ReSPA
Regional School
of Public Administration

ReSPA Regional Comparative eGovernment study

ReSPA Activities are
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1 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Foreword

During the last year ReSPA has, together with its eGovernment network members and respective regional and international experts, identified the need to conduct a Comparative Analysis on a regional level devoted to eGovernment in the Western Balkan region. The idea evolved directly from the need to support the current process and trends in Europe to learn about eGovernment, especially about its potentials, weaknesses/ bottlenecks and future development in the region. In the light of EU integration, the structure of the study reflects European good practice. In this regional comparative study, Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia and Kosovo [2*] are in focus. Much effort has been invested to highlight success, examine the lessons learnt and identify both past and current challenges faced by eGovernment in the Western Balkans. One of the most important features of the regional comparative study is the examination of the state of the art of eGovernment in Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia and Kosovo*. Particular focus is on eGovernment processes, including the provision of information, service delivery, interaction between Government to Government and Government to Citizen, as well as the equally important connections of Government with Business, i.e. the private sector.

The findings of this regional comparative study elaborate individual country developments in the Western Balkans, from the policy and strategic level in specific eGovernment institutional settings and implementations. In addition, the study investigates the best modalities to improve Government productivity, efficiency and effectiveness by providing a number of recommendations, and it attempts to address the challenges of the Western Balkan region as a whole. As a modality for transformation, the study offers guiding principles for regional project initiatives, and highlights the areas most needed to improve capacity building in Public Administrations. Suggestions for further horizontal and vertical networking within institutions, countries and the whole region by the means of eGovernment are also provided.

With this first regional comparative study, ReSPA is not only aiming to contribute to the life-long learning cycle but also to highlight the cross-cutting nature of eGovernment. It is also necessary to involve a wide spectrum of target audiences in its every day implementation, and more importantly to show that eGovernment is intrinsically connected with changes in the public sector more widely. It is also clear from the main conclusions that the importance of eGovernment is being acknowledged across the Western Balkans, and that more and more human and financial resources are being allocated with benefits already detected in all segments of the Public Administration institutional set up.

Suad Musić, ReSPA Director

2 *(This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence)

Contents

Acronyms

The following is an alphabetrical list of acronyms and their meanings used in the report.

CIO: Chief Information Officer
DAE: Digital Agenda Europe
eGovernment: Electronic Government
eID: Electronic Identity
eSEE: Electronic South Eastern Europe Initiative
EC: European Commission
EIF: European Interoperability Framework
EU: European Union
G2B: Government to Business services and relations
G2C: Government to Citizens services and relations
G2G: Government to Government services and relations
GIS: Geographical Information Systems
GPS: Global Positioning Satellite
ICT: Information and Communication Technology
ID: Identity
ISA: Interoperability Solutions for European Public Administrations Programme
IT: Information Technology
ITU: International Telecommunication Union
KPI: Key Performance Indicator
mGovernment: Mobile Government (using mobiles telephones and smart phones)
OECD: Organisation for Economic Cooperation and Development
PC: Personal computer
R&D: Research and Development
ReSPA: Regional School of Public Administration in the Western Balkans
RTD: Research and Technology Development
SOA: Service Orientated Architecture
UN: United Nations
UNDESA: United nations Department for Economic and Social Affairs
UNDP: United Nations Development Programme
UNCTAD: The United Nations Conference on Trade and Development
WB: Western Balkans
XML: eXtensible Mark-up Language

1 Introduction and objectives of the study

1.1 The Regional School of Public Administration in the Western Balkans

The Regional School of Public Administration (ReSPA) is a unique historical endeavour to support the creation of accountable, effective and professional public administration systems for the Western Balkans on their way to EU accession. The initial objectives behind the ReSPA initiative were to boost regional co-operation in the field of public administration, and strengthen administrative capacity and the development of human resources in line with the principles of the European Administrative Space.

The idea of an institution where civil servants from six ReSPA member countries (Albania, Bosnia and Herzegovina, Republic of Croatia[3], Republic of Macedonia[4], Montenegro and Republic of Serbia[5]) and Kosovo [6*] can receive training was originally put forward at the EU-Western Balkans summit held on 21 June 2003 in Thessaloniki.

In this context, ReSPA has indentified a need to produce a regional study on the Comparative Overview of the Provision of E-Services to citizens in the Western Balkan region.

1.2 Rationale for study

Interpretations of eGovernment are broad and divergent. Generally speaking, eGovernment can be defined as the use of ICT for delivering more effective and efficient government services to citizens, businesses or government agencies, by various electronic means of communication, such as the Internet, telephone, kiosks, wireless devices or other systems. eGovernment is still not widely used by government institutions in the Western Balkan (WB) countries, in particular in the domain of communication between government and Citizens (G2C) and government and businesses (G2B). However, it is very important for modern society, including for transition countries like the WB, to enable all relevant stakeholders (citizens, enterprises and organizations) to conduct necessary government tasks efficiently and effectively in terms of time, cost and organizational management.

It is thus essential to detect the extent to which eGovernment (as the use of information and communication technologies (ICTs) by government) is being developed in WB countries, how it is maintained and upgraded, its state of art in terms of human capital knowledge (knowledge and skills), and the needs for further upgrade through capacity building and training. eGovernment has been a very important field of exploration in the past few years in most countries around the world, including in the developing countries of the WB region.

If successfully implemented, eGovernment will bring wide societal benefits, such as greater efficiency, accountability and accessibility of public services. The main public institutions responsible for providing services to citizens must identify the critical factors needed for the successful introduction of eGovernment, both at the national and municipality level. They will need to focus on the following key drivers: legislative framework, ICT usage, institutional and capacity building including the training of personnel, municipal leadership support and appropriate funding. With the appropriate use of ICT, countries have the opportunity to make significant progress in a relatively short time period and to place themselves alongside other efficient, **citizen-oriented** governments.

As the next evolutionary phase in the field of eGovernment in WB countries, it is important to examine the modality of promoting and spreading it whilst improving government procedures, interacting with different target audiences (connecting citizens: eCitizens and eServices) and finally building the eSociety through external interactions. Comparative research analysis is required which aims to identify the technical and organizational relations of the interactions between government and (primarily) the citizens of the Western Balkan countries. This includes legal, institutional and organizational aspects, examples of good practices and the modalities required to achieve

3 Hereinafter referred to as Croatia
4 Hereinafter referred to as Macedonia.
5 Hereinafter referred to as Serbia
6 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

sustainability. *This comparative research must provide recommendations for continuous improvement towards a citizen self-service environment and the development of web-based solutions that are more focused on data-related eServices and not on data content alone*. Through the implementation of eGovernment availability, continuous access to a set of eServices for all citizens, non-governmental organizations, business entities and others can be assured.

Finally, the comparative research will provide recommendations for specific improvements to eGovernment to emulate state of the art standards in the provision of eServices to citizens in the ReSPA Member States and Kosovo[7*]. It will also support other core activities of ReSPA, mainly the eGovernment network as well as training modules encompassing this important topic.

1.3 Background to the study

There have been a number of previous studies and sources of information and data which this study has drawn upon and which provide a context for it. These include:

1. ITU "Measuring the Information Society"[8]
   - ICT infrastructure access, price, use and skills data (own data collation)

2. The UNDP's Electronic South Eastern Europe (eSEE) Initiative[9], including the 2010 Report "eGovernance and ICT Usage"[10]:
   - ICT infrastructure data (country surveys on legal infrastructure, institutional framework, accessibility, utilisation of ICT in public administration, utilisation of ICT within education, know-how and human resources (institutions related to eGovernance development, major providers of eGovernance solutions), major projects related to eGovernance development, active donors in the area of eGovernance and ICT, important events related to eGovernance (data from own surveys plus other sources like country statistical offices, ITU, World Bank, UN, commercial suppliers, etc.)
   - eGovernment availability data (from own web survey)

3. Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012[11]

4. UN eGovernment Survey 2012[12]:
   - ICT infrastructure data (from ITU)
   - human capital data (from UNDP and UNICEF)
   - eGovernment availability data (from own web surveys)

5. Eurostat eGovernment data[13]:
   - eGovernment availability data (from various sources including own surveys, country statistical offices, etc.)
   - eGovernment use data (from own telephone surveys)

6. EU eGovernment benchmarking data, 2010[14]:
   - eGovernment availability data (from own web surveys).

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7 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

8 ITU: "Measuring the Information Society 2011" http://www.itu.int/ITU-D/ict/publications/idi/material/2011/MIS_2011_without_annex_5.pdf see Annex 1, p. 152 for access, use and skills indicator values per country. Data exists for all ReSPA countries except Kosovo*(This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ opinion on the Kosovo declaration of independence).

9 http://www.eseeinitiative.org

10 UNDP: "*eGovernance and ICT usage report for South East Europe* ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

11 http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

12 http://unpan1.un.org/intradoc/groups/public/documents/un/unpan048065.pdf

13 http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/main_tables

14 http://ec.europa.eu/information_society/newsroom/cf/item-detail-dae.cfm?item_id=6537

In addition, two of the ReSPA countries, Croatia and Macedonia, have worked together with the European Commission to publish country eGovernment Factsheets available on the European ePractice portal[15].

1.4 Goal, objectives and outputs of the study

The overall goal of this activity is to enhance the level and quality of eGovernment in the six ReSPA member countries and Kosovo[16*] in a manner which both takes account of their specific and different needs as well as aligns them as closely as possible to European developments and standards.

This goal is achieved through three objectives:

1. Support the training organisations of the six ReSPA member countries and Kosovo* to help build the capacity of their public sectors to deliver efficient and effective eGovernment and particularly beneficial public eServices for citizens. (Examples of capacity building initiatives include training, mobility schemes, study visits, cooperation, best practices, etc.)
2. Identify appropriate regional project opportunities for the six ReSPA member countries and Kosovo*,particularly in relation to beneficial public eServices for citizens, and in relation to any available European and other international funding and support programmes.
3. Contribute to medium- and longer-term strategic eGovernment development in the seven countries, including recommendations for further initiatives, studies and policy enhancements.

Three outputs have been produced by the study to meet the above objectives:

1. A kick-off networking event, 17-18 September 2012, for presenting, discussing and agreeing the scope of work of the project, including a questionnaire template and work specification for the seven countries.
2. Country reports from the six ReSPA member countries and Kosovo* also used as input to the comparative study report in 3 below.
3. A comparative study report (this report) which compiles the reports from in the six ReSPA member countries and Kosovo*,presents a comparative analysis of them, and directly address the above three objectives.

15 http://www.epractice.eu/en/factsheets/

16 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

1.5 Structure of study

This main report of the study is structured as follows:

- Section 2: Global and European eGovernment context – overviews are provided of the main global and European eGovernment trends in order to provide an international context within which to examine the eGovernment needs of the Western Balkans. A review is also provided of international funding and support programmes for eGovernment which may be relevant for the Western Balkans. The eGovernment situation of the Western Balkan countries is then examined in this international context according to international benchmarks, and finally the headline conclusions from the 2010 eSEE Study on South East Europe are summarised.
- Section 3: Comparative analysis of eGovernment in the Western Balkans – this section summarises, compares and contrasts the evidence coming from the surveys carried out by the ReSPA member countries and Kosovo[17*] on their eGovernment status.
- Section 4: Summary status and strategic development of eGovernment in the Western Balkans – using the evidence presented in sections 2 and 3, this section draws together the common and disparate threads to provide a summary overview of eGovernment in the Western Balkans. It first focuses on the contrasts between the Western Balkan countries and then examines the opportunities and challenges they appear to share.
- Section 5: Country proposals for eGovernment capacity building in the Western Balkans – this section summarises and categorises the proposals made by the Western Balkan countries concerning capacity building for future ReSPA projects.
- Section 6: Country proposals for eGovernment project opportunities in the Western Balkans – this section summarises and categorises the proposals made by the Western Balkan countries concerning project opportunities in the Western Balkans.
- Main recommendations and conclusions – this section presents the main recommendations and conclusions of the study.

IMPORTANT NOTE:

- This main report contains data mostly collected from the key sources (UN, ITU, the eSEE report and the EC) which provide comparable coverage across all or most of the six ReSPA member countries and Kosovo* which are the subject of this report. Other data, particularly those collected by the countries themselves, are provided on an individual country basis where made available in the country profile annex.
- Similarly, this main report focuses only on the main issues selected to be highlighted for the purposes of this study. A great deal of additional detailed information is provided on a country by country basis in the country profile annex.

