CROATIA

ZaMirNET[1]
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Introduction

According to Croatian Chamber of Commerce documents, the Stabilisation and Association Agreement between Croatia and the EU is the driving force for further developing the information society in the country. General objectives include preparing citizens for the digital age, attracting investment, and the delivery of e-services. In January 2002 the Croatian Parliament adopted a strategy entitled Information and Communication Technology – Croatia in the 21st Century, and endorsed the General Measures for the Development of the Information Society. The government's programme for the period 2003 to 2007 has included the e-Croatia 2007 Programme[2] among its priorities. This programme sets out measures for encouraging the development of science, technology, and information and communications technology (ICT) in particular. The government plans to finish networking the education system and to allow citizens easier communication with the public administration, focusing on health, justice and other services via the internet (CCE, 2003).

Country situation

Network infrastructure

The Croatian telecommunications network is almost 100% digital, which is not to be found in any other Central European country. The installed fixed network capacity for Deutsche Telecom's T-Com, previously the sole service provider, is sufficient for 2.33 million subscribers, with actual subscribers currently numbering 1.7 million.

The Croatian government followed a trend towards privatisation on the grounds that state ownership is no longer deemed necessary for the achievement of national communications objectives, and because such ownership may interfere with fair competition. Privatisation was also seen as a welcome source of revenue for the state.

Nevertheless, the sale of 35% of Croatian Telecom (HT) to T-Com in October 1999 (later a further 16% was sold)[3] did little to immediately liberalise the telecommunications environment. The HT monopoly was part of the conditions of sale, and an exclusivity period was extended for two years from 2003 to 2005. This was a significant impediment to the use and growth of ICTs in Croatia.

There is a general agreement that telecommunications policies should promote a fair and competitive environment, and that this can best be achieved by having a regulatory function that is separated from telecommunications operations. Unfortunately, the "independent" telecoms regulatory body, the Croatian Agency for Telecommunications,[4] is seen as an employer for former HT employees, thereby diminishing its objectivity and independence.

Croatia's regulatory framework is a hybrid, with elements from both the 1998 and 2003 acquis communautaire.[5] A recent bylaw sets out procedures for market analysis according to the 2003 acquis. Until the market analysis is completed, the current balance of power in the telecommunications market will continue (Cullen International, 2006).

Penetration rates

The penetration rates of the most important operators and companies active in fixed telephony show that T-Com is still the main access and service provider (68% of the market), followed by CARNet (21%), Iskon Internet (10%), and Globalnet and VIPonline, each controlling 2.5% of the market.[6]

The number of internet users per 100 people is 33.6 (Cullen International, 2006). According to the e-Communication Household Survey in Croatia, 31% of households in the country have internet access and 5% have broadband access. According to market research conducted by GfK,[7] 51% of internet users are male and 49% are female. GfK also says 48% of households have a PC. The main obstacles to increasing the number of internet users are falling living standards and the lack of English language skills (EC, 2006).

Under the Telecommunication Law of 1999, voice over internet protocol (VoIP) service was considered a part of internet services, so that no further legislation was needed. Under the Law of 2003, VoIP has been defined as a separate service requiring a licence. Moreover, the licensing fees for VoIP were initially kept unusually high: a EUR 33,000 (USD 43,500) once-off fee, plus an annual fee of 1% of revenue. The bylaw on payments of fees for provision of telecommunications services amended on 17 February 2005 lowered the once-off fee by a factor of 50 to EUR 670, and the annual fee was lowered tenfold to 0.1%.[8]

According to the e-Communication Household Survey, 71% of households have fixed telephone access and mobile telephone access, 19% have fixed telephone access but no mobile telephone access, 8% have mobile telephone access but no fixed telephone access, while 2% have neither fixed nor mobile telephone access. Only 6% have ISDN,[9] compared to 15% of EU households.

Croatia has local call tariffs that are moderately above the EU average, and international call tariffs that are around the EU average (Cullen International, 2006). Generally speaking, the average spending on telecommunications of around 4% of GDP in the South East Europe (SEE) countries is significantly higher than in the EU, where the average is around 2.7% when cable TV revenues are included. (Croatia's GDP per capita in 2005 was above EUR 6,000 (USD 7,900) which is the highest in SEE) (Cullen International, 2006).

1 <www.zamirnet.hr>.

2 <www.e-Croatia.hr>.

3 The state currently owns 42% of HT, and the Fund for Homeland War Veterans the remaining 7%.

4 <www.telekom.hr>.

