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INTERNET ENABLED PUBLIC SERVICES AS A DRIVER OF ECONOMIC GROWTH-CASE STUDY ECROATIA 2006 -

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Abstract: The Barcelona European Council called on the European Commission to draw up an eEurope Action Plan in order to widespread penetration of ICT, as powerful driver of growth and employment. Availability of modern on-line public services through e-Government, e-Learning, e-Health and e-Business is to be secured by the Action Plan. The eEurope 2005 is succeeding eEurope 2002 Action Plan which comprises four separate but interlinked tools: policy measures, exchange of good practices, monitoring and benchmarking and overall co-ordination of existing policies.

Croatia is candidate for accession to EU by 2009, which means that Croatian Government has to implement eEurope Action plan 2005 and Commission's new strategic framework, i2010 – European Information Society 2010.

In first part of the paper authors are presenting overall framework of eEurope Action Plan 2005 as well i2010 strategic framework. For the purposes of the paper, authors have conducted a research availability of on-line public services through government, e-Learning, e-Health and e-Business in Croatia 2006. The results of the survey has been benchmarked to the results of similar surveys in New Europe countries.

Keywords: Internet, public services, eEurope, growth, employment, eCroatia.

1. INTRODUCTION

There are number of theoretical papers and empirical researches which are suggesting that economic growth in USA at the and of 90-ties in large extend is result of masive investments comming from public and private sector in research and development of information-telecomunication technology (further: ICT). Widespread of usage of Internet and related ICT for commercial purposes in the middle of 90-ties, gave further impuls on global economic growth. New business models have been developed which used Internet not only as communication but also as marketing and sales channel. Lot of "dot.com" companies has been established based on new Internet business models. After "dot.com hype" at the beginning of 2000 and following market correction, Internet business models were successfully integrated with traditional business models successfully creating "One Economy".

D. Novotny. Z. Sabati. Internet enabled public services as a driver of economic growth ...

Economic growth in EU stood behind the growth in other global regions, especially economic growth in USA, India and China. The Barcelona European Council, recognizing the fact that European economy is not growing fast enough, in order to create new employment, has called on Commision to draw up an *e*Europe Action Plan. The Plan should be focused on "the widespread availability and use of broadband networks throughout the Union by 2005 and the development of Internet protocol Ipv6...and security of networks an information, *e*Government, *e*Learning, *e*Health and *e*Business". The action plan was supposed to succed the *e*Europe 2002 action plan, which was part of Lisbon strategy. The principal goal of Lisbon strategy was to make European Union the most dynamic knowledge –based economy with improved economic growth and emloyment.

Major hypotesis in Lisbon strategy was that economic growth and employment will come from further development and penetration of ICT and Internet. Broadband technological development and multi-platform access to the Internet is offering significant economic and social opportunities. New services, applications and content would create productivity increase potential and create new markets. The growth will create new employment. On the other side, penetration of Internet will enable citizans more convenient access to information and improve communication, which will increase social cohesion and have impact on democracy. Development of broadband and service offerings is hanging on investments in infrastructure. Private investors will invest where the demand for services is allready on the market. Action is needed to improve broadband infrastructure investment dynamics in order to increase availability of advanced services. *e*Europe 2005 action plan is addressing a number of measures; on the demand side action on e-Governmant, e-Health, e-Learning and e-Business is designed to foster the development of new services. Public authorities can use purchasing power to aggregate demand and provide crucial pull for new networks.On the supply side the actions on broadband and security should advance the rollout of infrastructure.

Croatia is accession candidate. Croatian government is faced with chalenge to design own action plan, following the *e*Europe 2005 in order to cetch up with other EU Member States. In the first part of this paper major implications of *e*Europe 2005 will be presented. Croatian government established own agency, named *e*Croatia Office, in order to facilitate design and implementation of measures for stimulation of Internet enabled public services development. The Office performed two surveys on availability of public services by Internet. The results of 2006 survey is presented and analized in the second part of the paper.

Authors have conducted own surveys, desk research and case studies in order to test the hypotesis that Croatian Governmant is designing proper policies and measures in order to stimulate ICT infrastructure and Internet services penetration.

2. EEUROPE 2005 ACTION PLAN

Two major groups of measures and policies are called in action plan eEurope 2005 which should improve adoption and penetration of broadband and Internet technoogies in public and private sector within EU. On the one hand, a set of measures is aiming to:

- a. stimulate services based on broadband and Internet technology,
- b. stimulate development of Internet applications; and
- c. stimulate of content creation.