17 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

2 Global and European eGovernment context

In this section, overviews are provided of the main global and European eGovernment trends in order to provide an international context within which to examine the eGovernment needs of the Western Balkans. A review is also provided of international funding and support programmes for eGovernment which may be relevant for the Western Balkans. The eGovernment situation of the Western Balkans is then examined in this international context according to international benchmarks, and finally the headline conclusions from the 2010 eSEE Study on South East Europe are briefly summarised[18].

2.1 Global eGovernment developments

E-Government, or the use by governments and public administrations of Information and Communication Technology (ICT) to become more efficient in their own operations and to provide more effective services for citizens, businesses and other users, has been developing rapidly over the last thirty years. However, since the advent of the Internet about fifteen years ago, and in the last five years the widespread use of social media and mobile telephones, the impact and importance of eGovernment has increased dramatically across the world, as has the investments made in it. To understand and monitor these trends, many initiatives have been put in place by international organisations like the UN, ITU, World Bank, OECD and EU in the form of benchmarking, studies and best practice collections to support their members obtain maximum benefit from eGovernment. One of the main aspects analysed by these and similar organisations, as well as by individual countries and companies, has been to examine how public administrations should attempt to reform themselves to achieve these ends. The reform and strengthening of public administration is the key to the better exploitation of eGovernment and to increase the positive impacts it can have on economic and social development.

The International Telecommunication Union (ITU) publishes an annual series on *Measuring the Information Society*. The 2011 report[19] focuses on broadband issues such as capacity, speed and quality, as well as the role of education, income, gender, age and location in increasing Internet usage. Concerning broadband, the report concludes that there has been a rapid rise in broadband uptake over the past five years but that governments can do more to maximize its impact, such as creating an enabling regulatory framework and improving affordability through open markets. More broadly, the report suggests that the success of mobile phones can be replicated with mobile Internet access through smart phones, and that public access points can improve uptake, particularly among rural populations. It further suggests the provision of relevant content as a factor to improve usage.

The ITU's 2012 report[20] examines revenue and investment in telecommunications and usage from a global capacity view by measuring communication and capacity in bits and bytes (ITU 2012). The ITU emphasizes the importance of creating strong policy measures to support ICT development as well as its contribution to broader economic goals, for example by encouraging large scale investments in telecommunication infrastructure. Further, the report calls for more and better statistics on data traffic and network capacity in order to help policy-makers improve their understanding of the digital divide from a capacity point of view.

The United Nations Conference on Trade and Development (UNCTAD) publishes regular *Information Economy Reports*, most recently in 2011[21]. While it focuses on the private sector, important lessons can be learned by looking at the topic from this angle. For example, the overall recommendations provided all involve government: enhance the quality of ICT infrastructure, including opportunities associated with mobility, where governments are called upon to meet the needs of enterprises; enhance business use of ICT where government can help make services available and affordable; stimulate the ICT sector by creating competition, offering training, and increasing trust; and use ICT to support effectiveness and reform in order to reduce the cost of services and expand their reach.

18 http://www.eseeinitiative.org

19 International Telecommunications Union. 2011. Measuring the Information Society 2011. http://www.itu.int/ITU-D/ict/publications/idi/index.html

20 International Telecommunications Union. 2012. Measuring the Information Society 2012. http://www.itu.int/ITU-D/ict/publications/idi/index.html

21 UNCTAD. 2011. Information Economy Report 2011: http://unctad.org/ier2011/

In 2011, the Organisation for Economic Co-operation and Development (OECD) published an update to the *Government at a Glance* publication[22]. The report assesses government performance for 42 countries across 10 policy domains through 58 indicators of good government, including eGovernment strategies, e-procurement, and uptake of eGovernment services. A key finding, drawn from its 2010 Survey on eGovernment Structural and Economic Data, is that many OECD countries look to eGovernment as an enabler to public sector reform and a tool to do more with less in the aftermath of the financial crisis. For example, when asked about the main priorities of eGovernment initiatives, OECD countries most frequently listed reducing administrative burdens (cited by 96% of those who responded), followed by cost cutting (86%), spurring innovation (74%) and improving effectiveness and responsiveness (67%). In regards to usage, the report attributes low levels of eGovernment usage to the inability of vulnerable segments of society to use digital channels due to lack of awareness or lack of IT skills. At the same time, it views broadband proliferation and growth in mGovernment as potential solutions.

M-government (mobile government: the use by governments of mobile telephones and smart phones) is the theme of *M-Government: Mobile Technologies for Responsive Governments and Connected Societies*, published by the OECD in 2012 in collaboration with the ITU and with UNDESA[23]. The report highlights the growth of mobile communication technologies and their impact on economic and social development. Defining mGovernment as "the adoption of mobile technologies to support and enhance government performance and foster a more connected society," the report emphasis the growth in usage: the world went from a global penetration rate of 5% in 1998 to 55% in 2008 and towards an estimated 96% in 2018. According to the ITU World Telecommunication/ ICT Indicators database, access to mobile networks (2G, 3G, and 4G) is currently available to 90% of the world population, including 80% of whom live in rural areas. Given the rapid uptake, the report highlights the critical potential of mobile technologies for improved governance and economic and social progress.

In 2011, the World Economic Forum (WEF) published a report entitled *The Future of Government: Lessons Learned from around the World*[24] with transformation as the main theme. The report presents the FAST (Flatter, Agile, Streamlined, Tech-enabled) framework and recommends that governments move towards this approach in order to be effective in today's interdependent and rapidly evolving environment. To this end, the report highlights topics such as open government and open data, the civil service in the 21st century, metrics of government transformation, benchmarking public value from the perspective of citizens and cybersecurity for open government, giving examples of how governments around the world are using ICTs, including social media, to transform themselves and engage constituents. The report also notes that new metrics are needed in order to expedite the transformation of government and suggests a holistic framework to measure the various aspects of FAST (readiness) and its "public value" (outcome).

In a global view from Asia, the *2012 Waseda University International e-Government Ranking* from Waseda University[25] surveys the development of government websites worldwide and also identifies a number of worldwide eGovernment trends. These include cloud computing, social media, big data, business continuity plan, disaster recovery plan, digital inclusion, cyber security, mobile government and ICT applications for the ageing society.

2.2 European eGovernment developments

Many international organisations, including the UN, OECD and EC, undertake benchmarking of the status of eGovernment across different countries by measuring, for example, their respective levels of investment, public administration reform, supply of eGovernment services and the use of those services by users. The results can be used to identify each country's strengths and weaknesses in eGovernment, including the bottlenecks which need to be tackled and the strategies adopted, in order to improve the benefits obtained. This can also result in recommendations made to individual governments as to how they can better invest in eGovernment to achieve maximum impact.

22 OECD. 2011. Government at a Glance 2011.http://www.oecd.org/gov/governmentataglance2011.htm
23 OECD/ITU. 2012. M-Government: Mobile Technologies for Responsive Governments and Connected Societies.
24 WEF. 2011. The Future of Government: Lessons Learned from around the World. http://www.weforum.org/reports/futureGovernment
25 Waseda University Institute of e-Government. 2012. 2012 Waseda University International e-Government Ranking: http://www.waseda.jp/eng/news11/120224_egov.html

In December 2010, the European Commission published its latest benchmarking survey of eGovernment in Europe *Digitizing Public Services in Europe: Putting ambition into action*[26].
This was the culmination of ten years' work focusing on improving a basket of twenty eGovernment services (twelve for citizens and eight for businesses) based on a progressive five stage sophistication model to determine online service availability and sophistication across Member States: (i) information, (ii) one-way interaction, (iii) two-way interaction, (iv) transaction, and (v) targetisation/automation. According to the December 2010 measurement, both availability and sophistication have improved significantly over the ten years, as shown in Figure 1 and Figure 2.

Figure 1: Full online availability trend 2001-2010 timeline for EU27+

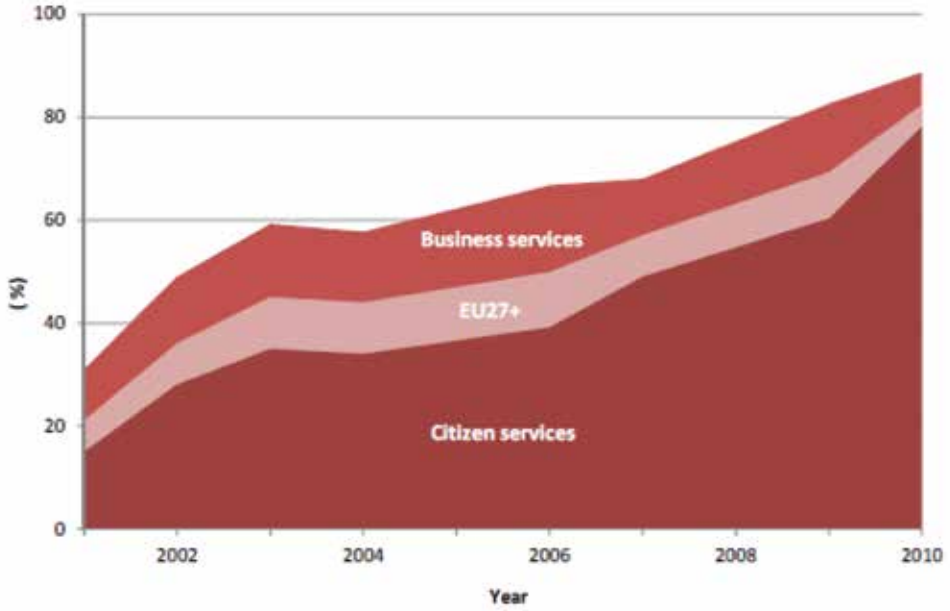
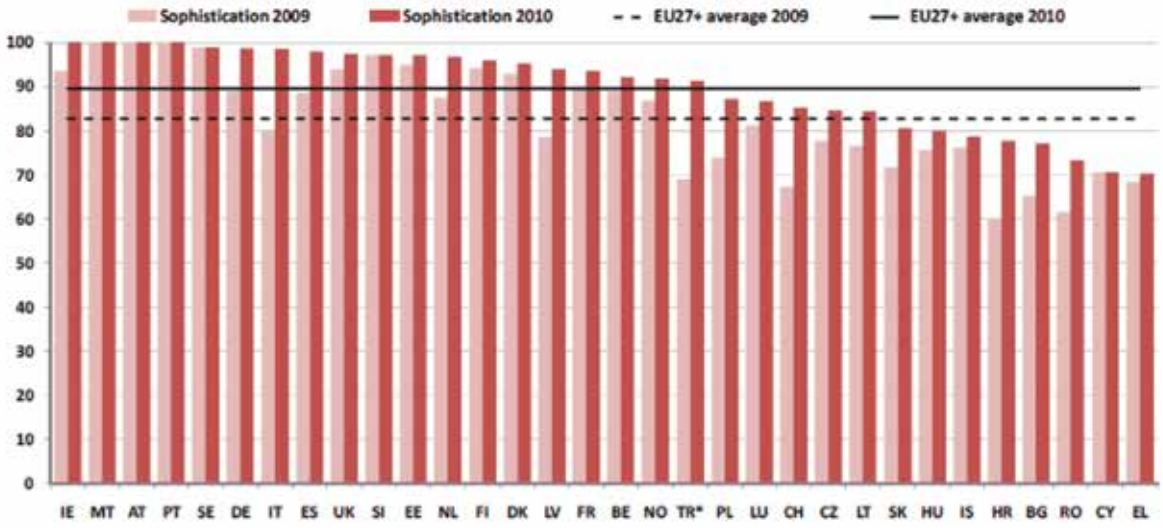


Figure 2: Services' sophistication ranking, 2009-2010 (in %)



* Survey not implemented in 2009. The score of 2007 is used in the graph.