5 Body of EU legislation.

6 T-Com recently bought Iskon Internet, strengthening its superior position in the market.

7 GfK - the Centre for Market Research Data, Gradjani i Internet 2006, (<www.gfk.hr/press1/internet.htm>).

8 *Ibid.*

9 Integrated services digital network, an international standard for switched, digital dial-up telephone service for voice and data.

IT economy

A study conducted by the United States Agency for International Development (USAID) in 2000 concluded that Croatia has tremendous potential to create an IT[10] economy: it has an excellent fibre optic backbone network and the necessary intellectual capital (USAID, 2000). Yet the utilisation and deployment of ICTs remain quite low, largely due to the high cost and barriers to entry caused by the HT/T-com monopoly, and the lack of an ICT strategy in government.

During the 1990s the ICT sector in Croatia gradually lost its leading position among Central and East European transition economies, a position built on the country's previous openness (then within the former Yugoslavia) to Western influences. The war in the first half of the decade, badly managed privatisation, the government's lack of an industrial policy, a sluggish economy, and the limitations of a small market have caused the Croatian ICT industry to lag well behind those of Slovenia, Hungary, the Czech Republic, and even Slovakia. While the telecom sector and the IT sector stem from the same environment, they had different starting positions and have each performed differently (CEA, 2006). Surging demand for telecom services from households, enterprises and the public sector, and lucrative profit opportunities, fuelled the inflow of USD 2.5 billion in foreign direct investment into the country.

In 2002, small IT companies (with up to 10 employees) were dominant in the market (making up 86% of the total number of IT companies). Their share of employment was 49%, and their share of revenue was 35%. At the same time, the 93 largest companies (with 51 or more employees) accounted for 15.4% of all employees in the sector and for 10% of total revenue (CCE, 2003).

In 2004, ICT firms constituted 2.1% of the total number of enterprises in Croatia and contributed 5.7% to the country's total business revenue. ICT exports accounted for 2.4% of the country's total exports of goods and services, while ICT imports constituted 4.7% of total imports. Those employed in the ICT industry accounted for 2.9% of the total business workforce in Croatia (CEA, 2006).

From 1999 to 2005, the Croatian government invested HRK 730.46 million (USD 122.15 million) to procure IT and communications equipment and software programmes. Annual ICT capital expenditures declined in 2000 and again in 2004, both of which were election years. (It appears that central government ICT spending freezes during the change of administration. Insiders claim that one to two quarters before the elections, and two to three quarters after, the ICT activities of the administration slow down dramatically) (CEA, 2006).

Benchmarked against several other diverse countries (i.e. Slovenia, Austria, Ireland and the EU-25)[11] Croatia has the lowest share of ICT spending in its state budget. Particularly significant for the comparison is the case of Slovenia, whose ICT spending is approximately three times larger than Croatia's. In 2004, Croatia's ICT spending was only 36.4% of the average ICT spending of the EU-25.[12]

National ICT strategy: e-Croatia

The country's ICT strategy was developed and adopted during the mandate of the centre-left Ivica Racan government (before 2003), while the subsequent implementation plans came from the centre-right Ivo Sanader government, by definition more inclined towards new neoliberal public management practices. The first law passed by the new government dealt with changes in the structure of the government itself, and founded four new central state administrative offices, among them the Office for e-Croatia 2007. The e-Croatia 2007 project aims to enable citizens to communicate with public administration through the internet.

The Central Administrative Office for e-Croatia analysed different stages in the online availability of services. It states that significant improvements have been made since 2004. In December 2004 public services for businesses scored an average of 5.73%,[13] and public services for citizens 3.36%. In 2005 public services for business scored 29.77%, and public services for citizens 38.22% of availability.

However, the project has run into difficulties. While a lack of coordination between the ministries responsible for Croatia's overall ICT strategy has impacted on the project,[14] it has been difficult to properly evaluate the efficiency of e-Croatia 2007. The project's operational plan explicitly stated that it will publish quarterly progress reports on its website, but only one report per year has been published (Miosic-Lisjak, 2005).

Moreover, the change of government demonstrated a shift of focus away from e-democracy towards e-government, which is a worrying factor. It is quite possible to imagine a fully functioning and efficient e-government which lacks other aspects of good democratic governance, to the extent that it actually facilitates *undemocratic* governance in which governments use ICTs to control their citizens, rather than vice versa (Miosic-Lisjak, 2005).

Open source software policy and interoperability

Restricting information systems to proprietary programme code that can be maintained by a single service provider only is considered one of the most important obstacles to attaining the goals outlined in the EU's new i2010 programme.[15] On 12 July 2006, the government adopted a free and open source software (FOSS) policy.[16] In doing so, Croatia has joined a group of countries, predominantly members of the EU, which have realised the importance of the use of open source software in the public sector.

