile services more actively

Table 44. The dynamics of mobile TV subscriber base by FD, thousand of people, 2010-2016

Federal Districts	2010	2011	2012	2013	2014	2015	2016
CFD	192	367	613	897	1 184	1 436	1 648
North-Western FD	72	141	240	353	463	560	635
Volga FD	70	131	219	322	424	510	578
North Caucasian FD	49	91	147	212	280	338	388
Ural FD	122	235	399	597	789	952	1 091
Siberian FD	45	86	146	219	291	354	409
Far Eastern FD	67	137	230	344	456	555	640
Southern FD	44	86	142	208	277	333	383
RF	**660**	**1 274**	**2 136**	**3 152**	**4 164**	**5 038**	**5 772**

Source: J'son & Partners Consulting

- **Assumptions and basis for Mobile TV ARPU forecast**

Tariffs for mobile TV worldwide range from 20% to 50% of ARPU for mobile services. But these data cannot be considered as indicative in principle, and for Russia in particular, as the market here is at an early stage of development.

In Russia, presumably, at first the operators will offer the mobile TV as a premium service; and ARPU in the first years may be close to the monthly ARPU of cellular service, which amounts to about 60% of cellular ARPU in Moscow. In the future, with a significant subscriber growth (which, however, remains limited: 11% of wireless broadband access and 4% of cellular), ARPU will decrease to 50% of ARPU of cellular subscribers in Russia on average.

In this case, the necessary foundation for realization of forecasts of ARPU and the number of subscribers will be the quality of services and quantity of content provided.

Table 45. ARPU of cellular network and mobile TV, RUB, 2010-2016

Federal Districts	2010	2011	2012	2013	2014	2015	2016
Central FD	255	271	276	281	286	292	297
North-Western FD	249	277	283	289	294	300	305
Volga FD	222	247	252	257	261	266	271
North Caucasian FD	298	313	319	325	331	337	342
Ural FD	255	279	285	290	295	300	306
Siberian FD	254	259	264	269	274	279	284
Far Eastern FD	401	438	446	454	462	470	479
Southern FD	247	269	274	279	283	288	293
RF	**312**	**342**	**350**	**357**	**364**	**371**	**379**
Mobile TV ARPU	**n/a**	**n/a**	**350**	**310**	**270**	**230**	**190**
Share from ARPU of mobile connection, %	*n/a*	*n/a*	*100%*	*87%*	*74%*	*62%*	*50%*

Source: J'son & Partners Consulting

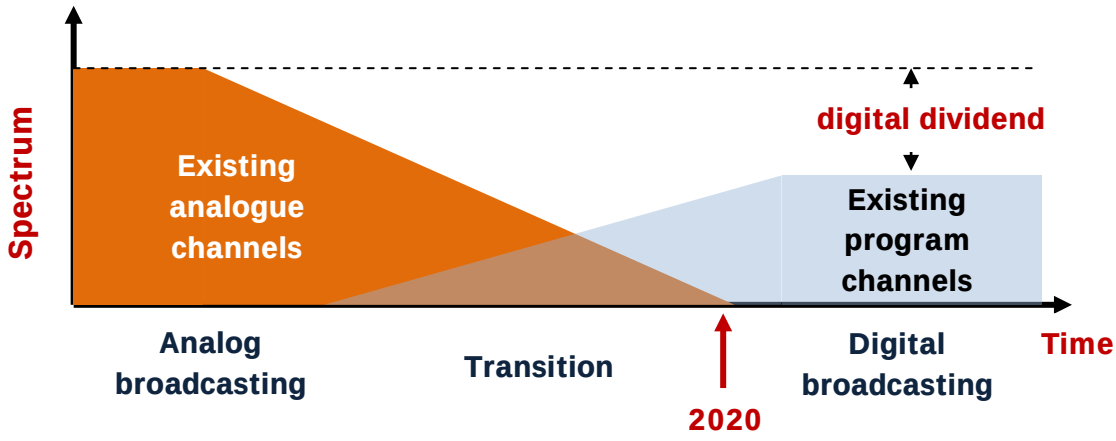
1.7. Forecasts of linear TV development in Russia by 2015

1.7.1. Battle for the "digital dividend"

Systems of digital compression used in digital television systems, allow transmitting several standard channels of digital television of acceptable quality in the band of radio frequency spectrum, used previously for transfer of one analogue channel. Digitization of several terrestrial analogue television services and their reduction in one digital television channel significantly reduces the use of radio spectrum as a whole. The volume of the spectrum in the VHF / UHF bands, which is higher than nominally required for the broadcasting of existing

analogue programs and, thus, may be released during the transition from analogue to digital television, is defined as the “digital dividend”.

Fig. 54. The definition of “digital dividend”



Source: ITU

The World Radiocommunication Conference (WRC-2007) allocated the upper part of the VHF band (790-862 MHz) for mobile service in Region 1 (including Russia) since 2015 and gave several countries of the region permission to use this distribution immediately, under certain conditions.

The range of uses for which the spectrum of “digital dividend” can be opened, is wide: extra terrestrial broadcasting services (for example, the new interactive television services and HDTV services), mobile multimedia applications (such as mobile TV and streaming video), mobile communications and wireless broadband systems.

The issue of contention now is: “Who will get the released frequency resource?”

Broadcasters reasonably expect that the free frequencies - the fruits of their labours on TV digitalisation - will be used in the future for the organisation of new TV channels.

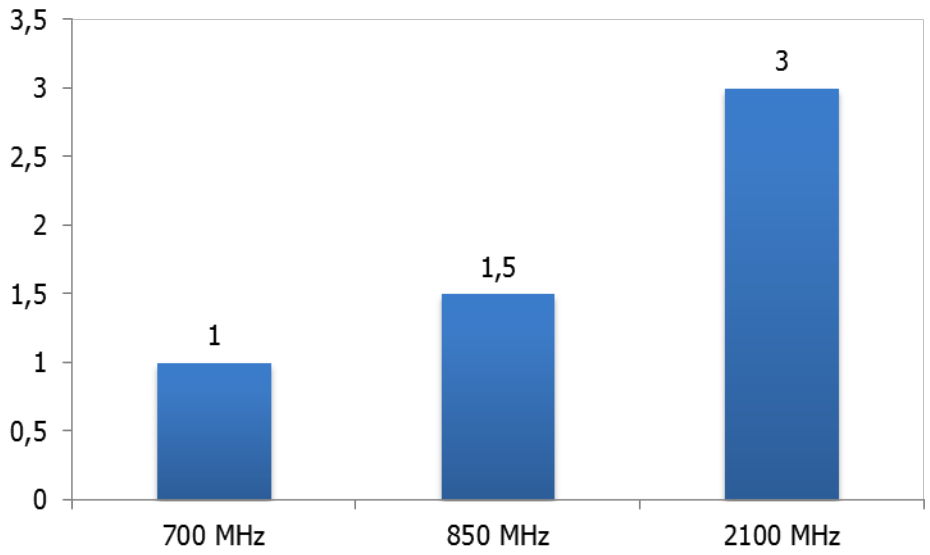
Other potential users, not part of the broadcasters, consider the spectrum of “digital dividend” as an opportunity to meet the constantly increasing demand for wireless communication services of the new standards, LTE above all.

In November 2009, Alcatel-Lucent successfully conducted the world’s first communication session to transmit data via LTE, working in a range of 800 MHz, which is called the European Digital Dividend (EDD). Range of 800 MHz is particularly well suited for delivery of the mobile broadband Internet services in rural areas.

Wireless operators are interested in the low frequencies of “digital dividend” because there is the opportunity to achieve a balance between transmitter power and range. It means that in order to ensure wider coverage of mobile communications there will be less need for infrastructure, which will allow to lower capital costs. According to experts, the provision of telecommunications services at frequencies of “digital dividend” costs for operators up to 70% cheaper than, for example, in the range of 2.1 GHz. VHF waves are less attenuated by

constraints and are characterized by the better parameters of distribution. Building of network infrastructure is considerably cheaper, because the providing the equivalent coverage in the range of “digital dividend” requires more base stations, operating in the range of 2.1, GHz.

Fig. 55. The ratio of base stations and a range of frequencies in the cellular



Source: GSMA

Therefore, recently receiving the “digital dividend” in the process of creation of wireless broadband network has become one of the main topics of discussion in the industry and a major focus of the wireless operators. In particular, the “digital dividend” was proposed by “Soyuz LTE" (Ltd.), a consortium of operators of 4G, for the development of LTE along with another range of 2.5-2.7 GHz.

At the end of July 2011 a new assessment of the costs of conversion as well as the release of the frequencies in the “digital dividend” appeared in the media, in the amount of 270 billion RUB Previously industry publications gave much smaller amount, at the level of 60-70 billion RUB, but it, apparently, concerned only the “digital dividend” itself[23].

Thus, despite the great perspectives, the use of “digital dividend” bands runs into considerable difficulties. In Russia, these frequencies (790-862 MHz) are allocated to the aeronautical radio-navigation service (on a primary basis) and terrestrial broadcasting service (on a secondary basis). In addition, until December 31, 2010 about 20 mobile operators worked in this band in the standard AMPS / DAMPS and CDMA-800, as well as trunking service of 815-821 MHz and 860-866 MHz ranges. In addition, on a secondary basis, this range belongs to television, including digital TV.

Meanwhile in Europe, the frequency range of 800 MHz can cause the storm in the telecommunications industry. When mixing such factors as the desire of operators and vendors to benefit from growing demand for mobile broadband, the lack of available range and the ability for the state to earn billions of dollars in auctions for frequencies, the “digital dividend” is

[23] http://www.rbc.ru/rbcfreenews/20110728100838.shtml

capable to destroy the global competitive landscape in unprecedented way, according to analysts. It is estimated by Delta Partners, that after all the auctions for the frequencies of "digital dividend" in Europe the amount, spent by operators on licenses, will be close to 50 billion USD. In this case the operators will be faced with the problem, namely, that their current strategies may not work in the new context, defined by the "digital dividend". Operators will be forced to completely re-evaluate their strategy, technology selection, investment plans and selection of partners. These decisions are very complex and are of strategic importance. And those operators, who are in no hurry to accept them due to unavoidable frequency auctions in the continent, do so at their own lawsuit, according to Delta Partners[24].

1.7.2. Regulator policies

According to the Minister of Mass Communications of Russian Federation, "digital dividend" will be used either to expand digital TV, or for the development of new generation of communication networks[25]. The use of "digital dividend" for the development of digital TV may become possible in case of the private investors expressing their interest in participation.

According to the experts, Russia is unlikely to rely on the "digital dividend" in the 800 MHz band, as these released frequencies are likely to be occupied by other services. At the same time, high-frequency channels, used for analogue TV now, can be used for additional multiplexes of digital broadcasting. Experts also believe that frequencies released from the analogue TV in the range of 700 MHz, may be used in Russia for a new generation of communication networks, in particular, LTE.

The transition to digital broadcasting is scheduled for completion in Russia by 2015. Firstly, the first multiplex (channel package) will be deployed. It includes eight television stations and three radio channels. Its deployment will be financed from the state budget and implemented by Federal State Unitary Enterprise "RTRS". Then it is planned to deploy two more multiplexes.

According to the regulator, in Russia, unlike many European countries, there is great need for the development of terrestrial TV, because it isn't possible to build a cable television network (CTV) anywhere. According to Yuri Zhuravel (Deputy Director of the Department of Public Policy in Telecommunications),[26] in Russia and especially in its European part, there are almost no frequency resources for the development of terrestrial digital television. In his opinion, taking into account the expected number of popular digital TV channels, we should rather talk about the shortage of frequency in this range, rather than about dividend. Only with the closure of analogue television networks, Deputy Director thinks, we will be able to judge, if "dividend" will appear in this range. If the broadcasting market will demand up to 40 digital terrestrial channels, mobile operators will be able to consider the "digital dividend". And if for example there will be 90 broadcasting channels of CT, then we'll meet a clear shortage.

[24] http://www.interfax-russia.ru/Ural/pressrel.asp?id=222383&p=3
[25] http://www.caemc.ru/caemc/page.php?trid=2963
[26] Exhibition Sviaz-Expocomm'2009

According to the deputy head of the Ministry of Communications Naum Marder[27], "Russia's first priority is the transition to digital television broadcasting, so the question of the use of range 790-862 MHz will be finally settled after 2015".

"We have to consider carefully what dividend would remain after the transition to digital TV and how to use it, and which frequencies are occupied by the security services" - the deputy minister said.

1.7.3. Business models and technology trends

Many experts currently share the views of Robin Foster who predicts 4 scenarios for development of modern TV.[28]

Scenario 1. Transformation. The rapid introduction of new technologies, in particular, the spread of broadband networks, leads to the departure from the consumption of content "on schedule" to compilation of the view program by the user. There are more and more content producers and independent platforms to distribute it. Aggregation of content by integrated media corporations is replaced by the search tools.

Scenario 2. Consolidation. Effective operation in a rapidly changing world is available for only a small number of vertically integrated major players. Consumers rely on trusted content providers, who control the rights to the content and routing.

Scenario 3. Radical fragmentation. New services, appeared due to the transformation (scenario 1), become unavailable for many consumers because of the digital inequality, which leads to high-fragmentized consumption. Users who have no access to the Internet, high-speed mobile technology experience cultural and digital shortage.

Scenario 4. Stagnation. Broadcasting technologies are developing slower than the growth in demand for digital devices, through which TV can be distributed; there is no substantial investment in it. The whole broadcasting industry comes to a decline.

Observed development of technological processes in modern broadcasting can be attributed to the first scenario, when there are a lot of suppliers, transmitting content to many consumers. TV goes to the category of private goods. The transformation of television is expressed in two major interrelated processes: digitalisation and convergence.

In the process of digitalisation there is no more problem of limited frequency resource due to using of a new compression technology. There are suggestions on cancelling regulation of the

[27] The same

[28] Independent consultant on economic, political and strategic issues in the communications industry, Member of Executive and Political Committees of the Ofcom (the UK regulatory authority for communication), commissioned by the Department of Culture, Media and Sport of Great Britain, undertook in 2007 a study "Regulation of Broadcasting in future", where he outlined four scenarios for the development of technologies in broadcasting, depending on which there will be changes in the business models and consumption patterns. http://www.refoster.co.uk/publications.htm

radio spectrum, as it will be an unlimited resource. In turn, digitalisation will give rise to an increasing number of television channels aimed at a narrow audience.

The process of convergence means the interpenetration of broadcasting technologies, Internet, mobile communication, etc. by, respectively, the spread of broadband access, advanced compression technology, improvements of mobile communications. Broadcasting service is converted to different platforms, which give rise to the light for mobile TV, Internet TV, etc., services' interactivity increases, it is possible to broadcast programs with the content, generated by users, there are "smart" user interfaces to personalize services consumed.

Until recently, telecom operators only transmit a signal to Internet users, listeners, and viewers. Now they are beginning to implement a new feature, the active one. There is the aggregation of content: TV channels, sites in "packages": "economic", "premium", etc, ranking media, depending on the preferences of each viewer. Already, the leading telecom operators, Internet service providers are capable of using special software to build a picture of users' preferences, including the creation of individual information consumer profile, and offer him the information, depending on his interests. Thus, a new model of information consumption, focused on individual choice of a particular consumer, is being created.

With the transition of cable networks to IPTV television acquires the features of interactivity and personalisation. J'son & Partners Consulting expects that Russian operators will launch their interactive services in several stages. At the first stage, the users will be provided with the primary level of interactivity, and at the second – with more advanced interactive services (some of which have already been provided by a number of operators), for example, parental control, delayed recording, TV program guide.

As digital television audience increases, the more advanced services, such as interactive advertising, will be particularly important for operators in terms of additional profits.

At present, Russian operators offer their subscribers a wide range of services, including dual service packages (Internet + IPTV), a great selection of TV channels, as well as a simple interactive services (TV show and PPV) in the price range of $5-20 monthly.

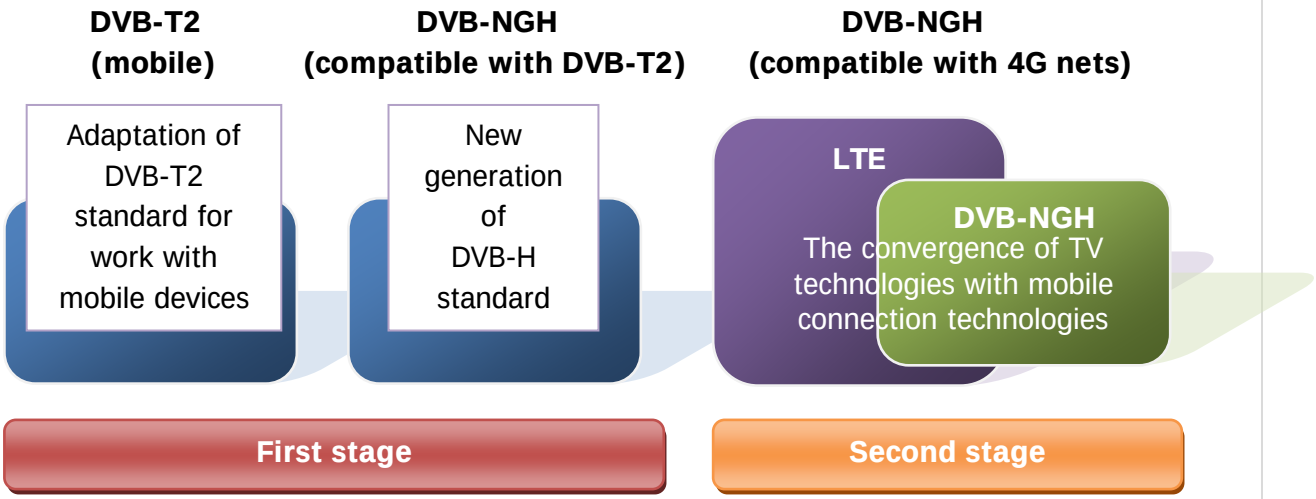
IPTV will get additional benefits comparing to adjacent markets if the more attractive pricing policy will be installed:

- Reduction in the cost or partially subsidized purchase of subscriber equipment (STB)
- Reduction in the cost of the simplest packages, and addition of "premium" content and services
- Users will be given a more diversified content as well as the possibility to change package for themselves

The introduction of new broadcasting standard DVB-T2, described in Part 1.4.3, will provide the following additional features:

- Organisation of convenient channel for transmission of the service information
- Creation of technological platform for multimedia services by convergence with the mobile network technology.

Fig. 56. Mobile TV on the basis of DVB-T2 standard: the road to convergence with mobile network technologies



Source: Ministry of Mass Communications

In this regard, many Russian analysts conclude that the type of connection between the media market players will depend on the type and origin of the content. In the near future we can expect the continuing dominance of the Internet as some kind of new universal environment for the exchange of information. In addition, the integration of DVB-T2, DVB-S2 broadcast technologies with the interactive features of the Internet environment, and the introduction of DVB-H format for mobile TV and DVB-NGH format of, providing convergence with mobile technologies, seems the most probable scenario for the near future.

Mobile TV gives the users wide availability of personalized content. In particular, it includes unicasts that transmit specific programs to user's mobile phone screen at regular intervals.

The success of mobile technology is largely dependent on the capabilities of the network to deliver the streaming services. There are several factors that ensure the required quality of service:

- Sufficient network capacity;

- Efficient broadcast capabilities of 3G networks, for example, the service broadcast / multicast of multimedia (Multimedia Broadcast / Multicast Service, MBMS).

Development of the 3DTV market

According to the Minister of Telecom and Mass Communications of RF Igor Shchegolev[29], the starting points of the concept for digital broadcasting development until 2020 and 2025 will be developed in 2011. The concept will include the development of 3D broadcasting, integration with the Internet, development of video information systems.

Starting points of a new concept were first formulated and presented at the XIV International Congress of NAT in November 2010. The report is published in the Newsletter of NAT (No. 39, December 2010).

[29] The report about results of 2010, board meeting of the Ministry of Communications

It is also included as a separate annex in the above mentioned report "New information and communication environment. Status, problems and challenges. Attempt of comprehension".[30]

In summary, these provisions include the following: 3DTV broadcast, integration of TV broadcasting and new information technologies, interactive multi-functional 2D/3D video-information systems (VIS), improving signal transmission of digital 2D/3D TV broadcasting, more efficient use of the bands of frequencies of analogue TV broadcasting based on the progress of digital technology.

Currently, some Pay TV broadcasting operators believe that HDTV is "yesterday" of broadcasting in the broadest sense, and the future belongs to 3DTV.

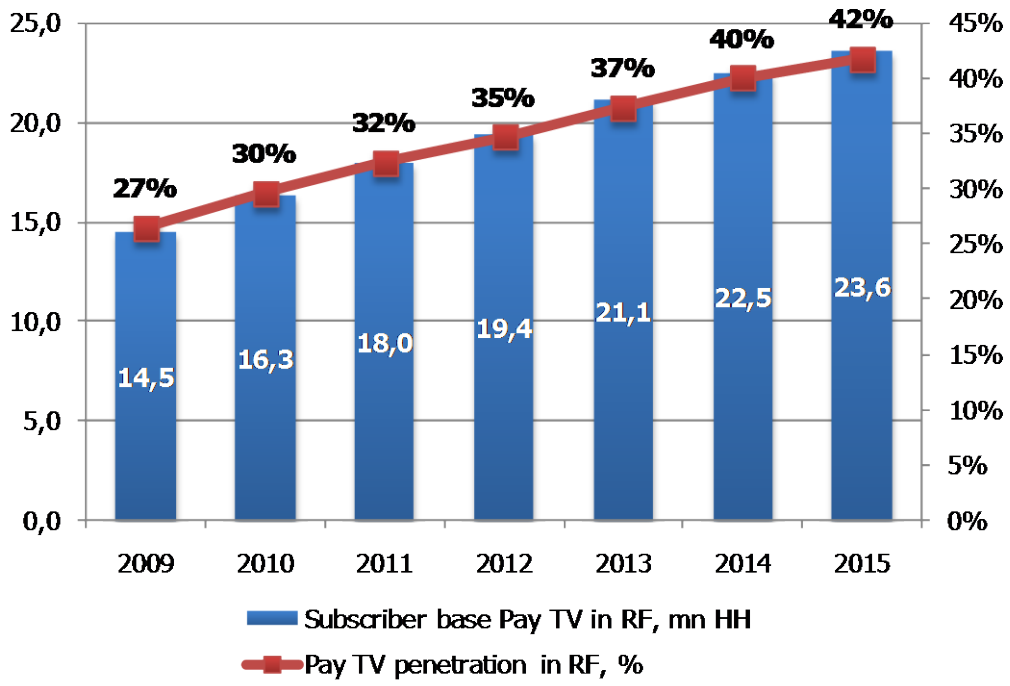
Russia Today is the first to start international standardization of 3DTV-broadcasting: in 2008 the Radio Research Institute prepared a report on the 3DTV broadcasting, in which there was a strategy of its international standardization (ITU-R, RF doc. 6D/21, April 7 2008). As a result, the following documents of ITU-R were created: in 2009 there was the report titled "Features of three-dimensional television systems for broadcasting", systematizing the results of worldwide research of 3DTV and defining future directions for research in this area; in 2010 there was the first set of requirements for DVB 3DTV intended for 3DTV services using the infrastructure of HDTV broadcasting; currently there is a preparation of requirements for the 3D TV systems that are compatible with 2D-systems, the development continues of the previously predicted holographic system operating without glasses, with the transmission of movable objects (CES'2011 in Las Vegas has already demonstrated a prototype of holographic TV). The requirements to 3D TV systems include minimization of fatigue and discomfort during prolonged viewing, possible in some cases. This problem also involved the WHO (World Health Organisation).

1.7.4. Quantitative estimate of DTT and non-terrestrial TV operators subscriber base and revenue estimate by regions

Pay TV services were used by more than 16.3 million subscribers in Russia at the end of 2010. According to J'son & Partners Consulting estimate, by the end of 2015, the subscriber base will approach 23.6 million HH, and penetration will reach 42%.

[30]Working group of the Council on mass communications at the Ministry of Communications, 2011'06

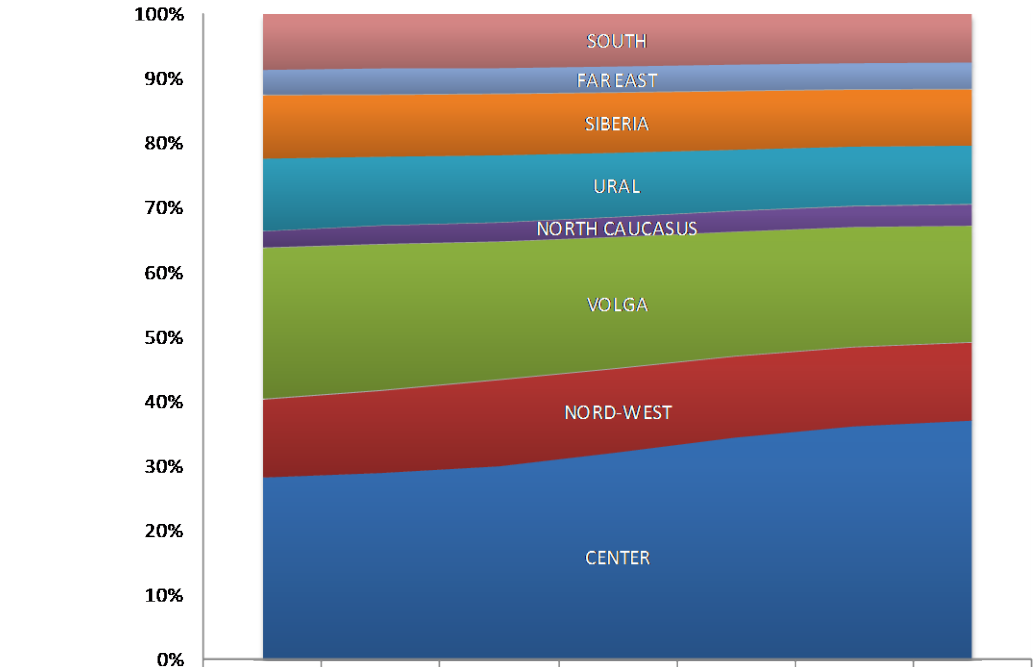
Fig. 57. Pay TV subscriber base dynamic in Russia, 2009-2015



Source: J'son & Partners Consulting

The structure of Pay TV subscriber base in Federal Districts of Russia reveals that Central FD has the largest subscriber share. J'son & Partners Consulting estimates the share of this district will be growing and by the end of 2015 will reach 37% of the total Pay TV subscriber base.

Fig. 58. Forecast of Pay TV subscriber base structure in Russia by Federal Districts, 2009-2015

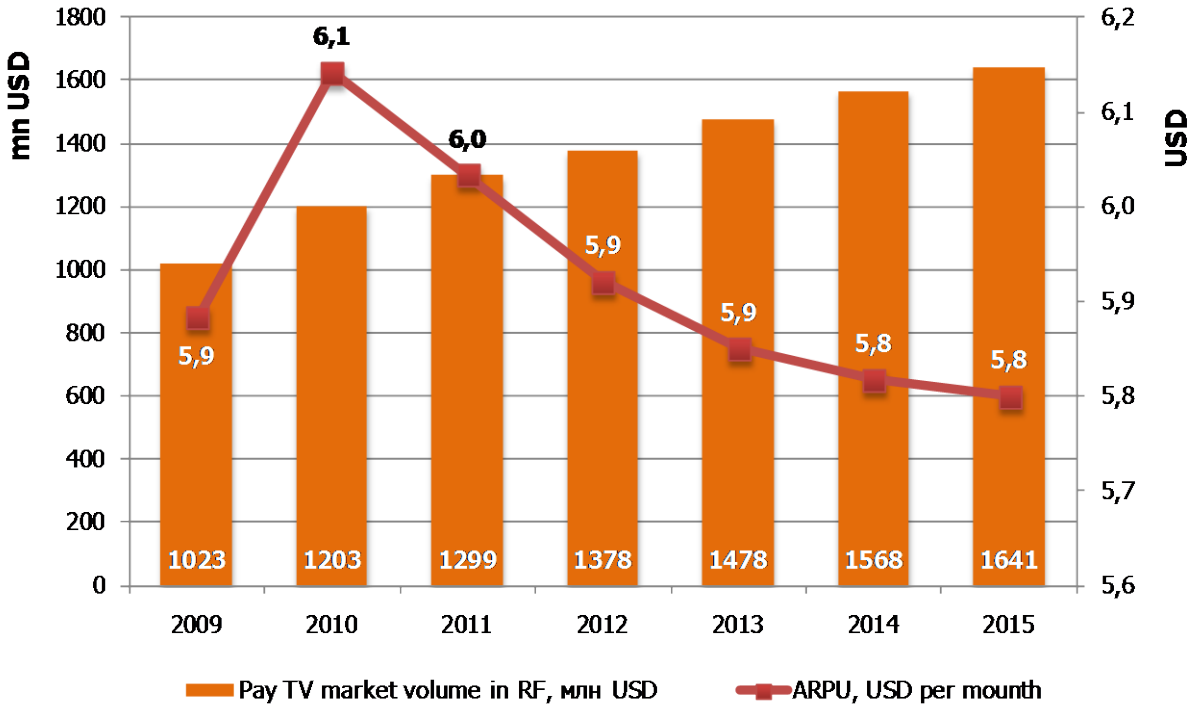


	2009	2010	2011	2012	2013	2014	2015
SOUTH	9%	8%	8%	8%	8%	8%	7%
FAR EAST	4%	4%	4%	4%	4%	4%	4%
SIBERIA	10%	10%	9%	9%	9%	9%	9%
URAL	11%	11%	10%	10%	10%	9%	9%
NORTH CAUCASUS	3%	3%	3%	3%	3%	3%	3%
VOLGA	23%	23%	21%	20%	19%	19%	18%
NORD-WEST	12%	13%	13%	13%	13%	12%	12%
CENTER	28%	29%	30%	32%	34%	36%	37%

Source: J'son & Partners Consulting

According to J'son & Partners Consulting estimate, Pay TV market size amounted for more than 1.2 billion USD at the end of 2010. At the same time, average ARPU was 6.1 USD per month and grew 3.3% over 2009. The ARPU growth is connected with decline of US dollar exchange rate and increase in the consumption of added services and more expensive tariffs by population after the economic crisis. This pattern is observed in all Russian Federal Districts. ARPU is expected to gradually decrease in the future because the market competition is accompanied by the growth of cheaper tariffs. According to J'son & Partners Consulting estimate, ARPU of Pay TV services in Russia by the end of 2015 will decrease to 5.8 USD per month and the market size will be over 1.6 billion USD.