The European benchmarking framework for eGovernment was part of a number of strategies adopted by the EU between 2001 and 2010, including the EU's overall Lisbon Strategy from 2000 to 2010 and the specific eGovernment strategy and Action Plan agreed in 2005 for the period up to 2010[27]. Figure 1 and Figure 2 show that by 2010 the availability and sophistication benchmarks are now about 90%, up from about 83% in 2009,

26 European Commission (2010) The 9th Benchmark Measurement, Digitizing Public Services in Europe: Putting ambition into action: http://ec.europa.eu/information_society/newsroom/cf/item-detail-dae.cfm?item_id=6537
27 European Commission (2005) "i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All".

and an increasing number of countries are achieving perfect scores (100%). This means that the framework and the associated strategies have be very successful in helping European governments dramatically improve their eGovernment performance, so that many countries are now achieving top scores. This is a great success and shows the value of a good benchmarking framework and clear common strategies, as well as the results which can be achieved when countries cooperate. It also means that the time is now ripe for a redesign of the benchmark in the context of a new strategic eGovernment framework for European governments to follow. This has been given added urgency now that European countries are increasingly looking to eGovernment to transform the public sector to achieve greater efficiency and effectiveness especially at a time of severe economic constraints.

A number of studies were undertaken to assess the impact of the eGovernment strategies and benchmarking framework up to 2010[28]. These were used in the context of discussions around Europe's overall strategic development to 2020 (see section 2.3) to prepare for the Ministers of EU Member States meeting in Malmö, Sweden, in November 2009. Here a new series of goals were agreed to drive the EU's collective approach to, and collaboration concerning, eGovernment up to 2015, and these were expressed in the Malmö Ministerial Declaration on eGovernment[29] to:

- empower citizens and businesses to use eGovernment services designed around users, and increase access and transparency
- reinforce mobility in the single market through eGovernment
- use eGovernment to improve effectiveness while promoting a sustainable economy
- create appropriate legal and technical enablers by setting policy priorities.

2.3 Global eGovernment trends to 2020

Drawing on the above developments, a recent report for the European Commission examined the new eGovernment trends and innovation visions to 2020[30]:

1. *Breaking down the barriers between the different parts of the public sector*

   Breaking down, or at least cooperation between, the public sector's different parts (often termed 'silos' by the EC), i.e. between different administrations, levels and localities, through sharing resources, data, content and tools, can be a huge challenge technically, politically, legally and organisationally. Moving towards what the UN[31] calls a 'whole-of-government' reality is the vision. Some countries are beginning to do this and are reaping the benefits of massive cost savings and efficiencies, as well as of greatly improved user services. For example Denmark, the UK, Australia and Singapore, as well as at the smaller scale local and city level where the barriers are often easier to overcome. Technically, this requires more focus on interoperability and open standards, and cloud computing, with equal weight given to principles such as cyber security, data protection and privacy issues. In terms of Web evolution, this is mainly a Web 3.0[32] development which is only just starting to be implemented in a few places, defined as the machine integration of data, knowledge and applications to make the Web a more meaningful and collaborative platform. However, there are severe barriers mainly of two types. First, lack of technical, semantic and organizational interoperability between government organisations, so that it is not possible operationally to share or exchange data. Second, management tends to be reluctant to share data and other resources as this is seen as risky and giving up control, and where the necessary personal as well as organisational skills, awareness and attitudes are not in place. There are also real concerns that sharing assets can result in loss of knowledge and thereby loss

28 Including Millard, J. et al (2009) "I2010 eGovernment Action Plan Progress Study: Final Report", for the ICT for Government and Public Services Unit, European Commission, November 2009. For a full list see: http://ec.europa.eu/information_society/activities/egovernment/library/index_en.htm

29 European Commission (2009) Ministerial Declaration on eGovernment. http://ec.europa.eu/information_society/activities/egovernment/events/past/malmo_2009/press/ministerial-declaration-on-egovernment.pdf

30 European Commission (2012) ICT for governance and policy modelling, prepared for the Public Services Unit in DG CONNECT by Jeremy Millard and Maria Wimmer, August 2012.

31 United Nations E-Government Survey 2012: http://www.unpan.org/eGovernment

32 Web 1.0 refers to simple Internet and email. Web 2.0 refers to the use of social media enabling users to be directly involved in shaping policy and developing services. Web 3.0 refers to the machine integration of data, knowledge and apps, for example the Internet of Things (IoT) where machines exchange data automatically without direct human agency, although according to human instructions, for example through algorithms. Web 3.0 needs high capacity large scale networks, now becoming reality in many places, and enables governments for example to manipulate huge amounts of data (termed 'big data') in order to map and analyse patterns in the data for the purposes of better policy development and decision-making.

of value, as well as how to achieve the right balance between transparency and privacy not just for citizens but also for politicians and civil servants who do need private spaces for open thinking and speculation before full publication of information. These issues can be difficult and time-consuming to solve, but global experience clearly shows that the long term benefits outweigh the effort, as evidenced in the latest United Nations e-Government Survey.[33]

2. *Collaboration with other actors such as companies, non-profit organisations, communities, citizens and hackers*

   There are numerous examples where other actors have already usurped government's role using ICT, for example 'Fix-My-Street' in the UK, noise measurement around Amsterdam Airport in the Netherlands, and Microsoft's 'health vault' storing citizens' health records in the cloud. More formal collaboration is however more challenging and similar barriers arise as in 1), but are already starting to be addressed in the UK at national level with the new eGovernment portal recently launched in beta version in cooperation with former hackers. The best examples are at local and especially city level, for example in San Francisco with its open data and outreach initiatives involving all relevant stakeholders. For many years, there has been a trend towards outsourcing and privatisation of eGovernment activities, including services, as part of the New Public Management vision of government. However, current trends also emphasise collaboration between actors with complementary role specialisation, rather than new forms of silo-isolation, moving towards a value network and ecosystem approach to government, closer to the more recent Public Value Management and open government visions.

3. *Governments are becoming 'smart' using 'big' data and data analytics*

   The value of data is being increasingly recognised by both their providers and users. The availability and use of so-called 'big data'[34] is growing exponentially and rapidly becoming a huge and fluid reservoir available for data mining, modification, mashing and converting into valuable content, services and products. Businesses, organisations and governments are all sources of potentially valuable data. In addition, the benefits of mixing these data together and adding civil, community and individual data (through for example crowdsourcing), as well as data 'scraped' from the Web (i.e. automatic extraction of data from websites), or even from controversial sources like WikiLeaks, have been recognised. An important spur to this trend is also 'open data', i.e. public sector data or information being released by a number of governments, both at national and local levels, though data quality and appropriate use are big challenges. There is a new cadre of data analyst experts developing, advancing and exploiting the tools and methods of 'data mining', 'data analytics' and 'business intelligence'. For example, IBM is developing basic approaches and standards, including the use of descriptive techniques (such as statistics) to understand past and current situations, of predictive techniques to simulate how the current situation and trends will project into the future if unchanged, and of prescriptive techniques to simulate and test 'what if' scenarios if specific decisions are taken or policies implemented. This allows policy trade-offs and choices to become more evidence-based, analytical and transparent.

4. *The strengthening of social media and mobile*

   Social media is the main set of tools riding on the Web 2.0 revolution[35], allowing users to do more than just retrieve information. Social media enables users to also contribute data as well as exercise some control over these data. Web 2.0 sites typically have an 'architecture of participation' that encourages users to add value to the application as they use it. A Web 2.0 site, like Facebook, Twitter or YouTube, gives its users the choice to interact or collaborate with other users as well as service providers in a social media dialogue around user-generated content in a virtual community. This is in contrast to Web 1.0 websites where users are limited to the active viewing of content created and controlled by others. Mobile is also potentially transformatory because it can add where, when and who I am, to online services, content and data, both automatically and on request, via GPS (Global Positioning Satellite) networks and GIS (Geographical

33 United Nations E-Government Survey 2012: http://www.unpan.org/eGovernment
34 'Big data' refers to the huge amounts of data governments can now have access to in order to map and analyse patterns in the data for the purposes of better policy development and decision-making.
35 See footnote 35.

Information Systems) databases. Mobile can be said to have threefold power, i.e. the *power of pull* being always on, accessible, carried everywhere and able to access precise content and services; the *power of push* being used mainly by individuals or families who can be offered personalised services and content by providers, as well as enabling users themselves to push their own content to others; and the *power of reach* being already more ubiquitous than fixed computers or even laptops. These characteristics enhance flexibility through mobility for all types of user. Mobile telephony has taken a step up in the last five years by the burgeoning popularity of the smartphone and the smart tablet, both of which offer much more advanced computing ability and connectivity than earlier 'dumb' phones.

5. *Local is smart*

Especially in larger countries, regional, local and especially city eGovernment is becoming more important. Local is where people lead their everyday lives and require public services which are specifically tailored to their personal needs. Traditional, top-down administrative e-services (like tax, benefits, licenses, applications, registrations, etc.) are fully rolled out in most European countries and, although absolutely essential, are by nature infrequently used so the take-up of eGovernment remains limited. On the other hand, more everyday location-based services, through mobile, PC as well as Web 2.0 social media, enable many new types of public service to be offered related to local transport, facilities, amenities, events, participation in local policy and decision-making, community building, developing the social economy, supporting disadvantaged individuals and groups, etc. This trend, together with dissolving silos, open data, big data analytics and widespread collaboration, are the basis for the important trend to smart city (e)governance. The smart use of advanced ICT enables these geographic units to exploit their position at the 'sweet spot' between centralised and de-centralised governance models. Cities are typically large enough to have real power and impact, but also small enough to be close to the lives of real people where governance makes most sense and can have greatest immediate impact.

There are already good examples, like the ESD (Effective Service Delivery) network[36] which has a membership of over 23,000 local agencies and authorities in the UK and has developed a range of toolkits and shared services for collaborative working and for evidence-based improvements of locally delivered services. ESD is a hosted, secure, online resource that enables all local authorities to record their public facing services against a comprehensive list of services, processes and interactions, and to compare and monitor them against the characteristics and performance of other participating local authorities based on shared metadata standards. It now has partners across Europe and is fast becoming a new standard for local eGovernment business models.

Further, in October 2010, a bottom-up initiative by a number of European local governments launched a pan-European 'Call to Action' - known as The Citadel Statement, designed to help local government deliver on the key objectives of the Malmö 2009 eGovernment Declaration. The statement covers[37]: common architecture, shared services and standards; open data, transparency and personal rights; citizen participation and involvement; privacy and identification of individuals; and rural inclusion.

6. *Blurring and transforming actor roles and relationships*

There are currently three drivers leading to the blurring and transformation of roles and relationships in and around public sector activity. First the financial and economic crisis resulting in fewer resources to undertake ever increasing demands from citizens and society, and in reconfigurations of who does what and how. Second, the increasing clamour for more bottom-up, participative forms of service design and delivery as well as engagement, especially at a local level, whilst more traditional top-down approaches are increasingly seen as inadequate to meet many societal challenges. Third, and one of the main tools to address the first two, is the increasing use of sophisticated ICT in the public sector as well as across the whole of society. This enables users not only to be passive consumers of content and services but also active contributors and designers in their own right. This means that all legitimate actors can be invited more openly into a participative and collaborative relationship with government.

36 http://www.esd.org.uk/
37 http://www.epractice.eu/en/blog/348359

Further, the distinctions between professional, politician, practitioner, civil servant, expert, consumer and citizen, are blurring dramatically. These roles are still important but the (power) relationships between them are changing and any given individual is increasingly taking two or more of them. In relation to government, this means that many actors can and are becoming involved in areas of competence previously the preserve of the public sector or specific agencies alone. *The public sector is becoming, instead of always the sole actor, just one player in new forms of collaborative governance.*

7. *New roles for government*

These trends, often driven and enabled by ICT, imply that governments in many (though certainly not all) areas are starting to re-think their role, and move away from assuming they can solve all societal challenges entirely on their own. Instead some are starting to establish collaboration platforms at every level where government's role is enabler and facilitator, as well as arbiter, coordinator, and regulator for the activities of others in delivering public value. Where this happens, government in most cases retains responsibility for overall quality standards, mechanisms for resource sharing and legal frameworks. Accountability for services and performance, and responsibility especially if things go wrong, is a critical issue. These developments seem to be largely beneficial, but they also give rise to threats and challenges, for example:

- loss of control and blurred accountability (by whom to whom?)
- quality standards are more difficult to determine and maintain with an increasing number of designers and suppliers
- privacy and data security
- the danger of data and content mis-use
- digital elite formation – new digital divides?
- information overload – or is this more a filter failure?
- ICT crowding out other, perhaps more relevant, channels for specific services in specific contexts.

