



ANNUAL WORK PROGRAMME

OF THE CROATIAN POST AND ELECTRONIC
COMMUNICATIONS AGENCY

FOR 2011

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1. Introduction

The Croatian Post and Electronic Communications Agency (hereinafter: HAKOM) is a national regulatory authority carrying out regulatory and other tasks in electronic communications and postal services sectors. HAKOM was founded and organised pursuant to the Electronic Communications Act and it acts in compliance with the Electronic Communications Act (hereinafter: ECA) and the Postal Services Act (hereinafter: PSA):

The founder of the HAKOM is the Republic of Croatia (hereinafter: RoC), and founding rights are exercised by the Croatian Parliament and the Government of the Republic of Croatia. HAKOM is accountable for its work to the Croatian Parliament. HAKOM's main activity is the regulation of the electronic communications and postal services markets in the Republic of Croatia. HAKOM also governs, manages and supervises the use of the radio frequency spectrum and the addressing and numbering space as naturally limited public resources of interest for the Republic of Croatia. In order to be able to completely and independently perform its function of regulating the electronic communications and postal services markets, HAKOM must ensure special prerequisites in terms of staff, expertise and financial resources.

HAKOM's work is in the first place oriented towards the achievement of certain principles and objectives of regulation of the electronic communications and postal services market, with a special emphasis on maintaining and promoting efficient and sustainable competition and on facilitating market access for new operators and service providers. In this respect, HAKOM pays particular attention to ensuring a good quality of electronic communications and postal services at an affordable price and to providing a high level of consumer protection. Through its regulatory activities, that is, by adopting a series of decisions and documents important for further liberalisation and regulation of electronic communications and postal services markets, HAKOM has ensured and keeps ensuring conditions for efficient competition. HAKOM's activities are focused on the liberalisation of the Croatian market and on the creation of equal conditions for operators and service providers thus providing to end users the possibility to choose operators and services according to their wishes. In accordance with the envisaged dynamics of gradual liberalisation by the end of 2012, one of the key roles of a national regulatory authority is to prepare the postal services market for all the challenges brought about by gradual liberalisation and the opening of the postal services market.

On the basis of its competences, HAKOM plans, allocates and manages the use of the radio frequency spectrum by applying the principles of objectivity, transparency, proportionality and non-discrimination and by harmonising radio frequencies at the European level. This enables the application of communications networks with the use of the radiofrequency spectrum for the purposes of development of electronic communications market services, for the needs of public services and national security without unwanted interferences or abuse.

It is HAKOM's mission to ensure the following:

- competition, stable growth and room for innovations on the electronic communications and postal services markets;
- protection of interests of users and the possibility to choose from among various communications and postal services at affordable prices;
- sustainable competitive conditions for operators and service providers under fair conditions for return on investments;
- support to economic growth, public services and quality of life in the RoC by using modern technologies.

The Council of the Croatian Post and Electronic Communications Agency (hereinafter: the Council of HAKOM), adopts HAKOM's Annual Work Programme, with prior consent of the Government of the Republic of Croatia. The HAKOM's 2011 Work Programme (hereinafter: the Programme) arises from HAKOM's obligations according to ECA, PSA, bylaws and HAKOM's Strategic and Operational plan.

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 competition and balanced development by making electronic communications and postal services equally accessible to all citizens of the Republic of Croatia regardless of where they live.

HAKOM will encourage, in particular:

- Competition in the offer of communications 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 spectrum;
- Rapid growth of broadband products and services;
- Increased reliability of communications in crisis situations;
- Further development of the Croatian economy.

The basic elements of the programme of work and development of HAKOM are elaborated in detail in the following chapters of this text:

- Regulation of the electronic communications market,
- Radio frequency spectrum management,
- Regulation of postal services market,
- Consumer protection
- HAKOM's capacity.

2. Regulation of the Electronic Communications Market

2.1 Regulatory affairs

HAKOM carries out market analysis which consists of the identification of markets susceptible to ex ante regulation, the definition of the relevant market and the assessment of effectiveness of competition. If it is assessed that there is no effective competition in the relevant market, HAKOM identifies one or more operators with significant market power and imposes regulatory obligations on the operators in question. HAKOM also supervises the implementation of regulatory obligations by operators with significant market power.

The market analysis procedure and/or the carrying out of the three criteria test comprise the following:

- Preparation of a questionnaire for market analysis;
- Sending the questionnaire to operators;
- Analysis of data from the received questionnaires;
- Definition of the relevant market on the basis of the analysis of received data;
- Conducting the three criteria test in case of markets which are not part of the European Commission's Recommendation on the relevant markets.
- Evaluation of effectiveness of competition on the relevant market;
- Identification of SMP operators on the relevant market;
- Imposition of regulatory obligations on SMP operator/s or withdrawal of all regulatory obligations imposed on SMP operators.

HAKOM also supervises the implementation of accounting separation and cost accounting by the company HT-Hrvatske telekomunikacije d.d (hereinafter: HT) in relation to the preparation of regulatory financial statements on the basis of HCA/FAC and CCA/LRIC models and may, where necessary, request from HT to amend the weighted average cost of capital (WACC), which is a constituent part of the Regulatory Accounting Document. Furthermore, HAKOM also prepares and applies cost models of SMP operators on the following markets: interconnection in fixed and mobile electronic communications networks, on markets of access to fixed electronic communications network and a cost model for the calculation of net costs of the obligation to provide universal services.

The supervision of the application of accounting separation and cost accounting carried out by HAKOM in relation to the preparation of regulatory financial statements on the basis of the HCA/FAC model includes the analysis of possible changes in HT's regulatory accounting documents and their impact on regulatory financial statements. This is done in the manner that HAKOM gives comments and adopts a decision on the (non-)approval of the mentioned changes. HAKOM analyses HT's revised regulatory financial statements and uses the received data for the carrying out of its regulatory tasks. HAKOM supervises the process of implementation of CCA/LRIC model, including the supervision of HT's activities defined in the Implementation Plan.

HAKOM collects and processes indicators of growth and development of electronic communications and postal services markets in the Republic of Croatia, keeps track of changes in retail prices and prepares OECD's consumer baskets in mobile communications. It also prepares comparative overviews of market indicators of the Republic of Croatia and European countries.

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Commission Recommendation (2007/879/EC) on relevant markets susceptible to ex ante regulation contains 7 relevant markets susceptible to ex ante regulation in relation to which the three criteria test does not have to be carried out to prove the need for ex ante regulation. National regulatory authorities may also regulate markets which are not a constituent part of the relevant Recommendation on relevant markets by proving that the three criteria (The Three Criteria Test), which prove the need for ex ante regulation, have been cumulatively met on those markets. National regulatory authorities mostly regulate those markets which are a part of this Recommendation, while the need for regulation of other markets depends on national idiosyncrasies.

In the EU Member States which implement the regulatory obligation of accounting separation, CCA is most frequently used as a cost basis, while FAC is the most frequently used cost methodology in retail access markets and LRIC on wholesale markets.

Pursuant to HAKOM's decision, operators with significant market power were obliged to publish reference offers for interconnection, a reference offer for the service of unbundled access to the local loop and the reference offer for the wholesale broadband access service. Since the reference offer for the service of wholesale broadband access was not in compliance with the above-mentioned decision, HAKOM initiated expert supervision and adopted decisions with a view to aligning the reference offer for interconnection, and it initiated the procedure for the amendments of the above-mentioned reference offer. Furthermore, HAKOM carried out the procedure for the amendments of the reference offer for the service of unbundled access to the local loop and amended reference offers for the interconnection service.

Moreover, HT was obliged to publish wholesale conditions within the framework of the reference offer for the service of wholesale broadband access over optical access infrastructure. For that purpose, a working group composed of HAKOM's representatives, HT and other operators initiated the drafting of the corresponding HT's wholesale conditions.

A recent analysis of the three relevant markets related to the leased lines services at the retail and wholesale levels and five relevant markets referring to retail services in the public communications network at a fixed location is a continuation of HAKOM's continuous activities in this respect.

HAKOM will continue with the implementation of the programme for accounting separation and cost accounting in HT. The Council of HAKOM granted its consent on HT's regulatory accounting documentation on the basis of which HT prepared draft regulatory financial statements on the basis of the HCA/FAC model in which HAKOM found certain inconsistencies and defined amendments to regulatory accounting documentation, which must be taken into account by HT when preparing regulatory financial statements. The audit of financial statements should be completed in the first quarter of 2011.

In addition to preparing financial statements on the basis of the HCA/FAC model, which were approved in 2009, HT is obliged to prepare regulatory accounting documentation on the basis of the CCA/LRIC model. For that purpose, HAKOM carried out three supervisions over the preparation of CCA/LRIC model by HT. The last supervision will be completed by the end of the first quarter of 2011.

HAKOM has also initiated a public procurement procedure for consultancy services for the implementation of the project “Cost-models of operators with significant market power”, which will facilitate better verification of financial information provided by the operators. The completion of the project is envisaged for 2011.

Focus and activities of HAKOM

In 2011, HAKOM will focus, in particular, on the following:

- supervision over the implementation of regulatory obligations by SMP operators, including the preparation of a model for the allocation of investment risk in case of optical access infrastructure
- amendments of reference offers for interconnection, for the service of unbundled access to the local loop and the wholesale broadband access service
- the analysis of the leased lines market (3 relevant markets)
- the analysis of markets referring to retail services in the public communications network at a fixed location (5 relevant markets)
- the analysis of the market of network access for providers of value added services
- the implementation of cost accounting and/or accounting separation programmes
- the implementation of the cost models project with a view to calculating the prices of all regulated wholesale services and prices for the provision of the universal service
- preparation of the final audited regulatory financial report based on the CCA/LRIC model
- improvement of the manner of work with operators
- improved drafting of market assessment reports,
- cooperation with state administration bodies (MSTI, e-Hr, CCPA,...)