Fig. 59. Russian Pay TV market size, 2009-2015



Source: J'son & Partners Consulting

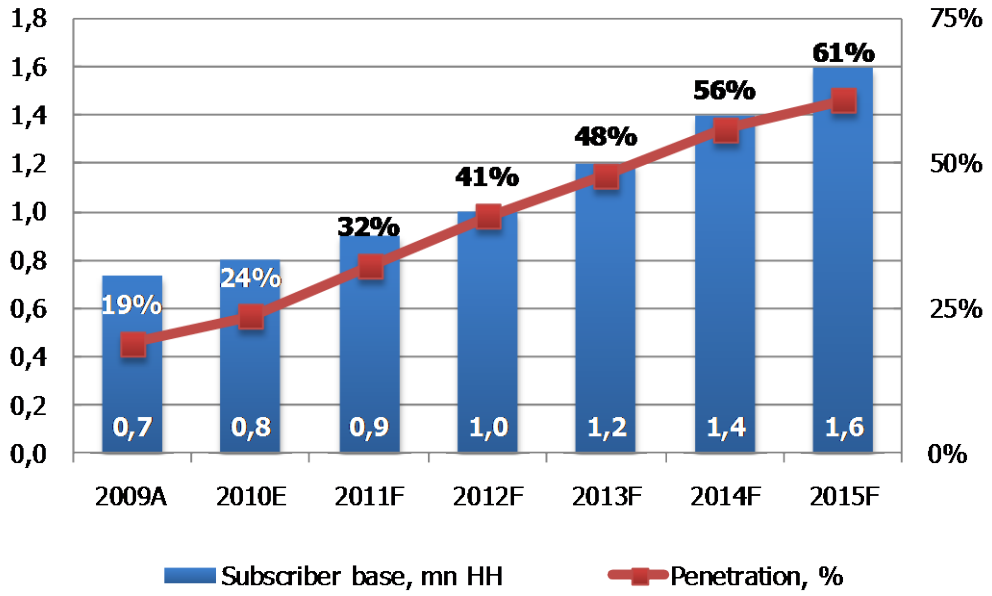
- **Moscow**

Despite of Pay TV service development and launch of new projects, Moscow service penetration level still remains one of the lowest in Russia, presenting just 24% of all households by the results of 2010.

According to J'son & Partners Consulting estimate, Pay TV services were used by about 0.8 million households in Moscow by the end of 2010. Thereby, Pay TV service penetration has reached about 24%. Moscow Pay TV market size in monetary terms was more than 125 million USD by the end of 2010. The Moscow Pay TV market size by subscribers base is expected to grow after 2010.

Subscriber base growth rate decreased insignificantly comparing with 2009 rates. But these rates are significantly lower than 2006-2008 rates. For example, subscriber growth was over 50% in 2007 comparing with 2006.

Fig. 60. Moscow Pay TV Service subscribers base, 2009-2015

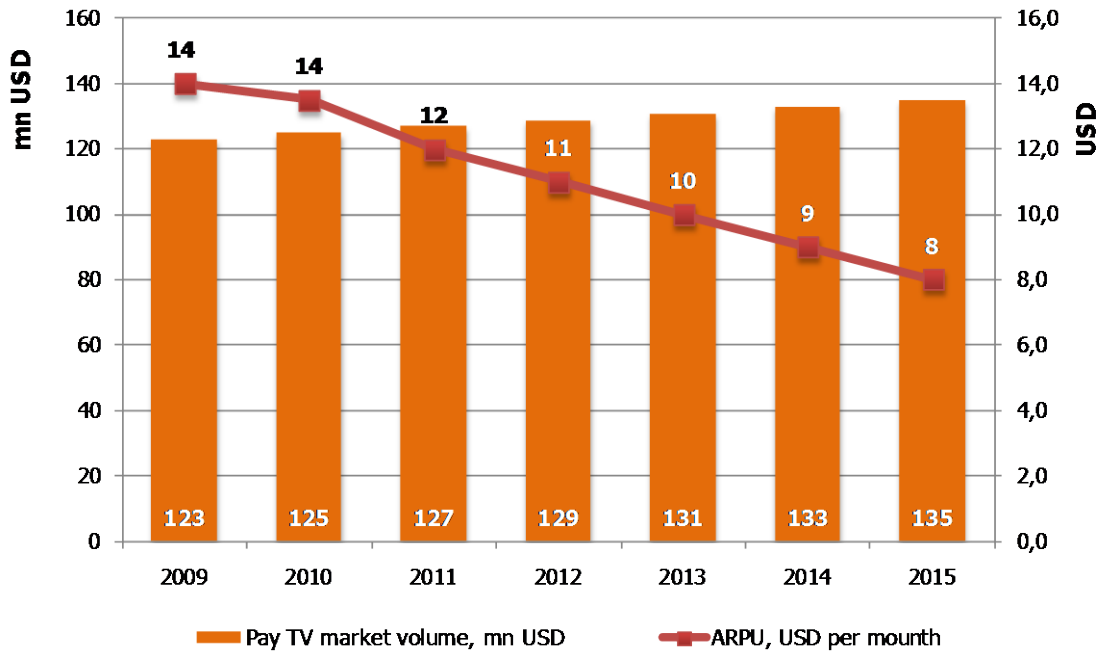


Source: J'son & Partners Consulting, operators data

However, Moscow Pay TV market shows a tendency of ARPU rate decrease due to the following factors:

- high level of competition on the market,
- TV package subscription in double-play package format reduces Pay TV service price for the users.

Fig. 61. Moscow Pay TV market size, 2009-2015

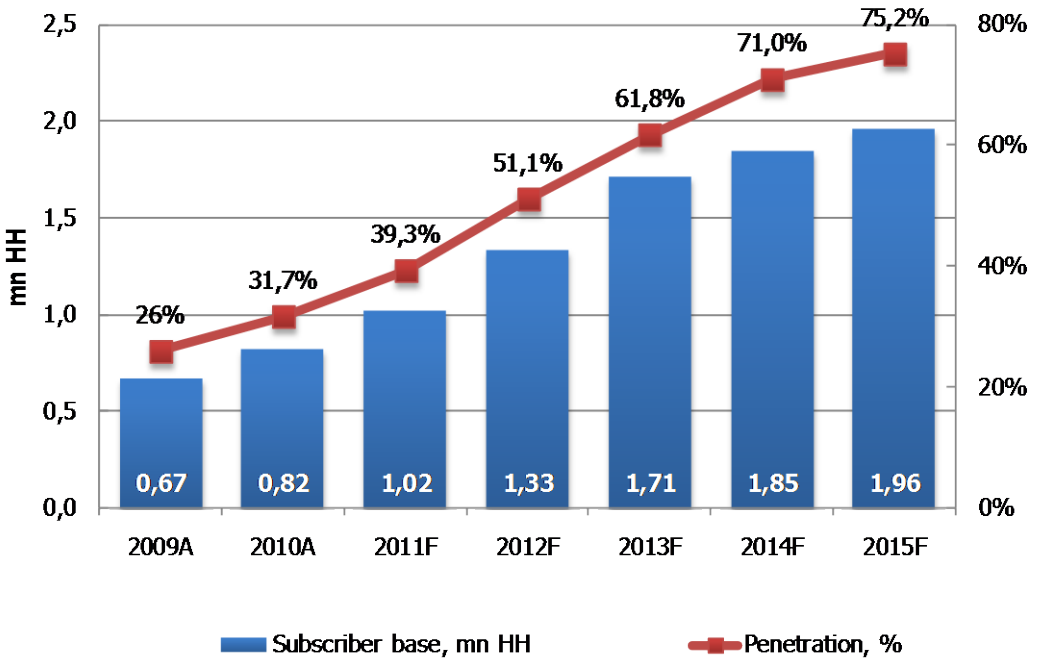


Source: J'son & Partners Consulting, operators data

- **Moscow Region**

Moscow Region territory Pay TV Service subscribers base have had more than 0,8 million connected households by the end of 2010.

Fig. 62. Moscow Region Pay TV Service subscribers base, 2009-2015



Source: J'son & Partners Consulting

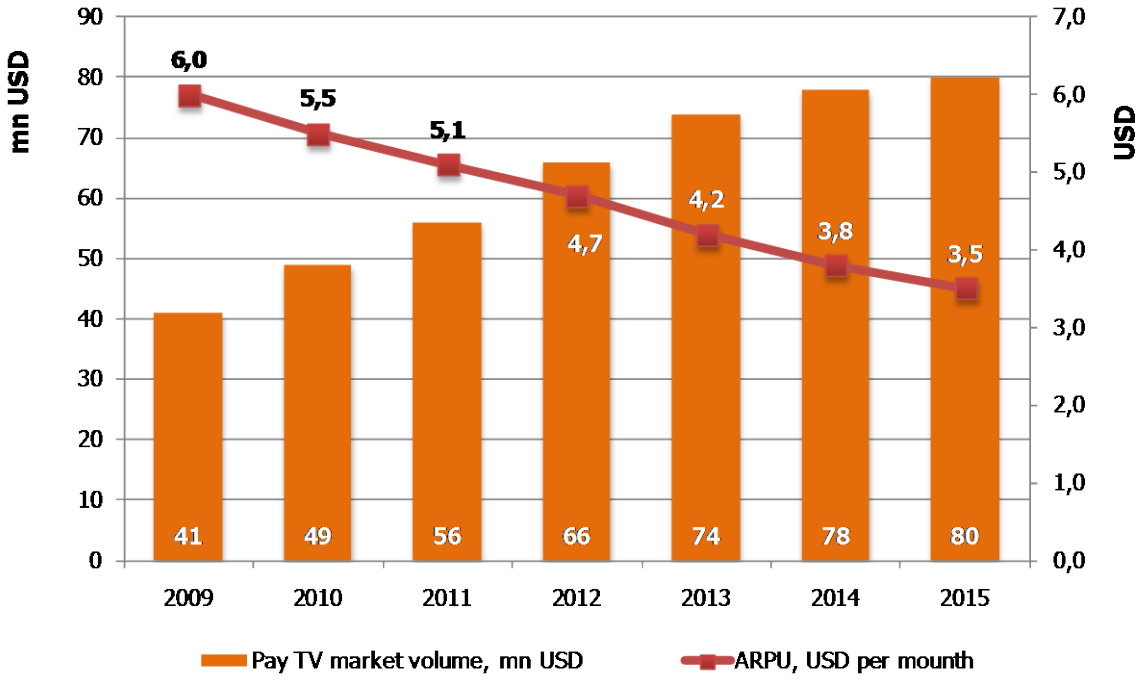
The subscriber base grew up by 22% compared to 2009, while in 2006-2007 the annual rate of growth in number of households connected to service was 70% per year.

According to J'son & Partners Consulting estimate, by the 2010 results Pay TV service penetration level in Moscow Region is about 32%.

The following factors facilitate significant slowdown in the Pay TV subscriber base growth rate:

- uneven development of the Pay TV service in the region – in some cities the Pay TV players cover less than 30% of households;
- decline in users incomes caused by the financial crisis (reduction of wages, job cuts, closing down of businesses, stoppage of industrial enterprises)

Fig. 63. Moscow Region Pay TV market size, 2009-2015



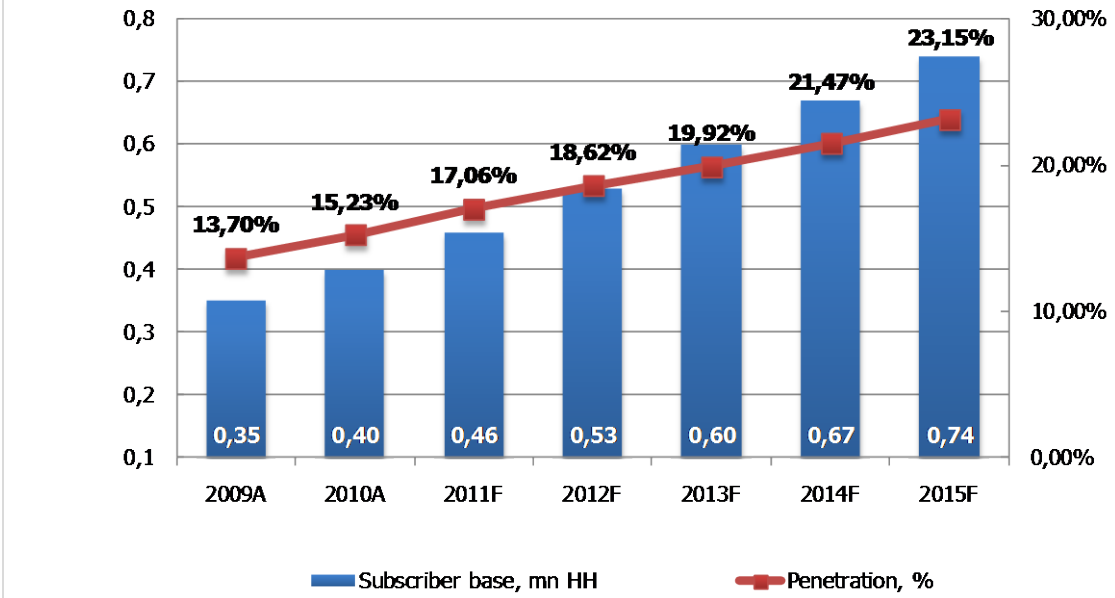
Source: J'son & Partners Consulting, operator data

- **St. Petersburg**

St. Petersburg Pay TV market has a significant number of players and most of them provide television in digital format.

St. Petersburg Pay TV subscribers numbered about 0.4 million of connected households by the end of 2010. Out of this, 20% of subscribers base belongs to Multinex operator which provides services under MTS brand from January 2011.

Fig. 64. Pay TV Service subscribers base St. Petersburg, 2009-2015

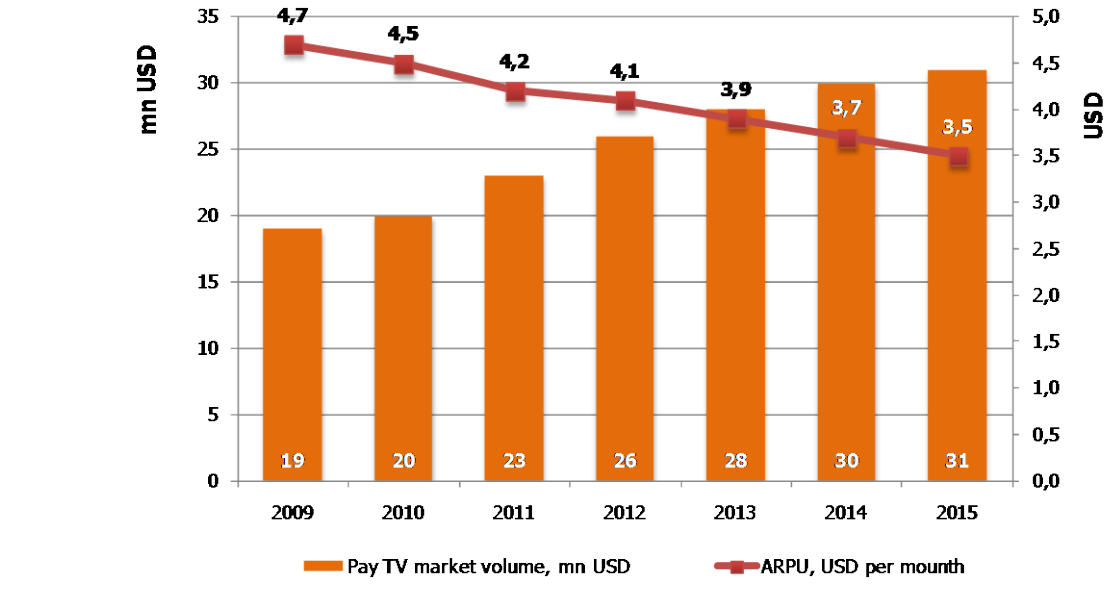


Source: J'son & Partners Consulting

J'son & Partners Consulting forecasts the growth of St. Petersburg Pay TV service subscribers base to 0.46 million connected households by 2011.

According to J'son & Partners Consulting estimate St. Petersburg Pay TV market size in monetary terms was about 20 million USD by the end of 2010. After 2010 it forecasts growth of digital Pay TV market size by active gain in subscribers base.

Fig. 65. St. Petersburg Pay TV market size, 2009-2015

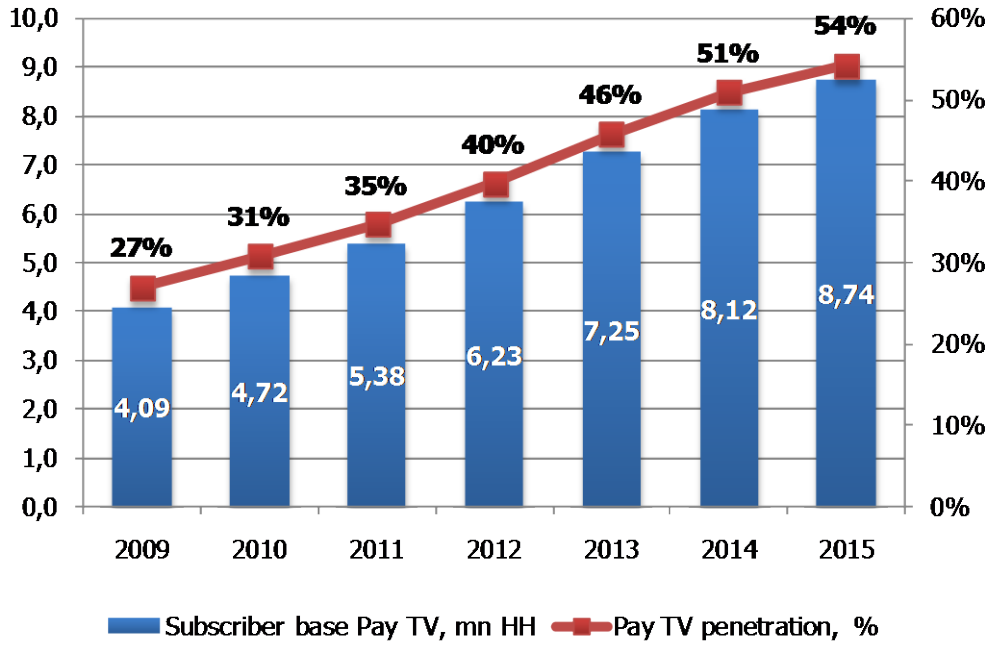


Source: J'son & Partners Consulting

Central Federal District

According to J'son & Partners Consulting estimate, Central FD Pay TV service subscriber base (including Moscow and Moscow Region) was about 4.72 million connected households by the end of 2010. The subscriber base growth will reach 8.74 million households by the year 2015 and the penetration will be 54%.

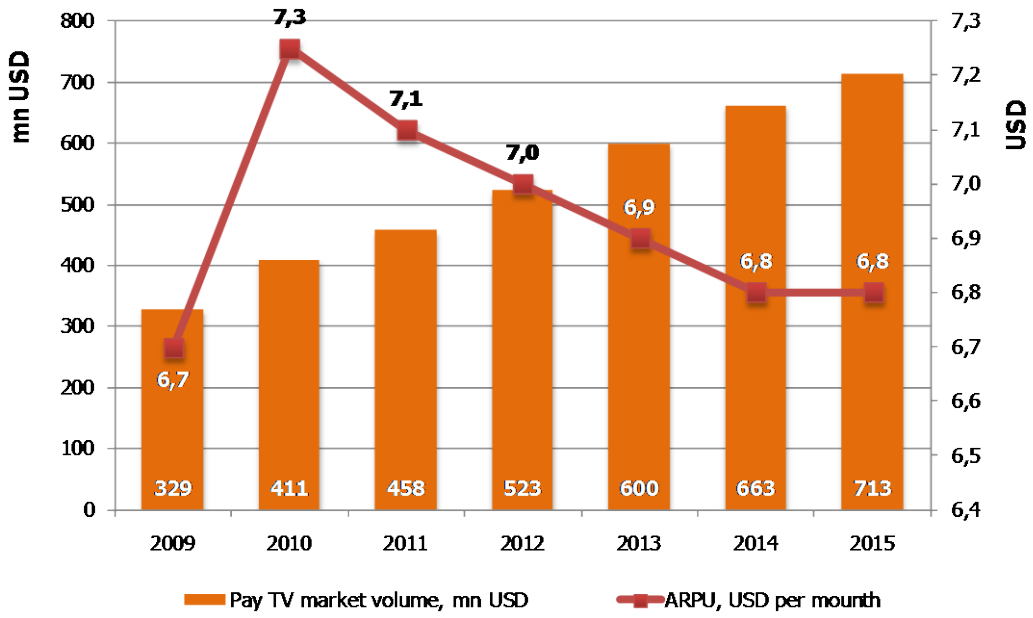
Fig. 66. Pay TV Service subscribers base in Central FD, 2009-2015



Source: J'son & Partners Consulting

According to J'son & Partners Consulting estimates, the revenues generated by the Pay TV operators from services provided in Central FD (including Moscow and Moscow Region) amounted to 411 million USD by the end of 2010. ARPU in Central FD by the year 2015 will decrease to 6.8 USD per month and the market size should grow up to 713 million USD.

Fig. 67. Central FD Pay TV service market size, 2009-2015

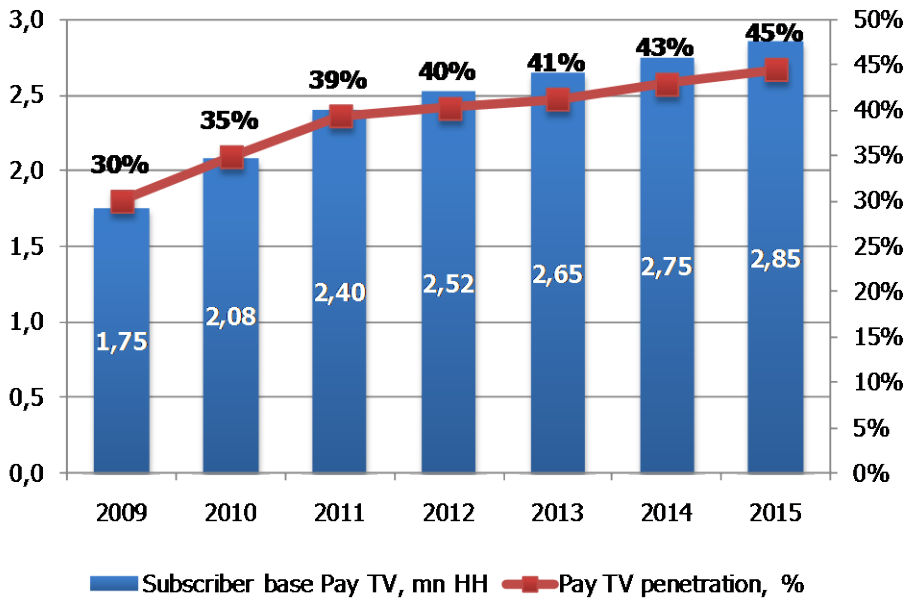


Source: J'son & Partners Consulting

- **North-Western Federal District**

North-Western Federal District Pay TV service Subscriber Base, including St. Petersburg, reached over 2.08 million connected households by the end of 2010. According to J'son & Partners Consulting estimate, by 2015 the subscriber base in North-Western FD will reach 2,85 million households, and the penetration will approach 45%.

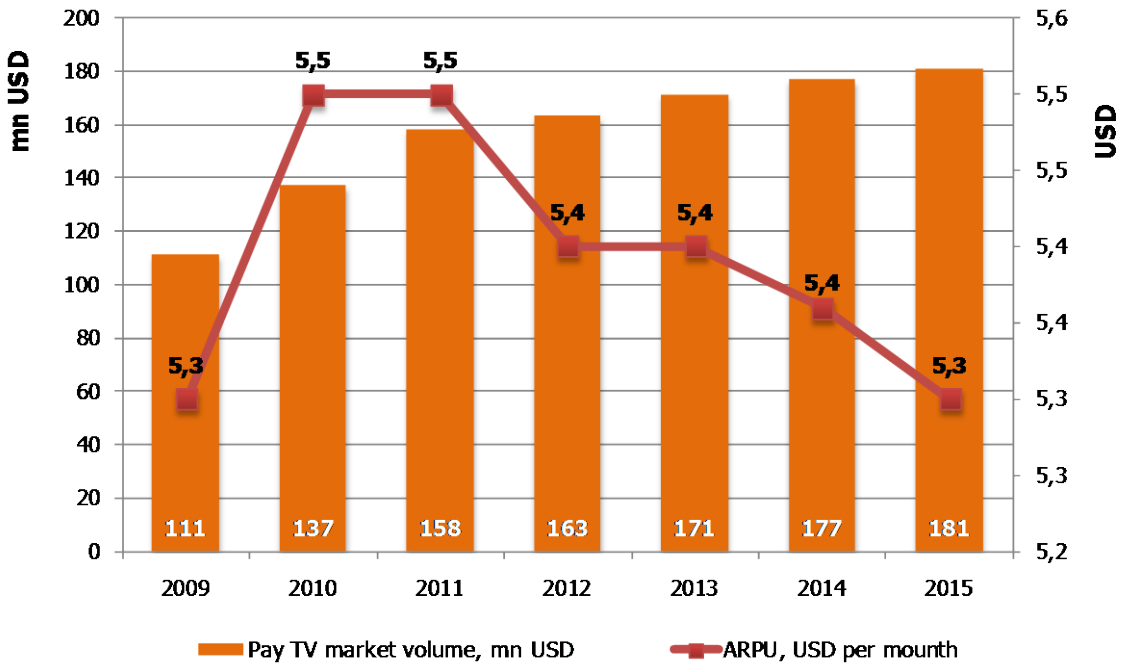
Fig. 68. North-Western Federal District Pay TV service subscriber base, 2009-2015



Source: J'son & Partners Consulting

In monetary terms, the volume of the Pay TV market in the region, including St. Petersburg, was 137 million USD by the end of 2010. According to J'son & Partners Consulting estimate, forecasted operator revenue was about 5.5 million USD per month and grew 3.6% comparing to 2009. J'son & Partners Consulting expects that ARPU in North-Western FD will decrease to 5.3 USD per month and the market size will be 181 million USD.

Fig. 69. North-Western Federal District Pay TV service market size, 2009-2015

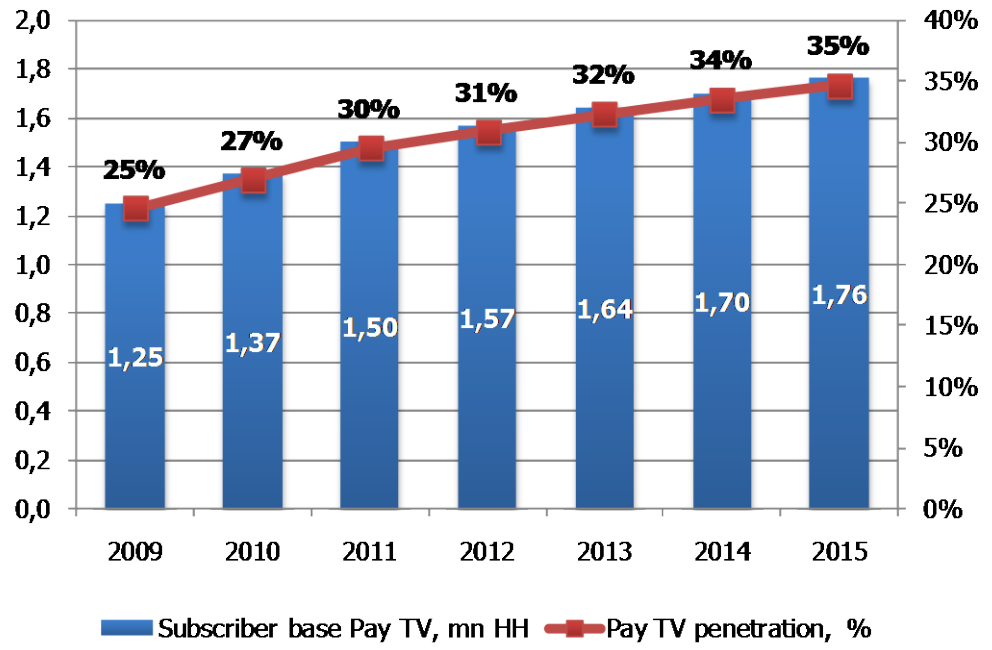


Source: J'son & Partners Consulting

- **Southern Federal District**

Southern Federal District Pay TV service subscriber base accounted 1.37 million connected households by the end of 2010. It should be noted that Southern FD Growth rates are one of the highest among the considered regions. By 2015 Pay TV operators subscriber base will reach 1.76 million connected households, with penetration of 35%.

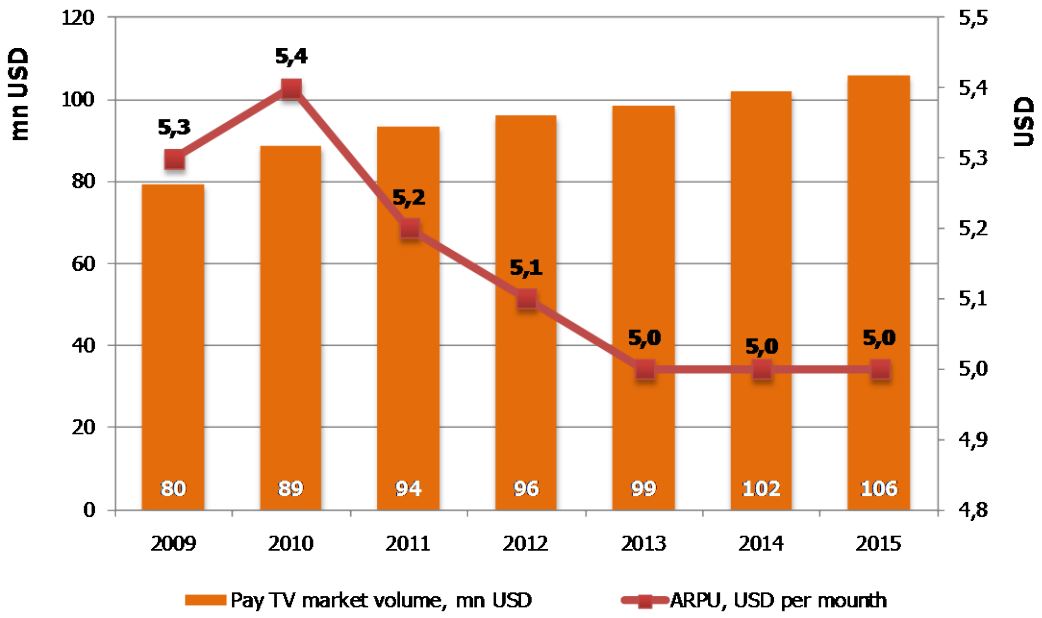
Fig. 70. Southern Federal District Pay TV service subscriber base, 2009-2015



Source: J'son & Partners Consulting

In monetary terms, the volume of the Southern FD Pay TV market exceeded 89 million USD by the end of 2010. ARPU was 5.4 USD per month and has grown 1.8% in comparison to 2009. By the end of 2015, ARPU is estimated to be 5 USD per month, and the market size will be 106 million USD.

Fig. 71. Southern FD Pay TV market size, 2009-2015

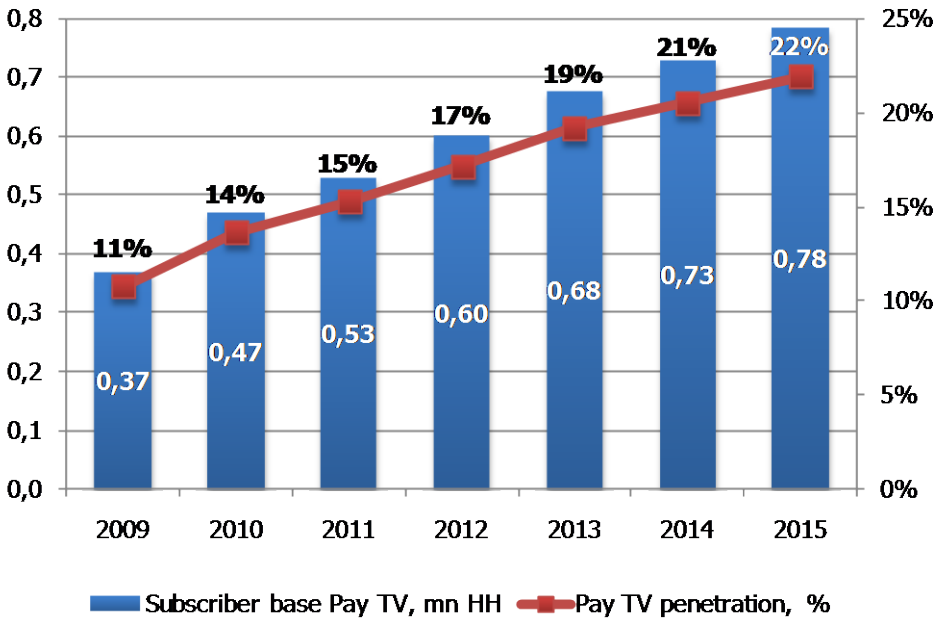


Source: J'son & Partners Consulting

North Caucasian Federal District

North Caucasian Federal District Pay TV service subscriber base was 0.47 million connected households by the end of 2010. It is expected to reach 0.78 million by the end of 2015 with penetration of 22%. The growth rate of North Caucasian Federal District Pay TV service subscriber base is one of the highest in Russia.