2.4 European and international support and funding programmes

The current background to potential support and funding for eGovernment in Europe was established in 2010. First, in April 2010, the Malmö Ministerial Declaration on eGovernment led to the European Commission, on behalf of Member States, publishing the *European eGovernment Action Plan 2011-2015: Harnessing ICT to promote smart, sustainable & innovative Government*[38]. The plan specifies four priorities designed to implement the main goals agreed in Malmö:

- User empowerment: eGovernment services to empower citizens and businesses, e.g. increased access to public information, strengthened transparency and stakeholder involvement.
- eGovernment should support the further construction of the digital single market: high quality eGovernment services, mobility, creating synergies in eGovernment solutions, to reduce administrative burden, increase transparency and potentially generate costs savings.
- eGovernment to enable efficiency and effectiveness, to reduce the administrative burden, improve organisational and administrative processes, facilitate information sharing and simplify interaction with the Commission.
- Implementation through key enablers and the necessary legal and technical preconditions, including interoperability of systems to exchange, process and correctly interpret information.

Second, in March 2010, the European Union laid out its broader strategic policy objectives to the year 2020, within which the eGovernment Action Plan is now embedded, in the Europe 2020 strategy[39]:

> "*In a changing world, we want the EU to become a smart, sustainable and inclusive economy. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion. Concretely, the Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Each Member State has adopted its own national targets in each of these areas. Concrete actions at EU and national levels underpin the strategy.*"

38 European Commission (2010) The European eGovernment Action Plan 2011-2015: Harnessing ICT to promote smart, sustainable & innovative Government.
http://ec.europa.eu/information_society/activities/egovernment/action_plan_2011_2015/docs/action_plan_en_act_part1_v2.pdf
39 Europe 2020 http://ec.europa.eu/europe2020/index_en.htm

Europe 2020 has established three priority areas covering seven flagships (high profile strategies) designed to help Europe "*emerge from the crisis stronger*":

Priority 1: Smart growth:
- Flagship 1: Digital Agenda Europe (see below for more details)
- Flagship 2: Innovation Union
- Flagship 3: Youth on the move

Priority 2: Sustainable growth:
- Flagship 4: Resource efficient Europe
- Flagship 5: Industrial policy for the globalisation era

Priority 3: Inclusive growth:
- Flagship 6: Agenda for new skills and jobs
- Flagship 7: European platform against poverty

Flagship 1, the Digital Agenda Europe (DAE)[40] sets out to define the key enabling role that the use of ICT will have to play if Europe wants to succeed in its three growth priorities by 2020, through eight Action Areas:
1. A vibrant digital single market
2. Interoperability and standards
3. Trust and security
4. Fast and ultra fast internet access
5. Research and Innovation
6. Enhancing digital literacy, skills and inclusion
7. ICT-enabled benefits for EU society
8. International aspects of the Digital Agenda

E-government crosses several of the DAE's Action Areas, but is most prominent in Action Area 7, ICT-enabled benefits for EU society, for example by highlighting the 2010-2015 eGovernment Action Plan and the focus on cross-border eEnvironment services. The DAE contributes to the EU 2020 Strategy as it is now accepted that knowledge, innovation and technology are key to Europe's future, and that ICT in particular does, and will continue to, play a major role. From 2004 to 2009, the Internet contributed on average 21% to GDP growth in mature economies.[41] In the long term, strengthening the technological and innovation base of Europe requires the development and implementation of new ICT products, services and content, as well as the continuous improvement of ICT skills and competencies. ICT is also seen as a major route to new products, processes and services across all economic sectors. It is also accepted that ICT needs to be used and applied by governments and public administrations to make them both more efficient, through greater productivity and cost cutting, as well as more effective by providing improved services to citizens and businesses which save them time and money as well as lead to higher quality lives and more competitive companies.

Flagship 2, the Innovation Union[42] has the goal of assisting Europe turn "*ideas into jobs, green growth and social progress*." With an ageing population and strong competitive pressures from globalisation, Europe' s future economic growth and jobs will increasingly have to come from innovation in products, services and business models. This is why innovation has been placed at the heart of the Europe 2020 strategy for growth and jobs. The Innovation Union aims to improve conditions and access to finance for research and innovation in Europe and to ensure that innovative ideas can be turned into products and services that create growth and jobs.

The recently proposed Multi-Annual Financial Framework for 2014-2020 (MFF)[43] calls for a significant increase in Research and Innovation funding under Horizon 2020[44] as the EU's new programme for research and innovation for implementing the Innovation Union, as part of the drive to create new growth and jobs in Europe, with an €80 billion budget. It will combine all research and innovation funding currently provided through the Framework

40 Digital Agenda Europe http://ec.europa.eu/information_society/digital-agenda/index_en.htm

41 McKinsey Global Institute (2011) "Internet matters: The Net's sweeping impact on growth, jobs, and prosperity": http://www.mckinsey.com/insights/mgi/research/technology_and_innovation/internet_matters

42 Innovation Union http://ec.europa.eu/research/innovation-union/index_en.cfm

43 Annual EU budgets shall comply with the Multiannual Financial Framework (MFF) laid down in a unanimously adopted Council Regulation with a consent of the European Parliament. The financial framework sets the maximum amount of commitment appropriations in the EU budget each year for broad policy areas ("headings") and fixes an overall annual ceiling on payment and commitment appropriations. The MFF for the period 2014-2020 is still under negotiation.

44 Horizon 2020 http://ec.europa.eu/research/horizon2020/index_en.cfm

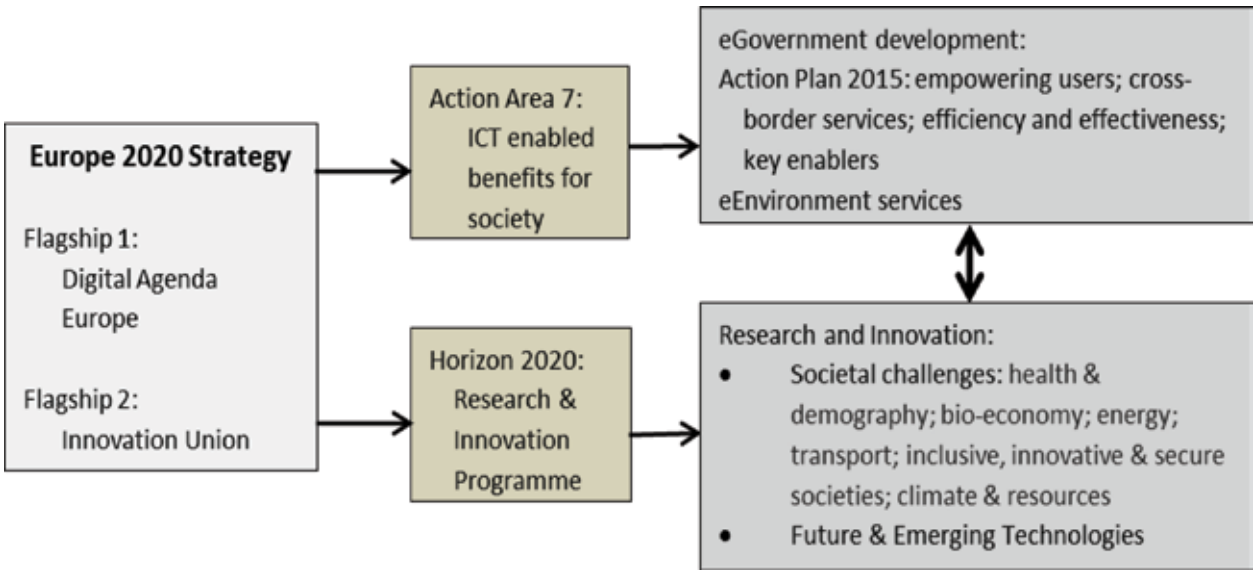
Programmes for Research and Technical Development, the innovation related activities of the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT). The Innovation Union aims to improve conditions and access to finance for research and innovation in Europe, to ensure that innovative ideas can be turned into products and services that create growth and jobs. Horizon 2020 will tackle societal challenges by helping to bridge the gap between research and the market by, for example, helping innovative enterprises to develop their technological breakthroughs into viable products with real commercial potential. This market-driven approach will include creating partnerships with the private sector and Member States to bring together the resources needed.

Horizon 2020's proposals for research and innovation focus on three distinct, yet mutually reinforcing, priorities: societal challenges, excellent science and industrial leadership. The societal challenges priority reflects the overall policy priorities of the Europe 2020 strategy and addresses the major concerns shared by citizens in Europe and elsewhere: health, demographic change and wellbeing; food security, sustainable agriculture, marine and maritime research, and the bio-economy; secure, clean and efficient energy; smart, green and integrated transport; inclusive, innovative and secure societies; climate action, resource efficiency and raw materials. A challenge-based approach will bring together resources and knowledge across different fields, technologies and disciplines, including social sciences and the humanities. This will cover activities from research to market with a new focus on innovation-related activities, such as piloting, demonstration, test-beds, and support for public procurement and market uptake.

The excellent science priority in Horizon 2020 will support Future and Emerging Technologies (FET) as the ICT incubator and pathfinder for new ideas and themes for long-term research in the area of information and communication technologies. Its mission is to promote high risk research, offset by potential breakthroughs with high technological or societal impact. FET will encourage clear long-term visions far beyond the state of the art through foundational breakthroughs as crucial steps towards new forms and uses of ICT. It will promote ambitious proof-of-concept innovation and new, high-risk ideas rather than from the refinement of current ICT approaches, and it will focus on new inter-disciplinary collaborations, possibly with prominent and internationally recognized non-EU research teams where these can provide a significant added value.

An overview of the European policy and research priorities relevant for eGovernment is provided in Figure 3.

Figure 3: European policy and research priorities relevant for eGovernment



As is clear from the above, potential European support and funding for eGovernment are currently undergoing significant change and development, which makes it very difficult at the present time to make specific statements. For example, the current Seventh Framework Programme for Research and Technology Development (FP7, which funds upstream research)[45] and the Competitiveness and Innovation Programme (CIP, which funds downstream, or market near, initiatives)[46], are closing their final calls for proposals in early 2013, and will both be replaced by the single Horizon 2020 from 2014.

In October 2012 the Council of the European Union sent Member States and other delegations and EU institutions (including the European Parliament) a detailed proposal for Horizon 2020. The Council and the Parliament are expected to complete the procedure and adopt the Horizon 2020 legislative package by the end of 2013. Also, the EU's Cohesion, Structural and related Funds are under review and will be replaced from 2014. They are also likely to focus mainly on counter crisis measures – although this is not yet certain. Neither is it yet known whether, nor indeed how much, these changes will involve eGovernment, although the chances are good that they will. There are some topics, however, that will continue and are almost certain to be funded, these include:

- Projects related to the European Interoperability[47] Framework (EIF version 2.0, 2010)[48]
- Projects related to the EU's Re-Use of Public Sector Information (PSI) Directive (2012)[49], i.e. opening up government data for use by other actors such as citizens, businesses, civil groups, etc. (currently under detailed discussion for final agreement).
- Projects related to the four priorities of the European eGovernment Action Plan (2011-2015) which give much scope for a wide variety of projects (see above)
- Projects related to public sector innovation involving ICT, especially those which help to meet pressing societal problems and focus on open and social innovation (like the ageing society, greater demands for health care, increasing poverty, climate change and sustainability, etc.).
- Start to align the WB countries with the Digital Agenda Europe indicators for benchmarking ICT developments[50], as well the new eGovernment benchmarking to be undertaken in 2013. For good policy making and good assessment of policy impacts in the eGovernment area, robust benchmarking is needed, preferably between countries so comparisons can be made and best practices can be shared.

Outside Europe, the main feasible source of support and funding from international bodies is from the World Bank which does provide assistance, including finance, to many countries to develop eGovernment and related areas. A good example of this is in Moldova where, between 2009 and 2011, the World Bank ran a capacity building programme "Enhancing Information and Communication Technology (ICT) in Moldova", also supported by Estonia, Singapore and India[51]. Three of the main topics addressed were governance, anti-corruption, and information and communications. A route like this potentially represents a relevant future source of finance and support for eGovernment related initiatives for the Western Balkans.

