

## **DIGITAL DIVIDE AND THE CHANGING POLITICAL/MEDIA ENVIRONMENT OF POST-SOCIALIST EUROPE**

**Elena Vartanova**

**Abstract** / The progress of information and communication technologies (ICTs) in post-Socialist countries is characterized by uneven economic and technological development, thus leading to contradictory results. Both industry and the social/cultural policies of these countries generally assume that the consequences of ICTs are negative. Various barriers to digital equality have been identified, determined mostly by particular national circumstances. The media markets in post-Socialist countries have experienced negative trends. New social discrepancies have been reproduced in access to ICTs and Internet. The role of market and corporate business in reshaping media systems appears to be anarchic, thus making states more responsible for providing equal access to Internet. Policies to overcome this 'digital divide' seem to be numerous, but in various post-Socialist countries the focus is generally on developing universal access in public places. The article attempts to analyse the factors which shape the patterns of new media uses, and the principal solutions to close the digital divide in the post-Socialist countries of 'Big Europe'.

**Keywords** / digital divide / information society / media and telecommunication policy / post-Socialism

### **Contradictory Aspects of the Digital Divide**

In the last few years, the two words 'digital divide', a political metaphor used by the US President Clinton, have become a general characteristic of the present state of the new media. Still, the rationale for political rhetoric in various national contexts essentially differs. The more advanced part of the world is very much concerned with the advantages brought by the progress of information and communication technologies (ICTs) in economy, social and cultural life, and the media industries. Often the same rhetoric is repeated in technologically less advanced regions with opposite grounds, since the development of ICTs appears to be more a burden than a liberating force because of the new demands and challenges imposed by the technological progress upon national economies and sociocultural policies.

Certainly, this is partly true of all countries. Even economically and technologically advanced states, which have already benefited from ICTs in terms of economic growth, are facing a set of social and cultural problems often referred to as a digital divide. On the other hand, it is worth noting that the digital divide

TABLE 1

Individual and Social Reasons not to be Online	
Reason not to use Digital Technology	General Background
No money	Socioeconomic
No access	Technological
No industry	Structural, economic
No skills	Educational
No time	Social, cultural, individual
No awareness	Educational, lack of media activity
No interest	Educational, individual, demographic, professional
No need	Individual, demographic, professional

is not the same across the different regions and states. The problem area encompasses many barriers to digital equality determined by various circumstances combining factors of a global, national and even individual character. In recent surveys on reasons which keep people offline, several key points were raised (see Table 1). It is interesting that each of these problems might be identified in all national contexts, but the difference between countries originates in a combination of reasons.

The global digital watershed divides more advanced and less advanced countries, and today's technological unevenness fully coincides with global economic and social inequality. There exists a clear correlation between the state of national media industries, especially audiovisual, and the level of access by the population to digital technology. Another significant factor that also points to a digital divide is the availability of computers and home electronic devices in households. Countries and regions with lower access to media resources and low penetration of home electronics represent today the less developed part of the world and they are exactly the states where the digital divide is a critical problem in the economic, sociopolitical and cultural sectors. While people in more advanced countries consider that there are no compelling reasons to be on the Web, users in less advanced countries describe the problem of access as the most crucial reason to keep them offline. For them, access includes mostly economic (cost of access to Internet competes with costs for basic necessities), technological and geographical (access outside urban areas is limited) aspects.

The position of post-Socialist countries on the global or even European digital divide is not very optimistic. The emergence of new social inequalities resulting from the profound changes in social structures in the countries of the former 'Socialist camp' took place simultaneously with the rapid diffusion of ICTs among certain groups of the population. At the same time, the disequilibrium resulting from economic crises and societal structural transformations was exacerbated by uneven ICT development. Countries of the region were rather slow in adopting ICTs, adjusting them to the needs of market economies and

attracting new investments. Cultural and social policies in the post-Socialist countries of Europe were put under even more pressures from the recent transformations with the emergence of the 'new poor', who have automatically been excluded from the new digital environment.

These changes in post-Soviet societies produced new conditions for political participation and citizens' attitudes towards the media. Demands in media content have radically transformed media systems, thus reshaping ICTs' influences over societies and audiences. A market-based economy and multi-political environment have not automatically produced equality in access to old or new media. On the contrary, media markets in post-Socialist European countries have experienced many negative trends (in terms of normative media theory) that coincided with the needs of economic reconstruction and social renovation. New social discrepancies were reproduced in access to old but especially new media, to ICTs and the Internet.

The digital divide has become an important policy issue for decision-makers around the globe. Today every state has to find national solutions for problems of a general nature such as economic, technological, social, educational, cultural and even demographic (generation divide, sexual divide, residential divide). However, each national context requires specific policies in which several key factors have to be identified nationally. The most important are:

- The combination of reasons for the digital divide, in particular national circumstances, which need be dealt with by policies;
- Prioritizing measures to overcome the most serious pitfalls;
- The specific roles of different social actors involved in overcoming policies.