Fig. 72. Pay TV Service subscribers base North Caucasian FD, 2009-2015

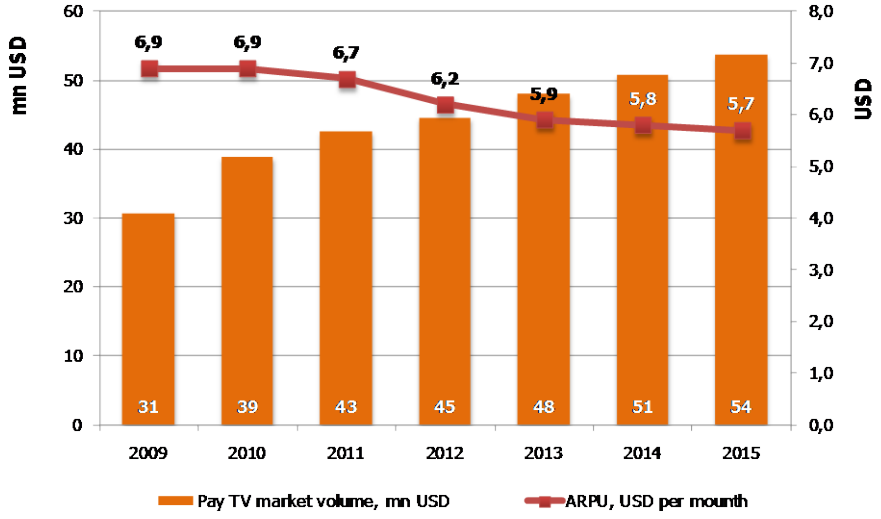


Source: J'son & Partners Consulting

North Caucasian Federal District Pay TV market size was 39 million in monetary terms by the end of 2010, with ARPU of 6.9 USD per month.

Pay TV operators revenue will reach over 54 million USD by the end of 2015, and the ARPU will decrease to 5.7 USD.

Fig. 73. North Caucasian FD Pay TV market size, 2009-2015

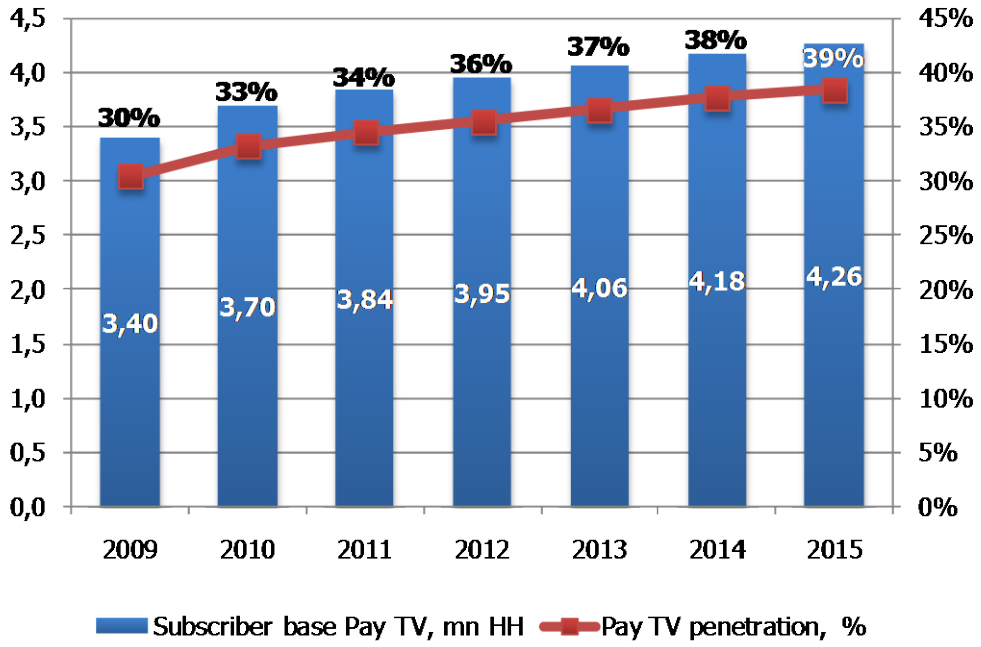


Source: J'son & Partners Consulting

Volga Federal District

By the end of 2010 the Volga Federal District Pay TV subscriber base was 3.7 million connected households. By the end of 2015 it will reach 4.26 million with penetration of 39%.

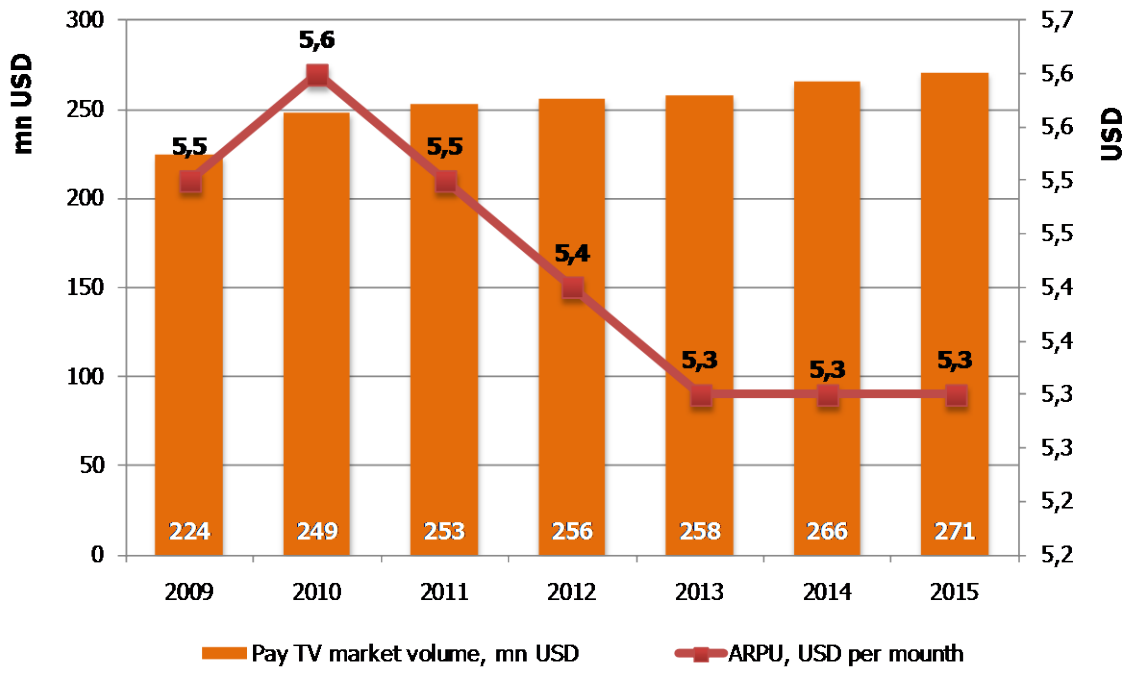
Fig. 74. Pay TV Service subscribers base Volga FD, 2009-2015



Source: J'son & Partners Consulting

In monetary terms, the volume of Pay TV market in the region was 249 million USD by the end of 2010 and ARPU was 5.6 USD. The market volume is estimated at 271 million USD by the end of 2015 with ARPU of 5.3 USD.

Fig. 75. Volga FD Pay TV market size, 2009-2015

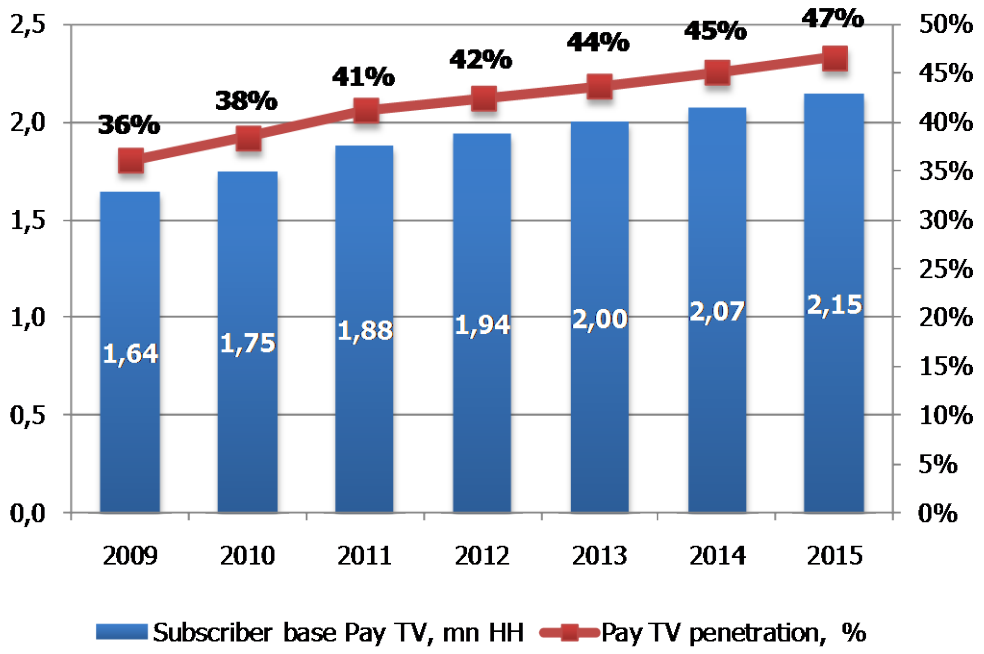


Source: J'son & Partners Consulting

Ural Federal District

Ural Federal District service subscriber base increased by 1.75 million households. According to J'son & Partners Consulting estimate subscriber base will reach 2.15 million households by the end of 2015 with penetration of 47%.

Fig. 76. Pay TV Service subscribers base Ural FD, 2009-2015

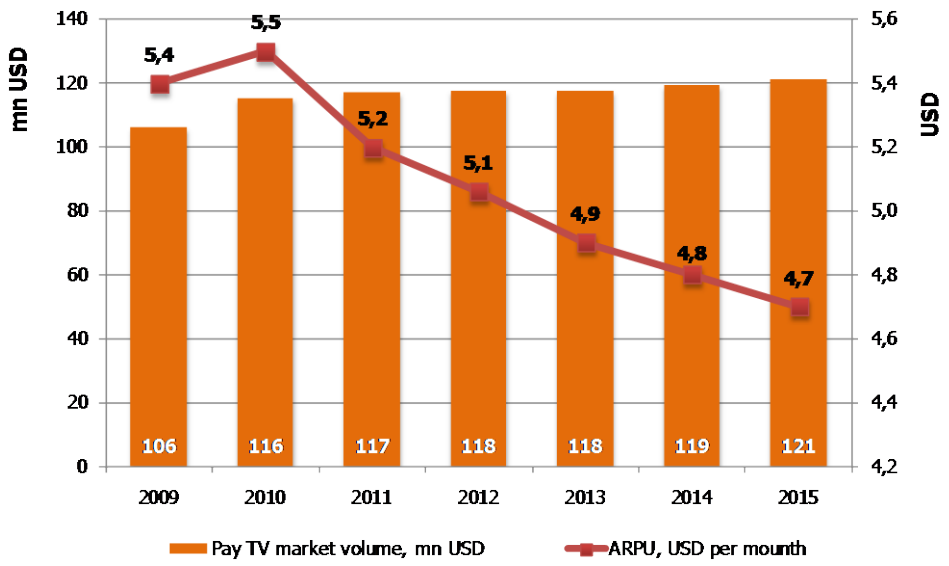


Source: J'son & Partners Consulting

In monetary terms, the volume of the Ural FD Pay TV market was 116 million USD by the end of 2010. ARPU was 5.5 per month and increased 1,8% in comparison with 2009.

According to J'son & Partners Consulting estimate the Pay TV revenue will reach 121 million USD, with ARPU of 4,7 USD.

Fig. 77. Ural FD Pay TV market size, 2009-2015

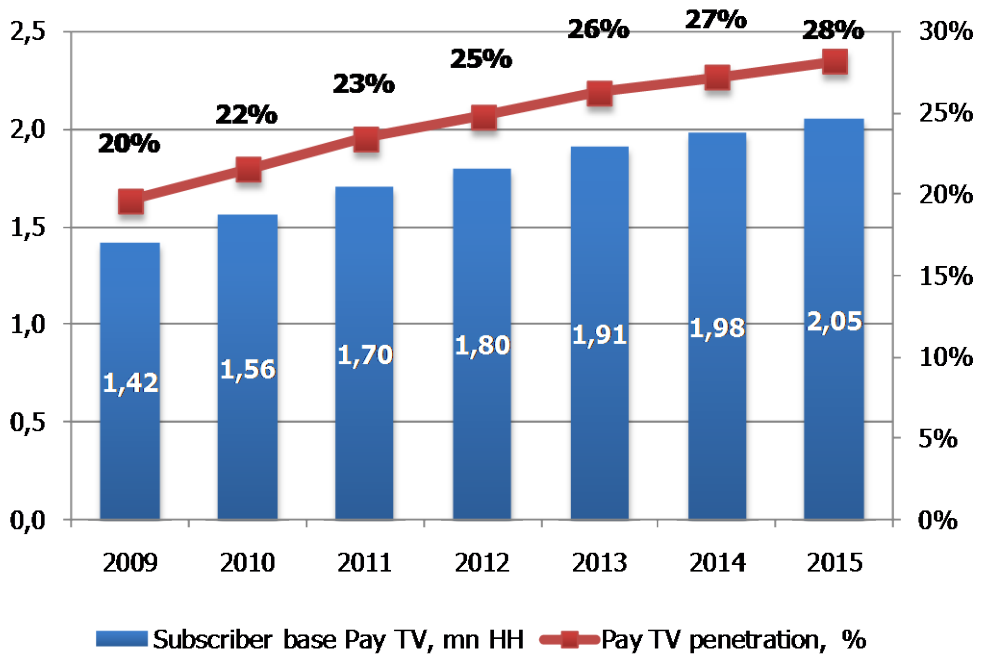


Source: J'son & Partners Consulting

Siberian Federal District

Siberian Federal District Pay TV service subscriber base has reached 1.56 million connected households by the end of 2010. J'son & Partners Consulting estimates that the subscriber base in the District will have 2.05 million connected households by the end of 2015 and the penetration will be 28%.

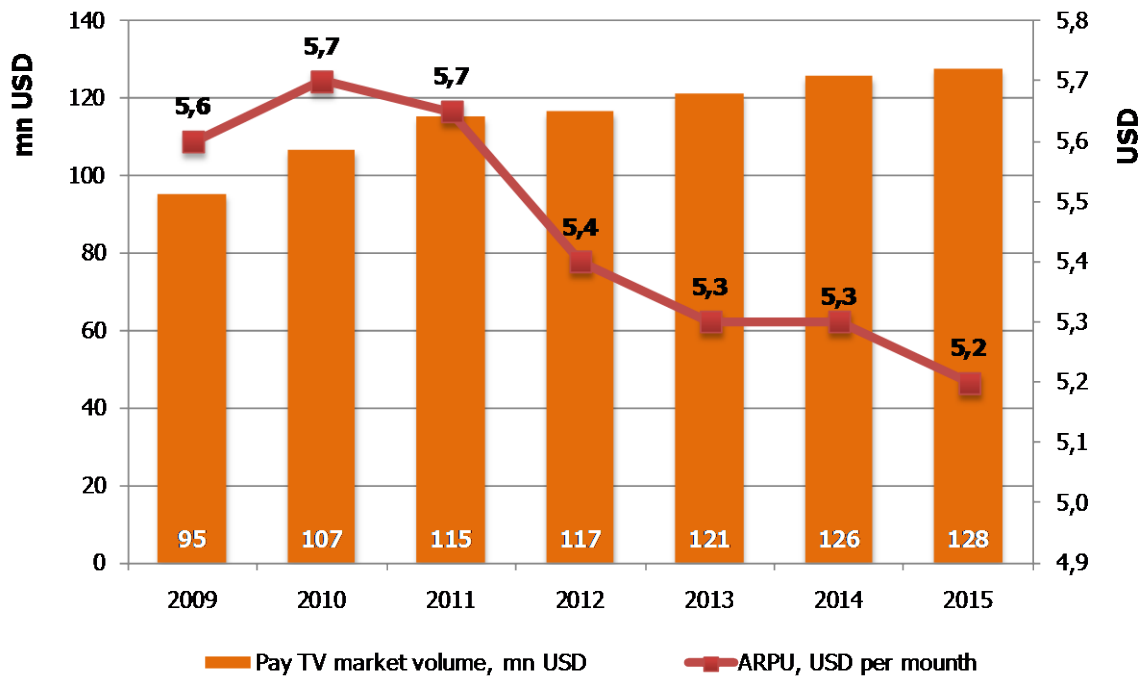
Fig. 78. Pay TV Service subscribers base Siberian FD, 2009-2015



Source: J'son & Partners Consulting

In monetary terms, the volume of the Pay TV market in the Siberian Federal District exceeded 107 million USD by the end of 2010 with ARPU of 5.7 USD and, according to J'son & Partners Consulting estimate, will reach 128 million USD by the end of 2015. ARPU will decline to 5.2 USD.

Fig. 79. Siberian FD Pay TV market size, 2009-2015



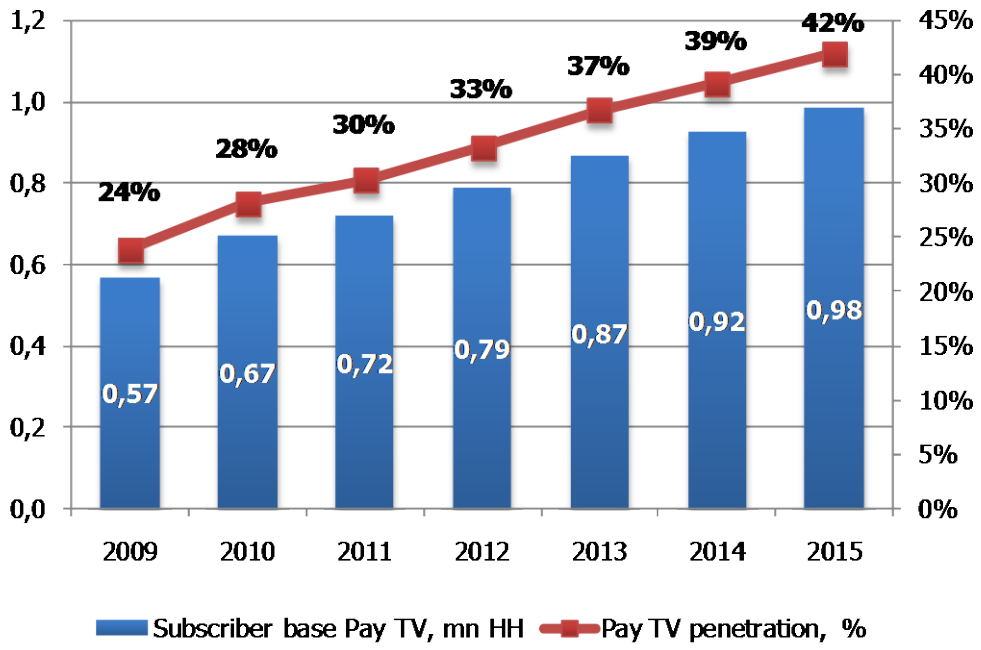
Source: J'son & Partners Consulting

- **Far Eastern Federal District**

Far Eastern Federal District is characterized by the poorest development of Pay TV service. By the end of the first half of 2010 the subscriber base of the operators providing this service was slightly over 0.67 million connected households. The share of the Far Eastern Federal District is in national subscriber base is 4%.

According to J'son & Partners Consulting estimates, by the end 2015 the subscriber base will grow to 0.98 million connected households and penetration will reach 42%.

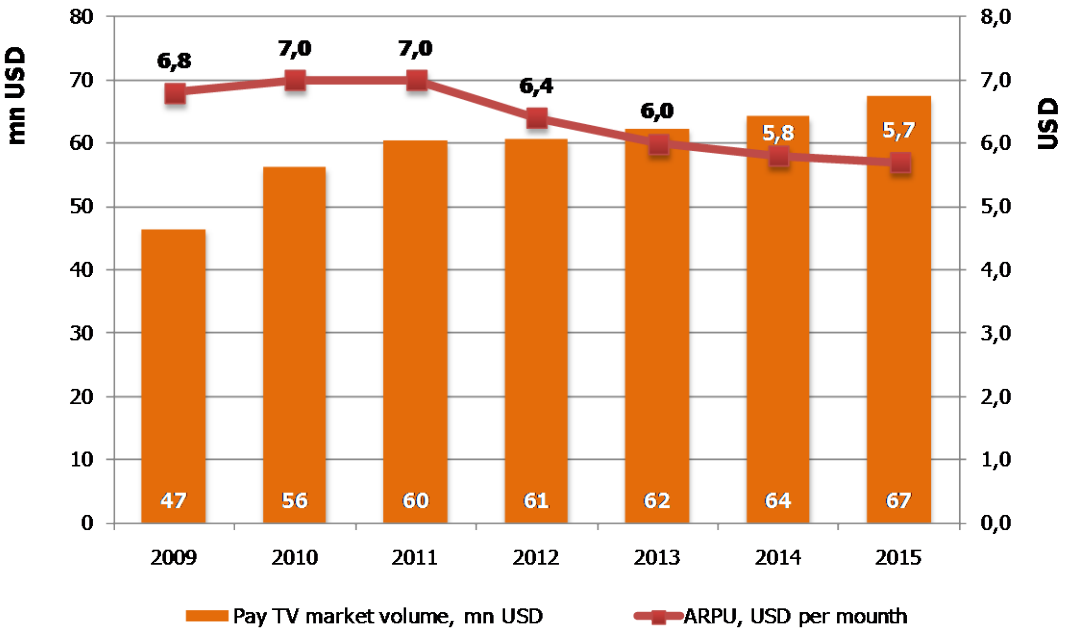
Fig. 80. Pay TV Service subscribers base Far Eastern FD, 2009-2015



Source: J'son & Partners Consulting

The market size of Pay TV in Far Eastern Federal District by the end of 2010 was about 56 million USD. ARPU grew 2.8% to 7.0 USD. J'son & Partners Consulting forecasts the growth of Far Eastern Federal District Pay TV service revenue to 67 million USD in 2015 with ARPU declining to 5.7 USD.

Fig. 81. Far Eastern FD Pay TV market size, 2009-2015



Source: J'son & Partners Consulting

1.7.5. Russian TV channels abroad in the presence of international TV groups in Russia

Russian TV broadcasting in Europe and other countries has nearly ten-year history. "RTR-Planeta" – the third RTR channel - began broadcasting on July 1, 2002. It is Russia's first state channel performing international television broadcasting.

Most of broadcasters are counting on the Russian-speaking audience, with channel content similar to what native Russian audience watches. Often the differences are in program slicing variations and different commercial content. The only exception is «Russia Today» - a four-lingual channel intended for improving Russia's international image, with specialized content created exclusively for this channel.

The State directs this activity, providing annual budgetary financing to support the international activities of such broadcasters as RTR and "TV-Novosti"[31].

Table 46. Channels supposedly established in the Russian Federation Russian channels broadcasted abroad

Channel	Broadcaster	Launch date	Public / Private / Mixed	Genre	Countries targeted	Access modalities
24 Dok	ART MEDIA GROUP	2005	Private	Documentary channel	Latvia, Lithuania, Estonia	Pay
24 Techno	ART MEDIA GROUP		Private	Documentary channel	Bulgaria, Latvia, Lithuania	Pay
8 Kanal (Russia)	8 Kanal		Private	News channel	Europe (Free satellite channel), Estonia	Free
A-One (Russia)			Private	Lifestyle/specific leisure channel	Ukraine, Belarus, Estonia, Kazakhstan, Moldova	Pay
Amazing Life (Russia)			Private	Entertainment channel	Estonia, Lithuania	Pay
Autoplus (Russia)			Private	Lifestyle/specific leisure channel	Europe (Free satellite channel), Latvia, Lithuania, Estonia	Free
Boets (Russia)		2006	Private	Sports channel	Latvia, Estonia, Lithuania	Pay
CTC TV (STS TV)	CTC MEDIA/MTG GROUP		Private	Entertainment channel	Europe (Free satellite channel)	
CTC TV Dixi (STS TV Dixi)	CTC MEDIA/MTG GROUP		Private	Entertainment channel	Europe (Free satellite channel)	Free
Comedy TV	COMEDY CLUB	2008	Private	Entertainment	Latvia, Estonia,	Pay

[31] More information about budget expenditures, see section 1.2.5.

(Russia)	PRODUCTIONS OOO			channel	Lithuania	
Peretz (Russia)		1999	Private	TV fiction channel	Europe (Free satellite channel)	Pay
Detskij		2005	Private	Children's channel	Cambodia, Estonia, Ukraine, Lithuania	Pay
Dom Kino	CHANNEL ONE - PERVIY KANAL		Private	Film channel	Estonia, France, United States, Bulgaria, Latvia, Lithuania, Finland	Pay
Domashny	CTC MEDIA/MTG GROUP	2005	Private	Lifestyle/specific leisure channel	Estonia	Free
Drive	SISTEMA MASS-MEDIA	2005	Private	Sports channel	Argentina, Azerbaijan, Belarus, Georgia, Moldova, Estonia, Ukraine, Lithuania, Latvia	Pay
Europa Plus TV (Russia)	RED MEDIA GROUP	2011	Private	Music channel	Europe (Free satellite channel)	Pay
Fenix+ Kino			Private	TV fiction channel	Estonia	Pay
First Game TV (1GTV)		2007	Private	Games/lottery/betting channel	Latvia	Pay
India TV (Russia)	RED MEDIA GROUP		Private	Minority interest groups channel	Estonia, Latvia, Lithuania	Free
Interesnoe TV	Collection TV		Private	Lifestyle/specific leisure channel	Lithuania	Pay
KHL TV	LCH Marketing		Private	Sports channel	Latvia, Lithuania, Estonia	Pay
Carusel International		2010	Public	Children's channel	Estonia, United States, Europe (Free satellite channel), Latvia, Lithuania	Pay
Kto est kto		2007	Private	Documentary channel	Estonia, Lithuania	Pay
Kuhnya TV			Private	Lifestyle/specific leisure channel	Latvia, Estonia	Free
La Minor TV	RED MEDIA GROUP	2006	Private	Music channel	Estonia, Lithuania	Free
Maty i Ditya		2007	Private	Cultural/educational channel	Latvia, Lithuania	Pay
MIR TV (Russia)		1992	Public	Generalist channel	Estonia, Europe (Free satellite channel), Latvia, Lithuania, Bulgaria	Free
MUZ	MUZ-TELESET		Private	Music channel	Estonia, Europe	Pay

					(Free satellite channel), Latvia, Lithuania, Bulgaria	
Moya Planeta (Russia)	TELEKANAL ROSSIYA-DOCHERNEE FGUP VSEROSSIISKAYA GOSUDARSTVEN-NAYA TELEVIZIONNAYA I RADIOVESHCHATE-LYNAYA KOMPANIYA	2009	Public	Documentary channel	Europe (Free satellite channel), Latvia, Lithuania	Pay
Music Box Russia	MUSIC BOX GROUP		Private	Music channel	Bulgaria	Free
NST (Nastojashee Smesnoe Televidenyel)	OOO ART MEDIA GROUP	2004	Private	Entertainment channel	Estonia, Latvia, Lithuania	Pay
NTK Orbita		2010	Private	Regional/ local channel	Europe (Free satellite channel)	Pay
NTV (Russia)	TELEKOMPANIYA NTV	1993	Public	Generalist channel	Bulgaria	Free
NTV Mir	TELEKOMPANIYA NTV	1997	Public	International linguistic and cultural channel	Estonia, Slovenia, Germany, Latvia, Lithuania, Finland, Bulgaria	Pay
NTV Plus Infokanal	TELEKOMPANIYA NTV		Public	Promotional / Information channel of multi-channel packager	Europe (Free satellite channel)	Pay
Nostalgia (Russia)			Private	Entertainment channel	Estonia	Free
Ohota & Rubalka	SISTEMA MASS-MEDIA		Private	Documentary channel	Estonia, Latvia, Lithuania, Bulgaria	Free
Perviy Baltijskyi Muzykalnyi Kanal (FBMC)			Private	Music channel	Europe (Free satellite channel), Estonia, Latvia, Lithuania	Free
Perviy Kanal/Channel One	CHANNEL ONE - PERVIY KANAL		Public	Generalist channel	Europe (Free satellite channel), AT, BG, CY, DE, DK, FI, FR, HU, LT, LV, MT, PL, PT, SE, SI, SK	Pay
Perviy Kanal Muzyka Pervogo	CHANNEL ONE - PERVIY KANAL		Public	Music channel	Europe (Free satellite channel), Austria, Malta, Germany, Czech Republic	Pay

Perviy Kanal Ukraina	CHANNEL ONE - PERVIY KANAL		Public	International linguistic and cultural channel	Ukraine	Free
ProPoker	ATV PRODUCTION	2009	Private	Games/lottery/betting channel	Latvia	Pay
Psikhologiya 21		2009	Private	Lifestyle/specific leisure channel	Estonia, Lithuania	Free
RBC	RBK-TV MOSKVA		Private	Business channel	Estonia, Europe (Free satellite channel), Latvia, Lithuania, Bulgaria	Free
RT en Español	ORGANIZACIÓN AUTÓNOMA SIN FINES DE LUCRO "TV-NOVOSTI"	2009	Private	News channel	France, Europe (Free satellite channel), South America	Pay
RTR Planeta	TELEKANAL ROSSIYA-DOCHERNEE FGUP “VSEROSSIISKAYA GOSUDARSTVEN-NAYA TELEVIZIONNAYA I RADIOVESHCHATE-LYNAYA KOMPANIYA”	2002	Public	International linguistic and cultural channel	Israel, Estonia, Cyprus, France, Europe (Free satellite channel), Austria, Germany, Latvia, Lithuania, Portugal, Malta, Sweden, Denmark, Greece, Italy, Poland, Slovenia, Hungary, Bulgaria	Pay
RTR Planeta Ukraina	TELEKANAL ROSSIYA-DOCHERNEE FGUP “VSEROSSIISKAYA GOSUDARSTVENNA YA TELEVIZIONNAYA I RADIOVESHCHATE LYNAYA KOMPANIYA”	2009	Public	International linguistic and cultural channel	Ukraine	Pay
RTVI Info	MEDIAMART		Private	News channel	Bulgaria, Germany	Free
RTVI M	MEDIAMART		Private	Music channel	France	Free
Radost Moya			Private	Children's channel	Europe (Free satellite channel)	Free
Ru TV			Private	Music channel	Estonia, Europe (Free satellite channel), Lithuania, Poland	Free
Russia 1 (Rossiya 1/ RTR)	TELEKANAL ROSSIYA-DOCHERNEE FGUP	1965	Public	Generalist channel	Europe (Free satellite channel), Austria, Bulgaria,	Pay

	VSEROSSIISKAYA GOSUDARSTVEN-NAYA TELEVIZIONNAYA I RADIOVESHCHA-TELYNAYA KOMPANIYA				Lithuania	
Russia 24	TELEKANAL ROSSIYA-DOCHERNEEFGUP VSEROSSIISKAYA GOSUDARSTVEN-NAYA TELEVIZIONNAYA I RADIOVESHCHATELYNAYA KOMPANIYA		Private	News channel	Estonia, Cyprus, France, United States, Slovenia, Austria, Bulgaria, Latvia, Lithuania, Portugal, Italy, Poland, Romania	Pay
Russian Travel Guide (RTG)		2009	Private	Documentary channel	Latvia, Lithuania, Estonia	Pay
Russkaja Noch			Private	Adult channel	Latvia	Pay
Russkij Extreme		2006	Public	Sports channel	Latvia, Lithuania, Estonia	Free
Russkij Illusion			Private	Others	Estonia, Latvia, Lithuania	Pay
Sarafan Television			Private	Travel channel	Montenegro, United Arab Emirates, Egypt, Morocco, Cyprus, Tunisia, Europe (Free satellite channel), Croatia, Poland	Pay
Shanson TV	MEDIAMART		Private	Music channel	Estonia, Lithuania	Free
Sovershenno Sekretno	KOMPANIJA «NOVYJ VYBOR»		Private	Entertainment channel	Lithuania	Pay
Soyuz TV		2005	Private	Religious channel	Europe (Free satellite channel), Latvia, Estonia	Free
TDK Telekanal Damskii Klub	TELEKOMPANIYA INTERAKTIVNOE TELEVIDENIE RIKOR		Private	Lifestyle/specific leisure channel	Estonia, Latvia, Lithuania	Free
TNV (Telekanal Novi Vek)		2002	Public	Generalist channel	Estonia, Europe (Free satellite channel)	Free
TV Arm Ru		2010	Private	Minority interest groups channel	Armenia, Europe (Free satellite channel)	Free

TV Bulvar			Private	Entertainment channel	Latvia, Lithuania	Pay
TV Club (Russia)			Private	Home shopping channel	Europe (Free satellite channel)	Free
TV Muzyka Pervogo	CHANNEL ONE - PERVIY KANAL		Private	Music channel	Estonia, France, Europe (Free satellite channel), Latvia, Lithuania, Finland	Free
TV Sale (Russia)			Private	Home shopping channel	Europe (Free satellite channel)	Free
TV Tsentr International (TVCI)	TV TSENTR		Public	International linguistic and cultural channel	Estonia, France, Europe (Free satellite channel), Bulgaria, Latvia, Lithuania	Pay
TV Vremya	CHANNEL ONE - PERVIY KANAL		Private	Entertainment channel	Estonia, France, Europe (Free satellite channel), Latvia, Lithuania, Finland, Bulgaria	Free
Telecafé (Russia)	CHANNEL ONE - PERVIY KANAL	2007	Public	Lifestyle/specific leisure channel	Latvia, Lithuania	Pay
Telekanal Footbol	TELEKANAL FUTBOL	2007	Private	Sports channel	Estonia, Latvia	
Tricolor TV Infokanal			Private	Promotional/ Information channel of multi-channel packager	Europe (Free satellite channel)	Free
USADBA Telekanal			Private	Others	Estonia, Lithuania, Latvia	Pay
Ulibka Rebyonka (Smile TV)			Private	Children's channel	Europe (Free satellite channel), Latvia	
Zdorovie TV	ÈNCIKLOPEDIJA ZDOROV'JA 2000		Private	Lifestyle/specific leisure channel	Estonia, Latvia, Lithuania	

** In this table, "Europe" means that the channel is available on a satellite of which the print cover one or several countries of the European Union.*

When a specific country is quoted, it means that the channel is also accessible on a specific pay-TV platform (cable, IPTV, satellite or DTT)

Source: database MAVISE edited and published by the the European Audiovisual Observatory

Broadcasting of programs from Moscow is generally via satellite links.