According to the deputy state secretary for e-Croatia, interoperability is one of the key challenges for Croatia. The objective of the EU IDABC[17] programme is to establish a framework which will enable the harmonious delivery of pan-European e-public services among public administrations of member states. By participating in this programme, Croatia is getting involved in the process of developing an e-public administration programme in the EU and a European interoperability framework. In line with this, the country has begun to develop open technical specifications for electronic public tenders within the framework of implementing the European Commission Action Plan.[18]

10 IT is used here to mean primarily hardware and software used in the office or home environment. ICTs includes telecommunications infrastructure.

11 The study was done by IDC, a market intelligence and advisory company. (<www.idc.com>).

12 *Ibid.*

13 The online availability of services is measured on a scale of 0 to 4. This is then converted to a percentage.

14 Absurdly, two portals have claimed to be the gateway to the country's "one-stop shop".

15 i2010 is a comprehensive strategy for modernising and deploying all EU policy instruments to encourage the development of the digital economy. See: <ec.europa.eu/information_society/eeurope/i2010/introduction/index_en.htm>.

16 Open Source Software Policy (<www.e-Croatia.hr>).

17 IDABC stands for Interoperable Delivery of European e-Government Services to Public Administrations, Businesses and Citizens (<europa.eu.int/idabc>).

18 <www.e-Croatia.hr>.

Participation

The participation of citizens in ICT policy development in Croatia is rather limited. The government and its relevant institutions have not encouraged an inclusive, multi-stakeholder environment.

While the Croatian Agency for Telecommunications (HAT) announces public online discussions on its website, participation is not properly facilitated. This particularly refers to a lack of technical and policy development knowledge needed for citizens to properly participate. However, some efforts have been taken by organised consumers. For example, the Croatian Association of Consumers (<www.huzp.hr>) has reacted to the high prices and lack of some telecommunication services, while the Association of Consumers (<www.potrosac.hr>) has raised questions about ownership over distributive telephone channels (DTK).[19]

One of the most active associations seems to be Telemah, the Association of Dissatisfied Users of Telecommunication Services (<www.mreza-telemah.info>). Telemah monitors activities in the ICT sector – from public procurement of IT services and hardware to ICT policy. In 2006 the association organised a survey of the public's understanding of the telecommunications market, including the ownership of DTKs. According to the survey results, most citizens think that the DTKs are owned by the public.[20]

When it comes to the public procurement of telecommunication services, the situation is also worrying. According to Telemah, out of 21 tenders in January 2006, eight were concluded in direct negotiation (exclusive negotiations with a prospective provider or buyer without a prior competitive process), four were cancelled, and only nine were completed according to principles of good governance, allowing all telecommunications companies to compete. The total value of contracts concluded in direct negotiation processes in January 2007 was HRK 3.86 million (USD 690,000).

Engagement has often meant opposition. For example, T-Zombix[21] became a prominent blogger writing about all aspects of the telecommunications sector, including privatisation, monopolies, censorship, etc. He became known to a wider audience when the government ordered his website *Zatvorena vrata* (Closed Doors) to be shut down. *Zatvorena vrata* was a mock website, created as a parody of the government project *Otvorena vrata* (Open Doors), which aimed to increase transparency and improve communication with citizens. The government's move raised concerns about freedom of speech on the internet.

Another organisation, Multimedia Institute (mi2),[22] sprang up in 1999 as a spin-off of the internet programme of the Open Society Institute-Croatia. Entering locally uncharted territory between social and cultural action and new technological developments, mi2 brought together an emerging generation of civil activists, media practitioners, urban culture actors and social and media theorists.

Over the past years, mi2 has become increasingly involved in cooperative activities at the local, regional and international levels that look to strengthen the cultural scene and advocate on behalf of the public domain. It is working towards initiating structural changes in a wide range of areas, including non-institutional culture, informal education, technology, intellectual property rights, and access to public resources.

In 2003 and 2004, mi2 implemented a project that aimed to localise Creative Commons licences. Four people, including two professional lawyers, worked on the translation and adaptation of the licences to the Croatian legal system. The Croatian versions of the licences were officially launched at the beginning of 2005.

Two organisations who have been working in the area of FOSS are equally relevant: HULK (<www.linux.hr>) and HrOpen (<www.open.hr>). HULK stands for the Croatian Association of Linux Users. The Association promotes the use of Linux, and facilitates networking and information sharing. HrOpen is the Croatian Association for Open Systems and Internet. It promotes open systems and organises an annual conference of Linux users.