The services, application and content creation should cover both public services and ebusiness. On the other hand the Action Plan is adressing policies which should improve investments in broadband infrastructure and standardise Internet security. According to *e*Europe action plan, EU member states would until 2010 have:

a. advanced Internet enabled public services:

i.e-Government, e-City;

ii.e-Learning services;

- b. *e-Health* on line services.
- c. dynamic e-Business environment

Major barrier in most of member states is underdeveloped broadband infrastructure. Comparing to other global regions EU stood behind in liberalization and development of broadband and ICT, especially if EU will be compared to US and Japan. If rastructure investments were been to long subject to political economy, which resulted in high access prices and lower penetration rate. Implementation of *e*Europe 2005 policy measures at national and European level should ensure achievemnt of following major goals:

- a. adaptation of national legislative in order to avoid that legislation does not unnecesseraly hamper new services;
- b. to strenghten competition and interoperability;
- c. to improve acess to a variety of networks; and
- d. to demonstrate political leadership.

Action plan is calling public authorities in EU to act with focused measures and policies in the areas in which an added value could be achieved. Some targeted goals are:

- connecting public admnistrations, schools and healthcare to broadband;
- interactive public services, accessible for all and offered on multiple platforms (multiple channels)
- provide health services by Internet;
- removal of obstacles to the deployment of broadband networks;
- review of legislation affecting e-business;
- creation of a Cyber Security Task Force.

Action plan is facilitating exchange of good practices. Policy measures aare monitored by benchmarking of the progress made. Action plan is an invitation to the private sector to cooperate with Commission and Member States to realise *e*Europe objectives. If successful, the plan will have significant impact on growth and productivity, employment and social cohesion in Europe.

3. IMPLICATION OF EEUROPE 2005 FOR CROATIA

There is critical level of consensus within Croatian polity in the respect of EU accession till the end of this decade. Croatian economy will be within 3-5 years will formally join European integrated economy which is, according *e*Europe2005 action plan

and *i*Europe 2010 strategic vision is restructuring towards, knowledge based economy in which ITC and Internet as growth and employment drivers are playing very important role. Major issue for Croatian policy makers is to catch up developments of European action plan. The hypotesis is that Croatian government is allready implementing *e*Europe strategic framework.Using analitical tools developed in EU end performing own empirical reasearch, authors tested the hypotesis.

3. 1. THEORY-TECHNOLOGY TRENDS

Penetration of ICT and Internet related technology was very dynamic in the last couple of years. Technological progress, especially development of broadband, the third generation of wireless technology, and very dynamic growth in number of coverged wireline, cable and Internet services. drived further diffusion of Internet enabled pubic services. Researches in this area are indicating the technology trends and new expetations regarding Internet services and e-business.

European Commission published at the end of 2005 regular e-Business Report on the status and trends in ICT and Internet. Accoriding to the Report $[2,p\ 9]$, following trends could be indentified:

- Further migration towards broadband can be noticed in ICT development; in 2005 almost one third of Internet users accepted broadband;
- Development of e-commerce applications is continuing; in 2005 even 19% of businesses have implemented e-procurement applications, more that 17% implemented Internet marketing and sales applications;
- Difussion of RFIP shipment tracking technology within supply chane management can be expected;
- E-invoicing and standardisation in this segment of Internet enabled public services can improve adoption of online public services both by citizens and between the businesses;
- Corporations, but public sector as well, will be focused in the future on the implementation of e-CRM, Internet enabled applications for the support of client relationship management business processes.

It is believed that regonizable trends in penetration and adoption of Internet services could be a result of *e*Europe action plan implementation.

3.2. POLITICAL ECONOMY OF INTERNET IN CROATIA

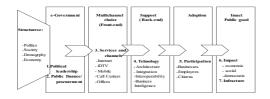
Privatisation of HT-Hrvatske telekomunikacije d.d (further: Croatian Telecom), major telecommunication and Internet services provider in Croatia, which hold the state monopoly until the end of 2004, didn't lead to real market liberalization. Croatian Telecom as incumbant took control over the backbone, but local loop infrastructure as well. New service providers were not enough funded to develop own infrastructure. Croatian Telecom continued with monopolistic business model in 2005. and 2006. Croatian government, which still controls 49% of common shares in Croatian Telecom, has not encouraged other utility companies, such as Croatian Electricity or Croatain Railways, the public companies which developed own broadband infrastructure, to offer the services on the market. Result of the policy is that "old player is still controlling the game in town".