### **Digital Divide and Access to ICTs**

Inequality in access to ICTs is as old as the history of the first newspapers. The poor and the illiterate had no opportunity to read newspapers when they appeared; newspapers were read by aristocrats and rich bourgeois families. Telephone, radio and television first penetrated the homes of aristocracy and rich businessmen, who were also part of the elite. Thus, access to media and ICTs has always been a significant indicator of social and economic inequality.

Today, access of the general population to the Internet, its services and contents is the key issue: it reflects the most important parameters of social progress, the state of economics and also the level of democracy in society. Among the cornerstones of the future e-society are the skills necessary to use and comprehend new technologies. Access to newspapers, the ability to read and understand them, became in the middle of the 19th century the indicators of literacy of the emerging industrial society. The society that is coming to replace the industrial one demands from its citizens a sufficient level of media education, which is undoubtedly a modern precondition for political and social participation.

Levels of access are numerous, its various aspects are diverse; however, the most important are the following:

- *Technological aspects* refer to the physical access of ordinary users to ICTs, including the latest innovations. It is important to stress that the most advanced computers, mobile phones, should be available to the broadest audience possible.
- *Financial aspects*: It is assumed that users have a guaranteed income level to be able to buy the necessary hardware, to pay for the connection to the information and communication networks as well as the use of them, acquiring the information services and content products on offer.
- *Social aspects*: Public access should be provided for those layers of society who cannot afford individual access.
- *Educational aspects*: Ordinary users willing to use ICTs need primary skills and they must have an opportunity to acquire them.
- *Fair competition* is the major principle for network operators, service and content providers. It guarantees favourable economic conditions on the ICTs market.
- *The freedom of speech* principle stands at the core of activity of content providers, journalists, writers, intellectuals and ordinary people. It ensures access for content providers to the Internet and the infrastructure.

Various aspects of access to ICTs, aimed at overcoming the digital divide, are important elements of the new telecommunications policies at national level, though it is clear that the Internet is gradually erasing the concept of 'national'. Notions of 'unevenness' and 'inequality of access' to the Internet are very different in various national contexts.

The statistics on global access to ICTs prove that those regions of the world which traditionally were more developed in the industrial period remain leaders in the digital era. There is a direct connection between a stable increase in the number of Internet users in the USA, Canada, Western Europe, Asia and the Pacific and economic development. On the contrary, the post-Socialist region in Europe illustrates how the infrastructure problems of previous periods have impaired ICTs' progress and determined their telecommunications policies in the broader European context.

### **Countries of Central and Eastern Europe: Following the EU Model**

In many respects, there are both similarities and dissimilarities across post-socialist Europe. Differences which existed in previously comparable national contexts of Socialist Europe have turned into evident discrepancies, which increasingly disconnect a one-time unanimous world. Different territories, size of population, natural resources, economic structures, legal systems, social and cultural traditions play a gradually more important role in the promotion of ICTs in post-Socialist regions. While the problems met by all post-Socialist countries are very similar, there exist essential differences among countries with regard to national policy models and approaches.

### *Old Shortcomings Still Play a Role*

The countries of Central and Eastern Europe (CEECs) entered the last decade of the 20th century with broadcasting and telecommunications infrastructures inherited from the era of the vertically controlled and planned economy. Although there existed various national political contexts and different cultural traditions, basic characteristics of information, media and (tele)communication sectors remained similar. The state was the major player in telecommunications especially in terms of infrastructure control. Penetration of broadcast media remained comparatively high because of ideological and instructive roles prescribed to television and radio by Communist political elites (McQuail, 2000: 212–13). The state monopoly of broadcasting was secured by the existence of the one tightly controlled broadcaster, and in the telecommunications sector the state monopoly determined rules for the industry which was kept rather underdeveloped. Moreover, Sparks and Reading (1998: 131) point to the fact that

*... the revolutions of 1989 did not have an immediate transformative effect upon the existing broadcasting institutions of Central and Eastern Europe. In this, broadcasting was not exceptional ... there was a considerable degree of continuity.*

In general, the CEECs represented a kind of paradox of uneven and incomparable development of the two sectors, broadcasting and telecommunications. This could be explained within the general framework of the ideological control by the existing system. Policies for broadcasting and telecommunications had never been coordinated as the two areas had traditionally been viewed as separate. Numbers of radio sets and television penetration in the CEECs were much closer to similar indicators in the most advanced European countries than rates of teledensity (number of telephone lines per 1000 inhabitants).