HAKOM’s main regulatory activities in 2011:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Supervision over the implementation of regulatory obligations by SMP operators	Assessment of implementation of obligations, Expert supervision where necessary	I–IV quarter	N, 4213,
2	Analysis of relevant markets of leased line services at retail and wholesale level	Three analyses have been completed	I quarter	N, 4213, 4257
3	Analyses of five relevant markets of retail services in public communications network at a fixed location will be completed	Five analyses have been completed	I quarter	N, 4213, 4257
4	Analysis of the market of network access for providers of value added services	Analysis completed	II-IV quarter	N, 4213, 4257
5	Risk allocation model in case of investments into optical access infrastructure	Public consultation about proposals of models Model completed and published	III quarter	N, 4213,
6	Amendments to reference offers	New reference offers	II-IV quarter	N

7.1	Implementation of CCA/LRIC model	Fourth supervision completed	I quarter	N, 4213, 4257, VI
7.2	Implementation of CCA/LRIC model	The analysis of draft regulatory financial statements of HT's CCA/LRIC models	II-III quarter	N, 4213, 4257, VI
7.3	Implementation of CCA/LRIC model	Final audited regulatory financial statements	III-IV quarter	N, 4213, 4257, VI
10	"Cost-models" project	Project implemented Calculation of prices of regulated wholesale services and prices for the provision of universal service	I-IV quarter	N, 4257, VI

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Upgrading of the SPOK system (Indicators' system)	OLAP functionality - the preparation of reports permits multidimensional queries	100	N, 4257 IV
2	Cooperation with operators	Improvement of the manner of work with operators		N
3	Cooperation with state administration bodies	Expert opinions	100	N

N- Note consists of: 41, 4251, 4254, 4255, 4261, 4263, 4264

Concerning activity under SA.6, HAKOM stresses that the procedure for amending reference offers, in accordance with the ECA, must be carried out at least once a year. Since HAKOM carried out the procedure for amendments to the reference offer for the service of wholesale broadband access in the first half of 2010, the procedure for amendments to reference offer for the service of unbundled access to the local loop in the third and fourth quarters of 2010, and the procedure for amendments to reference offers for interconnection in the last quarter of 2010, HAKOM will be carrying out the procedure for amendments to reference offers in the second, third and fourth quarters of 2011.

2.2 Communications networks

HAKOM is responsible for following the development of Next Generation Networks (NGN), with a special emphasis on openness, neutrality and access technologies and services.

Open access is the key element both for the development of market liberalisation and for technological development of networks. For the purpose of better definition of regulatory frameworks necessary for the development of open access, HAKOM pays special attention to business models adjusted to a vertical, layered architecture in order to minimise the possibility of discrimination in the provision of retail services.

Furthermore, HAKOM manages the addressing and numbering space in electronic communications by adopting decisions on the primary allocation of addresses and numbers and the corresponding accounts for the allocation of addresses and numbers, and by adopting the Addressing and Numbering Plan. Moreover, it is also responsible for the implementation of

number portability by managing the central administrative database of ported numbers (CADPN) and by preparing new functionalities.

HAKOM is also in charge of issuing certificates, invoices for fees for the provision of electronic communications services and other documents in accordance with the Electronic Communications Act and regulations adopted pursuant to this Act. Furthermore, HAKOM supervises the conditions for the provision of electronic communications services and quality of electronic communications services.

By adopting decisions, HAKOM identifies operators of universal services, defines their rights and obligations and follows the development and level of retail prices of universal services and quality of universal services. Upon request of operators of universal services, HAKOM decides whether costs incurred by the obligation to provide universal services represent an unfair burden on universal services operators, it calculates net costs for the provision of universal services and finally, where necessary, adopts a decision establishing a system for the compensation of net costs of universal service operators.

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The development of Next Generation Networks is a precondition for economic growth of any country. The development of broadband access services encourages the development of next generation networks and increases the value and overall competitiveness of a country and its regions. By regulating the access NGN network (NGA), the EU is trying to promote effective investments of SMP and other operators into infrastructure by protecting former investments. This includes the monitoring and guiding of the development and investments into next generation networks, in particular into optical access networks and, in addition to economic analyses, the observing and resolution of problems of implementation and migration towards NGN networks.

The increase in the number of operators in the EU results in the increased demand for resources in the addressing and numbering space. There is also a trend of using new technologies, and the appearance of new services (NGN, fixed-mobile convergence, IPTV), which makes the technical and regulatory conditions for the provision of services more complex.

A similar trend may also be noticed in the Republic of Croatia which requires continuous training of employees in the department to keep up to date with international trends in the introduction of new technologies on the electronic communications market and with the application of new IT tools for managing the addressing and numbering space.

A constant increase in the number of market participants necessitates continuous upgrading of the CADPN by taking into account the demands of market participants, which simplifies the number portability procedure in the administrative sense.

The increase in the number of Internet uses results in the need for the protection of databases and user information. Network security measures are necessary for the purpose of data protection during Internet transfer, in particular when the majority of companies, governments and academic communities use Internet as a means for the exchange of data. The security of networks and information also includes the protection of infrastructure, electronic signature, electronic commerce, and preparedness for emergency response. HAKOM's competences also include the introduction of elements of "Network and information security", such as supervision, lawful gathering of data, awareness raising and user protection.

Through its membership in the Body of European Regulators (IRG/BEREC), HAKOM actively participates in the work of the above-mentioned groups, keeps track of European Commission recommendations on the above-mentioned topics and, where necessary, introduces amendments to relevant legislation. HAKOM pays special attention to the monitoring of the Working Group for Next Generation Networks (NGN) and for Network and Information Security. HAKOM also participates in the work of the BEREC team for network neutrality.

Internet has grown exponentially in the recent years, as well as the number of users and types of technologies used for access to the network of all networks. The integration of classic data networks based on the IP protocol with other user communications networks and interfaces creates new needs and requirements for IP network protocol which may not be satisfied by the existing IPv4 version. Therefore, a new version of IP protocol, IPv6 protocol is the next step in the development of Internet and its adjustment to new user needs, to the development of new applications and integration of communications networks and it, thus, represents the future of the Internet in the long run. IPv6 protocol is envisaged as one of the basic communications protocols both in classic IP data networks and in next generation mobile networks. For the purpose of raising awareness of companies and citizens in the RoC, a new IPv6 working group will be established and it will be composed of CARNet, e-Croatia, MSTI and HAKOM and its main task will be the drafting of documents on technical procedures and manners of migration towards IPv6 networks.

Focus and activities of HAKOM

In 2011, HAKOM will focus, in particular, on the following:

- preserving openness and neutrality of the Internet, that is, on issues of net neutrality in accordance with the new EU regulatory framework
- the application of best EU practice in relation to the quality of service
- upgrading network security, i.e. protection of data during transfer over the Internet and protection of infrastructure by introducing electronic signature, electronic commerce, and preparedness for emergency response
- the monitoring of the introduction of elements of "Network and information security", such as supervision, lawful gathering of data, awareness raising and user protection.
- following the work of the Working Group for Next Generation Networks (NGN) and for Network and Information Security.
- the allocation of addresses and numbers to operators in a transparent, objective, equal and unbiased manner by means of a web application existing within the framework of the e-Agency programme
- upgrading and modernisation of CADPN
- the introduction of the numbering plan for SMS
- the control of appropriate routing of calls towards emergency services
- ensuring the appropriate dialling of emergency services for users with special needs,
- shortening the time for number porting,
- monitoring the fulfilment of obligations of universal service operators
- monitoring of the provision of value added services (special tariff services) in order to ensure additional protection of users of these services,
- monitoring of the provision of services by mobile and fixed operators
- the testing of the quality of services, assessment, testing and verification of the measurement and billing systems,
- the carrying out of measurement/testing of lines which are, or might be, used for the provision of broadband services.

HAKOM's main activities in 2011 in relation to communications networks:

Strategic activities				
1	Shortening of time limits for number portability in mobile networks	Number portability procedure in mobile networks shorter than 3 days	I-IV quarter	N, 4258,
2	Allocation of addresses and numbers	Workshop with operators took place Process upgraded	I quarter	N
3	Preparation of the database of addresses and numbers (DAN)	Database of addresses and numbers being prepared. Easier management of the addressing and numbering space	II quarter	IV, 4258
4	"Looking to the Future" project	Possible obstacles in the introduction of next generation networks recognised	I-IV quarter	N, VI
5	Preparation of the numbering plan	Single allocation and control of active SMS codes implemented	I-IV quarter	N
6	e-Call	Necessary changes in ordinances under HAKOM's competence established	I-IV quarter	N
7	Promoting migration from IPv4 to IPv6	organised workshops publication on websites	I-IV quarter	N
.	Activity	Result	Completion Fin. plan	

Regular activities

No.	Activity	Result	% 11/10	Fin. plan
1.	Quality complaints and disputes between operators and users	Better cooperation with operators concerning quicker resolution of user complaints	120	N
2	Phone complaints	Quicker resolution of emergency cases	2x	N
3	Supervision over the provision of services by mobile and fixed	Ensuring better protection of users of these services	120	N
4	Alignment of ordinances with new directives and recommendations	New versions of ordinances (neutrality)	100	N
5	Monitoring network and information security	Data gathered and analysed Conclusions on websites Impact on general terms and conditions	100	N
6	Upgrading of databases (CADPN, DAN, database of operators and database of C-numbers)	Clearer, simpler and more accessible databases	100	IV
7	Processing of requests and notifications about the provision of electronic communications services	Issuing of certificates and updating of operator's lists	100	N
8	Ensuring numbering and addressing resources	Decisions on primary assignment of addresses and numbers Bills for fees for addresses and numbers	100	N
9	Verification of use of the existing access network for provision broadband services	Periodic measurements carried out upon users' requests	100	II.A.1

10	Testing of the quality of services, assessment, testing and verification of the measurement and billing	2 measurement campaigns carried out with all operators with share over 2 percent	100	N
11	Preparation of a database of C-numbers	Appropriate routing of calls to emergency services	100	IV, (6.2)
12	Preparation of a single database of operators of EC services	Database is being prepared and it is linked with HAKOM's website	100	IV (6.2)
13	Monitoring of work of operators of universal services	Analysis of quality of universal services	100	N

2.3. Facilities and infrastructure

HAKOM's competence also applies to facilities and infrastructure which include three interdependent areas: conditions for building, infrastructure and R&TT equipment.