Croatian Telecom began with investments in broadband infrastructure in 2004, starting with the offerings in 2005 without any stronger competitor on the market. Without real commpetition, broadband services prices are still remaining on the higest level in Europe.

This is obveously one of major barriers for stronger penetraton and adoption of broadband services.

3.3. INTEGRATED E-GOVERNMENT HOLISTIC CONCEPT

European Commission's Enterprise & Industry Directorate is monitoring developments in the implementation of *e*Europe 2005 action plan on EU level and i Member States. Survey and monitoring methodology has been developed by consulting firm Capgemini S.A, which has the mandate to conduct the benchmaring measurments. A holistic approach is developed for the measurment purposes.



Source: Capgemini S.A.

Figure 1. Integrated e-government measurment model

E-government policy impact holistic model is integrated approach of monitoring and measurment on penetrateion, adoption and impact of Internet enabled public services in major structures, such as:

- Politics and democracy;
- Social relationships;
- Economy; and
- Demographics.

The governments are acomplishing political leadirship role through implementation of integrated e-government concept, creation of optimistic environment and public call for investments in offerings of Internet services to private sector. Governmental role is not reduced only to the political goals, but with public investments in ICT infrastructure and Internet services is driving the market. Enabling public finance and public procurement by Internet, governments are not only reducing own expenditures, but improving transparency and democratic development as well.

Political economy of Internet is playing very importat role in transtion economies, such Croatian economy is. Public authoroties are responsible for creation of stimulating environment through higher investments and development of telecommunication infrastructure, liberalisation of access services and regulatory affairs. Market liberalisation should lead to access services price decrease and faster adoption of Internet. Further to investments in basic infrastructure by public sector, development of multi-channel platform is enabling penetration and driving the market on the "front-end". Within holistic model development in difussion of broadband nad penetration of "front-end" services has been measured. Because of needed heavy fundings in this segment, government is showing own commitment through development of infrastructure, policy measures and offering of online public services. Without development of Internet technology and application for support of processes on the "back-end", integration and consulting services, penetration of e-government and ebusiness could not be possible. Improvements and government policies on the "back-end" of e-government have been measured through integrated approach as well.

Implementation of e-government should bring new public value through social, democratic and economic impacts.

3.4. STATUS OF E-GOVERNMENT IN CROATIA MEASURED WITH HOLISTIC APPROACH

Croatian government recognized importance of Internet in pubic services. Establishment of *e*Croatia Office, which has role to streamline and monitor penetration of online public services in Croatia, Government made a very first step in implementation of *e*Europe action plan. It is the question remaining how far is Government really designing and implementing *e*Europe strategic framework for economic growth and employment.

Governmental *e*Croatia Office performed two surveys on level of penetration of online public services, the first one in 2004 and the second one early in 2006. Authors of this paper conducted own empirical reasearch in order to test to which extent e-government integrated framework has been implemented in Croatia.

3.4.1. Internet enabled public services survey

For the purposes of online public services surveys, *e*Croatia Office defined 12 public services which are Croatian authorities are offering both to citizens and 8 public services offered to businesses.

Citizens	Businesses
Income Tax Declaration	Social Contribution for Employees
Job Center Services	Corporate Tax
Social Security Benefits	VAT
Personal Documents	Registration of a New Company
Car Registration	Dana Submission to the Statistics
Builiding Permissions	Custom Declaration
Declaration to the Police	Evironment-related Permissions
Public Libraries	Public Procurement
Birth and Marriage Certificates	
Enrollment in Higher Education	
Announcement of Moving	
Health-related Services	

Table 1. Public Services in Croatia

Source : *e*Croatia 2006

For the measurment purposes it has has been defined the identical four stage assessment methodology which was used in *e*Europe monitoring surveys:

Stage 0 - No available information: The information neccessary to start the procedure to obtain this public service is not available on-line;

Stage 1 - Information: The information neccessary to start the procedure to obtain this public service is available on-line;

Stage 2 - One-way Interaction: The publicly assesable website offers the possibility to obtain in a non-electronic way (by downloading forms) the form to start the procedure to obtain this service;

Stage 3 – **Two-way Interaction:** The publicly assesable website offers the possibility of an electronic intake with an electronic form to start the procedure to obtain this service;

Stage 4 – Full electronic case handling: The publicly assesable website offers the possibility to completely treat this public service via the website, including decision and delivery;