2.5 The Western Balkan countries in an international context

The eGovernment benchmarking systems most relevant for the Western Balkans are those undertaken by the United Nations and the European Commission on the eGovernment supply side. In many respects they are very similar and both are cumulative, see Table 1[52].

45 The FP7 programme funds pure and applied R&D in Europe with a relatively longer term (5-10 years) envisaged before the results are ready for the market.

46 The CIP funds applied R&D in Europe with a relatively short time to market, generally less than 2-3 years, envisaged to assist in "market deployment".

47 Interoperability is the term used to describe the ability of diverse systems and organizations to work together (inter-operate). It is often used in a technical systems engineering sense, or alternatively in a broad sense, taking into account social, political, and organizational factors that impact system to system performance. The European Interoperability Framework for European Public Services (EIF 2.0: see footnote 51) covers four parts (levels): legal interoperability, organisational interoperability, semantic interoperability, and technical interoperability.

48 European EIF 2.0, "European Interoperability Framework for European Public Services", 16 December 2010: http://ec.europa.eu/isa/documents/isa_annex_ii_eif_en.pdf

49 http://ec.europa.eu/information_society/policy/psi/index_en.htm

50 http://ec.europa.eu/digital-agenda/en/our-targets

51 http://wbi.worldbank.org/sske/case/moldova-e-transformation

52 Please note, however, that the EC method is set to change for the next measurement in 2013 because (as noted above) most countries are now nearing the higher stages. It is however still relevant and applicable to the Western Balkans countries given that they are significantly behind most European countries as evidenced by the UN and EC benchmarks presented here.

Table 1: Comparison of United Nations and EC benchmarking stages

United Nations[1]	European Commission[2]
Stage 4: Connected services Government websites join up services across ministries and departments, they are proactive in requesting information and opinions from the citizens using Web 2.0 and other interactive tools.	*Stage 5 Personalisation (proactive services)* The user's data are automatically delivered or are pre-filled with all relevant data so that, in conformance with data protection regulations, the agency providing the service already knows about the user
Stage 3: Transactional services Government websites engage in active two-way communication with their citizens, including requesting and receiving inputs on government policies, programmes, regulations, etc.	*Stage 4 Transaction (full electronic case handling)* The service provider offers the possibility to completely treat the provision of data by the user via the website. No other formal procedure is necessary for the applicant via "paperwork"
Stage 2 Enhanced information services Government websites deliver enhanced one-way or simple two-way e-communication between government and citizen, such as downloadable forms for government services and applications.	*Stage 3 Two-way interaction (downloadable and uploadable forms)* The service provider offers the possibility of an electronic intake with an official electronic form to upload data or information. *Stage 2 One-way interaction (downloadable forms)* The service provider offers the online possibility to obtain the paper form to access and use the service a non-electronic way.
Stage 1 *Emerging information services* Government websites provide information on public policy, governance, laws, regulations, relevant documentation and types of government services provided.	*Stage 1 Information only* The information necessary to undertake the service is available on a publicly accessible website managed by the service provider.
	Stage 0 No online service accessibility The service provider does not have a publicly accessible website or The service provider does not qualify for any of the criteria for the levels 1 to 4.

1 United Nations "E-Government Survey 2012"
2 European Commission (2010) The 9th Benchmark Measurement, Digitizing Public Services in Europe: Putting ambition

The EC benchmarking does not include any Western Balkan countries, unlike the United Nations which covers the vast majority of countries in the world, although not Kosovo[53*] Table 2 provides recent UN data showing the ranks obtained by the six ReSPA countries in both 2010 and 2012.

53 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Table 2: UN global eGovernment benchmarking ranks (supply side)[54]

Rankings & placings	2010			2012		
	Overall	eServices	eParticipt.	Overall	eServices	eParticipt.
Albania	85	75	86	86	93	101
Bosnia & Herzegovina	74	91	135	79	104	162
Croatia	35	41	25	30	40	55
Macedonia	52	71	55	70	88	93
Montenegro	60	74	76	57	66	50
Serbia	81	110	135	51	51	63
Top 3 global countries	1. Korea 2. USA 3. Canada	1. Korea 2. USA 3. Canada	1. Korea 2. Australia 3. Spain	1. Korea 2. Netherlands 3. UK	1. Korea 2. Singapore 3. USA	1. Netherlands 2. Korea 3. Kazakhstan

It can be noted in Table 2 *that Croatia is the leading Western Balkan (WB) country and that its overall[55] global UN ranking improved between 2010 and 2012. However, this was entirely due to improvements in the ICT infrastructure, whilst in terms of eServices no comparative progress was made and in terms of eParticipation the country slipped significantly down the global ranking.* It needs to be remembered that these results are comparative with other countries, and do not mean that Croatia has performed worse in eServices and eParticipation between 2010 and 2012, just that many other countries have improved much more. Croatia is followed in the overall ranking in 2012 by Serbia, Montenegro, Macedonia, Bosnia and Herzegovina, and Albania respectively. Just looking at the Western Balkan context, Serbia has significantly improved its overall position jumping from fifth in 2010 to second in 2012.

In terms of eServices and eParticipation, three other WB countries apart from Croatia have also slipped in the comparative global ranking between 2010 and 2012: Albania, Bosnia and Herzegovina, and Macedonia. However, Montenegro and particularly Serbia have significantly improved their global rankings in eServices and eParticipation.

The data in Table 3 are purely about eServices and come from the 2010 eSEE survey based on the EC framework rather than the UN's. However, the positioning of countries is very similar to the UN's eServices ranking in 2010, with the exception of Serbia and Montenegro which seem to be already in some flux regarding eGovernment as noted above.

Table 3: eSEE eGovernment measures of online sophistication (supply side) using the EC approach[56]

Scores	2010		
	G2C	G2B	Average
Albania	25%	52%	39%
Bosnia & Herzegovina	27%	45%	36%
Croatia	47%	54%	51%
Kosovo	23%	34%	29%
Macedonia	51%	69%	60%
Montenegro	32%	40%	36%
Serbia	42%	57%	50%
Average	38%	52%	45%

54 United Nations "E-Government Survey 2012".

55 The overall ranging is based on three equal parts: ICT infrastructure; human capital; eServices (which also incorporates eParticipation).

56 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf -- note that not all services measured are able to cover all stages and this has been taken into account in calculating the assessed percentage sophistication reached.

In conclusion, therefore, according to the comparative UN data between 2010 and 2012, and with some concurrence from eSEE in 2010, there seem to be two groups of WB countries as far as eGovernment is concerned:

1. A leading group, where, although Croatia remains the leading WB country, Serbia and Montenegro are catching up fast.
2. A lagging group, consisting of Albania, Bosnia and Herzegovina, and Macedonia, which have slipped back globally, although Macedonia is doing exceptionally well on some measures, like the eSEE scores in Table 3.

This conclusion is strongly reinforced when the actual UN data, rather than the global ranks, are examined as in Table 4. This shows that the leading group (marked in dark blue) have not only significantly higher scores in 2012, but also achieved a much higher point increase in both absolute and percentage terms between 2010 and 2012, compared to the three lagging countries (marked in light blue).

It can also be seen from Table 4 that all WB countries did increase their UN point scores between 2010 and 2012, so all made improvements. The issue is that the three leading countries seem to be making much faster progress than the three lagging countries.

Table 4: UN global eGovernment benchmarking points (supply side)[57]

Un overall scores	2010	2012	Point change 2010-12	% point change 2010-12
Albania	45	52	+7	+15%
Bosnia & Herzegovina	47	53	+6	+12%
Croatia	59	73	+14	+24%
Macedonia	53	56	+3	+1%
Montenegro	51	62	+11	+21%
Serbia	46	63	+17	+37%

2.6 Headline observations from the 2010 eSEE Study on South East Europe

The 2010 eSEE Study[58] also provided useful observations which need to be taken into account in the present study even though, as already noted, two years is a long time in eGovernment and there have been important changes over that short time frame. The most important of these observations are:

- The overall aim of eGovernment in South East Europe: is to "contribute to increasing democratic governance"
  - Comment: this is also clearly in line with the requirements of EU membership, and is enshrined in the eSEE Agenda[59].
- ICT infrastructure: a generally good level "is there, but more services and content are to be developed and used"
  - Comment: this reflects the observation above from the UN data that most WE countries have improved more in terms of ICT infrastructure than in terms of eServices and eParticipation.

57 United Nations "E-Government Survey 2012" (scores are out of a maximum of 100).
58 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf. It should also be noted that the eSEE report was a wider South-East Europe study which, in addition to the seven countries examined in the present report, also looked at Moldova and Romania.
59 http://www.eseeinitiative.org

- Legal and regulatory infrastructure: most countries “posses a satisfactory legal infrastructure and regulatory framework”
  - Comment: this is a good basis on which to develop eGovernment.
- Accessibility and availability: “has also improved”
  - Comment: again this is an essential building block.
- ICT in public administration: “high level of ICT presence” but low use
  - Comment: again this reflects the earlier comment that much of the ICT infrastructure is in place, which is of course essential, but is not yet well used – i.e. ICT infrastructure can be regarded as a necessary but not sufficient condition.
- Action Plans: “Most countries have an action plan for implementation of eSEE AgendaPlus”
  - Comment: again this is an essential building block.
- Achievements: “Many goals achieved but some call for more agile action”
  - Comment: clearly progress is being made, but a step change is now probably needed in the near future.
- eGovernment services: “mainly level 2 only” (one-way interaction); “great potential to go higher”
  - Comment: this reflects the rather disappointing level of eGovernment services already noted (though it should be remembered that there is a wide variation between WB countries).
- Gender: “a better gender enabling environment is needed”
  - Comment: this may reflect the wider socio-economic gender disparities existing in the WB, and indeed the European experience shows that ICT and eGovernment can help drive down such disparities, although it will always be at least loosely correlated with them.

3 Comparative analysis of eGovernment in the Western Balkans

This section summarises, compares and contrasts the evidence coming from the surveys carried out by the seven Western Balkan countries on their eGovernment status.

3.1 ICT infrastructure

In terms of ICT infrastructure relevant for eGovernment, the best data is that collected by the ITU in relation to ICT access, ICT use, skills and ICT price, as provided in Table 5 and Table 6.Both tables consistently reinforce the clear pattern recognised in section 2.5 of two distinct groups in the WB, consisting of Croatia, Serbia and Montenegro in a leading group, and Albania, Bosnia and Herzegovina, and Macedonia in a lagging group. (Kosovo[60*] is not covered by the ITU.) However, there are a few exceptions, for example, mobile cellular subscriptions are relatively high in Albania, as is the percentage of households with a computer in Macedonia. Also, in terms of ICT use, the two group pattern does not hold for the percentage of individuals using the Internet, nor for fixed broadband Internet subscriptions – in both cases differences between the six countries are not great, although in both Croatia remains the clear leader. In the latter examples, this more broadly spread usage provides some good ground for optimism that the populations of all six countries are moving more or less together in their readiness to use eGovernment services on the demand side, even though in the lagging countries the services on the supply side may not be as available or sophisticated compared to the leading countries.

This shows, that in most WB countries, but especially in the lagging countries, there is a gap between supply and demand of eGovernment services, certainly in terms of service sophistication. This is unsurprising, as the same challenge exists across much of Europe as well as globally, with some notable exceptions (such as the Scandinavian countries and the Netherlands)[61]. However, given that the WB is at a lower level of supply and use than most of Europe, the supply-demand gap here seems to be related more to less developed service sophistication on the supply side than to a demand-side ceiling being reached in much of Europe due to a limit as to how often users need to use what are mainly administrative services[62].

60 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

61 Millard, J (2010) “Government 1.5 – is the bottle half full or half empty?” European Journal of ePractice, Number 9, March 2010: www.epracticejournal.eu

62 For example, most of the twenty eServices measured by the EC are so-called ‘administrative’ services which the user (whether citizen or business) only needs to use once or twice a year.