2.3.1 Building requirements

Building requirements refer to spatial planning of electronic communications infrastructure, special conditions for the construction of electronic communications infrastructure and of business or residential buildings, safety zones of electronic communications infrastructure and associated facilities and protection zones of radio corridors, the issuing of certificates of compliance of main projects and technical checks of constructed facilities in procedures for the issuing of a certificate of occupancy for facilities.

In relation to building requirements, HAKOM implemented the following key processes:

- defining and issuing of requirements and guidelines for the content of spatial plans at all levels in the part referring to electronic communications infrastructure
- participating in previous and public consultations in the procedure for the drafting and adoption of spatial planning documents
- issuing opinions in the process of drafting and adopting spatial planning documents
- issuing of special conditions in the procedure for the issuance of location permits, opinions and approvals for designs
- participating in the issuing of location permits by taking part at conferences
- determining special conditions for interventions in space within the zone of electronic communications infrastructure and associated facilities and protection zone and the radio corridor of certain radio stations
- issuing of the certificate of compliance of the main project with designs in the procedure for the issuing of approvals for main projects and building permits
- participating in the work of commissions for technical inspection of completed facilities in the procedure for the issuing of certificates of occupancy for facilities in relation to which it participated in procedures for the issuance of documents approving construction;
- issuing of certificates of quality of joint antennae systems.

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The EU is trying to speed up investments and building of electronic communications infrastructure as a precondition for the development of the electronic communications market, in particular, Internet, broadband access and broadband services market which have been recognised in the world as key factors in overall economic growth, employment and

competitiveness. All obstacles that might result in the decrease in investments and building of electronic communications infrastructure are being removed. In the process, special attention is paid to the protection of the environment and of space.

With a view to promoting effective development of electronic communications infrastructure, HAKOM will undertake activities aimed at the creation of preconditions for quick and undisturbed development of mobile networks of all operators and for the building of quality cable ducts by promoting the planning and building of electronic communications infrastructure integrated with other utilities. It will continue to contribute to efforts to create, at county and lower levels of governance, quality Spatial Plans that will better appreciate the contribution made by electronic communications to the overall economic and social development of the observed areas. By investing systematic efforts and proposals, HAKOM will try to influence the improvement of spatial planning documents at all levels. Seminars will be organised for organisations authorised for the preparation of spatial plans where the importance of including electronic communications infrastructure in the plans will be presented in order to satisfy preconditions for the improvement of economic, social and other elements sustainable development. Presentations will be held in units of local and regional self-government around the topic of integrated infrastructure.

HAKOM's focus and activities in relation to building conditions

In 2011, HAKOM will focus, in particular, on the following:

- participating in the adoption or amendments to spatial planning documents
- satisfying the requirements for the protection of human health and space and for the preservation of the environment
- endeavouring to keep spatial planning in the part relating to electronic communications on a common basis
- stimulating joint investments into electronic communications infrastructure
- encouraging effective investments into infrastructure by issuing special conditions for construction/approvals for projects
- ensuring that all building owners may freely chose an operator, and that all operators have access to a building under equal and non-discriminating conditions
- establishing special conditions for interventions in space in the zone of electronic communications equipment and associated facilities
- ensuring safety zone of radio corridors
- stimulating the construction of integrated infrastructure.

HAKOM's main activities in 2011 in relation to building requirements:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Support to spatial planning	Planning guidelines have been defined and distributed	31/12/2011	N
2	Improvement of issuing of special conditions for spatial interventions	Establishing of the current situation and issuing of conditions in the zone of EC infrastructure has been improved.	31/12/2011	N, 4211

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Definition of requirements and guidelines for the content of implementing spatial plans of all levels, in relation to the electronic communications infrastructure	Requirements and guidelines issued.	110	N
2	Previous and public consultation about the drafting and adoption of spatial planning documents	Active participation in consultations.	120	N, 4211
3	Issuing opinions in the process of drafting and adopting spatial planning documents	Assessment and opinion formed and delivered.	120	N
4	Special conditions in the procedure for the issuance of location permits, opinions and approvals for designs	Conditions for licences and opinions on projects granted	70	N
5	Conferences on the issuing of location permits	Active participation in conferences	60	N 4211
6	Special conditions concerning spatial interventions in safety zones	Special requirements within the ECI issued	110	N
7	Certificates of compliance of the main project with designs in the procedure for the issuing of approvals for main projects and building permits	Certificates issued on time	100	N
8	Technical inspections of constructed facilities	Active participation in the work of commissions for technical inspections	50	N 4211
9	Certificates of quality of joint antennae systems	All cases processed on time		N

2.3.2 Infrastructure

The building of and access to electronic communications infrastructure is an important factor in the liberalisation and development of the electronic communications market. HAKOM's main role in this area is: to ensure effective use the existing electronic communications infrastructure and associated facilities, to adopt legislative documents and regulate the existing situation and the right of way, to present and sanction trespassing, and dispute mediation. The definition of conditions for sharing of the existing telecommunications ducts has contributed to the consolidation of this area in good faith thus enabling new operators to have easier access to new users.

In procedures related to joint use of electronic communications infrastructure and associated facilities, HAKOM carries out the following key activities:

- analyses requests for collocation and sharing of electronic communications infrastructure and the establishment of the existence of technical possibilities for sharing
- mediates in and analyses the prepared technical solutions in disputes
- establishes technical conditions for collocation and unbundling of the local loop
- drafts proposals for laws, acts, instructions and forms necessary for sharing of electronic communications infrastructure.

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The effective use of electronic communications infrastructure is a precondition for market development, in particular Internet, broadband access and broadband services and it has been recognised in the world as the key instigator of overall economic development, employment and competitiveness and, thus, an obligatory factor for more efficient health, education, science, tourism and other sectors. The main trends noticed in the EU and in the Republic of Croatia, in relation to the majority of operators, are less investments into and construction of electronic communications infrastructure, the need for better protection of the environment and space, and rapid development of the infrastructure market, the need for deeper penetration of broadband access in fixed networks and the removal of barriers to deeper penetration.

Broadband penetration still remains unsatisfactory. HAKOM will continue to promote new technologies and the development of infrastructure for broadband Internet access in general, and in certain geographical areas in particular, thus improving the availability of broadband Internet access and allow a diverse offer of broadband services of all operators. The promotion of technology of optical access networks and allowing investments into optical access infrastructure to other subjects, in the first place units of local and regional self-government, significantly increases the availability of broadband access.

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 to resolving the existing situation related to the use of infrastructure.

HAKOM's focus and activities in relation to infrastructure and facilities

In 2011, HAKOM will focus, in particular, on the following:

- encouraging the construction of integrated infrastructure
- supporting effective use of the existing electronic communications infrastructure as a limited resource
- initiating the programme for providing horizontal state aid to the development of broadband Internet access (fixed and mobile communications) into less populated areas
- prompt issuing of right of way certificates and carrying out of procedures related to the right of way
- defining technical, occupancy and other conditions for certain types of electronic communications networks and electronic communications infrastructure and associated facilities
- promoting and encouraging broadband Internet access, in particular by means of open optical access networks
- monitoring the development of access technologies and models encouraging more rational use
- collecting data on paths and infrastructure capacities in the geo-information system.

HAKOM's main activities in 2011 in relation to infrastructure and facilities:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Encouraging joint investments into infrastructure	Control of application of the Ordinance intensified	I-IV quarter	N, 4211
2	Encouraging the development of optical access network	Control of application and promotion of the ordinance on optical access networks	I-IV quarter	N, 4211
3	"Right of way" process	Improved processes defined and implemented.	31/12/2011	N
4	Reference offer for access to HT's cable ducts	<ul style="list-style-type: none"> ■ Participation in the adoption procedure ■ Offer published. 	01/03/2011	N
5	Programme of horizontal support to less inhabited areas	Programme defined, planned, aligned and initiated.	31/12/2011	

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Promotion of investments into electronic communications infrastructure as a precondition for the development of broadband	Expert workshops and presentations took place	110	N, 4211
2	Efficient use of limited free space in electronic communications infrastructure	Implementation of the provisions of the Ordinance on the manner and conditions of access to and sharing of ECI has been intensified	100	N, 4211
3	Ordinances on technical, usage and other conditions for certain types of ECM and ECI	One Ordinance has been published	100	N, 4257
4	Promotion of the Ordinance on the construction, development and maintenance of ducts by encouraging investments, development and construction.	<ul style="list-style-type: none"> ▪ Expert workshops ▪ Presentations ▪ Instructions 	120	N 4213, 4211
5	Right-of-way certificates and regulation of the existing situation (legislation)	Issuing of certificates has been intensified.	130	N
6	Geo-informational system for the gathering and entry of data on paths and infrastructure capacities	<ul style="list-style-type: none"> ▪ Geo-information system established. ▪ Gathering initiated. ▪ Resolution of applications quicker. 	50	N

2.3.3 R&TT equipment

In 1999, the EU adopted Directive 1999/5/EC on important requirements and manner and

conditions for the placing on the market of R&TT equipment. The above-mentioned directive substituted the old type approval system with a new system which allows free movement of R&TT equipment among EU Member States.

The Ordinance on R&TT equipment (hereinafter: the Ordinance) was adopted in the process of accession of the Republic of Croatia to the EU and the alignment of legislation with the EU regulations. The Ordinance has partially implemented the above-mentioned directive but some of its provisions will no longer be valid after accession to the EU or signature of the accession agreement (ACAA) thus making it completely aligned. This Ordinance lays down the obligation to obtain HAKOM's prior approval before import and placing on the market of R&TT equipment, which represents ex ante market regulation. The approval is issued on the basis of documentation which is usually provided to inspection services in EU Member States and it represents a sort of inspection supervision. However, this will change after the accession to the EU or the signature of the appropriate accession agreement, that is, the provision on the issuing of HAKOM's approval before import and placing on the market of R&TT equipment will be eliminated, and the RoC will thus enable free import and placing on the market of R&TT equipment. Supervision will have to be carried out on the field when the equipment has already been placed on the market. Since, according to the ordinance, HAKOM's inspectors participate in the supervision of R&TT equipment on the market, it is, therefore, necessary to organise and train the inspection service that will be able to supervise the market of R&TT equipment.