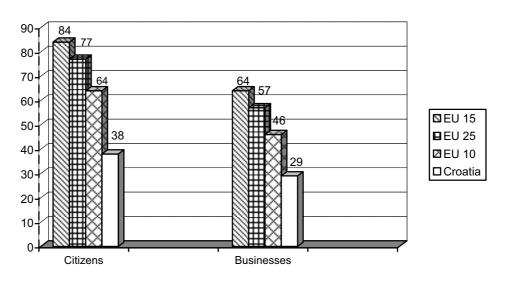
The research which has been conducted in 2006 encompassed all Croatian counties and City of Zagreb. The resuls have been braked down in two major categories and in four clusters. Below table is presenting the results of the survey conducted in February2006:

Public Service	Availability	Public Service	Availability
	in %		in %
1. Income generating services	47,69	3. Returns and transfers	32,95
- Corporate Tax	50,00	- Health-related Services	35,00
- VAT	50,00	- Job center Services	22,22
- Income Tax	50,00	- Public Libraries	53,15
- Custom Declaration	75,00	- Poblic Procurement	26,85
-Social Security for Employees	13,46	- Social Benefits	27,55
2. Registration	36,32	4. Permits and licences	35,64
- Car Registration	19,64	- Personal Documents	37,78
- Data Submission to Statistics	44,44	- Environmental-rel.	40,91
- New Comapany Registration	31,67	Services	
-Announcement of Moving	24,64	- Enrollment to Higehr Edu.	29,63
-Birth&Marriage Certificates	61,23	- Building permit	34,26

Table 2. Results of public services on-line availability survey

Source: eCroatia 2006

In parallel to this empirical reserach a benchmaring study has has been developed in order to establish monitoring tool which is suggested by *e*Europe action plan



Source : eCroatia 2006

Figure 2. Public services online availability benchmarking

Empirical research on the public services online availability in Croatia 2006 has indicated that: a) 38% of public services to citizens and 29% oublic services to bussiness sector are Internet enabled. In comparison to the survey from 2004, which suggested that only 3% of public services to citizens and 5% services to business were available by Internet, there is substantial progress.

Benchmarking study is showing, on the other hand, that within New Europe member states (EU 10) public services to citizens are available in 64% of cases. Services which are offered to businesses have availability of 46%. Public services in Estonia are 80% available on line, which makes this country the most advanced economy within New Europe in respect of Internet penetrartion in public sector. Within EU 15 Member States, Sweden has 88% availability, Ireland 87%, United Kingdom 85% and Finland 84% both for citizens and businesses.

Croatia can be compared with Lithuania, Poland and Slovakia, new member states in which public services are available on line ln less then 40% of cases. Slovenia, very successful newcommer into EU with which Croatia because of common political history is often compared, has 60% availability. Related high availability of Ineternet enabled services in public revenue cluster of services (47,69%) suggest that Croatian government recognizes this as priority.

Penetration of Internet in education sector in one of major goals in *e*Europe 2005. Services offered by high education organizations in Croatia are available by 29,63% which indicates that the Government has neither designed nor implemented policies in this for the penetration of Internet in this extremly important sector of public services.

Low availability of online public procurement services (24,64%) can indicate certain transparency deficit which has democracy implication.

Analysis of results of survey on public services online availability in Croatia 2006, can be summarized as follows:

- a. public sector in Croatia is offering much more services by Internet in 2006 than in 2004; in this respect Croatia is catching up New Europe member states;
- b. the Government is focused on Internet penetration in public revenues cluster of services, but education (*e*Learnig) is still staying behind.

3.4.2. e-Government status in Croatia 2006

Online public services availability measurments which has been performed by *e*Croatia Office in 2004 and 2006 is indicating certain progress, but benchmaring is suggesting that Croatia is following *e*Europe framework with great delay. Internet enabling public services is representing only one componet of *e*Europe strategic plan. Authors tested the hypotesis that Croatian government is implementing own e-Government action plan. Using the holistic approach, authors performed reasearch in order to check the status of implementation of *e*Croatia framework in addition to online public services availability. Empirical survey was conducted in May and June 2006. Measurment encompassed following:

- a. measurment of the progress in implementation of *eEurope* strategic framwork in Republic of Croatia as future EU Member State;
- b. measurment of ICT penetration level and relevance for public and business sector;
- c. testing of hypotesis if Croatian government, with designed policies, is stimulating and encouraging penetration of ICT and implementing e-government integrated concept;

3.4.2.1. Methodology

Identical four moduls methodology, which has been suggested by the Commission is used in this survey.