Table 5: ICT profile in Western Balkans: access and use[63]

		Albania (2010)	Bosnia & Herze-govina (2010)	Croatia (2010)	Mace-donia (2010)	Monte-negro (2010)	Serbia (2010)
ICT Access	Fixed-telephone subscriptions per 100 inhabitants	10.3	26.6	42.4	20	26.8	40.5
	Mobile-cellular subscriptions per 100 inhabitants	141.9	80.1	144.5	104.5	185.3	129.2
	International Internet bandwidth Bit/s per Internet user	9'709	15'650	42'920	16'831	21'317	47'011
	Percentage of households with computer	15.6	33.7	60	60.3	32	50.9
	Percentage of households with Internet	11.7	18.1	56.5	49.2	21.2	40.2
ICT Use	Percentage of individuals using the Internet	45	52	60.3	51.9	52	40.9
	Fixed (wired)-broadband Internet subscriptions per 100 inhabitants	3.4	10.4	18.3	12.5	8.3	8.5
	Active mobile broadband subscriptions per 100 inhabitants*	0	10.7	39.3	20.8	38	19

Table 6: ICT profile in Western Balkans: skills and price[64]

		Albania (2010)	Bosnia & Herze-govina (2010)	Croatia (2010)	Mace-donia (2010)	Monte-negro (2010)	Serbia (2010)
Skills	Adult literacy rate	95.9	97.8	98.8	97.1	97	97.8
	Gross enrolment ratio Secondary education	72.4	91.2	95.5	83.6	88.1	91.5
	Gross enrolment ratio Tertiary education	36.7	37	54	45.9	29.8	49.8
ICT Price	ICT Price Basket	4.3	3.3	1.5	4.4	2.6	2.1
	Fixed-telephone sub-basket as a % of GNI per capita	1.9	2.4	1.5	3.3	1.4	1.1
	Mobile-cellular sub-basket as a % of GNI per capita	7.7	3.9	1.5	6.4	3	2.3
	Fixed-broadband sub-basket as a % of GNI per capita	3.2	3.7	1.6	3.5	3.3	3.1
	GNI per capita, USD, 2009	4'000	4'700	13'720	4'400	6'650	6'000

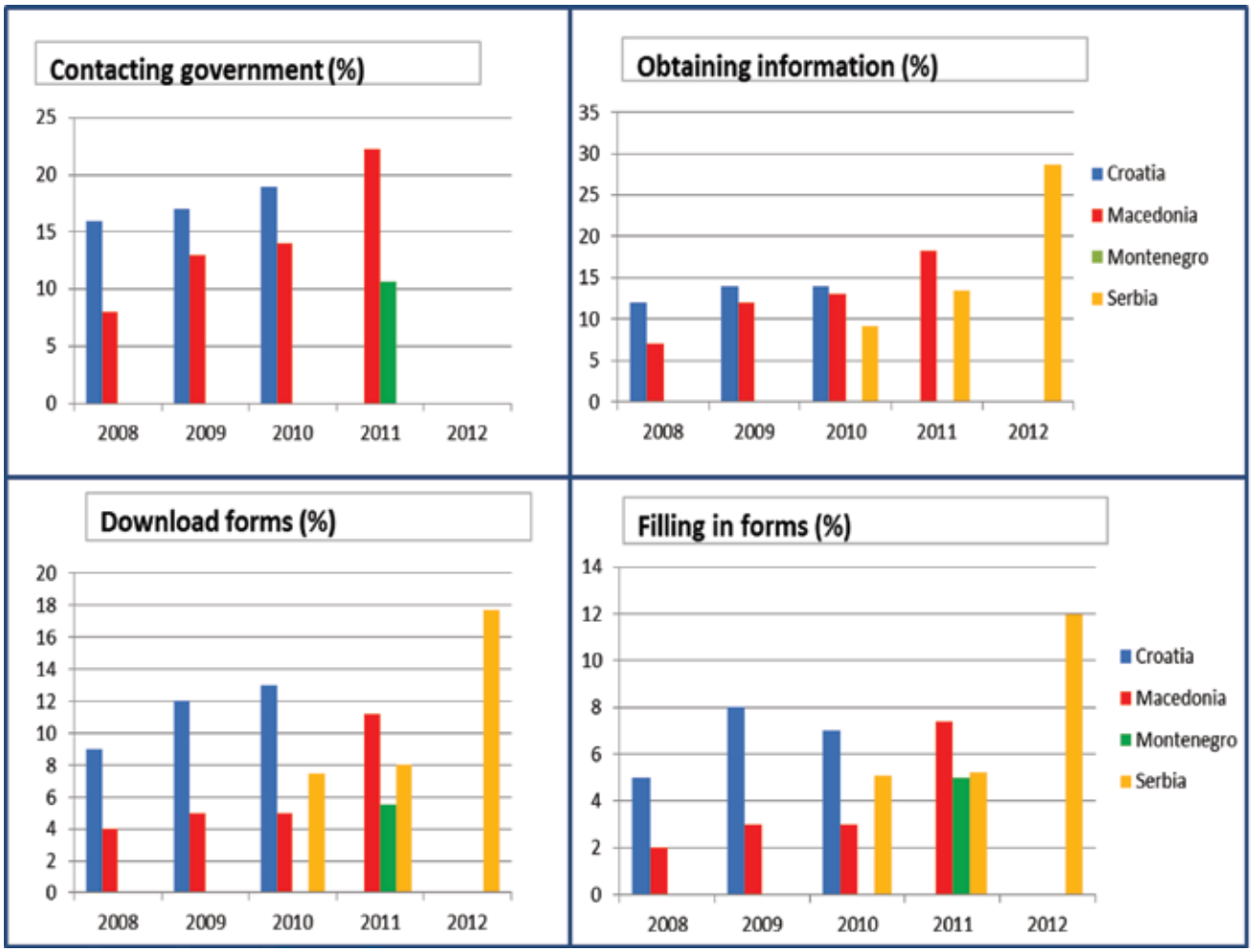
63 ITU: "Measuring the Information Society 2011" http://www.itu.int/ITU-D/ict/publications/idi/material/2011/MIS_2011_without_annex_5.pdf

64 ITU: "Measuring the Information Society 2011" http://www.itu.int/ITU-D/ict/publications/idi/material/2011/MIS_2011_without_annex_5.pdf

3.2 eGovernment use

The data shown above only present the eGovernment supply side. Four out of six ReSPA member countries and Kosovo[65]* are covered by the European Commission's annual Eurostat survey of the demand side, i.e. Croatia, Macedonia, Montenegro and Serbia, but only intermittently and at different times. The available data are provided in Figure 4. This shows, as expected from the discussion above, that Croatia has somewhat greater usage of eGovernment services than the others, but data for this country are only available from 2008 to 2010, and it is precisely in the years since (2011 and 2012) that Serbia appears to have considerably improved its position. Three of the four datasets show Serbia behind Croatia in 2010, but also that Serbia's eGovernment usage has risen significantly since. It should also be noted that all the WB countries remain substantially behind most EU27 countries, for example the EU27 average in 2012 was 32%.

Figure 4: Eurostat eGovernment usage (demand side)
Percentage of individuals in the last twelve months



65 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

3.3 eGovernment benchmarking

Accurate and robust measurement of eGovernment is extremely important to help develop and guide strategy as well as the implementation of action plans. It is important both for national eGovernment strategies and for all other national strategies which reply on good governance and well performing public administrations, as well as which promote public welfare and competiveness in the economy. Table 7 displays the WB countries which have developed their own eGovernment benchmarking measures.

The countries identified above as the WB eGovernment leaders, i.e. Croatia, Montenegro and Serbia, are each undertaking their own Government benchmarking whilst the others are not. Croatia performs rigorous and systematic benchmarking, as part of its impending accession to the EU. Montenegro performs an annual analysis based on the European Commission methodology. In Serbia the latest eGovernment related benchmarking took place in 2009, however at the sub-national level, a yearly measurement is done in the Vojvodina ICT Cluster.

Bosnia and Herzegovina state that governments and entity levels are expected to start conducting eGovernment benchmarking in 2013 through indicators harmonized and comparable with the EU in accordance with 'Benchmarking Digital Europe 2011-2015' conceptual framework. No systematic benchmarking of eGovernment is performed in Albania, Kosovo[66*] and Macedonia.

Table 7 Country specific eGovernment benchmarking measures

Country	eGovernment benchmarking measures	Future plans
Albania	No	No
Bosnia and Herzegovina	No	Expected in 2013
Croatia	Yes	
Kosovo*	No	No
Macedonia	No	No
Montenegro	Yes	
Serbia	Yes, latest in 2009	

66 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

3.4 eGovernment policy and strategy

3.4.1 Impact of eGovernment policies and strategies

eGovernment policy and strategy in place is largely as indicated in the eSEE 2010 Survey[67]. Impacts so far, as reported by each country, are summarised in Table 8.

Table 8: Impact of eGovernment policies and strategies

Albania	▪ Better dialogue with citizens ▪ Increased transparency ▪ Not having to queue
Bosnia and Herzegovina	▪ Little progress to date
Croatia	▪ No information on this topic is published
Kosovo*	▪ Greatest impact to date is improvement on the physical Infrastructure
Macedonia	▪ No relevant information on impacts
Montenegro	▪ Regulatory framework and institutional framework has improved ▪ Broadband internet access is much better compared to 2009 ▪ Digital certificates and eGovernment portal established ▪ 30 eServices
Serbia	▪ Centralised system of registry books (births, deaths and marriages) ▪ Central Company register ▪ Registration renewal on one site ▪ eTaxes: more taxes are collected ▪ Real Estate Cadastra online: less queuing

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Most of the impacts reported in Table 8 are in the back-office as well as being related to the ICT infrastructure, which corresponds well with the overall stage most WB countries are at in developing eGovernment, as well as with the impression given from the UN data in Table 2. This is also sensible given the need to establish the basic building blocks of eGovernment (especially in the form of standardisation, interoperability, eAuthentication and base registries), even though these can be seen as necessary but not sufficient conditions.

In addition to the summary, Bosnia and Herzegovina report that there has to date been little progress in implementing their policies so it is not possible to report on their impact at the present time. This is also because their implementation is highly decentralised in terms of strategic eGovernment management, and driven by ad-hoc established, and usually donor-driven projects, which are not being implemented under the same specific eGovernment strategy and action plan. Also, Croatia reports that no information on this topic is published but that ICT industry is satisfied with eCroatia standards (interoperability and the Standard Project on Electronic Business proceedings).

3.4.2 Institutional benefits and barriers

Institutional benefits in using eGovernment are those which governments and public administrations themselves (as opposed to users) can realise, such as cost savings in time, money, staff, greater productivity, simplification/ re-engineering of procedures, better working conditions, better decisions, more effective services, greater innovation and change, help in tackling the financial/economic crisis, etc. On the other hand, there may be barriers which hinder government institutions in using eGovernment and gaining these benefits, such as lack

67 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf.

of administrative will, too costly (for example, the need to run an electronic service channel as well as an over the counter service channel), lack of demand from citizens or businesses, lack of staff skills, management/staff resistance, lack of awareness, etc.

Identifying the institutional benefits and barriers in the Western Balkans will help understand the specific challenges to be overcome and the specific advantages to be gained in so doing. This will, in turn, assist in developing realistic policies and strategies for eGovernment in the respective countries. The main benefits of eGovernment to public sector institutions as reported by each country are summarised in Table 9.

