



**ANNUAL ACTIVITY REPORT**  
**OF THE CROATIAN POST AND ELECTRONIC**  
**COMMUNICATIONS AGENCY FOR 2009**

**Zagreb, April 2010**

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# 1. INTRODUCTION

The Croatian Post and Electronic Communications Agency (hereinafter: HAKOM), pursuant to Article 13, paragraph 1 of the Electronic Communications Act (hereinafter: ECA) hereby presents to the Croatian Parliament and the Government of the Republic of Croatia (hereinafter: RoC) its Annual Activity Report.

HAKOM's Annual Activity report contains data on the development of the market of electronic communications networks and services and market of postal and courier services, an overview of the implementation of the established principles and goals of regulation of the market of electronic communications networks and services and of the market of postal and courier services, data on the fulfilment of objectives and tasks laid down in the HAKOM's Annual Work Programme and all other data relevant for an overview of development of the market of electronic communications networks and services and of the market of postal and courier services in the Republic of Croatia. In accordance with the Broadband Development Strategy and its Action Plan, this report places a special emphasis on the situation and development of broadband Internet access.

The work of HAKOM in 2009, was, in the first place, oriented towards the achievement of the established principles and goals of regulation of the market of electronic communications networks and services and of the market of postal and courier services with a special emphasis being placed on the maintenance and promotion of effective competition, and on encouraging market access for new operators and service providers. Moreover, HAKOM paid special attention to ensure good quality of electronic communications services at an affordable price and a high level of consumer protection. Last year HAKOM continued with its consumer protection activities and though prevention (education of users) and correction (dealing with complaints) it tried to ensure a high level of protection of electronic communications users.

By means of its regulatory activities, HAKOM has, by adopting a series of decisions and rulings important for further liberalisation and regulation of the market of electronic communications networks and services and market of postal and courier services, created conditions for efficient competition. HAKOM's activities in 2009 were focused on further market liberalisation in the RoC and on the creation of identical conditions for all operators and service providers in order to allow to end users to choose operators and services according to their wishes.

In 2009, HAKOM also continued implementing the "Modernisation" programme aimed at building its own capacity for market regulation and development by means of IT introduction into its processes and services, the increase of regulatory competences, the increase of productivity and efficiency and by facilitating access to HAKOM's regulatory activities.

HAKOM's financial and final statements for 2009 make a constituent part of the annual report and contain the report on revenues, expenditures, an overview of surplus income, balance sheet, investment report, an overview of staff structure, and a report on state budget's revenue.

## 2. OVERVIEW OF DEVELOPMENT OF THE ELECTRONIC COMMUNICATIONS MARKET

On the basis of received official data on developments in the electronic communications market in 2009, it may be concluded that the electronic communications market recorded a fall in revenue as illustrated in Figure 2.1.

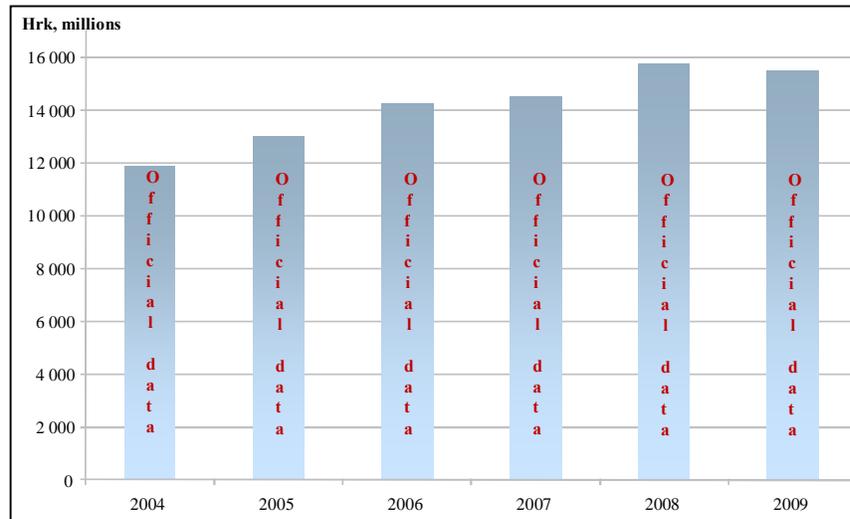


Figure 2.1. Total revenue from all activities

The total revenue from all electronic communications activities in 2009 decreased by 1.67% compared to 2008. However, an encouraging fact is that the biggest increase in revenue of 44.9% refers to the data transfer activity, which for the most part results from accelerated development and increasing use of broadband Internet access shown in Figure 2.2.

A 2.9 % fall in revenue was recorded in mobile communications networks while the revenue for fixed networks was down 9.6 percent. The market segment of leased communications lines shows an increase in revenue by 6.8%, while the cable television segment sees a 10.1 % rise.

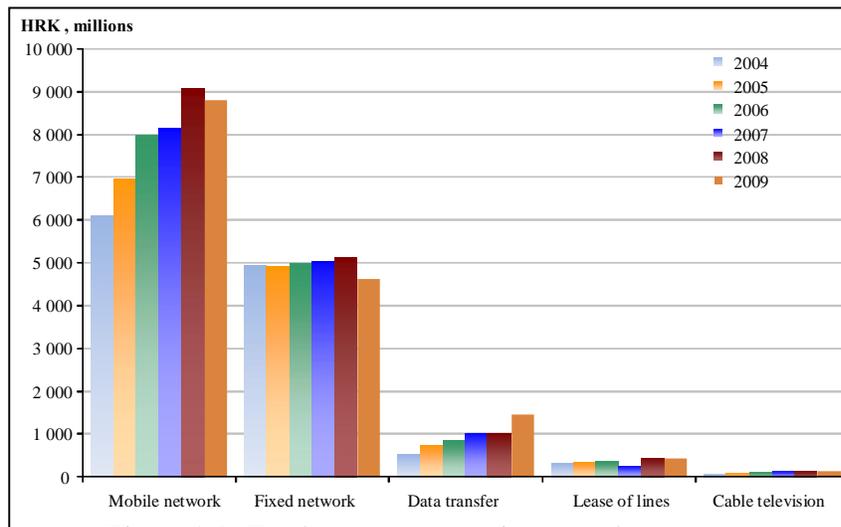


Figure 2.2. Total revenue per main network segments

For comparison sake, the total revenue in the European Union Member States (hereinafter: the EU) remained at the level of 2008 total revenue. However, revenue from public voice service in fixed communications experienced a sharp decline in these countries, by 6.3 percent, and the same type of revenue in mobile communications fell by 1.8 percent. A significant increase was recorded in the EU Member States in relation to broadband Internet access in fixed networks, by 5.6%, and in the mobile network, by 9.3%.

At the end of 2009, the Croatian electronic communications market was characterised by the indicators shown in Table 2.1.

Table 2.1. Basic data on the electronic communications market

Indicator	
Operators of public telephone service in fixed electronic communications network	9
Inactive operators of public telephone services in fixed electronic communications network	8
Operators in mobile electronic communications network GSM/DCS	3
Operators in mobile electronic communications network UMTS	3
Licenses for fixed wireless access	42
Providers of leased electronic communications network and/or lines	31
Internet service providers (ISP)	51
Providers of Voice over the Internet Protocol	36
Cable providers	20
Number of radio networks	173
Number of television networks (analogue television)	25
Number of television networks (digital television)	2
Number of television networks (digital television) ó experimental	4
Users of fixed communications networks	1 859 200
Users of carrier preselection	240 420
Users of mobile communications networks	6 082 900
Internet users	2 495 500
Users of broadband Internet access – <i>total</i>	937 198
- <i>in fixed communications networks</i>	684 960
- <i>in mobile communications networks</i>	252 238
Cable users	141 163
Realised collocations	478
Realised unbundled local loops	123 847
Ported numbers in fixed communications networks	359 137
Ported numbers in mobile communications networks	110 209

## 2.1. PUBLIC SWITCHED TELEPHONE NETWORK

The number of subscribers of public voice service, illustrated in Figure 2.3, in the public switched telephone network (PSTN) in the Republic of Croatia has been stagnant.

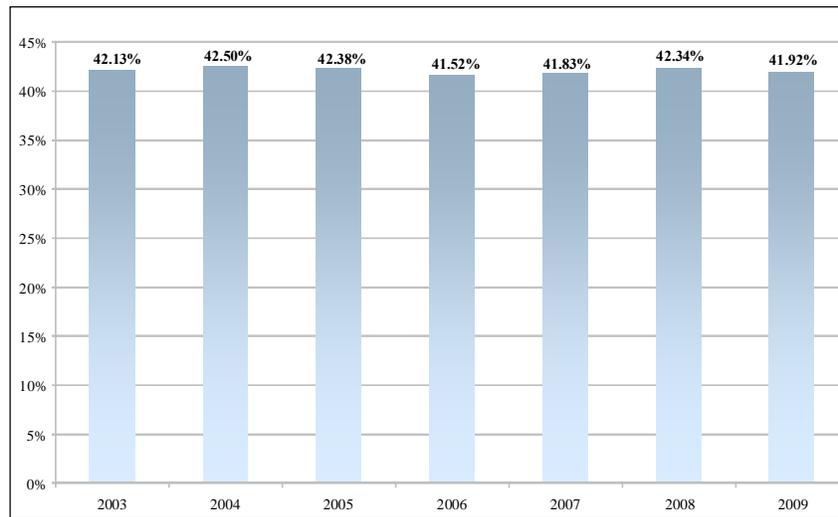


Figure 2.3. Penetration in the fixed communications network

This development trend is present in the EU<sup>(1)</sup> as well, as indicated in Figure 2.4, and it is a consequence of a switchover from fixed to mobile communications and to broadband Internet access. Additional fall in the number of end users of public switched telephone network is expected since devices in the mobile communications network (mobile phones) are increasingly becoming a means of personal communication, while devices used in fixed communications network (computers) are becoming a means of family and business communication.

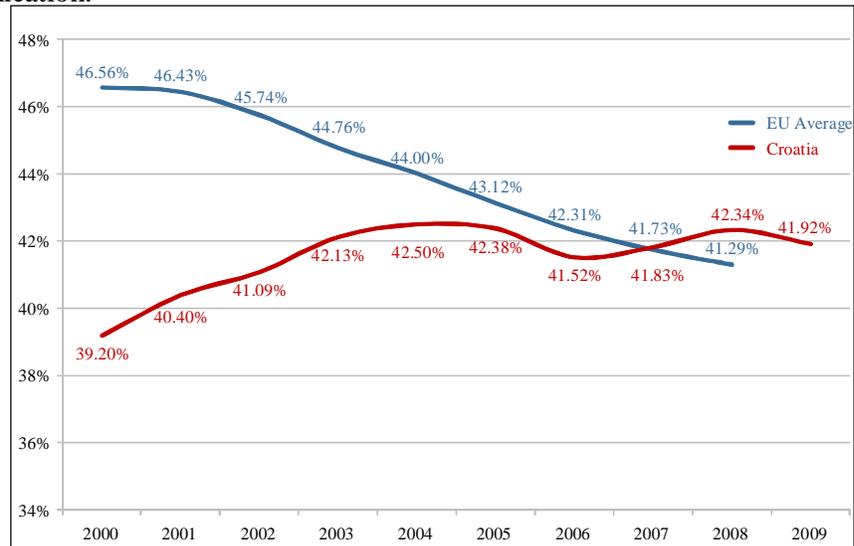


Figure 2.4. Developments in penetration in fixed communications network

<sup>(1)</sup> Data on electronic communications markets in the EU Member States have been taken over from ITU, OECD, COCOM, EUROSTAT

The above-mentioned development trend is illustrated by the comparison with the trend in penetration of users of public voice service in fixed communications network in the EU Member States. There is a noticeable downward trend in the number of users of fixed communications networks per 100 inhabitants ó penetration, which is particularly characteristic of technologically more advanced EU Member States.

At the end of 2008, the Republic of Croatia showed the penetration of users in the fixed communications network similar to that of the EU Member States average (41.29 percent) as illustrated in Figure 2.5.

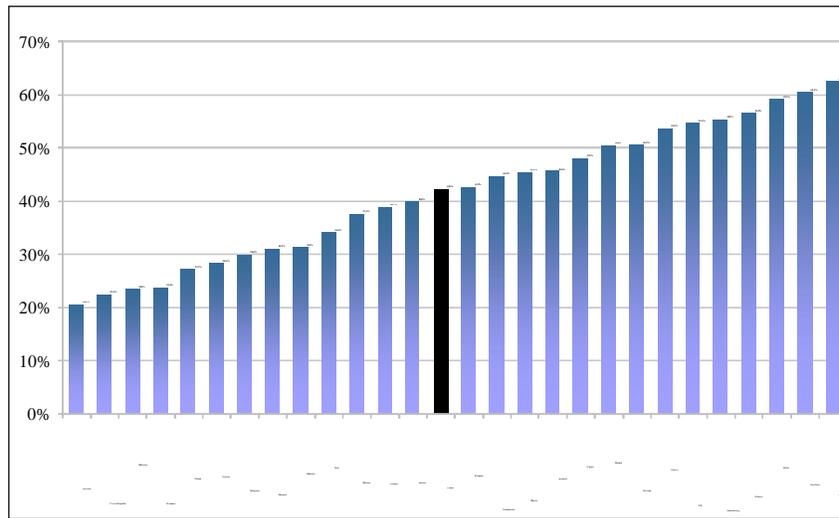


Figure 2.5. Penetration of users of public voice service in fixed communications network (EU and RoC)

The share of new operators (including Iskon) on the market of the public fixed communications network in the RoC at the end of 2009, illustrated on Figure 2.6, has increased in relation to the number of users and amounts to 26.73 percent. The total revenue has also grown in 2009 and amounts to 18.81.

For comparison sake, at the end of 2008, the share of new operators on the market of the public fixed communications network in the RoC in relation to the number of users amounted to 22.35 percent, and in relation to the total revenue earned in 2008 it amounted to 16.99 percent.

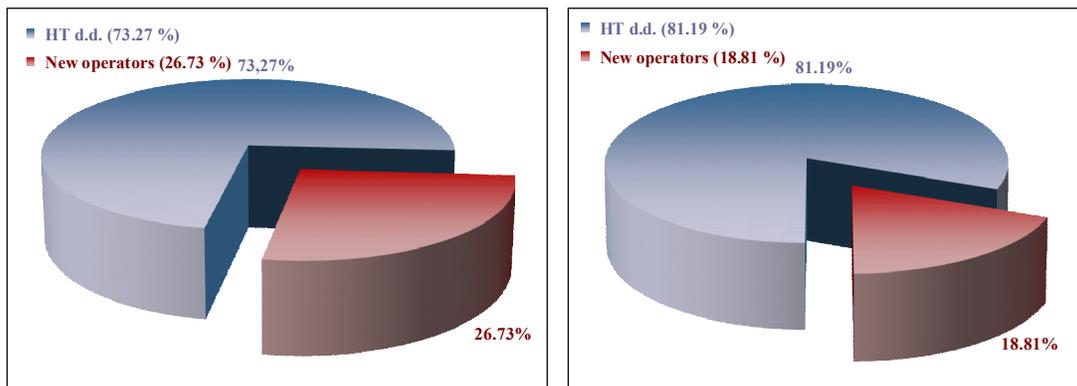


Figure 2.6. Market share of new operators in relation to the number of users and total revenue

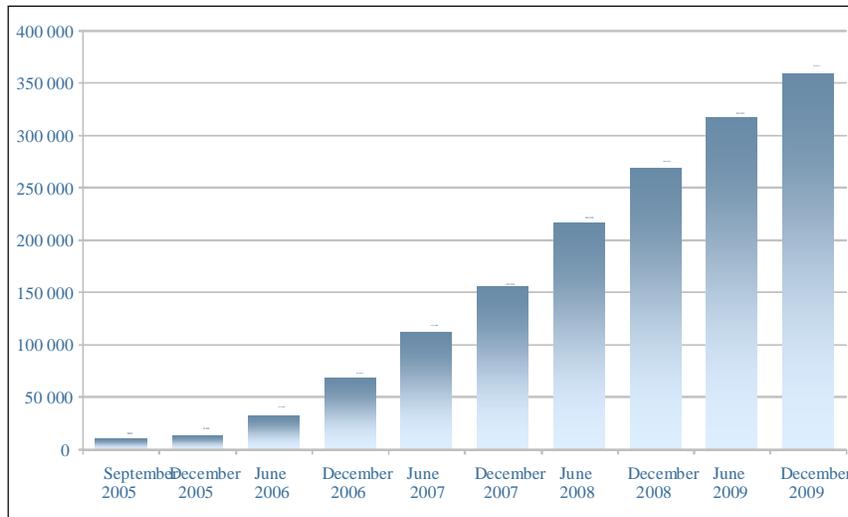


Figure 2.7. Ported numbers in fixed communications network

The increase in the number of ported numbers in fixed communications networks indicates not only the increased dynamics of this market but also a better selection for end users.

The share of new leased lines providers and leased network providers in the RoC at the end of 2009, in relation to the revenue earned in the year before, amounted to 47.87 percent as illustrated in Figure 2.8.

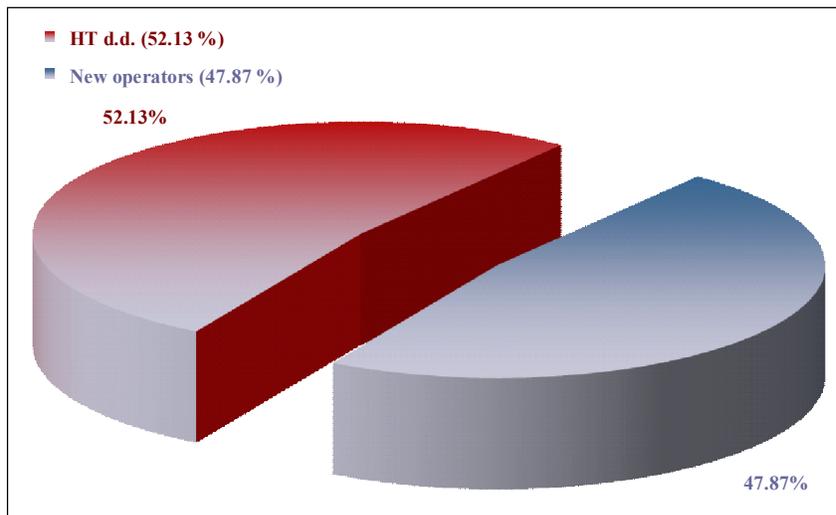


Figure 2.8. Market share of leased lines and leased network providers

## 2.2. PUBLIC MOBILE COMMUNICATIONS NETWORK

The number of users of public mobile communications networks, illustrated in Figure 2.9, saw a slight increase in 2009. The most important reasons for the increase are the following: the lowering of prices of use of mobile communications networks, more competition, in particular through activities of the third operator of mobile communications networks, the switchover of users from fixed to mobile communications networks and the general tendency towards greater use of mobile communications networks.

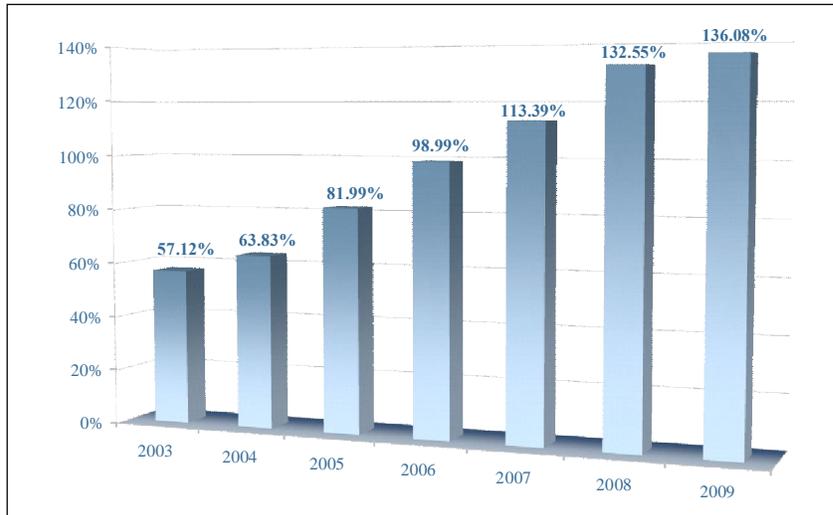


Figure 2.9. Penetration of users in mobile communications network

The comparison of penetration of users of mobile communications networks with the latest available data in the EU (December 2009) in Figure 2.10 shows that Croatia is above the EU average of 119 percent. This shows that Croatia's market is highly developed, considerably liberalised, and that there is still sufficient room for improvement both in terms of quality and lowering of prices.

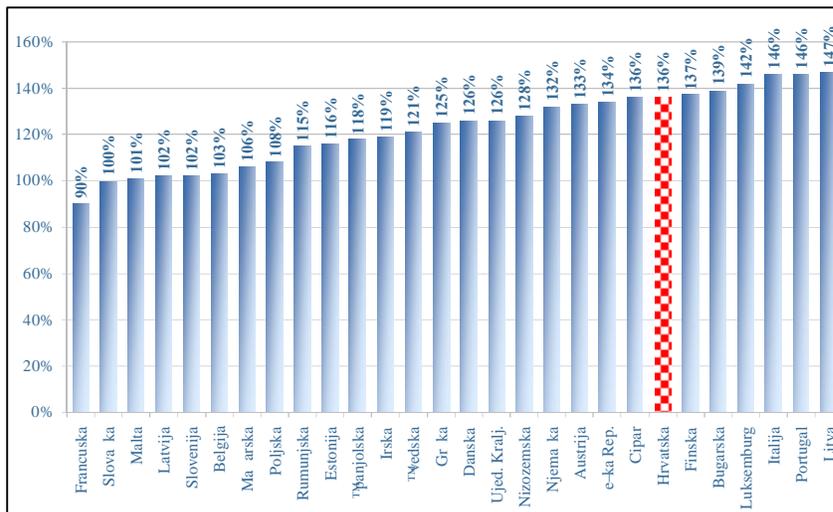


Figure 2.10. Penetration of users of mobile communications networks (EU and RoC)

The share of the third operator on the market of public mobile communications networks in the RoC in 2009, considering the number of users, amounted to 9.91 percent, while its share in revenue grew to 10.18 percent, as illustrated in Figure 2.11.

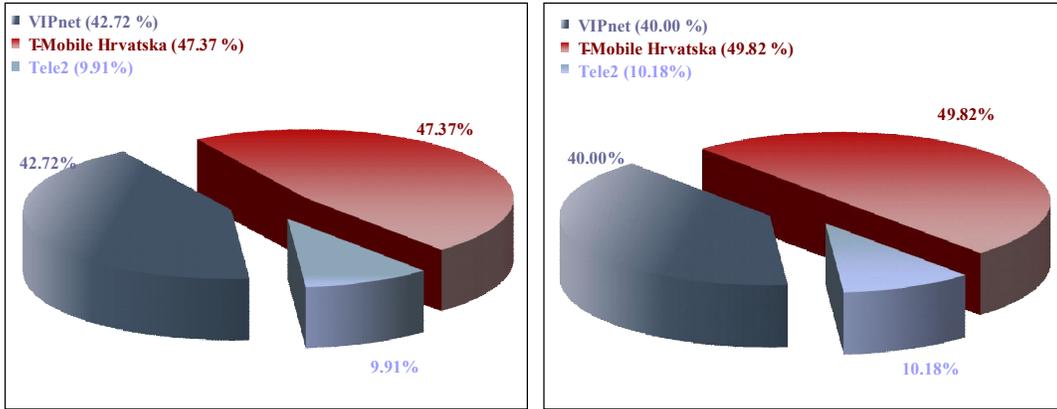


Figure 2.11. Market share of operators of mobile communications networks in relation to the number of users and total revenue

The number of ported numbers in mobile communications network shows an upward trend, as illustrated in Figure 2.12.

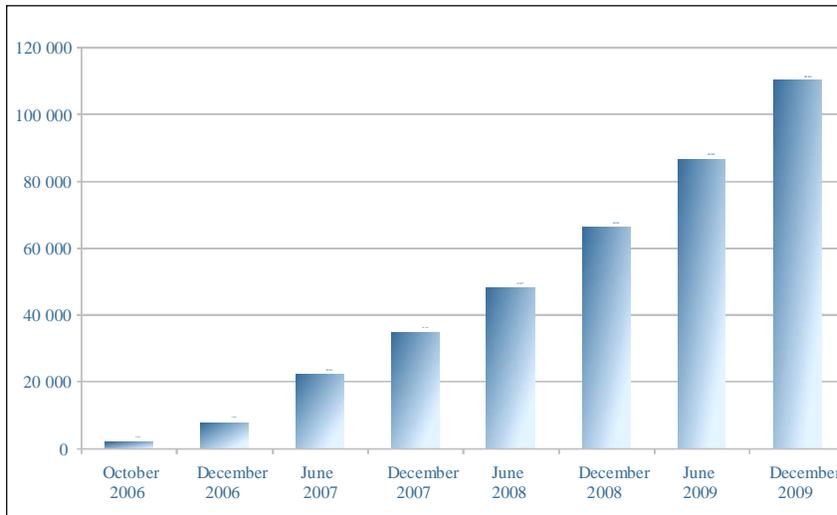


Figure 2.12. Ported numbers in mobile communications network

The growth in the number of ported numbers, like the one in fixed communications network, indicates an increased dynamics in this market and a better selection for end users.

The OECD (Organisation for Economic Co-operation and Development) basket of public voice service in the mobile communications network indicates balanced, measurable spending of average users in the manner that the calculated basket can serve as comparison between operators and between countries. The calculation takes into account

all tariff packages, and all important characteristics of individual packages, operators or the country in question. All the prices include value added tax. The analysis of the movement of prices indicates that all prices of use of the mobile communications network services are above the EU average as illustrated in Figure 2.13.

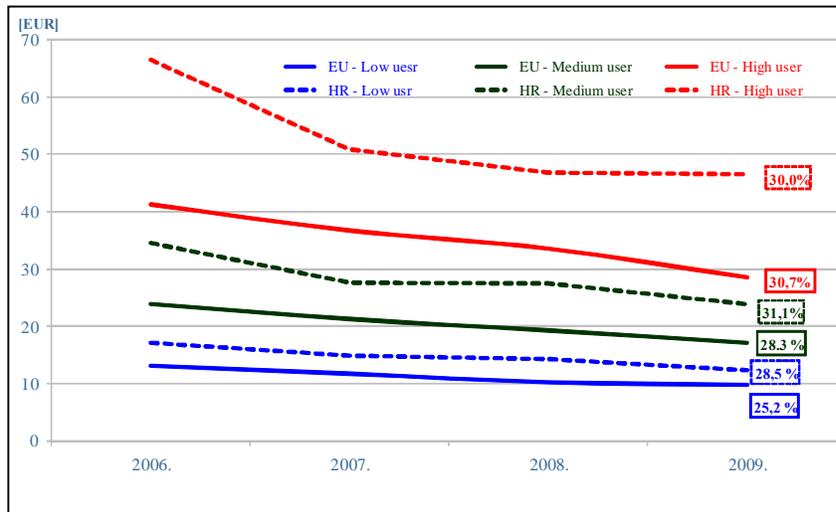


Figure 2.13. OECD basket of use of mobile communications networks services

The above figure shows a continuous decline in the prices of services in mobile communications networks since 2006. Prices of services are 28.5 percent lower for low users, 31.1 percent for medium users and 30.0 percent for high users, which is very close to the EU development trend.

### 2.3. INTERNET

The development of Internet, broadband Internet access and broadband applications and services have been recognised worldwide as key initiators of overall economic growth, employment, competitiveness, and efficiency, and as an inevitable factor for ensuring a more efficient health system, education, science, culture, tourism etc.

The total number of Internet users both in the world and in the RoC shows an accelerated growth trend. Last year, the number of Internet users, as illustrated in Figure 2.14, grew by 11.2 percent and it reached the total of 2 495 440 users.

However, broadband Internet access in the RoC does not have the desired broadband competitiveness compared to the EU Member States.

The number of subscribers of broadband Internet access over a fixed communications network has increased by 30.54 percent in 2009 thus reaching the penetration of 15.44 percent.

The measuring of broadband Internet access over mobile communications networks has been introduced to the market of electronic communications in 2008<sup>2)</sup>. Mobile internet access has been growing significantly in the entire world.

<sup>(2)</sup> In the December 2008 report, COCOM for the first time illustrated broadband Internet access by using mobile network platforms.