This attitude has produced a set of important consequences for today's development. No matter how different the broadcasting systems in socialist countries might appear, they were definitely used for the purpose of control, and the power to make economic, managerial or programming decisions was held by the ruling elite, the Communist *Nomenklatura*, alone. In line with this approach, telephony policy was targeted at the surveillance and maintenance of control through keeping the sector undeveloped. The process of digitalization and technological convergence which had already begun in the 1980s had never been seriously analysed by politicians and media practitioners before 1990. Therefore, the crucial disadvantage inherited by the media and telecommunications sectors of post-Socialist Europe which increasingly shapes the contours of the post-Socialist digital divide is the lack of investment in telecommunications resulting from the general strategy of the planned socialist economy.

From the general economic perspective the low level of teledensity followed not only the control paradigm, but it also indicated the sector's low priority in the planned socialist economy. Although the acceleration of technological progress was traditionally used as a political slogan by the socialist system, the lack of expenditure on new technologies, with the exception of the military

TABLE 2

**Availability of Information and Communication Technologies in Selected Post-Socialist Countries**

Countries	Per 1000 people						Internet Hosts per 10,000 People
	Daily News papers	Radio Sets	TV Sets	Telephone Main Lines	Mobiles	PCs	
Bulgaria	257	543	398	329	15	29.8	14.50
Estonia	174	638	480	343	170	34.3	206.81
Hungary	186	689	437	336	105	58.9	113.38
Poland	113	523	413	228	50	43.9	47.26
Russia	105	418	420	197	5	40.6	14.69

Source: World Development Report (2000/1: 310-11).

industry, was a real obstacle to economic growth. Consequently, both the coverage of telephone networks and scope and quality of services still remain weak in a majority of countries. The average number of telephone mainlines in Europe is about 200 lines per 1000 inhabitants because of low teledensity specifically in post-Socialist countries. The rate however does not reflect realities in countries of disproportionate development such as Slovenia, Poland and Estonia, on the one hand, and Bulgaria, Romania and Albania, on the other (ESIS Knowledge Base, 2001). Compared to the average telephone density in the European Union (about 500 lines per 1000 inhabitants), CEECs still lag behind established western standards (see Table 2).

### *Media Change is not Telecommunications Change*

The process of fundamental political and economic transformations following the collapse of the old Socialist system caused real problems in the CEECs. In search of urgent solutions for their economic and social problems, these new states often paid little attention to promoting forward-looking policies in IT industries (Jakubowich, 1999: 224). As a result, the pace and direction of change significantly differ from country to country depending on a number of national circumstances. One can distinguish various factors including:

- The level of economic development and the ability of national economies to accept the advantages of ICT;
- A general political and legislative context favourable to private initiative;
- The speed and level of privatization in the industrial and financial sectors;
- An openness of national markets to foreign investments;
- The technological evolution of the media sector and in particular the digitalization of content, services and broadcasting networks, which may eventually reinforce the convergence of media and other sectors (information technology and telecommunications);

- The degree of corruption of emerging regimes, affecting real liberalization of the telecommunications sector.

Many economists and researchers argue that tomorrow's economic growth is definitely based on today's achievements in the ICT sector. A survey, *Out of the Abyss: Surviving the Information Age* (Reuters, 1999) analysed interviews with more than 1000 senior managers from 11 countries around the world. It showed that CEECs belong to an economic model that cannot overcome the growing influx of information and are incapable of managing information. The crisis experienced by the countries of the region proved that they are still in the pre-information age. The research data showed that the CEECs are not in a position to access the information they need and do not even know where to find it. Whereas 90 percent of respondents in the USA and France say that information management is a vital necessity for economic success, this view is supported by 52 percent of respondents in Poland and by only 28 percent in Russia (Reuters, 1999).

In terms of ICT use, the CEECs unquestionably belong to the poorer regions of Europe and can be compared only with some of the southern countries of the EU, though these countries themselves are also uneven in their movement towards acquisition of ICTs (see Table 3). From a general perspective, the overall penetration of the new technologies still remains fairly low in the CEECs. The example of the Internet clearly proves the case. For instance, in Albania the number of the Internet users is one of the lowest in the region and reaches only 0.34 percent. In other countries, the situation looks slightly better but still well below the average in the EU, ranging from more than 31 percent of total population in Slovenia, 25 percent in Estonia to no more than 10 percent of the whole population in many other countries (9.06 percent in Poland, 7.59 percent in Bulgaria and 3.57 percent in Romania) (NUA, 2001).

Data for the CEECs reflect general trends revealing themselves specifically in national circumstances. There is a constant, though uneven and comparatively slow growth of Internet hosts and users, but this has not yet led to any substantial change in the overall picture in the region. At the same time, the statistics show that the influence of ICTs does not penetrate the main bulk of the population; it is mostly restricted to the administrative, economic and financial elites. In Poland, about a quarter of population have PCs at home (and only a minor proportion of them are connected to the Internet). Poles who use the Net represent social groups with high income levels only (Zassoursky and Vartanova, 1999: 307). The same is true of other countries. This underlines that the digital divide in CEECs puts the main bulk of the population into the group of information 'have-nots', thus making the situation different from countries of the EU in terms of both quality and quantity.