Table 47. Satellites, used for TV broadcasting abroad			
Logotype	Channel	Satellite	Broadcasting zone
	8 Kanal	Intelsat 15	Russia
		Eutelsat W7	Russia
	A-One	ABS 1	North
		Eutelsat W7	Russia
	Bashkirskoe Sputnikovoe TV	Intelsat 15	Russia
		Intelsat 904	Spot 1
		Bonum 1	East Russia
	CNL Sibir	Yamal 201	C
		Amos 2	Europe
	Dozhd	Intelsat 15	Russia
		Eutelsat W7	Russia
	GTRK Alania	Express MD1	C
	Global Star TV	Intelsat 904	Spot 1
	K+	NSS 6	Middle East & South Africa
		Hot Bird 6	Europe
	Katun 24	Express AM33	Steerable
		Bonum 1	East Russia
	Mir	Express AM33	Steerable
		ABS 1	North
		Intelsat 17	Russia
		Intelsat 904	Spot 2
		Bonum 1	East Russia
		Eutelsat W4	Russia
	NNTV	Intelsat 17	Russia
	Perviy Obrazovatelniy	Yamal 201	C
		Intelsat 15	Russia
	RBK TV	Express AM3	Ku Low
		ABS 1	North

		Intelsat 904	Spot 1
		Intelsat 904	Spot 2
		Bonum 1	East Russia
		Eutelsat W4	Russia
		Eutelsat W7	Russia
		Hot Bird 6	Europe
		Eurobird 9A	Europe
	RT America	NSS 806	Hemi
		Nimiq 1	Canada
		Galaxy 19	Ku
	RT Arabic	Yamal 202	Global
		Eutelsat W7	Russia
		Badr 4	BSS
		Hot Bird 9	Europe
		Amos 2	Middle East V
		Atlantic Bird 4A	Middle East
	RT D	Hot Bird 8	Europe
	RT English	Optus D1	NZB
		Optus D2	NANZ
		Apstar 6	Ku
		SES 7	S
		AsiaSat 3S	C
		Insat 4B	India
		Measat 3	South Asia
		Thaicom 5	Global
		ABS 1	North
		Insat 4CR	India
		Intelsat 906	Spot 2
		Yamal 202	Global
		Hellas Sat 2	F1
		Eutelsat W7	Russia
		Eurobird 1	S1
		Astra 3A	Central Europe H

		Astra 1M	Europe Wide
		Hot Bird 9	Europe
		Eurobird 9A	Europe
		Astra 4A	Nordic BSS
		Amos 2	Middle East V
		Hispasat 1C	Europe
	RT Español	Yamal 202	Global
		Eutelsat W7	South Africa
		Eutelsat W7	Russia
		Astra 1L	Europe
		Hispasat 1C	Europe
		Intelsat 9	Americas
		EchoStar 9/Galaxy 23	C
	RTR Planeta	Apstar 6	Ku
		AsiaSat 5	C
		Intelsat 904	Spot 2
		Eutelsat W7	South Africa
		Astra 3A	Central Europe H
		Hot Bird 6	Europe
		Eurobird 9A	Europe
		Astra 4A	Nordic BSS
		Thor 6	K2
		Amos 2	Middle East V
		Amos 3	Europe V
		Amos 3	Europe H
		Express AM44	Global
		Galaxy 25	Ku
		Galaxy 16	Ku
		Galaxy 3C	North America H
	RZD	ABS 1	North
	Rap.ru	Yamal 201	C
	Raz TV	Yamal 201	C

		Eutelsat W4	Russia
	Re Music	ABS 1	North
	Rossiya 24	Express AM3	C
		Express AM3	Ku Low
		Express A2	C
		Express AM33	S2
		Yamal 201	Ku
		Intelsat 15	Russia
		Express AM2	C High
		Express AM2	C
		ABS 1	North
		Intelsat 904	Spot 2
		Intelsat 904	Spot 1
		Bonum 1	East Russia
		Yamal 202	Global
		Express AM1	C
		Eutelsat W4	Russia
		Eutelsat W7	South Africa
		Hot Bird 6	Europe
		Eurobird 9A	Europe
		Galaxy 16	Ku
		Galaxy 3C	North America H
	Ru TV	Yamal 201	C
		Intelsat 904	Spot 2
		Eutelsat W4	Russia
		Hot Bird 6	Europe
		Hispasat 1E	Europe
	Russian Music Box	Yamal 201	C
		Bonum 1	East Russia
		Hot Bird 6	Europe
		Amos 2	Middle East V
	Shanson TV	Express AM3	Ku Low
		Yamal 201	Ku

		Intelsat 15	Russia
		Eutelsat W4	Russia
		Hot Bird 6	Europe
	Soyuz	Yamal 201	C
		Bonum 1	East Russia
		Eutelsat W4	Russia
		Hot Bird 6	Europe
		Galaxy 19	Ku
	TBN Rossiya	Yamal 201	C
		Hot Bird 8	Europe
		Amos 3	Middle East V
	TDK	Intelsat 904	Spot 1
		Intelsat 904	Spot 2
		Bonum 1	East Russia
		Eutelsat W7	Russia
	TV Arm Ru	Eutelsat W4	Russia
		Hot Bird 8	Europe
	Ugra TV	Express AM33	S2
	Zhivi!	ABS 1	North
		Intelsat 904	Spot 2

Source: lyngsat.com

The impact of accession of Russia into the WTO on the TV industry

The final decision on Russia's accession into the World Trade Organisation (WTO) is expected by the end of 2011. J'son & Partners Consulting predicts the following changes in the structure of the television market after this happens:

Table 48. Changes in the television market after Russia's accession to WTO	
Inside Russia	Outside Russia
■ Demand for content of the European companies will not increase dramatically because the process of procurement and translation of most foreign programs interesting for the Russian viewers was established many years ago ■ Large foreign TV companies in the near future will not be able to compete with Russian broadcasters in the Russian-speaking part of the content because of lack of experience in the production of such a content ■ The most likely scenario of the market will be participation of foreign investors in the equity of Russian TV companies	■ Demand for content of Russian companies in the near future will not increase dramatically because of weak demand for such content ■ Russian operators in the near future will not be able to compete with European broadcasters in terms of content in European languages due to lack of experience in the production of such content

Source: J'son & Partners Consulting

2. Non-linear TV in Russia

In the systems of non-linear (or interactive) television user manages a process of receiving programs. He can specify the time of showing a program (movie, series, show), choose a device through which it will be played.

Non-linear television is divided into two types: open and closed systems.

In *closed systems* user chooses video content that is given to him by a media service provider. It includes VOD services and its variants (for details see Part 2.2. Closed systems).

The best prospects of development are for *open systems* (or over-the-top, OTT), in which video content is delivered via the Internet without an intermediary provider.

This technology significantly changes the look of the TV industry, providing new opportunities for the development of existing TV companies and making it easier to enter the market for the new TV companies.

In his scenario, the president of holding "Prof-Media" Rafael Akopov suggested that by 2020 in Russia there will be only two systems of delivering content - OTT and "air digital".

At the same time he underlines that the transition of air broadcasting to digital technology does not meet the interests of nor Russian broadcasters neither the viewers as due to high distribution costs many regional and "niche" channels may disappear.

2.1. Revolution of video content viewing user terminals

2.1.1. Client equipment market tendencies

Currently non-linear video content is consumed mostly via personal computers and mobile devices, but there are other ways of doing it and specialized devices to display such content on a TV screen.

Advantages of TV set-top-boxes:

- Wide price range (starting at 30 USD)
- The traditional way of viewing video on TV screen
- Ability to pre-download video to a device for later viewing
- Built-in hard drive allows saving videos, forming a personalized library and accessing stored videos on demand
- Some devices such as game consoles, Connected TV sets are multifunctional.

Classification of devices is in the table below.

Table 49. Types of equipment

Game consoles with Internet access	Blu-ray players with Internet access	Connected TV sets	Set-top-Boxes
Nintendo Wii Xbox360 Playstation3	LG Samsung Sony Insignia Philips Panasonic	LG Samsung Sony	BBK Duna WD Dune

Sources: J'son & Partners Consulting

High picture quality and access to a global network makes it possible to supply video game consoles with ability of viewing content from popular online video resources. On the other hand, since game consoles are not specifically designed for watching videos, they do not provide access to a wide range of available resources, but rather collaborate with major players, aggregating a large number of video content. For example, Xbox360 and Playstation3 are limited to distribution of content of three key Internet video portals - Netflix, Hulu and Youtube.

Blu-ray players with Internet access can be connected to the largest video services.

Connected TV is designed to combine TV viewing, Internet access, selection of connected video and game providers on one screen.

Samsung Smart TV is the class leader by the number of integrated online video resources and technologies for Internet access. Thus, the technology of Smart Hub provides a full web browser, service SocialTV, bringing together a number of popular services on one screen, a global search through all available sources. To facilitate data entry instead of the usual remote control it is possible to use Samsung smartphone, connected to a TV with AllShare technology. In addition to online services, Smart Hub provides access to all individuals in the local network of media content, can use the TV for its intended purpose - to view the air time (with access to the program schedule, the ability to schedule recording, etc.). There is also Samsung Apps, a company online applications store, where you can download additional games and services, divided into thematic categories (videos, sports, style, information, etc.).

Fig. 82. Samsung Smart HUB

Source: company data

LG Smart TV is technologically similar to the above-mentioned device from Samsung. The main section of the interface is the “Premium”, which provides access to many different online services: news portals, weather, online video, social services. There is also LG Apps store with a preview of popular and new applications, Smart Share section, which displays the available media content sources (both connected to the TV via USB, and available through DLNA technology), and the programming schedule for the current channel.

Fig. 83. LG Smart TV

Sources: company data

To access the online video service through TV there are STB capable of connecting to the Internet network using Wi-Fi technology and Ethernet. Almost all the set-top boxes have the following functions:

- Broadcasting in several quality formats, including HD
- Built-in hard disc (usually around 40 GB) that enables users to record video in different qualities, simultaneously record one channel while watching another, program video recording for a week
- The function of providing VOD
- Broadcast of audio / video streaming on TV
- Ability to access the Internet on TV
- Game console with a certain amount of built-in games
- Connection to an external drive and other sources

The market is also expecting arrival of TV set-top-Boxes with the opportunity of watching terrestrial TV (DVB-T), non-terrestrial (DVB-C / S, IPTV) TV and other applications.

The best-known brands on the STB market are BBK, Duna, Western Digital.

Apple TV and Google TV, in spite of considerable ambition, have been unable so far to show significant success in the market.

Representation of video services in the connected TV sector actually coincides with the online video market. The leaders are Youtube, Netflix, Hulu and Amazon Instant Video; they are represented on almost all devices. Also quite popular are Vimeo.com, Blip.tv, BBC iPlayer, TV.com, myfitv.com and some others.

2.1.2. Market structure

By vendors

Currently, the Russian market of TV set-top boxes for viewing of video content is immature. The major players, occupying the most of the market, are various marginal companies, such as BBK.

By location of equipment production

According to J'son & Partners Consulting estimate, 95% of all terminals for viewing non-linear content, not counting the TV-sets, are produced in South-East Asia.

2.1.3. Equipment with HD support

Currently, most video game consoles with video content watching capability support HD video format.

All connected TV sets are also capable of watching video content, but the amount of non-linear HD video content is limited.

2.2. Closed systems

Closed non-linear TV systems are represented on the market by "video-on-demand" (VOD) service.

2.2.1. "Video on Demand" (VOD) category of services

"Video on demand" is a kind of electronic video rental service available on different devices. The user selects a movie/TV show from the catalogue and watches it at a convenient time. This service also allows ordering the program shown on television (digital video recorder), with the ability to pause, rewind, etc.

- **VOD classification**

Currently, you can find in the publications quite a large number of terms, related to services like "video on demand". J'son & Partners Consulting adheres to the following classification.

Table 50. VOD classification

Abbreviation	English term	Comment
Sales models		
PPV VOD	Pay-per-view VOD (or Pay-per-play VOD)	The service with a prepayment for each program (movie, TV show, etc.)
SVOD	Subscription Video On Demand	It is a VOD service with a prepayment on a regular basis for a package of TV programs (movies)
FVOD	Free-On-Demand	The service is financed by advertisers or sponsors or by public financing

Transfer modes		
Pull VOD	VOD in pull mode	It is VOD, when the source of program is a MSP server
Push VOD	VOD in push mode	It is VOD, when the source of the program (movie) is stored on the client's PVR
PVR (DVR)	Personal (digital) video recorder	Storage on a client's side
Network PVR (DVR)	Network Personal (digital) video recorder	Storage on an MSP's side

Source: J'son & Partners Consulting

Business models

VOD services offer three main sales models:

- **PPV VOD (Pay-per-play VOD or Pay-per-view VOD)** is the service with a prepayment for each program. This sales model is historically the earliest and still the most common.
- **Subscription VOD (SVOD)** is the service alternative to PPV VOD, with the periodic regular prepayment for a package of programs. Subscription can be monthly, semi-annual, annual, etc.
- **Free VOD (FVOD).** All expenditures are carried by advertisers and sponsors.

Main players

VOD market players are classified by the video content delivery technology they use.

Table 51. Technologies and devices for VOD services providing	
Delivery technology	**Terminal**
Cellular network	Smartphone
VOD via Internet	PC or TV set (Connected TV)
IPTV (VOD as addition to the package of TV channels)	TV set or PC
Cable TV	TV set
Digital satellite TV (Digital satellite transmission, DST)	TV set

Source: J'son & Partners Consulting

The VOD services were most widespread among the IPTV providers, which have the easiest way to run "video on demand".

Provision of services through satellite TV is complicated by the necessity of the transmitting antenna.

VOD in a closed system via PC did not become very popular because of strong competition from free analogues.

Finally, to run the services on mobile channels, sufficient data rate is required. It can still be provided only by the operators of the "big three" via the 3G network, and by 4G providers (Yota).

Business of those providers, who provide content only to their subscribers, is complicated by the fact that it is psychologically difficult for the user to pay twice, both for the service and to the content providers. VOD service itself began to develop just like an image component, the income from which is only a small portion of the total revenue of the operator (5-10%).

Table 52. The main players of VOD market in closed systems

Providers	Devices	VOD type
Beeline	TV sets	PPV, NPVR
	Smartphones	PPV, SVOD
MTS	TV sets	PPV, NPVR
	Smartphones	PPV
Megafon	Smartphones	PPV, SVOD
AKADO	TV sets	PPV
Rostelecom	TV sets	PPV, NPVR, PVR, SVOD

Source: companies data

The main business model used by providers is PPV.

- **Russian market size**

Stream TV, the first company to provide VOD services in Russia, conducted a pre-project study, polling the interest among users in multimedia interactive services. The result was the cross-matrix which demonstrates (on the horizontal axis) the percent of service users that may be interested in another services.

The best position in this matrix has "video on demand" with more than 70% of users showing their interest in adding this service.

Table 53. The cross-matrix of interest of users who chose the multimedia interactive service and are going to select another one						
		Secondary service				
		Basic service	Pay TV	VOD	Network games	Access to the Internet on TVs
Primary service	Basic service	100%	59%	77%	33%	14%
	Pay TV	53%	100%	78%	33%	12%
	VOD	44%	48%	100%	30%	11%
	Network games	45%	48%	72%	100%	19%
	Access to the Internet on TVs	53%	50%	73%	53%	100%

Source: telesputnik.ru

According to forecasts of J'son & Partners Consulting, the total volume of VOD market for closed systems in Russia will reach 54.5 million USD by the end of 2011. Most of the revenue will come from sales of "video on demand" via smartphones - 53.8 million USD.
Video on demand content provided for TVs will respectively bring 0.54 million USD.

Table 54. Indicators of VOD in closed systems by devices in Russia, 2010-2011						
Device	Market volume, million USD		Number of subscribers, million people		Number of projects	
	2010	2011	2010	2011	2010	2011
VOD for TVs	0,36	0,54	1,5	5,3	12	14
VOD for PC	n/a	n/a	n/a	n/a	2	2
VOD for smartphones	50,1	53,8	0,7	1,3	3	4

Source: J'son & Partners Consulting, NEVAFILM Research

VOD service, delivered to TV, have the largest number of users – 5.3 million, due to the deepest penetration in this segment. VOD for smartphones subscribers are 1.3 million, as the equipment to provide these services is quite expensive.

The number of projects for all devices in the middle of 2011 equals 20. Dominating the market are services delivered via TV because of the earliest start of this service.

Pricing policy

Let's look at the cost structure of VOD services for various sales models.

Table 55. The average cost of VOD services by type of service and device, RUB			
	PPV	SVOD	NPVR (one-time service)
TV sets	88,7	500 per month	n/a
PC	97,5	-	15
Smartphones	47,5	8 per day	-

Source: J'son & Partners Consulting, companies data

The highest average cost of PPV of VOD services, delivered to TV sets, is 88.7 RUB per unit of content. The cost of VOD for PCs is pretty much the same - about 100 RUB. The price range for all kinds of devices is quite wide - from 5 to 200 RUB, depending on the category.

The highest prices are charged for the "Adult" movies and for high-quality video (HD).

The subscription price for TV sets is 500 RUB per month.

2.2.2. VOD for TVs

■ Successful and unsuccessful projects in recent years

MTS. Video on demand

http://www.mts.ru/internet/mts_stream/additionally_services/for_home_tv/tvcontent/

Project start: September, 2006 (as Stream-TV)

Property structure: JSFC SYSTEMA

Service type: PPV VOD, NPVR

Cost: PPV

For adult — 90 RUB per unit
For adult (HD) — 100 RUB per unit
Others – 39,5 RUB per unit

Cost of NPVR ("POVTOR-TV") service is included in the monthly payment for "Home television MTS".

Audience: MTS subscribers

Content: movies

In September 2006, Mass Media System launched the NVOD service under the Stream-TV trade mark, using IPTV technology through ADSL.

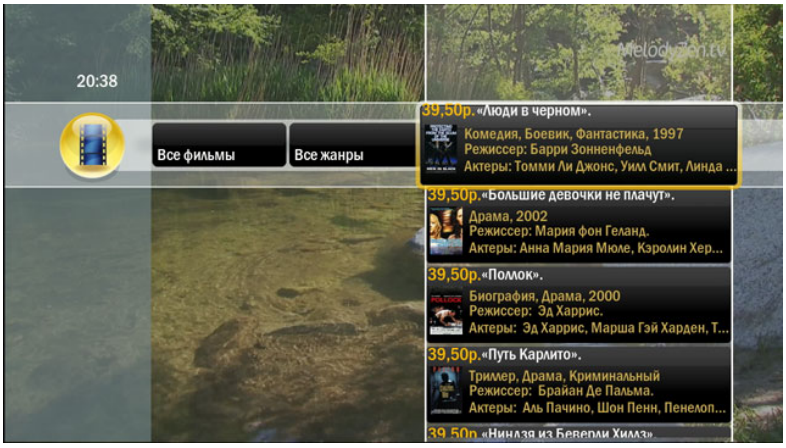
In November 2007, the company has stopped providing the unlimited access to VOD resources of and offered the "pay-per-view" payments system to its subscribers.

The viewer could choose a convenient time for viewing from the schedule, pay 1.4 Euro and see any of the available videos. Further development of service made it possible to choose any

convenient time for watching. New features appeared: "pause", "rewind", and "repeat." The service became available for "Platinum" tariff users (unlimited internet and unlimited access to video content) for 11.4 Euro per month. Users get unlimited access to the Internet and unlimited access to video content. The investment in the service amounted to 700 thousand USD.

During the integration of Comstar (which owns the Stream) and MTS, which began in May 2010, the service became known as MTS STREAM. Currently, the video content is taken from the site Omlet.ru that in the fall of 2009 entered into a contract with Paramount Pictures for the online sale of 100 well-known movies of the studio.

Fig. 84. MTS. Video on demand



Source: company data

"Domestic TV MTS" includes "POVTOR-TV" service, which gives the user ability to view programs (movies, shows) that were shown earlier. This service can be classified as NPVR (Network Personal Video Recorder).

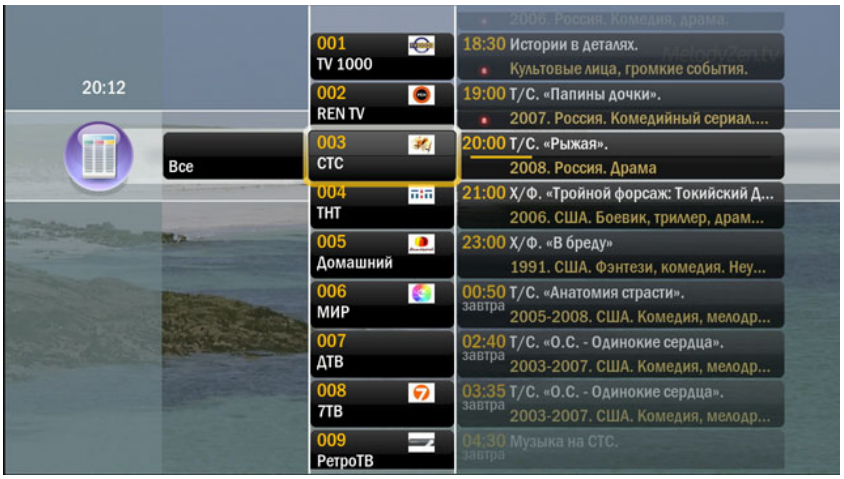
Any programs broadcasted on terrestrial TV channels in the current and previous days, are available in recording. There are functions of "Rewind", "Pause", etc.

Cost of "POVTOR-TV" service is included in the monthly payment for "Home television MTS" service.

"POVTOR-TV" can be used with such channels as Domashniy, Peretz, Detsky Mir/Teleclub, Zhivi!, Muz-TV, O2TV, Pro Den'gi, CTC, TDK, Travel Channel, English Club, Semerka.

In June 2008, the service has ceased to be available for the Central TV channels, because "Comstar" did not make contractual arrangements with the channels for running the "POVTOR-TV" service.

Fig. 85. MTS. POVTOR-TV



Source: company data

AKADO. "Domashniy Kinozal"

http://cinema.akado.ru/

Project start: November, 2006

Property structure: UAB "AKADO-Stolitsa"

Service type: PPV VOD

Cost: 60 RUB per each movie, first view for free

Audience: AKADO subscribers

Content: movies, Cinema hall 13 – unfromatted movies

At the start of the project, subscribers of the service "Domashniy Kinozal" could order movies by telephone on the NVOD technology (with shows every half-hour). Price for one movie was 70 rubles.

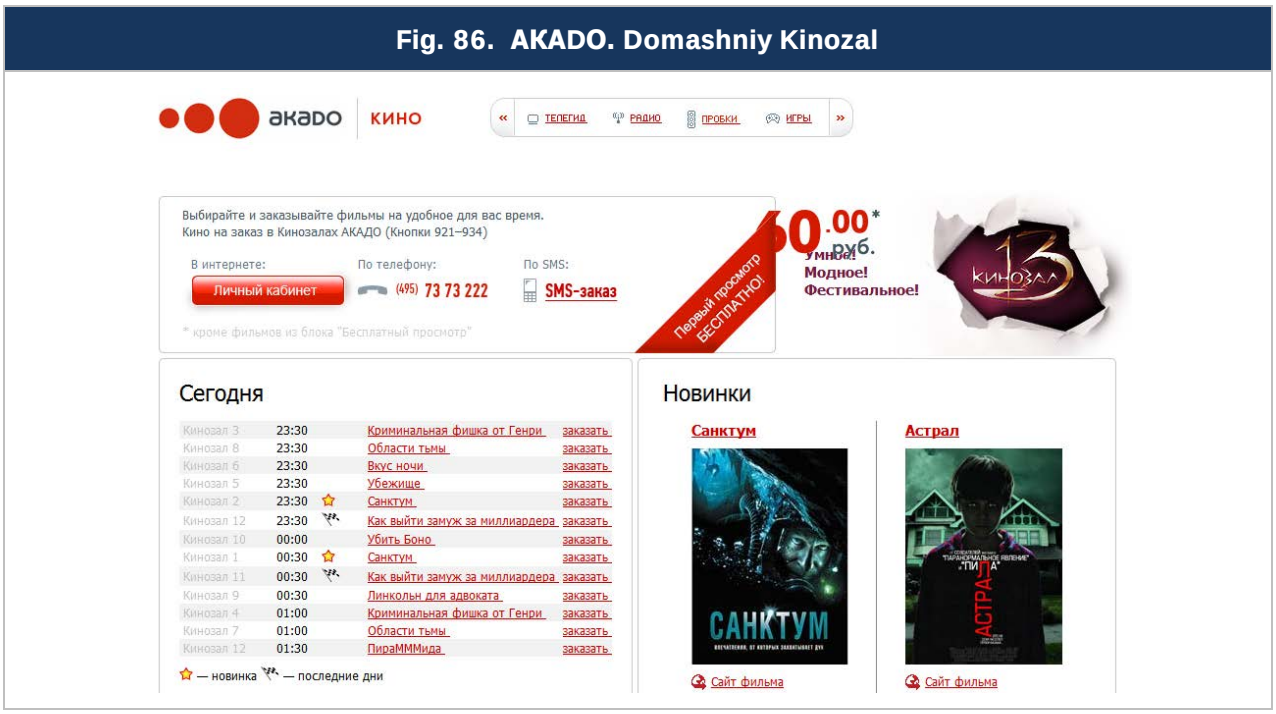
Beginning in December 2009, all subscribers of digital television "AKADO" could order movies from ”Kinozal 11 and 12” channels for free.

In 2010, when developing the service, operator AKADO significantly reduced the time gap between cinema release and screening of films in the "Domashniy kinozal".

In the four years of service existence, the preferences of AKADO’s viewing audience of have not changed: most popular among the subscribers of ‘Domashniy Kinozal’ are comedies, the second place is taken by actions and thrillers, the third place is taken by dramas.

In 2011, AKADO within the service "Domashniy kinozal" is planning to host the premiere films and implement special retrospective screenings of world cinema classics.

Fig. 86. AKADO. Domashniy Kinozal



Source: company data

QWERTY. VideoteQa

http://movie.qwerty.ru/

Project start: May, 2007

Property structure: JSC "Tsentralny Telegraf"

Service type: PPV VOD

Cost:

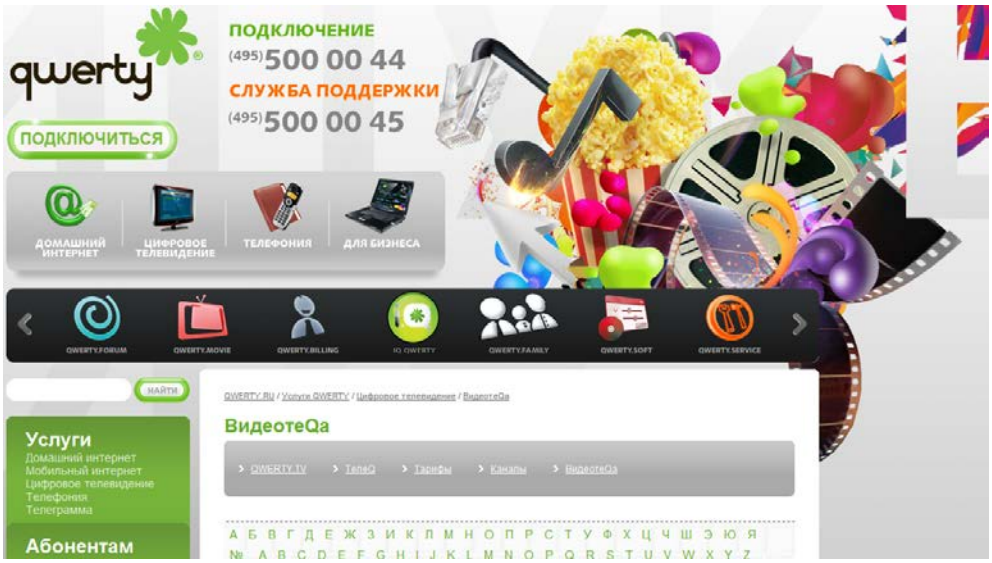
24-hour access
Classic 60 RUB per unit
Adult 155 RUB per unit
Premiers 79 RUB per unit
HD collection 99 RUB per unit

Audience: subscribers of Tsentralny telegraf

Content: movies of various genres

“Tsentralny Telegraph” offers its services in Moscow and Moscow region under the mark QWERTY. The company came to the market rather late, providing VOD under the title VideoteQa. During the testing of service, the company offered it as a bonus to subscribers of QWERTY.NET + TV package. At the moment, there are less new movies added because of falling demand for services due to pirated content.