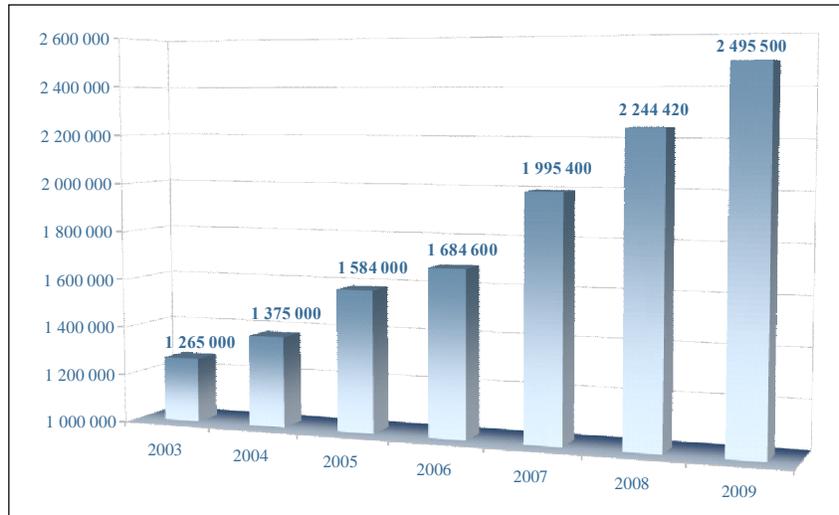


Figure 2.14. Number of Internet users

Broadband Internet access over mobile communications networks reached 252 238 at the end of 2009, as illustrated in Figure 2.15, which, considering the number of users, represents a penetration of 5.69 percent.

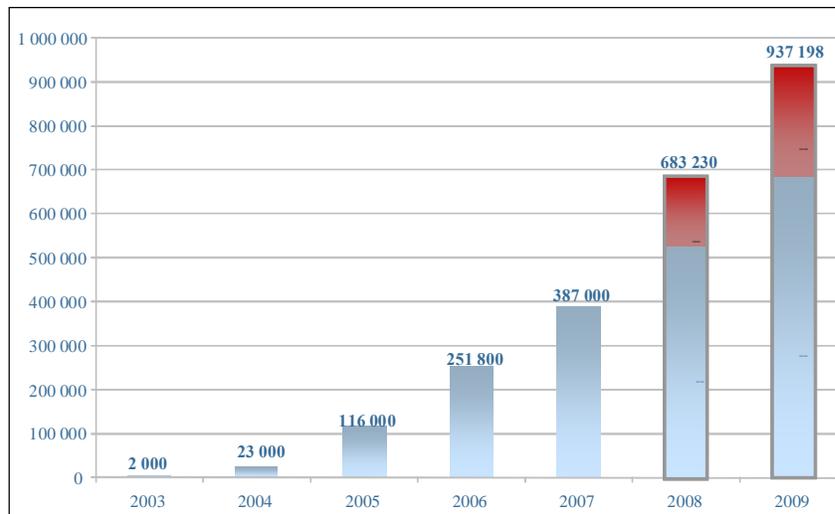


Figure 2.15. Total number of users of broadband access

At the end of 2009, there was the total of 937 198 broadband internet connections in the RoC, which is a penetration rate of 21.13 in relation to the number of inhabitants.

Special attention must be paid to a more uniform development of broadband Internet access in different regions. The image of broadband penetration in mobile communications networks<sup>(3)</sup> per individual countries is given in Figure 2.16.

<sup>(3)</sup> The overview was prepared with the geometrical support of HAKOM

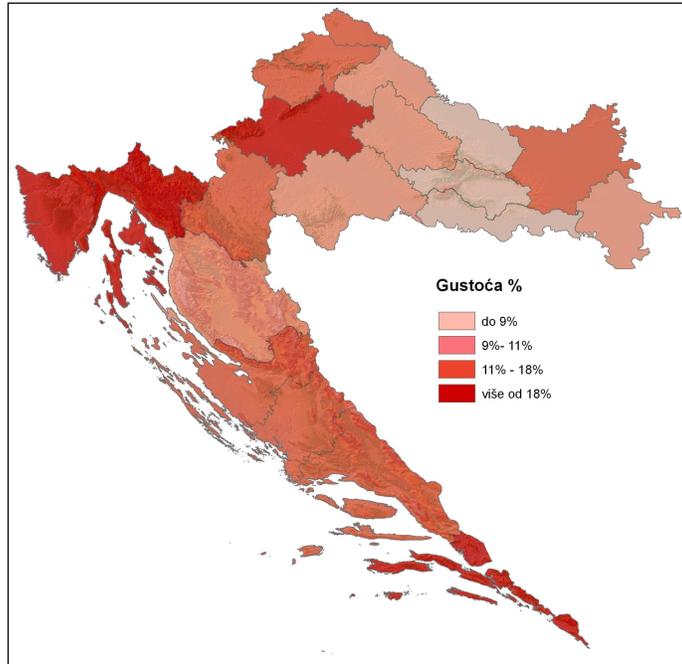


Figure 2.16. Broadband penetration per counties

The Figure shows a very unequal distribution of broadband penetration per individual counties which justifies the selective stimulation of broadband Internet access development in the RoC.

Furthermore, significant development and introduction of mobile access also contributed to a greater share of the total number of broadband users.

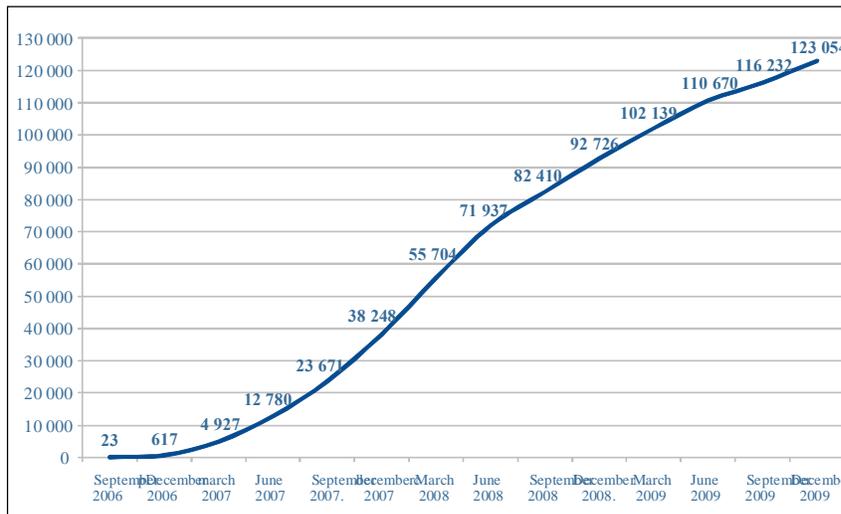


Figure 2.17. Unbundled local loops since the service became available

A sharp growth of unbundled local loops confirms the accelerated liberalisation of the electronic communications market in the RoC, Figure 2.17. The same applies to collocations in Figure 2.18.

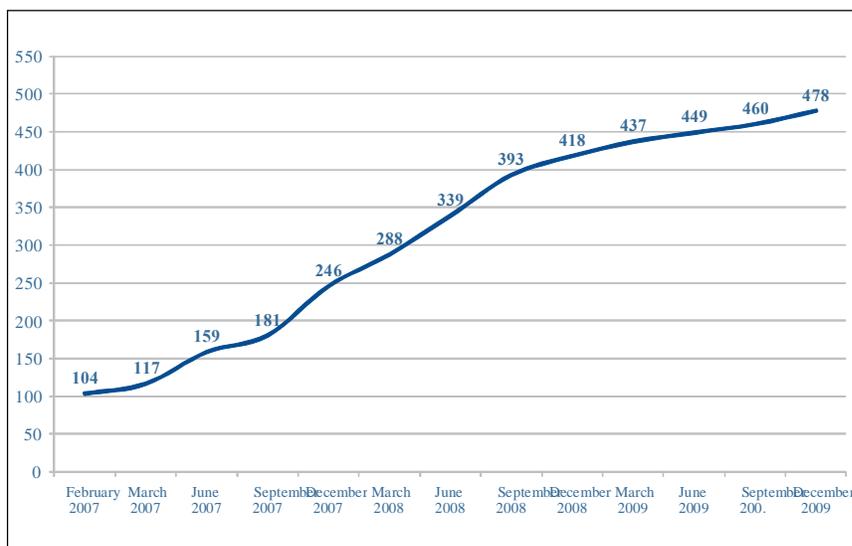


Figure 2.18. Developments in the number of collocations from 2007 to 2009

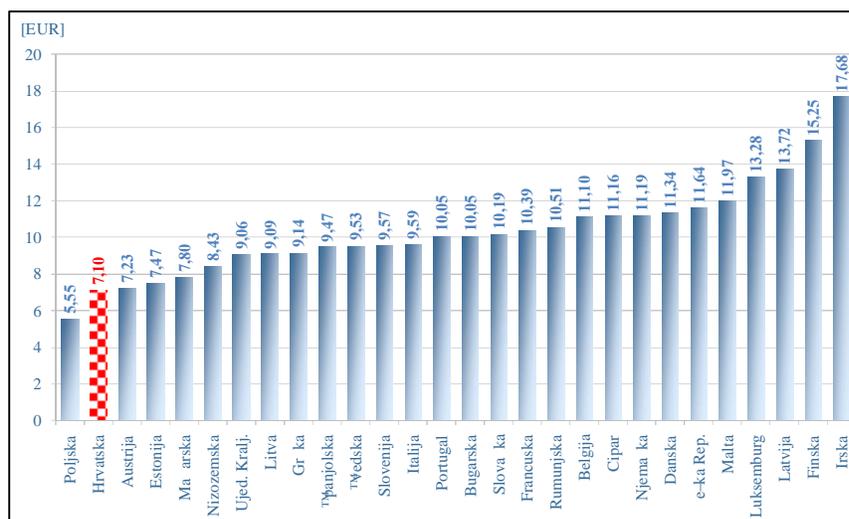


Figure 2.19. Monthly fee for complete access to unbundled local loop (EU and RoC)

According to the latest available data in the EU (October 2008), it is obvious from Figures 2.19 and 2.20 that monthly fees for full and shared access to the unbundled local loop are among the cheapest. With its price policy, HAKOM has contributed to the development of competition and faster growth of broadband access.

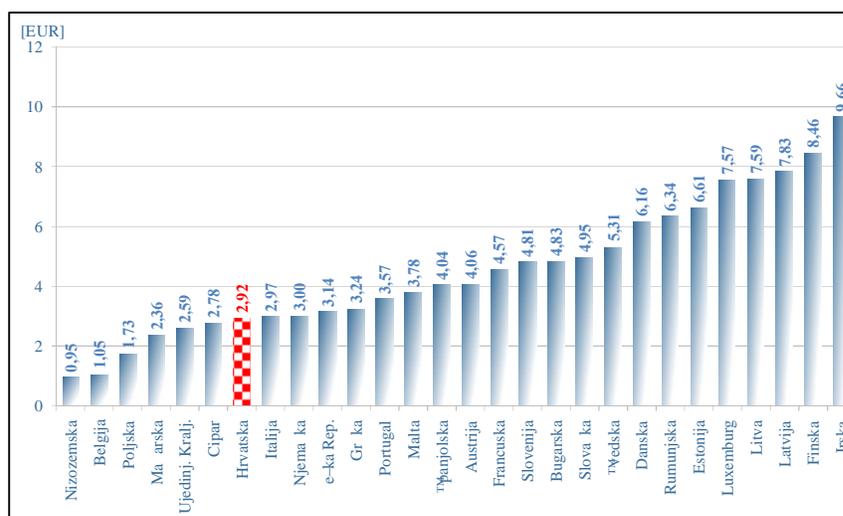


Figure 2.20. Monthly fee for shared access to the unbundled local loop

## 2.4. DIGITAL TELEVISION

The process of digitalisation and switchover from analogue to digital television (hereinafter: DTV) has started and it is gaining speed. The digitalisation of audiovisual content allows the introduction of many new services based on personalisation and interactivity, such as personal selection and programme schedules, delayed programmes, video on demand, interactive voting, participation in game shows, elimination or viewing of selected commercials only.

The market is faced with a problem of standardisation, property protection, consumer protection, advertising, preservation of public and cultural values.

The EU is trying to speed up the process of switchover to the terrestrial DTV in order to free the spectrum and ensure the so-called "digital dividend" for additional television contents and new information and communication services and, for that reason, the European Commission (hereinafter: the EC) has published a recommendation to switch off analogue terrestrial television by 2012.

Countries such as Sweden, Finland, Switzerland, Germany, the Netherlands, Luxembourg, Denmark and Norway have already switched off the analogue terrestrial television while the majority of the other EU Member States intend to do the same by 2010.

In accordance with the Analogue to Digital Television Broadcasting Switchover Strategy in the Republic of Croatia, Croatia will switch off the analogue television by 31 December 2010 by gradually switching off the nine regions.

As part of the implementation of the Strategy, HAKOM invited a public tender and on 24 April 2009 granted the first license for the provision of service of management of electronic communications network of digital television for Multiplex (MUX) A and Multiplex (MUX) B in the territory of the RoC, thus ensuring the technical preconditions for six new digital television channels at the national level in addition to the existing four channels (HRT1, HRT2, Nova TV and RTL). By the end of 2009, the population coverage

of 96% for Multiplex A and 91% for Multiplex B has been achieved in the territory of the RoC.

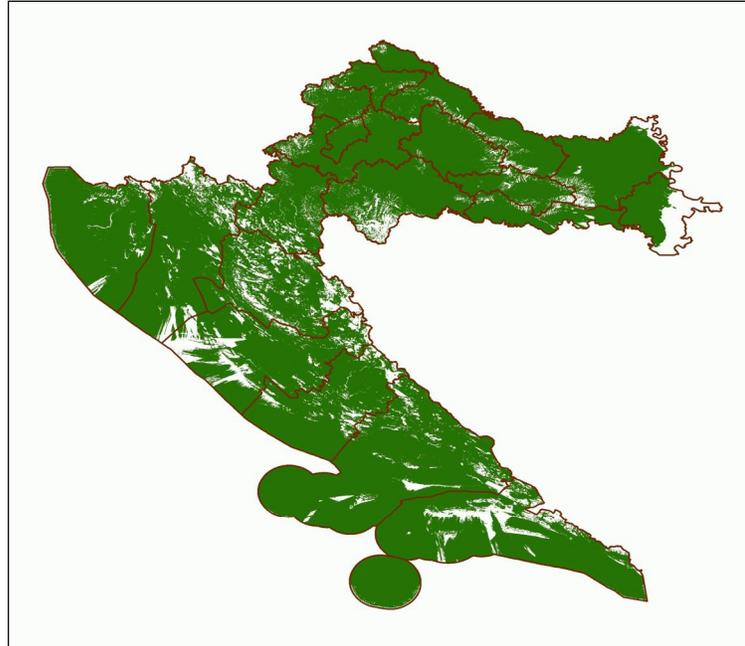


Figure 2.21. Coverage of Croatian territory with DVB-T

The experimental broadcasting of High Definition Television ó HDTV continued in Osijek, Split, Rijeka and Zagreb in 2009, and in the first half of the year, experimental broadcasting of DVB-H (Digital Video Broadcasting ó Handheld) started first in Zagreb, and then in Rijeka.

In the last quarter HAKOM invited public tenders for the granting of licenses for use of the radio frequency spectrum for digital television for Multiplex D in digital regions D5, D1, D3, D7 and D9, and for the existing local/regional contents and new additional contents.

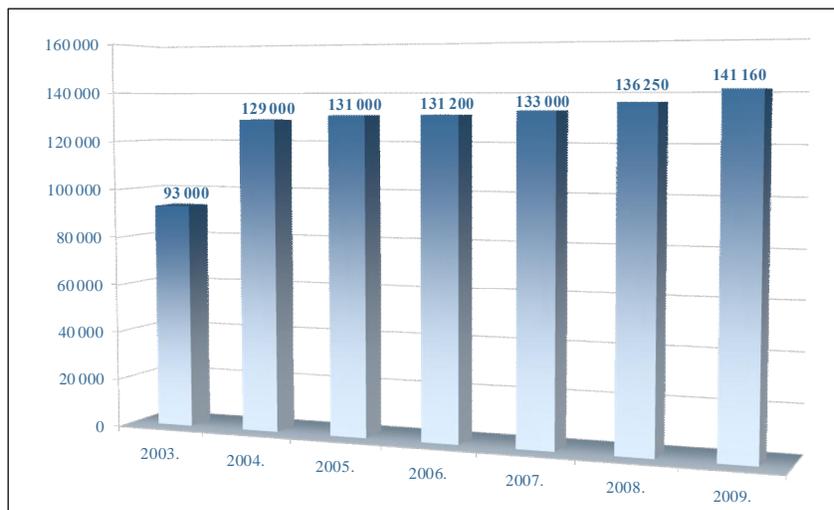


Figure 2.22. The total number of cable subscribers

The number of cable television users shows a slight upward trend compared the previous years, as illustrated in Figure 2.22. Considering the technological progress which enables the bundling of the public voice service, Internet access and cable television and an increasing interest into investments in the development of new types of networks, a more significant increase in the number of users of cable television is expected in the forthcoming period.

The unsatisfactory growth of cable television indicates the need to further encourage convergence and consolidation in the fixed communications market and to continue building the fixed electronic communications network.

### **3. OVERVIEW OF DEVELOPMENT OF THE POSTAL SERVICES MARKET**

Since the entry into force of the ECA, and in accordance with the Postal Act (hereinafter. PA), that is, the Postal Services Act (hereinafter. PSA), HAKOM has been in charge of following the situation on the market and the development of postal activities, of the postal and courier services market, and of undertaking measures necessary to ensure fair and efficient competition in the postal and courier services market.

Also, because of the existing providers of courier services, it is necessary to emphasise that the legal framework changed in the middle of the year because the PSA entered into force in July 2009. The transitional provisions of the PSA prescribe the obligation for the existing postal and/or courier service providers, who have acquired the right to provide postal and/or courier services on the basis of an application submitted in compliance with regulations in force until the entry into force of the PSA, to comply with the conditions for the acquisition of the right to provide postal services within 90 days from the entry into force of the PSA on the basis of an application in accordance with the PSA. Furthermore, the PSA defines courier services as receipt, transport and delivery of postal items directly from the sender to the addressee, without routing, in the manner that the same employee of the provider of services carries out all the above-mentioned activities and, if the provider of services provides the services exclusively in the above-described manner, the provider shall be regarded to provide courier services, which is not a subject of the PSA, and in order to acquire the right to provide such a service the provider does not need to apply to HAKOM. However, if the provider provides the service by routing the postal item, or if receipt, transport and deliver of postal items are not carried out by the same employee of the service provider, this shall be regarded as postal service which is regulated by the PSA and under the competence of HAKOM. The former PA defined the courier service as a value added service, and the PSA differentiates, among postal services, between the universal postal service and other postal services which include value added services and other postal services which are not universal postal services. Therefore, what the PA classified as postal service in accordance with the manner and conditions of provision of service, the PSA classifies either as universal postal service or as other postal services or as a courier service.

Consequently, this report shall contain data about providers of services both in accordance with the PA and with the PSA.

The indicators about the postal and courier services market, given in this annual report, are based precisely on data for service providers both according to the PA and according to the PSA. All data in this report are given separately for the public operator HP-Hrvatska po-ta d.d. (hereinafter: HP) and jointly for all other providers (group other providers).

#### **3.1. PROVIDERS OF POSTAL AND COURIER SERVICES IN THE RoC**

Until the entry into force of the PSA, the total of 22 providers of postal and courier services were registered with HAKOM. At the end of 2009, the total of nineteen (19) postal service providers were registered in the RoC out of which only HP is the provider

of all universal postal services and, pursuant to the PSA, has the right and the obligation to provide universal services in the entire territory of the RoC. The other eighteen providers are, as well as HP, registered for the provision of other postal services (Table 3.1).

Table3.1. List of postal service providers

<b>POSTAL SERVICE PROVIDERS</b>		
<b>PROVIDERS OF UNIVERSAL POSTAL SERVICES</b>		
HP- HRVATSKA POŠTA d.d. (CROATIAN POST)	Juriševa 13	ZAGREB
<b>PROVIDERS OF OTHER POSTAL SERVICES</b>		
HP- HRVATSKA POŠTA d.d. (CROATIAN POST)	Juriševa 13	ZAGREB
DHL ó INTERNATIONAL d.o.o.	Turinina 3	ZAGREB
DPD CROATIA d.o.o.	Franje Lužića 23	ZAGREB
LAGERMAX AED CROATIA d.o.o.	Franje Lužića 23	ZAGREB
INTEREUROPA, LOGISTIČKE USLUGE d.o.o.	Josipa Lončara 3	ZAGREB
IN TIME d.o.o.	Velika cesta 78	ZAGREB
RHEA d.o.o.	Buzinski prilaz 36/a	ZAGREB
LIDER EXPRESS d.o.o.	Ulica Sv. Roka 3, Donje Sitno	ŠIRNOVNICA
ZUM DISTRIBUCIJA d.o.o.	Tomislavova 11	ZAGREB
BICIKL EXPRESS d.o.o.	Radićev odvojak 37	VELIKA GORICA
OVERSEAS TRADE Co. Ltd d.o.o.	Kovinska 20	ZAGREB
ZAGREBŠKI PEDAL d.o.o.	Vodovodna 20/a	ZAGREB
TISAK TRGOVAČKO d.d.	Slavonska avenija 2	ZAGREB
NOVA DISTRIBUCIJA d.o.o.	Kneza Branimira 11	DUBROVNIK
BRZO SREBRO d.o.o.	Vrapčanska 195	ZAGREB
D.F.F.f. d.o.o.	Potok 41	ZAGREB
A1 DIREKT d.o.o.	Zrinskih i Frankopana 18	OZALJ
CityBOX d.o.o.	Tršćeva 8	ZAGREB
SPRINT, company for the delivery of printed matter, Hrvoje Cvitešić	Turanj 81	KARLOVAC
<b>PROVIDERS WHO ARE NOT IN COMPLIANCE WITH PSA</b>		
INTEREUROPA SAJAM d.o.o.	Avenija Dubrovnik 15	Zagreb
City EXPRESS d.o.o. for transport of business documentation	Mrljane 13	Nevećane
ATLANTIK EXPEDITUS d.o.o. for business services	Radnička cesta 27	Zagreb
TOMATANE d.o.o.	Bosutska 31	Zagreb
CITY EX d.o.o. for transport of business documentation	Donje Svetice 40	Zagreb

### 3.2. DATA ON SERVICES

According to the delivered data, providers of postal and courier services provided in 2009 the total of 383,007,950 postal, courier and related services thus reducing the number of services by approximately five percent compared to 2008. On the total market, HP's share

was approximately 98% with the total of 339,617,756 provided services, and the group of other providers had a share of approximately 11 percent with 43,390,194 provided services. In 2009 the group of other providers increased its market share by almost one percent (Figure 3.1) compared to 2008.

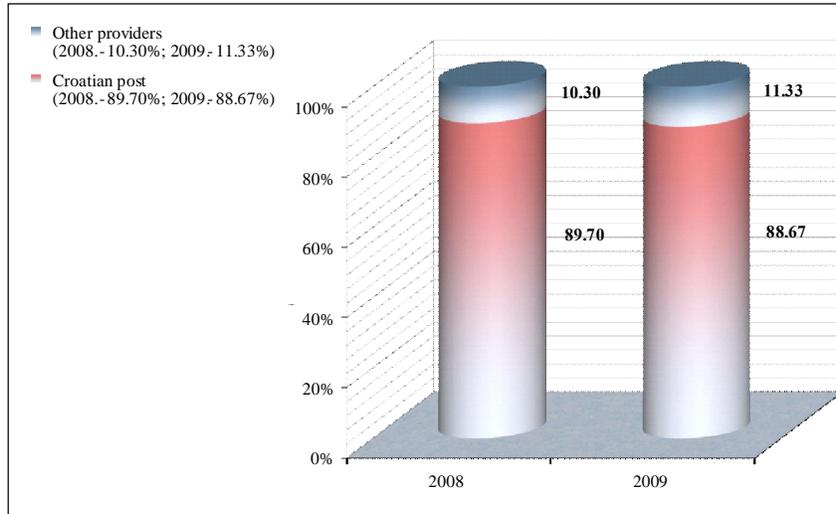


Figure 3.1. Market shares in the total number of provided services

It is obvious from the structure of the total number of provided services (Figure 3.2.) that postal items (letters, registered items and insured items) in HP made almost 89% of all services, while they made about 69% in the group of other providers. The share of packages in the total number of services provided by HP amounted to around 1%, while in the group of other providers in amounted to around 12%. Compared to the year before, HP's share of postal items declined by a little less than four percent, the share of packages remained approximately the same, and the share of unaddressed mail increased by around four percent. In the group of other providers, the share of postal items decreased by almost 13 percent, and the share of packages increased by a bit more than one percent, and the share of unaddressed mail by 17 percent.

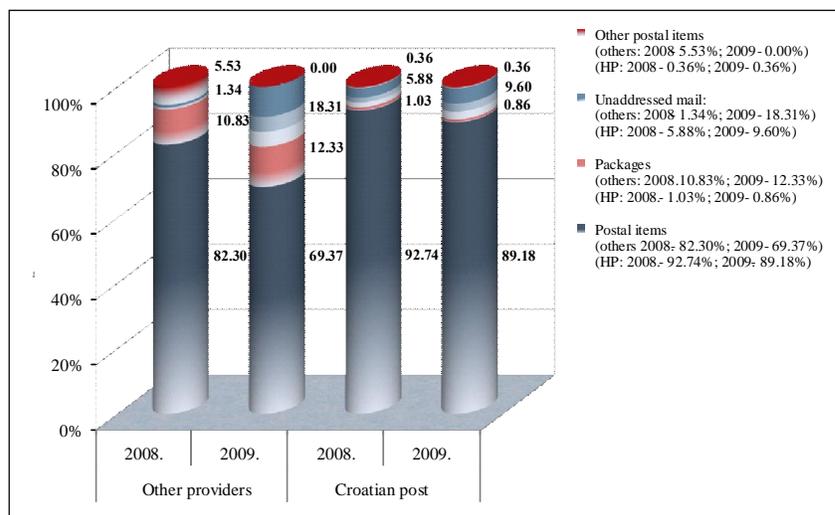


Figure 3.2. Shares of the total number of provided services per providers

Looking individually at categories of services and the share of the group of other providers and HP in the total number of provided services in 2009, it is obvious that, compared to the previous year, the share of the group of other providers increased compared to HP in categories of packages services and unaddressed mail, while the share of postal items remained the same (Table 3.2.).

Table 3.2. Number of provided services per categories of services and shares per providers

		Other providers	Hrvatska pošta (Croatian post)	Total	Share of other providers	Share of Croatian post	
<b>Total services</b>	2007	27,287,961	376,466,449	<b>403,756,410</b>	6.67	93.24	
	2008	41,379,573	360,359,612	<b>401,739,185</b>	10.30	89.70	
	2009	43,390,194	339,617,756	<b>383,007,950</b>	11.33	88.67	
	Index	2009/2007	90	95			
		2009/2007	94	95			
Postal items	2007	20,058,357	344,582,045	<b>364,640,402</b>	5.50	94.50	
	2008	34,053,375	334,185,309	<b>368,238,684</b>	9.25	90.75	
	2009	30,097,753	302,858,205	<b>332,955,958</b>	9.04	90.96	
	Index	2009/2007	80	<b>91</b>			
		2009/2007	91	<b>90</b>			
Packages	2007	4,177,579	3,774,889	<b>7,952,468</b>	52.53	47.47	
	2008	4,482,198	3,695,357	<b>8,177,555</b>	54.81	45.19	
	2009	5,349,771	2,921,951	<b>8,271,728</b>	64.68	35.32	
	Index	2009/2007	77	<b>104</b>			
		2009/2007	79	<b>101</b>			
Unaddressed mail	2007	975,000	26,838,970	<b>27,813,970</b>	3.51	96.49	
	2008	556,000	21,189,102	<b>21,745,102</b>	2.56	97.44	
	2009	7,942,670	32,611,294	<b>40,553,964</b>	19.59	80.41	
	Index	2009/2007	122	<b>146</b>			
		2009/2007	154	<b>186</b>			
Other mail items	2007	2,077,025	1,270,545	<b>3,347,570</b>	62.05	37.95	
	2008	2,288,000	1,289,844	<b>3,577,844</b>	63.95	36.05	
	2009	0	1,226,300	<b>1,226,300</b>	0.00	100.00	
	Index	2009/2007	97	<b>37</b>			
		2009/2007	95	<b>34</b>			

Out of the total number of services provided by all active providers of postal and courier services, domestic traffic makes about 94 percent, the inbound international mail more than three percent, and international mail in transit a little less than three percent of services (Figure 3.3.).

Figure 3.4 shows shares of postal items of the group of other providers and HP in the total traffic. The image indicates that shares of HP and of the group of other providers in domestic traffic did not change significantly in 2009 compared to the year before. In both 2008 and 2009 the share of HP in international mail was more than 99 percent.