### *Ways to Overcome the Digital Divide*

The digital divide exists today, and within the countries of post-Socialist Europe reveals the most important characteristic for this part of Europe. Consequently, measures to solve the problem are similar, but what really differ are the priorities and combinations of such measures.

**TABLE 3**

**Access to the Internet by the General Population in Selected Countries of Europe  
(data for the end of the year 2000)**

Country	Percent of Population Using the Internet
In South Europe	
Italy	23.29
Greece	12.42
Portugal	19.9
In Central and Eastern Europe	
Albania	0.34
Bulgaria	7.59
Czech Republic	10.71
Hungary	11.87 <sup>a</sup>
Estonia	25.57
Latvia	9.37
Lithuania	6.2
Poland	9.06 <sup>a</sup>
Romania	3.57
Slovenia	31.13
In CIS	
Belarus	1.74
Moldova	0.34
Russian Federation	6.3
Ukraine	1.54 <sup>b</sup>

<sup>a</sup> Data for March 2001. <sup>b</sup> Data for June 2001.

Source: NUA (2001).

First, there is a direct link between economic growth and the level of ICT development. Better economic performance, freer and more effective market activity and normal functioning of the service sector have been developed in markets with more advanced ICT infrastructures. The state of infrastructure has multiple direct links to poverty and the digital divide.

A comparison between countries of different income categories provides a certain degree of proof for this assumption. Poland, the largest country of the region, representing the middle level in the UNESCO human development index (HDI = 0.851, GDP per capita 4 014 Euros), also has average rates among the CEECs in terms of telephone density and Internet connection. Slovenia (HDI = 0.887, the highest index for the CEECs, GNP per capita 10 994 Euros) has a relatively high rate of telephone density close to 40 percent and an Internet access of about 33 percent. Figures for Estonia (HDI = 0.758, GDP per capita 3 339 Euros), with a telephone density rate close to 35 percent and use of the Internet by 25 percent of population, may seem quite surprising, but still proving the case

(UNESCO, 2000; ESIS Knowledge Base, 2001). This small Baltic country has deliberately concentrated its efforts on the telecommunications sector in attempts to repeat the widely known success of its Scandinavian neighbours.

Second, despite comparatively good indicators in some advanced states, all the CEECs at present demonstrate a great lack of modern networks and quality telecommunications services. This is the result of numerous negative factors including the lack of investment and the absence of modernization policies before 1990. Various reports for the Central and East European Information Society Forum indicate that the proportion of GDP spent on telecommunications equipment is almost constant at 0.4 percent and therefore still limited (see, for instance, ESIS Knowledge Base, 2001). This is an especially glaring lack of investment compared to the countries of Western Europe: in most developed states of the EU national ICT expenditure was average 4.9 percent of GDP in 1997. It is also important to point to the constant growth of this indicator in Western European countries compared with the underinvestment in the ICT sector which was a permanent trend during the latter period of socialist systems in the CEECs.

Third, in attempts to coordinate and harmonize domestic policies with the EU liberalization policy, the CEECs have introduced similar policies in their internal markets, but, however, with different effects. In those states where the pace of change in telephony and telecommunications liberalization has been faster there exist higher rates of Internet penetration, mobile telephony progress and consequently a better state of reform in the economy.

While nearly all countries of the region have adopted specific regulatory provisions which opened up the way to full liberalization, only a few have managed to implement their political decisions in real terms. For instance, only Slovenia has radically moved forward and has come closer than other post-Socialist states to EU requirements for the telecommunications sector. At the same time, national data for other countries distinctly prove rapid progress in the ICT markets. In contrast to state telecommunications monopolies, alternative infrastructures operated by alternative owners (railways, highways) are emerging, cable networks are opening up for the provision of Internet and data services to the public. Additional measures such as upgrading networks, investment by foreign operators, especially in cable and cable television, are also contributing to the rapid advance of the sector.

The first step on the way to the liberalization of internal telecommunications markets is the adoption of updated regulatory regimes which restrict the monopoly power of state-owned telecommunications monopolies, introduce competition and allow alternative operators to act in the market. Among all CEECs, the telecommunications markets of Poland and Estonia are the most liberalized. As a result, some indicators for the telecommunications sectors in these countries, especially those describing the use of the Internet, are fairly high compared to other countries.

Finally, in almost all CEECs the role of the state is to provide private enterprises with favourable legislative regimes and to stimulate the development of the ICT sector. It is a general approach within the framework of the information society project, but in countries with a traditionally underfinanced

telecommunications sector this becomes an important policy guideline which underlines the strategic priority of ICT in future economic development.