Fig. 87. QWERTY. VideoteQa



Source: company data

Beeline. Videoprokat, Upravleniye efirom

http://smotri.beeline.ru/ru/msk/index.wbp

Project start: July, 2007 (composed of IPTV by Corbina Telecom)

May, 2009 (composed of Beeline TV)

Property structure: JSC "Vympelcom"

Service type: PPV VOD, NPVR

Cost:

Videoprokat (PPV): from 15 to 100 RUB for a movie, depending on a genre and category. Access within 24 hours since the moment of order.

Upravlenie efirom (NPVR): included in the cost of home digital TV "Beeline".

Audience: available for subscribers of home digital TV "Beeline".

Content: blockbusters, dramas, fantasy, cartoons, video-lessons etc.

Initially, the service was provided by Corbina Telecom for users of pay IPTV and called "Video na zakaz". The cost was 1-60 RUB per unit, depending on the video category, for access during the day.

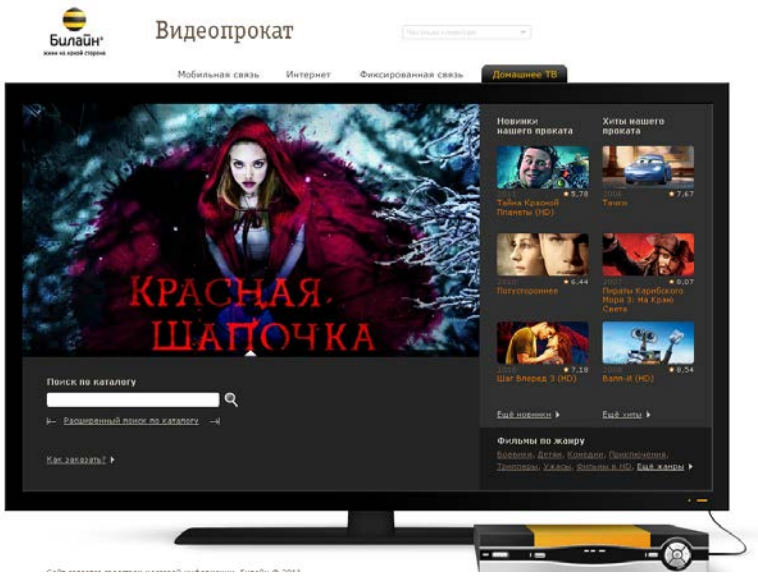
Following the acquisition of JSC "VympelCom" by Corbina Telecom in May 2009, new IPTV project 'Beeline TV' appeared in Russia. During the first six months of its operation, Beeline TV gained 30 thousand subscribers in Moscow and St. Petersburg. Initially, the operator began to provide VOD service within the VideoteQa, having collected 3000 items of content.

In April 2011, Beeline agreed with Microsoft to launch Beeline Internet TV service for Microsoft Xbox 360 video game consoles, which will increase demand for the service, since there will be no need to buy separate expensive set-top box. Such a proposal is the first in Russia. According

to the operator, 10% of Internet subscribers would like to see the IPTV and "video on demand" services to work on their game consoles.

In the first quarter of 2010, one in six of more than 40 thousand subscribers of "Beeline TV" used the "Video on demand". PPV service gained the demand from the users.

Fig. 88. Beeline. Videoprokat



Source: company data

Disel. Disel-TV Video on demand

http://www.diselcom.ru/krasnodar/disel-tv/video

Project start: March, 2009

Property structure: JSC "Rostelecom"

Service type: PPV VOD, SVOD

Cost: depends on a category

PPV: access within the period from 24 to 48 hours
SVOD: watching within the period from 10 to 30 days since the moment of activation of service

Audience: subscribers of Krasnodar's branch of JSC "Rostelecom"

Content: movies of 18 categories

Regional branches of Rostelecom - the Russian monopoly in fixed telephony – are very active in introducing VOD services. Initially, prices for video on demand were based on the price list of video rental store.

Southern MB of Rostelecom (now Macroregional branch "South") is a pioneer among the seven regional companies that provide this service. In the Southern Federal District broadband, operator Disel offers digital TV services under the brand name **Disel-TV**.

Rostelecom-North-West offers digital TV services under the brand name **"Avangard TV"** in the North-West District.

PPV VOD: film is available for watching within 48 hours

The cost depends on the category: 5 - 200 RUB per movie.

NPVR: storage time is limited to 72 hours

10 RUB per one program

"Rostelecom-Ural" provides service "Video po zaprosu" under the brand "**Utel.TV"**.

PPV VOD: The cost depends on the category: 0-200 RUB per movie.

SVOD: access within 30 calendar days

500 RUB regardless of the film category

Far Eastern branch of Rostelecom, company Far-Eastern MB of Rostelecom, provides services via interactive television operator **TVi.**

PPV VOD: film available for watching within 24 hours

Cost - from 5 to 200 rubles per movie

January 19, 2011 "Volga MB of Rostelecom" (from April 2011 – "Rostelecom-Volga") announced the launch of IPTV services, including "video on demand" in all regions of the company. The test operation was started in June 2009. The service provider is **J-TV.**

PPV VOD: access within 48 hours

The cost is 50-120 RUB per movie

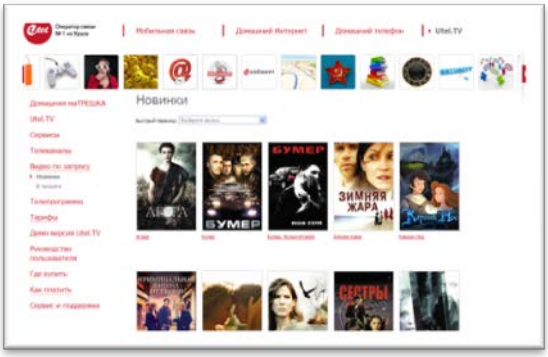
In August 2011 Rostelecom has signed a licensing agreement with International film studio NBC Universal International Television Distribution for the rights to broadcast films in terms of the service VOD (video-on-demand).

Fig. 89. Video on demand services of regional operators of Rostelecom

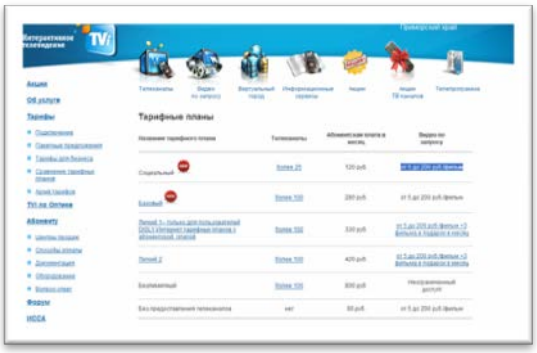
Disel-TV Video on demand

Avangard TV Video on demand

Utel.TV Video on demand



TVi Video on demand



Source: company data

NTV-Plus. Kinodrom

http://www.ntvplus.ru/w/kinodrom/about.xl

Project start: September, 2008

Property structure: UAB "Gazprom-Media Holding"

Service type: PPV VOD

Cost: 99 RUB per movie

Audience: subscribers of NTV-Plus

Content: 4 channels with new movies

Channels are the first Russia to use the "Pay-per-view"format.

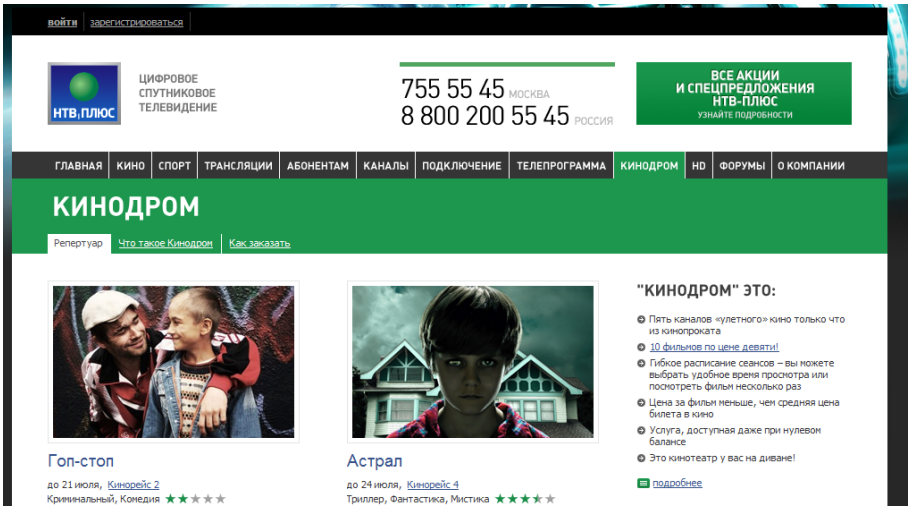
Part of the movies is broadcast in 16:9 format with Dolby Digital 5.1 sound format.

Cost of watching a film originally was 75 RUB

The service "Ten movies for the price of nine" which began operating on August 1, allows the user to watch 9 paid movies and get the tenth for free.

Since the end of 2010 the largest satellite TV network "Tricolor TV" launched an analogue of "Kinodrom" ("Kinoacademiya Tricolor TV") and became the potential owner of the biggest VOD user base. Distinctive features of the service are four theme-based movie-halls.

Fig. 90. NTV-Plus. Kinodrom



Source: company data

ER-Telecom. Domashniy Kinozal

Project start: October, 2008

Property structure: UAB "ER-Telecom Holding"

Service type: PPV VOD

Cost: initially, 50 RUB per movie

Audience: subscribers of digital cable TV

Content: there was an agreement with the content owner of more than 1000 movies.

ER-Telecom launched VOD services for subscribers of digital television (brand "Divan-TV").

The company has positioned PPV as a premium service and planned that it will move gradually into the category of mass services. At the moment the service does not exist.

In April 2011, ER-Telecom has officially launched a Videodom service, which provides free access to more than 3 000 units of legally owned video to high-speed Internet subscribers of "Dom.ru". One of the content providers is ivi.ru, Russia's largest online cinema. "ER-Telecom" was one of the first of Russian Internet providers to implement such a project.

Table 56. The comparison of VOD services for TV sets in closed systems					
Provider	**Start year**	**Content delivery technology**	**Service type**	**Cost RUB**	**Service status description**
MTS	2006	IPTV	PPV	39,5-100	In demand (content of popular Omlet.ru)
	2008		NPVR	Included in cost of home TV of MTS	Central TV channels are disabled
AKADO	2006	IPTV, Internet	PPV	60	Premiers have success
QWERTY	2007	IPTV	PPV	60-155	Demand has fallen, less new content
Beeline	2009	IPTV	PPV	15-100	In use of each 6th subscriber of Beeline TV
	2009		NPVR	Included in cost of home TV of Beeline	-
Disel	2009	IPTV	PPV	Included in services packages	Good quality of services
			SVOD		
			PVR		
			NVOD		
NTV+	2008	Satellite TV	PPV	99	Successful, service is repeated by competitors
ER-Telecom	2008	Cable TV	PPV	50	Does not exist, however, there is a free access to video content via PC
	Successful service				
	Service is not successful or stopped				

Source: operators data, J'son & Partners Consulting

Most cable TV operators in Russia do not have sufficient subscriber base to obtain high returns with "video on demand". In addition, unlike mobile operators, cable TV operators do not have streamlined production chain for the supply of VOD services and should attract content providers to create a video library. At the same time the copyright holders require a high payment just for inclusion of the film in the operator's library. Therefore, they do not have exclusive and extensive video content. Many projects are being closed or reduced because of the problems with copyright holders.

VOD projects, offered by Internet services providers on the IPTV technology and satellite operators, which have a significant user base (Tricolor TV and NTV+), are developing most actively and successfully.

Many providers of VOD for TV sets, as a result of development of the services, received a number of important advantages over their competitors in other segments: high-speed data rate via modern technologies allows watching the guarantied-quality video without delay, in contrast to the torrent; the cost of unit of video content is sometimes 6 times cheaper than the

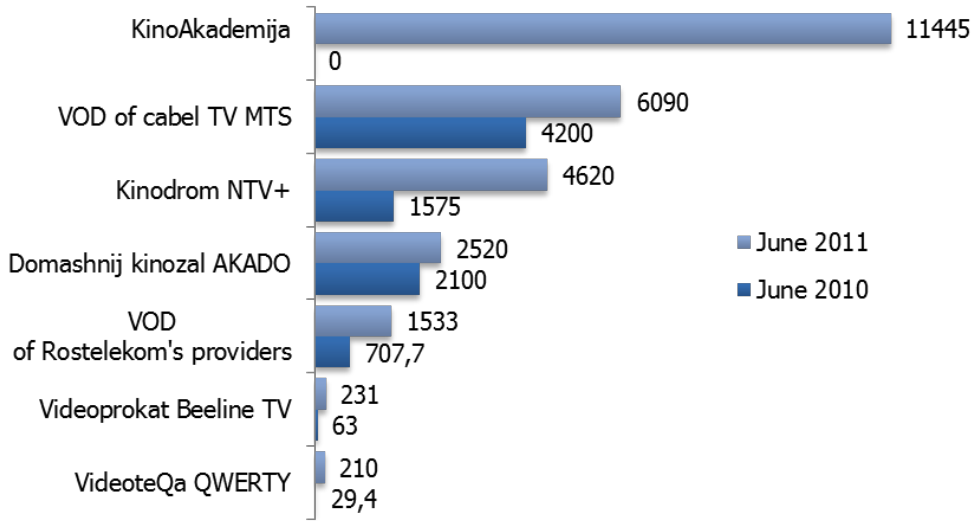
price of DVD; premiere films are immediately available on TV, but the cost is 2-3 times lower than a movie ticket.

J'son & Partners Consulting research showed that users prefer to buy premier movies via PPV service, and to use SVOD for the movies, available in rental for more than a year.

- **Market size**

It is estimated by J'son & Partners Consulting that the total subscriber base of operators providing VOD services for TV, reached about 26.7 million users in June 2011. The leader in the number of potential video-on-demand users is an operator of "Tricolor TV" satellite TV with nearly 11.5 million subscribers in the asset. Operators of cable TV MTS and satellite operator NTV+ have half as much subscriber base.

Fig. 91. Subscriber base of satellite, IPTV and cable operators, providing VOD services, thousand, June 2010 - June 2011



Source: J'son & Partners Consulting, NEVAFILM Research

- The share of VOD use is from 5% to 30%, depending on the operator.
- The viewing rate for video on demand amounts to 10-20 thousand per month.
- The average cost of viewing is 3 USD.

Total revenue from the provision of VOD for TV in Russia is over 540 thousand USD, which is only about 1% of the total revenue of operators.

The main revenue of operators is formed by providing a pay-movies service (about 50% of the revenue is earned by the films with adult content, for which a payment is of 3-4 times higher than normal), as well as access to sport events in HD-format.

"Video on demand" service for TV shows large potential for development, as many operators reject outdated models of television package consisting of a predetermined set of channels and a number of exclusive movies, in favour of niche, personalised TV content that is defined by the user.

2.2.3. VOD for PC

Russian Internet services, providing VOD services, services only began to appear on the market in mid-2007.

The existing paid online-cinemas have to withstand fierce competition from the pirate file-sharing networks and open portals with legal content. The situation was exacerbated by the massive video-content aggregator, social network VKontakte that has given the ability to view high quality video, including legal content (in collaboration with ivi.ru).

The presence of a serious competitor (torrents, soc. networks) should have forced broadband operators and right holders to work together to combat illegal content providers. However, such actions could result in significant losses for Internet-providers, as the availability of pirate networks provides them with users wishing to upgrade to more expensive rate plans with high speeds.

Therefore, some broadband operators, understanding the current competitive environment, enter into agreements with providers of free legal quality online content that enhances their image and allows them to avoid significant costs to purchase the video. For instance, operator ER-Telecom did this by making for its users a free access to the content, the significant part of which is video from free cinema ivi.ru

- **Successful and unsuccessful projects in recent years**

Domolink. "Video on Demand", "Setevoy videomagnitofon"

http://moscow.domolink.tv/kino/

Project start:

2009 – "Video po zaprosu" (translation - video on demand)

May, 2010 – "Setevoy videomagnitofon"

Property structure: OJSC "Rostelecom"

Service type: PPV VOD, NPVR

Cost:

PPV "Video on Demand": from 5 to 200 RUB depending on a category. Access within 48 hours since the moment of order

NPVR "Setevoy videomagnitofon": one time order of service costs 15 RUB

Audience: Domolink subscribers

Content: 698 units of content: movies of various genres, TV series, cartoons, music videos

In 2011 it is planned to increase the share of HD-content and to fill VOD with content in demand.

Fig. 92. Domolink. Video on demand

Source: company data

Stream TV for PC. Video on demand

http://home.mts.ru/prices/vod/

Project start: September, 2010 (as Stream TV for PC)

Property structure: JSC "COMSTAR — UTS"

Service type: PPV VOD

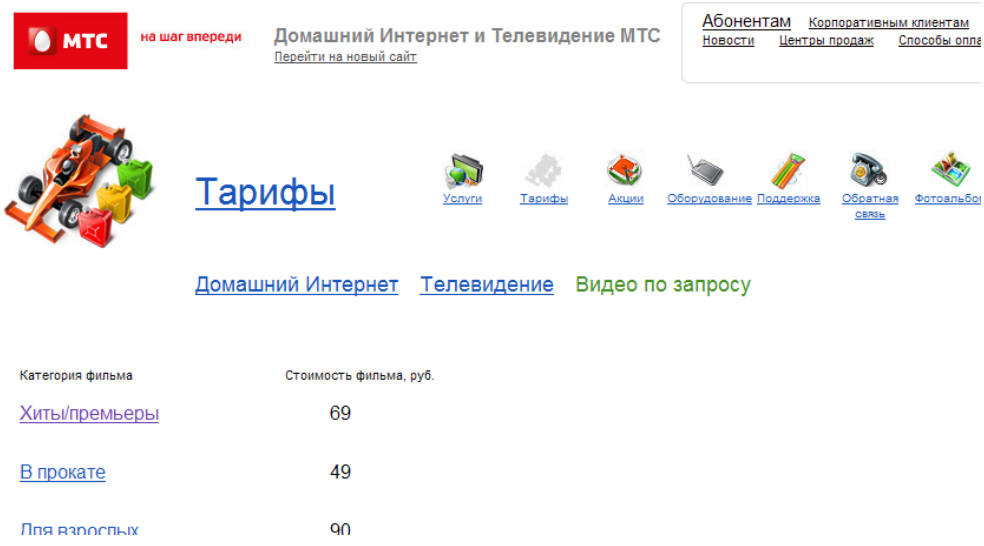
Cost: 49-100 RUB per movie

Audience: MTS subscribers

Content: movies

VOD service for MTS subscribers started in Moscow region as Stream TV for PC and cost 49 RUB per movie. The special modem was required for the service. One time subscription to the services was impossible. At the moment the service doesn't exist.

Fig. 93. Stream TV for PC. Video on demand



Source: company data

Since April 2011, subscribers of MTS and MGTS got the access to the video content of the site Omlet.ru on a free basis within the service "Videosvoboda". The cost of video is included in the monthly payment for home Internet of MTS and MGTS. The catalogue contains more than 90 films.

However, since the end of June 2011, MTS informed about the suspension of free access for the subscribers of JSC "COMSTAR-Regions".

Table 57. The comparison of VOD projects for PC in closed system

Provider	Start year	Content delivery technology	Service type	Cost RUB	Service status description
Domolink	2009	Internet	PPV	5-200	Contains high-quality video
	2010		NPVR	15	
Stream TV on PC	2010	Internet	PPV	49-100	The service is closed. It has been replaced by a similar service which provided by MTS free of charge to Domashnee TV subscribers , which is suspended for regional subscribers

Source: J'son & Partners Consulting

Intense competition from the side of open, mostly free, legal portals and need to pay double (to an operator for the connection and to a content provider) impedes the development of online cinemas in closed systems.

- **Market volume**

There are currently almost no broadband providers' services with access to video via Internet on the market. So it's impossible to estimate market size.

2.2.4. VOD for smart phones

- **Successful and unsuccessful projects in recent years**

Beeline. Video-portal

streaming.temafon.ru

Project start: December 2010

Property structure: JSC "Vympelcom"

Service type: PPV VOD, SVOD

Cost:

SVOD:

Watching all videos from Playboy or Adult Category - 12 RUB including VAT per day;

Watching all videos in one of the categories, except the Playboy or Adult categories - 8 RUB including VAT per day.

PPV:

Watching any video from Playboy or Adult categories - 55 RUB, VAT included;

Watching any video in any category, except the Playboy or Adult categories - 40 RUB, VAT included.

Payment for Internet traffic is not charged

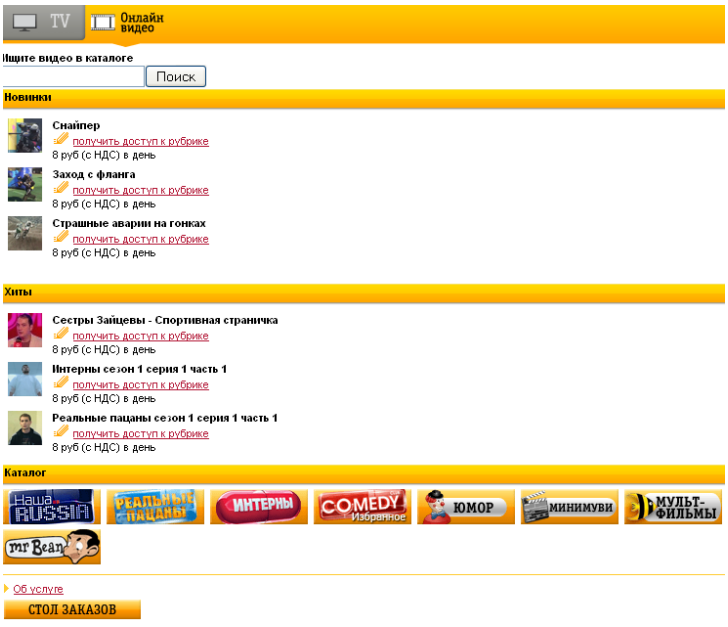
Audience: Beeline subscribers, to the middle of 2011 the service was used by the 1.4 million subscribers.

Content: entertaining - sports, music videos, humour, cartoons, short films

"Video-portal" service works on mobile phones which support the data transfer via GPRS/EDGE/3G, except IPhone. Supported by more than 220 phone models.

Videos presented at Video-portal are not intended for downloading. TV channels and video clips are being watched via player device.

Fig. 94. Beeline. Video-portal



Source: company data

MegaFon. Videoportal

szf.megafon.ru/services/joy/video-portal.html

Project start: February 2009

Property structure: JSC "MegaFon"

Service type: SVOD

Cost: 4-10 RUB per day, also it is possible to connect for 3 and 6 weeks for 112 and 240 rub respectively

Payment for Internet traffic included in the subscription

Audience: MegaFon subscribers

Content: Videos and movies on all genres - sports, news, entertainment, fashion, cars, travel, adult, etc.

"MegaFon" became the first mobile operator that launched in Russia mobile TV services. In 2004, Moscow "MegaFon" subscribers had opportunity to watch multiple channels for a monthly fee.

The service was widely used: in September 2009, the number of users reached 100 thousand people. The service was supported by a subsidiary of "MegaFon" - an aggregator "VAS Media", which concludes agreements with TV channels to convert them to the mobile format.

Access is via 3G networks.

Fig. 95. MegaFon. Videoportal

Source: company data

SkyLink. Videoteka

Project start: June 2007

Property Structure: UAB "SkyLink"

Type service: PPV VOD

Cost: originally from 0.52 to 1.72 USD, depending on the price category of video, +MBs payment traffic in accordance with the tariff plan, since August 2008 from 1 to 7 RUB.

Audience: SkyLink subscribers

Content: video clips, music video, trailers and movies

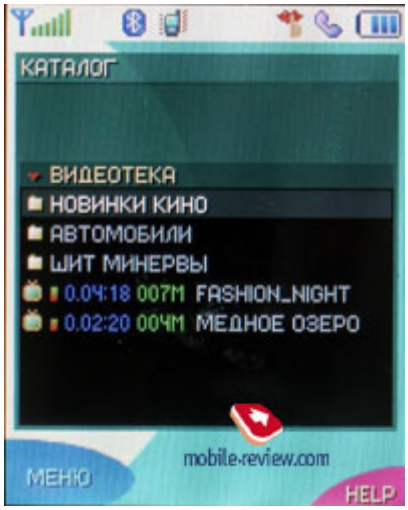
By the beginning of its commercial operation, "Videoteka" included over three thousand movies, divided into seven sections: "Music", "Sports", "Cartoons", "Adult", "Funny", "Mobile Cinema", "Auto".

Watching videos on the phone was in real time without uploading them to the terminal memory. Access to video service was based on the EV-DO technology.

The company announced the reduction of video content access: , since August 2008, one-time charge from 1 to 7 RUB (including VAT), was required, at the same time, it was expanding its film collection.

However, to date service ceased to exist (there is only "Mobile TV" video streaming service).

Fig. 96. SkyLink. Videoteka



Source: company data

Table 58. The comparison of VOD projects for smartphones in closed systems					
Provider	**Start year**	**Content delivery technology**	**Service type**	**Cost, RUB**	**Service status description**
Beeline	2010	GPRS/EDGE/3G	PPV	40-55	Supported by 220 phone models. For the first six months the service was used by 1.4 million subscribers
			SVOD	8-12/day	
MegaFon (Videoportal)	2009	3G	SVOD	4-10/day, 112/3 weeks 240/6 weeks	Concluded an agreements to ensure availability of popular content
Sky Link	2007	EV-DO	PPV	1-7	Despite the large amount of content the service has been closed in favor of streaming video
	The service is successful				
	The service is closed				

Source: operators data, J'son & Partners Consulting

Existing video portal operators which provide "video on demand" for their subscribers, do not charge a separate fee for consumed traffic, as well as provide the ability to watch videos without downloading.

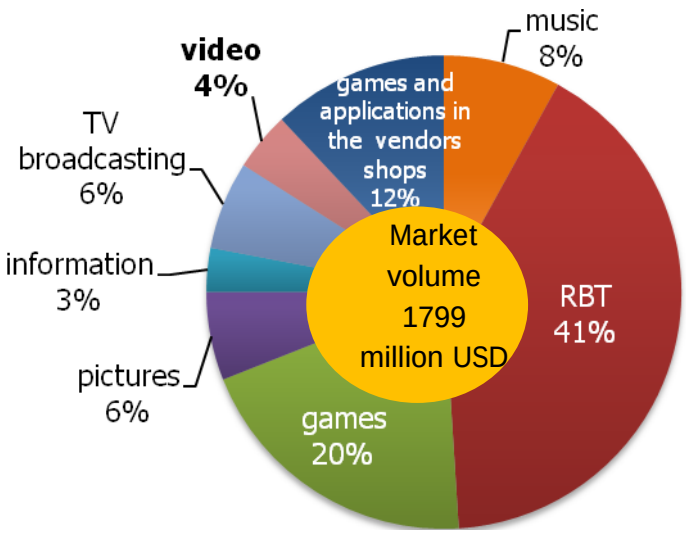
- **Market size**

Despite the rapid spread of technologies for VOD services, there are still not enough devices in the users' hands that support these technologies and their video services.

Unestablished business model of mobile video services is another deterrent factor for the mobile VOD in closed systems development, and the proposed payment options do not suit the users.

By the estimation of J'son & Partners Consulting, in 2011 the revenue from mobile video content will constitute 4% of the total mobile content market in Russia. Considering forecasted market volume of 1.8 billion USD in 2011, the volume of VOD for smartphones will be 53.8 million USD (without non-operator's content).

Fig. 97. Shares of content segments at the Russian market, 2010



Source: J'son & Partners Consulting

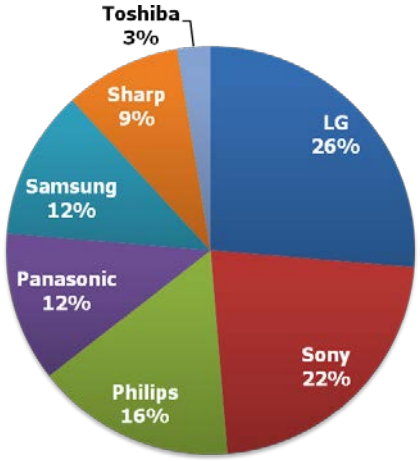
Downloadable content is the main income item of the operators that provide Mob TV (mostly music clips).

2.3. Open systems

2.3.1. Videoplayers for TVsets

The amount of applications for Connected TV sets is very limited, primarily due to the novelty of the format for the Russian market. In addition, resources that are registered in Europe, the United States and Canada and are not available in Russia, occupy a large proportion of the applications. Such resources are, for example, hulu.com and netflix.com. Connected TV sets by LG, Sony and Philips have the greatest number of applications for the devices.

Fig. 98. Distribution of presented in Russia Connected TV sets by number of available applications



Source: J'son & Partners Consulting

The most popular application for watching video on Connected TV is Youtube.com. It is available on devices of almost all manufacturers.

Table 59. Applications for Connected TV, presented in Russia

LG	Panasonic	Philips	Samsung	Sharp	Sony	Toshiba
fidel.ru	BBC iPlayer	Youtube.com	mail.ru	Gallery Player	1tv.ru	Youtube. com
ivi.ru	eurosport.ru	cartoonnetwork.ru	skype.com	NBC Universal	Blip.tv	Own services for content distribution
jv.ru	skype.com	film2home.com	sport-express.ru	Galery AQUOS	concierge.com	
omlet.ru	Youtube.com	funspot.com			dailymotion.com/ru	
ria.ru/riatv/		i-concerts.com			ehow.com	
Russia.ru		screendreamsdvd. com			eurosport.ru	
Tvigle.ru		VideoFutur			rutube.ru	
tvrain.ru		videoland.nl			tnt-online.ru	
vgtrk.com		Zoomby.ru			videodetective. com	
videomore.ru					youtube.com	
vtuner.com						
Youtube.com						

Source: J'son & Partners Consulting

Russian video services which are available as Connected TV video players, are presented by the following sites:

- Online theatres
  - ivi.ru
  - videomore.ru
  - Zoomby.ru
  - Tvigle.ru
  - rutube.ru
  - omlet.ru
- Broadcasting of TV programme
  - Russia.ru
  - tvrain.ru
  - tnt-online.ru
  - vgtrk.com

Consider one of the new projects for Connected TV working on the model of pay per view.

Yota. Yota Play

Project start: July, 2011

Property structure: "Scartel" (Ltd.)