	Module 1	Module 2	Module 3	Module 4
Process	Public sector	Business sector analysis	Public value	Results
	analysis			interpretation
Methodology	Policy analysis, analysis of front- and back end structures	Empirical reasearch on ICT penetration and relevance; sample 100 largest Croatian enterprises measured by turnover in 2005	Public value evaluation	

Table 3. Survey approach

Source: European Commission, adaptation by authors

3.4.2.2. e-Government policies

Implementation of e-government integrated concept and relevance for society structures was analysed within the first survey module. The government policies, which should improve and stimulate implementation of e-government strategic framework ,were cut into three segments, as follows:

- e-Government
- *e*-Health
- *e*-Learning

Following assessment grades have been used:

- Grade 1 there is no designed government policies
- Grade 2 there are partial policies
- Grade 3 there is non- integrated e-governmant policy
- Grade 4 there are integrated e-government policy

Seg	ment	Grade
1.	e- Government	2
1.1.	Public finance	2
1.2	Public pocurement	2
2.	e-Health	2
3.	e-Learning	2
4.	Polititical leadership	2

Table 4. e-	 Government po 	licies survey result	S
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Policy analysis results are suggesting following conclusions:

- Croatian government partialy implemented some strategic directions of egovernment concept integrated in *e*Europe 2005 set of political measures;
- there is no integrated e-government approach which could be estimated as *e*Europe action plan implementation;
- Croatian government is not achieving no substantial progress in e-Health and e-Learning implementation;
- Croatian government is not achieving any major progress in political leadership which is crucial component in integrated *e*Europe strategic framework.

3.4.3. Internet infrastructure survey

Within integrated measurment model it is very important to test the infrastructure development status on the front-end and the back-end. If and when the public sector will be able to offer public services to the citizens and businesses to full extent, intefrace channels with service users can be certain bottleneck. Infrastructure and front-end development insvestments could not only rely on private investors but the Government should either invest within fiscal capacity or to set the policies and measures which could encourage private investors.

3.4.3.1 Front-end

Without developed broadband ifrastructure but the front-end (multi)channels, egovernment can not be successfuly implemented. Authores conducetd a survey on infrastucture and access services supply side for following services:

- Broadband services
- Interactive digital TV services (iDTV)
- Cable Internet and TV
- Wireless access (UMTS)
- Public Internet corners

Competitivness of Internet channels on the front and is one of key factors for difussion and penetration of Internet services. For measurment and assessment purposes therefore hase been used a standard four grade competitivness measurment framework:

- Grade 1 -there is no service provider on the market
- Grade 2- service is offering only one provider
- Grade 3- service is offering not more than 3 provides -- semi-competitive market
- Grade 4- service is offering more than 3 providers -- competitive market

The survey results are exibited in following table:

Table 5. Internet channels competitivness survey results

Cł	nannel	Grade
1.	Broadband	2
2.	iDTV	1
3.	Cable Internet and TV	3
4.	Wireless access (UMTS)	2
5.	Public Internet corner	1
6.	Front-end everage grade	1,8

Croatian Telecom has developed own broadband infrastructure, which other service providers are using as well. This is close to monopolistic situation and the result is that access services prices are still extremly high. Slightly better situation is on cable access services. Overall situation on the Internet access services in Croatia can be described as early stage of market liberalization.

3.4.3.2 Back-end

Integrated mesurment model is suggesting to check market situation on the back-end. Penetration of Internet services, beside the Internet infrastructure, is depending on the offerings of applications which are enabling Internet services and e-business. This segment of integrated e-government implementation approach is very important in respect of economic growth and new employment. New companies which are developing Internet enabled business models, application vendors, consulting companies and service providers are creating new market dynamic. Market competitivness on the back-end has been checked with empirical survey, in following market segments:

- Busienss nad technology consulting services;
- ICT and Internet technology integration services;
- Applications development and standard solution services providers;

For the measurment has been used four grade framework, as follows:

- Grade 1-there is no service provider;
- Grade 2-there is only one service provider;
- Grade 3-there are less than 3 service provider --semi-competitive market
- Grade 4- there are more than 3 service providers -- competitive market

The survey results are exibited in following table:

Table 6: Beck-end services market competitivness survey results

Services	Grade
1. Busienss nad technology consulting services;	4
2. ICT and Internet technology integration services;	4
3. Application development and standard solutions implementation srervices providers	
4. Back-end everage grade	4

The survey is indicating a competitive market situation on the back-end.