The role of the private sector in ongoing changes is impossible to overestimate. With the shift to a new type of society based on liberal values and market economy, the CEECs were forced to pay more attention to their ICT sectors and consequently change their strategic societal priorities. The importance of the information society project for CEECs has become especially visible since the decision to apply for EU membership was taken by the governments of Poland, the Czech Republic, Hungary, Estonia, Bulgaria among others. The Bulgarian National Strategy for the Information Society puts forward the idea in a remarkably open way:

*The national strategy for IS development specifies the main aims, priorities and actions that combine national interests with the IS concept worked out by the European Union. . . . The new ICT achievements should be used in the process of preparing Bulgaria for membership in the EU. (Zassoursky and Vartanova, 1999: 298-301)*

### *Universal Access Makes Society More Open*

Slow but sure ICT influence over national economies does not necessarily decrease the digital divide, which still disconnects people of different social groups, geographical regions, generations and sexes. It is clear that the problem of information inequality has no simple solution. Prices for modern hardware and costs of new services remain extremely high and not affordable for the majority of potential users. Many surveys show that only 3 percent of Central Europeans have a home PC and fewer than 1 percent of people in the Baltic states own a computer. Price is cited as a major impediment to widespread use of ICT in everyday life (NUA, 2001).

With few exceptions, the CEECs still represent the poorer regions of Europe and therefore it is logical that there should be specific solutions to overcome the digital divide compared to the wealthier parts of the continent. Patterns of Internet use in the region point to the gaps between private/home and public/office/educational institution access. The state of the telecommunications industries reflects the weakness of national businesses, the importance of foreign investments and the need for an active state policy to promote the advantages of ICTs among the general public.

Some national examples have already established possible directions for the implementation of a specific information society model in the CEECs. In Estonia, a national school computerization project named 'Tiger Leap' was launched in the mid-1990s. In 1997, 25 percent of the schools were connected to the Internet. The ultimate goal of the project was to connect all Estonian schools to the Internet by the year 2000. A similar initiative, known as the 'School-Net' programme, was launched in Hungary. Its objective was to equip about 1000 schools with modern computers and rapid access to the Internet. Poland, with its pioneer project 'Internet for Schools', has significantly encouraged the use of the Internet among young Poles and their parents. In Slovenia, where the proportion of schools connected to the Internet is the highest in

Central and Eastern Europe, the level of Internet use by the general population is also the highest in the region.

The experience of schools and educational institutions has only underlined the need for Internet access points available to the general public. The idea of universal, affordable and technically easy access to ICT stands close to public service requirements already accepted in telephony and in certain forms implemented in the idea of public service broadcasting (Vartanova, 1999: 74-6). Estonia has already set up about 30 public Internet access points – a form of community e-centres where everybody can use basic computers and Internet services free of charge. They also provide online information, on-site consultation and reference materials as well as training for their visitors (*The Estonian Tiger Leap*, 2000). A similar project of community telecottages is being implemented in Hungary (European Ministerial Conference, 2000: 10).

The realization of both projects demonstrates some general characteristics which might be considered key elements for the social dimension of the information society model in the CEECs. They are:

- Provision of public access points for those who do not have access to ICTs otherwise;
- Development of specific funding schemes for financial support of ICT use in education and community e-centres;
- Guaranteeing training in use of ICTs for all, especially for those who have already finished their education;
- Promotion of awareness-raising campaigns targeted at wide audiences and involving a broad scope of specialists such as politicians, business people and journalists.

### **The Case of Russia: New Era and New Politics**

As in other post-Socialist countries the progress of ICTs in Russia is gradually becoming an essential factor for development and economic growth. This is due to a number of reasons, but especially because the information service sector, the telecommunications industry and media sector are increasingly important both as key industries for the national economy and fundamental elements of effective modernization and flexible management of the Russian economy.

#### *Country of Divides*

The state of the information and communication industry in a given country might be described by a combination of various criteria such as television and radio broadcasting penetration, PC penetration, access to interactive online computer networks and access to telephone lines including mobile phone penetration. In the list of world information industry leaders (1997) Russia ranked 35th. In terms of television penetration, the country stands as the 20th in the world information hierarchy (Vartanova, 1998: 175). This imbalance remains true in today's contradictory economic environment.

The availability of other technologies, computer-based communications

and media in particular, is much worse. PC and mobile phone penetration remains comparatively low; access to offline and online digital media is limited by a set of factors such as:

- The geographical location of users;
- The region's level of economic and technological development;
- Users' income level;
- Users' educational level;
- Users' age group.

On the average, there were about 197 telephones per 1000 Russians in 1998 with the total number of telephones in Russia close to 27 million. As compared to the average telephone density in the world – 146 per 1000 – the indicator for Russia appears to be comparatively good, but from the European perspective the figure looks outdated and inadequate (World Development Report, 2000/1: 311). On the other hand, the situation in regions differs substantially. Moscow, St Petersburg and some other metropolises are characterized by the highest penetration rates and mostly by the required quality of lines. At the same time many regions of the Central and Eastern European part of Russia and of the Urals and Siberia lack both access to a modern telecommunications infrastructure and investment to upgrade lines. According to data from the International Telecommunications Union, Russia would have to invest at least US\$12 million in its telephone sector to reach the modern level of fixed telephony (Vartanova, 1998: 180).