Therefore, HAKOM will actively participate in the work of the Telecommunications Conformity Assessment and Market Surveillance Committee (TCAM) which provides technical support to the European Commission for the preparation of the audit of the above-mentioned directive.

HAKOM's focus and activities in relation to R&TT equipment

In 2011, HAKOM will focus, in particular, on the following:

- the issuing approvals for import and placing on the market, assessing compatibility, receipt and processing of notifications on the intention to place on the market R&TT equipment operating in non-harmonised frequency bands;
- the speeding-up of procedures, better information of users and availability of the latest technologies on the Croatian market, which enables more effective use of the RF spectrum
- the improvement of competences of supervisors, inspectors and customs officers in relation to supervision of R&TT equipment
- the participation in the work of TCAM in relation to the above-mentioned directive;

HAKOM's main activities in 2011 in relation to R&TT equipment:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Training of supervisors, inspectors, customs officers for the supervision of R&TT equipment	Training completed	31/12/2011	N

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1.	Issuing approvals for import and placing on the market, assessing compatibility, receipt and processing of notifications on the intention to place on the market R&TT equipment.	Carrying out of regular tasks on time.	100	N
2	Participation in the work of TCAM	Improvement of work procedures.	100	N 4211
3	Database of issued approvals for import and placing on the market	Database updated.	100	N, 4258
4	Participation in amending regulations and alignment of work procedures with new regulations.	<ul style="list-style-type: none"> ■ Regulations prepared. ■ Procedures aligned and users informed. 	100	N
5	Training of expert supervisors for effective supervision of the R&TT equipment market.	<ul style="list-style-type: none"> ■ Expert workshops. ■ Presentations ■ Giving instructions. 	100	N
6	Improvement of communication with users on HAKOM's websites in relation to R&TT equipment	<ul style="list-style-type: none"> ■ Website updated. ■ Facilitated fulfilment of obligations for producers and importers during import and /or placing on the market of R&TT equipment 	100	N

2.4. Expert supervision

HAKOM's expert supervision includes control over the implementation of the ECA, regulations adopted on the basis thereof, and decisions of the Council of HAKOM. Expert supervision is carried out by electronic communications supervisors who are authorised to undertake measures to ensure that market participants comply with laws and subordinate legislation or HAKOM's decisions. In addition to undertaking such measures, supervisors are authorised to issue misdemeanour orders or propose to HAKOM the filing of motions in all cases where a fine has been prescribed for the misdemeanour.

Europe and the Republic of Croatia

The electronic communications market in the RoC and the EU is following the trend of liberalisation and regulation which ensures easier entry and participation of legal and natural persons on the market. This enables simpler provision of diverse services and the appearance of new services and electronic communications facilities. In addition to the fulfilment of regulatory obligations of operators on the market, control and supervision play an important role in the realisation of market conditions which enable undisturbed provision of communications services, user protection, use of the radio frequency spectrum and, in general, the compliance with all laws and pieces of subordinate legislation. The division of areas of expert supervision in HAKOM leads to the conclusion that competences of authorised employees of HAKOM's expert services are of satisfactory level, except in the area of supervision of the R&TT market. For the time being, HAKOM's granting of approvals for import and placing on the market of R&TT equipment represents one aspect of market control but, since it is expected that it will be eliminated, preconditions for effective supervision of the Croatian R&TT equipment market will have to be created by HAKOM to enable free import. HAKOM will particularly focus on all

cases which might put into question equal participation of all market participants, user protection from fraud and operator protection from interferences in the radio frequency spectrum. A system of inspection, that is, of supervision, has been established in all EU countries in the same or similar manner as in the Republic of Croatia.

Focus and activities of HAKOM

During expert supervision, HAKOM will, in particular, focus on the following:

- implementing of regulatory obligations of SMP operators
- lawfulness of provision of electronic communications services
- protecting users from the point of view of the provision of services and tariff systems
- addressing and numbering
- protection from interference
- limiting effects of electromagnetic fields
- complying with the obligations of producers and importers when importing and/or placing on the market of R&TT equipment
- protecting against unauthorised access into cable ducts and legal obligations of infrastructure operators.

Main activities in expert supervision:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Increasing competences in the area of expert supervision	Competences in the area of R&TT equipment improved.	31/12/2011	N, 4213,

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Supervision of regulatory obligations	Prompt reactions to all indications of non-compliance with or abuse of regulatory obligations	100	N
2	Supervision for the purpose of user protection	Prompt reaction to all indications of irregularities harmful to users with a special emphasis on value added services	100	N
3	Non-compliant or illegal radio stations	Irregularities eliminated or further operation of radio stations prohibited.	100	N, 4211
4	Interference in communications systems	Interference eliminated in the shortest possible time	100	N, 4211
5	Supervision over distribution cable ducts	All indications checked and prompt reaction to all cases related to compliance with regulations in the area of electronic communications infrastructure	100	N, 4211
6	Non-compliant R&TT equipment	<ul style="list-style-type: none"> ■ Supervision has been carried out in accordance with all reports of non-compliance with regulations concerning R&TT equipment ■ All indications of non-compliant R&TT equipment checked, where necessary supervision was carried out. 	100	N, 4211
7	Excess levels of electromagnetic radiation	<ul style="list-style-type: none"> ■ Excess radiation eliminated ■ Prohibited operation to radio stations exceeding the prescribed radiation levels 	100	N, 4211

3. Radio Frequency Spectrum Management

In relation to radio frequency spectrum management, HAKOM is in charge of the following key processes:

- preparing the Frequency Allocation Table and Radio Frequency Allocation Plans
- international coordination of the radio frequency spectrum in accordance with appropriate procedures, and the conclusion of implementing agreements (on a bilateral or multilateral level) concerning the use of the RF spectrum
- planning and preparation of technical parameters for the issuing of licences for use of the radio frequency spectrum which may be issued on the basis of an application, a public tender or a public auction
- granting of licences for use of the radio frequency spectrum
- issuing of general authorisations
- issuing of certificates of compliance for notified base stations of public communications networks (GSM, UMTS) which comply with the provisions of the Ordinance on the limitations of strengths of electromagnetic fields for R&TT equipment,
- regular control and measurements in the radio frequency spectrum in the entire territory of the Republic of Croatia;
- measuring, testing and establishing interferences in the radio frequency spectrum in the entire territory of the Republic of Croatia, and their removal.

Europe and the Republic of Croatia

Since it is planned that the Republic of Croatia will by the end of 2010 completely switch-over from analogue to digital broadcasting of TV channels, a part of the radio frequency spectrum will be freed 790-862 MHz (digital dividend) and it may be used for additional television channels, mobile communications services, broadband Internet access and radio microphones. The EU has been striving towards more technological and service-related neutrality in radio communications, that is, towards the allocation of the radio frequency spectrum to users without determining the type of the communications service, technology used and services. Laws and subordinate legislation in the Republic of Croatia have already been adjusted to the allocation of the radio frequency spectrum on a technology and service neutral basis. It must be decided to which type of radio communications service this part of the spectrum will be allocated to. When adopting the decision, special attention must be paid to market circumstances, financial and technological strength of the operator providing broadcasting services and mobile communications services, and to social aspects (broadcasting and influence on the public, and the availability of broadband access in the entire RoC).

Furthermore, allocations at the EU level must be taken into account, in particular those covering neighbouring countries. It is desirable that the allocation of the digital dividend be harmonised on a wide geographical territory for the purpose of easier co-existence and international coordination. Moreover, time of digital switchover in the neighbouring countries largely influences the allocation of the spectrum in the RoC. Since the use of the spectrum for other purposes in geographically adjacent areas could cause interference in the territory of the RoC,

restrictions are possible in the provision of services in certain areas (depending on the level of interference the reduction of the transfer speed and/or coverage area).

In accordance with the European Commission recommendation on the digital switchover by 2010, the digitalisation of terrestrial television is in advanced stages in the majority of the EU countries. The consequence of the application of digital technology is a more efficient use of radio frequency spectrum, which releases part of the used spectrum and ensures a "digital dividend" for the provision of additional broadcasting and communications services.

Countries such as Sweden, Finland, Switzerland, Germany, the Netherlands, Luxembourg, Denmark and Norway have already completed the digital switchover process, while in other countries it still remains to be completed. The RoC has been planning to continue with the broadcasting of terrestrial television exclusively in digital technology (DVB-T) from the beginning of 2011, which makes it, in addition to Austria and Slovenia, the leading country in the region, while, for example Hungary is planning to switch over to digital television in late 2011, and Bosnia Herzegovina, Montenegro and Serbia still have not started with the introduction of digital television, let alone with the switching off of analogue television.

The licence for use of the radio frequency spectrum for the provision of the service of management of electronic communications networks of digital television for MUX A and MUX B will include the coverage of at least 95 percent of Croatian population with programmes of the four existing national television stations and the introduction of six new channels at the national level. As part of its activities related to the international coordination of the radio frequency spectrum, HAKOM granted, on the basis of a public tender, a licence for use of the radio frequency spectrum for the provision of the service of management of electronic communications networks of digital television for MUX D, which ensures the switchover to digital television for the existing local and regional broadcasters and conditions for the introduction of additional contents and services at the national, regional and local level.

As a result of the definition of receivers by Eureka 147 group (DMB/T- DAB/T-DAB+), activities of European countries concerning the introduction of digital radio have intensified, in the first place in the VHF III band.

Countries like Belgium, Denmark, Switzerland, Malta, Great Britain, Norway, Germany, the Netherlands and Portugal, have today covered the majority of their population with digital radio on the basis of the granted licences, while other European countries are still in the initial or test stages of introduction of digital radio. Furthermore, an increasing number of international activities (ITU, CEPT, EBU, industry and others) are focused on the planning of digitalisation of the VHF II frequency band used for broadcasting of the so-called FM radio. However, the switching off of analogue radio in this frequency band still isn't envisaged. Today the RoC has been broadcasting in T-DAB and DMB technologies as part of experimental broadcasting of digital radio.