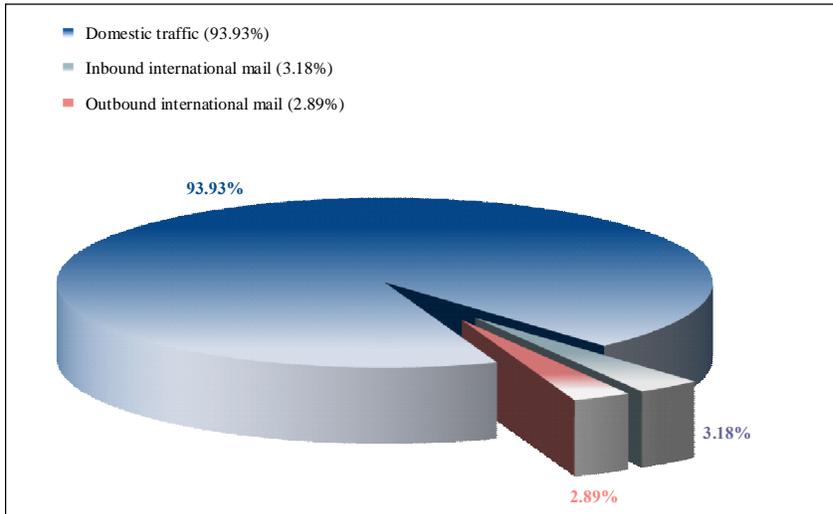


Figure 3.3. Shares of provided services per types of traffic in 2009

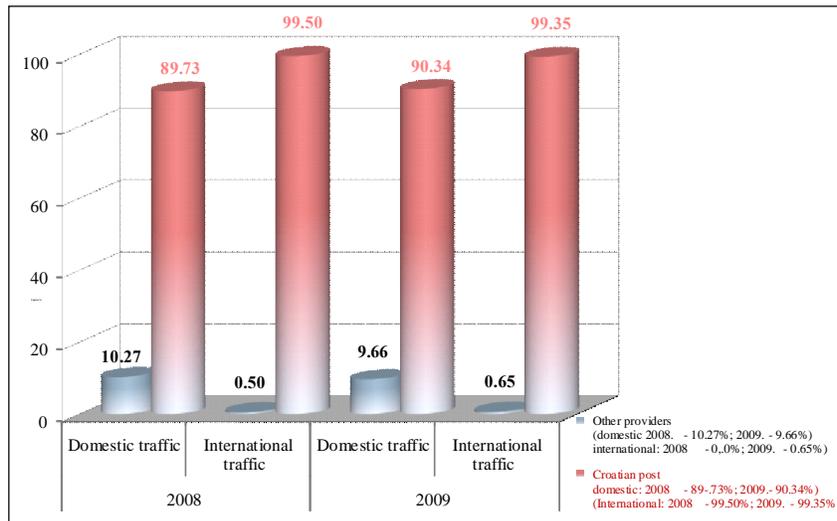


Figure 3.4. Shares of postal items per types of traffic

As opposed to postal items where HP had a significantly higher share than the group of other providers, the shares in the category of packages are more diverse, both in relation to domestic and international traffic. The group of other providers had three times greater share of packages in international traffic in 2009. In the domestic traffic of packages, the share of the group of other providers was higher than the share of HP by approximately 28 percent, and this share increased by approximately ten percent in 2009, compared to the previous year (Figure 3.5).

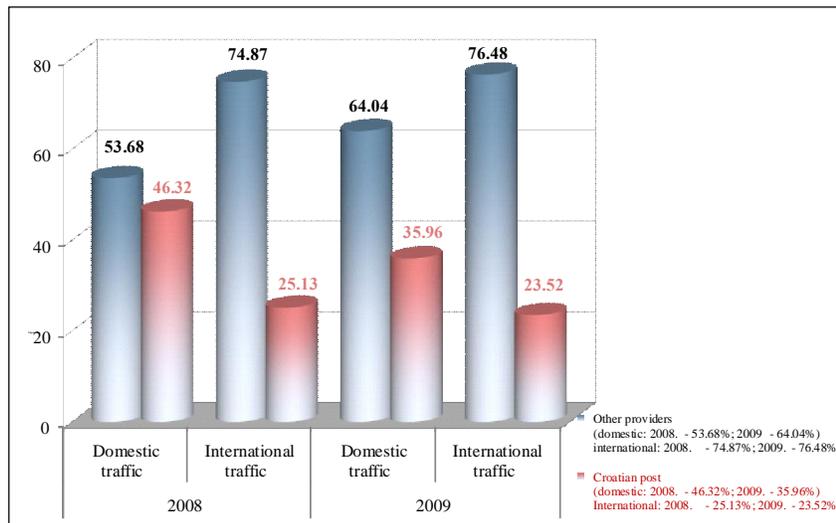


Figure 3.5. Shares of packages per types of traffic

### 3.3. BUSINESS PERFORMANCE OF SERVICE PROVIDERS

#### 3.3.1. Providers' revenue from the provision of postal and courier services

According to data from unofficial, unrevised financial statements, that is, according to estimated data for providers who, in addition to providing postal and courier services, provide other services as well, the revenue earned exclusively from the provision of postal and courier services in 2009 amounted to HRK 1,578,521,685 and, it is about ten percent higher compared to 2008. This revenue does not include revenue from the sale of printed matter, financial services, telecommunications services, sales of goods, shipping services, cargo transportation and the similar. Compared to 2008, HP increased its revenue by approximately 16 percent, and revenue of the group of other providers fell by around 3 percent. The share of HP in revenue from the provision of postal and courier services in 2009 rose by approximately three percent, compared to the previous year.

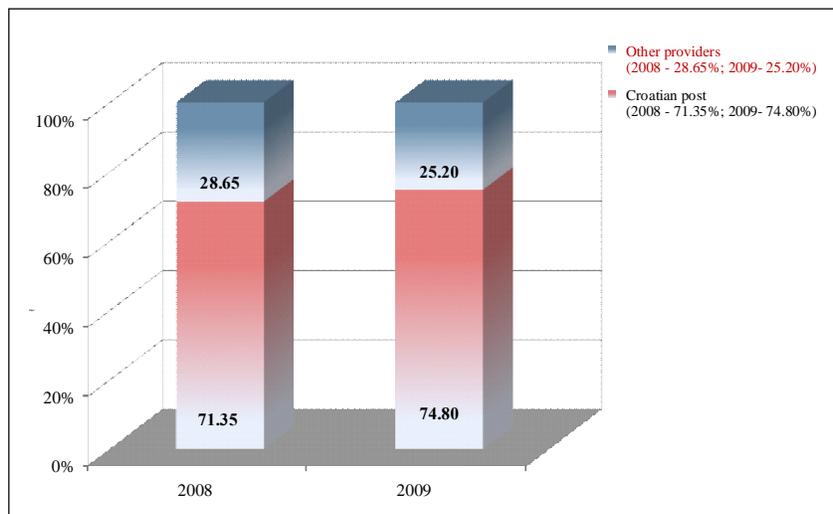


Figure 3.6. Share of revenue in the total revenue earned from the provision of postal and courier services

Out of the total revenue of all active providers, HP earned in 2009 the total of HRK 1,180,801,000 revenue or nearly 75 percent, and the group of other providers earned HRK 397,720,685, that is, nearly 25 percent (Figure 3.6).

### 3.3.2. Providers' expenditure from the provision of postal and courier services

According to data from unofficial, unrevised financial statements, that is, according to estimated data for providers who, in addition to providing postal and courier services, provide other services as well, the expenditure incurred exclusively from the provision of postal and courier services in 2009 amounted to HRK 1,554,450,653 and they are at the approximately same level as in 2008. This expenditure does not include expenditure from sale of printed matter, financial services, telecommunications services, sales of goods, shipping services, cargo transportation and the similar. Compared to 2008, HP has increased its expenditure by nearly one percent, and the group of other providers reduced its expenditure by approximately four percent. The share of HP in expenditure exclusively from the provision of postal and courier services increased in 2009 by nearly one percent compared to the previous year.

Out of the total expenditure of all active providers, in 2009 HP incurred HRK 1,233,266,000 expenditure or nearly 79 percent, and the group of other providers incurred HRK 321,184,653, that is, nearly 21 percent (Figure 3.7).

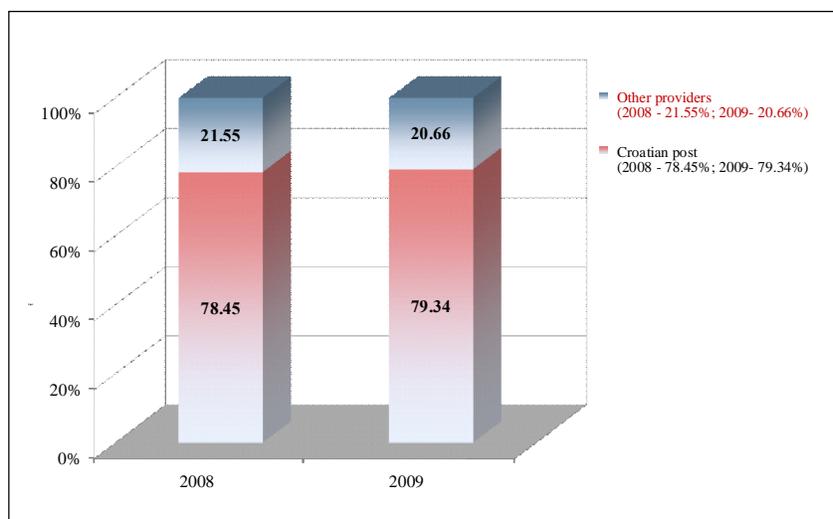


Figure 3.7. Shares of expenditure in the total expenditure from the provision of postal and courier services

### 3.3.3. Business results of providers of postal and courier services

According to data, the total profit before tax earned by active providers of postal and courier services in 2009, exclusively from the provision of postal and courier services,

amounted to HRK 24,071,032, while in 2008 their business results were negative and amounted to HRK 126,128,085 (Figure 3.8), meaning that the total business results from the provision of postal and courier services in 2009 outdid those from the year before by almost HRK 150 million.

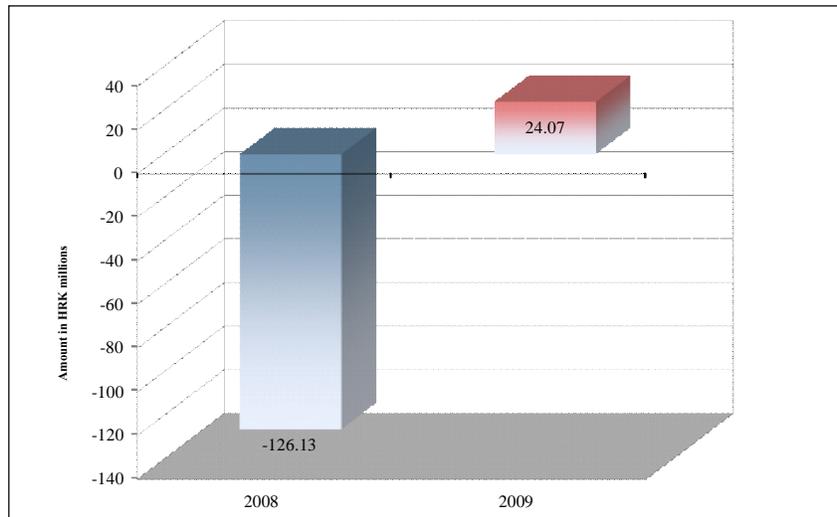


Figure 3.8. Total business results from the provision of postal and courier services before tax

Looking at the overall business results exclusively of the provision of postal and courier services (Figure 3.9), it is obvious that the group of other providers increased their profit in 2009, that is, increased the gap between the profit earned by one part of providers and loss of the remaining providers, compared to the year before, while in 2009, HP suffered losses, which were, compared to 2008, reduced by approximately HRK 148 million.

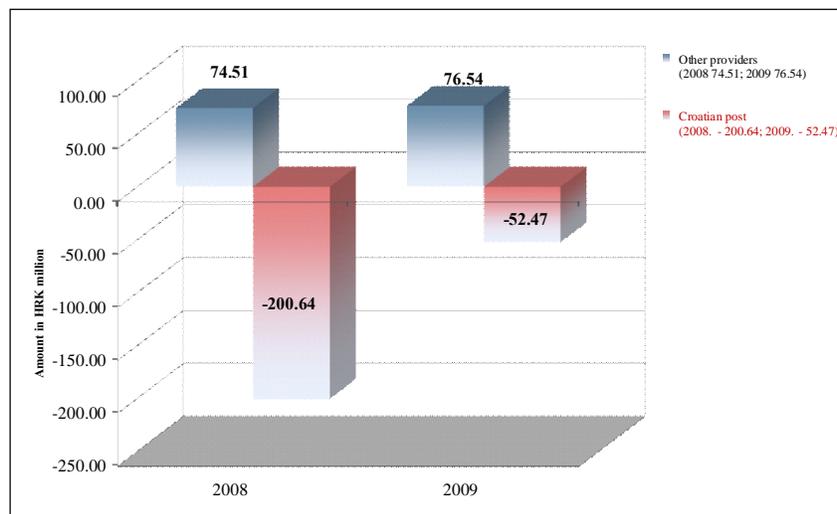


Figure 3.9. Total business results from the provision of postal and courier services for HP and the group of other providers, before tax

It must be stressed that data referring to revenue and expenditures, as well as business results, all exclusively from the provision of postal and courier services, were based in one

part of providers on actually verifiable revenue and expenditure from the provision of postal and courier services only. In case of the other part of providers, especially those who, except for postal and courier services, also provided other types of services and(or) activities, data were based on estimates made by providers themselves and are not verifiable in official financial statements and may not be regarded as completely credible with a satisfactory degree of certainty. These data provide a general image of the situation on the market of postal and courier services with the focus on financial performance exclusively in relation to the provision of postal and courier services because the PA, which was in force in 2008 and for the majority of 2009, imposed only on the public operator the obligation to keep separate accounting records which serves to establish revenue and expenditure only from the provision of postal and courier services.

## **4. REGULATION OF THE ELECTRONIC COMMUNICATIONS MARKET**

HAKOM's activities in 2009 were primarily focused on the achievement of principles and objectives of market regulation in electronic communications with a special emphasis placed on the promotion of effective and sustainable competition and on ensuring market access to new operators and service providers. Additionally, HAKOM paid special attention to ensure good quality of electronic communications services at an affordable price and high level of consumer protection.

### **4.1. MARKET ANALYSES**

The work of HAKOM in 2009 was primarily focused on the achievement of principles and objectives of market regulation in electronic communications with a special emphasis on completing the market analysis procedure which was started in July 2008.

In July 2008, HAKOM started the market analysis procedure on three groups of markets, or, more precisely, on the market of interconnection in fixed electronic communications networks, (3 markets), wholesale markets (2 markets) and interconnection markets and retail market in mobile electronic communications networks (4 markets). These procedures were completed in July 2009 by decisions adopted by the Council of HAKOM stating that some markets are susceptible to ex-ante regulation, while other markets are deregulated, or, more precisely, they are not susceptible to ex-ante regulation because it had been established that competition on these markets is effective. Before the adoption of these decisions, HAKOM conducted public consultations in order to allow all the interested parties to give their opinions, objections and proposals. HAKOM took into account all the comments when adopting the final decisions.

While conducting market analysis, HAKOM paid particular attention to the application of the relevant EC Recommendation on relevant markets susceptible to ex ante regulation and of the relevant EC Guidelines on market analysis and assessment of significant market power in accordance with the common regulatory framework for electronic communications networks and services.

The main objective of the market analysis procedure was to establish the existence of effective competition on a certain market or whether there is an operator or more operators on that market with significant or joint significant market power. On the basis of the results of the analysis and the three criteria test, HAKOM imposed, amended, kept or withdrew regulatory obligations.

The definition of the relevant market is a basis for conducting market analysis which consists of the definition of the relevant market and assessment of the existence of one or more operators with significant market power on that market and of the imposition of regulatory obligations on operators with significant market power. The purpose of the process of definition of the relevant market is to establish restrictions, that is, barriers encountered by operators of electronic communications networks on the market. After having defined the relevant market, HAKOM, on the basis of criteria necessary for the assessment of the existence of operators with significant market power, that is, after

having conducted market analysis, defines operators with significant market power on which it imposes regulatory obligations on the basis of competitive constraints which may appear on the relevant market and on the downstream retail market to which the operator with significant market power may leverage its dominant position from the relevant market.

Detailed explanations why some operators are designated as SMP operators, detailed explanations of each individual regulatory obligation as well as reasons why certain markets are no longer susceptible to ex ante regulation may be found under market analysis documents on the website [www.hakom.hr](http://www.hakom.hr).

HAKOM had established all competitive constraints in every individual market and, on the basis of firm arguments, it adopted decisions that will enable further liberalisation and stable development of the electronic communications market in the RoC in the best possible manner.

In addition to having completed market analysis of the above-mentioned three groups of markets in 2009, HAKOM also started, in the same year, with preparations for market analysis in accordance with the ECA in the remaining markets the regulation of which was carried out in 2009 in accordance with the Telecommunications Act (hereinafter: TA), or, in relation to the remaining markets, it allowed further liberalisation and regulation of the electronic communications market by means of adequate regulatory decisions, in accordance with the provisions of the TA.

#### **4.1.1. Market of call origination on public telephone networks provided at a fixed location**

The market of call origination on public telephone networks provided at a fixed location makes a constituent part of the group of interconnection markets in fixed electronic communications networks.

HAKOM defined the market of call origination on public telephone networks provided at a fixed location as a relevant market susceptible to ex ante regulation and on the basis of the services dimension and the geographical dimension it established the boundaries of the relevant market on which it, on the basis of analysis of criteria necessary for assessment of SMP operators, identified the operator Hrvatske telekomunikacije d.d. (hereinafter: HT) as the operator with significant market power.

HAKOM imposed on HT, as the SMP operator, and because of barriers that may appear on the market of call origination on public telephone networks provided at a fixed location and on the downstream retail market to which HT may leverage its significant market power, the regulatory obligation of access to and use of specific network facilities, the obligation of non-discrimination, the obligation of transparency along with the obligation to publish the reference interconnection offer, the obligation of price control and cost accounting, the obligation of accounting separation, and the obligation of carrier selection and preselection.

#### **4.1.2. Call termination on individual public telephone network provided at a fixed location**

The market of call termination on an individual public telephone network provided at a fixed location is a constituent part of the group of interconnection markets in fixed electronic communications networks.

HAKOM defined the market of call termination on an individual public telephone network provided at a fixed location as a relevant market susceptible to ex ante regulation and on the basis of the services dimension and the geographical dimension it established the boundaries of the relevant market on which it, on the basis of the analysis of criteria necessary for assessment of SMP operators, it identified nine operators (Amis Telekom, H1 Telekom, HT, Iskon Internet, Metronet telekomunikacije, Optima Telekom, Primatel, Vipnet and Voljatel) as operators with significant market power in the manner that they are operators with significant market power in the market of call termination on their own network.

Taking into account the fact that HT does not have the same position as other operators on the mentioned market, HAKOM imposed on HT the obligation of access to and use of specific network facilities, the obligation of non-discrimination, the obligation of transparency along with the obligation to publish the reference offer, the obligation of price control and cost accounting, and the obligation of accounting separation, while on other operators it imposed the obligation of access to and use of specific network facilities, the obligation of non-discrimination, the obligation of transparency along with the obligation to publish the minimum offer of interconnection conditions, and the obligation of price control.

#### **4.1.3. Market of call transit on fixed public communications network**

The market of call transit on fixed public communications network is a constituent part of the group of interconnection markets in fixed electronic communications networks but it is not a constituent part of the Recommendation on relevant markets meaning that the regulation of this market requires the three criteria test.

On the basis of the services dimension and the geographical dimension, HAKOM defined the boundaries of the relevant market and conducted the three criteria test on the basis of which it concluded that the market of call transit on fixed public communications networks, as a relevant market, is not susceptible to ex ante regulation because all three criteria were not cumulatively met.

Since all three criteria were not cumulatively met, HAKOM withdrew all the obligations previously imposed on HT as the SMP operator in the interconnection market according to the provisions of the TA, in the part referring to the service of call transit, that is, the service of call transit provided by HT is no longer the subject of regulation since the existence of effective competition was established on this market.

#### **4.1.4. Market of wholesale (physical) network infrastructure access at a fixed location**

The market of wholesale (physical) network infrastructure access at a fixed location is a constituent part of the group of wholesale access markets.

HAKOM defined the market of wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location as a relevant market

susceptible to ex ante regulation and on the basis of the dimension of services and the geographical dimension it established the boundaries of the relevant market on which it identified HT as the operator with significant market power on the basis of the analysis of criteria necessary for the assessment of operators with significant market power.

HAKOM imposed on HT as the SMP operator because of barriers that may appear on the market of wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location and on the downstream retail market to which HT may leverage its significant market power, the regulatory obligation of access to and use of specific network facilities, the obligation of non-discrimination, the obligation of transparency along with the obligation to publish the reference offer for the service of unbundled access to the local loop and related facilities, the obligation of price control and cost accounting, and the obligation of accounting separation.

#### **4.1.5. Market of wholesale broadband access**

The market of wholesale broadband access is a constituent part of the group of wholesale access markets.

HAKOM defined the market of wholesale broadband access as a relevant market susceptible to ex ante regulation and on the basis of the dimension of services and the geographical dimension it established the boundaries of the relevant market on which it identified HT as the operator with significant market power on the basis of the analysis of criteria necessary for the assessment of operators with significant market power.

HAKOM imposed on HT, as the SMP operator, and because of barriers that may appear on the market of wholesale broadband access and on the downstream retail market to which HT may leverage its significant market power, the regulatory obligation of access to and use of specific network facilities, the obligation of non-discrimination, the obligation of transparency along with the obligation to publish the reference offer for wholesale broadband access, the obligation of price control and cost accounting, and the obligation of accounting separation.

#### **4.1.6. Market of call termination on an individual mobile public communications network**

The market of call termination on an individual mobile public communications network is a constituent part of the interconnection market in mobile electronic communications networks.

HAKOM defined the market of call termination on an individual mobile public communications network as a relevant market susceptible to ex ante regulation and on the basis of the dimension of services and the geographical dimension it established the boundaries of the relevant market on which it identified three operators (T-Mobile Hrvatska, Vipnet and Tele2) as operators with significant market power on the basis of the analysis of criteria necessary for the assessment of operators with significant market power in the manner that these operators are SMP operators on the market of call termination on their own network.

Taking into account the fact that operators T-Mobile Hrvatska and Vipnet do not have the same position on the market as the operator Tele2, HAKOM has imposed on the operators

T-Mobile Hrvatska and Vipnet the obligation of access to and use of specific network facilities, the obligation of non-discrimination, the obligation of transparency along with the obligation to publish the minimum offer for interconnection, and the obligation of price control and cost accounting, while on Tele 2 HAKOM imposed the obligation of access to and use of specific network facilities, the obligation of non-discrimination, the obligation of transparency along with the obligation to publish the minimum offer for interconnection that will contain data on technical specifications, network characteristics prices or services and time limits and conditions of the offer, and the obligation of price control.

In addition to market analysis, HAKOM also, ex officio, conducted inspection over Vipnet because of the provision of the service 'Fixed and mobile VPN' and over T-Mobile for the provision of the service 'VPN direct access'. These are identical services which are a part of their retail services on the electronic communications market. HAKOM established that operators provide the above-mentioned services for personal needs while at the same time conditions allowing other electronic communications operators to interconnect for the provision of the same services still had not been published. Taking into account the fact that HAKOM imposed on T-Mobile and Vipnet on the market of call termination on an individual mobile public communications network the regulatory obligation to allow to other operators to provide the services that they provide for personal needs, HAKOM adopted a decision ordering Vipnet and T-Mobile to allow access to their network so that other operators on the market might offer the equivalent services. These HAKOM's decisions contributed to further liberalisation and development of competitiveness on the electronic communications market.

#### **4.1.7. Market of access and call origination on mobile public communications networks**

The market of access and call origination on mobile public communications networks is a constituent part of the group of interconnection markets in mobile electronic communications networks, and does not make a constituent part of the Recommendation on relevant markets meaning that regulation of this market requires the carrying out of the three criteria test.

On the basis of the services dimension and the geographical dimension, HAKOM defined the boundaries of the relevant market and conducted the three criteria test on the basis of which it concluded that the market of access and call origination on mobile public communications networks, as a relevant market, is not susceptible to ex ante regulation because all three criteria were not cumulatively met.

Since all three criteria were not cumulatively met, HAKOM withdrew all the obligations previously imposed on T-Mobile and Vipnet as the SMP operators in the interconnection market according to the provisions of the TA, in the part referring to the service of access and call origination, that is, the mentioned services provided by T-Mobile and Vipnet, are no longer susceptible to regulation since the existence of effective competition was established on this market.

#### **4.1.8. Market of termination of SMS messages on an individual mobile public communications network**

The market of termination of SMS (Short Message Service) messages on an individual mobile public communications network is a constituent part of the group of interconnection markets in mobile electronic communications networks, but it does not make a constituent part of the Recommendation on relevant markets meaning that regulation of this market requires the carrying out of the three criteria test.

On the basis of the services dimension and the geographical dimension, HAKOM defined the boundaries of the relevant market and conducted the three criteria test on the basis of which it concluded that the market of termination of SMS (Short Message Service) messages on an individual mobile public communications network, as a relevant market, is not susceptible to ex ante regulation because all three criteria were not cumulatively met.

Since all three criteria were not cumulatively met, HAKOM withdrew all the obligations previously imposed on T-Mobile and Vipnet as the SMP operators in the interconnection market according to the TA, in the part referring to the service of termination of SMS (Short Message Service) messages, that is, the service of termination of SMS (Short Message Service) messages provided by T-Mobile and Vipnet, is no longer the susceptible to regulation since the existence of effective competition was established on this market.

#### **4.1.9. Market of publicly available telephone services in mobile electronic communications networks**

The market of publicly available telephone services in mobile electronic communications networks is not a constituent part of the Recommendation on relevant markets meaning that regulation of this market requires the carrying out of the three criteria test.

On the basis of the services dimension and the geographical dimension, HAKOM defined the boundaries of the relevant market and conducted the three criteria test on the basis of which it concluded that the market of publicly available telephone services in mobile electronic communications networks, as a relevant market, is not susceptible to ex ante regulation because all three criteria were not cumulatively met.

Since all three criteria were not cumulatively met, HAKOM withdrew all the obligations previously imposed on T-Mobile and Vipnet as the SMP operators in the market of public voice service in mobile networks according to the TA, that is, the publicly available telephone service provided by T-Mobile and Vipnet, is no longer susceptible to regulation since the existence of effective competition was established on this market.

#### **4.1.10. Markets of leased lines**

In the last quarter of 2009, HAKOM started preparing for the analysis of the market of leased lines in accordance with the provisions of the ECA. Relevant markets referring to services of leased lines consist of the retail market of the minimum set of leased lines and of the wholesale market of terminating segments of leased lines and the wholesale market of trunk segments of leased lines.

The market of terminating segments of leased lines makes a constituent part of the Recommendation on relevant markets while the market of trunk segments of leased lines and the market of the minimum set of leased lines do not make a constituent part of the Recommendation on relevant markets meaning that regulation of these markets requires the carrying out of the three criteria test.

For the purposes of market analyses and the conduct of the three criteria test, HAKOM prepared a special questionnaire which contains a part referring to the wholesale market, and the part referring to the retail market, and the level of information and data necessary for a quality analysis. HAKOM is planning to start market analyses on markets of leased lines in the first quarter of 2010 and the regulation of these markets, in accordance with the provision of the ECA, is expected in the course of 2010.

The regulation of the market of leased lines during 2009 was carried out in accordance with the provisions of the TA, that is, in accordance with regulatory obligations adopted by HAKOM in June 2008 when it gave its consent to HT, as the SMP operator, to give a new minimum offer of telecommunications lines for lease in the part referring to HT's wholesale offer for leased lines which was amended in order to allow further market development, that is, effective competition on the market of leased lines.

#### **4.1.11. Markets of access and markets of publicly available telephone services in fixed public communications networks**

In the last quarter of 2009 HAKOM started preparing for the analysis of the market of access to the public telephone network at a fixed location for residential and non-residential customers and the analysis of four markets of publicly available telephone service in fixed public communications networks, which include the market of public voice service in local and/or national traffic provided at a fixed location for residential customers, the market of public voice service in international traffic provided at a fixed location for residential customers, the market of public voice service in local and/or national traffic provided at a fixed location for non-residential customers, the market of public voice service in international traffic provided at a fixed location for non-residential customers.