Traditionally, the Soviet state paid a great deal of attention to the development of the national broadcasting system. Still, today, the majority of Russians are in a position to receive several national television channels, while about 3 percent of the population, living primarily in rural areas, cannot receive television transmission signals at all. The rapid development of the television sector dates from 1990–1 after the new media laws were adopted in the Soviet Union and Russia. As a consequence, new private broadcasting companies began to emerge. At present, there are more than 1000 private broadcasters operating in Russia. However, on the domestic television market there still exists a crucial problem of a technological nature. All Russian television stations except one in Moscow broadcast in the analogue format. The national audiovisual sector is not yet prepared to shift to new digital formats and in fact no concrete plans for this have been discussed until now. Therefore the prospects for digital television remain rather uncertain.

Along with a technological lag in the sector of digital television, the future for cable television and various forms of pay-TV is also very unclear. This seems surprising in the country of the first sputnik, but in fact the situation still reflects the existing paradigm of strong state (and military) control over Russian achievements in the ICTs sector. Another crucial point for the development of new television services is the low standard of living in Russia. A substantial proportion of the population cannot afford even to buy new analogue television sets to replace the old Soviet-produced sets able to receive just six channels as they break down. The latest polls indicate that the Russian television audience

is slowly declining, but the trend is somewhat different with regard to the segmentation of the television audience, a process well known in the audiovisual sector in technologically advanced countries.

While some experts argue that the decline in income has not led to a substantial decrease in number of television channels or their variety and pluralism (Zassoursky, 1997: 220–1), the actual situation is slightly different. An analysis of the programming schedules of the two major national television channels, ORT and RTR, reveals a rather limited supply of impartial analytical programmes. ORT prime time consists of major evening news programmes which never separate news and opinions. In addition, daytime news shows are followed by opinion current affairs programmes exhibiting very personal viewpoints of the presenters. With the increase in number and volume of political talk shows, personal bias has become a crucial problem, which explains today's decrease of the television popularity.

### *Russian Internet: Miracle or Barrier?*

In these circumstances, the only medium which at an early stage of its existence challenged the politicized content of mainstream media channels was undoubtedly the Internet. The Russian Internet, then Runet, has become the most evident indicator of the present extensions of the media in a country experiencing socially large-scale and economically painful transformation. Some researchers have even defined the Russian Internet as the New Russian Miracle. Technically, it already existed in the Soviet Union, but only a few academicians had access to the evolving international network. During 1993–7 the number of Russian Internet users doubled each year. It even survived the August crisis in 1998 and after several turbulent months the number of users even exceeded 1 million. The latest statistics show that there are now more than 10 million Russians (6.3 percent of population) on the Net (NUA, 2001).

New data reflect the same trends in the Russian Internet development as elsewhere in the developed world. Those working in the intellectual professions constitute the largest group of Russian users; students also go online frequently. Users are mostly men (60–80 percent) but among them there are many young people aged between 20 and 35 years. The dynamics of change is really essential, and the Internet must move from the capital to the provinces. Until recently the absolute majority – 85 percent – of users were Muscovites. But during the last three or four years the proportion of Internet users living in the Russian capital declined to 60 percent. Thus, the number of Russians using the Internet outside Moscow has increased.

Another striking feature of the Russian Internet is the rapid growth in number and volume in the Russian-language sites, search engines and services in e-commerce. In most technologically advanced regions the Internet has played a role in the parliamentary and presidential election campaigns as a source of both information and disinformation. According to some statistics this did not change attitudes to the Net. Of all Russian Internet users, 36 percent trust Internet information while 35 percent do not trust anything on the Net (Zassoursky and Vartanova, 1999: 298–301).

On the other hand, Russian Internet use is still seriously limited by geographical and economic factors. It is practically impossible to connect to the Net from rural areas and small towns located in remote and sparsely populated regions. Expensive technological solutions like Internet access via mobiles seem also unsuitable since very few operators are using the latest advances in digital technologies and have not yet moved to the Russian regions. The last but not least obstacle is the price for hardware and services, which still remains unaffordable for many Russians.

The position of Russia in the European context is unfavourable, although there are two positive factors. First of all, the rate of increase of Internet connections in Russia surpasses the dynamics of Internet growth in many Western European countries. It can be explained by the great interest of Russians in modern communications and by the fact that the Internet became available to the mass audience in Russia a bit later than in western countries. Compared with other countries of the post-Soviet region, with the exception of the Baltic states, the number of Internet connections in Russia is very high.