Table 9: Institutional benefits of and barriers to eGovernment

Country	Institutional benefits	Institutional barriers
Albania	▪ Improved interaction with business and industry ▪ Increased efficiency, fast response; ▪ Improved quality of service and comfort; ▪ Closer cooperation between institutions; ▪ Reducing administrative barriers; ▪ Elimination of bureaucracy; ▪ Increased competition; ▪ Higher responsibility; ▪ Greater transparency; ▪ Avoidance of corruption; ▪ Reducing costs;	▪ Leadership ▪ Financial restrictions ▪ Poor coordination ▪ Workplace & organisational inflexibility ▪ Lack of trust ▪ Poor technical design ▪ The Administrative Law ▪ Authentication and identification ▪ Relationships between public administrations, citizens and actors ▪ Hardware and software costs ▪ Lack of cooperation and coordination between institutions results in data duplication, when primary data from other institutions is not used ▪ No trust in services & data protection
Bosnia and Herzegovina	▪ Time savings (for citizens and in producing government services) ▪ Cost savings ▪ Improved government efficiency ▪ Better information exchange between government institutions ▪ Quality of services improves ▪ Fewer back-office resources	▪ Lack of understanding and administrative will ▪ Lack of a shared vision and strategy for the development of eGovernment ▪ Uncoordinated eGovernment development at all levels leads to data duplication
Croatia	▪ business process definition and standardisation ▪ transparency ▪ faster problem and requests solving ▪ easier, faster and better decision making process	▪ Lack of staff eSkills ▪ Lack of awareness in civil service
Kosovo*	▪ Cost savings ▪ Sharing common resources (within government)	▪ Lack of awareness to use e-Governance services ▪ Financial issues ▪ Leadership failures ▪ Interoperability issues ▪ Political unwillingness

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Country	Institutional benefits	Institutional barriers
Macedonia	▪ Simplification of administrative process (services now delivered 4 times faster)	▪ Legislative and regulatory barriers ▪ HR and finance ▪ Security and privacy ▪ Cultural and change resistance by management and staff barriers ▪ Coordination barriers ▪ Technical difference and legacy systems ▪ Organisational barriers ▪ Multilingualism
Montenegro	▪ More effective and efficient pub administration ▪ Effective services (business process simplification) ▪ Higher service quality ▪ Cost savings ▪ Time and money reductions ▪ Roles and responsibilities inside institutions become clear ▪ Increased transparency means that institutions becomes responsible and effective	▪ Digital literacy ▪ Resistance to changing business processes ▪ The financial crisis
Serbia	▪ More effective and efficient public administration ▪ Simplification of administrative process ▪ Higher service quality ▪ Cost savings ▪ Quality of services improves ▪ Time and money reductions	▪ Lack of administrative will and low priority ▪ Poor understanding, vision & planning ▪ Resistance to change ▪ Showing cost benefits over long-term ▪ Cost of providing multiple channels ▪ Cost of security and legal demands ▪ Departments don't agree or coordinate ▪ Low interoperability between systems ▪ Inadequate skills and capacity building ▪ Government-centric approach ▪ Cycles of attention and inattention lead to patchy, stop-go progress

The inputs by Macedonia and Serbia have been summarised as both have provided much more detail on the benefits of and/or barriers to eGovernment, which are available in the country profile annex.

Table 9 shows that it is often easier to articulate the barriers than the benefits of eGovernment, but this is very typical of even the most advanced eGovernment countries, and arguably indicates a realistic focus on barriers and therefore how they might be addressed and overcome. Several barriers are typical of the majority of the WB countries, and do reflect global experience, especially at the stage of development the WB countries are at. These include lack of administrative will, poor understanding and planning, silo mentality between departments and ministries, a strong concern about costs with the concomitant problem of how to demonstrate that these can be met or outweighed by the benefits, as well as some legal, technical and security issues.
The issue is often that barriers and associated costs and problems tend to be short-term and relatively easy to identify and quantify also in monetary terms, whilst benefits tend to be longer-term and much more difficult to identify, let alone quantify in financial terms. All large organisations have this similar problem, including in

the private sector as evidenced by the tendency to short-termism by many companies especially in a poorly regulated environment. This is why accurate and robust measurement, KPIs, a sound long-term business case and cost-benefit analyses are so important. It may be no coincidence that, for example, Korea, Australia, the UK, the Netherlands and Denmark have been using such advanced tools for a number of years, and that they also rank very high in the UN eGovernment survey for eServices.

3.5 Interoperability

3.5.1 Interoperability policy and framework

Interoperability is the term used to describe the ability of diverse systems and organizations to work together (inter-operate). The European Interoperability Framework for European Public Services[68] covers four parts (levels): legal interoperability, organisational interoperability, semantic interoperability, and technical interoperability. The EIF has been agreed by most European countries to help develop cross-border eGovernment services in Europe, and is based on the experience of many European countries in developing their own national interoperability frameworks. Both the EIF and compliant national frameworks in Europe are naturally also inter-operable with each other. National and regional interoperability frameworks are needed as they can help make huge savings because different ministries or countries do not waste money duplicating the work of others. Interoperability is also needed to ensure that the systems of different ministries and countries can work together, for example that data (see section 3.5.2) and base registries (see sections 0 and 3.5.4) can be easily exchanged. However, interoperability can also risk mis-using user data and make it more likely that it can be accessed in an unauthorised manner. Thus, provisions for protecting user data are also needed (see section 3.5.5).

The main features of interoperability policy and framework, as reported by each country, are summarised in Table 10.

Table 10: Interoperability policy and framework

Albania	▪ Each institution must exchange data with other institutions which need the data ▪ Institutions, which have basic primary data necessary for other institutions' work, are required to make these available by 2013
Bosnia and Herzegovina	▪ No specific policy document regarding interoperability ▪ Some deliverables of interoperability framework do however contain policy elements, drafted in compliance with EIF 2.0
Croatia	▪ Align to Interoperability Solutions for European Public Administrations (ISA) in 2011 ▪ Interoperability framework established in October 2011 ▪ Will examine the interoperability provisions of Digital Agenda for Europe
Kosovo*	▪ Upcoming eGovernment law will establish policies for interoperability based on EIF 2.0
Macedonia	▪ Established by the Law for Electronic Management based on EIF 2.0
Montenegro	▪ No specific policies, but Strategy for the Development of Information Society specifies need to create and adopt an Interoperability Framework
Serbia	▪ Serbian National Interoperability Framework is under preparation based on EIF 2.0

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Table 10 shows that all countries have interoperability policy provisions, but some are more specific and advanced than others. Most of the countries mention the European Interoperability Framework 2.0 (EIF 2.0) and/or ISA, which shows good attempts to align to these important international standards which should bring many rewards and opportunities in future.

68 EIF 2.0: see footnote 51.

3.5.2 Barriers to data exchange

The main barriers to data exchange, as reported by each country, are summarised in Table 11. This shows that many of the purely technical barriers appear to have been overcome, at least in some countries like Croatia and Montenegro, but that there are still standardisation and definitional tasks in others. Semantic interoperability (i.e. the use of the same or comparable definitions of categories and terms – like a "house", a "vehicle" or a "company" – so data can be compared), as in many European countries, is one of the biggest challenges. This is because many ministries and agencies have historically used different definitions of basic categories.

The lack of definitions and standards are also seen as big barriers and explains the slow progress in improving data exchange. Organisational barriers are also important, especially staff resistance, uncertainty and lack of coordination between ministries and agencies. Overall, legal barriers seem less challenging, but there are still legal legacies that take time to address, as well as some uncertainty about compliance with EU regulation, and rapid technological change which often makes it very difficult for both legal and organisational changes to keep up.

Table 11: Barriers to data exchange

Albania	▪ Technical: institutions not connected via the government network GovNet ▪ Semantic: decentralised system development leads to semantic non-interoperability leads to the need to create a registry of all databases and their semantic definitions ▪ Organisational: staff resistance to new technologies ▪ Legal: amendments to laws have been made; currently the law on archive and documentation is being modified
Bosnia and Herzegovina	▪ Technical: missing SOA and XML definitions for data exchange ▪ Semantic: each level of government has established semantic structures ▪ Organisational: required by law to exchange data – but in reality do not ▪ Legal: administrative structure prohibits harmonisation of legal framework for interoperability
Croatia	▪ There are no technical, semantic or legal barriers to data exchange ▪ Organisational: regarding business process of updating the spatial units register, which is presently divided between different administrative units
Kosovo*	▪ Reports no technical, semantic, organisational or legal barriers to data exchange
Macedonia	▪ Technical: lack of financial resources for implementing technical interoperability ▪ Semantic: no standards or methodology for semantic interoperability ▪ Organisational: uncertainty as to the consequences of interoperability (jobs may be at stake) ▪ Legal: "speaking" ID number, further legal adjustments must be made; institutions receive some of their resources directly from citizens as fees; current laws prohibits institutions from sharing fee revenue
Montenegro	▪ Technical: none ▪ Semantic: missing semantic framework and the quality of data ▪ Organisational: missing horizontal coordination and collaboration; changing business rules ▪ Legal: plans to have a general law regulating electronic interaction between authorities and registries; there may be legal problems in existing laws not yet revised
Serbia	▪ Technical: some data still in paper mode or is not available from one central source; standardisation and coordination have not yet been done, and no national level policies or recommendations exist to support this ▪ Semantic: lack of semantic interoperability, and poor data quality; missing common data definitions ▪ Organisational: only own data is considered authoritative; traditionally cooperation between state bodies is poor; most IT projects solve only the immediately pressing problems and ignore broader perspectives; some government bodies are better linked with EU institutions than with institutions in Serbia ▪ Legal: law on personal data protection doesn't fully comply with EU regulation; need to establish legal basis for which authorities are responsible for the reference data (basic registers), and what conditions and security standards should be applied for data exchange

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

3.5.3 Base registries

Base registries are the basic building blocks of modern eGovernment within a country and increasingly between countries. They consist of the main databases containing up-to-date categories of everything the government and the public sector need to become an efficient administration offering good services (both electronic and non-electronic) to citizens and businesses, as well as developing and implementing effective policies. The most typical registries are details of all citizens (especially name, age, address, tax liable and paid if in work, etc.) and of all companies (size, year of establishment, number of employees, sector of activity, tax liable and paid, often also linked to registries showing annual turnover, profit, etc.).

Registries of land and of buildings (location, size, type, use, value, tax, etc.) are also common, as are vehicles, transport networks, waterways, etc. If two different ministries keep separate registries of the same category and update these independently (for example, the tax and trade ministries of companies) there is clearly duplication of effort, greater likelihood of error and no possibility to get a full picture of each company. Each country typically has a different view of what a 'base' registry is, i.e. one that can be used by more than one ministry or agency, but typically citizens, companies, land and buildings are most likely to be designated as 'base' registries. Building, updating and sharing base registries can be quite costly in the short term, but, as explained above, this can make very large longer term savings as well as enabling other efficiencies, better services and better policies. Building base registries, and the interoperability system needed for them to be shared by relevant ministries and agencies, is thus a main foundation of eGovernment. The most advanced European eGovernment countries, for example the Netherlands and Denmark, have gone furthest in developing well functioning base registries, but most are making good progress mainly compatible with the EIF 2.0.

An overview of WB countries' progress towards establishing five key electronic base registers, as reported by each country, is provided in Table 12. This provides both an overview of the state of play and calculates scores for each country using a simple point system as explained in the table[69]. The table takes account both of whether or not and the extent to which a base register is digitised but also other important features. These features are online availability, whether or not connected to an interoperability system for ease of exchange between government entities, and whether or not users can check their data. The latter has a number of significant benefits. First that the accuracy of the registry can be improved and second for improving transparency and trust between the government and the user.

The table shows that Croatia as the leading country scores highest but also because its eGovernment is better established over a somewhat longer time frame, as evidenced by the data presented in section 2.5. However, the other current WB leaders, Montenegro and Serbia have less developed base registers which, in fact, are no better developed than some of the so-called lagging countries. This is likely to be because both Montenegro and Serbia have had their impressive eGovernment development only in the last one to two years, as also evidenced by the data in section 2.5. Macedonia also performs quite well in terms of base registry development as it has, like Croatia, had a longer eGovernment development path, though at a lower level than Croatia in most though not all areas. One conclusion is that it takes time to establish base registers, but that rapid progress in eGovernment can take place over the short term somewhat ahead of their full development, and that this is arguably a good strategy. However, a limit to progress in eGovernment is likely to be reached quickly without strong focus on the development of base registries, which will probably mean in most countries that it is good policy to keep the two aligned as much as possible.

In terms of the development of the different base registries in the Western Balkans, Table 12 also shows that the most developed is the business and legal entity register, though very closely followed by the population register. These two are, arguably, the two most fundamental base registries, certainly as seen in most other fast developing eGovernment countries around the world. They together provide the fundamental building blocks of collaborative and whole-of-government eGovernment given that they underpin virtually all transactions between any users and any part of government. The data in Table 12 thus show, that overall priorities seem to be correct.

The next most developed base registry is real estate and property, again a very important set of data for a large number of governance functions.

69 Note, the point system is approximate and assumes equivalence between registers whilst ignores graduations in the extent of base register roll-out. It also ignores the fact that in some countries other base registers might be more important than the five selected here (see the country profile annex for individual country priorities).