The market of access to the public telephone network at a fixed location for residential and non-residential customers is a constituent part of the Recommendation on relevant markets while all four markets of publicly available telephone service in fixed public communications networks do not make a constituent part of the Recommendation on relevant markets meaning that regulation of these markets requires the carrying out of the three criteria test.

For the purposes of market analyses and the conduct of the three criteria test, HAKOM prepared a special questionnaire which contains a part referring to network access, and the part referring to the publicly available telephone service in fixed public communications networks, and the level of information and data necessary for a quality analysis. HAKOM is planning to start market analyses on the markets of access and publicly available telephone service in fixed public communications networks in the first quarter of 2010 and the regulation of these markets is expected in the last quarter of 2010.

The regulation of the market of access and publicly available telephone service in fixed public communications networks during 2009 was carried out in accordance with the provisions of the TA, that is, in accordance with a list of the relevant markets and providers of telecommunications services with significant market power on these relevant markets which was published in 2007. On the basis of this list, HT and Iskon Internet were identified as operators with significant market power on the relevant market of services of public switched telephone networks in the territory of the RoC. The regulation that was carried out on these markets during 2009 (the granting of consent for new tariff packages and options of HT and Iskon Internet) enabled further development of the market, that is, of effective competition on retail markets of publicly available telephone service.

#### **4.1.12. Market of network access for operators of value added services**

On the market of network access for operators of value added services, according to the provisions of the TA, HT was identified as the SMP operator, and, in accordance with regulatory obligations, it is obliged, on the basis of its reference offer, to provide value added services (060) and televoting services (061).

In November 2009, on the basis of provisions of the TA, HAKOM granted consent for a new reference offer for providers of value added services (060) which includes quantity discounts on the fee for the use of infrastructure and the change of the model of the monthly fee for the use of 060 numbers and quantity discounts on the price of use of HT's infrastructure for the transfer and routing of traffic. On the basis of a decision granting to operators the ability to use quantity discounts, HAKOM adopted a decision enabling further development and liberalisation of the market of value added services.

Concerning the regulation of the televoting service (061), it was carried out during 2009 in accordance with the provisions of the TA, that is, in accordance with HAKOM's decision from July 2008 on the basis of which HT was obliged to prepare a reference offer for televoting services (061).

In the last quarter of 2010, HAKOM is planning to start preparations for the analysis of the market of network access for providers of value added services in compliance with the provisions of the ECA.

## **4.2. COST ACCOUNTING PROJECT**

### **4.2.1. Accounting separation and cost accounting**

In a decision adopted in November 2008 HAKOM imposed on HT the manner of carrying out accounting separation and cost accounting in the manner and within the time limits laid down in the document "Instructions for Accounting Separation and Cost Accounting", which makes a constituent part of the decision. This decision imposes on HT, as the SMP operator, the contents and manner of collecting accounting data and the manner of preparing regulatory financial statements in order to ensure equal and transparent competition conditions for all participants in the electronic communications market. In other words, HT's activities, on the basis of which it was identified as the operator with significant market power, are divided into separate business entities which

permits the analysis of information from HT's official accounting system for regulatory needs.

This enables the verification of implementation of regulatory obligations of transparency and non-discrimination, that is, prevents discrimination and distortion of competition as a result of high wholesale prices, price discrimination, cross-subsidising and/or inefficient business performance of HT.

Since the establishment of the accounting separation and cost accounting is a very complex and time consuming process, the decision envisaged its implementation to take place in three stages.

In the first stage, that is, in August 2009, the process of approving HT's regulatory accounting documentation based on historical cost accounting and fully allocated costs was completed. In accordance with the transparency principle, HT delivered the above-mentioned documentation in two versions, one for publication and the other for HAKOM's needs.

In September 2009 HAKOM received HT's detailed document on the methodology for allocation and draft of regulatory financial statements and statements on unit costs of services for 2008 based on historical cost accounting and fully allocated costs. These statements were not revised and published because their objective was to establish the system of accounting separation and cost accounting, to familiarise the involved parties with the whole process and the assessment of proper implementation of regulatory obligations. After the analysis of regulatory financial statements and of a detailed document on the methodology of allocation, HAKOM delivered to HT the results of the analysis, which also included requests for certain corrections. Also, the process of analysis of HT's regulatory accounting documentation based on current cost accounting and long run incremental cost was started in May 2009.

The decision envisaged the second stage of the process in 2010 when HT is supposed to deliver its first revised regulatory financial statements and statements on unit costs of services for 2009 based on historical cost accounting and fully allocated costs.

In the third stage of the process, HT is obliged to deliver for 2011, and for every subsequent year, revised statements for the previous financial year based on the current cost accounting and long run incremental cost.

HAKOM thinks that the implementation of cost accounting and accounting separation through increased transparency of regulatory procedures and ensuring of equal business conditions for all participants in the market will contribute to greater stability and further development of competition.

#### **4.2.2. Cost models of operators with significant market power**

In July 2009, HAKOM started preparing for the implementation of the project *“Cost models of operators with significant market power”*. The main objective of this project is to build, prepare and apply cost models in order to obtain reliable information for the calculation of prices of wholesale services given in reference offers of operators with significant market power in markets where the regulatory obligations of price control and

cost accounting have been imposed. As part of the development of the obligation to provide universal services in the RoC; HAKOM is also planning to build a cost model for the calculation of net costs of the obligation to provide universal services.

The public tender for consultancy services for the building of cost models was published in July 2009. However, since the State Commission for Control of Public Procurement Procedures cancelled the Decision on selection for reasons which are beyond our comprehension, HAKOM complained to the Administrative Court of the Republic of Croatia. HAKOM is hoping to start implementing the project *“Cost models of operators with significant market power”* in the first half of 2010 either on the basis of the ruling of the Administrative court of the Republic of Croatia, or as a result of a repeated public tender.

HAKOM thinks that the implementation of the project will contribute to better transparency, that is, it will increase trust into financial indicators of SMP operators thus having a positive impact of the development of competitiveness of the entire market.

### **4.3. TELEVISION NETWORKS**

In 2009 HAKOM continued working intensively on the planning and creating of conditions for the launching of DTV networks in accordance with the Analogue to Digital Television Broadcasting Switchover Strategy in the Republic of Croatia and preparations for the switching off of analogue television (hereinafter: ATV) transmitters and repeaters that will take place in 2010.

HAKOM has carried out international coordination of frequencies for DVB-T (Digital Video Broadcasting - Terrestrial) networks of the D multiplex which is intended for the transmitting of digital television channels for local and regional television broadcasters and for the introduction of new contents in digital regions.

The experimental operation of the DVB-T HDTV multiplex was continued, broadcasting high definition television in Zagreb, Split, Rijeka and Osijek. Licenses on the basis of which experimental broadcasting of DVB-H was carried out were issued in the first half of 2009, first in Zagreb, and then in Rijeka.

The planning of analogue television was continued by adjusting the previous plan of the existing TV network, that is, the replacement of the existing channels of analogue TV transmitters in order to free the radiofrequency spectrum for further introduction of digital television.

In early 2009 tender documentation was prepared and a public tender was invited for the granting of an individual licence for use of the radio frequency spectrum for digital television in the territory of the RoC (DVB-T Multiplexes A and B).

The public tender for the issuing of the individual license for use of the radio frequency spectrum for the provision of the service of management of electronic communications networks of digital television for Multiplex A and Multiplex B in the territory of the Republic of Croatia was successfully implemented and the licence was granted in April 2009, to a company entitled Oda-ilja i i veze d.o.o., the first operator of DVB-T network in Croatia. The issuing of the above-mentioned license ensured the switchover from analogue to digital transmission of the existing channels at the national level (HRT1, HRT2, Nova TV and RTL) and technical preconditions for six new digital television programmes at the national level.

By the end of 2009, on the basis of the issued license, the 96% population coverage for Multiplex A and 91% population coverage for Multiplex B were ensured in the territory of the Republic of Croatia.

In the last quarter of 2009 HAKOM prepared tender documentation and launched the implementation of five public tenders for the granting of licenses for the use of the radio frequency spectrum for digital television for MUX D in digital regions D5, D1, D3, D7 and D9. After the implementation of tenders, the granted licenses will ensure the preconditions for switchover from analogue to digital transmission of channels of broadcasters at a level lower than the national level in digital regions and the possibility for the introduction of new contents in the mentioned regions. The tender for the remaining digital regions will be invited in the first quarter of 2010.

Through cooperation with the Agency for Electronic Media (hereinafter: the AEM), HAKOM regularly delivered technical parameters for the renewal of the existing television concessions. The control of projects and parameters in accordance with the defined parameters of TV stations was carried out regularly as part of the administrative legal procedure of the processing of applications for licenses, and, where necessary, their correction as well.

The database of the radio frequency spectrum for television, which is publicly available on HAKOM's website, was renewed on the basis of results of the adjustment of pre-planning of the existing and planning of new TV networks and international coordination of frequencies,.

At the national level, HAKOM processed a large number of applications from concessionaries and network operators for the amendment of conditions of use of TV/DVB-T radio stations and questions of the Agency on Electronic Media concerning technical parameters.

As part of international coordination, radio stations published over ITU BRIFIC were analysed on a regular basis. The procedure of international coordination of Croatian uncoordinated DVB-T stations with neighbouring countries was initiated, and the analysis of a large number of coordination requests was carried out, as well as of DVB-T stations, administrations of Austria, Bosnia and Herzegovina, Hungary, Slovenia and Serbia. The coordination of channels for DVB-T stations for the MUX D network was successfully completed.

#### **4.4. RADIO NETWORKS**

Despite a heavy congestion of VHF FM, HAKOM has continued with intensive planning of the radio stations of FM networks in order to ensure better coverage of the existing broadcasters and to ensure frequencies for new concessions.

A significant number of requests of radio broadcasters has been processed for the most part concerning the improvement of audibility or the possibility to change technical parameters. New programme identification (PI) codes were allocated in 2009 to all radio broadcasters.

On the basis of successfully implemented coordination at the national level, significant improvements in the national coverage of broadcasters' networks have been ensured.

All the activities related medium and short wave broadcasts were continued.

The planning of digital radio networks in the territory of the Republic of Croatia in the VHF III frequency band started in the second half of 2009. This band could, according to the existing plans, be used for DAB (Digital Audio Broadcasting), DAB+ (upgraded Digital Audio Broadcasting) or DMB (Digital Multimedia Broadcasting).

Experimental broadcasting of digital radio in DAB and DRM (Digital Radio Mondiale) standard was continued in 2009.

In order to consider the possibilities of introducing digital radio and adopt conclusions and basic guidelines for the adoption of a strategic decision on the introduction of digital radio and selection of the Croatian standard, HAKOM has initiated a Forum on digital radio which gathers experts of different profiles from different institutions.

As part of preparation and drafting of subordinate legislation, HAKOM prepared, in addition to a series of ordinances, the Radio Frequency Allocation Plan for terrestrial broadcasting services in 148,5 kHz to 1492,0 MHz frequency bands.

Through cooperation with AEM, HAKOM regularly delivered technical parameters for the invitation of the tender for the carrying out of radio activities, and answers to questions on the existence of technical parameters for the granting of concessions in individual areas.

On the basis of results of re-planning of the existing and planning of new FM networks and the international coordination of frequencies HAKOM updated the database of the radio frequency spectrum for radio, which is publicly available on HAKOM's website.

Within the framework of international coordination, FM radio stations published via ITU BRIFIC were analysed on a regular basis, and the registration of shortwave radio stations for the season A09, B09 and A10 was carried out.

The procedure of international coordination of radio stations with the neighbouring countries Austria, Bosnia and Herzegovina, Montenegro, Hungary, Italy, Slovenia and Serbia was continued.

#### **4.5. RADIOCOMMUNICATIONS NETWORKS**

The management of the radiofrequency spectrum intended for public mobile, private mobile, microwave and satellite networks is under HAKOM's competence. At the domestic level this implies planning and preparation of technical parameters for the issuing of licenses for use of the radiofrequency spectrum and maintenance of the database of radio stations, while at the national level this refers to the coordination of use of the radio frequency spectrum in accordance with the valid decisions and recommendations of CEPT and valid international agreements.

For the purpose of greater harmonisation of use of the radiofrequency spectrum, alignment with European legislation and easier circulation of devices using the radio frequency spectrum in the territory of CEPT (European Conference of Postal and Telecommunications Administrations), in 2009 HAKOM issued ten new general licenses, amended two existing licenses and withdrew two general licenses.

Annual public consultations about the proposal for amendments to the Radio Frequency Spectrum Allocation Table were also carried out on HAKOM's website in late 2009 and

the amended proposal of the Table was submitted to the Ministry of the Sea, Transport and Infrastructure (hereinafter: MSTI) for publication.

#### **4.5.1. Public mobile networks**

As part of regular activities related to public mobile networks in 2009 HAKOM received notifications of base stations from operators and, after having verified the submitted data, it issued certificates of compliance for those base stations. In the process of verification of submitted data and calculations related to radiation of base stations, special attention is paid to areas of increased sensitivity (residential areas, schools, preschools, hospitals etc.) and, where necessary, additional measurements are carried out in cooperation with the inspection service.

Public consultations about the issuing of new licenses were carried out in 2009 before the expiry of the licenses for use of the radio frequency spectrum for VIPnet and T-Mobile. New, technologically neutral, licenses to the existing operators were issued in July to VIPnet and in September to T-Mobile.

Public consultation was also carried out about the future use of GSM (Global System for Mobile Telecommunications) frequency band. In accordance with that, a new allocation plan was adopted for 900 MHz and 1800 MHz frequency bands enabling the use of both GSM and UMTS technologies in those frequency bands.

At a bilateral meeting with the administration of Bosnia and Herzegovina, HAKOM signed agreements on the allocation of preferential channels for the GSM-R (Global System for Mobile Communications on Railways) and E-GSM (Extended Global System for Mobile Communication).

#### **4.5.2. Private mobile networks**

The planning of the use of the radio frequency spectrum for private mobile networks was part of HAKOM's regular activities related to private mobile networks in 2009. International coordination was carried out in compliance with HCM (Harmonised Calculation Method) Agreement and requests of neighbouring signatory countries were processed.

In accordance with the ECA, the granting of authorisations for use of the radiofrequency spectrum to services of special importance which use radiofrequency bands intended for civil and military use has started.

#### **4.5.3. Microwave and satellite networks**

As part of regular activities related to microwave networks, in 2009 HAKOM planned the use of the radiofrequency spectrum through the preparation of technical parameters for the granting of licenses. International coordination was carried out in accordance with the HCM Agreement.

The alignment of former concessions for fixed wireless access with the ECA was carried out in March 2009 and operators were issued technologically neutral licenses. This, together with the amendments to the Radio frequency Spectrum Allocation Table, allowed

the use of this part of the radio frequency spectrum for mobile purposes for which operators have already shown interest.

Tender documentation was prepared, tender procedures carried out and radio frequency spectrum for broadband wireless access was assigned in the territories of the Osje ko-baranjska County, the City of Zagreb, Dubrova ko-neretvanska County and the region consisting of Krapinsko-zagorska, Varafldinska, Koprivni ko-krifleva ka and Viroviti ko-podravaska counties.

At a bilateral meeting with the administration of Bosnia and Herzegovina, HAKOM signed agreements on the allocation of preferential channels for broadband wireless systems at 3.5 GHz, 26 GHz i 28 GHz.

In accordance with ITU procedures, HAKOM's administrative service analysed and replied to coordination requests from other countries, in relation to satellite networks.

HAKOM's administrative service carried out extensive preparations and participated in the meeting with representatives from the Czech Republic, Hungary and Slovakia concerning the use of the joint satellite position, taking into account the expressed interest. It was decided that negotiations will not be started before the exact input parameters are known.

#### **4.6. MANAGEMENT OF ADDRESSING AND NUMBERING SPACE**

HAKOM's task is to manage the addressing and numbering space in the RoC in order to ensure the efficient use of addresses and numbers. HAKOM is therefore carrying out the following activities:

- Assigns addresses and numbers to operators on the basis of the Addressing Plan and the Numbering Plan,
- Controls the use of addresses and numbers,
- Supervises number portability and carrier preselection,
- Controls the functioning of the Central Administrative Database of Ported Numbers (CADB) and introduces the necessary changes in order to keep it functional.

##### **4.6.1. Management of addressing and numbering space**

Effective, reasonable and uniform management of the addressing and numbering space is one of HAKOM's important tasks. Only by assigning addresses and numbers to operators in a transparent, objective, fair and impartial manner, at any moment, it enables all participants to compete fairly in the electronic communications market which leads to a more competitive market. For that reason, a new Numbering Plan (OG 154/09) was adopted in 2009 adjusting the use of the numbering space to new services (e.g. the use of a personal number). The adopted Numbering Plan also provides special sets of numbers for some value added services in order to offer to users of these numbers a simple possibility to protect from possible abuse (for example, value added services for adults, children, and games of chance). Together with operators, problems of overlapping between numbers related to routing of traffic towards numbers for value added services were resolved and the switchover from the existing numbers for emergency services (92, 93, 94) to the proposed numbers (192, 193 and 194) was carried out.

The integration of the new programme for the processing of requests for the primary assignment of addresses and numbers and processing of annual accounts, that is, the payment of the fee for the right of use of addresses and numbers in accordance with the Ordinance on the payment of the fee for the use of addresses and numbers for the MSTI and the Ordinance on the payment of the fee for the conduct of HAKOM's tasks was carried out in January. .

#### **4.6.2. Number portability**

In order to remove barriers to entry of new participants in the market, it is very important to offer the number portability service to all users of services. In order for the service to reach its final goal, simple and fast number porting for the end user, HAKOM focused the majority of its activities in 2009 on the improvement of the number portability process in the manner that it paid special attention to administrative procedure of number portability in order to allow users to change operators in a very simple procedure. Therefore, in 2009 HAKOM started changing the number portability procedure, and, following a public consultation and the processing of comments, it adopted a new Ordinance on number portability. The results of the improvement of the process are visible from indicators on the amount of ported numbers in 2009, in other words there was a 33 percent increase in the fixed network and 66 percent increase in the mobile communications network compared to 2008. Furthermore, this information indicates that users have become more aware of the possibility to use their right as users i.e. the possibility to port their number, and, consequently, to select the operator whose offer best suits their needs.

The assessment of upgrading of the CADB system was defined and the documentation was prepared related to the selection of the provider of the service of maintenance of CADB hardware.

During 2009, the total of 134 decisions on primary assignment of addresses and numbers were adopted, and 492 invoices for the fee for addresses and numbers were issued.

Last year, HAKOM had to intervene 2987 times into the number portability procedure in order to speed up the number porting process or the process of giving up the request for number porting in order to satisfy the requests of users of the above-mentioned services to the greatest possible extent.

### **4.7. COMMUNICATIONS INFRASTRUCTURE AND CONDITIONS FOR BUILDING**

HAKOM's activities in 2009 were primarily focused on achieving the established principles and objectives of electronic communications infrastructure and associated facilities with special emphasis being placed on conditions for building, the use of common good on the basis of the right of way, the sharing of communications infrastructure and radio equipment and telecommunications terminal equipment (hereinafter: R&TTE).

#### **4.7.1. Building of electronic communications infrastructure and associated facilities**

The problems related to building conditions cover activities related to issuing the conditions for building that is, the confirmation of the design, the evaluation of design, the compliance of main projects with conditions for building, that is, the design, the participation in the work of commissions for technical inspection of buildings, the participation in the evaluation of designs and main projects in the procedures for the

granting of location and building permits, providing guidelines/requests for the contents of spatial planning documents in the part referring to the planning of electronic communications and participation in previous and public consultations about public spatial plans. In the reporting period, the total of 4, 426 cases were processed, and the total of 4,131 documents issued.

For the purpose of fulfilment of its legal obligation to develop telecommunications, HAKOM undertook a series of activities in order to create preconditions for fast and undisturbed development of mobile communications networks of all operators and to create preconditions for building of quality cable ducts through spatial planning. These activities include the following:

- signing a Memorandum on cooperation in planning, preparation and building of communications infrastructure between all three mobile communications operators,
- participation in amendments to county spatial plans in the part referring to the establishment of telecommunications zones,
- preparing drafts and stimulating the sharing of communications infrastructure for antenna masts for installing several antenna systems and directional radio communications of mobile communications operators,
- drafting and adopting the Ordinance on technical conditions for electronic communications network of business and residential facilities,
- optimization of internal processes in order to speed up the issuing of documents for building, use and demolition of facilities.

#### **4.7.2. Use of common good and property on the basis of the right of way**

After the adoption of the ordinance on the certificate and fee for the right of way, HAKOM started issuing certificates of the right of way. From the adoption of the ordinance until the end of the year, the total of **18** requests for the issuing of certificates for the right of way was processed. The total of **947** certificates of the right of way were issued for **91 km** of cable ducts for which the infrastructure operator is obliged to pay the annual fee for the right of way amounting to **HRK 276,000**. The main problem with the issuing of certificates of the right of way are the unresolved ownership papers which results in the infrastructure operator not being able to get the certificate of the right of way on the entire path. The owner of a property who is in the records and who is supposed to exercise the right to a fee is often no longer the owner or the certificate may not be issued. The certificate of the right of way allows the infrastructure operator to initiate the legalisation process, that is, to resolve the situation with beneficiary operators on those paths because it is expected that workload in this segment will increase. This situation was noticed at the end of the year because the number of reports of unlawful entry and use of cable ducts without a contract with beneficiary operators significantly increased.

Since one infrastructure operator is planning to increase the number of requests for certificates of the right of way in the forthcoming period (HT's planned dynamics is 150km of lines per month), HAKOM redefined the entire process and computerising the process in order to be able to meet market demands in the future.

#### **4.7.3. Sharing of communications infrastructure and associated facilities**

The following activities were carried out in 2009:

- mediation in disputes between the infrastructure operator and beneficiary operators,
- determination of the real situation in cases of sharing of built communications infrastructure and associated facilities,

- collecting of data on infrastructure and associated facilities of infrastructure operators,
- participation in the work of expert commissions and giving expert opinions from its competence,
- participation in the preparation and drafting of ordinances:
  - ✓ Ordinance on the manner and conditions of access to and sharing of electronic communications infrastructure and associated facilities,
  - ✓ Ordinance on the certificate and the fee for the right of way,
  - ✓ Ordinance on the manner and conditions for determining the zone of electronic communications infrastructure and associated facilities, the radio corridor safety zone and obligations of the investor of works or of the building.

After the adoption of the Ordinance on the manner of and conditions of access to and sharing of electronic communications infrastructure (hereinafter: ECI) and associated facilities, a negative reply by the infrastructure operator concerning the inability to satisfy a request of a beneficiary operator for the lease of free space in telephone distribution cables (TDC) was almost completely eliminated. Because of this, HAKOM did not receive any complaints from beneficiary operators concerning cases of leasing space in the TDC.

Further to sharing of built ECI and associated facilities, HAKOM participated in the analysis and preparation of price proposals for the leasing of cable ducts on the basis of cost-oriented prices.

#### **4.7.4. R&TT equipment**

In 2009, HAKOM carried out the tasks of granting approvals for import and/or placing on the market of R&TT equipment and conformity assessment of R&TT equipment. The total of 3508 cases was processed, and the total of 6872 documents issued.

All the actions and necessary adjustments (preparation of new forms, of new templates, preparation of the price list for conformity assessment informing of parties etc.) for successful implementation of the Ordinance on R&TT equipment which entered into force in January 2009 have also been conducted. During the implementation of provisions of the Ordinance on R&TT equipment, certain irregularities and insufficiencies were noticed resulting in the preparation of instructions, in cooperation with the MSTI, in the form of frequently asked questions providing interpretation of vague provisions of the ordinance.

A lot of attention was paid by HAKOM last year to public information. HAKOM regularly updated its webpage, including the database of R&TT equipment, provided expert opinions and held meetings with different parties about topic from its competence.

A press release was published concerning the Internet purchase and import of R&TT for personal needs, and this was also a topic for participation in the TV show *öPetro–a ki kodõ*.

## **4.8. MONITORING AND SUPERVISION IN ELECTRONIC COMMUNICATIONS**

For the purposes of supervision of the radio frequency spectrum (hereinafter: RF) and in order to perform other expert and technical tasks within the framework of efficient RF spectrum management; HAKOM has established a system of monitoring and measurement centres (hereinafter: MMC), and monitoring and measurement stations (hereinafter: MMS).

In addition to MMC Zagreb, there are centres established in Osijek, Split and Rijeka, which is an optimal number considering Croatia's geographical characteristic. In addition to MMC, there are six MMS which are remotely controlled from monitoring and measurement centres. HAKOM also owns five measurement vehicles equipped for measurements in the RF spectrum.

#### **4.8.1. Radio frequency spectrum control**

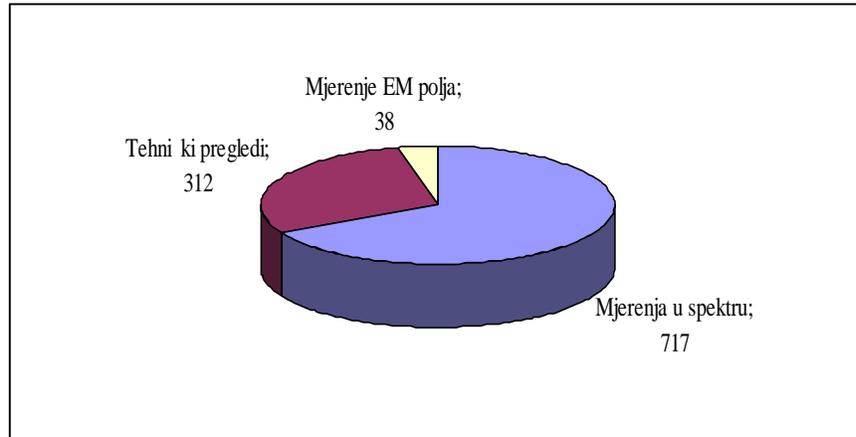
During the entire 2009 HAKOM carried out systematic measurements in the RF spectrum for the purpose of protection of the spectrum as a naturally limited good of interest for the Republic of Croatia. Measurement covers domestic and foreign radio stations, that is, it checks whether domestic radio stations operate in compliance with prescribed licenses or internationally coordinated technical parameters for foreign transmitters. Measurements were carried out also for the purpose of frequency planning and international coordination.

Everyday measurement were carried out from all four MMC and from six remotely controlled MMS. Measurements by mobile monitoring stations were also conducted from time to time at locations determined in advance. In this manner the system of spectrum monitoring was rounded up in relation to the measurement possibilities of the fixed part of the monitoring measurement system.

In accordance with HAKOM's plan, four comprehensive measurement campaigns were also carried out: the measurement of compliance with technical regulations for UKV/FM radio stations, the compliance of microwave radio stations operation with the prescribed licenses, the measurement of the radio and television signal on the coast and in the coastal area with the emphasis on protection from interference (in particular on channels used or to be used for digital television), and compliance of work of radio stations in broadcasting pursuant to the issued licenses.

The most important was the summer campaign of the measurements of the signals in the coastal area which provided an insight into dynamics of changes in the transmission signal from the Republic of Italy, and the current 'purity' of frequency channels that are already used or will be used for digital television. In addition to the above-mentioned measurement campaign, the measurements of microwave links should also be mentioned. The technology of these devices makes measuring with the measurement system impossible, and they need to be measured in a special manner. Since the use of this part of the RF spectrum brings significant revenue to the State Budget, HAKOM checked the functioning of a representative sample on the total number of these radio stations and thus showed to the users that supervision is present and possible.

The total of 312 on-site inspections of broadcasting radio stations were carried out as part of the radio frequency spectrum control. These were mostly new DVB-T radio stations of the license holder for the use of the spectrum (Oda-ilja i i veze d.o.o.), the license to whom was issued as part of the implementation of the Government Strategy for switchover from analogue to digital broadcasting television in the Republic of Croatia. The dynamics of launching of new DVB-T radio stations suggests that the objective of coverage with digital television channels in the RoC is being fulfilled.



On-site supervisions of radio stations, Measurements of EM Field, Measurements of RF spectrum

Figure 4.1. Monitoring of RF spectrum

The RF spectrum monitoring also included the measurement of the level of electromagnetic fields for the purpose of efficient protection of human health from the influence of the electromagnetic field. The measurements served in the first place to HAKOM for the verification of the measuring results submitted by legal persons authorised to conduct measurements for the purpose of issuing of safety certificates.