In 2010, some EU countries have started allocating the RF spectrum at 2.6GHz for commercial use for IMT networks. Since the Radio Frequency Allocation Table in the RoC prescribes that this band must be allocated by public auction, if there is sufficient public interest, HAKOM will prepare the procedures relevant for the allocation of the RF spectrum. New technologies have been developing worldwide (including the EU), in particular in relation to networks intended for public protection and emergency situations. Since, due to their nature, these systems may be used only if they have been harmonised on a wider territory, the development of technology and regulations in the EU must be closely followed in order to implement the final solutions in the Republic of Croatia. Furthermore, the development of cognitive radio will be followed, both in the technological and in the regulatory sense. This being an emerging technology based on completely new principles (use of the free spectrum through limited geographical areas/time, which has been intended for other purposes), the implementation thereof requires a new and

complex regulatory framework.

Therefore, subordinate legislation will also be aligned accordingly, in particular the Radio Frequency Spectrum Allocation Table and the relevant allocation plans.

The appearance of new technologies, technological solutions, services and users in radio communications resulted in better usage of the radio frequency spectrum. As a result of the liberalisation trend on the European and international markets, the control of the radio frequency spectrum has become an important factor in regulation, efficient management of radio frequencies, protection of users from interferences and electromagnetic radiation and in preventing unauthorised use. Because of this, all EU Member States have established measuring systems for spectrum control and the possibility of inspection i.e. supervision of market participants using radio frequencies.

HAKOM established a measurement system for control of radio frequency spectrum which must be continuously developed in order to permit measurement and control of new communications systems, in addition to the existing ones which have existed for years. The appearance of new users of the RF spectrum and the introduction of new technologies and technological solutions require constant upgrading of the system to prevent unauthorised use of the RF spectrum and to offer efficient protection to all users. Croatian control and supervision over the radio frequency spectrum must be able to carry out measurements for use of the digital dividend and to keep track, in the technological and professional sense, with the most developed EU countries. In the years to come, HAKOM must replace the old measurement vehicles and find permanent locations for control and measurement centres in Split and Osijek.

Focus and activities of HAKOM

Bearing in mind the key processes, the situation in the EU and the Republic of Croatia, HAKOM will in 2011 focus on the following:

- implementing positive European and international practice in the management and regulation of use of the radio frequency spectrum and the alignment with the new EU regulatory framework when it is adopted
- international coordination of the radio frequency spectrum in accordance with appropriate procedures, and the conclusion of implementing agreements (on a bilateral or multilateral level) concerning the use of the RF spectrum
- preparation for allocation of the radio frequency spectrum of the digital dividend (790-862 MHz) and observation of activities related to the introduction of other services in the 790-862 MHz (digital dividend) frequency band and their influence on broadcasting networks
- planning of radio frequencies and preparation of technical parameters for the issuing of licences for the use of the radio frequency spectrum;
- protecting citizens from non-ionising electromagnetic radiation with particular emphasis on protection in areas of increased biological sensitivity (residential areas, schools, preschools, hospitals etc.)
- development and evolution of digital television by ensuring the radio frequency spectrum and granting of licences for new digital terrestrial television networks in the RoC
- monitoring activities of building of digital television networks in accordance with the issued licences for use of the radio frequency spectrum
- ensuring the radio frequency spectrum as a precondition for introduction of digital radio
- organisation of the Digital Radio Forum with a view to drafting the proposal of the

- "Croatian norm" and strategic guidelines for the introduction of the digital radio
- following international activities related to the introduction of digital radio in the VHF bands I and II and MF/HF band
 - upgrading and modernising the control system of the radio frequency spectrum
 - carrying out regular measurements on the basis of the established measurement system, and measurements for the purpose of frequency planning
 - control of use of radio frequencies in relation to the granted licences for use of the radio frequency spectrum.

HAKOM's main activities in relation to RF management in 2011:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Use of the RF spectrum for the digital dividend 790-862 MHz	<ul style="list-style-type: none"> ■ Proposal made and public consultation carried out ■ Analysis of results of public consultation carried out 	31/10/2011	N
2	Public auction for the allocation of the RF spectrum for the digital dividend (790-862 MHz) and 2.6 GHz	<ul style="list-style-type: none"> ■ Experiences of other countries gathered. ■ Model of public auction selected and parameters 	I-IV quarter	N, 4211 IV
3	Ensuring conditions for additional digital television networks	Documentation was prepared for the competition for the granting of licences for use of the RF	IV quarter	N, 4211,
4	Coordination of frequencies for digital radio	International coordination of the RF spectrum was completed for the purpose of introducing digital radio into the VHF II frequency band	II quarter	N, 4211
5	Organisation of the forum on digital radio	The proposal for the "Croatian norm" and for strategic guidelines for the introduction of digital radio into the RoC was prepared	IV quarter	N, 4257
6	Enable electronic submission of licence applications	Improved process of granting of individual licences by means of electronic applications	IV quarter	N, 4258, 4213
7	Replacement of three measurement vehicles	New vehicles used	IV quarter	N, 4211 IV
8	CMS V. Bokolj	CMS in use.	IV quarter	N,4291,V, II.A.2
9	CMC Osijek	CMS in use.	IV quarter	N,4211,I, A.2,II.A.1

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Amendments to the RF Spectrum Allocation Table	Amendments to the RF Spectrum Allocation Table in accordance with the expressed interest and market and technology development	I-IV quarter	N
2	Amendments of the existing and adoption of new RF Spectrum Allocation Plans	Allocation plans accepted based on more efficient use of the RF spectrum, expressed user interest, existing situation and principle of equality and transparency	I-IV quarter	N
3	Support to the preparation of the ordinance laying down the restrictions on influence of electromagnetic fields	Subordinate legislation adopted which takes into account HAKOM's experiences.	I-IV quarter	N
4	Monitoring of international activities related to the introduction of the system for public protection and emergency situations	Amendments to subordinate legislation, where necessary, and allocation of RF spectrum to relevant services	I-IV quarter	N, 4211
5	Monitoring of international activities related to the development of cognitive radio	Amendments to subordinate legislation, where necessary	I-IV quarter	N, 4211
6	Following the development of digital television networks	Verified fulfilment of conditions for the realisation of networks in accordance with granted licences	100	N, 4211
7	Monitoring of the introduction of other services in the 790-862 MHz (digital dividend) frequency band and their impact on broadcasting networks	Undisturbed operation of broadcasting and other services in UHF band V ensured.	100	N, 4211
8	Ensuring the radio frequency spectrum as a precondition for introduction of digital radio	<ul style="list-style-type: none"> ■ Frequencies necessary for experimental broadcasting ensured ■ Frequencies necessary for the invitation of the tender for the granting of licences ensured. 	100	N, 4211
9	Following of international activities related to the introduction of digital radio in the VHF bands I and II and MF/HF band	Concept about the digitalisation of the VHF band I and II and MF/HF band prepared.	I-IV quarter	N, 4211
10	Issuing of individual licences for use of the RF spectrum on the basis of the submitted application	Licences granted on the basis of applications which complied with the prescribed	90	N
11	Preparation of technical parameters for the invitation of tenders for radio and television	Technical parameters for the requested concessions delivered.	100	N
12	Planning and optimisation of broadcasting networks	<ul style="list-style-type: none"> ■ Ensured more effective use of RF spectrum ■ Increased coverage of existing networks ■ Ensured conditions for work of new networks. 	100	N

13	Fees for use of the RF spectrum	Fees calculated and annual invoices for use of the RF spectrum according to valid licences prepared	100	N
14	Maintenance of the control and measurement system	System in the function for the prescribed tasks.	100	N, 4211, 4291, II.A.1
15	Measurement campaigns	Measurement campaigns carried out: <ul style="list-style-type: none"> ■ use of fixed radio stations, ■ measurement of signals from neighbouring countries 	100	N, 4211
16	Measurements of electromagnetic fields	Measurements carried out in areas of increased sensitivity populated by children	110	N, 4211
17	Regular control of the spectrum and measurements	Measurements carried out in accordance with the 2011 measurement plan and requirements of frequency planning	100	N, 4211

4. Regulation of the Postal Services Market

HAKOM has the following responsibilities on the postal services market:

- adopts regulations for the implementation of the PSA
- grants licences for the provision of universal postal services
- receives applications for the provision of postal services
- adopts decisions on amendments, revocation and termination of validity of licences for the provision of postal services
- adopts decisions on public operator's network access, on the separation of business activities of the public operator and amendments or annulment of terms and conditions of universal services provider
- approves prices of reserved postal services
- follows the application of prices of postal services and undertakes suitable measures
- monitors the development and situation on the postal services market;
- regularly publishes data, notifications and documents in the area of provision of postal services;
- provides expert opinions and clarifications in the application of the Postal Services Act;
- expert supervision over the application of the PSA;
- carries out other tasks prescribed by the PSA;

HAKOM carries out its regulation of the postal services market in the two basic ways:

- Proactive – giving initiatives for further development of the postal services market;
- Corrective – reaction to noticed situations and development trends on the postal services market.

As part of the proactive component, HAKOM collects and publishes data, notifications and documents related to the situation on and development of the postal services market. Furthermore, HAKOM is planning to strengthen its role as a regulator of the postal services market and confirm it by means of regular contacts and cooperation with all providers of postal services on the market and by encouraging postal service providers to completely liberalise the postal services market.

The corrective component is carried out by undertaking adequate measures for directing the development of the postal services market in accordance with the PSA, the Ordinance on the provision of universal postal services, the Strategy for the Development of the Postal Services Market in the RoC and the Action Plan for the implementation of the Strategy.

Expert supervision over the application of the PSA and regulations adopted on the basis thereof is carried out by postal supervisors in all cases of possible violation of legislative provisions. Procedures are initiated on the basis of information and facts collected by HAKOM.

Europe and the Republic of Croatia

The postal services market in the EU is in the final stages of liberalisation. The third postal directive envisages the completion of this process by the end of 2012 which should result in a completely open postal services markets in all Member States of the EU. EU Member States with the developed postal markets are obliged to fully liberalise the postal services market in early 2011. Experiences that these countries have with the preservation of universal postal services simultaneously with the opening of the market will be very valuable for HAKOM and other actors on the postal services market in the RoC.

The legislator, HAKOM and the public operator will face significant challenges in the period preceding full market liberalisation which is why HAKOM will continue in 2011 to strengthen its capacity for its role and tasks on a fully liberalised market. Therefore, for the purpose of providing universal services under conditions of free competition, HAKOM will intensify all of its activities aimed at encouraging the public operator to fulfil its obligations under the Strategy for Market Development in the RoC and the Action Plan for the implementation of the Strategy to be fully prepared for market liberalisation in 2013.