In this context, we should also mention a recently announced initiative in the business sector, lead by the Croatian Association of Employers, to establish a cluster of open source software producers. The cluster should improve services to end users, but also enable FOSS producers (primarily small businesses) to develop joint products and command bigger market shares.

Conclusions

If one looks only at official statistics (such as internet penetration rates), the pace of information society development in Croatia might be considered satisfying. However, there is no data to assess the "digital divide" properly – including the "digital gender gap". As a result, no effective strategy to improve in these areas can be developed.

National strategies are not well coordinated and strategic documents often get tossed in the garbage bin with a change of government. As a consequence, the institutional continuity necessary for a systematic approach to any development initiative is ruined. It also seems that the majority of government efforts are aimed at increasing its revenue through improved tax collection (or similar objectives) and supporting the business sector, while other citizen needs remain neglected. This particularly refers to using technology for inclusion (e.g., of elderly persons with special needs that are poorly addressed by national strategies and even more poorly by various implementation plans.)

The participation of citizens in decision-making that affects the development of the information society in Croatia is minimal. While HAT regularly holds public online discussions, they are not well advertised in the media. The process is also not developed in a way that allows for maximum participation of all stakeholders. Agencies rarely hold workshops and public hearings or convene advisory committees or roundtable sessions before issuing new proposed regulations.

Publicly expressed criticisms of some of HAT's decisions come from civil society, political parties and members of Parliament. However, these do not seem to have any effect on the regulator's leadership.

HAT often comes across as ineffective. Theoretically it is in charge of the DTKs, but the evidence suggests that it has no control over them. For example, T-Com was allowed to cut cabling belonging to a competitor without consequences.[23] HAT publicly condemned T-Com's move, but did not take any action to stop it.

19 Telecommunication cables that are laid underground in cities.

20 The survey was organised around discussions that caught significant media attention on whether or not the government sold the DTKs to T-Com when privatisation started in 1999. The result of the dispute between the government and T-Com about DTK ownership is still not clear.

21 T-Zombix is a pseudonym. See: <www.t-zombix.net>.

22 <www.mi2.hr>.

23 The competitor assumed that the DTKs were public property and can be used by any operator who has a licence.

T-Com also launched several promotional campaigns for new services without informing the regulatory agency about the campaigns, as it is obliged to do. When HAT responded, the campaigns had already run in the media.

In line with the very few avenues for holding regulatory agencies accountable, the fact remains that the "public" that participates in the shaping of ICT policy is a narrow slice of the entire citizenry. Generally not many organisations and individuals (apart from business and public administration) are involved in national ICT policy. We believe this is mostly due to a lack of interest (or an inability to recognise what would be in their interest) and a lack of knowledge among the wider public, as well as a lack of appropriate channels (procedures and processes). Most citizens are reduced to mere consumers of telecommunication services.

Citizens who have engaged have done so using alternative channels and mainstream media. Yet if the goal is to improve the quality of public discussions, participation should be supported by training and educative content that is adjusted to the level of knowledge of "non-techie" citizens.

Steps should be taken to raise awareness among citizens and civil society organisations about ICT policy, and to search for allies in the business sector and opposition parliamentary parties. ■

References

CEA (Croatian Employers' Association) (2006). *Analysis of the Croatian ICT Industry, 1999-2004* [online]. Available from: <www.apiu.hr/docs/apiuEN/documents/149/1.0/Original.pdf>.

CCE (Croatian Chamber of Economy) (2003). *Information System and Statistics Department. Croatian ICT Sector* [online]. Available from: <www2.hgk.hr/en/depts/IT/hrv_ict_sektor.pdf>.

Cullen International (2006). *Report 2. Country Comparative Report. Supply of services in monitoring of South East Europe – telecommunications services sector and related aspects* [online]. Available from: <www.cullen-international.com/documents/cullen/cipublic/studies/balkan/report2comparative.pdf>.

EC (European Commission) (2006). *e-Communication Household Survey* [online]. Available from: <ec.europa.eu/public_opinion/archives/ebs/ebs_249_en.pdf>.

Miosic-Lisjak. N. (2005). *Searching for Godot. A study into good governance practices in Croatia's e-governance* [online]. Available from: <www.map.hr/dokumenti/searching%20for%20godot.pdf>.

USAID (United States Agency for International Development) (2000). *Croatia ICT Assessment* [online]. Available from: <unpan1.un.org/intradoc/ groups/public/documents/UNTC/UNPAN018420.pdf>.