Service type: PPV VOD

Cost: 99 RUB per unit with the access within 48 hours since start of watching

Audience: subscribers of Yota and other networks

Content: there are agreements with Walt Disney Pictures, Sony Pictures, Warner Brothers and Universal. At the moment there are 10 thousand hours of video content, including movies that were just shown in cinemas. Each week, 200 movies are added.

Yota service launched first time in 2009, after commissioning of the first WiMAX networks in St. Petersburg and Moscow. Then there were the contracts for broadcasting music and video with the leaders of Russian and foreign music markets. Video, however, was available for watching only for the owners of the HTC Max 4G smartphone. Yota planned to expand the service to the watched on PC, but the company has had problems with the copyright holders.

Now service is provided to PDAs, computers and televisions with access to the Internet. The company also signed an agreement with Samsung Smart TV and LG Smart TV (Connected TV sets).

The service is integrated with a Facebook network and allows selecting movies via news feed of friends, where you see their opinions and history of views.

In the future they plan to launch SVOD service.

The total investment in the project is 15 million USD by the end of 2012.

2.3.2. Video portals for PC

The classification of Internet video resources for PC

Video portals can be divided into two groups depending on the type of content:

- Professional video:
  - Full-length and short movies;
  - TV show episodes;
  - TV program recordings;
  - Cartoons;
  - other.

In the Russian market there is insignificant number of projects that provide access to full versions of copyrighted video, including HD videos.

- User Generated Content. Projects of this group include such platforms as Video.Mail.ru, YouTube, RuTube, Smotri.com

Table 60. Types of online video

Professional video	User Generated Content video
• High quality, even HD • Playback not only on PC, but also on TV screens and with the help of common DVD/multimedia players, home cinemas • Copyright protection	• Low quality, low definition • Playback on a PC (in browser) • Relatively short length of unit of video content

Source: J'son & Partners Consulting

Video on the Web resources may be represented as the main content component of the portal or as one of the sections/services. The first type of content includes video hosting, such as RuTube, and specialized online stores such as Video.ru. The second group of Web resources may include social networking sites, TV channels, pirate resources (torrent trackers and file sharing).

General classification of participants of online video market is presented in the following table. It should be noted that amateur and professional videos can be represented at the same portal, but the websites in the table are attributed to the video category that predominates in the content base.

Table 61. The classification of online video market participants

Type of portal	Characteristics	Examples	Origin of the content	Business model	Watching mode
Video hosting	Web-resources specialized in sharing, showing and broadcasting of video	YouTube.com RuTube.ru	UGC	Advertising	Streaming only
Online cinema	Web-resources, specializing in video and giving opportunities of online watching of professional video	Tvigle.ru Ivi.ru Zoomby.ru Videomore.ru Tnt-online.ru	Professional video	Advertising	Streaming only
		Now.ru		Subscription	
Internet store, selling video	Internet stores, specialized in selling of video content	Video.ru, Kino.cod.ru, Omlet.ru, Getmovies.ru	Professional video	One time sales, subscription	Downloading + streaming
Internet broadcasting	Web resources, giving opportunities of online watching of TV channels	tvrain.ru webtelek.com, russiantvonline.com, yatv.ru, stb.net.ru	TV programs live	Advertising + Subscription	Streaming only
Sites of TV channels and TV programs	Sites of TV channels, one of the sections of which is recordings of TV programs and/or TV program trailers	1tv.ru, Vesti.ru, Rbctv.ru, Ntv.ru, Tnt-tv.ru, Ctc-tv.ru, Tvc.ru	TV channels content	Advertising	Streaming only
News portals	Sites, containing news video content	Life.ru, Kp.ru	New video content	Advertising	Streaming only
Thematic video	Niche web resources (sport, kids etc.), placing the content of particular subjects	Sportbox.ru, Eurosport.ru, Championat.tv, Sport-express.ru jv.ru	Thematic video, UGC, professional video	Advertising PPV Subscription	Streaming (more often)
Animation video	Web resources, specializing on animation movies	Mult.ru, Antimult.ru	UGC and professional video	Advertising PPV Subscription	Streaming (more often)
Education portal	Web resources, placing educational materials, including videos	Teachvideo.ru jv.ru	UGC and	Advertising PPV	Streaming (more often)

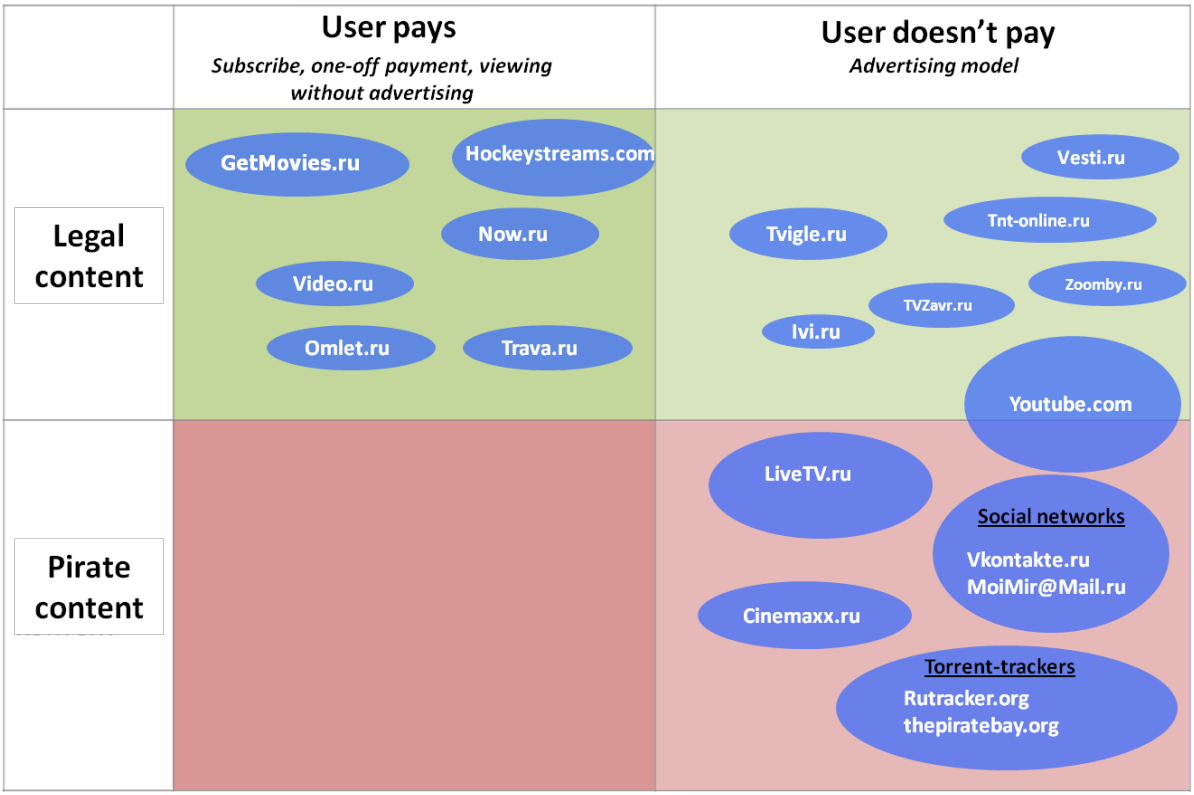
Table 61. The classification of online video market participants					
Type of portal	**Characteristics**	**Examples**	**Origin of the content**	**Business model**	**Watching mode**
			professional video	Subscription	
Social networks	Social networks, giving opportunities for users to place videos	Vkontakte.ru, MoiMir@Mail.ru, Privet.ru	UGC	Advertising	Streaming only
Torrent-trackers	Web-sites with the function of torrent-trackers	Rutracker.org, Lostfilm.tv, Kinozal.tv, Nnm-club.ru, X-torrents.ru, Streamzone.ru, Uniongang.ru	UGC	Advertising, additional paid services for users	Downloading only
File sharing	Web resources, giving opportunities to store and share files, including video	Rapidshare.ru, Slil.ru, Depositefiles.com, Filefactory.com, Webfile.ru, Filepost.ru, Sharing.ru, Ifolder.ru	UGC	Advertising, additional paid accounts	Downloading only

Source: J'son & Partners Consulting

We should separately mention such a world famous aggregator of content as iTunes. There is the iTunes Store in Russia, but it works in a restricted mode: users from Russia cannot buy music and movies, but can acquire applications for iPod touch, iPad and iPhone. This situation is explained by the fact that Apple is not the owner of audiovisual content, the content is owned by record labels and movie companies, which restrict access to it in different countries, including Russia.

Besides that, online video market players can be divided into sites with only legal content and sites with pirated videos.

Fig. 99. The classification of internet portals with video content



Source: J'son & Partners Consulting

Business-models of internet video open systems

There are 4 types of business-models in the open system segment: two types of paid business-models (pay per view and paid Subscription) and two types of free business-models (monetization by advertising and sponsored projects).

Table 62. Business models in the online video market	
Type of business model	**Method of monetization**
Pay per view	• Payment for the video unit (viewing and downloading)
Subscription	• Access to the library
Advertising	• Media advertising • Context advertising
Special projects	• Sponsorship of contests, sections • PR - actions • Branding of sections

Source: J'son & Partners Consulting

According to a survey conducted by the Online Market Intelligence (OMI) in May 2010, young people aged 16 to 24 (29.4%) are ready to pay for quality content without adware. At the same time, nearly half of surveyed refuse outright to consume paid video content.

Table 63. Conditions when user is ready to pay for watching a video (movies, programs) on the Internet	
Answers	**The share of people who agree, %**
I will not pay for watching video in the Internet	49,5
I will pay for video of high quality	25,3
If there is not adware (in any form)	22,3
For video that corresponds to my interest (travel, fishing, animals etc.)	19,7
Only for watching movies	14,5
In case there are actual news videos	12,3
If there is a "chip", funny and unexpected plot twist in a program	5,9
In case the producer is a well-known and respected company	4,4
When there are famous people, people of name	1,9

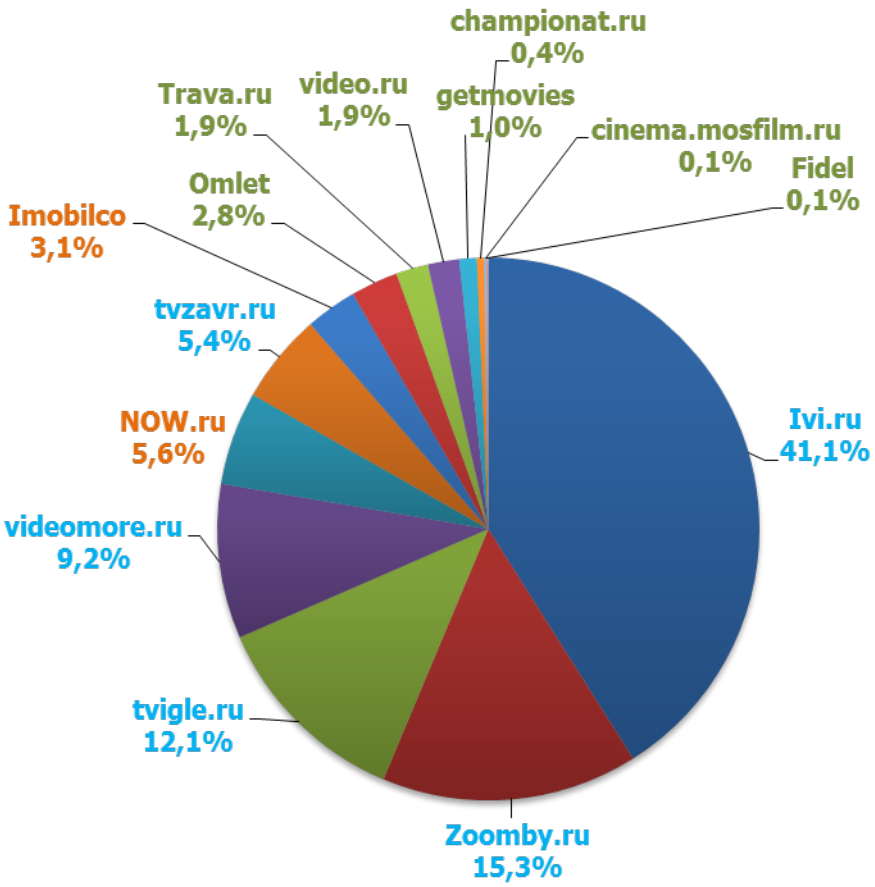
Note: respondent could choose several variants of answers
Source: OMI

Audience of internet video resources for PC

There is a domination of portals that provide the ability to view video on the advertising business-model (free) in the market of open online cinemas.

Among all the portals ivi.ru by audience reach (according to a panel monitoring of LiveInternet - webomer.ru) takes 41.1%. Zoomby, Tvigle and Videomore follow him with a considerable margin. Portals Now.ru and Imobilco, working on a subscription, occupy respectively 5.6% and 3.1% of the market. Each of the pay per view services (Trava.ru by Megafon, Omlet by MTS, video.ru, etc.) cover only less than 3% of the audience.

Fig. 100. Largest online cinemas with legal video by audience reach, 2011



Advertising business-model

Subscription

Pay per view

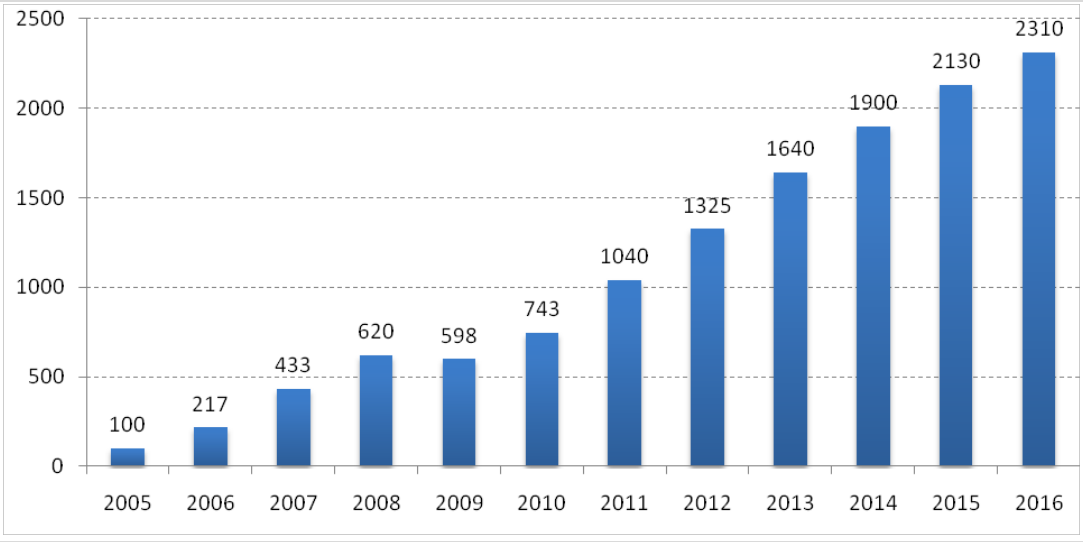
Source: webomer.ru, J'son & Partners Consulting

The market of Internet video resources for PC

Monetization of Internet video portals started relatively recently, in 2006-2007, but it is growing at a rapid pace. In this case, there are two main areas that form the market of video portals: the spread of video advertising and paid content.

The basis for forecasting the market of Internet video advertising in Russia is the Internet advertising market in general. The crisis of 2008-2009 led to a slight reduction in Internet advertising market in dollar terms, while in ruble terms, it grew even in 2009. Since then the situation has changed for the better and the market is steadily growing.

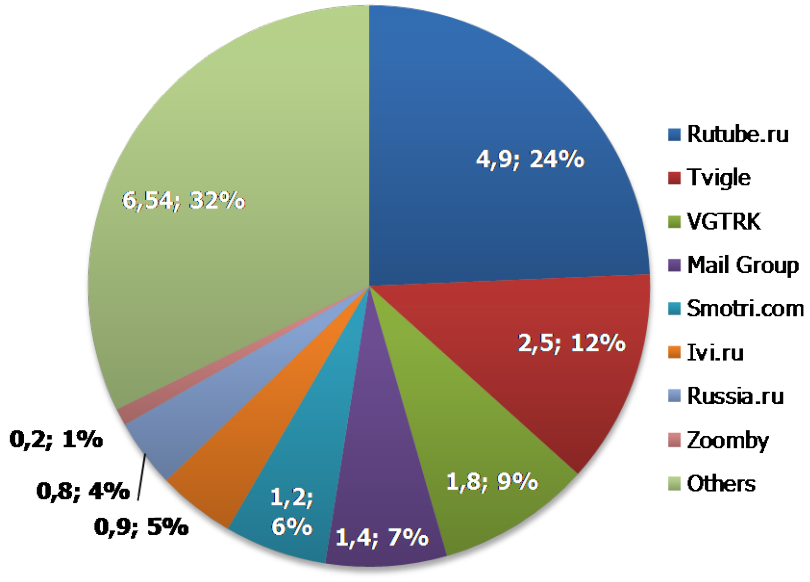
Fig. 101. The forecast of Internet advertising market in Russia, million USD, 2005-2016



Source: J'son & Partners Consulting

According to forecasts of J'son & Partners Consulting, Internet video advertising market in Russia will increase from 2.4% of Internet advertising market in 2010 to 12% in 2016. It corresponds with the gap in share of video advertising in the structure of internet advertising market as a whole of USA indicators for three years.

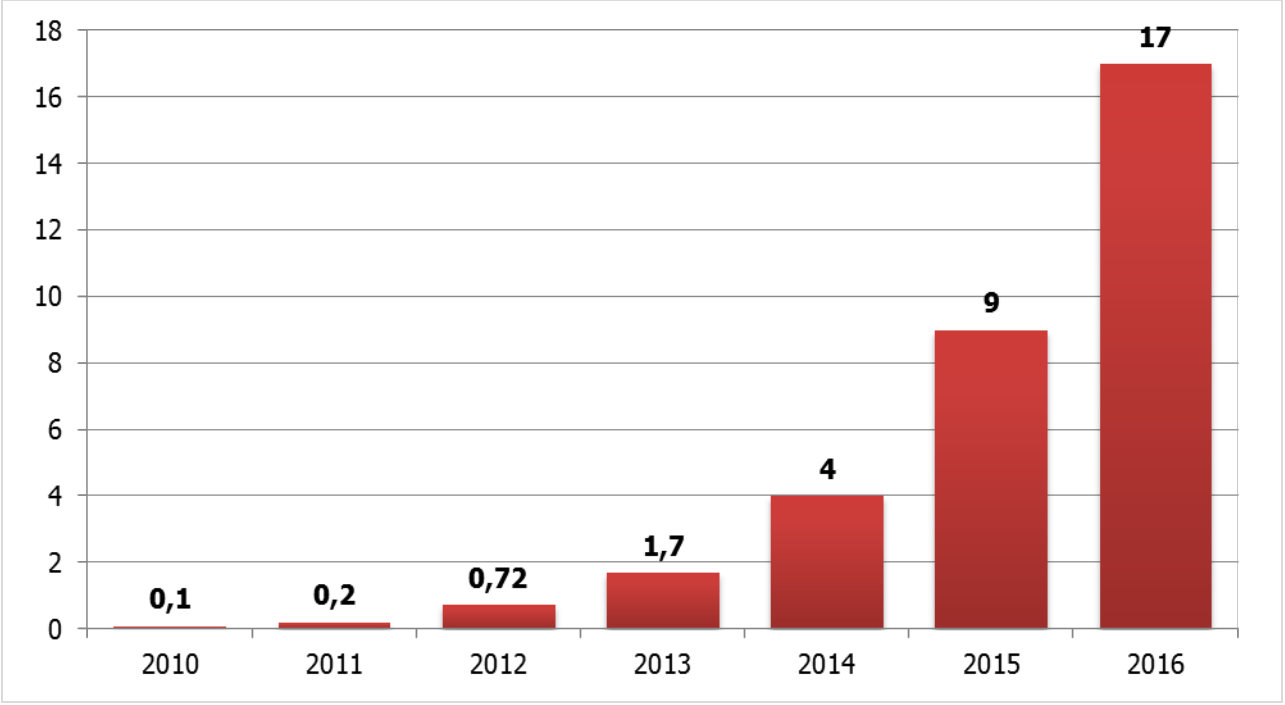
Fig. 102. Video advertising market structure in 2010, million USD; %



Source: J'son & Partners Consulting

The segment of paid video will be able to grow considerably if the main players improve the content and quality of libraries, but it'll hardly reach the same level as in the U.S. and Western Europe. According to J'son & Partners Consulting forecast, it can get close to 17 million USD in 2016.

Fig. 103. Forecast of Web TV market, million USD, 2010-2016



Source: J'son & Partners Consulting

The income structure of downloading or viewing the movie is quite complex. Since the primary method of payment (99%) is via SMS, almost half of the ticket price goes to cellular operators. The second half is divided between the copyright owner and the movie channel.

The government's attempt to combat illegal videos may become an additional external factor that can support the expansion of this market segment. At the end of July, Russian Government proposed creation of a worldwide register[32] of films, music and books. All products will be supplied with digital labels that explain the conditions for use of their content: free, free without copying, copying for a fee, etc. These labels help users to identify by themselves whether they use legal content or violate the law. Moreover, such a register should be established on a global scale because of the openness of the network.

Register will help the copyright holders to keep track of how their works are distributed, and may generally reduce the number of illegal video on the Internet.

[32] Vedomosty 25.07.2011, 135 (2901)

Successful and unsuccessful projects of paid open online-cinemas

Video24.ru

Video24.ru

Project start: October, 2007

Property structure: Central Pertnership

Service type: PPV VOD

Cost: 60 и 200 RUB per unit

Audience: visitors of the portal video24.ru

Content: about 1000 movies and TV series

With the project "Video 24", distribution company "Central Partnership" which owns Russia's largest copyrighted library, first started to sell legal movies and TV series via Internet, using Microsoft's DRM technology. Investment in the project amounted to 1 million USD.

There was a convenient payment system on the site, premiers appeared quickly, but the limitation of the offered films (only releases by "Central Partnership") did not satisfy users in spite of the high-quality content.

In 2009, the portal has ceased to exist.

Nevertheless, this project was the first to attempt legalization of showing the films via Internet.

Fig. 104. Video24.ru

Source: company data

Now.ru

Now.ru

Project start: March, 2011

Property structure: UAB "Gazprom-Media Holding"

Service type: PPV VOD, SVOD

Cost:

PPV: 50-100 RUB per movie

SVOD: 299 RUB for 10 days

499 RUB for 30 days

1199 RUB for 90 days

18+: 299 RUB for 10 days

Audience: subscribers and visitors of the portal now.ru

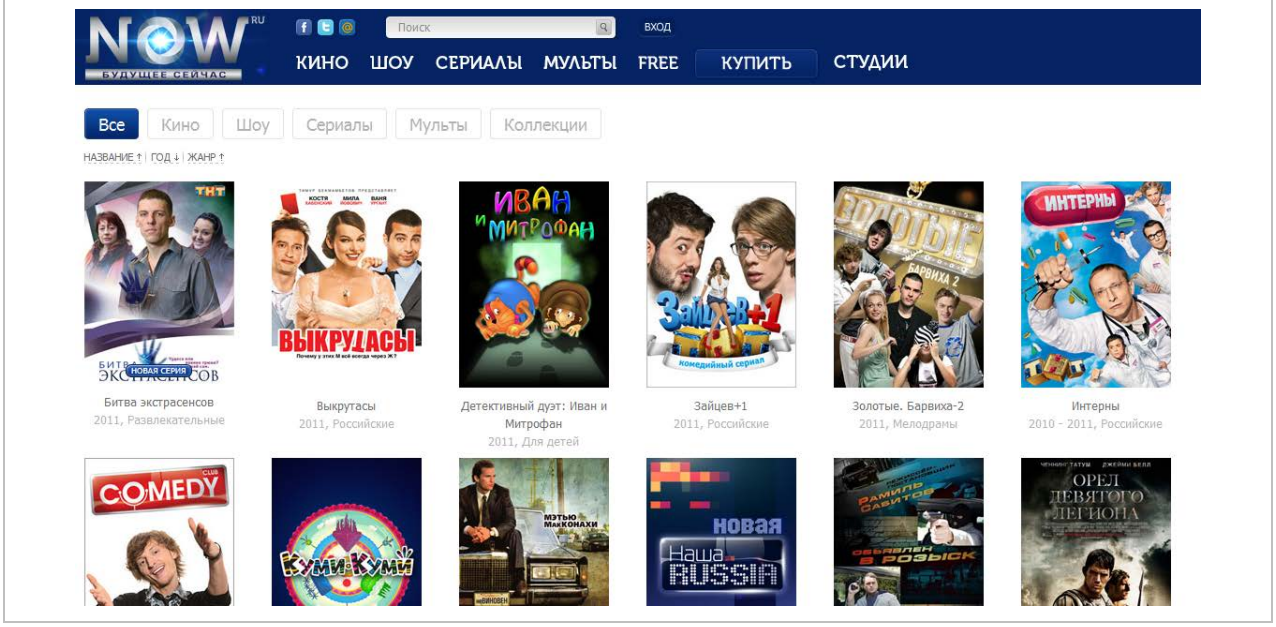
Content: Content for cinema is licensed by Sony Pictures, Disney, Warner Bros, Playboy, Lions Gate, BBC, Nickelodeon and MTV. There is an exclusive access to the video content of the companies of the "Gazprom-Media Holding". 30 thousand hours of video are planned to appear. Among the Russian users domestic content is more popular.

In the Russian market, Now.ru has to compete with pirated videos and free online resources with the legal video content, for example, Ivi, Tvigle, when the only difference between them and Now.ru is showing ads.

The company describes its competitive advantage as being the only site that has a great amount of well-known movies that are not shown on the portals with legal content using the advertising model.

As of May 2011, approximately 7% of the users buy a subscription after registering on the site, one-third of the users return to the site for more than ten times in a month, while 45% have repeated purchases.

Fig. 105. Now.ru



Source: company data

Thanks to Now.ru, for the first time in Russia films will be legally available online earlier than in cinema theatres. On 22 of July, 2011 the portal has signed an agreement with the company "Russian World Studios", which is the largest private domestic film market representative. The first premieres are scheduled for the second half of September.

This alternative form of movie distribution would significantly increase the audience of the service, due to Internet users. And for the viewers, such shows are even cheaper: the cost of a ticket for watching on the site is about 50-100 roubles.

TNT TV series already run on the portal earlier than on terrestrial TV.

video.ru

video.ru

Project star: July, 2007

Property structure: Company "DVN, Inc" – 99,01%, "VID" (Ltd.) – 0,99%

Service type: PPV VOD, SVOD

Cost:

PPV: 15-40 RUB per unit.

SVOD: 499 RUB per month.

Audience: subscribers and visitors of the portal video.ru

Content: movies, series, performances, sport lessons, concerts, etc.

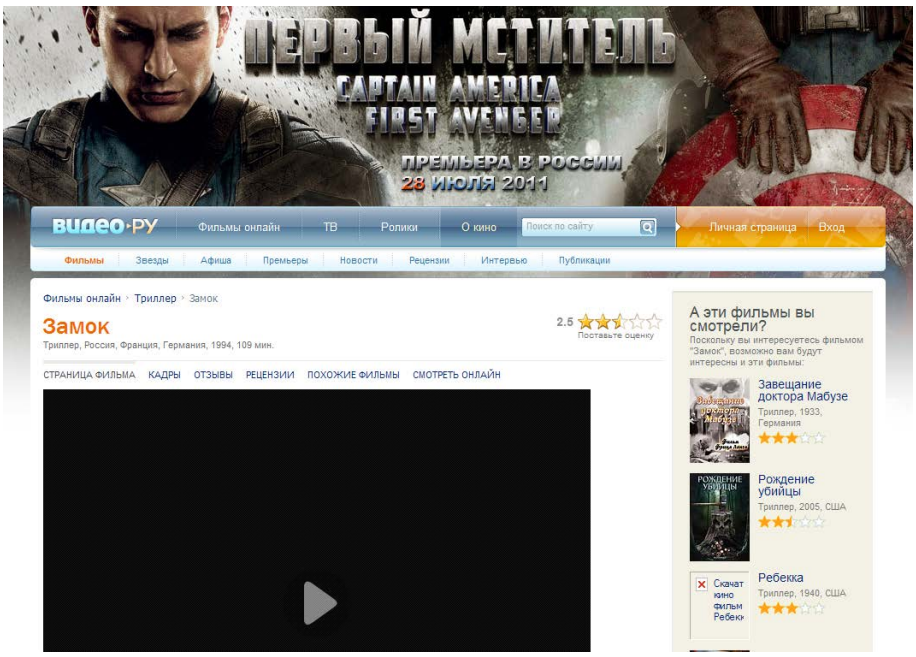
The portal started as a web blog about the movie. Video.ru became the first portal to offer video content on the terms of the unlimited access.

Modern film industry is practically absent, the site is intended for adult audience.

Given that there is a free quality alternative, the site could lose the audience.

Video.ru is being visited by more than 100 thousand users per day, the sales are about 10 thousand digital copies per month.

Fig. 106. Video.ru



Source: Company data

GetMovies.ru

GetMovies.ru

Project start: 2006

Property structure: X-Media Digital

Service type: PPV VOD, SVOD

Cost:

PPV: 16-107 RUB per unit

SVOD: 199 RUB per month

Audience: subscribers of GetMovies.ru

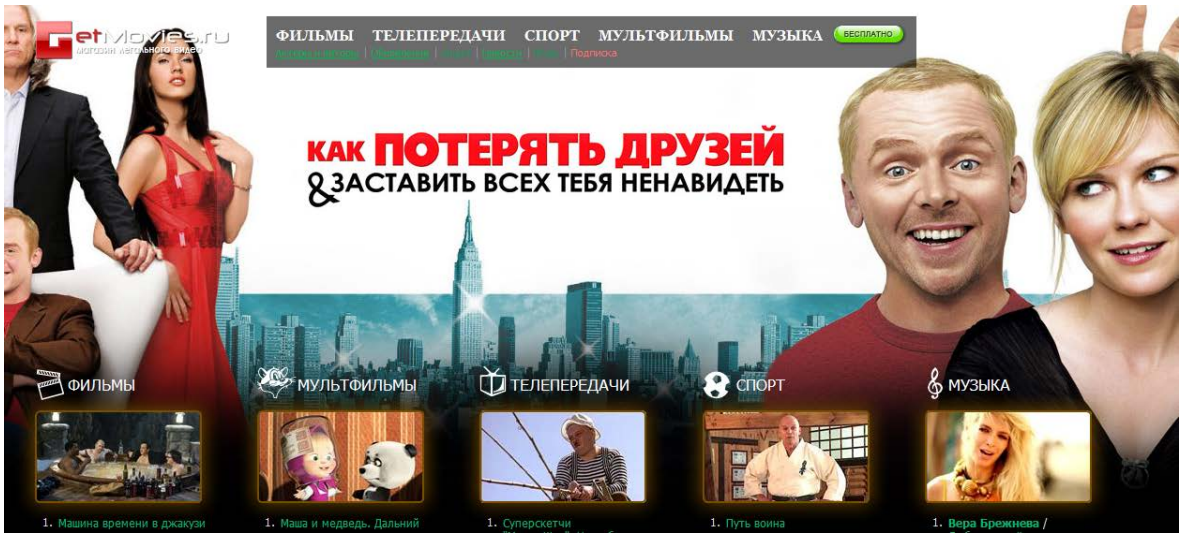
Content: movies, TV shows, sports, cartoons, music and 4 thousand pieces of content. Total length is more than 1,500 hours.

The first full-fledged legal digital video store in RuNet. Daily audience is 50,000 users.