Focus and activities of HAKOM

The key issues that HAKOM will focus on in the upcoming period are the following:

- working more intensively on the fulfilment of all obligations of the public operator
- collecting and analysing data on the situation on the postal services market
- lawfulness of the provision of postal services
- ensuring compliance with public operator's right to provide reserved postal services
- quality of universal postal services.

HAKOM's main activities on the postal services market in 2011:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	IPA 2009 project - development of the postal services market (in the area of accounting separation)	Tender documentation, Selection of consultants and defined methodology	31/12/2011	4257
2	Accounting separation and the allocation of costs of the public operator	Project for accounting separation of public operator's costs started.	31/12/2011	N,4257
3	Costs of provision of universal postal service	Calculation of actual costs of provision of universal postal service initiated	31/12/2011	N, 4257

Regular activities

No.	Activity	Result	% 11/10	Fin. plan
1	Promoting competition on the postal services market	Informing providers and users of services about possibilities for access to the public operator's network. Proposal of regulatory measures aimed at ensuring access to the public operator's network.		N
2	Monitoring of statistical data on the postal services market	Data on the postal services market published quarterly	100	N
3	Analysis of development of the postal services market	Market analysis carried out. Proposal of measures for the placing of the market in a legal framework.	100	N, 4253, 4257
4	Public operator's obligations	A plan was prepared to complete the public operator's obligation to bring the universal service to a quality level that allows network accessibility to all users	100	N
5	Ordinance on the payment of the annual fee to HAKOM	Ordinance on the payment of the annual fee prepared and put for public consultation	100	N
6	Ordinance on the provision of universal postal services	Proposal of amendments to the Ordinance drafted. Plan for the reduction of the number of households without 5-day delivery incorporated.	100	N
7	Supervision over the quality of universal postal services.	Audit of the report on the quality of provision of postal services carried out.	100	N, 4257
8	Satisfaction of users of postal services	Survey of satisfaction of users carried out. Survey results published.	100	N, 4211, 4257
9	Supervision over work of postal service providers	Verification of compliance of service providers with granted licences Verification of operation in accordance with submitted applications.	110	N, 4211

5. Consumer Protection

HAKOM's basic regulatory principles and objectives comprise, among other things, the promotion of interests and protection of rights of users of public communications and postal services.

The promotion of users' interests is carried out by:

- ensuring access to universal public communications and postal services for all users of services in the entire territory of the Republic of Croatia
- promoting clear information about prices and conditions of using the services
- informing and educating consumers about their rights and obligations
- dealing with the needs of special social groups (disabled persons, children, etc.)
- processing, controlling and harmonising general acts of operators adopted by operators in accordance with the law and ordinances
- participating in various activities of other state institutions and associations dealing with user protection
- international cooperation with the relevant organisations and institutions on consumer protection, and participation in the work of their expert bodies and work groups
- publishing data and informing competent state authorities.

The protection of user rights is ensured by conducting simple and accessible procedures for the resolution of disputes between consumers and operators of public communications and postal services. HAKOM resolves disputes on the basis of a proposal and opinion of the Commission for the Protection of Rights of Users of public communications and postal services consisting of representatives of consumer protection associations.

The above-mentioned activities of promoting and protecting user interests are conducted in the Consumer Protection Department which also has a Consumer Protection Commission as an advisory body whose proposal and opinion serves as a basis for HAKOM to resolve disputes between operators or providers of postal services on one hand and users of services, on the other. The Department carries out two main groups of tasks:

Dispute resolution

- receiving, filing and processing requests for the resolution of disputes between subscribers and operators of public communication and postal services and their preparation for decision-making in the Consumer Protection Commission
- processing of cases after the opinion given by the Consumer Protection Commission on the basis of which HAKOM resolves disputes and may adopt binding decisions for operators of public communications services and postal service providers
- education and assistance to users in dispute resolution proceedings
- enabling users to receive daily updated information on the status of their requests over the phone or on HAKOM's website
- keeping the database of consumer complaints
- cooperating with operators of public communications services and providers of postal services on the resolution of complaints and claims of users.

Prevention in consumer protection

- informing and educating users about their rights and obligations

- publishing appropriate information and instructions for users of public communication and postal services on HAKOM's website, in newspapers, or in some other appropriate manner
- processing, control and amendments, supplementation or deletion of individual provisions of general terms and conditions which are adopted by operators of public communications services and universal service providers in accordance with the law and the ordinances;
- researching, analysing and controlling services provided on the market, proposing measures for the prevention of user protection and initiating control on the basis of a complaint or ex officio
- participating in professional gatherings and public consultations on consumer protection.

Europe and the Republic of Croatia

A new regulatory framework was established in 2010 which envisaged more significant amendments concerning the exercise of rights of users to services and special protection of users. All EU Member States should be aligned by May 2011 which was accepted in this country as well as the final alignment deadline. European regulations establish the obligation to provide universal services in order to encourage the development of market and services and to ensure equal use of all services to all citizens regardless of their residence. With a view to promoting interests and protection of users, the new regulatory framework particularly emphasised the need for personal data protection and the resolution of requests by users with special needs, that is, of special social groups. Basic regulatory principles and objectives encourage competition for the purpose of market development, introduction of new services and finally, reduction of prices for end users. Basic regulatory principles and objectives also include the protection of end users.

In relation to consumer protection, the implementation of a current project implemented as a part ERG/IRG activities and entitled "End user PT" will continue, Through its 4 project tasks, the project's objective is to discover the direction in which the European Commission will regulate markets and relations for the purpose of promoting interests of users and for their protection. Specific project tasks will serve to establish problems faced by users in relation to the number portability procedure (unjustified keeping of users, taking over of users as a result of false representation of operators), the manner of solving requests submitted by persons with special needs. HAKOM has been actively participating in all of their activities.

The new national legal framework for dispute resolution entitles HAKOM to adopt decisions which are binding for operators and which allow only the instigation of an administrative dispute. Decisions on the resolution of disputes for public communications services are adopted by the HAKOM's director thus satisfying the principle of cost-effectiveness of proceedings since these are small claims disputes, as opposed to disputes between operators the resolution of which is under the competence of the Council of HAKOM.

Bearing in mind the manner of dealing with disputes between consumers and operators in the EU, we may conclude that HAKOM has taken upon itself a big responsibility and obligation when it took over the resolution of these out-of-court proceedings. However, at this moment of market development and of the overall society development, this represents a contribution to legal security of all participants.

As opposed to the previous period when it was obliged only to control SMP operators for the purpose of issuing appropriate approvals, HAKOM has determined, in accordance with new regulations, that it is necessary to, in order to promote consumer interests, control bylaws of all operators and their tariff systems before publication. With a view to establishing user needs and raising the level of their protection, surveys are carried out for users of postal and public communications services and

necessary activities are identified on the basis of results of such surveys, and on the basis of analyses of markets of services.

Focus and activities of HAKOM

HAKOM's activities in 2011 will be focused on:

- completion of initiated activities related to the promotion of consumer interests
- introducing additional preventive activities and procedures bearing in mind, in particular, the education of consumers in all operationally and financially feasible forms
- organising adequate workshops with operators, which might develop into permanent – monthly discussions of current topics;
- analysing services on the market both in relation to their provision and in relation to tariff systems, that is, by controlling operators' general terms and conditions and tariff systems of operators and service providers;
- aligning and adopting prescribed bylaws and introducing procedures and processes for protection of users of postal services, which have proven to be efficient for users of public communications services.

HAKOM's main activities in consumer protection in 2011:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Alignment of subordinate legislation with the legislative framework	<ul style="list-style-type: none"> ■ Aligned subordinated legislation. ■ Relations between service providers and users of services 	IV quarter	N
2	Improvement of dispute resolution procedures	<ul style="list-style-type: none"> ■ A simpler and more economic dispute resolution procedure ensured. ■ High level of user protection achieved. 	IV quarter	N
3	Preventive activities aimed at user protection	<ul style="list-style-type: none"> ■ Better information of users. ■ More responsibility of operators/service providers in the protection of their users. 	IV quarter	N, 4253

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
2	Alignment of general terms and conditions and tariff systems of operators and service providers	<ul style="list-style-type: none"> ■ General terms and conditions and tariff systems have been aligned. ■ Users are able to use services adjusted to their needs and lawfulness of the provision of services has been ensured 	150	N

3	The analysis of the provision of services, tariff systems and user complains according to individual operators	<ul style="list-style-type: none"> ■ Proposals for improvement of HAKOM's interaction with operators/service providers ■ Achievement of a high degree of consumer protection 	110	N
4	Information and education of users via different media	<ul style="list-style-type: none"> ■ Participation in radio programmes dealing with consumer-related topics ■ Participation in TV shows. 	110	N
5	Maintenance and improvement of HAKOM's website for users.	Users are more familiar with services and their rights and obligations in the use of services	110	N
6	Better information of users about services and their rights and obligations in the use of services	<ul style="list-style-type: none"> ■ Preparation and publishing on the website a brochure with advice for users. ■ Inserts in daily newspapers. 	150	N, 4253
7	Establishing needs and satisfaction of users	Survey carried out and results published	100	N, 4257
8	Upgrading of application "Complaints system"	Users are able to check the status of their case on the web.	110	N, 4258
9	Cooperation with national and international bodies and institutions dealing with user protection	<ul style="list-style-type: none"> ■ Exchange of knowledge and experiences. ■ Application to improvements in user protection. 	100	N, 4211

6. Increase of HAKOM's Capacity

HAKOM has been continuously trying to adjust its regulatory capacity to market needs and increase the efficiency and transparency of its work by means of better organisation, definition and IT introduction into work processes, by creating a strong and integrated information system oriented towards e-government, by establishing active international cooperation and especially by enhancing the knowledge and skills of its employees.

6.1 International cooperation

In the year 2011 HAKOM will continue to actively cooperate and to exchange its experience in the field of the regulation of electronic communications and postal services and will strive to implement the best practice in accordance with the development and the conditions on the Croatian market.