Compared to other countries with transitional economies, Russia has the biggest network of Internet hosts, but on a similar index for Western European countries Russia lags far behind, with only 105 hosts per 1000 citizens. In Russia, as we have already seen, 6.5 percent of the population have access to the Internet (it should be borne in mind that this is only the potential audience; the active audience is much smaller). Russia is of course ahead of Moldavia, Armenia, Georgia and the independent states of Central Asia where less than 1 percent of the population have access to the Internet. But it is not at all reassuring, as in the country with the biggest number of Internet connections in Europe – Iceland – 52.11 percent of the population had access to the Internet in October 2000. It is worth noting that the level of telecommunications infrastructure in Russia does not allow for a drastic improvement of the situation: teledensity in Russia is 197 telephones per 1000 citizens, while in Sweden it is 682 and in the USA, 640.

The mobile telephony sector is in fact an alternative example of the most promising sectors of the evolving Russian economy. The growth of mobile telephony has become one of the signs of the coming wireless communication era. This was also proved in Russia at the end of 2001. Long queues at mobile sales points indicated not only the interest, but also the financial viability of the services: US\$50 a month is not a big price for many Muscovites for a telephone and 15 minutes free call time. The average estimate shows that at the moment almost one in six Muscovites uses a mobile telephone and that the number of fixed telephones in the Russian capital is below the number of mobiles.

### *Stages in Framing New Policy*

Despite all the positive features the present state of the Russian telecommunications sector still looks rather gloomy. The dissolution of the Soviet Union has destroyed the vertically organized and highly centralized national media system. The national press has almost disappeared, but has left a lot of niches free for local publications. Newspapers have been getting more and more

engaged in the political and economic competition between various elite groups. National television channels have turned into a commercial and entertainment medium, although their role in national election campaigns is difficult to overestimate. As a result, the only successful successor of the glasnost media policy, in the view of some western scholars, is the Internet.

It is true that at some points it has played the role of alternative medium for those who had access to it. The unique character of the Internet has created a comparatively big and dynamic audience in Russia, as in many other countries, and already in 1995 the Russian state had approved the concept of the development of a national information space and state information resources which stressed the importance of modern telecommunications for the development of the Russian economy and society. However, the 'Concept of 1995' limited the scope of state activity in the field to security and restrictive approaches. The state underlined the importance of information security, but put aside the problems of information equality, universal access to telecommunications and fair competition.

Economic difficulties, political disputes and social problems in fact have not diminished the importance of the emerging information society for the state, at least for some of its institutions. The 'Concept of the State Information Policy' approved by the state, the Russian parliament – the Douma – and the president for the first time in modern Russian history brought together the development of the telecommunications infrastructure and mass media, information resources and home computerization. Moreover, the document introduced the building of the information society as a major goal of national development.

The 'Concept of Building the Information Society in Russia' (May, 1999) should be also mentioned among the most prominent documents which Russian official institutions have produced in order to ensure the evolution of the telecommunications sector. This paper has been adopted by the Ministry of Telecommunications and Informatization. Declaring that Russia has no other objective than to move to an information society the document proposes a Russian way of transition. It presupposes the adaptation to global changes by preserving national identity, especially in culture and media. The Russian way also includes a strong state influence with less emphasis on role of the market and in particular the liberalization of the telecommunications sector (Vartanova, 2000: 25).

An important step was taken with the adoption of the 'Doctrine of Information Security of the Russian Federation' in 2000. Emphasizing the importance of information security as such, the document also underlined the importance of ICTs for the country's present development and stressed the importance of legal guarantees to ensure access to information and to promote democracy. The Doctrine put special emphasis on 'conditions for the harmonious development of the Russian information infrastructure, for the exercise of constitutional and civil rights and freedoms in the field of obtaining information' (Nordenstreng et al., 2001: 252).

Finally, the most profound state regulatory documents were approved by the Russian government in July 2001. They were the federal programmes 'Electronic Russia in Years 2002–2010' and 'The Development of the Unified

Information and Educational Space in 2001–2005'. Both documents are 'packaged' together to present up-to-date national priorities in education and informatization. The documents reflect new understanding of the key role of infocommunications in developing Russian civil society, promoting a power–citizen dialogue and increasing the effectiveness of education.

## Conclusion

The modern information and telecommunications sector in the economy of post-Socialist Europe can be characterized by considerable unevenness. There are the foundations of the infrastructure necessary for the transition to information society in every country of the region. For instance, in Russia there is a working system of satellite connections, a considerable intellectual potential of researchers and designers of programme software as well as the necessary technological hardware. Telecommunications, information services and content markets are rapidly developing, the number of computers in offices and households is increasing. The level of education, which is still high at least in administrative and industrial centres, guarantees the opportunity of the widespread use of the new technologies in the economies of Central and Eastern Europe. The private business in the region, especially banking, is an active force in developing information and communication technologies. On the other side, the state sector is open to the new possibilities, it actively uses information and communication technologies in executive and legislative power. Now the legislative background and state structures, which can facilitate the process of transition to information society, are being formed.