The only project that offers HD Ready video.

The exclusive content is well presented: a collection of Bollywood movies, a lot of movies in their original language (German, English, Spanish, French, Italian, Korean).

Fig. 107. GetMovies.ru



Source: company data

Table 64. The comparison of online videoportals projects for PC						
Provider	**Start year**	**Content delivery technology**	**Service type**	**Cost RUB**	**Service status description**	
Video24.ru	2007	Internet	PPV	60-200	The portal is closed mainly because of unsatisfactory demand for a variety of content	
MTS (Omlet.ru)	2009	internet, cellular network, connected TV	PPV	35-75	Diversity of content: exclusive, classic, modern cinema	
Megafon (Trava.ru)	2010	Internet, cellular network	PPV	25-40	Using cloud computing technology allows to reduce the cost of content	
			SVOD	5 RUB per day		
Now.ru	2011	Internet	PPV	50-100	30% of users return to the site for more than ten times during the month, 45% made a purchase for the second time	A lot of unique content, premieres are available earlier than in cinemas
			SVOD	299/10 days 499/30 days 1199/90 days 18+: 299/10 days	7% of users buy a subscription immediately after the registration on the site	
video.ru	2007	Internet	PPV	15-40	A lot of content, but not exclusive	
			SVOD	499/month		
GetMovies.ru	2006	Internet	SVOD	199/month	HD Ready video, exclusive content	
	The service is successful					
	The service is closed					

Source: J'son & Partners Consulting

Overview of major projects has shown that it is profitable to rely on high-quality, exclusive video content. This allows competing with free alternatives.

2.3.3. Video for smartphones in open system

Mobile versions of video portals work, as a rule, on a pay model: subscription or pay-per-view. Difficulties of using the free, advertising model appear due to the following reasons:

- Because the mobile devices have technical characteristics , different from PC, the standard advertising formats cannot be used.
- Cell phone owners prefer to download media to a mobile device, for viewing it later in offline mode. It obliges vendor to acquire the rights, which are much more expensive than a rights to a streaming video.
- Video has to be technically adapted for a particular device and its OS.
- Video viewing generates large volumes of expensive traffic (in comparison with the cost of PC traffic).

Reasons mentioned above cause the creation of specialized mobile video portals by large telecom operators. Advantages of these operators over distributors of video content to PC are:

- Aggregation of significant subscriber base and access to channels of effective communication with them;
- Operators provide free or preferential tariff for traffic for subscribers of their own network as a premium service;
- The use of video portals as a mechanism of marketing promotion of services, information channel and formation of the audience's loyalty;
- The fact that operators offer Pay TV services as a separate business direction allows them to aggregate a big amount of video content.

Projects mobile portals with video in open systems

Omlet.ru

Omlet.ru

Project start: May 2009

Property structure: JSC "MTS"

Service type: PPV VOD

Cost: 35 to 75 RUB

Audience: portal visitors

Content: more than 2,000 feature films and 4,000 episodes of TV series and TV programs. 40% of the content is high-quality video from the world's studios to satisfy the tastes of both adults and young audiences.

Available in browsers, mobile phones, LG Smart TV (since March 2011).

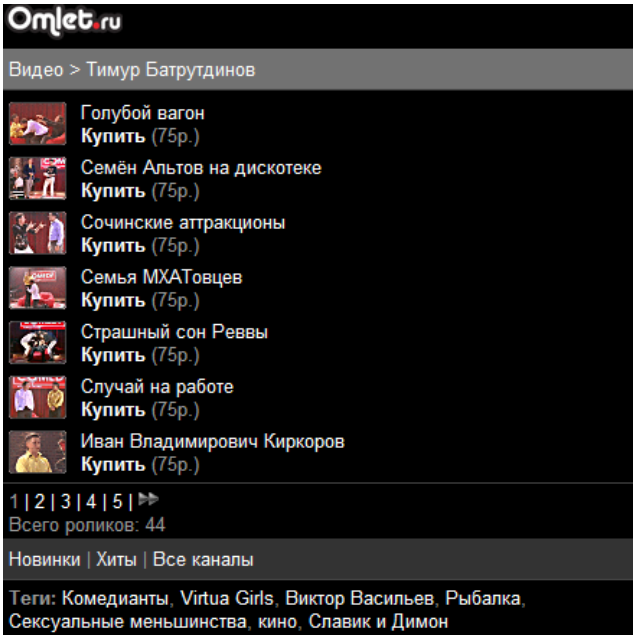
Implementation of the project required an investment of 10 million USD, and the launch of the resource costed 1 million USD.

Total Omlet audience in 2010 tripled, and the number of views increased 10 times.

In February 2011 the portal had an agreement with "Central Partnership" film company, through which over 700 popular films will be available to the portal , the rights are owned by

the largest Russian film company. Thus Omlet.ru was the only Runet web site, providing the possibility of online-broadcasting and purchase of the content on the VOD model without advertising.

Fig. 108. Omlet.ru



Source: company data

Trava.ru

trava.ru

Project start: June, 2010

Property structure: JSC "Megafon"

Service type: PPV VOD, SVOD

Cost:

SVOD: 5 RUB per day

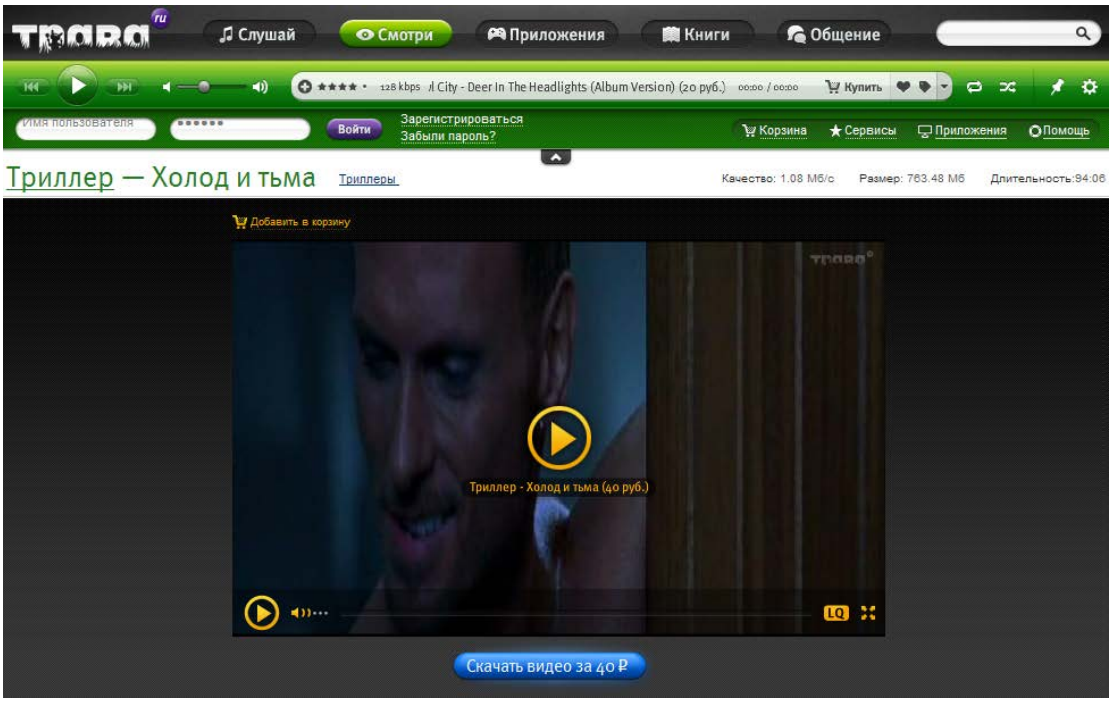
PPV: 25-40 RUB

Audience: all visitors of the portal

Content: anime, action, video for kids, educational video, more than 3000 units of music video.

Multimedia portal of licensed entertainment content "Trava.ru" is available on browsers and all popular mobile platforms. Project is based on "cloud technology".

Fig. 109. Megafon. Trava.ru



Source: company data

Resume

Mobile portals that provide open access to the videos are only adapted versions to the smartphone containing the same content and functionality as the PC versions.

2.4. Forecasts of Non-linear TV development in Russia by 2015

2.4.1. Long-range business models and technology development scenarios

The technological development of devices for distribution of video content leads to their convergence. Regardless of the type – set-top boxes for IPTV, PC or mobile devices - the content will be available on any of them. The result is a common universal environment of content distribution. In particular, the delivery of content to any internet-connected device (on a commercial base) is provided by OTT (over-the-top) technology. Its use implies the exclusion of operator (satellite, cable) from the delivery chain, which reduces the cost of the final product and eases access of content providers to the market. This technology is in demand in Russia because it allows providing a wide audience and video broadcasting in the national language.

The transition to digital television in Russia reveals wide possibilities of involving the user in what is happening on the screen. Interactive TV creates new advertising formats, better adapts content, which is displayed to the user for his requests and selects video services, focused on his preferences in a movie. Technologies that are already popular in Europe are represented in Russia and are expected to appear soon in the Russian market.

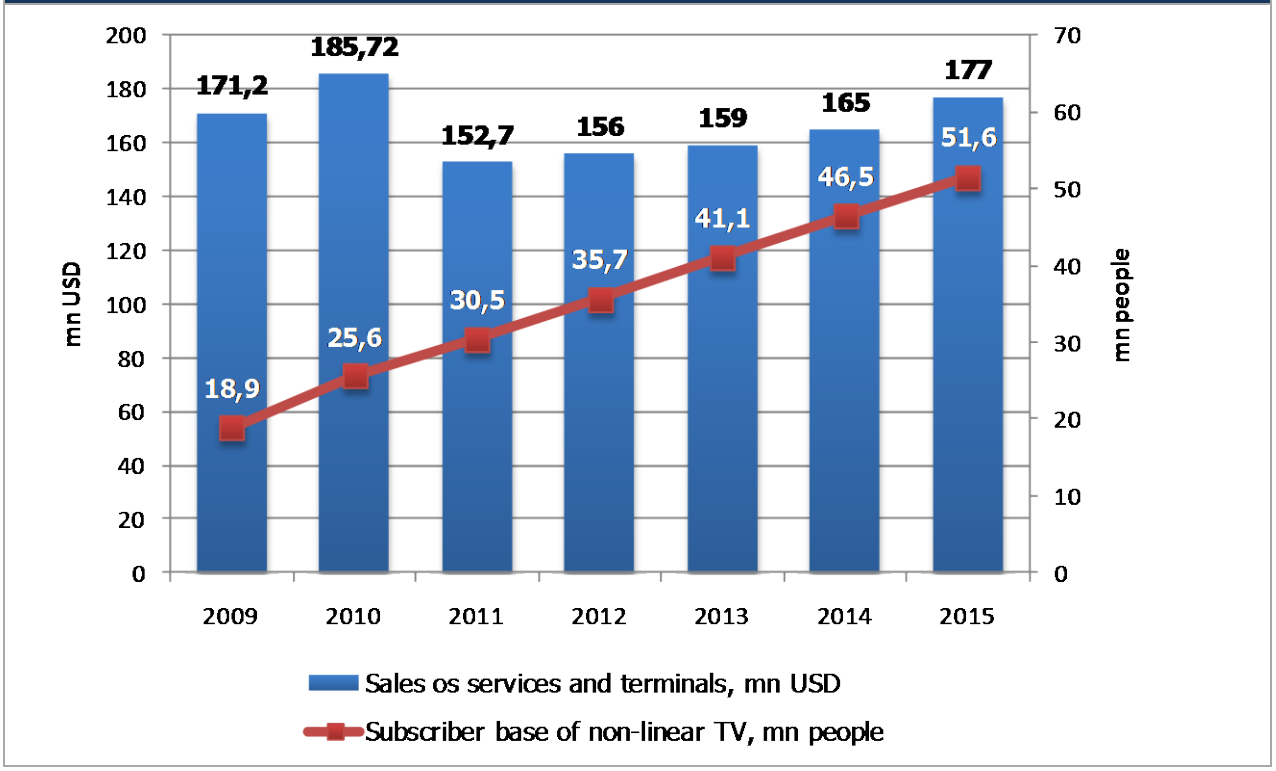
In the West, the technology of online shopping is being developed: a Danish online store www.buyfriend.dk, for example, allows you to choose clothes by clicking on areas in the video. This form of advertising is a legalized version of product placement, significantly increases the attendance of the site. But it's mostly realized by the large brands, as the cost of video is quite high and is more like image finding.

Targeted services can get a wide development. For example, special video widgets connected with a watched movie, pick information about actors, fragments of the movie on YouTube; they also introduce the sponsors of the show, and provide opportunity to order their products.

2.4.2. Quantitative estimate of subscriber base and revenue from selling of service and non-linear TV terminal equipment

Profits from the sale of equipment play rather big role in the structure of revenues from non-linear TV - in 2010 they amounted to 186 million USD. At the same time, revenue from the sale of non-linear TV services in the same year amounted to only 0.4% - 0.8 million dollars. This is primarily due to the newness of the format, poor consumer culture of paid digital content and the absence of its broad relevant base.

Fig. 110. Forecast of subscriber base and revenue from the sale of services and terminal equipment for Non-linear TV, 2009-2015



Source: J'son & Partners Consulting

2.5. Non-linear TV video content

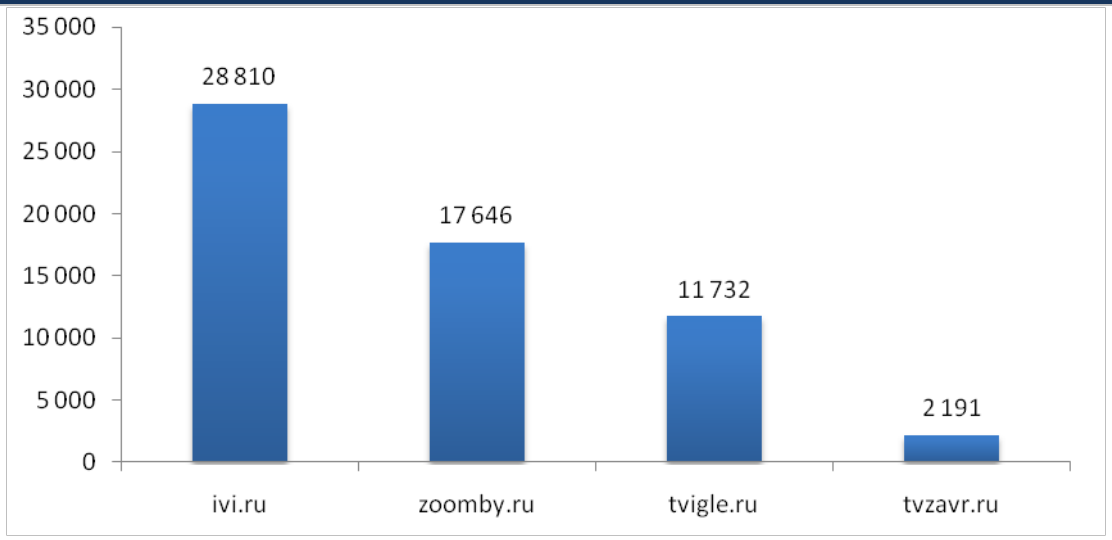
2.5.1. Video content supply analysis

The main asset of the professional video portal[33] is its content base. The main factors influencing the development of content base are:

- High cost of acquiring the rights for licensed video
- Intense competition for audiences, suggesting competition for content and significant investment to increase the content base
- Partnership programs with major content producers

The content of video portals is often stipulated by relationships with shareholders - large media companies - and other market players. For example, zoomby.ru uses VGTRK content, tnt-onlinear.ru TNT content, videomore.ru CTC Media content. In addition, individual players, such as ivi.ru, secured a large portion of their libraries with certain types of short content - in this case, music videos (64% of the library of ivi.ru).

Fig. 111. The total volume of the content library of the largest players, units, June 2011

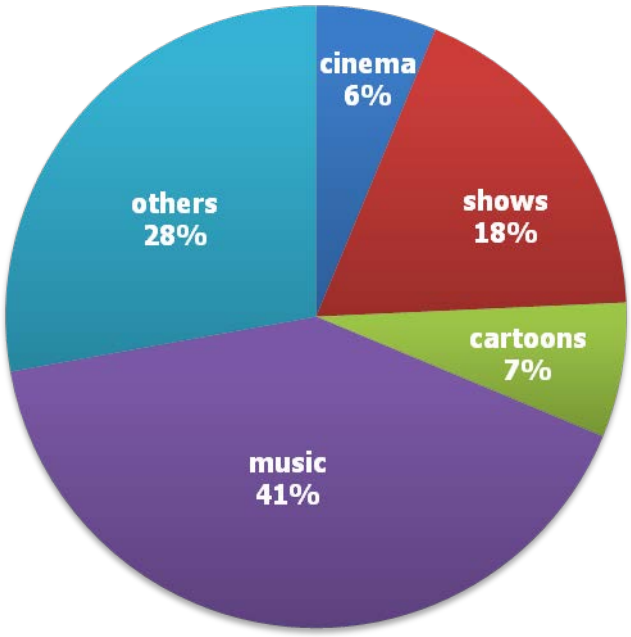


Source: J'son & Partners Consulting

The overall structure of the professional video library at the end of June 2011 is shown in the diagram below:

[33] In 2.5.1 considered only professional resources, which use the advertising model. Other online video services are considered in other sections of the report

Fig. 112. Structure of the professional video library by type of content, June 2011

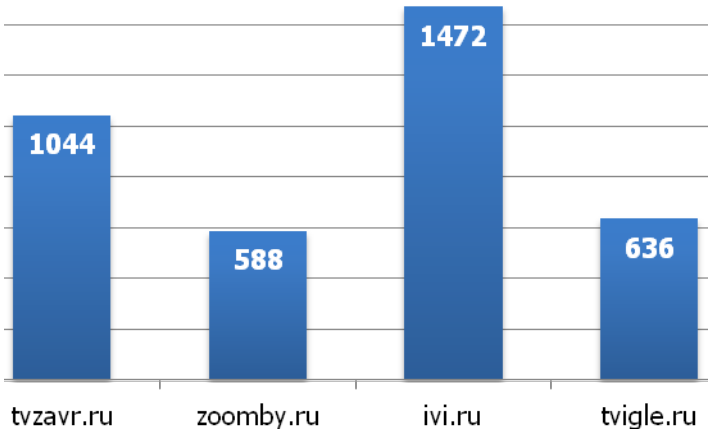


Source: J'son & Partners Consulting

The major types of content of various resources are movies, TV shows and cartoons. A comparison of different content bases of players by type of content is provided below.

The most extensive video content base belongs to ivi.ru:

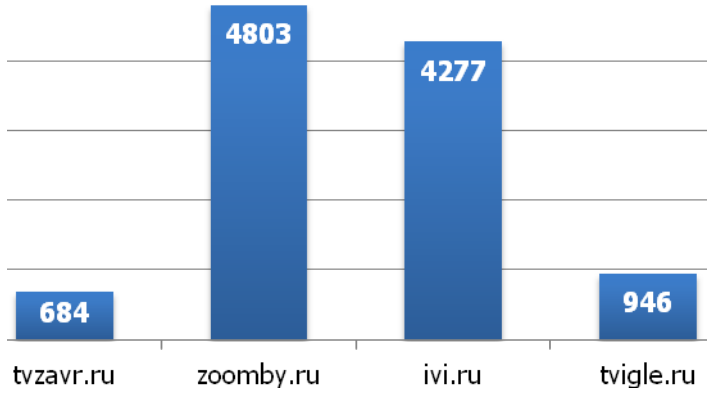
Fig. 113. Number of films on professional portals, units, June 2011



Source: J'son & Partners Consulting

Leaders by total amount of TV shows are ivi.ru and zoomby.ru:

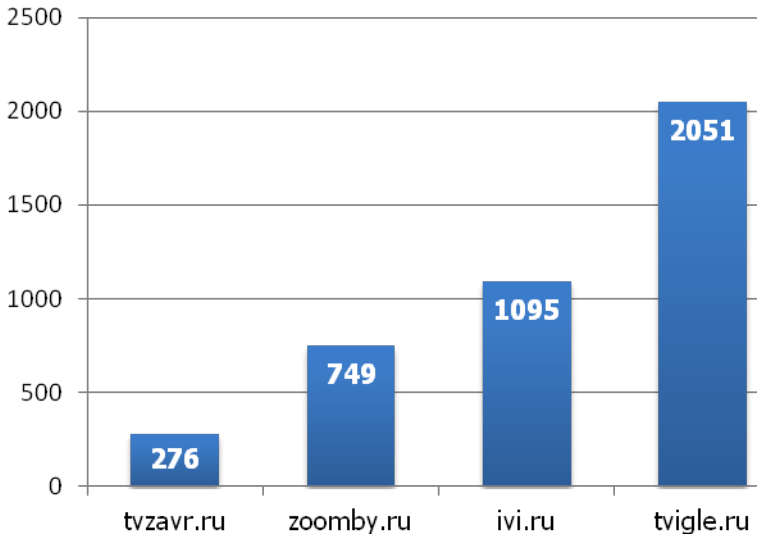
Fig. 114. Number of TV series on professional portals, units, June 2011



Source: J'son & Partners Consulting

Tvigle.ru is a leader by a head in the cartoon content category.

Fig. 115. Number of cartoons on professional portals, units, June 2011



Source: J'son & Partners Consulting

Despite the fact that music has a greater share in the structure, this section is not the most popular and demanded. The popularity of music videos is stipulated by the short length and price availability of such content. In some cases the music section is more than the half of the content on the site, because media holdings (distributing content via web resources) specialize in creating the music videos.

It is important not to forget that the basic types of content shown above are not exhaustive for any of the video resources. Among other types of content the most common are:

- Cooking programs (resources tvigle.ru, ivi.ru)
- Video lessons (on the resource tvigle.ru)

- Shows
- TV programmes
- News
- Sport

2.5.2. Video content market growth factors

Developing the necessary technical infrastructure is the main factor that contributes to the growth of video content market. The main factors of this group are:

- The spread of broadband access as a way of improving the accessibility and convenience of viewing content online
- The availability of digital cameras, the proliferation of mobile phones equipped with digital cameras

Economic factors

- A significant reduction in tariffs for the broadband access market over the past 5 years has made the video portal services available for most users. As a result of market developing and improving the level of competition there is a smooth decrease in the average revenue per user (ARPU). For example, the level of ARPU in 2006 was 410 RUB per month. And in the middle of 2010 it is 300 RUB per month.
- Free access to video content - the main factor influencing the popularity of Internet portals
- The possibility of reducing the cost for software and hardware as a consequence of technological progress

Social factors

- The growth of Russian Internet audience activity - at average, Russians are browsing 97 units of video, spending on it approximately 11 hours per month[34]
- Positioning of Internet video as an entertainment video - 40% of users are daily browsing the entertainment online video

Legal factors

- The reduction of available television advertising time in accordance with the advertising laws on TV[35]
- Tougher measures to protect copyright in connection with the integration of Russia into the global information space will increase the share of legal professional content in the Internet on video portals and would facilitate the distribution of foreign video content

Commercial factors (business trends)

- The last two years have witnessed a tendency media holdings and television structures to create their own web-resources for monetization of current and future video content and aggregation of their loyal audience
- All major advertising platforms are now engaged in the implementation and development of their own video content, developing common standards for the placing of video content and video advertising (e.g., proper treatment of hits, duration and rotation of the videos, the technical requirements for creative ideas, etc.)

[34] comScore Video Metrix, may 2011

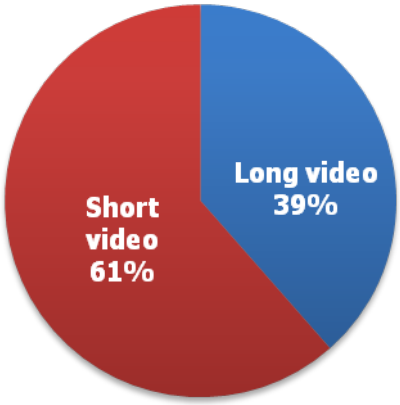
[35] Duration of the ad block is not more than 4 minutes and the total volume of advertising is not more than 12 minutes per hour, the Federal Law "About advertising", 01/07/2006

Thus, Russian market has a large number of factors for the growth of professional video content.

2.5.3. Analysis of viewer preferences by type of content

Video content can be divided into short (up to 20 minutes: users videos, stories, news programs) and long (more than 20 minutes: movies, TV shows).

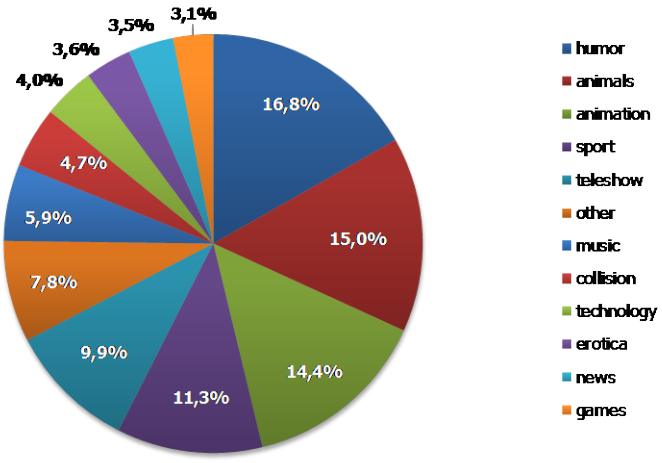
Fig. 116. The popularity of video depending on its length, June 2011



Source: J'son & Partners Consulting

Users prefer to watch short videos. Nevertheless, each user may watch short and long content. In segment of short video the most viewable are humour videos, video with animals, and animation.

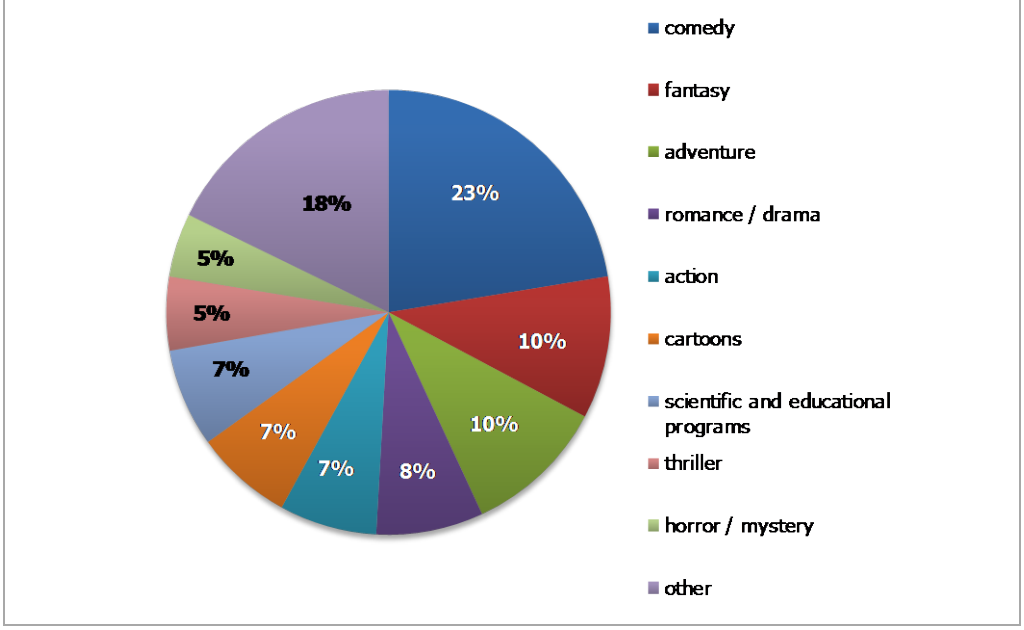
Fig. 117. Distribution of short video by subjects, 2011



Source: players' data, J'son & Partners Consulting

Leader in long video views is comedy genre. The second place is divided between adventure and fantasy genres. Actions, dramas, love stories, cartoons and science-fiction videos have almost equal shares.

Fig. 118. Distribution of long video by genres, 2011



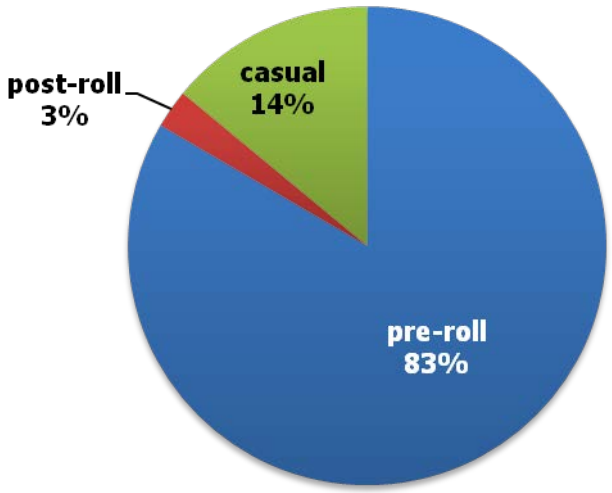
Source: players' data, J'son & Partners Consulting

Thus, the undisputed leaders by users' preferences among both long and short video are comedy and animation videos.

2.5.4. Review of client behaviour and advertisement viewing preferences

CTR (click-through rate) that is the percentage of clicks on an ad for certain number of shows, is a telling indicator for analyzing the viewers' preferences in watching video advertisements. CTR of video advertising is 5-6 times higher than CTR of advertising banner.

Fig. 119. Shares of clicks during video advertising, 2011



Source: J'son & Partners Consulting

The most effective running time of the pre-roll is 5-10 seconds. At a lower running time, user gets less information about the advertised product or service. When running time is more than 5 seconds, there is a significant increase in CTR, which indicates an increase in interest from the audience to the advertised product. In addition, the quality of transitions is preserved, as more than 75% of all transitions happen when pressing on the button "To the advertiser's site". When running time is more than 10 seconds, the audience often does not watch advertisement to the end.

Effective running time of post-roll is 15-30 seconds. Due to this running time ad does not bother the viewer, and he gets the maximum amount of information about the advertised product or service.