Europe and the Republic of Croatia

The European Union and the world have been trying, on one hand, to standardise, secure the interoperability and harmonise further development of the electronic communications and postal services market, and, on the other hand, to ensure innovations, investments and competition on these markets. This process has been taking place within the framework of international authorities, working groups, different associations, forums, as well as through bilateral and multilateral cooperation between countries. Furthermore, the EU Member States are currently applying the existing regulatory framework and preparing for the implementation of the new regulatory framework after its adoption.

HAKOM has regularly participated in the activities of these authorities in order to monitor market development, to secure the interests of the Republic of Croatia, to exchange information and

experiences, to acquire new knowledge, to achieve a timely recognition of the regulatory, technological and market challenges, and to observe and apply best practices.

Focus and activities of HAKOM

In the field of international cooperation in the next year HAKOM will focus on:

- consolidating, harmonising and more efficiently applying the electronic communications market regulation
- understanding the revised regulatory framework
- experiences in the regulation of Next Generation Networks
- efficient management and harmonisation of the radio frequency spectrum use
- adjusting the postal system to the one existing in the EU
- using of the funding from the pre-accession funds.

HAKOM's activities in the area of international cooperation:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	Use of EU pre-accession funds (IPA programme) for: <ul style="list-style-type: none"> ■ strengthening human resources ■ improving market analysis and regulatory accounting 	<ol style="list-style-type: none"> 1. Increased management and "soft" competences. 2. Competences for market analysis and cost accounting have been strengthened. 	III. quarter	N, 4257
2	Use of pre-accession EU funds (IPA programme) through South-East European Digital Television (SEE TV) project: <ul style="list-style-type: none"> ■ coordinate switch-over to DTV of countries in the region ■ reduce digital gap between countries in the region and coordinate the use of the digital dividend ■ prevent possible negative 	<ol style="list-style-type: none"> 1. Switch-over to digital TV in the region sped up, increased quality and availability of new services. 2. Difference between the EU countries and countries in the region in the area of digital television has been reduced. 3. Harmonised use of the RF spectrum, technology and norms of countries in the region. 	I-IV quarter	N, 4211, 4213, 4257

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Participation in the work of: COCOM BEREC IR RSPG RSC	Gathered knowledge and experience about: <ul style="list-style-type: none"> ■ EC market regulation ■ Gradual consolidation and alignment of EU market ■ new EU regulatory framework ■ development of new technologies ■ Next Generation Networks (NGN/NGA) etc. 	110	N, 4211,4213

2	Participation in the work of: ITU ECC	Gathered knowledge and experience about: <ul style="list-style-type: none"> ▪ efficient management and coordination of use of the radio frequency spectrum ▪ efficient protection against harmful interference and their removal ▪ participation in drafting and adoption of decisions, recommendations, and reports at the European and international level 	100	N, 4211, 4213
3	Participation in the work of: CERP UPU	Gathered knowledge and experience about: <ul style="list-style-type: none"> ▪ development of internal market ▪ adjustment of the Croatian postal system to the EU system 	100	N, 4211, 4213
4	Organise and participate in: Meetings of international working groups, bilateral and multilateral meetings and workshops with regulatory authorities from the EU and neighbouring countries	<ul style="list-style-type: none"> ▪ exchanged experiences about regulation of the electronic communications and postal services markets ▪ coordination of use of radio frequencies and prevention of harmful interference 	110	N, 4211, 4213

6.2 Development of competences and modernisation

HAKOM has adopted a strategic and operational development plan until the year 2012 which is being implemented through two improvement programmes:

- Convergence – oriented towards competition and market regulation aimed at improving competition and increasing investments and innovations in the electronic communications market;
- Modernisation – oriented towards the development of its own ability to regulate and develop electronic communications markets with the priority strategic goal being the development of HAKOM's regulatory competence.

Special attention in these programmes has been dedicated to the raising of own capacity and efficiency through development of regulatory competences and the e-Agency project.

Development of competences

HAKOM shall continue to strengthen competences and qualifications of its employees. HAKOM is active in a sector characterised by continuous and extremely quick technological changes which are challenging for all participants on the electronic communications market as well as for the regulatory authority itself. The activities and operations of the regulatory body are closely connected to the appropriate number and educational structure of employees and demand the monitoring and evaluating of complex professional (electronic and communicational and postal), legal and economic issues. HAKOM shall pay special attention to the approaching issues and to those that will in the near future mark the electronic communications market. HAKOM's employees will improve their knowledge by participating in postgraduate studies, research projects, seminars, conferences, work groups, workshops and courses with an aim of improving organisational and individual competences. Although HAKOM, as a regulatory authority, has quality and professional staff, the need for further training still persists. Therefore, in addition to the carrying out of the planned training, future needs for training will also be identified for all employees in order to permit the realisation of objectives and tasks laid down in the organisation strategy. The objective is to create an environment capable of

ensuring continuous development of various knowledge and skills in HAKOM in order to satisfy future needs for the strengthening of the regulatory authority and, at the same time, to achieve continuous improvement in HAKOM's operations. HAKOM will provide support to any employee in order to fulfil demanding market regulation tasks expected from the regulatory authority. Training results will contribute to better work results of employees who have undergone training and to the achievement of individual goals.

As part of the IPA 2007 programme "Strengthening of institutional and administrative capacity of the Croatian Post and Electronic Communications Agency", professional workshops will be organised for all employees with a special focus on regulations on electronic communications, implementation of legislation in the field of electronic communications, market analyses and consumer protection.

HAKOM continuously monitors the development of regulatory aspects in the world and in the EU by participating in international regulatory organisations, by participating in conferences and by using reference works from this field. This will allow HAKOM to define legal and specific aspects of the market in the Republic of Croatia, notice the discrepancy between the market in the Republic of Croatia and in the world and the EU, recognise the best practices of foreign regulators, especially of the European regulators, and define a plan for competences development which in the first place relies on cooperation with universities in the Republic of Croatia. Therefore, in partnership with the Faculty of Electrical Engineering and Computing, the Faculty of Economics in Zagreb, the Faculties of Law in Zagreb and Split, HAKOM has been preparing a programme of competence development by initiating specialised, multi-disciplinary postgraduate studies in the regulation of electronic communications market and a multi-annual project entitled „Looking to the Future“.

Moreover, HAKOM has also initiated a language learning programme for its employees and this programme will continue in the future as well. 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.

Europe and the Republic of Croatia

Although telecommunications traffic and income has been continuously growing and it will continue to do so, it does not happen in the same manner and with the same intensity as it used to. The possibilities for growth based on increased capacity or the number of connections still exist only in undeveloped countries, whereas in developed countries further growth is possible only on the basis of the introduction of broadband networks and new applications and services. More and more traffic has been arriving from network borders, that is, from new applications and services which have been offered by some new players in the chain. This presents new challenges before participants in the electronic communications market and requires new business models, new knowledge and skills, as well as the establishment of new relations on the market. Next Generation Networking, NGN, is a term describing an architectural evolution in telecommunications core and access networks. The general idea behind NGN is single transport of all information and services (voice, data, and video) by using packet-switching, as in the case of the Internet. NGN will pave the way for new multi-media applications and services. Examples of such applications include VoIP, IPTV, LBS etc. A process that will mark the development of electronic communications in the next 5 to 10 years has to a large scale already started in developed countries (UK, the Netherlands and so on), whereas in the Republic of Croatia this process is only starting. NGN asks for new multi-disciplinary (communication, economy and law) knowledge and skills from all participants on the electronic communications market. For that purpose, HAKOM initiated the above-mentioned multidisciplinary course in electronic communications market regulation. The initiative envisages participation and rising of awareness of all participants in the electronic communications market regulation and development in the Republic of Croatia.

Focus and activities of HAKOM

In the following year HAKOM shall focus on:

- promoting a multidisciplinary (communications, economy and law) approach to solving regulatory problems
- keeping track of the development of new technologies and their influence on network and services development with a special emphasis on regulatory aspects,
- supporting organisation and actively participating in conferences and workshops such as ConTel, SoftCOM, Mipro, ELMAR, HURIN and others.
- problems of faster and more balanced development of broadband Internet access and introduction of broadband applications and services into the network of the Republic of Croatia.

HAKOM's main activities in 2010 in relation to the development of competences:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	"Looking to the Future" project	<ul style="list-style-type: none">■ Stage 1 completed.■ Document published and presented.	31/12/2011	N, 4257, VI
2	Promoting competition and investments into optical access network	<ul style="list-style-type: none">■ Strategy and proposal for measures defined.■ Regulatory measures for achieving competitiveness proposed.	30/09/2011	N

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Multidisciplinary specialist course	<ul style="list-style-type: none">■ 12 specialists■ 10 new attendees	100 84	4213
2	Conferences and workshops	<ul style="list-style-type: none">■ 10 scientific and expert papers■ 20 participants in conferences in the RoC■ 3 workshops about NGN		4211, 4213

The carrying out of projects and the competence development programmes requires the necessary human and material resources. HAKOM does not have the necessary human resources for the execution of the programme and this is not under HAKOM's competence alone. For that reason, HAKOM implemented this programme together with the Faculty of Engineering and Computing, the Faculty of Economics in Zagreb, the Faculty of Law in Zagreb and other interested subjects on the electronic communications market in the RoC, HAKOM's employees actively participated in the above-mentioned projects. HAKOM will concentrate particularly on defining the necessary knowledge and skills, on preparing tender documentation, on participating in the programme implementation and on further training of its employees.

e-Agency

E-Agency is a project for the transformation of HAKOM's activities through application of information and communication technology thus making HAKOM's activities more user-oriented. E-Agency also includes continuous adjustment of the processing and technological framework of HAKOM's activities with a view to achieving more effectiveness, optimum use of funds and more quality provision of the available services.

Although e-Agency is based on new Web 2.0 technologies, this is a new concept of operation of a regulatory authority based on transparency, collaboration and participation of all interested parties on the market of post and electronic communications. IT introduction into processes and services along with increased productivity creates possibilities for creation of innovative solutions to widen and facilitate access to HAKOM's regulatory services. Modernisation by means of information and communication technology ensures timely and quality information to all interested parties on the market of post and electronic communications.