3.4.4. Penetration of ICT and e-business in business sector

Major goal in eEurope 205 action plan is to push economic growth and new employment through faster penetration of ICT and Internet enabled services in public and business sector. The survey which has been conducted by *e*Croatia Office in 2006 on availability of public online services is indicating not fast enough penetration of Internet in public sector. Authors conducted empirical research on penetration of ICT and Internet in business sector in Croatia on the sample of 100 largest domestic companies measured by turnover in 2005. In this survey has been used the methodology which has been used in similar empirical surveys within *eBusiness Watch* surveys sponsored by the Commission. The sample of 100 largest businesses in Croatia has been clustered by industries, as follows:

- Food & Beverage
- Textile industry
- Publishing and media
- Pharma industry
- Machinery

- Civil engeneering and building materials
- Turism
- Telecommunications and IT services

The survey has been conducted in May and June 2006. Penetration and relevance of Internet for the sample of largest Croatian businesses has been surveyd through penetration and relevance in following segments:

- Adoption of *broadband* ;
- Adoption of ICT for inovation and R&D;
- ERP/SCM systems implementation and Internet integration;
- Online procurement;
- Internet sales and marketing

Penetration, adoption and overall relevance has been measured by following grades:

- Grade 1-low relevance, penetration in 0% 24% of surveyed companies
- Grade 2-everage relevance, penetration in 25%-50% surveyed comapnies
- Grade 3-above everage relevance, penetration in 51%-75% surveyed comapnies
- Grade 4- high relevance penetarton in 76%-100% companies

The survey results are exibited in following table:

Table 7. The relevance of ICT and e-business in 9 Croatian busines	s sectors
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Sector	Adoption of broadband	ICT for inovation	ERP/ SCM	Internet procurement	Internet marketing	Overall relevance
Food & Beverage	1	1	2	1	1	1
Textile industry	1	1	1	1	1	1
Pharma industry	3	4	4	3	2	3
Pubisihng and media	3	4	2	2	3	3
Machinery	1	1	1	1	1	1
Cicil engeneerig / build. Materials	1	1	1	1	1	1
Turism	2	2	1	2	3	2
Financial srvices industry	4	3	1	1	3	2
Telecommunica tions / IT services	4	4	4	3	3	4

Relevance of ICT and e-business within Croatian business sector is very low within traditional sectors. Companies in financial services industry, telecommunications and IT services industry are recognizig high relevance of ICT and e-business. Companies in these business sectors, which has been suggested by some other empirical researches, are the most powerfull drivers of economic growth in Croatia.

4. CONCLUSION

Penetration of ICT and Internet technology in Croatian public and busines sector is still very low. Analysis of the empirical surveys conducted by *e*Croatia Office and surveys conducted by authors of this paper are leading to the following conclusions:

- i.Penetration of ICT and Internet in Croatian public and private sector as of June 2006 is not catching up EU Member States, which are implemening *e*Europe 2005 action plan; in that respect Croatia can be commaperd with Poland and Lithuania, Member States with the lowest penetration of ICT and Internet in public and business sector;
- ii. In spite of substantial improvements in the last 2-3 years, availablity of Internet enabled public services in Croatia is still below EU 25 everage; only 38% of public services are online available;
- iii.Croatian government has neither designed own action plan, which should follow *e*Europe 2005 strategic framework, nor is not performing political leadership with Internet enabled public services;
- iv.Relativly low relevance of ICT and e-business in Croatian business sector, excluding financial services insustry and telco/IT services industry, is indicating that this sector is not recognizing ICT and Internet as growth drivers as well;
- v.Government policies and political economy of telecommunicatio services industry in Croatia is one of major barriers in further penetration and adoption of broadband and Internet; as result of privatistion and market regulation policies instead of faster liberalization and access services price decrease, private monopoly has replaced state monopoly and control over the infrastructure.

Having in mind EU accession ambitions, which are driving Croatian government in foreign policy, current and future Croatian governments should develop eCroatia 2010 action plan. Following major policy impacts could be summarized as follows:

- i.In order to improve competitivness on the Internet infrastructure market, new set of policies and measures should be designed and implemented;
- ii.Promote the competitivness on the ICT market by removing of legislative barriers;
- iii.Improve political leadership through faster penetration of Internet enabled public services;
- iv.Develop and promote Internet standardisation;
- v.Promotive stimulative climate for ICT inovation in private sector;
- vi.Promote and provide incentives for adoption of ICT and Internet in SMEs sector.

If economic gowth and employment is one of major political goals fo Croatian government, which should be, relevance of ICT and Internet penetration in public an private sector should be focal point in the future.

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