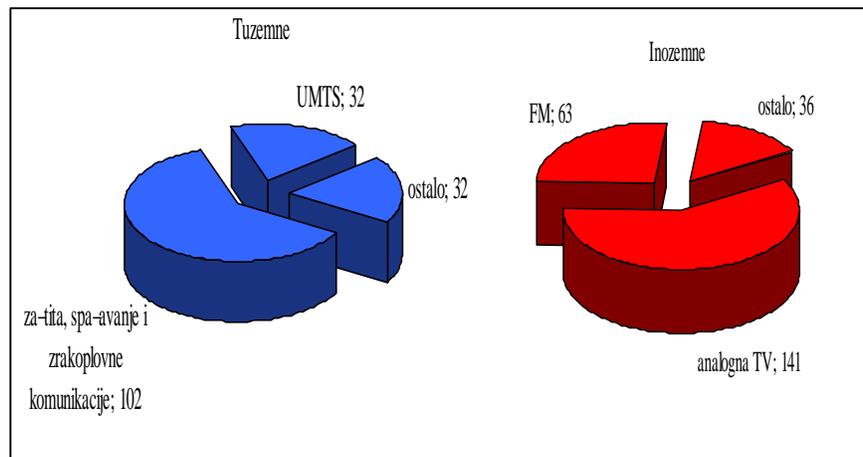
#### 4.8.2. Protection from interference

HAKOM paid particular attention to protection from interference in radio communications, in particular of state administration bodies in charge of protection and rescue, emergency services, maritime and air radio communications (whose purpose is the safety of human lives) and operators of electronic communications. In addition to giving absolute priority to protection from interference in these cases, HAKOM introduced the procedure of prevention measures which includes everyday

measurements from all locations which are a part of the measurement system in frequency bands used for communication of the above-mentioned services.

As a result of measurement of the signal in the coastal area, in particular during the measurement campaign in summer 2009, HAKOM identified Italian radio stations which broadcast radio or television programme with uncoordinated technical parameters and on that occasion 202 international reports of interference were sent to the Italian administration.

A growth trend in the number of interferences in the UMTS frequency band was noticed in 2010. The reason was the increase in the number of base stations of electronic communications operators, and inference was mostly caused by faulty technical equipment of natural persons. All reported interference was removed.



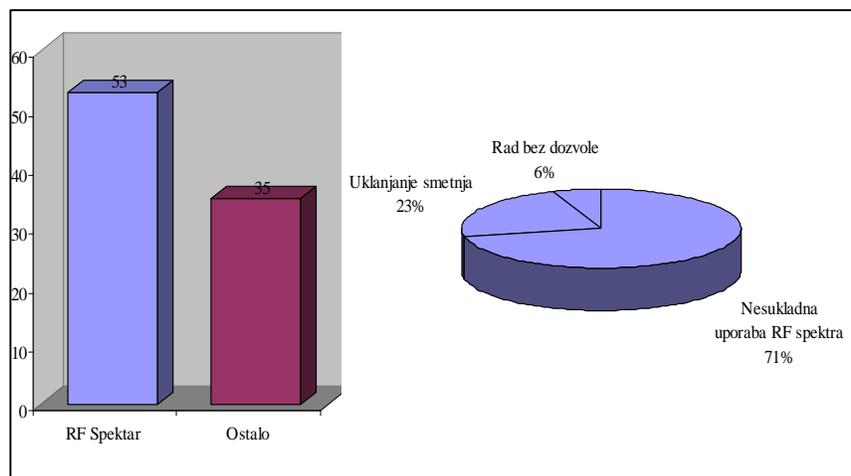
Domestic, Foreign, Rescue, protection and air traffic control communications, other, analogue TV

Figure 4.2. Interference

#### 4.9. EXPERT SUPERVISION

HAKOM is in charge of expert supervision over the application of the ECA and regulations adopted on the basis of this Act, as well as of decision adopted by the Council.

In 2009, HAKOM intensified the work of the technical service and electronic communication supervisors (hereinafter: supervisors) throughout the entire market which resulted in positive behaviour of participants in the market. The number of expert supervisions was increased compared to 2008 and in 2009 there were 88 expert supervisions carried out. Out of 53 cases concerning the use of the radio frequency spectrum, the majority refer to the use of radio stations which are not in compliance with technical regulations or issued licenses for the use of the spectrum. This is followed by interferences eliminated through expert supervision, and the rarest cases are those of unauthorised use of the spectrum, that is, work without a proper license.



RF Spectrum, Other, Elimination of interference, Work without proper license, Uncoordinated use of RF spectrum

Figure 4.3. Structure of expert supervisions

Such a structure of cases resolved through expert supervisions was expected. A small number of cases of unauthorised use of the spectrum in a certain frequency band compared to inadequate use (which may be caused by malfunction or negligence, and not necessarily by intent), proves the success of preventive action through control of the radio frequency spectrum. In all cases of unauthorised use of the spectrum, supervisors issued misdemeanour orders in accordance with the ECA.

HAKOM has also increased the number of inspections in the area of electronic communications infrastructure, networks and services, competition and protection of rights of users of services and consumers. Special attention was also dedicated to cases with indication of violation or non-compliance with the Council's decisions.

Attention was also focused on operators of value added services ó from the manner of their advertising in the media to the provision of the service itself. In case of services where there were violations of legal provisions, and with prevention of services by HAKOM through its decisions, it was shown that there is a synergic effect between cases of dispute resolution between subscribers and operators and market control. Subscribers who make founded complaints against the amount of their debt towards the operator warn HAKOM about possible violations of legal provisions by operators of value added services. After having carried out the expert supervision and adopted a decision, HAKOM prohibits further provision of the service in such a manner and, at the same time, facilitates the resolution of disputes between subscribers and operators.

## **5. REGULATION OF THE POSTAL AND COURIER SERVICES MARKET**

HAKOM's activities in the field of regulation of the market of postal services may be divided into following:

1. Proactive ó giving initiatives for further development of the postal services market
2. Corrective ó reaction to noticed situations and development trends on the postal services market.

Within the proactive component of its activities, HAKOM collects, analyses, directs and publishes data, information and documents on the situation on and development of the postal services market. In addition, HAKOM strengthened and confirmed its role of the market regulator by means of frequent contacts and cooperation with all providers of postal services on the market and by guiding postal services providers towards complete market liberalisation.

The corrective component of HAKOM's activities consists in taking adequate measures aimed at the development of the postal services market in accordance with the PA, or, the PSA, the Strategy for Development of the Postal Services Market in the RoC and the Action Plan for the Strategy.

### **5.1. HAKOM'S ACTIVITIES IN THE FIELD OF POSTAL AND COURIER SERVICES**

Until the entry into force of the PSA, HAKOM was in charge of regulation of the postal and courier services market. After the entry into force of the PSA, in July 2009, HAKOM's competence was narrowed down to the regulation of the postal market and the provision of postal services. However, the PSA dedicated special attention to the further strengthening of HAKOM's independence, to the improvement of efficiency of its work, organisation and authority, further liberalisation of the postal services market, quicker and simpler acquisition of rights to provide postal services, in particular universal postal services, the increase of responsibility of postal services providers and more effective and quality mechanism for the protection of rights of users of postal services.

### **5.2. REGULATORY ACTIVITIES IN THE FIELD OF POSTAL AND COURIER SERVICES**

The most important HAKOM's activities in the field of postal and courier services in 2009 referred to the determination of prices of reserved postal services, the inspection over the implementation of provisions of the PA, that is, PSA, the procedure for granting the consent to HP's bylaw on access to the public postal network, implementation and presentation of the project "Survey of satisfaction and use of postal and courier services in the Republic of Croatia" Part Ió, the separation of business activities, that is, the distribution of HP's revenue and expenditure, the monitoring of the market of postal and courier services in the RoC, the collecting and processing of statistical market data and the granting of consent to HP's terms and conditions.

### **5.2.1. Monitoring of business operations and fulfilment of obligations of service providers**

In 2009, HAKOM did not receive any application for the provision of universal postal services, and, therefore, no license for the provision of such services was granted.

On the basis of the PA and the PSA, a legal person must submit a written application to HAKOM for the provision of postal services which are not universal postal services, and on the basis of the PSA for the provision of courier services. At the beginning of 2009, the total of sixteen providers of postal and courier services were registered with HAKOM. Fourteen out of those were active. At the end of the year, there were 19 registered providers of other postal services.

After the entry into force of the PSA, all providers of postal services were obliged to align the conditions for the acquisition of the right to provide postal services on the basis of an application with the provisions of the PSA. During 2009, 14 providers of postal services submitted their applications for the alignment of business operations with the provisions of the CPA, and 5 new providers applied to HAKOM for the provision of other postal services. In addition to the alignment of business operations with the PSA, providers have also submitted the harmonised terms and conditions for the provision of postal services. In accordance with the provisions of the PSA, HAKOM no longer grants prior consent to terms and conditions of postal service providers but only has to be notified thereof.

### **5.2.2. Regulatory activities in the sector of universal postal services**

Until September 2009, HP applied the prices of reserved postal services laid down in a temporary HAKOM's decision from November 2008. HAKOM adopted the temporary decision after the amendments to the Ordinance on terms and conditions for the provision of postal services which revoked the former weight limits for postal items, that is, the limit was changed from 20 grams to 50 grams for the first weight step. In September 2009, after the submission of the Study on the influence of the change in the weight limits for postal items on the price of the service and the calculation of the price of reserved services by HP, HAKOM revoked the above-mentioned temporary decision and replaced it with the final decision.

The Postal Act prescribed that HP must keep separate accounting for reserved and non-reserved postal services, and within the framework of non-reserved postal services separate accounting of universal postal services from postal services which are not universal and courier services. The PSA, which entered into force in July 2009, additionally extended this obligation within the provision to carry out accounting tasks. In addition, on the basis of a decision by the Postal Service Council of December 2009, HP must ensure separation of business activities in terms of accounting, and apply organisation and accounting measures that make possible the easy establishment and following of revenue and expenditure for every type of provided service. In 2009, when it was obliged to deliver data for the approval of prices of reserved services, HP delivered data on the distribution of revenue and expenditure for 2008. According to the submitted data, it is obvious that HP applied a new manner of distributing revenue and expenditure (by including minutes as the main indicator of distribution) compared to the year before in an attempt to comply with the above-mentioned obligations. However, regardless of all the undertaken measures and procedures, related to the distribution of revenue and

distribution of expenditure, HP did not fully comply with legal obligations laid down in Article 34 of the Postal Services Act.

In accordance with the Ordinance on terms and conditions for the provision of postal services (hereinafter: the Ordinance), in April 2009, HP submitted to HAKOM the 2008 Report on the Quality of Universal Postal Services (hereinafter: the Report). The Report contains the results of the measuring of quality of transport of postal items in international and domestic traffic and data on the total number of received and resolved complaints in international and domestic postal traffic. It is clear from the results of measuring (UNEX<sup>TM</sup>, UPU (Universal Postal Union) and AMQM (Automatic Mail Quality Measurement)) that the quality of transport of priority mail in domestic and international traffic is not in compliance with the criteria laid down in the Ordinance. Article 36, paragraph 1 of the ordinance prescribes that the provider of universal postal services must conduct a fifteen-day measuring of the quality of transport of postal items every year by means of an independent body in order to determine the percentage of delivered items within the meaning of Article 35 of the Ordinance. HP was not able to find an adequate independent body to conduct the measuring of quality in domestic traffic in a public tender carried out in 2008 but in the period between 15 and 30 November 2008 the measuring of quality was carried out by employees of HP itself. Such a measuring was not accepted by HAKOM as relevant for establishing the quality of provision of universal postal services. HAKOM warned HP in an official letter that the fifteen day measuring of quality by an independent body is necessary in order to establish the percentage of delivered items within time limits laid down in the Ordinance. Only in early 2009, on the basis of a public tender, did HP find an independent measuring body to conduct the measuring of quality of universal postal services in domestic traffic. The independent measuring body carried out the measuring in March 2009, and prepared a report which it submitted to HP, and HP forwarded one copy of the report to HAKOM. The results of the fifteen-day measuring of the quality of universal services by an independent body are similar to the results of other types of measuring that are being or were being conducted. This measuring said that the results of the transport of test priority postal items between two cities, the centre of the city, are under the 95% set in the Ordinance in a time limit of D+1 and amount to 62.82%, while in other areas the quality of transport of priority items amounted to 90.48%, which is much closer to the prescribed 95%. The results of the measuring of transport of test non-priority postal items show that in the area city-city, centre of the same city, the total of 90.10% of items were transported within the prescribe time limit of D+3, which is under the prescribed 95%. The results of measuring of the transport of other postal items by means of audit are in compliance with the provisions of the Ordinance laying down quality parameters. The comparison of results of measuring carried out in 2009 with the results of measuring from the previous periods indicates an increase in the quality of provision of postal services in domestic and international traffic but the quality is still under the set legal limits. The increase in quality was influenced by concrete measures and activities implemented by HP during 2008 and 2009 as well as by constant warnings by HAKOM of the need for better quality in the provision of universal postal services.

Pursuant to the provisions of the Ordinance on the public operator's postal system (OG No. 5/05 and 112/08; hereinafter: the Ordinance), HP obtained from HAKOM the approvals for the closing, relocating and organisational changes of postal offices, and it was obliged to timely inform HAKOM of the intention to temporarily close, temporarily relocate or reopen a postal office. HP also adopted a decision on the opening hours of

postal offices of which it first informed HAKOM as laid down in the provisions of the Ordinance, and it continued to timely and continuously inform HAKOM of all changes in the opening hours of postal offices.

Until the entry into force of the PSA, HAKOM did not approve HP's proposal of the Ordinance on the access to the public operator's postal network because of serious deficiencies in its content. The Postal Services Act prescribes that access to a public operator's network shall be regulated in the Ordinance on the provision of universal services adopted by HAKOM.

### **5.2.3. Monitoring the situation and the development of the postal services market.**

As in the years before, in 2009 HAKOM collected statistical and other data from the providers of postal and courier services, that is, postal services providers. A part of data was collected as part of a statistical survey of the postal and courier services market started by the EC and EUROSTAT in cooperation with CERP (European Committee for Postal Regulation) with HAKOM being the contracting authority for the entire project in the RoC. The collected data were used by HAKOM to monitor and compare the number of provided services, revenue, the number of employees and other market data, that is, to gain insight into the situation on the market of postal and courier services in the RoC compared to previous years, and to compare the market in the RoC with markets of postal and courier services in other countries. The overview of the development of the postal and courier services market is given in Chapter 3.

### **5.2.4. Cooperation with stakeholders in the postal services market and public information**

In the postal services sector, HAKOM actively participated in the work of and cooperated with the following stakeholders in the postal services market at the national and international level:

- HP,
- Providers of postal and courier services,
- Ministry of the Sea, Transport and Infrastructure of the Republic of Croatia,
- Ministry of the Economy, Labour and Entrepreneurship of the Republic of Croatia,
- Ministry of Foreign Affairs and European Integration of the Republic of Croatia,
- Central Office for Development Strategy and Coordination of EU Funds,
- Croatian Standards Institute,
- European Committee for Postal Regulation (CERP) and participation in the CERP working groups,
- Directorate-General for Internal Market and Services of the European Commission
- Universal Postal Union (UPU).

In addition to this, HAKOM keeps and regularly updates databases kept for the purpose of carrying out of activities under its competence, including data prescribed by the PSA which regulates the postal services sector. These databases are publicly available in the electronic form at the HAKOM's website, and they are free of charge. HAKOM also regularly published and updated on its website the list of providers of postal and courier

services as well as its decisions and other administrative acts. In 2009, HAKOM published and presented to the public a publication "Market Analysis of Postal and Courier Services in the Republic of Croatia in 2007 and 2008" which contains data on the postal and courier service market in the above-mentioned years.

### **5.3. Preparation of subordinate legislation**

The PSA prescribes HAKOM's obligation to prepare the following pieces of subordinate legislation:

1. Ordinance on the provision of universal postal services (Article 8, paragraph 5 of the PSA),
2. Ordinance on the payment of the annual fee for the carrying out of HAKOM's activities (Article 43, paragraph 2 of the PSA),
3. Ordinance on the manner of work of the internal organisational unit for consumer protection (Article 45, paragraph 3 of the PSA).

The Ordinance on the payment of the annual fee for the carrying out of HAKOM's activities was adopted in December 2009. The Ordinance on the manner of work of the internal organisational unit for consumer protection was amended by provisions on the protection of users of postal services and the Ordinance on amendments to the Ordinance on the manner of work of the internal organisational unit for consumer protection was adopted in December 2009. The drafting of the proposal of the Ordinance on the provision of universal postal services was initiated in 2009, and the completion and publication are planned for the first quarter of 2010.

### **5.4. Inspection**

During 2009 inspection was carried out pursuant to the provisions of the Postal Act over three important and dominant providers of postal and courier services in domestic traffic: HP-Hrvatske pošte d.d. City EX d.o.o. from Zagreb and LIDER EXPRESS d.o.o. from Split. Out of the three above-mentioned inspections, two were completed by the end of 2009 pursuant to the provisions of the PA, and one inspection is still in progress.

Inspection over business operations of HP was focused on the monitoring of the measuring of quality of provision of universal postal services, the monitoring of the application of prices of universal postal services and giving discounts on these services in accordance with the PA and the invoicing for the provided services.

Company CITY EX d.o.o. from Zagreb was issued a Decision by a postal inspector stating that the service called by the provider "exchange of documents" is not in compliance with the PA, and the company was ordered to harmonise the postal service it provides under the title "exchange of documents" with the PSA.

The PSA prescribes that HAKOM shall carry out the inspection over the application of provisions of the PSA and regulations adopted pursuant to the PSA which regulate the provision of postal services, the quality of universal postal services, terms and conditions of postal service providers, network access, the approval of prices of reserved services, the bookkeeping of providers of postal services and supervision over the implementation of all individual acts adopted by HAKOM within its competence. The current providers of postal and/or courier services were obliged to, on the basis of transitional and final provisions of the PSA, harmonise their terms and conditions for provision of postal

services and conditions for the acquisition of the right to provide postal services on the basis of a notification with the PSA. Since the procedure of the harmonisation of the existing postal service providers took place in the second half of 2009, inspection over these postal service providers will be carried out in 2010.

## **6. CONSUMER PROTECTION**

During 2009, HAKOM tried to ensure by means of a series of activities in the implementation of laws and subordinate legislation which entered into force in early January 2009 a higher level of protection of users of electronic communications.

HAKOM's activities were focused on:

- Resolving users' complaints in accordance with the proposed opinion of the newly founded Consumer Protection Commission,
- Analysis of complaints establishing the reasons of complaints and adoption of adequate measures for consumer protection in public communications services,
- Control and alignment of operators' bylaws defining their business procedures as well as special obligations on consumer protection in electronic communications,
- Organisation of workshops with operators on value added services,
- Prevention by means of online education of users by introducing a new website,
- Helpline for assistance, instructions and information on concrete cases,
- Regular (1-2 times a month) participation in radio and television shows,
- Research on the use of public communications services and on attitudes of users of public communications services (needs and satisfaction of users).

Furthermore, HAKOM actively participated in the work of other state institutions on projects concerning consumer protection.

### **6.1. RESOLUTION OF DISPUTES BETWEEN USERS AND OPERATORS**

#### **6.1.1. Analysis of received user complaints in 2009**

The Consumer Protection Commission has been a new advisory body in the process of resolution of user complaints since the beginning of 2009. The Commission consists of seven members out of which two are representatives from two Unions of Consumer Protection Associations and five are HAKOM's employees. On the basis of the Commission's opinion, HAKOM resolves disputes and may adopt decisions binding on the operators.

In the following text there are some statistical indicators of received complaints the analysis of which confirms that the newly-founded body, as well as novelties introduced into legislation, brought about some positive results in consumer protection.

The increase in the number of complaints (Figure 6.1) since 2006 with a significant leap in 2007 when the first new changes in the treatment of irregularities were introduced, and in 2008 when rules of behaviour were established but still not fully enforced, and a relatively stable development trend in 2009 show that former and implemented preventive activities in 2009 contributed to the stabilisation in the number of complaints despite the increase in the number of users of public communications services and the introduction of a series of new services and new operators. On the basis of complaints analyses, HAKOM implements measures focused on critical points in the provision of services and in a short time manages to achieve the elimination of the established irregularities. At the same time, HAKOM collects information on the basis of which it may intervene as a regulator.

Complaints are of the following types: a) complaints about the amount of bills for public communications services and b) complaints about the quality of public communications services. It is obvious that more than 70 percent of all complaints still refer to bills, however, the increase of complaints in 2009 compared to the year before was only 5 percent while complaints on the quality of service continue to show a downward trend. Considering the number of new services, we believe that preventive activities in the provision of services stopped a more significant increase in the number of complaints.

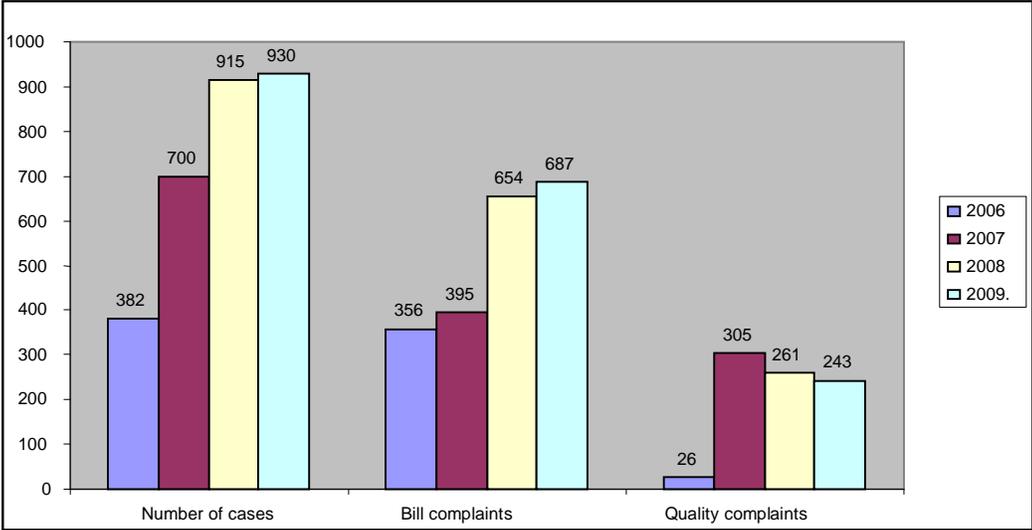


Figure 6.1. Number of complaints from 2006 to 2009

The analysis of complaints showed that, in addition to the basic types of complaints about bills and quality of service, there are also complaints about the behaviour of operators during provision of services, and that new classification is necessary for the purpose of monitoring and analysis. For that reason, complaints about the business operations of operators, complaints about carrier preselection and complaints about number portability have been introduced (Figure 6.2.). An increase in the number of complaints of 35 percent was recorded which indicates that operators are behaving irresponsibly and that their behaviour needs to be additionally regulated. Appropriate procedures have been established for all types of complaints.

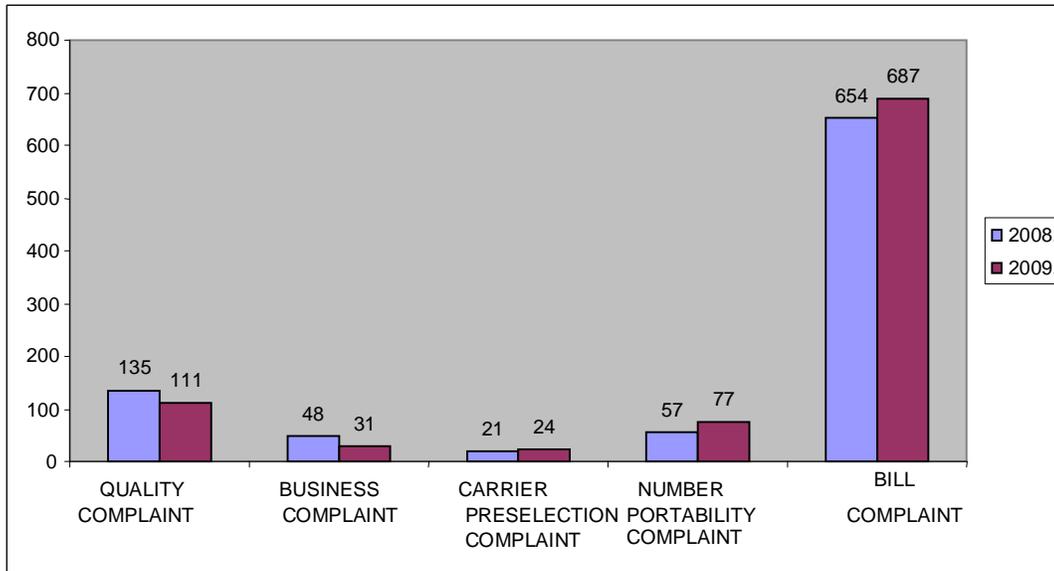


Figure 6.2. Complaints according to a new classification

Bill complaints show a slight 5 percent increase which may be regarded as a positive indicator considering the increase in the number of users and introduction of new services ó particularly value added services. A significant contributory factor was the new regulatory framework and additional controls.

Some groups of complaints have almost disappeared completely (*diallers*, games of chance ó as a special category of a value added services).

Value added services (special tariffs) show a certain uniformity which results from the fact that the appearance of õillegal servicesö comes in cycles ó every six months there is a new (as a rule one) service of this kind. The expected appearance of õillegal servicesö in the upcoming period concerns the increase in the number of text messaging value added services.

#### 6.1.1.1. Analysis of bill complaints – basic groups of bill complaints

In the group of basic services the increase in the number of complaints refers in the first place to new service packages which were not clearly and transparently communicated to users. In this segment additional attention will have to be paid to the control of new services prior to their introduction on the market, as well as to new tariffs. Interventions into regulations are also possible.

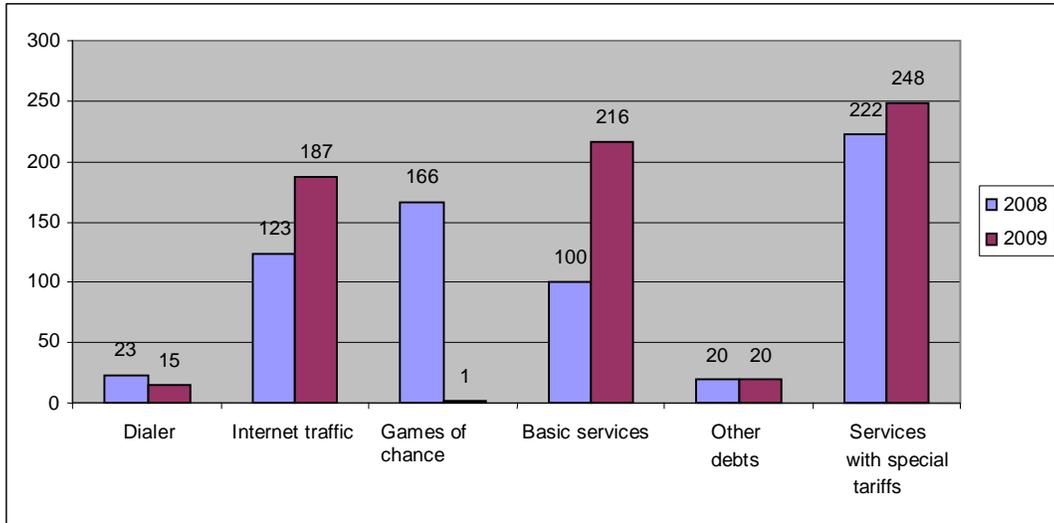


Figure 6.3. Structure of bill complaints

Complaints about internet traffic services also show an upward trend and they result from a significant increase in the number of users in both fixed and mobile networks. ADSL Internet access is a desired option for the user of this service but it is currently still accompanied by technical and infrastructural limitations of operators and insufficient technical literacy of users and awareness about possible abuse or, in other words, the insufficient insistence of operators on the education of their users.

In mobile networks, the introduction of new types of technologies and tariffs for Internet access for more advanced mobile devices resulted in the increase in the number of cases when undesired Internet connections were established. The principal problem is that users are insufficiently educated and also, on the other hand, that operators are very passive when it comes to the giving of adequate instructions.