The ads (pre-rolls) of the following categories of advertised products and services showed a high CTR:

- Food (7,4%)
- Movies and entertainment (6,8%)
- Automobiles (6,7%)

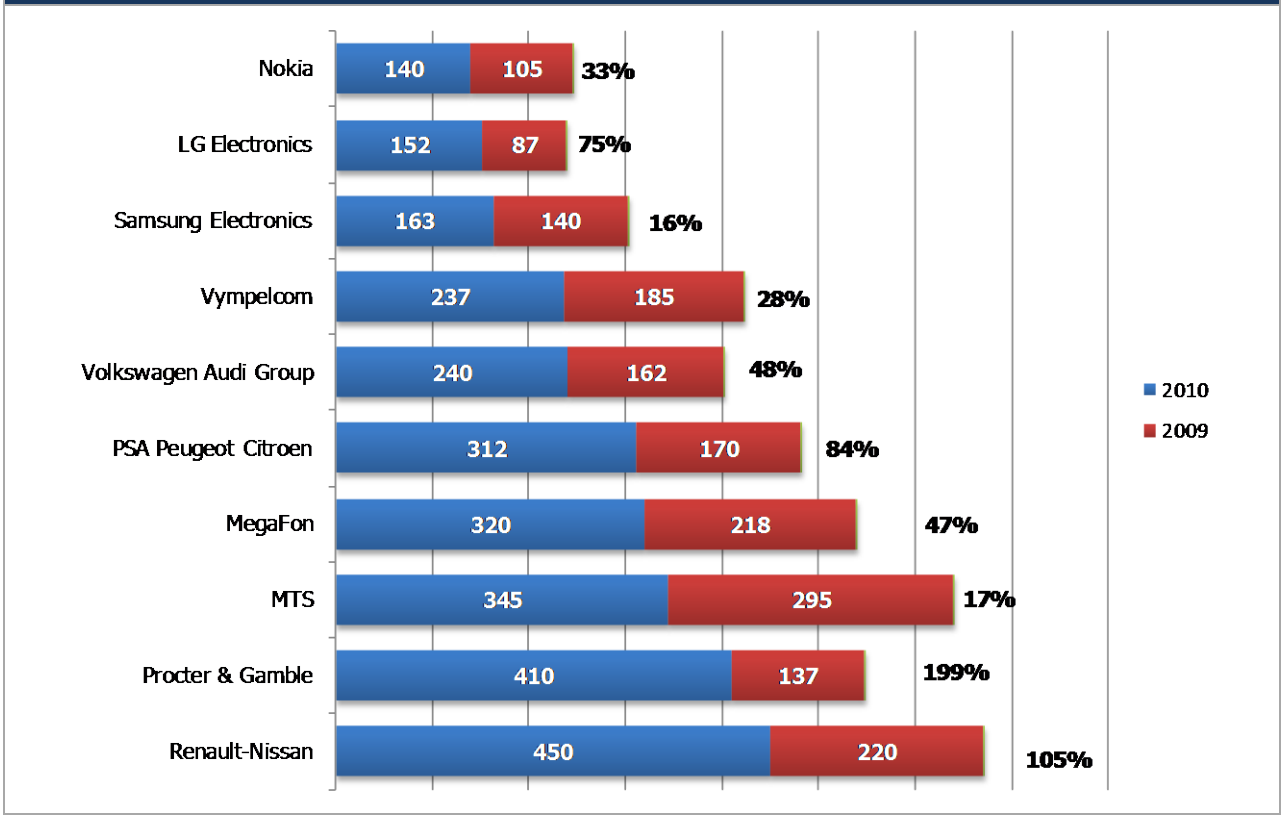
The highest percentage of full viewing of pre-rolls was in the following categories of advertised goods and services:

- Clothes and shoes (83%)
- Drugs, biologically active supplements (75%)
- Automobiles (68%)
- Cell phone manufacturers(68%)

2.5.5. Analysis of advertiser's switching to new technological platforms from the traditional ones

In comparison with 2009, online video advertising market in 2010 showed more than twofold increase - from 9.4 to 20.3 million US dollars. This fact clearly indicates an increase in the interest of advertisers to the possibilities of online video advertising, especially in connection with a higher CTR than in other advertising formats. Among the most active sectors there are telecom, FMCG and automobiles.

Fig. 120. The largest advertisers of the media online advertising segment, million RUB, 2009-2010



Source: TNS Media Intelligence, J'son & Partners Consulting

The strengths of online video advertising and features, attracting a big amount of advertisers to this format, are:

- Very high level of CTR in comparison with other video advertising formats, which amounts to 5-23% depending on the form of video;
- The absence of audience irritation when watching advertisement due to the novelty of format;
- Unique and demanded content, available at video portals which aggregate a significant audience;
- Opportunity of targeted placement in various thematic content that is demanded among various segments of targeted audience;

- Novelty and demand for format;
- Easy convertibility of TV videos.

Factors that discourage advertisers from active transition to online video advertising are:

- Relatively high prices for video advertising in comparison with media and context ones;
- Small amount of platforms for placement: in mid 2010 there were less than 120 platforms for placement of online video advertising;
- Novelty and lack of study of the format;
- Small amount of analytic data, provided by sales-houses and platform owners, which complicates deep media planning;
- Special features of the placement format that unlike media and context advertising, requires a big creative component for creation of the advertising unit.

According to market experts, the online video advertising is one of the most popular advertising formats in 2011, providing advertisers and users with wide interactive opportunities. Nowadays, video advertising in Russia is in its early stages of development: in the next few years we can expect new interactive formats that allow users to interact with the viewed content, change the sequence of events, integrate information from a user profile on social networks, and target video message in maximum details. Also, online video advertising is a direct “successor” of television advertising, which share in the advertising market is reduced. This fact may constitute grounds for conflict of interests of different business structures, both within a single holding company, and in the whole industry. However, the problem of the transition of television advertising to the Internet can be solved with the opening of video portals by the owners of TV channels or media holdings involved in the full cycle of television production.

3. ANNEXES

3.1. Glossary

2G/ 3G/ 4G – Second/ Third/ Fourth generation of mobile telephone services

Broadcaster - Russian legal entity engaged in the formation of radio channel or TV channel and distributing it in the prescribed manner on the basis of a license for television broadcasting, radio broadcasting

CDN – Content Delivery Network

Closed TV system - system of non-linear TV, in which the service is delivered to the subscriber, concluded the contract with the MSP

Conditional-free TV (in Russia "Social TV ") is analogue cable TV or terrestrial TV with common antenna. People pay some money (usually less 2-3 USD per month) for technical support and receive some free channels (usually less 8-12)
Conditional-free TV = Free TV + Technical Support
Pay TV = Social TV + Pay Channels (usually package)

Digital dividend - the spectrum made available over and above that required to accommodate the existing analogue television services in a digital form in VHF and UHF.

DTT - Digital terrestrial television

DVB (Digital Video Broadcasting) - European standard for digital broadcasting of satellite television (DVB-S, DVB-S2), cable television (DVB-C, DVB-C2), terrestrial television (DVB-T, DVB-T2), mobile television (DVB-H), etc.

GHz - Gigahertz

High-definition television (HDTV) - video that has resolution substantially higher than that of traditional television systems (standard-definition TV, or SDTV, or SD). Today HDTV is digitally broadcast using video compression.

Household (HH) – economic unit which is equal to 2,7 persons

IPTV (Internet Protocol television IPTV) - a system through which Internet television services are delivered using the architecture and networking methods of the Internet Protocol Suite over a packet-switched network infrastructure (such as the Internet or other access network).

Linear audiovisual services - broadcast mode, where MSP with a TV schedule determines the broadcast time of a particular TV program.

Media service provider (MSP) – the natural or legal person who has editorial responsibility for the choice of the audiovisual content of the audiovisual media service and determines the manner in which it is organized.

Multiplex - a group of digital TV or radio channels that are mixed together for broadcast.

Non-linear audiovisual services - television broadcast mode, where the customer determines himself the broadcasting time of particular program of his individual request from a list provided by the MSP ((VOD, catch-up TV in Europe).

Open TV system - system of Non-linear TV, where the free access to video content can be received by any user.

OTT (Over-the-top content) - video signal delivery on the user's console (computer, mobile phone) by the uncontrolled Internet network unlike the IPTV, which are provided through a managed network controlled by an operator with a guaranteed QoS (Quality of Service).

Regional (interregional) mandatory public channel - the channel, which broadcasting by the network provider is mandatory throughout the territory of one or more subjects of the Federation.

Set-top-Box (StB) – a television device (TV-receiver) that converts signals to viewable images.

Smart TV devices - TV sets, digital TV receivers, Blu-ray players, game consoles and similar devices with built-in Internet access.

TV channel, radio channel - formed in accordance with the broadcasting schedule (program schedule) and coming out (broadcast) at a constant name (title) and at specified intervals set of TV and radio programs, and (or), respectively, other audio-visual, audio messages and materials.

UHF - ultrahigh frequency

Universal License - license giving the right to broadcaster, who belongs to the editorial staff of TV channel or radio channel, to distribute radio channel or TV channel throughout the Russian Federation in any media broadcasting, including terrestrial broadcasting, satellite broadcasting, cable broadcasting.

VHF - very high frequency

VOD (video on demand) - television transmission mode, where the consumer determines the translation time of a particular program from a list provided by the media service provider (MSP).

3.2. A directory of main broadcasting companies and main TV production companies in Russia

Broadcasting companies

JSC "Channel One"
127 000, Moscow, Akademika Koroleva st., 12
Tel., fax: (495) 617-77-25, 615-19-39
e-mail: info@1tv.ru
www.1tv.ru

TV channel "Russia 1"
125124, Moscow, Shabolovka st., 37
Tel., fax: (495) 624-63-74, 234-89-73
e-mail: info@rutv.ru
www.rutv.ru

TV channel "Russia 2"
125040, Moscow, 5th Yamskogo Polya st., 19-21
Tel., fax: (495) 924-63-74, 250-05-06

TV channel "Russia K"
123995, Moscow, Malaya Nikitskaya st., 24
Tel., fax: (495) 780-56-01
e-mail: pr@tv-culture.ru
www.tvkultura.ru

TV channel "Russia 24"
125040, Moscow, 5th Yamskogo Polya st., 22
Tel., fax: (495) 221-94-81, 257-31-92
e-mail: info@vesti.ru, vesti24@vesti.ru
www.vesti.ru

JSC "Telekompaniya NTV" (TV channel NTV)
127427 Moscow, Akademika Koroleva st., 12
Tel., fax: (495) 725-51-03, 725-54-00
e-mail: info@ntv.ru,
www.ntv.ru

JSC "TNT-Teleset" (TV channel TNT)
127427 Moscow, Trifonovskaya st., 57, block 3
Tel., fax: (495) 783-30-00, 783-00-00, 783-00-01, 783-30-34
e-mail: reception@tnt-tv.ru kdolgopolova@tnt-tv.ru
www.tnt-tv.ru

UAB "Set Televizionnyh Stanciy" (TV channel CTC)
123298 Moscow, 3rd Horoshevsaya st., 12
Tel., fax: (495) 797-41-00, 797-41-01
e-mail: ctc@ctc-tv.ru
www.ctc-tv.ru

UAB "Noviy Kanal" (TV channel "Domashniy")
123298 Moscow, 3rd Horoshevsaya st., 12
Tel., fax: (495) 797-41-00, 797-41-01
e-mail: info@domashny.ru
www.domashny.ru

TV channel “Peretz”
125284, Moscow, Leningradsky Prospect, 31A, p. 1, "CTC Media"
Tel.: (495) 785-63-47
e-mail: RPaushu@ctcmedia.ru
www.peretz.ru

Media holding REN TV (TV channel REN TV)
119847 Moscow, Zubobsky blvd., 17, bld. 1
Tel., fax: (499) 246-59-33, 246-06-55, (495) 937-61-70
e-mail: site@ren-tv.com press@ren-tv.com
www.ren-tv.com

JSC "Teleradiokompaniya "Petersburg – Channel 5"
191023, Saint Petersburg, Italyanskaya st., 27
Tel., fax: (812) 315-37-45, 234-38-46
e-mail: trk@spbtv.ru
www.5-tv.ru

"TV 3 Media" (Ltd.) (TV channel "TV 3")
117105 Moscow, Varshavskoe highway, 9, bld. 1a
Tel., fax: (495) 937-40-39, 937-35-27
e-mail: info@tv3moscow.ru
www.tv3moscow.ru

UAB "Energiya TV" (TV channel "MTV Russia")
117105 Moscow, Varshavskoe highway, 9, bld. 1a
Tel., fax: (495) 783-23-06, 788-74-09
e-mail: info@mtv.ru
www.mtv.ru

UAB "TV channel 2x2"
117105 Moscow, Varshavskoe highway, 9, bld. 1a
Tel., fax: (495) 644-22-24, 644-22-26
e-mail: reception@2x2tv.ru tmaximova@2x2tv.ru
www.2x2tv.ru

"TV kanal Semerka" (Ltd.)
117105, Moscow, Varshavskoe TV shosse, 25-A, bld 6, 3rd Floor
Tel.: (495) 213-1869
e-mail: press@7tv.ru
www.semerka.tv

TV channel "MUZ"
117105, Moscow, Varshavskoe TV shosse, 25-A, bld 6, 3rd Floor
Tel., fax: (495) 213-18-66, 213-18-67
e-mail: secretary@muz-tv.ru
www.muztv.ru

International TV and radio company "MIR"
107076, Moscow, Krasnobogatyrskaya st., 44

Tel., fax: (495) 648-07-92, 964-08-01
e-mail: pr@mirtv.ru, inbox@mirtv.ru
www.mirtv.ru

JSC "TRK VS RF "Zvezda" (TV channel "Zvezda")
129164 Moscow, Mira Ave., 126
Tel., fax: (495) 645-92-89 (ext. 2010, 2020)
e-mail: info@zvezdamedia.ru priemnayak@zvezdamedia.ru
www.tvzvezda.ru www.zvezdamedia.ru

JSC "TV Center"
115184, Moscow, Bolshaya Tatarskaya st., 33, bld. 1
Tel., fax: (495) 959-39-01, 959-39-03
e-mail: web@tvc.ru
www.tvc.ru

JSC "Evropeyskaya Veshatelnaya companiya" (TV channel "Euronews")
119021, Moscow, Zubovsky blvd., 4, bld. 1
Tel., fax: 645-62-44, 645-62-45
e-mail: info@evronovosti-tv.ru
www.evk-eurnews.com

RU.TV
www.rmg.rusradio.ru, Tel. (495) 232-1636

TERRESTIAL TV CONTENT PRODUCERS

UAB "TV company "OSTANKINO"
127000, Moscow, Akademika Koroleva st., 12
Tel., fax: (495) 617-89-84
e-mail: www@tv-ostankino.ru
www.tv-ostankino.ru

AVTORSKOE TELEVIDENIE
119180, г. Moscow, 2nd Kazachiy lane, 11, bld. 1
Tel., fax: (495) 959-12-80, 953-59-37
e-mail: atv@atv.ru
www.atv.ru

TV company "AGA"
Moscow, Myasnitskaya st., 24, block 1
Tel., fax: (495) 6241005, (495) 6240013, (495) 6257101
www.humorfestival.ru

AMEDIA
Address: 115088, Russia, Moscow, Novoostapovskaya st., 5, bld. 3
Tel.: +7 (495) 744-1717 Fax: +7(495) 744-1718

www.amediafilm.ru

ArtMedia Group
123022, Moscow, 2nd Zvenigorodskaya st., 13, bld. 17
Tel., fax: (495) 661-19-06
e-mail: info@artmedia-group.ru
www.artmedia-group.ru

GAMMA-FILM
Moscow, Bororvaya st., 3
Tel., fax: (495) 785-15-61, 360-73-35
e-mail: info@gammafilm.ru
www.gammafilm.ru

The film company "Novoe Vremya"
127549, Russia, Moscow, Prishviina st., 8, bld.1
Tel:
+7 (495) 788-72-53, +7 (903) 776-62-32, +7 (929) 566-23-00
Fax:
+7 495 7887253
E-mail: kudryashov@post.km.ru
http://www.nvfilm.ru

The film company "RUmedia"
Address:
123007, Russia, Moscow, 3rd Horoshevskiy st., 5, bld.1, office 11
Tel:
+7 (495) 940-09-02
Fax:
+7 (495) 940-09-02
E-mail: info@ru-media.com
www.ru-media.com

KRASNY KVADRAT
127000, Moscow, Akademika Koroleva st., 12
Tel., fax: (495) 646-34-64
e-mail: red@red-red.ru
www.red-red.ru

COMEDY CLUB PRODUCTION
Tel: (495) 543-88-88
129090, Moscow, Meshanskaya st., 7/21, bld.4
e-mail: info@comedyclub.ru
www.comedyclub.ru

LEOPOLIS
123100 Moscow, Sergeya Makeeva st., 9, bld.1
Tel:
+7 (495) 646-98-60
Fax:
+7 (495) 646-98-60
e-mail: vlinna@leopolis.ru, vl.inna@mail.ru
www.leopolis.ru

MAKTO
Address:
124575, Russia, Moscow, Zelenograd, block 1014, office 93
Tel: +7 (916) 627-76-72
e-mail: info@makto.org
www.makto.org

PRODUCTION COMPANY "SREDA"
115088, r. Moscow, Novoostapopovskaya st., 5, bld.3.
Tel., fax: (495) 542-43-33
e-mail: sreda@sredatv.ru
www.sredatv.ru

"Produsserskaya firma Igorya Tolstunova" (Ltd. "Profit")
Address:
119991 Moscow, Mosfilmovskaya st., 1, block 3, fl. 3, PROFIT
Tel:
+7 (495) 789-89-08; +7 (925) 007-17-75
Fax:
+7 (499) 143-90-21
e-mail:dana@profitkino.ru; plotkina@profitkino.ru; savina@profitkino.ru
www.profitkino.ru

PRODUCTION CENTRE "PIRAMIDA"
125080 Moscow, Surikova st., 24
Tel.,fax: (495) 258-80-74
e-mail: pyramid_m@mail.ru
www.piramidfilm.ru

RBC-TV
117393 Moscow, Profsouznaya st., 78
www.rbc.ru, Tel. (495) 363-1111

RITHMOTIME
197136, Saint-Petersburg, Plutalova st., 4, lit. A, bld. 8N
Tel:

+7-911-008-38-61, +7 (812) 313-82-50
Fax:
+7 (812) 313-82-50
e-mail: rithmotime@gmail.com, birth-mystery@mail.ru

Russian Television and Radio Broadcasting Network (RTRS)
www.rtrs.ru, Tel. (495) 648-0111

RUSSIAN MEDIA GROUP
123298, Moscow, 3rd Horoshevskaya, 12
Tel., fax: (495) 232-16-36
e-mail: pressa@rr.ru
www.rmg.ru

Star Media, group of companies
109382 Moscow, Nizhnie Polya st., 31 bld.1
Tel: +7 (499) 356-54-00
Fax: +7 (499) 356-54-00, +38 (044) 390-50-60
e-mail: distrib@starmediafilm.ru
www.starmediafilm.ru

Studio 2V
Tel., fax: (495) 234-52-94, 234-52-77, 234-52-76
e-mail: alla@studio2v.ru
www.studio2v.ru

Studio "Illuzion"
197348, Saint-Petersburg, Aerodromnaya st., 4
Tel: +7(812)715-7782, +7(812)715-8381, +7(812)928-0508
Fax: +7(812)394-7116
e-mail: illuzion@illuzion.tv
www.illuzion.tv

"Studio Master Video" (Ltd.)
199034, Saint-Petersburg, 2nd line, V.O., 13/6
Tel: +7 (812) 9632840, 7 (812) 7142095
Fax: +7 (812) 7142095
E-mail: artmastervideo@gmail.com
www.master-video.ru

FORA-CINEMA
109153, Moscow, Privol'naya st., 65/32, ap.33
Tel: +7 (495) 781-05-63
Fax: +7 (495) 781-05-63
E-mail: fora-cinema@mail.ru

www.foracinema.ru

"CENTRAL PARTNERSHIP" (Ltd.)
Address:
119034, RF, Moscow, Ostozhenka st., 17/19
Tel.:
+7 (495) 777-49-53
Fax:
+7 (495) 777-49-53
E-mail: Davityan.Armen@centpart.ru, Soldatenkova.Irina@centpart.ru
www.centpart.ru

Centre of National Film (film studio)
Address:
125445 Russia, Moscow, Valdayskiy st., 16
Tel.:
+7 (495) 457-82-34
Fax:
+7 (495) 455-92-13, +7 (495) 455-91-64
E-mail: ellada@cnf.ru, pr@cnf.ru
www.cnf.ru

YAUZA TV PRODUCTION
Moscow, Borby square, 13
Tel., fax: (495) 6813119, (495) 6819708

3.3. A list of the main professional TV events, 2011-2012 (Markets, Festivals, Awards)

Table 65. A list of the main professional TV events, 2011-2012

Event	Date	City	URL
2011			
The National Award in the field of multi-channel digital television "Big digit"	February 2	Moscow	http://www.aktr.ru/index.php?srch=&pgid=28&spgid=0&did=7191&prm=0&spos=0&epos=19&mspos=0&mepos=19&oid=&rqid=&action=&tday=&tmnt=&tyer=
The Conference "Global interoperability - urgent problem of modern telecommunications"	February 16	Moscow	http://www.comnews.ru/index.cfm?id=58869
The Conference "Pressing issues of implementation and promotion of telecom services in modern conditions"	February 17-18	Moscow	http://www.comnews.ru/index.cfm?id=58870
Seminar "Development of broadband telecommunication networks in Russia"	March 15-16	Moscow	http://www.expo-telecom.ru/index.php?m=2&k=157&d=1
The Festival of TV and radio antiterrorist directionality "TV-Radio-Antiterror"	20 - 22 April	Moscow	http://www.guvdso.ru/apress403.html
Forum Multiplay	April 26	Moscow	http://www.multiplay-expo.ru/
All-Russia forum "The development of telecommunications in Russia"	April 26-27	Sochi	http://www.expo-telecom.ru/index.php?m=2&k=158&p=0&d=11
Interregional Festival of the military-patriotic television and radio, "Shield of Russia"	June 9-12	Perm	http://www.t7.ru/guard11/
International Baikal Information Forum	July 14-17	Ulan-Ude	http://bif.govrb.ru/index.php?id=41
Media forum "Enisey.RF – 2011"	July 21-24	Krasnoyarsk	http://медиафорум-енисей.рф/
International Festival of Children's Television "Join in!"	August 23-26	Moscow	http://www.nat.ru/?an=on_off_2011
The International conference "Temporary Conditions and Challenges for IP-communications and IP-services in Russia"	September 6-7	Moscow	http://www.rans.ru/fr2011/
International Exhibition and Conference IBC	September 8-13	Amster-dam, Holland	http://expomap.ru/amsterdam/ibc-2011.html
The Annual conference of operators and users of satellite communications	September 21-22	Moscow	http://www.nat.ru/?an=news_exp_page&uid=8825

and broadcasting of the Russian Federation - SATRUS 2011			
Specialized exhibition of information technologies, communications equipment, computer equipment, Internet services, technology, broadcasting and broadband telecommunications "ITCP – Sibtelekom"	September 20-22	Novosi-birsk	http://sibcomputer.sibfair.ru/
International Media Festival "Living Word"	September 23-25	Nizhni Novgorod Region	http://zhivoeslovo.ru/index.php?option=com_content&task=blogcategory&id=83&Itemid=218
The National Award in the field of satellite, cable and Internet TV "Golden Ray"	September 29	Moscow	http://journalist-virt.ru/anons/94-anons/1662-lzolotoj-luchr-2011
Ural Forum of Information Technology and Communications – 2011	September 27-29	Yekaterin burg	http://www.gosbook.ru/node/22799
The Annual Conference on "Convergence in Telecommunications"	October	Moscow	http://www.expo-telecom.ru/index.php?m=2&k=162
Seminar "Fiber cable technology in the transport of telecommunications networks. Trends and Prospects"	October	Moscow	http://www.expo-telecom.ru/index.php?m=2&k=163&d=1
International Forum MIPCOM 2011	October 3-6	Cannes, France	http://expomap.ru/cannes/mipcom-2011.html
All-Russia Festival "Profession: Journalist"	October 10-15	Moscow	http://journfest.ru/
Forum "Investment to the Digit. Legal Aspects"	October 19	Moscow	http://www.midexpo.ru/idforum
Russian Internet Week, RIW-2011	October 19-21	Moscow	http://www.riw11.com/about/
The Festival of socially important television programs and television movies "A Hero of Our Time"	October 20-22	Ufa	http://www.nat.ru/?an=news_nat_page&uid=569
All-Russia TV contest "TEFI-Region 2011"	November 17-22	Sochi	http://www.tefi.ru/ru/tefi-region/
The Conference "The development of digital broadcasting in Russia. New technologies and approaches to the formation and distribution of TV content"	November 22	Moscow	http://www.expo-telecom.ru/index.php?m=2&k=159&d=1
Broadband Russia Forum 2011	November 23-24	Moscow	http://rbcdaily.ru/media/conference/562949980793903.shtml
International Congress of NAT, exhibition of professional equipment for television, radio and Internet broadcasting NATEXPO	November 23-25	Moscow	http://www.natexpo.ru/project
Broadcast Content Market Moscow Teleshow. As part of the market - an international conference "Content to 3D: the world of amazing discoveries"	November 29 – December 1	Moscow	http://www.teleshow.ru/

2012			
International Exhibition and Conference CSTB'2012	February 7-9	Moscow	http://www.cstb.ru/
National Award in the field of multi-channel digital television "Big digit"	February 8	Moscow	http://www.bigdigit.ru/
International Forum "INTERNET TV & VIDEO. Change of priorities"	February 21	Moscow	http://internettv-forum.com/
Exhibition CPS / Cinema Production Service-2012	March 12-15	Moscow	http://www.ridjey.ru/index.php?view&viid=18180
Broadband Russia & CIS 2012	March	Moscow	
International Exhibition and Conference NAB-Show	April 14-19	Las-Vegas, USA	http://www.nabshow.com/2011/index.asp
Digital Media Europe	April 16-18	London, UK	http://www.ifra.com/website/ifraevent.nsf/wuis/7BD82D06CC50904AC125786C0016663E?OpenDocument&CS&
International Forum "Business Models Media & Telecom 2.0: Key monetization strategies"	April 18	Moscow	http://telco-forum.com/
International Exhibition "Sviaz-Expocomm 2012"	May 14-17	Moscow	http://www.sviaz-expocomm.ru/
International Broadcast Content Market Moscow Teleshow	May	Moscow	http://www.teleshow.ru/
All-Russian TV contest "TEFI-2012" - the category "Professions"	May	Moscow	n/a
All-Russian TV contest "TEFI-2012" - the category of "Faces"	May	Moscow	n/a
National Festival of TV films and programs, "My Province"	May	Sochi	n/a
The award "Russian Media Manager-12"	July	Moscow	n/a
International Baikal Information Forum	July	Ulan-Ude	n/a

3.4. A directory of the main professional organisations in the television market

Professional associations:

Association of Communication Agencies of Russia (AKAR)
www.akarussia.ru, Tel.: (495) 662-3988
Association of Directors of Communications and Corporate Media (ACMR)
www.corpmedia.ru, Tel.: (495) 741-4920
Association of domestic producers and consumers of radio relay communication systems (APORRS)
www.aporrs.ru, Tel.: (495) 334-4655
Association of high-definition television and digital cinema (HD Union)
www.hdunion.ru, Tel.: (495) 781-2061

Association of regional communication operators
www.rrto.ru, Tel.: (499) 973-5078
Cable Television Association of Russia (AKTR)
www.aktr.ru, Tel.: (495) 748-3178
Media Committee
www.mediakomitet.ru, Tel.: (495) 953-9030
MediaUnion
www.mediasoyuz.ru, Tel.: (495) 617-3980
National Association of Broadcasters (NAT)
www.nat.ru, Tel.: (495) 651-0836

Academies, Research and Development Establishment, Funds

Academy of Russian television
www.tefi.ru
Eurasian Academy of Television and Radio (EATR)
www.eatr.ru, Tel.: (495) 783-3990
Gosteleradiofond
www.gtrf.ru, Tel.: (499) 265-7495
Institute for Advanced Studies of Television and Radio Broadcasting Employees
www.ipk.ru, Tel.: (495) 689-4185
International academy of television and radio (IATR)
www.interatr.org, Tel.: (495) 647-6060
Moscow Scientific Research Institute of Television (MNITI)
www.mniti.ru, Tel.: (499) 763-4542
Radio Engineering Institute of Academician A.L. Mints
www.rti-mints.ru, Tel.: (495) 614-0451
Russian Academy of Radio (RAR), The Fund of broadcasting promotion of “Academy of Radio”
www.radioacademy.ru, Tel.: (495) 937-3347
Saint-Petersburg state university of tele-communications of professor M.A.Bonch-Bruevich
www.sut.ru, Tel.: (812) 315-0118
Scientific Research Institute of Radio (NIIR)
www.niir.ru, Tel.: (499) 261-3694
Scientific Research Institute of Television (NIITV)
www.niitv.ru, Tel.: (812) 297-4167
The State specialized project institute of radio and TV (GSPIRTV)
www.gspirtv.ru, Tel.: (495) 915-7128.

Satellite, cable, IPTV operators and content providers

AKADO
www.akado-group.ru, Tel.: (495) 657-9671
Alfa-Group
www.alfagroup.ru, Tel.: (495) 620-9191
Gazprom-Media
www.gazprom-media.com, Tel.: (495) 725-5400
Geo Telecommunications
www.gtss.ru, Tel.: (495) 727-0731
HD Media
www.hdmedia.ru, Tel.: (495) 781-2061
Kosmos-TV
www.ktv.ru, Tel.: (495) 231-1921
National Telecom
www.nationaltelecom.ru, Tel.: (495) 795-0350
Orion Express
www.orion-express.ru, Tel.: (495) 781-4101
Rostelecom
www.rt.ru, Tel.: (499) 972-8283
Sistema Mass Media
www.smm.ru, Tel.: (495) 229-6363
Synterra Media
www.synterramedia.ru, Tel.: (495) 647-7777
Tricolor TV
www.tricolor.tv, Tel.: (495) 984-5124
TTK Company
www.ttk.ru, Tel.: (495) 784-6670
Video International
www.vi.ru, Tel.: (495) 234 4400

Equipment producers and providers

Almaz-Antey Telecommunications
Tel.: (495) 995-1028
ERA
www.era-tv.ru, Tel.: (495) 781-2061
I.S.P.A.
www.ispa.ru, Tel.: (495) 784-7575
Intersputnik, international organisation of space communication
www.intersputnik.ru, Tel.: (499) 252-8333
MART (Powerful equipment of radio broadcasting and TV)
www.martspb.ru, Tel.: (812) 328-4557
Okno-TV
www.okno-tv.ru, Tel.: (495) 617-5757
Russian Satellite Communications Company (RSCC)

www.rscc.ru, Tel.: (495) 730-0450

Sociological research companies

COMCON
www.comcon-2.ru, Tel.: (495) 502-9898
GFK Rus
www.gfk.ru, Tel.: (495) 937-7222
Russian Public Opinion Research Center (VCIOM)
www.wciom.ru, Tel.: (495) 748-0807
TNS Russia
www.tns-global.ru, Tel.: (495) 935-8718

OBSERVATOIRE EUROPÉEN DE L'AUDIOVISUEL
EUROPEAN AUDIOVISUAL OBSERVATORY
EUROPÄISCHE AUDIOVISUELLE INFORMATIONSSTELLE

Set up in December 1992, the European Audiovisual Observatory's mission is to gather and diffuse information on the audiovisual industry in Europe.

The Observatory is a European public service body comprised of 37 member states and the European Union, represented by the European Commission. It operates within the legal framework of the Council of Europe and works alongside a number of partner and professional organisations from within the industry and with a network of correspondents.

In addition to contributions to conferences, other major activities are the publication of a Yearbook, newsletters and reports, and the provision of information through the Observatory's Internet site (http://www.obs.coe.int).

The Observatory also makes available four free-access databases, including LUMIERE on admissions to films released in Europe (http://lumiere.obs.coe.int) and KORDA on public support for film and audiovisual works in Europe (http://korda.obs.coe.int).

J'son & Partners Consulting is a leading consulting company in telecommunications, high technology, IT and media, with extensive experience in developing and auditing business plans, marketing and financial models, as well as in-depth research of markets in Russia and CIS countries. Its project were successfully implemented for institutional and private investors, telecommunication and media holdings, the companies-manufacturers of the telecommunication equipment, start-up projects and etc. A comprehensive network and constant information interaction with the major players in the market ensure the high quality of J'son & Partners research and consulting services.

J'son & Partners Consulting has been regularly conducting its own pay-TV market research since 2005, including surveys of regional and federal pay-TV operators, satellite communications, advertising market and mobile market. The agency also uses field research data, proprietary market models and databases. In the years 2005-2011 J'son & Partners Consulting carried out a series of reports and successfully conducted research projects on TV, online video-, VOD-and advertising markets, as well as investment support for the clients in the various area.
http://web.json.ru