However, alongside the positive features characterizing the present state of information and communication in the CEECs and Russia, there exist serious difficulties which hamper rapid progress in the sphere. They are the low living standards of the population and an underdeveloped technological infrastructure, especially in the provinces (the low level of telephonization, cable penetration and cable capacity). Thus, completing a brief overview of emerging telecommunications policies in the CEECs, one should conclude that the role of the market and corporate business in reshaping media systems appeared to be too anarchic, thus making states more responsible for enabling citizens to become aware of the new possibilities provided by the use of ICTs and to have equal access to the Internet. Developing policies to overcome the digital divide should obviously be numerous, but specific in the various post-Socialist countries. It is evident that the role of different actors – states, private enterprises, media traditions, journalists – in finding solutions to the problem should also vary and take into account nationally specific circumstances, economic potentials and traditions of education and media consumption.

## References

ESIS Knowledge Base (2001) *Basic Facts and Indicators*; available at: [europa.eu.int/ISPO/esis/default.htm](http://europa.eu.int/ISPO/esis/default.htm)

- European Ministerial Conference (2000) *Summary Progress Report on the Implementation of the Conclusions and Recommendations of the Third EU-CEEC Information Society Forum*; available at: [europe.eu.int/information\\_society/international/candidate\\_countries/doc/summary\\_report.pdf](http://europe.eu.int/information_society/international/candidate_countries/doc/summary_report.pdf)
- Jakubowich, K. (1999) 'Information and Communication Technologies throughout the world: Eastern and Central Europe', pp. 224-40 in *World Communication and Information Report 1999-2000*. Paris: UNESCO Publishing.
- McQuail, D. (2000) *McQuail's Mass Communication Theory*, 4th edn. London: Sage.
- Nordenstreng, K., E. Vartanova and Y.N. Zassoursky (eds) (2001) 'Doctrine of Information Security of the Russian Federation', pp. 251-92 in *Russian Media Challenge*. Helsinki: Kikimora Publications.
- NUA (2001) *How Many Online*; available at: [www.nua.ie/surveys/how\\_many\\_online/europe.html](http://www.nua.ie/surveys/how_many_online/europe.html)
- Reuters (1999) *Out of the Abyss: Surviving the Information Age*. London: Reuters.
- Sparks, C. with A. Reading (1998) *Communism, Capitalism and the Mass Media*. London: Sage.
- The Estonian Tiger Leap into the 21st Century* (2000) available at: [www.esis.ee/ist2000/background/tiigrihype](http://www.esis.ee/ist2000/background/tiigrihype)
- UNESCO (2000) *World Communication and Information Report 1999-2000*. Paris: UNESCO.
- Vartanova, E. (1998) 'National Infrastructure for the New Media in Russia', pp. 174-88 in Y.N. Zassoursky and E. Vartanova (eds) *Changing Media and Communications: Concepts, Technologies and National Perspectives*. Moscow: Faculty of Journalism/IKAR Publishers.
- Vartanova, E. (1999) 'Universal Access to the New Media as a Form of Public Policy', pp. 73-87 in Y.N. Zassoursky and E. Vartanova (eds) *Media, Communications and the Open Society*. Moscow: Faculty of Journalism/IKAR Publishers.
- Vartanova, E. (2000) 'Russian Internet Fever', *Economic Trends* (Helsinki) 3: 23-5.
- World Development Report (2000/1) available at: [www.worldbank.org/html/extdr/regions.htm](http://www.worldbank.org/html/extdr/regions.htm)
- Zassoursky, Y.N. (1997) 'Media in Transition and Politics in Russia', pp. 213-21 in J. Servaes and R. Lie (eds) *Media and Politics in Transition: Cultural Identity in the Age of Globalization*. Amersfoort: ACCO Leuven.
- Zassoursky, Y.N. and E. Vartanova (1999) 'Transformation in Context of Transition: Development of New Information and Communication Technologies within Professional, Legal and Political Frameworks', pp. 284-330 in *Information Societies: Crises in the Making? Diagnostics and Strategies for Intervention in Seven World Regions*. Montreal: ORBICOM.

**Elena Vartanova** is professor at the Faculty of Journalism and vice-dean for research. She lectures on media economics, the history of business journalism, the Nordic media system, contemporary media systems, and the Information Society. She has published two monographs and more than 50 articles in Russian and English and edited four books of research papers. Professor Vartanova is member of International Council of the IAMCR, and member of the Executive Board of the European Consortium for Communication Research (ECCR), and is corresponding editor for *European Journal of Communication*.

**Address** Faculty of Journalism, Moscow State University, 9 Mokhovaya, Moscow 101999, Russia. [email: [eva@journ.msu.ru](mailto:eva@journ.msu.ru)]