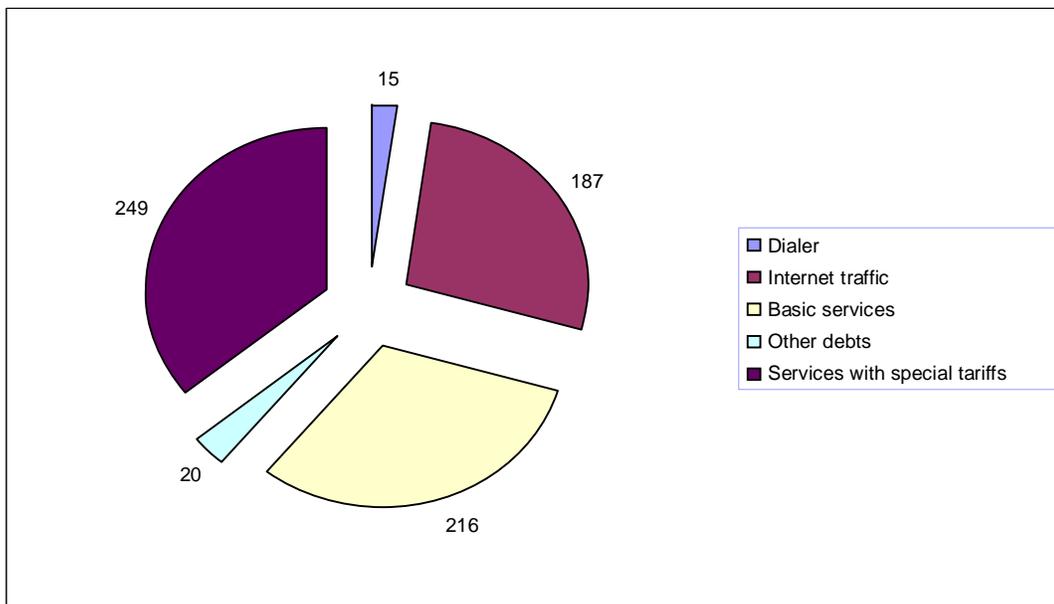
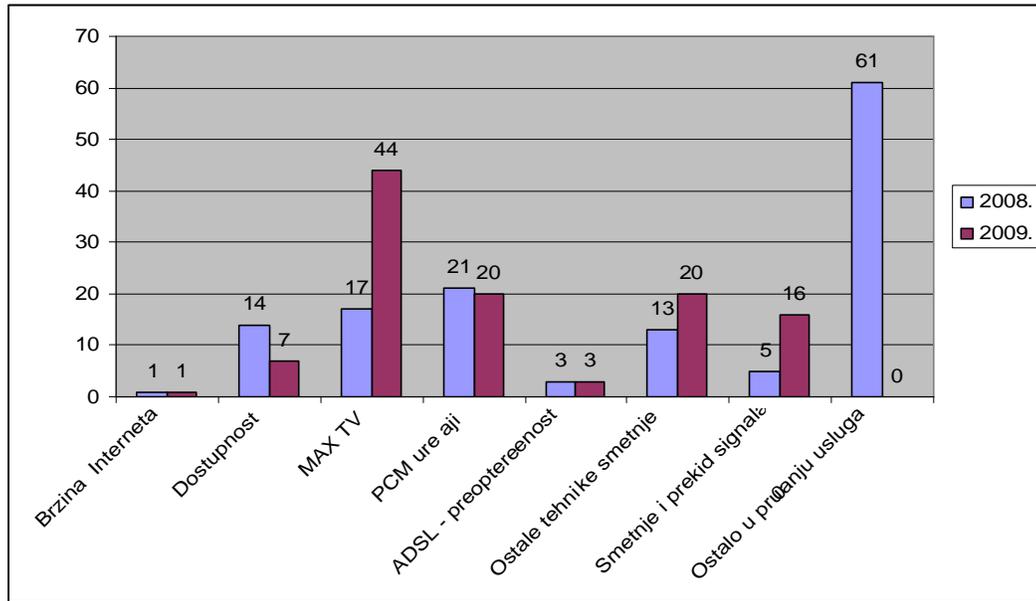


Figure 6.4. Bill complaints in 2009

### 6.1.1.2. Analysis of quality complaints

The aggregate number of complaints about the quality of services still shows a downward trend and a fall of 7% compared to the previous year. In the entire structure (Figure 6.5) a significant increase was recorded with MAX TV services which results from a rise in the number of users, or, as a rule, from the impossibility to realise this additional service.



Internet speed, Availability, Max TV, PCM devices, ADSL ó congestion, other technical interferences, Interferences and signal interruption, other issues in the provision of services

Figure 6.5. Structure of quality complaints

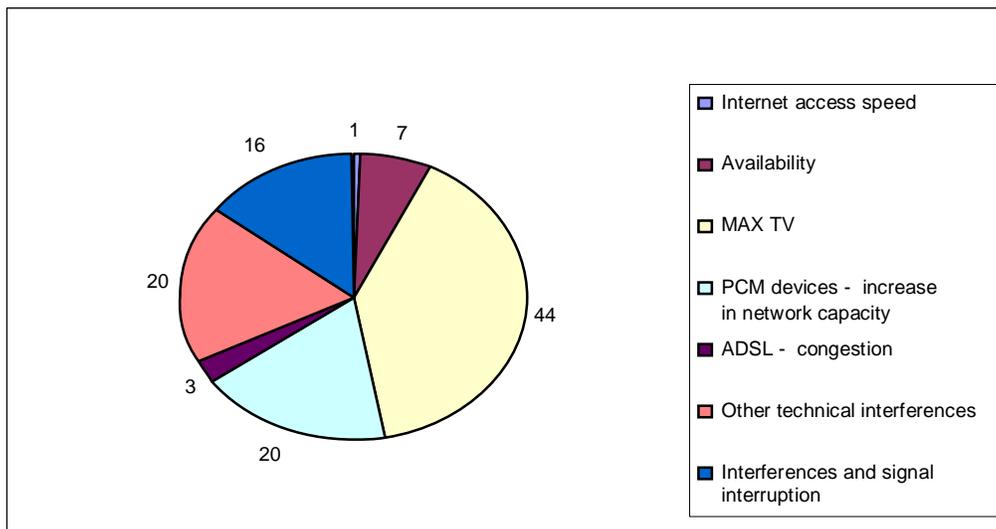


Figure 6.6. Quality complaints in 2009

The category of service ‘Other issues in the provision of services’ has been divided into some other categories in the new classification and it was not recorded in 2009. Interferences and signal interruption, as well as other technical interferences, mostly refer to Internet access services and related additional services.

### 6.1.1.3. New types of complaints – arising as a result of deceptive business practices

Complaints representing oversights in the behaviour of operators have been separated since 2009 and HAKOM is authorised to act upon such complaints pursuant to new regulations. It is a fact that different forms of keeping subscribers against their will and illegal stealing of subscribers appear on our market, as well as the non-transparency of contractual relations and deceptive offer of services. This section deals with complaints about the impossibility to realise certain services (e.g. number portability, LLU (Local Loop Unbundling) and broadband), that is, various forms of deceptive sales practices. In order to eliminate occurrences of such behaviour, HAKOM pays special attention to control of prescribed internal acts of operators and their business practice.

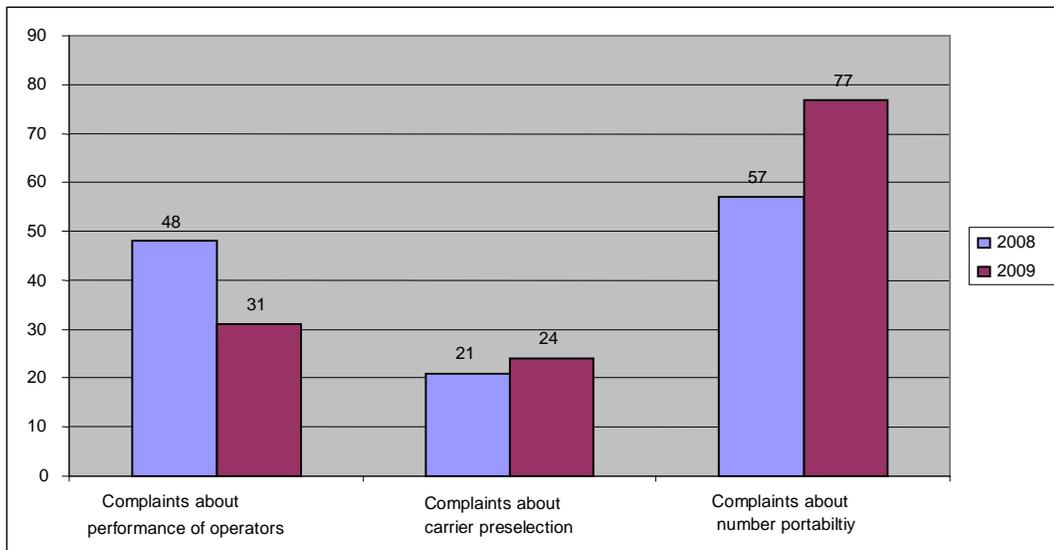


Figure 6.7. New types of complaints

Bearing in mind the data presented by other European regulators, this kind of behaviour of operators is on the rise and they are perfecting their deception methods.

### 6.1.1.4. User complaints via HAKOM’s new website

After the introduction of a new website which in a simple manner gives instructions to users and provides a possibility to ask HAKOM and to register as a user in order to initiate dispute resolution procedures before HAKOM, the following results were achieved in 2009 (starting from June):

1. general user questions and answers: 80 questions
2. registration to initiate dispute resolution: 46 users

### 6.1.1.5. Overview and analysis of resolved complaints

The last session of the Council of Users of Telecommunications Services was held in January 2009. The newly-founded Consumer Protection Commission had its first session in March 2009. The total of 577 cases were dealt with at the above-mentioned sessions

and 570 cases were resolved in the adequate manner. In 7 cases additional activities were requested from HAKOM and operators. Since the prescribed time limit for the resolution of a case is 4 months, this number includes a part of received cases from 2008 (94 cases). Below is an overview of the structure of resolution of cases (Figure 6.8.) :

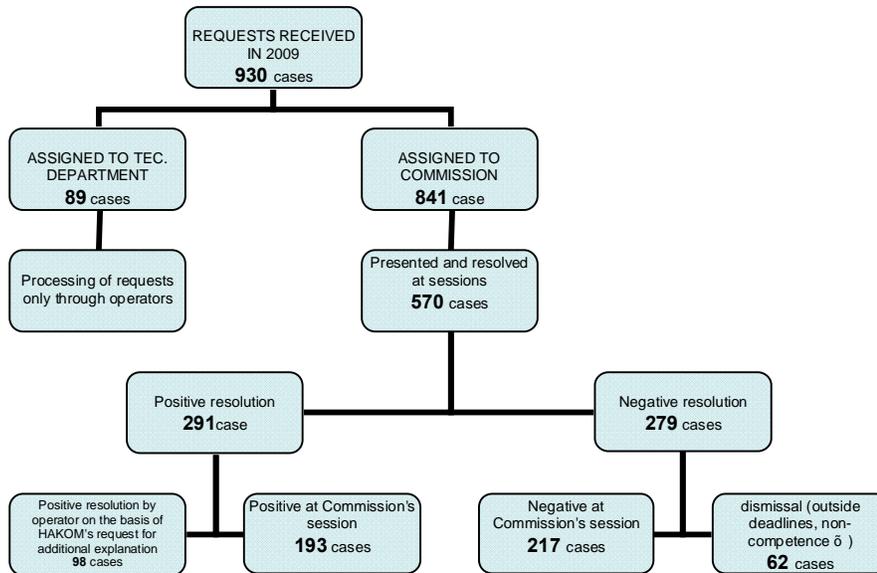


Figure 6.8. Structure of resolution of cases

Those complaints for which HAKOM has a direct basis in its regulations received a positive resolution, that is, opinions were adopted on the need for a positive resolution of the user's complaint in case of subordinate application of other regulations. This results from the general HAKOM's attitude that willingness to accept one's own mistakes and oversights, that is, the need to protect a weaker party in proceedings, is more useful in the long run than the adoption of drastic measures. In relation to this it must be emphasised that operators reconsidered the subject of the complaint in 98 cases (17 percent) and, on the basis of HAKOM's request for an additional explanation, changed their originally negative decision themselves. This behaviour of operators shows that they are ready to cooperate and contribute to the protection of their users. Unfortunately, on the other hand, there are still cases of not acceptance and stalling attempts. In such cases, sanctions will be necessary.

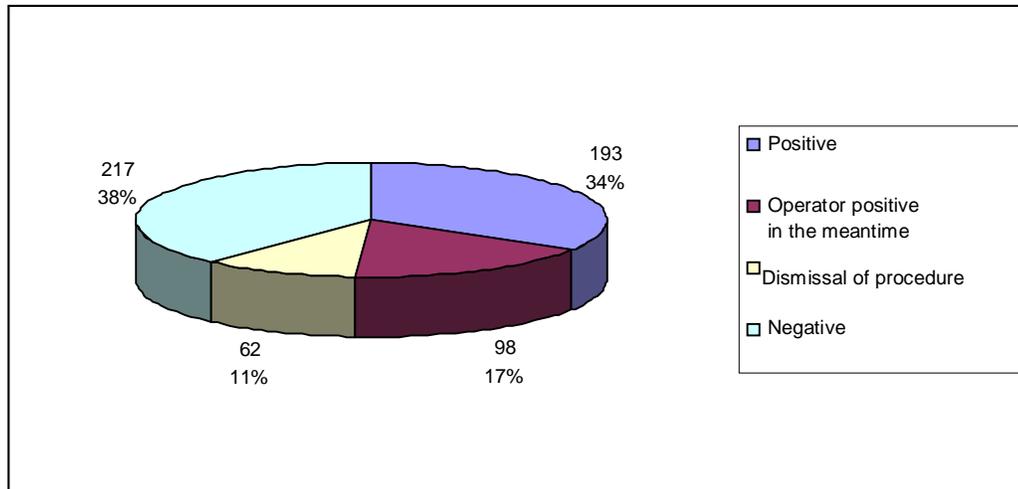


FIGURE 6.9. Structure of resolution of complaints

Out of the total number of resolved complaints, 279 (48 percent) of complaints had a negative resolution, or, 38% because 62 (11 percent) complaints were dismissed because of formal or legal reasons. In case of negative resolutions of complaints, users, unfortunately, incorrectly interpreted their rights and obligations and there was no legal basis for accepting the complaint.

## 6.2. PRINCIPLES OF CONSUMER PROTECTION

The ECA changed the legal framework which significantly increased the area of consumer protection. HAKOM's role in the promotion of interests of users of services was emphasised, in particular in the following ways:

- a) by ensuring a high level of consumer protection,
- b) by a simpler and more accessible dispute resolution procedure,
- c) by promoting the giving of unambiguous information and
- d) by addressing the needs of special social groups.

For that purpose, the Ordinance on the manner and conditions for the provision of electronic communications networks and services, and in particular its Annex 5 additionally regulates these relations and the manner and conditions for the provision of value added services, and it achieved the following:

- unfair conditions in contracts are prohibited,
- free access to Customer Service 24/7,
- publication of terms and conditions and pricing systems in daily newspapers and instructions to existing users on the possibility to terminate the contract in case of unfavourable conditions,
- specification of pricing systems which provide data for calculation of the future debt,
- return or refund of the unspent amount in mobile and fixed networks,

- ban on outgoing calls to a certain number or a group of numbers or a monetary limit on the monthly bill upon the user's request, regular information of users about the possible bans,
- following habits of subscribers and issuing warnings when they spend the prescribed amount (double the average spending in the previous 3 months),
- making the rights of pre-paid users equal to rights and conditions that apply to subscribers for the same type of service and in cases when applicable,
- procedures for resolution of user complaints prescribed in detail (determination of administrative and technical proper functioning of the electronic communications network and subscriber terminal equipment as well as the inability of unauthorised use outside the subscriber's zone of responsibility),
- Internet services ó before the beginning of provision of a service, the user must be provided with written instructions about the need and possibility to protect from unauthorised use,
- Value added services
  - For all services: announcement of the price and possibility to interrupt the call (2 seconds) before the charging starts
  - For services charged per minute ó Announcement of the interruption and interruption of the call, after the expiry of 30 minutes or after having spent a certain amount ( HRK 250.00)
  - For SMS services ó notification about the price and manner of interrupting the service
  - Obligation to dial numbers in case of adult services,

protection of children:

- possibility to ban access to contents not appropriate for children
- dialling of numbers for children services
- spending limit (HRK 50.00)
- operators of public communications services must record and exchange data on numbers and addresses the contents of which are not intended for children,

disabled persons:

- ensuring equipment and services to be provided
- including educated persons to work in customer service.

### **6.2.1.Changes in dispute resolution procedures**

The ECA gave HAKOM the competence to resolve disputes between subscribers and operators of public communications services. New manner of dispute resolution entitles HAKOM to adopt binding decisions which ensure a high level of protection of users because the operator is obliged to act in accordance with the decision.

HAKOM resolves disputes in a transparent, objective and non-discriminating manner on the basis of an opinion given by the Consumer Protection Commission.

Decisions on dispute resolution are adopted by HAKOM's Director on the basis of the Commission's opinion which satisfies the principle of cost effectiveness of procedures, and takes into account small value of disputes compared to disputes between operators the resolution of which is under the competence of HAKOM's Council.

## **6.2.2. Preventive activities in consumer protection**

### **6.2.2.1. Prevention through regular procedures**

In order to ensure a high level of consumer protection, various preventive procedures which have proven to be effective and useful are carried out because they permit the elimination of irregularities when they first appear. Below is a list of more important preventive activities carried out by HAKOM during 2009:

- Ex ante and ex post control and alignment of terms and conditions of operators (terms and conditions of business and pricing systems) defining their business operations and special obligations concerning consumer protection in electronic communications. Reviewed, aligned and approved terms and conditions for 5 biggest operators,
- Research and control of the existing and new packages of services and promotional offers of operators,
- A workshop was organised for new operators of value added services and other operators participating in the provision of value added services where rules of behaviour were defined, as well as necessary consumer protection procedures,
- Online education of users by introducing a new website in June 2009 which gives instructions for the behaviour of users and offers the possibility to ask questions to HAKOM, to register as users in order to initiate dispute resolution procedures before HAKOM, and to check the current status of their cases,
- Telephone line for information about specific cases, that is, assistance and instructions on what and how to act in case of problems encountered when using public communications services,
- Regular (1-2 a month) participation in radio and TV shows where users may complain about problems encountered in the use of public communications services and where they can get the necessary advice and instructions,
- In May 2009 a survey was conducted on the use of public communications services and attitudes of users about public communications services (needs and satisfaction of users),
- Actively participated in the work of other state institutions on projects concerning user/consumer protection (workshop and preparation of a brochure in cooperation with the Croatian Union of the Consumer Protection Associations, participation in the work of the National Consumer Protection Council).

### **6.2.2.2. Prevention through inspection**

It was noticed in the past two years that new products are appearing on the market of public communications services, in particular in the group of value added services, and these new services are often barely legal. Considering the new legal procedures for preventive action and implementing measures as well as a systematic definition of

permitted and prohibited services in legislation, inspection allows the termination of provision of such a service and quick alignment procedures. In this manner, the number of complaints is decreased because the number of "deceived" customers is lower and initiated disputes may be resolved more quickly on the basis of an inspector's general decision. In 2009 four inspections were initiated for that purpose against providers of value added services and the first decisions on individual complaints were adopted in late December. This kind of practice will gain in importance in the upcoming period.

## 7. EXECUTION OF THE WORK PROGRAMME

In late 2007, HAKOM adopted the Strategic and Operational Development Plan until 2010 which serves as a basis for preparation of annual work programmes.

The adopted HAKOM's strategic and operational plan is implemented through two improvement programmes:

- Convergence ó oriented towards the outside and focused on the development of the market, competition and regulatory frameworks.
- Modernisation ó oriented towards the inside and focused on building capacity and own ability to regulate and develop the market through a) implementation of the e-Agency project and b) development of regulatory competences.

HAKOM has appointed heads and members of the modernisation and convergence programmes and adopted programme plans, defined deadlines, and manner of monitoring these plans as well as the manner of updating the Strategic and Operational Plan.

The 'convergence' programme was dealt with in the previous chapters on the regulation of electronic communications market and the postal and courier services market and, therefore, the text below will focus more on the 'modernisation' programme in terms of HAKOM's productivity and efficiency in 2009.

### 7.1. EXECUTION OF THE E-AGENCY PROJECT

E-Agency is a project for the transformation of HAKOM's activities through application of information and communication technology thus making HAKOM's work more user oriented. E-Agency also includes the constant adjustment of the procedural and technological framework of HAKOM's activities in order to achieve better efficiency, the optimum use of funds and more quality provision of the available services.

IT introduction into processes and services increases productivity but also opens possibilities for the creation of innovative solutions in order to extend and facilitate access to HAKOM's regulatory services. The modernisation through information and communication technologies ensures timely and quality informing to all interested parties in the post and electronic communications market.

In 2009, HAKOM continued implementing the e-Agency, a strong integrated information system based on e-Government. Although e-Government implies the use of different communication technologies, in 2009 the main focus was on Internet access through a communication channel agency- citizens and agency- business operations.

E-Agency is structured in layers in accordance with the following principles: a) integrated information system; b) flexible and acceptable in the future; c) developed in accordance with internationally standardised protocols, d) open and modular system and e) adjusted to user needs.

E-Agency's architecture consists of three layers: IT (Information Technology) infrastructure, 'back office' (information systems not visible to users) and 'front office' (information systems visible to users).

IT infrastructure was additionally extended and modernised in 2009 because of the requirements of information systems and safety issues. This in the first place refers to the increase in the processing power and memory of servers, the use of platform virtualisation, the introduction of safety solutions at the network level, additional

functionality of the wireless local network and updating of the client and primary software.

During initial use, background systems have shown the need for upgrading of certain modules and, on the basis of user requests, adjustments and upgrades were introduced into the following systems: ERP - Enterprise Resource Planning, DMS ó Document Management System and HRM ó Human Resource Management. The basis of the BPM - Business Process Modelling system is created in the form of a repository of business processes and preparation for the introduction of modules for the management of business processes.

In 2009 HAKOM continued building the visible systems which consist of a modern, strong portal including many electronic, online applications such as Public Consultation (e-Consultation), e-Complaints, e-Portability, e-Licenses, e-Tender, e-Market, e-Advice, e-Offer, e-Procurement, e-Careers and the similar.

The above-mentioned e-applications are a central element of an integrated information system since HAKOM is trying to satisfy the needs of interested parties in the market of post and electronic communications, to ensure a high quality of services, easy access and quick delivery of information. Our services, productivity, efficiency and flexibility depend on strong, implemented electronic applications.

By implementing the e-Agency, HAKOM supports Croatian integration into a common European electronic communications market and the upcoming pan-European e-Government services.

The conceptual architecture of the e-Agency started coming to life last year and on 15 June 2009 the new HAKOM's portal was launched. Four new e-applications were developed and launched as part of the new web portal:

- e-Complaints ó after registration, an user may file a complaint electronically and follow the status of the complaint
- e-Portability ó after registration, a user may follow the status of number portability process and find out in which network is the number currently located in order to establish the price of the conversation. Unregistered users may at any time get information about the network in which the number is located. The application provides the status of the number portability process and location in real time completely synchronised with the central administrative database of ported numbers.
- e-Market ó users may read an updated status of the post and electronic communications market quarterly or annually for mobile and fixed communications networks, internet services, broadband access etc.
- e-Advice ó registered users may ask questions from under HAKOM's competence all in one place without the need to find the appropriate contact information. Questions and answers are followed in one place and published in the same place. The application also permits discretion upon a user's request.

The application e-Market permits the electronic collection of data on market situation from operators with authorisation of users from a remote location by using a web interface. This application also permits to HAKOM to carry out a flexible analysis of market developments and a high level of manipulation of market data collecting cycles. Security measures and data confidentiality apply to network, transport and application integration level.

The already known application e-Consultation has been upgraded in terms of speed, design and simplicity of use and it is available to participants of public consultations by means of simple registration on HAKOM's web portal.

## **7.2. DEVELOPMENT OF REGULATORY COMPETENCES**

During 2009 HAKOM continued working on improving the expertise and competences of its employees. The work and activities of the regulatory authority are closely related to an adequate number and qualifications of employees because they include monitoring and assessment of very important expert (electronic communications and postal), legal and economic issues. Market changes demand constant in-service training of all of HAKOM's employees. The in-service training of HAKOM's employees shall include postgraduate study, research projects, seminars, conferences, work groups, workshops and courses.

As part of the "modernisation" programme HAKOM initiated a number of projects for the development of regulatory competences the most important being:

- multidisciplinary postgraduate studies,
- "A Glance Towards the Future" project
- Foreign languages

and all aimed at increasing organisational and individual capacities.

### **7.2.1. Multidisciplinary postgraduate studies**

In cooperation with the Faculty of Electrical Engineering and Computing, the Faculty of Economics and Business and the Faculty of Law in Zagreb, HAKOM started an interdisciplinary specialist post-graduate university course in electronic communications market regulation. The responsible authority is the University of Zagreb, the coordinator of the course in the Faculty of Electrical Engineering and Computing, and the curriculum is carried out by the above-mentioned faculties.

The academic title acquired after the completion of the course is the title of "a graduate specialist in regulation of electronic communications market". Participants will acquire the following competences during the course:

a) economic, legal and technological aspects of electronic communications market regulation and b) ability to apply the regulatory framework and resolve regulatory issues.

The framework, curriculum, conditions of study and lecturers have been defined for every subject. The curriculum comprises obligatory subjects, elective subjects and the final dissertation and it gives the total of 60 (European Credit Transfer System) ECTS points. Obligatory subjects take place in the first semester, and elective subjects in the second semester. The dissertation includes a regulatory project.

The classes from obligatory and elective subjects consist of lectures by teachers and visiting domestic and foreign lecturers and of seminars and workshops for discussion and elaboration of case studies.

The requirements for enrolment in the course are the completed four-year undergraduate course and work experience in electronic communications, knowledge of the English language and a dissertation proposal. The selection procedure for participants includes an

interview in which the area of expertise for the dissertation is established and a mentor appointed depending on the field.

In 2009 HAKOM established the criteria which included a dissertation topic and announced an internal competition for its employees. The total of 12 of HAKOM's employees were enrolled because they satisfied both the internal prerequisites and course prerequisites.

HAKOM is planning to offer scholarships to 50 of its employees by the end of 2010.

Since this is, to our knowledge, the first such course in Europe, it is possible that regulatory authorities and operators from the neighbouring countries might show interest.

### **7.2.2. "A Glance Towards the Future" project**

Immediately following the completion of organisational aspects of the specialist multidisciplinary post-graduate course in regulation of electronic communications market, HAKOM started preparing a multidisciplinary project "A Glance Towards the Future".

Therefore, in 2009 HAKOM defined the areas of interest and prepared the specification for this multidisciplinary project, and the preparation of tender documentation is in progress. In that sense, HAKOM started negotiating with the Faculty of Electrical Engineering and Computing in Zagreb, the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture in Split and the Faculty of Economics and Business in Zagreb. The Faculty of Law in Zagreb and the Faculty of Electrical Engineering in Osijek also plan to get involved in the project.

HAKOM will invite all other relevant, interested participants in the electronic communications market (operators, manufacturers...) to participate in the project thus attempting to create a Croatian Electronic Communications Forum.

The project is supposed to prepare HAKOM for challenges waiting in the near future:

#### A) Next Generation Network (NGN):

- NGN core
- NGN access
- NGN numbering
- New services and applications (IMS - Internet Protocol Multimedial Subsystem)

#### B) Development of the electronic communications market

- Market analysis (8 markets)
- Market regulation
- Management and spectrum economy
- Cost accounting
- Cost models.

The dominant topics in the project are the future development of technology, new regulatory issues opened by the new technology, their influence on the development of the electronic communications market and economic and legal aspects of proactive, neutral and transparent market regulation, stimulating measures for investments and innovations and fair competition conditions.

### **7.2.3. Foreign languages**

HAKOM is aware that its employees, if they do not speak foreign languages, especially English, cannot communicate internationally and are limited only to "knowledge sources" written in the Croatian language, which is unacceptable in such a dynamic sector as electronic communications. The need to improve language competences arises from the need of HAKOM's employees to build on knowledge necessary to follow the development of professional aspects of HAKOM's activities through participation in international regulatory organisations, at conferences and by reading literature in HAKOM's field of competence. We believe this to be one of the important preconditions for the development of HAKOM as a national regulatory authority.

Since HAKOM is constantly trying to improve its efficiency by increasing the knowledge and skills of its employees, it has organised the courses of English and French language in order to improve the competences of its employees. In 2009, foreign language courses were started for 45 employees. English language courses for four groups and French language courses for one group started in October 2009 and their continuation is planned depending on HAKOM's goals and employees' interest.

### **7.3. PUBLICITY OF HAKOM'S WORK AND PUBLIC INFORMATION**

In order to develop and improve the publicity of its work, HAKOM in 2009 defined and introduced the organisation, tools and processes which support the required accuracy and publicity of work.

Therefore, in 2009 HAKOM initiated and completed the project of creating a new web site ([www.hakom.hr](http://www.hakom.hr)) both in Croatian and in English and part of the content was adjusted to persons with special needs. The new website has been designed in the manner that it emphasises transparency and publicity of work which was recognised by the judges of the contest "VIDI WEB TOP 100" for 2009. HAKOM's website received the annual reward "ONE OF TOP 10" in the category of governmental organisations and state institutions.