The e-Agency programme is at the same time a strong e-Government based integrated information system oriented in the first place on the Internet-based approach through the communication channel agency-citizens and agency-economy.

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

E-Agency's architecture consists of three layers: IT infrastructure "back office" (information systems which are not exposed towards users) and "front office" (information system exposed towards users).

During initial use, back systems have demonstrated a need for the improvement of individual modules which is why adjustments and upgrades are carried out on the Enterprise Resource Planning (ERP), Document Management System (DMS) and Human Resources Management (HRM) system. 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.

Systems exposed towards external users have been built around a modern, strong portal including numerous electronic, Internet based applications such as e-Consultations (public consultation), e-Complaints, e-Portability, e-Licences, e-Market, e-Advice, e-Procurement, e-Employments 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.

All e-applications are based on the principle of a single application which is momentarily activated on the basis of user account parameters. HAKOM's website is based on a strong browser providing an overview of results according to relevant pages and documents containing the relevant words. Basic functionalities of the website intended for persons with special needs have been implemented.

Europe and the Republic of Croatia

Significant innovations and initiatives no longer come from the field. At the international level, emphasis has shifted to institutions from which innovative solutions are expected in order to stimulate the development the economy, of more efficient communication and of increased confidence of users

and satisfaction with their work. The vision of public services in the 21st century in developed countries is based on the concept of e-governments. E-government can be defined as a process of applying information and communication technology to the exchange of information between government authorities on one side and citizens and businesses on the other. The usual communication channels are the following: Government - citizens, government - buyers, government - businesses, government - government and government - employees.

The introduction of affordable services and transparent procedures coincides with a mature Web 2.0 technology which ensures prompt interaction with end users. Initiatives and programmes that are initiated must introduce new values and improve efficiency in accordance with needs and quick changes in today's society.

The Government of the Republic of Croatia, first and foremost with the e-Croatia programme, has been undertaking pervasive action in order to enhance the development of information society in the Republic of Croatia. The aim of the programme is to provide to citizens and businesses in the Republic of Croatia a high level of information services, the possibility of wide application and exchange of all kinds of information in such a manner as to enable their active participation in global development. By implementing the e-Agency, HAKOM supports Croatian integration into a common European electronic communications market and the upcoming pan-European e-Government services.

Focus and activities of HAKOM

In the year 2011 HAKOM will focus the e-Agencies programme on:

- further automation of the process depending on the possibilities of the Document Management System that will improve the monitoring of the course of activities and resolution of applications;
- developing a concept of open integration of the system by means of transaction interfaces in order to ensure automation of processes from one end to another
- endeavour that the user may perform all activities during a single visit, while the system makes sure that all departments competent for the resolution of the request are included
- offer, over the website, all services that will lead the user in an intuitive manner suggesting future actions that will prevent him from making mistakes when submitting applications;
- increasing security of HAKOM's information system;
- development and installing the set of new, web-based and consumer-oriented applications.

HAKOM's major activities within the e-Agencies programme in the year 2011:

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
i.	Implementation of the e-application: E-Licences	Automated and fast system for the issuing of vessel licences Application - payment - documentation.	IV quarter	N, 4258 IV
2	Implementation of the e-application: E-Licences	Unique interface for gathering information about employment candidates	I quarter	N, 4258 IV
3	Implementation of the e-application: Allocation table	Application enabling the display of a chosen part of the Allocation table has been launched	IV quarter	N, 4258 IV

4	Implementation of an e-application: Allocation of addresses and numbers	Application for keeping and browsing through addresses and numbers integrated with the database of ported numbers and operators' database	II quarter	N, 4258 IV
5	Implementation of an e-application: E-Procurement	Application for support to the public procurement system	I quarter	N, 4258
6	Implementation of the e-application: Database of operators of EC services	Service for operators from the submission of the application for the provision of services, creation of documentation and keeping of register.	I quarter	N, 4258 IV
7	Implementation of DMS statistical module	Monitoring of efficiency of management and resolution of cases enabled.	III quarter	N, 4258 IV
8	e-Market upgrade	Advanced reporting possibilities introduced.	III quarter	N, 4258
9	Process management	Automated process for the processing and calculating of travel orders	I quarter	N, 4258, IV

Regular activities				
No.	Activity	Result	% 11/10	Fin. plan
1	Document management	Improved registration, storage, scanning, exchange and browsing of documents	II quarter	N
2	Information system security	Information system security increased.	IV quarter	N, 4257
3	Maintenance of information systems	Reliable operation of information systems with minimal problems and controlled reaction and repair time	IV quarter	N, 4252
4	Organised training for work with information systems	Raising of information literacy and efficiency of employees	III quarter	N, 4213
5	Modernisation of IT systems' architecture	Efficient and modular platforms with acceptable maintenance costs	IV quarter	N
6	Refreshing the functionality of the web portal	Attractive portal, interesting to users	IV quarter	N, 4252

The implementation of the e-Agencies programme requires the necessary human and material resources. HAKOM does not have the necessary human resources for the execution of the programme and this is not under HAKOM's competence. For that reason, HAKOM will focus only on defining the architecture and specification of a particular application or a system, on preparing tender documentation, on supporting the implementation and integration applications and systems into the HAKOM's integrated information system, and on training the staff that will be using the application or the system. The applications and systems themselves will be bought ready-to-use by HAKOM or some national companies will be engaged in their development.

6.3 Goods, human resources and monitoring

Goods and human resources

Material resources necessary for performing HAKOM's proscribed tasks, that is the activities mentioned in the above chapters, will be defined in the financial plan. Specific activities, which are an integral part of projects and programmes, will be specified in under items of HAKOM's financial plan.

HAKOM will try to ensure the necessary human resources for the carrying out of the necessary tasks by increasing efficiency through the upgrading of processes and training of employees.

In this sense it is necessary to focus on:

- modelling and redefining business processes,
- market analysis
- development of broadband networks
- implementation of the project of cost models,
- regulation of the postal services market
- E-Agency project.

Strategic activities				
No.	Activity	Result	Completion	Fin. plan
1	ISO 27001	The launching of the programme of HAKOM's information security system will be prepared. (threats, risks, vulnerabilities and countermeasures - project specification).	III quarter	N

Regular activities				
No.	Activity	Result	% 11/10	Fin. Plan
1	Improvement of processes	Modelling and optimisation of HAKOMs business processes.	110	N
2	Learning of foreign languages	Continuation from 2010 New attendees (10 employees)	100	N, 4257
3	Acquiring a higher level of education	Continuation from 2010 New attendees (7 employees)	100	N, 4213
4	Training for cost accounting	Financial and accounting training (10 employees)	100	N, 4213
5	Training in Win 7 and MC Office 2010	Improvement of office management by using modern tools (150 employees)	100	N, 4213

Monitoring of activities

The monitoring of HAKOM's fulfilment of tasks (activities) shall be undertaken by managers or assistant directors responsible for their implementation. The results of monitoring are regularly reported at HAKOM's meetings chaired by the executive director. For bigger projects and

programmes there is a steering group which meets at least once a month and monitors objectives, goods and dynamics of project execution and helps with risk management. The results are presented to HAKOM's Council every six months.

7. List of abbreviations

Abbreviation	Full name
ACAA	Agreement on Conformity Assessment and Acceptance of Industrial Products
DAN	Database of addresses and numbers
CADPN	Central administrative database of ported numbers
CCA	Current Cost Accounting
CEPT	European Conference of Postal and Telecommunications Administrations
CERP	European Committee for Postal Regulation
COCOM	Communication Committee
DMB	Digital Multimedia Broadcasting
DMS	Document Management System
DRM	Digital Radio Mondiale
DTV	Digital Television
DVB-H	Digital Video Broadcasting – Handheld
DVB-T	Digital Video Broadcasting Terrestrial
CBS	Central Bureau of Statistics
EBU	European Broadcasting Union
ECC	Electronic Communication Committee
ECO	European Communications Office
EFIS	ERO Frequency Information System
E-GSM	Extended Global System for Mobile communication
EC	European Commission
ECM	Electronic Communications Network:
ENISA:	European Network and Information Security Agency
ERG	European Regulators Group
ERP	Enterprise Resource Planning
EU	European Union
EUROSTAT	Statistical Office of the European Union
FAC	Fully Allocated Costs

FGSM	Fixed Global System for Mobile communication
FM	Frequency Modulation
GSM	Global System for Mobile Telecommunications
GSM-R	Global System for Mobile Communications on Railways
HAKOM	Croatian Post and Electronic Communications Agency
HCA	Historic Cost Accounting
HCM	Harmonised Calculation Method
HDTV	High Definition Television
HRM	Human Resource Management
HT	Hrvatske telekomunikacije d.d.
IMT	International Mobile Telecommunications
IPA	Instrument for Pre-Accession Assistance I
IPTV	Internet Protocol Television
IRG	Independent Regulators Group
IT	Information Technology
ITU	International Telecommunication Union
LRIC	Long Run Incremental Costs
CMC	Control and Measurement Centre
MF/HF	Medium/High Frequency
MSTI	Ministry of the Sea, Transport and Infrastructure
MUX	Multiplex
NGA	Next Generation Access
NGN	Next Generation Network
NPIEU	National Programme for the Integration into the EU
OG	Official Gazette
P-t-P	Point to Point
P-t-MP	Point to Multipoint
RF	Radio frequency
RoC	Republic of Croatia

R&TT.	Radio equipment and telecommunications terminal	
RSC	Radio Spectrum Committee	
RSPG	Radio Spectrum Policy Group	
SDTV	Standard Definition Television	
SMS	Short Message Service	
IS	Indicator System	
TCAM	Telecommunication Conformity Assessment and Market Surveillance Committee	
T-DAB	Terrestrial Digital Audio Broadcasting	
UHF	Ultra High Frequency	
UMTS	Universal Mobile Telecommunications System	
UPU	Universal Postal Union,	
VAS	Value Added Service	
VHF	Ultra short wave	
Council	Council of HAKOM	
VoIP	Voice over Internet Protocol	
WG NaN	Working Group Numbering and Networks	
WGSE	Working Group for Spectrum Engineering	
ECA	Electronic Communications Act	
PSA	Postal Services Act	