In accordance with the ECA and PA, HAKOM regularly kept and updated databases with all registers and records kept for the purpose of carrying out of its activities, operators and providers of electronic communications and postal and courier services. These databases are publicly available in the electronic form on HAKOM's website and they are free of charge. It also regularly published statistical data on electronic communications and postal services markets. On HAKOM's new website there is a special part intended for users of electronic communications and postal services.

During the year HAKOM informed all the interested parties on the electronic communications and postal services markets (users, operators and providers of electronic communications and postal and courier services, social partners and others) about its activities. HAKOM also publishes decisions and other administrative acts on its website and in the "Official Gazette".

Furthermore, HAKOM carried out online public consultations on decision-making procedures and adoption of other administrative acts which have a significant influence on the relevant market and in procedures of adoption of subordinate legislation, work programmes and HAKOM's financial plan.

Besides that, HAKOM also organised periodic meetings, workshops and seminars with interested participants in the market throughout the year.

#### **7.4. ISO 9001 quality management system**

Aware of the fact that markets of electronic communications and postal services directly depend on efficiency, transparency and consistency in the work of regulatory authorities, HAKOM initiated a project for the introduction of a quality management system in order to better satisfy market demands, and demands of operators, service providers, end users and all interested parties.

HAKOM started implementing the project for the introduction of a quality management system in accordance with ISO 9001:2008 in June, and completed it successfully in November 2009. The compliance of the quality system with the standard was verified by the internationally recognised certification company *Bureau Veritas*. HAKOM thus became the first regulatory agency in the Republic of Croatia which certified the quality management system in accordance with the international standard ISO 9001:2008.

In order to satisfy the requirements for the standard it was necessary to train the members of HAKOM's working group (and directors) who in turn transferred their knowledge about quality management to its employees, to train internal independent auditors for assessing the progress of the project (internal auditors ó 17 employees), to establish all processes in the organisation, to determine the order and interaction between these processes, criteria and methods necessary for efficient progress and control of processes, to ensure the availability of resources and information, to supervise and analyse work processes and apply actions that contributed to efficiency and improvement of processes. The documentation for the quality management system was prepared in the process which includes the description of procedures of all of HAKOM's key processes, HAKOM's forms, and the description of all obligatory procedures required by the standard such as the management of quality documentation, preventive and corrective activities, the management of non-compliant services, the procedure for internal independent audit, and the management of quality records. A manual on quality was also prepared which follows HAKOM's vision, mission, policy, and objectives. Internal independent audit of the quality management system was carried out and HAKOM's management prepared an assessment of the quality management system before the audit.

Since the establishment, maintenance and constant improvement of the quality management system is a long-term and demanding process which implies continuous and systematic monitoring and improvement of business processes and complete involvement of the management of an organisation and of all employees, HAKOM has decided to keep the quality management system as a permanent programme.

#### **7.5. INTERNATIONAL COOPERATION**

In accordance with the annual work programme, HAKOM's employees continued with international cooperation in 2009 and participated in a series of bilateral and multilateral meetings and workshops thus promoting effective regulation of electronic communications and postal services markets, of the radio frequency spectrum and of numbering resources, and promoting HAKOM as an active and modern regulator in the network of European regulators in terms of application of the regulatory framework and market development.

During 2009, HAKOM actively participated in the work of European Commission's working groups (COCOM, ERG (European Regulators Group), IRG (Independent Regulators Group), RSPG (Radio Spectrum Policy Group), RSC (Radio Spectrum Committee)), and in the work of ITU's and CEPT's working groups in the sector of electronic communications market and in CERP's and UPU's working groups in the sector of the postal services market. In 2009, the work of the above-mentioned bodies mainly focused on effective regulation and harmonisation of the EU market, on radio frequency spectrum management, on switchover to digital broadcasting and amendments to the new regulatory framework in the electronic communications market.

In addition to intense correspondence with the neighbouring countries, international cooperation included one bilateral meeting with Italian administration and one with the administration of Bosnia and Herzegovina, and two bilateral meetings with Serbian administration. Two successful workshops on market analyses were organised with experts of the Slovenian Agency for Post and Electronic Communications (hereinafter: APEC). HAKOM also received experts from the regulatory bodies of Albania and Macedonia and prepared expert workshops for them where it transferred its experience in regulation of the electronic communications market and management of the radio frequency spectrum.

In May 2009, HAKOM successfully organised a meeting of the Working Group for Spectrum Engineering in Hvar. The meeting was attended by 51 representatives of European regulators and of the industry. As part of activities concerning the "digital dividend" (790-860 MHz) and the consideration of technical possibilities related to the possible harmonisation of use of the "digital dividend" that is, the coexistence of different digital technologies in the same frequency band, HAKOM participated in the work of the working groups ECC TG4 (Electronic Communications Committee Task Group 4) and RSPG.

HAKOM's employees also participated, as part of their in-service training, at the L&S Telecom conference, at the European Broadcasting Union conference on digital radio, International Broadcasting Conference, EBU FORECAST and DRM (Digital Radio Mondiale) conference with topics from the digital broadcasting sector, at the DigiTAG workshop on the introduction of digital television and other workshops dealing with issues of introduction of digital television in Europe and countries in the region.

Within the framework of the Instrument for Pre-Accession Assistance (IPA), a project was agreed upon during 2009 that will ensure to HAKOM the procurement of modern equipment for monitoring and measuring of the radio frequency spectrum worth EUR 3.5 million. A project which starts in 2010 was also prepared at the same time. This project is aimed at strengthening HAKOM's human resources, at providing support in the implementation of market analysis and regulatory accounting as HAKOM's key regulatory tasks.

Year after year, as Croatia gets closer to the EU membership, HAKOM is following and keeping up with the application of the best practice in market regulation in accordance with the development and situation on the Croatian market which is confirmed through international cooperation which will become one of HAKOM's key activities on the path towards the European electronic communications market and postal services market after Croatia's accession to the EU and in harmonised application of regulation.

## 7.6. PROCESSED REQUESTS AND HAKOM'S DECISIONS

Last year HAKOM processed the total of 30 185 incoming documents and 19 806 outgoing documents with the total of 49 991 documents passing through HAKOM. Therefore, in 2009 HAKOM had the following:

- 30 185 incoming acts out of which 8 132 are administrative cases, and 22 053 non-administrative cases,
- 22 483 initiated new proceedings out of which 7829 are administrative cases, and 14 654 non-administrative cases,
- 18 361 resolved cases out of which 7 095 are administrative cases, and 11 266 non-administrative cases,
- 19 806 outgoing acts out of which 7 860 are administrative cases, and 11 946 non-administrative cases.

### A) Issuing of licenses for use of the radio frequency (RF) spectrum (3679 licenses):

- 514 licenses for use of the RF spectrum for a fixed radio station;
- 1090 licenses for use of the RF spectrum in microwave link ;
- 483 licenses for use of the RF spectrum for a mobile radio station \*;
- 27 licenses for use of the RF spectrum in satellite service;
- 421 licenses for use of the RF spectrum in broadcasting;
- 164 licenses for use of the RF spectrum in amateur service;
- 34 licenses for CEPT amateur license ;
- 907 licenses for use of the RF spectrum on a vessel ;
- 31 license for use of the RF spectrum on a plane;
- 1 license for use of the RF spectrum for digital television networks;
- 2 licenses for use of the RF spectrum in 900 MHz and 1800 MHz frequency bands;
- 5 licenses for use of the RF spectrum for broadband wireless access.

### B) Issuing of authorisation for use of the radio frequency spectrum

- 61 authorisations for use of the radio frequency spectrum

### C) Issuing of certificates of conformity

- 1084 certificates of conformity

### D) Primary assignment of addresses and numbers:

- 134 decisions on primary assignment of addresses and numbers
  - 122 assignments, 3 withdrawals, 9 transfers of rights
  - 94230 numbers and 11 address

### E) Conformity of R&TT equipment and approvals for import and placing on the market:

- 3508 received cases with the total of 6872 issued documents.

\*after the entry into force of the Ordinance on the conditions for allocation and use of the radio frequency spectrum for a larger number of radio stations of the same user, only one license is issued

F) Management of communications infrastructure:

- 201 processed cases with the total of 1764 issued documents.

G) Building conditions and spatial plans:

- 8480 received cases with the total of 7780 issued documents.

H) User complaints

- 930 user complaints.

### **7.7. ACTIVITIES RELATED TO SUBORDINATE LEGISLATION**

In 2009 HAKOM prepared a plan for the adoption of subordinate legislation based on the ECA and started executing this plan in the manner that an expert group (head, participants) was established for each piece of subordinate legislation and deadlines for preparing drafts of pieces of subordinate legislation. In the carrying out of its legislative activities HAKOM cooperated with the Ministry of the Sea, Transport and Infrastructure and with the Ministry of Foreign Affairs and European Integration (hereinafter: MFAEI).

The procedure for the adoption of a piece of subordinate legislation under the competence of the HAKOM Council consists of the following:

- Drafting of proposals for ordinances in a working group,
- Publishing a proposal for the ordinance on HAKOM's official website for the purpose of a public consultation lasting for at least 30 days,
- Processing of received comments and amendments of the text of the proposal of the ordinance,
- Adoption of the ordinance at the session of the HAKOM's Council,
- Publication of the ordinance in the Official Gazette,
- After the entry into force of the ordinance, HAKOM publishes on its official website the processed comments received during public consultation and explains the reasons why some comments and proposal were accepted and others were not.

During 2009, the HAKOM Council adopted 14 pieces of subordinate legislation:

1. Ordinance on the manner of work of the internal organisational unit for consumer protection - OG No. 10/09.
2. Ordinance on the directory and the directory inquiry service - OG No. 23/09.
3. Ordinance on universal services in electronic communications - OG No. 23/09.
4. Ordinance on the certificate and fee for the right of way - OG No. 31/09.
5. Ordinance on reference offers - OG No. 37/09.
6. Ordinance on the manner of and conditions for preventing and suppressing abuse and deception in the provision of electronic mail services ó OG No. 42/09.
7. Ordinance on the manner of and conditions for determining a zone of electronic communications infrastructure and associated facilities, safety zone ó OG No.42/09.
8. Ordinance on number portability - OG No. 42/09.
9. Ordinance on amateur radio communications ó OG No. 61/09

10. Ordinance on amendments to the Ordinance on amateur radio communications - OG No. 92/09.
11. Numbering plan ó OG No. 154/09.
12. Ordinance on amendments to the Ordinance on the manner of work of the internal organisational unit for consumer protection OG No. 154/09.
13. Ordinance on technical conditions for electronic communications network of business and residential buildings ó OG No. 155/09.
14. Ordinance on the payment of fees for the carrying out of HAKOM's activities ó OG No. 158/09.

When a piece of subordinate legislation is covered by the National Programme for the Integration of the Republic of Croatia into the European Union, its adoption requires the preparation of tables of concordance of provisions of the ordinance and a statement of conformity of (draft) proposal of legislation with the EU *acquis communautaire* and with the legal acts of the Council of Europe.

In addition, during 2009, HAKOM Council adopted the following new bylaws:

1. Ordinance on work procedures
2. Ordinance on internal organisation
3. Ordinance on classification of work places
4. Ordinance on salaries and other material rights
5. Ordinance on the use of HAKOM's company vehicles
6. Ordinance on business secret
7. Ordinance on business trips of employees
8. Ordinance on safety at work
9. Ordinance on taking-over and use of official terminal equipment and mobile devices.

# **SUMMARY**

## **OVERVIEW OF THE ELECTRONIC COMMUNICATIONS MARKET**

The total revenue from all electronic communications activities in 2009 fell by 1.67 percent compared to 2008. HAKOM sees the causes of such a decline in a) world crisis, which is present also in the Republic of Croatia, b) insufficient investments and innovations by operators in previous years, and c) introduction of excise duties into mobile communications.

The concepts "higher price, lower income", and "less investments and innovations, lower income", which characterise the world communications market, also apply to the RoC in this activity.

## **PUBLIC SWITCHED TELEPHONE NETWORK**

The number of subscribers of public voice service via the fixed network in the RoC is stagnant as a result of switching over to mobile communications and to broadband Internet access. At the end of 2009, the Republic of Croatia reached the EU average in the penetration of fixed communications network.

In 2009 the public switched telephone network recorded a fall in income of 9.6 percent.

The share of new operators in relation to the number of users and the total revenue on the market of the public switched telephone network in the Republic of Croatia has been continuously increasing.

## **PUBLIC MOBILE NETWORK**

The public mobile telephone network recorded in 2009 a fall in revenue amounting to 2.9 percent despite a slight increase in the number of users of public mobile networks in 2009. The comparison with the penetration of users of mobile networks in EU Member States in 2009 shows that the Republic of Croatia is above average of the EU Member States which indicates that Croatian market is very developed and liberalised to a large extent.

The share of the third mobile network operator in 2009 has significantly increased compared to the year before in relation to the total revenue.

OECD basket of mobile telephone services shows a continuous decline in the prices of services in mobile networks. The analysis of the development of prices indicates that prices of mobile services are above the EU average.

## **INTERNET**

The development of Internet, broadband Internet access and broadband applications and services have been recognised worldwide as key initiators of overall economic growth, employment, competitiveness and efficiency, and an important factor in ensuring more efficient health and education systems, science, culture, tourism etc.

The total number of Internet users worldwide, and in the RoC, shows an upward trend. Last year, the number of Internet users increased by 11.2 percent and reached the penetration of 56.3 percent.

However, Croatia is still not sufficiently competitive in broadband access compared to the EU Member States.

The number of broadband subscribers over a fixed communications network increased in 2009 by 30.54 percent thus reaching the penetration of 15.44. Unequal distribution of broadband connections in individual countries continues to be present.

Furthermore, the increase in total number of broadband connections results from the development and introduction of access over mobile networks.

## **DIGITAL TELEVISION**

The process of digitalisation and switchover from analogue to digital television (hereinafter: DTV) has started and it is gaining speed. The digitalisation of audiovisual content allows the introduction of many new services based on personalisation and interactivity such as personal selection and programme schedule, delayed programmes, video on demand, interactive voting, and participation in game shows, elimination or viewing of only certain commercials.

The EU is trying to speed up the process of switchover to terrestrial DTV in order to free the spectrum and ensure the so-called "digital dividend" for additional television contents and new information and communication services. For that reason, the EC adopted a recommendation to switch off analogue terrestrial television by 2010. It is estimated that all Member States of the EU will not be able to finish the process by that deadline because they did not all start from the same point or at the same time.

In accordance with the Analogue to Digital Broadcasting Switchover Strategy for the Republic of Croatia, Croatia will complete the switch off of analogue television by the end of 2010 by gradually switching off nine regions.

As part of the implementation of the Strategy, HAKOM invited a public tender in April 2009 and issued the first license for the provision of the service of management of electronic communications networks of digital television for MUX A and MUX B thus ensuring, in addition to the existing four programmes (HRT1, HRT2, Nova TV and RTL) the technical preconditions for six new digital television programmes at the national level. By the end of 2009, the population coverage in the Republic of Croatia achieved for MUX A was 96% and MUX B 91%.

## **OVERVIEW OF THE POSTAL SERVICES MARKET**

Since the entry into force of the ECA, and in accordance with the PA, that is, the PSA, HAKOM has been in charge of monitoring the situation and development of postal activities, of the postal and courier services market and of undertaking the necessary measures to ensure fair and effective competition in the postal and courier services market.

Moreover, the legal framework was amended last year and changed the status of courier service providers. According to new legislation, courier services are defined as receipt, transport and delivery of postal items directly from the sender to the addressee, without routing, in the manner that the same employee of the service provider carries out all of the

above-mentioned activities. Courier services defined in such a manner are not subject of the PSA and the application to HAKOM is no longer a prerequisite for the provision of the above-described service. Therefore, what the Postal Act defined as a value added service and classified under courier services, the Postal Service Act classifies, in accordance with the manner and conditions for the provision of the service, either under universal postal services or under other postal services, or under courier service.

### **POSTAL AND COURIER SERVICES**

Until the entry into force of the PSA, HAKOM received applications from 22 providers of postal and courier services. At the end of 2009 there were the total of 19 postal service providers registered in the Republic of Croatia with only HP as the provider of all universal postal services who, on the basis of the PSA, has the right and obligation to provide universal services in the entire territory of the Republic of Croatia. The other eighteen providers have all applied, as well as HP, for the provision of other postal services.

### **DATA ON SERVICES**

According to the delivered data, postal and courier service providers provided in 2009 the total of 383,007,950 of postal, courier and related services. The number of provided services declined by approximately five percent compared to 2008. On the entire market, HP had a share of approximately 89 percent, and the group of other providers had a share of nearly 11 percent. The group of other providers increased its market share by nearly one percent in 2009 compared to 2008.

Looking at the share of the group of other providers and HP in the total number of provided services in 2009, it is obvious that, compared to the previous year, there was an increase in the share of the group of other providers compared to HP in categories of packages services and unaddressed mail, while the share of postal items remained the same. Out of the total number of provided services of all active providers of postal and courier services, the total of approximately 94 percent was provided in domestic traffic, and 6 percent of services in international traffic.

### **BUSINESS PERFORMANCE OF SERVICE PROVIDERS**

According to data from unofficial, unrevised financial statements, that is, according to estimated data for providers who, in addition to providing postal and courier services, provide other services as well, the revenue earned exclusively from the provision of postal and courier services in 2009 increased by about ten percent compared to 2008. According to the reported revenue from the provision of postal and courier services, HP increased its revenue in 2009 by nearly 3 percent compared to the year before. .

On the other hand, the reported expenditure from the provision of postal and courier services remained the same in 2009 as it was in 2008. The share of HP in reported expenditure from the provision of postal and courier services in 2009 increased by nearly one percent, compared to the year before.

According to the reported data, the total revenue before tax earned from the provision of postal and courier services by active providers of postal and courier services in 2009 amounted to HRK 24 million, while in 2008 they reported a negative business result amounting to HRK 126 million, which means that the total business results from the

provision of postal and courier services outdid those from 2008 for about HRK 150 million.

Looking at the total business results exclusively from the provision of postal and courier services, it is obvious that the group of other providers increased their revenue in 2009, compared to the year before, while HP suffered losses in 2009, but lower compared to 2008.

## **REGULATION OF THE ELECTRONIC COMMUNICATIONS MARKET**

HAKOM's activities in 2009 were focused on promoting effective and sustainable competition, and on facilitating market entry for new operators and service providers.

### **MARKET ANALYSES**

In 2009, HAKOM was focused on completing market analysis on three groups of markets, that is, on the market of interconnection in fixed electronic communications networks, (3 markets), wholesale markets (2 markets) and interconnection markets and retail market in mobile electronic communications networks (4 markets). The results of the analysis and of public consultation are Council Decisions deregulating some of the markets, which means that they are no longer susceptible to ex-ante regulation because effective competition has been established on these markets, while the ex ante regulation approach was kept for the other part of the markets.

The main objective of the market analysis procedure is to establish whether competition on a certain market is effective or there is an operator or several operators with significant market power or joint significant market power. On the basis of the analysis or the three criteria test, HAKOM imposed, amended, maintained or withdrew regulatory obligations.

The following analyses were carried out:

- market of call origination on public telephone networks provided at a fixed location,
- market of call termination on an individual public telephone network provided at a fixed location,
- market of call transit on fixed public communications network,
- market of wholesale (physical) access to network infrastructure at a fixed location,
- wholesale broadband access market,
- market of call termination on an individual mobile public communications network,
- market of access and call origination on mobile public communications networks,
- market of termination of SMS (Short Message Service) messages on an individual mobile public communications network,
- market of publicly available telephone service in mobile electronic communications networks,
- market of leased lines,
- market of access and market of publicly available telephone service in fixed public communications networks,
- market of network access for operators of value added services.

While conducting market analysis, HAKOM paid particular attention to the application of the relevant EC Recommendation on relevant markets susceptible to ex ante regulation and of the relevant EC Guidelines on market analysis and assessment of significant market power in accordance with the common regulatory framework for electronic communications networks and services.

On each individual market, HAKOM first established all competitive constraints and, on the basis of firm arguments, adopted decisions that will in the best possible manner contribute to further liberalisation and stable development of the electronic communications market in the Republic of Croatia.

The definition of the relevant market is a basis for conducting market analysis which consists of the definition of the relevant market and assessment of the existence of one or more operators with significant market power on that market and of the imposition of regulatory obligations on operators with significant market power. The purpose of the process of definition of the relevant market is to establish limitations, that is, barriers encountered by operators of electronic communications networks on the market. After having defined the relevant market, HAKOM, on the basis of criteria necessary to assess the existence of operators with significant market power, that is, after having conducted market analysis, defines operators with significant market power on which it imposes regulatory obligations on the basis of competitive constraints which may appear on the relevant market and on the downstream retail market to which the operator with significant market power may leverage its dominant position from the relevant market.

### **COST ACCOUNTING AND COST MODELS**

In 2009, HAKOM continued working on the implementation of accounting separation and cost accounting in the manner and within time limits laid down in the document *„Instructions for accounting separation and cost accounting”*, which makes a constituent part of the decision. With the implementation of these instructions, HT, as the SMP operator, was imposed the contents and manner of collecting accounting information and the manner of preparing financial statements in order to ensure uniform and transparent conditions of competition for all participants in the electronic communications market.

In this manner the implementation of regulatory obligations of transparency and non-discrimination can be verified, that is, discrimination and distortion of competition because of high wholesale prices, price discrimination, cross subsidising and/or inefficient business performance of HT can be prevented.

Since the establishment of the accounting separation and cost accounting is a very complex and time consuming process, the decision envisaged its implementation to take place in three stages with the planned completion in 2012.

In 2009, HAKOM started preparing for the implementation of the project *„Cost models of operators with significant market power”*. The main objective of this project is to build, prepare and apply cost models in order to obtain reliable information for the calculation of prices of wholesale services given in reference offers of operators with significant market power on markets where the regulatory obligations of price control and cost accounting have been imposed. As part of the development of the obligation to provide universal services in the RoC; HAKOM is also planning to build a cost model for the calculation of net costs of the obligation to provide universal services.

The public tender for consultancy services for the building of the above-mentioned cost models was published in July 2009. However, since the State Commission for Control of Public Procurement Procedures cancelled the Decision on selection for reasons which are beyond our comprehension, HAKOM complained to the Administrative Court of the Republic of Croatia. HAKOM is hoping to start implementing the project *„Cost models of operators with significant market power”* in the first half of 2010 either on the basis of the ruling of the Administrative court of the Republic of Croatia, or following a repeated public tender.

## **TELEVISION NETWORKS**

In 2009 HAKOM continued working intensively on the planning and creating of conditions for the launching of DTV networks in accordance with the Analogue to Digital Television Broadcasting Switchover Strategy in the Republic of Croatia and preparations for the switching off of the transmitter and adapter of analogue television (hereinafter. ATV) that will take place in 2010.

The experimental operation of the DVB-T HDTV bundle was continued, that is, the broadcasting of high quality television in Zagreb, Split, Rijeka and Osijek. Licenses on the basis of which experimental broadcasting of DVB-H was carried out were issued in the first half of 2009, first in Zagreb, and then in Rijeka.

Tender documentation was prepared and public tender was invited for the granting of an individual licence for use of the radio frequency spectrum for digital television in the territory of the RoC (DVB-T MUX A and B). The tender and the issuing of the above-mentioned license ensured the switchover from analogue to digital broadcasting of the existing channels at the national level (HRT1, HRT2, Nova TV and RTL) and technical preconditions for six new digital television programmes at the national level.

In the last quarter of 2009, HAKOM prepared tender documentation and initiated five public tenders for the issuing of licenses for use of the radio frequency spectrum for digital television for MUX D in digital regions D5, D1, D3, D7 and D9.

## **RADIO AND RADIOCOMMUNICATIONS NETWORKS**

In 2009, HAKOM continued the procedure of planning of radio stations of FM networks in order to ensure better coverage of the existing broadcasters and frequencies for new concessions. New programme identification codes (PI) were awarded to all broadcasters. The success in the carrying out of international coordination processes resulted in improvements in coverage of broadcasters' networks at the national level. Activities related to short- and medium wave broadcasting have also continued.

The planning of digital radio networks in the territory of the Republic of Croatia in the VHF III frequency band was started in the second half of 2009. According to the existing plans, these networks could be used for DAB, DAB+ or DMB. At the same time, experimental broadcasting of digital radio in DAB and DRM standards was continued. HAKOM started the Digital Radio Forum which gathers experts of various profiles in order to create a base for the adoption of a strategic decision about the introduction of digital radio and selection of the Croatian standard.

Under its competence, in 2009 HAKOM carried out the activities of management of the radio frequency spectrum intended for public mobile, private mobile, microwave and satellite networks. At the domestic level this implies the planning and preparation of technical parameters for the issuing of licenses for use of the radiofrequency spectrum and maintenance of the database of radio stations, while at the national level this refers to the harmonisation of use of the radio frequency spectrum in accordance with CEPT's valid decisions and recommendations and valid international agreements.

Public consultation about the issuing of new licenses was carried out in 2009 before the expiry of VIPnet's and T-Mobile's licenses for use of the radio frequency spectrum. New licenses to existing operators were issued to VIPnet in July and to T-Mobile in September, and they are technologically neutral.

Public consultation was also carried out about the future use of GSM (Global System for Mobile Telecommunications) frequency band. In accordance with that, a new allocation plan was adopted for 900 MHz and 1800 MHz frequency bands enabling the use of both GSM and UMTS technologies in those frequency bands.

As part of regular activities related to private mobile networks in 2009, HAKOM planned the use of the radio frequency spectrum for this purpose and it also planned the use of the spectrum within the framework of activities related to microwave links by preparing technical parameters for the issuing of licenses. International coordination was carried out in compliance with the HCM Agreement.

## **MANAGEMENT OF ADDRESSING AND NUMBERING SPACE**

In order to ensure effective, uniform, objective and transparent management of the addressing and numbering space in the Republic of Croatia, HAKOM adopted a new Numbering Plan in 2009 adjusting the use of the numbering space to new services (e.g. the use of a personal number). The adopted Numbering Plan also provides special sets of numbers for some value added services in order to offer to users of these numbers a simple possibility to protect from possible abuse (for example, value added services for adults, children, and games of chance). Together with operators, problems of overlapping between numbers related to routing of traffic towards numbers for value added services were resolved and the switchover from the existing numbers for emergency services (92, 93, 94) to the proposed numbers (192, 193 and 194) was carried out.

HAKOM focused a part of its activities in 2009 to the issue of simple and quick porting of numbers as one of the preconditions for competition and focused its activities on the improvement of the number portability procedure by paying special attention to the administrative side of the number porting procedure in order to allow users to change operators in a simpler manner. For that purpose, the upgrading of the system of the central administrative database of ported numbers was defined.

**COMMUNICATIONS INFRASTRUCTURE AND CONDITIONS FOR BUILDING**  
HAKOM's activities in 2009 were primarily focused on achieving the established principles and objectives of electronic communications infrastructure and associated facilities with a special emphasis being placed on conditions for building, the use of common good on the basis of the right of way, and on the sharing of communications infrastructure and radio equipment and telecommunications terminal equipment (hereinafter: R&TTE).

The problems related to building conditions cover activities related to issuing the conditions for building that is, the evaluation of the design, the compliance of main projects with conditions for building, the participation in technical inspection of buildings, participation in public consultations about public spatial plans in the part concerning electronic communications.

By adopting the ordinance on the certificate and fee for the right of way, in 2009 HAKOM started issuing certificates for the right of way which allows the infrastructure operator to initiate the procedure for legalisation, that is, definition of status with beneficiary operators on those paths. The main problem with the issuing of certificates are the ownership papers which results in the fact that the infrastructure operator may not obtain the certificate on the entire path in continuity

In 2009, HAKOM also carried out the activities of issuing approvals for import and/or placing on the market of R&TT equipment and evaluation of compliance of R&TT equipment. All the actions and necessary adjustments (preparation of new forms, preparation of new templates, price of services for the assessment of compliance,

information of parties etc.) for successful implementation of the Ordinance on R&TT equipment which entered into force in January 2009 were carried out.

### **MONITORING AND CONTROL IN ELECTRONIC COMMUNICATIONS**

During the entire 2009 HAKOM carried out systematic measuring in the RF spectrum for the purpose of protection of the spectrum as a naturally limited good of interest for the Republic of Croatia. Measuring covers domestic and foreign radio stations, that is, it checks whether the operation of domestic radio stations is in compliance with prescribed licenses or internationally coordinated technical parameters for foreign transmitters. Measuring was carried out also for the purpose of frequency planning and international coordination.

HAKOM paid particular attention to protection from interference in radio communications, in particular of state administration bodies in charge of search and rescue, emergency services, maritime and air traffic control radio communications (whose purpose is the safety of human lives) and operators of electronic communications.

Last year HAKOM intensified the work of the administrative service and electronic communications inspectors in the monitoring of the entire market which resulted in positive changes in behaviour of market participants.

### **REGULATION OF THE MARKET OF POSTAL AND COURIER SERVICES**

HAKOM's activities in the field of regulation of the market of postal services may be described as a) proactive ó giving initiatives for further development of the postal services market; b) corrective ó reaction to noticed situations and trends on the postal services market.

Within the proactive component of its activities, HAKOM collects, analyses, directs and publishes data, information and documents on the situation and development of the postal services market. In addition, HAKOM pays special attention to guiding postal services providers towards complete market liberalisation.

The corrective component of HAKOM's activities consists in undertaking adequate measures aimed at the development of the postal services market in accordance with the PA, that is, the PSA, the Strategy for Development of the Postal Services Market in the RoC and the Action Plan for the Strategy.

In 2009, HAKOM focused on the improvement of the efficiency, organisation and supervisory authority, the further liberalisation of the postal services market, the quicker and simpler acquisition of the right to provide postal services, in particular universal postal services, the increase of responsibility of providers of postal services and a more efficient and quality mechanism for the protection of rights of users of postal services.

The most important HAKOM's activities in the field of postal and courier services in 2009 were related to the determination of prices of postal services, the carrying out of supervision over the implementation of the law, the procedure for the granting of consent to HP's bylaw on access to the public postal network, the separation of business activities, that is, distribution of HP's revenue and expenditure and approving of HP's terms and conditions.

At the beginning of the year, 16 providers of postal and courier services were registered in HAKOM. Out of which fourteen were active. At the end of the year, the total of 19 postal

service providers were registered. Postal service providers were obliged to adjust their business operations to the Postal Services Act and supplement their applications accordingly. The total of 14 postal service providers supplemented their applications in 2009, and 5 providers applied for the provision of other postal services.

The Postal Act prescribed that HP must keep separate accounting for reserved and non-reserved postal services, and within the framework of non-reserved postal services separate accounting of universal postal services from postal services which are not universal and courier services. According to the submitted data, it is obvious that HP applied a new manner of distributing revenue and expenditure (by including the norm of minutes as the main indicator of distribution) compared to the year before in an attempt to comply with the above-mentioned obligations. However, regardless of all the undertaken measures and procedures related to the distribution of revenue and distribution of expenditure, HP did not fully comply with legal obligations.

A slight increase in the quality of universal postal services in domestic and international traffic in 2009 is a result of concrete measures and activities implemented by HP in the previous years and of constant warnings by HAKOM of a need for better quality in the provision of universal postal services. Unfortunately, the quality of universal postal services in domestic and international traffic is still not in compliance with the criteria laid down in the Ordinance or with the EU norms.

As in the years before, in 2009, HAKOM collected, processed and published statistical and other data from providers of postal and courier services, that is, of postal service providers. In 2009 HAKOM prepared the Ordinance on the provision of universal services, the Ordinance on the payment of the annual fee for the carrying out of HAKOM's activities and Ordinance on the manner of work of the internal organisational unit for consumer protection.

During 2009, HAKOM carried out the inspection over the implementation of the provisions of laws and regulations. The inspection was carried out by a postal inspector who is an authorised employee of HAKOM's administrative service. In 2009 inspection was carried out over two important and dominant providers of postal and courier services in domestic traffic: HP-Hrvatske pošte d.d., City EX d.o.o. and it was started over LIDER EXPRESS d.o.o. from Split. Inspection over business operators of HP was focused on the monitoring of the measuring of quality of provision of universal postal services. Company CITY EX d.o.o. from Zagreb was issued a Decision by a postal inspector stating that the service called by the provider 'exchange of documents' is not in compliance with the PA, and the company was ordered to harmonise the postal service it provides under the title 'exchange of documents' with the PSA.

## **CONSUMER PROTECTION**

In 2009 HAKOM continued with consumer protection activities thus trying to ensure a high level of protection of users of electronic communications.

## **DISPUTE RESOLUTION BETWEEN USERS AND OPERATORS**

In 2009 HAKOM continued upgrading consumer protection and network safety by improving procedures for the processing of user complaints, by introducing a programme for recording and processing of cases which enables a comprehensive analysis of received objections and by establishing a Consumer Protection Commission as HAKOM's advisory body in dispute resolution between users and operators. The Commission

consists of seven members out of which two are representatives from two Unions of Consumer Protection Associations and five are HAKOM's employees.

A slower increase in the number of complaints was recorded last year which shows that preventive activities carried out in 2009 contributed to the stabilisation in the number of complaints although the number of users of public communications services has increased and a series of new services and new operators were introduced. Complaints are of the following types: a) complaints about the amounts of bills for public communications services and b) complaints about the quality of public communications services. It is obvious that more than 70 percent of all complaints still refer to bills and that this type of complaints has increased by 5 percent compared to the year before which means that further analysis and additional efforts are needed although preventive activities and regulation of the provision of services stopped a more significant increase in the number of complaints.

Since a very high number of complaints (36 percent) are complaints about bills of operators of value added services, HAKOM redefined the way of consumer protection by the Ordinance on the manner and conditions for the provision of electronic communications networks and services, which in particular regulates the provision of value added services.

Complaints about Internet services also show an upward trend, which results from an increased number of users. A new type of complaints appeared in 2009 and they refer to operators' oversights. It is a fact that operators on our market have different ways of forcing their subscribers to stay and ways of illegally stealing subscribers from other providers in combination with the non-transparency of contractual relations and a deceiving offer of services.

## **PRINCIPLES OF CONSUMER PROTECTION**

The ECA changed the legal framework which significantly increased the area of consumer protection. HAKOM's role in the promotion of interests of users of services was emphasised, in particular in the following ways: a) by ensuring a high level of consumer protection, b) by a simpler and more accessible dispute resolution procedure, c) by promoting the giving of unambiguous information, and d) by addressing the needs of special social groups.

The Electronic Communications Act placed the dispute resolution between subscribers and providers of public communications services under HAKOM's competence as a form of out-of-court dispute resolution. In this new manner of dispute resolution HAKOM adopts binding decisions ensuring a high level of consumer protection because the operator is obliged to act in accordance with the decision. HAKOM resolves disputes in a transparent, objective and non-discriminating manner on the basis of an opinion adopted by the Consumer Protection Commission.

In order to ensure a high level of consumer protection, HAKOM has focused its activities on various forms of preventive activities in order to ensure a high level of consumer protection. These activities have proven to be effective and useful because they permit the elimination of irregularities when they first appear. HAKOM pays special attention to preventive protection of children from services with content inappropriate for children.

Other HAKOM's preventive activities are carried out through inspection which permits the interruption of the services which are barely legal or illegal ó these are mostly services with a higher tariff ó and quick alignment with the law.

## **EXECUTION OF THE WORK PROGRAMME**

The adopted strategic and operation plan is implemented by HAKOM through two improvement programmes: a) Convergence ó oriented towards the outside and focused on the development of the market, competition and regulatory frameworks and b) Modernisation ó oriented towards the inside and focused on building capacity and own ability for market regulation.

## **EXECUTION OF THE E-AGENCY PROJECT**

The main objective of the e-Agency project is to build HAKOM's capacity through IT introduction into processes and services by increasing production and efficiency and by extending and facilitating access to HAKOM's regulatory services. In 2009, HAKOM continued implementing the e-Agency, a strong e-Government base integrated information system focused on Internet access through a communication channel agency-citizens and agency- business operations.

The basis of the e-Agency is the so-called "Back Office" which has a layered architecture consisting of IT infrastructure (local network, servers, clients and the basic software), the document management system (DMS), Human Resource Management System (HRM) and Enterprise Resource Planning (ERP). The "Back Office" was additionally extended and modernised in 2009.

In 2009 HAKOM continued developing the so-called "Front Office" which consists of a modern, strong portal including numerous electronic, Internet-based applications such as e-consultations, e-complaints, e-portability, e-licenses, e-market, e-tender, e-auctions, e-advice, e-price, e-offer and the similar.

## **DEVELOPMENT OF REGULATORY COMPETENCES**

During 2009 HAKOM continued working on improving the expertise and competences of its employees. The work and activities of the regulatory authority are closely related to an adequate number and qualifications of employees because they include monitoring and assessment of very important expert (electronic communications and postal), legal and economic issues. Market changes demand constant in-service training of all of HAKOM's employees.

The most important projects for the development of regulatory competences are the following: a) the launching of the multidisciplinary postgraduate course in the regulation of electronic communications market which was initiated in cooperation with the Faculty of Electrical Engineering and Computing, the Faculty of Economics and Business and the Faculty of Law in Zagreb and b) public tender for the project "A Glance towards the Future" is in progress. The project is focused on future development of technology, new regulatory issues, economic and legal aspects of active, neutral and transparent market regulation and stimulating measures for investments and innovations and c) initiated a wider process of foreign language learning, in particular English, because HAKOM is aware of the fact that its employees, if they do not speak foreign languages, especially English, cannot communicate internationally and are limited only to "knowledge sources"

in the Croatian language, which is not acceptable in a dynamic sector such as electronic communications.

## **PUBLICITY OF HAKOM'S WORK AND PUBLIC INFORMATION**

In order to develop and improve the publicity of its work, HAKOM in 2009 defined and introduced the organisation, tools and processes which support the required accuracy and publicity of work. Therefore, in 2009 HAKOM initiated and completed the project of creating a new web site ([www.hakom.hr](http://www.hakom.hr)) both in Croatian and in English and part of the content was adjusted to persons with special needs. The new website has been designed in the manner that it emphasises transparency and publicity of work which was recognised by the judges of the contest 'VIDI WEB TOP 100' for 2009. HAKOM's website received the annual reward 'ONE OUT OF TOP 10' in the category of governmental organisations and state institutions.

Last year, HAKOM used its website to conduct public consultation, and it regularly kept and updated databases from its competences. It also regularly published statistical data on markets of electronic communications and postal services. A special part on the new HAKOM's website was intended for users of electronic communications and postal services. Besides this, HAKOM last year organised periodic meetings, workshops and seminars with interested market participants.

A publication 'Survey about the satisfaction and use of postal services in the RoC' was issued in November 2009. This survey provides to postal service providers and all other interested institutions and individuals a better insight into satisfaction and use of postal services.

## **ISO 9001 QUALITY MANAGEMENT SYSTEM**

Aware of the fact that markets of electronic communications and postal services directly depend on efficiency, transparency and consistency in the work of regulatory authorities, HAKOM initiated a project for the introduction of a quality management system in order to better satisfy market demands, demands of operators, service providers, end users and all interested parties.

HAKOM started implementing the project for the introduction of a quality management system in accordance with ISO 9001:2008 in June, and successfully completed it in November 2009. The compliance of the quality system with the standard was verified by the internationally recognised certification company *Bureau Veritas*. HAKOM thus became the first regulatory agency in the Republic of Croatia which certified the quality management system in accordance with the international standard ISO 9001:2008.

## **INTERNATIONAL COOPERATION**

In 2009 HAKOM continued with international cooperation and participated in a series of bilateral and multilateral meetings and workshops thus promoting effective regulation of electronic communications and postal services markets, the management of limited resources, and promoting HAKOM as an active and modern regulator in the network of European regulators in terms of application of the regulatory framework and market development.

During 2009, HAKOM actively participated in the work of European Commission's working groups (COCOM, ERG, IRG, RSPG, RSC) and in the work of ITU's and CEPT's working groups in the sector of electronic communications market and in CERP's and UPU's working groups in the sector of the postal services market. In 2009, the work of the above-mentioned bodies mainly focused on effective regulation and alignment of the EU market, on radio frequency spectrum management, on switchover to digital broadcasting and amendments to the new regulatory framework in the electronic communications market. Special attention was paid by HAKOM to cooperation with the neighbouring countries.

As part of the EU pre-accession instrument, the IPA programme, a project was contracted in 2009 that will ensure to HAKOM the procurement of modern equipment for monitoring and measuring of the radio frequency spectrum worth EUR 3.5 million. At the same time a project was prepared that will begin in 2010 which is aimed at strengthening HAKOM's human resources, providing support to market analysis procedures and regulatory accounting as HAKOM's key regulatory tasks.

### SUMMARY FROM THE 2009 WORK PROGRAMME

The Croatian Post and Electronic Communications Agency (hereinafter: the Agency) enters 2009 as a regulatory authority competent for the electronic communications market and the market of postal and courier services. The Agency resulted from the merging of the Croatian Telecommunications Agency and the Postal Services Council. In addition to harmonisation with the European *acquis*, the Electronic Communications Act, strengthened the role of the Agency on both markets. In 2009 the Agency will finish its reorganisation and adopt the remaining ordinances.

In the year to come, HAKOM will particularly focus on creating a regulatory environment that will enable and encourage investments and innovations on the Croatian electronic communications and postal services market. In this process, particular account will be taken of promoting balanced development by making electronic communications and postal services equally accessible to all citizens of the Republic of Croatia regardless of where they live.

The Agency will encourage, in particular:

- Competition in the offer of communications services and postal and courier services;
- Constant growth and rapid implementation of modern communications technology;
- Stable, interoperable and reliable communications infrastructure;
- Affordable offer of communications services to Croatian consumers;
- Efficient use of the RF spectrum;
- Rapid growth of broadband products and services;
- Increased reliability of communications in crisis situations;
- Further development of the Croatian economy.

The Agency is aware of its role in the process of accession of the Republic of Croatia to the European Union and it will invest maximum efforts, in cooperation with the Ministry of the Sea, Transport and Infrastructure, and other ministries and state administration bodies, to fulfil the objectives laid down in this programme and in this manner contribute to accession of the Republic of Croatia to the European Union in the near future.

### ELECTRONIC COMMUNICATIONS

Following the analysis of the relevant market, and if the analysis establishes the lack of effective competition in the relevant market, the Agency identifies operators with significant market power in the relevant market and imposes regulatory obligations laid down in the Act. Immediately after the entry into force of the Act, the Agency started with the analysis of the relevant markets. Documents with market analyses and regulatory obligations that will be imposed on SMP operators will be subject to a public consultation in the first quarter of 2009.

In 2009, the Agency will continue with the implementation of the cost accounting and accounting separation project initiated in 2009 which serves to prove that prices of electronic communications services susceptible to regulation are justified, that is, that they

are related to costs. The first revised financial statements to be used for regulatory purposes may be expected by the middle of 2010. In addition to this, the Agency will, in 2009, initiate the cost models project ó a tool for the regulation of wholesale prices ó which will be used to check whether prices of SMP operators are cost-oriented, transparent and non-discriminating.

During 2009, the Agency will develop and put into operation a system for electronic delivery, updating, archiving, analysis and publication of all the relevant data on the electronic communications market. The gradual introduction of the system will significantly speed up the processing and control of data and reduce the Agency's and operators' costs.

The Agency will publish updated information about developments on the electronic communications market at least once in every three months on its website.

The Agency will continue collecting and entering data on paths and infrastructure capacities into the geo-information system thus contributing to more efficient processing of requests for sharing of electronic communications infrastructure and resolving of the existing situation related to the use of infrastructure. The process of data entry into the geo-information system is a continuous process the completion of which is planned in 2010.

The Agency will continue with activities of issuing the conditions for building and certificates of compliance of main designs with conditions for building. The completion of the initiated reorganisation of business operations due to changes in legislation is planned for 2009, including the drafting of ordinances, in particular of the ordinance on safety zones of electronic communications infrastructure and several ordinances on technical conditions of infrastructure and networks. The Agency will actively cooperate with all ministries, state administration bodies and bodies of local self-government in order to ensure the possibilities for the construction of electronic communications infrastructure and mobile networks. For that purpose, a series of seminars for spatial planners have been envisaged.

Special attention will be paid by the Agency to the control of quality of universal electronic communications services. The new ordinance on the manner and conditions for the provision of universal services will additionally regulate: special measures for disabled persons, access to emergency services, directory services, the procedure for designation of universal service providers, data transfer speed which permits efficient Internet access, access to universal services at a fixed location via a mobile electronic communications network and public phone cards. The Agency will monitor the cost orientation of prices of universal services and the fulfilment of obligations of universal service providers related to special benefits for socially disadvantaged users of electronic communications services.

In 2009 the Agency will intensify preventive and corrective activities in order to additionally improve consumer protection in electronic communications. The Consumer Protection Section will investigate the causes of complaints, study users, mediate and resolve user complaints and initiate the process of harmonisation of terms and conditions of providers of electronic communications with the new Consumer Protection Act. Additionally, the Agency will complete the implementation of the comprehensive online system for complaints, advice and instructions of end users that will additionally improve

consumer protection. Special attention will be paid by the Agency to value added services which have proven to be an area without sufficient user protection.

In 2010, the Agency will continue to work intensively on further development of broadband Internet access. In spite of enviable results achieved 2008, the penetration of broadband Internet access is still unsatisfactory. The Agency will continue to promote new technologies and the development of infrastructure that will improve the availability of broadband Internet access and allow a diverse offer of broadband services of all operators.

In 2009 the Agency will continue managing the radio frequency spectrum intended for public mobile, private mobile, broadcasting (radio and television), microwave and satellite networks and planning and preparation of technical parameters for the issuing of licenses for radio stations. In the process, the Agency will actively follow the European practice in spectrum regulation and apply appropriate and successful solutions in our legislation. Further alignment of the Radio Frequency Spectrum Allocation Table is planned for 2009. In the management of the radio frequency spectrum, the Agency will cooperate with the Ministry of the Sea, Transport and Infrastructure.

In 2009, the Agency is planning to issue two licenses for GSM spectrum since concessions for the GSM spectrum for the two existing operators (T-Mobile Hrvatska d.o.o. and VIPnet d.o.o.) expire in 2009 and the existing concessions need to be replaced with the authorisation to provide services. It is expected that both operators will apply for a new license.

The Agency is planning to enable the use of other technologies (IMT) in the frequency bands intended for GSM. In this case, it will be necessary, in cooperation with the existing operators, to partially plan the allocated spectrum again and to internationally coordinate spectrum use.

Preparations for the possible issuing of licenses for the radio frequency spectrum in the 2.6 GHz frequency band will be carried out in 2009. Since this is the case of a possible use of the spectrum by different technologies (technologically neutral allocation), experiences of European countries who have already implemented these systems will be used in the process.

In accordance with the Analogue to Digital Television Broadcasting Switchover Strategy in the Republic of Croatia, it is planned that the switchover to digital broadcasting will take place in all 9 technological regions (division according to the Geneva 2006 plan) of the Republic of Croatia in 2009 as well as complete switch off of analogue transmitters in 8 technological regions in the Republic of Croatia. In 2009, the Agency will continue implementing the activities from Analogue to Digital Television Broadcasting Switchover Strategy in the Republic of Croatia. It is planning to invite a public tender and grant licenses for use of the radio frequency spectrum for an operator of the network and the multiplex (for two DVB-T multiplexes, and depending on the dynamics of realisation, the Agency will prepare and implement tenders for additional multiplexes). In the procedure for the implementation of the DVB-T multiplex, the Agency will prepare technical parameters of DVB-T stations in order to ensure digital signal coverage in the Republic of Croatia in the transitional period for 95% of the population.

In 2009 the Agency will continue with the inspection over the provision of electronic communications services and activities on the basis of a general authorisation and over the

sharing of electronic communications infrastructure for the purpose of equal use by all users and prevention of prohibited actions which interfere with the development of electronic communications networks.

The Agency will carry out regular controls and measuring in the radio frequency spectrum for the purpose of undertaking the measures for protection against interference and harmful interference and for coordination of use of radio frequencies, as well as inspection of holders of licenses for use of the radio frequency spectrum and owners/users of radio stations.

## **POSTAL AND COURIER SERVICES**

In 2009 the Agency will intensify activities of further liberalisation of postal and courier services market by gradual and controlled opening of the market through the establishment of the procedures of control and regulation of the market in order to ensure further provision of universal postal services of a certain quality under equal conditions and at affordable prices and gradual integration into a single EU market of postal services.

The Agency is also planning to initiate the project of accounting separation of postal and courier services in 2009, that is, the introduction of cost accounting in order to satisfy the requirements for regulatory accounting. The project needs to precisely define the obligations of the regulator and the public operator with the objective to publish the regulator's decision, after public consultation, that will contain all the provisions that the public operator needs to apply for the purpose of detailed and transparent procedures of accounting, separating and reporting.

In 2009 the Agency will focus on supervision and resolution of possible disputes concerning granting access to a public postal network after the harmonisation of the Ordinance on access to public postal network by the public operator, the Agency and the Ministry of the Sea, Transport and Infrastructure.

In 2009 the Agency will continue monitoring and regulating prices of reserved postal services on the market and proposing to competent authorities the undertaking of legal measures in cases when providers adopt or apply prices contrary to the Postal Act. Since it is impossible to establish with certainty the unit price for each of the reserved services, or establish the prices for reserved postal services based on real costs for each of the services, the Agency will, until the application of cost accounting, use the comparison of prices of identical services in other European countries or other methods used in domestic or foreign practice.

The Agency will also intensify its supervision over all providers of postal and courier services, in particular over the public operator as a provider with the obligation to provide universal postal services of a certain quality in the Republic of Croatia.

During 2009, the Agency will participate in the project of the collection of statistical data initiated as a result of cooperation of the Statistical Office of the European Commission (EuroStat) with the European Committee for Postal Regulation (CERP) and the European Commission. As a national regulatory authority, the Agency will be the contracting authority for the project of collecting statistical data from providers of postal and courier services in the Republic of Croatia.

The Agency is also planning to introduce in 2009 a systematic collecting and analysis of data on the market of postal and courier services in the Republic of Croatia. A special attention on the Agency's new website, the introduction of which is planned for 2009, will be paid to the publication of data on the situation on the market of postal and courier services.

In 2009, the Agency will intensify activities aimed at encouraging all providers of postal and courier services to adopt terms and conditions for the provision of services which regulate the conditions, manner and procedure for the provision of postal and courier services on the basis of the *„Instruction for the preparation of terms and conditions of providers”* prepared by the Agency.

In 2009, the Agency will collect, unite and analyse data on the market of postal and courier services in the Republic of Croatia in 2008 and present them to the public in a publication that will also be translated into the English language. As a result of the survey of satisfaction of users, which will be carried out in 2009, the Agency will also publish the collected data on the satisfaction of users with the provided postal and courier services.

## **DEVELOPMENT OF THE AGENCY**

The Agency will continue implementing in Strategic and Operational Development Plan in 2009 through the following improvement programmes: a) convergence and b) modernisation. The Strategic and Operational Plan will in 2009 be supplemented by aspects of postal and courier services.

In 2009 the Agency will continue building a business information system in order to ensure the resolution of cases under its competence within the envisaged legal time limits. For that purpose, the Agency is planning to procure new and upgrade the existing software and applications. It is the Agency's objective that a part of the exchange of data with operators, in particular the filling of various forms, can be carried out completely electronically.

In 2009 and 2010 the Agency will focus on the implementation of the *e-Agency*, a system consisting of a modern, strong portal including many electronic, web-based applications such as *e-consultations, e-complaints, e-portability, e-licenses, e-market, e-tender, e-auctions, e-advice, e-price, e-offer and the similar*.

The Agency will thus satisfy the needs of the interested parties on the market of electronic communications and postal and courier services, ensure a high quality of service, easy access and fast delivery of information, and increase its own productivity and efficiency.

In 2009, the Agency is planning to continue working on the expertise and training of its employees in order to create preconditions for the implementation of principles of regulation of the electronic communications and postal market by acquiring the necessary skills and experiences and implement the objectives laid down in the Strategic and Operational plan.

A multidisciplinary post-graduate course in the regulation of the electronic communications market created by the Agency together with the Faculty of Electronic Engineering and Computing in Zagreb, the Faculty of Economics and Business in Zagreb and the Faculty of Law in Zagreb is expected to start in 2009.

In cooperation with the Faculty of Electrical Engineering and Computing in Zagreb, the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture in Split and the Faculty of Economics and Business and the Faculty of Law in Zagreb, the Agency is planning to start in 2009 a multidisciplinary project "A Glance Towards the Future" aimed at predicting the near future and preparing the Agency for this future. The dominant topics in the project are the following: future development of new technologies, new regulatory issues opened by the new technologies, their influence on the development of the electronic communications market, and economic and legal aspects of proactive, neutral and transparent market regulation, stimulating measures for investments and innovations and fair competition conditions.

The Agency is planning to continue developing and improving public relations, in particular via its website, in order to provide to the interested subjects on the market of electronic communications and postal services (users, service providers, partners and others) timely information about its activities and about the market situation.

## ANNEX 2

### LIST OF ABBREVIATIONS

AEM - Agency for Electronic Media

AMQM - Automatic Mail Quality Measurement

ATV ó Analogue television

BPM - Business Process Modelling

BRIFIC - Bureau Radio International Frequency Information Circular

CADB ó Central Administrative Database of Ported numbers

CEPT - European Conference of Postal and Telecommunications Administrations

CERP - European Committee for Postal Regulation

COCOM - Communications Committee

DCS - Distributed Control System

DAB - Digital Audio Broadcasting

DAB+ - Digital Audio Broadcasting ó An upgraded version of the DAB system which is not compatible with DAB

DRM - Digital Radio Mondiale ó Short, medium and long wave radio

DMB - Digital Multimedia Broadcasting

DMS - Document Management System

DRM - Digital Radio Mondiale ó Short, medium and long wave digital radio

TDD ó Telephone distribution ducts

DTV ó Digital television

DVB-T - Digital Video Broadcasting ó Terrestrial

DVB-H - Digital Video Broadcasting ó Handheld

EBU - European Broadcasting Union

EBU FORECAST ó Annual EBU event

ECC TG4 - Electronic Communications Committee Task Group 4 ó Working group of the Electronic Communications Committee in charge of technical aspects of the ódigital dividendö

ECTS - European Credit Transfer System

E-GSM - Extended Global System for Mobile Communication

EC ó European Commission

ECI ó Electronic communications infrastructures

ERP - Enterprise Resource Planning

ERG - European Regulators Group

EU - European Union (27 Member States)

EUROSTAT - Statistical Office of the European Union

FM - Frequency Modulation

GSM - Global System for Mobile Communications

GSM-R ó Global System for Mobile Communications on Railways

HAKOM ó Croatian Post and Electronic Communications Agency

HCM ó Harmonised Calculation Method ó International agreement for the harmonisation of frequencies for mobile and fixed terrestrial systems

HDTV - High Definition Television

HP - Hrvatska pošta d.d. (Croatian Post)

HT - Hrvatske telekomunikacije d.d. (Croatian Telecommunications)

HRM - Human Resource Management

HRT ó Croatian radio-television

IBC - International Broadcasting Conference ó International conference on production, management and distribution of contents of electronic media

IMS - Internet Protocol Multimedial Subsystem ó IP multimedial subsystem

IPA - Instrument for Pre-Accession Assistance in the process of accession to the EU - one of the EU pre-accession cooperation and assistance

IRG - Independent Regulators Group

ISO - International Standards Organization

ISP - Internet Service Provider

IT - Information Technology

ITU - International Telecommunication Union

CMS ó Control and measuring station

CMC ó Control and measuring centre

LLU - Local Loop Unbundling

MSTI ó Ministry of the Sea, Transport and Infrastructure

MUX ó Multiplex ó a series of digital signals containing several radio or television programmes and/or other data that are being transferred simultaneously in one RF channel

MFAEI ó Ministry of Foreign Affairs and European Integration

NGN - New Generation Network

OG ó Official Gazette

PHARE Poland and Hungary: Assistance for Restructuring their Economies ó One of the European Unions pre-accession programmes

PSTN - Public Switched Telephone Network

RF ó Radio frequency

RoC ó Republic of Croatia  
R&TT ó Radio equipment and telecommunications terminal equipment  
RSC - Radio Spectrum Committee  
RSPG - Radio Spectrum Policy Group  
SMP - Significant Market Power  
SMS - Short Message Service  
TV ó Television  
OECD - Organisation for Economic Co-operation and Development  
UMTS - Universal Mobile Telecommunications System  
USW ó Ultra short waves  
UNEX - A programme for measuring quality of postal traffic towards IPC (International Post Corporation ó international corporation dealing with international quality measuring)  
UPU - Universal Postal Union  
VHF - Very High Frequency  
VoIP - Voice over Internet Protocol  
WGSE - Working Group for Spectrum Engineering  
ECA ó Electronic Communications Act  
PA ó Postal Act  
TA ó Telecommunications Act  
PSA ó Postal Services Act

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