Table 12 Base key electronic registers

D = fully digital; d = partially digital; p = paper mode	A = available online; a = partially available online	S = connected to interoperability system; s = partially connected to interoperability system	C = users can check their data; c = users can partially check their data	**Score**: All large letters score 1, all small letters score ½

Country Key register	Albania				Bosnia & Herzegovina				Croatia				Kosovo*				Macedonia				Montenegro				Serbia				Total score
	D	A	S	C	D	A	S	C	D	A	S	C	D	A	S	C	D	A	S	C	D	A	S	C	D	A	S	C	
1 Popula-tion	D	A	S		D		S		D	A	S	C	D	A	S	C	dp			C	D	A		C	d	a		c	19½
2 Business/ legal entities	D	A		C	D				D	A	S	C	D	A	S	C	D	A	S	C	D	A			D	A		C	21
3 Land/ geospatial	d								D	A		C	d				d	A	S	C	d				d	a		c	9½
4 Real estate / property	D	A							D	A		C	d				D	A	S	C	D	A		C	d	a		c	14
5 Cars/ vehicles	p	A	S		D				D	A	S		d				D				D				d				10½
Total	3D 2d	4A	2S	1C	3D		1S		5D	5A	3S	4C	2D 3d	2A	2S	2C	4D 1d	3A	3S	5C	4D 1d	3A		2C	1D 4d	1A 3a		1C 3c	
Scores	4	4	2	1	3		1		5	5	3	4	3½	2	2	2	4	3	3	5	4½	3		2	3½	2½		2½	
Total score	11				4				17				9½				15				9½				8½				**74½**

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

3.5.4 Future plans for digitising base key registries

The countries' main future plans for digitising base key registries, as reported by each country, are summarised in Table 13.

Table 13: Future plans for digitising base key registries

Albania	▪ Each institution is required to build and to exchange data with other institutions that will need the collected data ▪ Institutions, which have basic primary data necessary for other institutions' work, are required to make these available within 2013
Bosnia and Herzegovina	▪ Almost all key registers have already been established, and future plans foresee implementation of electronic services to citizens and business community based on these key registers, though a barrier here is coordination problems between administrative levels
Croatia	▪ Croatia is well advanced but still needs to deal with the interconnection of basic key registers, data updating and refreshing, as well as defining business processes
Kosovo*	▪ Full digitising of the population, businesses, addresses, cars and land registers
Macedonia	▪ Land register is now 30% digitised, expected full digitalisation by 2015 ▪ Completing population register (citizen and birth registers) and make it interoperable in 2014 ▪ Car register to be established ▪ Health insurance to be made interoperable ▪ Employment and pensions to be made fully interoperable
Montenegro	▪ Data consolidation will be one of the key future activities
Serbia	▪ The electronic register of birth, marriage and death will be finalised by the end of 2013. ▪ The register of personal ID cards will be finalised by the end of 2016. ▪ The alphanumeric data of cadastre is close to finalisation. ▪ The geospatial data are currently in digitalisation process and the readiness is 30%. ▪ The register of the social insurance is under construction and it should be operative in first half of 2013. ▪ The register of tax payers is planned to be operative by the end of 2013. ▪ The register of driving licences and car registration is in implementation phase. ▪ Portal of GeoSerbia is under implementation. ▪ Conceptual model for Citizens Register is adopted and the project is under preparation. ▪ The register of urban plans is under implementation. ▪ The central address register is under implementation.

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

The conclusions drawn from Table 13 build upon those made regarding Table 12. For example, Serbia has over the last one to two years made very rapid progress in eGovernment which has to some extent overtaken the enabling status of the base registries. The country's ambitious plans are clearly focused on rectifying this situation in order to ensure that eGovernment continues to make fast progress in the future. Other countries are planning to plug some important gaps, for example the land registry in Macedonia, as well as the plans to create registries for health, employment and pensions. Similarly, Croatia, with the best developed base registries at present, is planning to tackle more difficult problems like data updating and refreshing, as well as defining business processes.

3.5.5 Provisions for protecting user data

As explained in section 3.5.1 above, the exchange of data between ministries and other public agencies can risk mis-using user data and make it more likely that it can be accessed in an unauthorised manner. Thus, provisions for protecting user data are needed and most European countries have developed specific legal, organisational and technical frameworks for doing so, usually based on national laws and customs.

In February 2012, the EC proposed a major reform of the EU legal framework on the protection of personal data[70] by strengthening individual rights and tackling the challenges of globalisation and new technologies. Under EU law, personal data can only be gathered legally under strict conditions, for a legitimate purpose. Furthermore, persons or organisations which collect and manage personal information must protect it from misuse and must respect certain rights of the data owners which are guaranteed by EU law.

However within the EU, businesses, public authorities and individuals need to transfer vast amounts of personal data across borders. Conflicting data protection rules in different countries would disrupt international exchanges. Individuals might also be unwilling to transfer personal data abroad if they were uncertain about the level of protection in other countries. Therefore, common EU rules have been established to ensure that personal data enjoys a high standard of protection everywhere in the EU. Individuals have the right to complain and obtain redress if their data is misused anywhere within the EU.

The main provisions for protecting user data, as reported by each country in the Western Balkans, are summarised in Table 14.This clearly shows that all countries, with the exception of Kosovo[71*], have legal mandatory provisions in place for data as a necessary building block for eGovernment, especially for the exchange of personal data between the public sector and citizens and businesses and for personalised services.

Table 14: Main provisions for protecting user data

Albania	▪ Each agency collecting and processing data is required to notify and be registered in the database of the Data Protection Commissioner which advises or takes administrative action in case of violation
Bosnia and Herzegovina	▪ Mandatory protection is defined by the Law on Personal Data Protection and an agency is established for monitoring
Croatia	▪ The Personal Data Protection Agency (AZOP) carries out administrative and professional tasks regarding personal data protection, and permits data to be transferred cross-border and processed in another jurisdiction if the receiving jurisdiction can ensure an adequate level of protection
Kosovo*	
Macedonia	▪ The Law for personal data protection gives formal provision for protecting user data ▪ Informal provisions are expressed with bilateral agreements between two entities that exchange data, and are being signed before establishing connections
Montenegro	▪ The Law on Personal Data Protection is in place and the Agency for Personal Data is the responsible body
Serbia	▪ The Law on Personal Data Protection requires personal data protection and performed by the Commissioner for Information of Public Importance and Personal Data Protection as the autonomous state organ

70 http://ec.europa.eu/justice/data-protection/index_en.htm
71 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

3.6 eGovernment user interface

An eGovernment user interface refers to the electronic interface between the public administration and the user, for example a web-site or a portal, the use of a mobile phone or tablet for voice, text or graphics, a kiosk display, etc. It also refers to how this interface is used by the user, for example how the user finds out what is wanted through navigation on a website, or whether a search engine is provided to enable the user to enter one or more words describing what is wanted and being directed to what is available that fits the description. Other features can also be important for a user interface, including how an individual user is identified using eID (electronic identification), such as using a pincode or electronic signature or eAuthentication (electronic authentication[72]), as well as how payments can be made be electronically through ePayment.

The main eGovernment user interfaces in the Western Balkan, as reported by each country, are summarised in Table 15.

Table 15: eGovernment user interfaces

Country	Portals	Navigation	Search	eID etc,	ePayment
Albania	▪ Joint G2B & G2B ▪ 3 others ▪ Not interactive ▪ New from 12-12		Yes	New from 12-12	▪ 2 systems ▪ 1 from 12-12
Bosnia and Herzegovina	▪ 2 G2C (1 coming) ▪ 1 also lists G2B			▪ 2 systems ▪ 1 from 1-13	1 system from 1-13
Croatia	▪ 1 G2C ▪ 1 G2B	Life events	Yes	3 systems	2 systems both SMS
Kosovo[10*]	▪ 1 G2C ▪ 1 G2B			Under development	
Macedonia	▪ Joint G2C & G2B ▪ 3 other G2C ▪ 2 other G2B	▪ Service lists ▪ Service types ▪ User segments		2 commercial CAs issuing digital signatures, which are used as eIDs	4 systems
Montenegro	▪ Joint G2C & G2B ▪ 2 other G2C ▪ 1 other G2B		Yes	2 systems	2 systems
Serbia	▪ Joint G2C & G2B ▪ 2 other G2B	Life events		4 systems	1 system

Table 15 shows that all 6 ReSPA member countries and Kosovo* have a number of portals, four of which feature joint G2C (Government to Citizen) and G2B (Government to Business) interfaces, and all except Croatia and Kosovo* have one or more additional portals for specific functions. There are no intrinsic advantages or disadvantages in the number of portals, as long as they are simple, easy to find and linked, as well as being clear in terms of their specific functions and purpose. In contrast, few countries as yet have specialised navigation features, although both Croatia and Serbia are using life events and Macedonia has a more specialised approach

72 Authentication is a process closely related to identification. In online environments, the username and identifies the user, while the password authenticates that the user is whom she or he claims to be.

with service lists, types and user segmentation. These three represent some of the leading countries. Similarly, two of the three leading countries, Croatia and Montenegro, use specific search facilities, only accompanied by Albania.

All countries have one or more eID and eAuthentication systems, including the fact that Albania, Bosnia and Herzegovina and Kosovo* have systems under active development. Similarly with ePayment systems where all countries apart from Kosovo[73*] have systems in place or under active development. Both eID and ePayment are essential tools for transactional services so the development of these systems points to strong future developments of such services.

3.7 User empowerment and centricity

The terms user empowerment and user-centricity refer to the ability of users themselves to have some control over the appearance, configuration and functionality of the eGovernment interfaces and services they use. This includes whether or not users can personalise, for example, the eGovernment website they use; the availability of social media and Web 2.0 features which enable users to add their own comments and content; the ability of users to provide feedback on services or policies and participate in discussions, decisions and policy-making; whether the public administration enables users to collaborate with it to co-produce content or services; whether ‘’open data’, i.e. government data published electronically for anyone to use (e.g. on budgets, jobs, health, addresses, legislation, etc.) is available in machine-readable and data linked formats; and issues of transparency and trust. Transparency refers to the extent to which information about the government and what it does is easily available to citizens (apart from types of information legally defined as confidential, secret or subject to personal data protection), and whether or not citizens can freely ask questions about this information. Trust refers to the other features which enable citizens to trust the public administration, such as anti-corruption measures, ease of contacting and questioning government officials and politicians, etc. Also important are definition and promoting user (as opposed to institutional) benefits, as well as the barriers to achieving these and how these might be overcome.

The main eGovernment user empowerment and centricity features, as reported by each country, are summarised in Table 16. As with many other eGovernment features, the leading group consisting of Croatia, Montenegro and Serbia are often front-runners in new forms of user empowerment and centricity, although Macedonia and Bosnia and Herzegovina also have many such features. As far as the different features of user empowerment and centricity are concerned, all seven countries espouse a strong focus on user benefits and barriers, and there are many common threads. The most common benefit is time savings mentioned by five countries, followed by cost savings and convenience mentioned by three. Transparency and better information are also mentioned by two countries. Barriers to usage also form distinct patterns with the most common being lack of access mentioned by four countries and poor eSkills mentioned by three. Others barriers featured are data protection, privacy, awareness and high cost, each mentioned by two countries. Both these benefits and barriers strongly reflect those identified in most European countries.

73 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Table 16: user empowerment and centricity

Country	User benefits	User barriers	Service personal-isation	Web 2.0 & social media	Feedback & participation	Collabor-ation with users	Open data	Transparency & trust
Albania	▪ Time & money ▪ Better info ▪ Convenience	▪ Access ▪ eSkills ▪ Data protect						▪ Anti-corruption ▪ Planning to join OGP
Bosnia & Herzegovina	▪ Time ▪ Convenience	▪ Access ▪ eSkills ▪ Trust		Some use examples	Some examples		Open formats	▪ Anti-corruption ▪ eTransparency
Croatia	▪ Time & money ▪ Better info ▪ Transparency	▪ Awareness ▪ eSkills		Some use examples	Some examples		▪ Cultural heritage ▪ Other	OGP
Kosovo[11*]	▪ Time & money ▪ Transparency ▪ Simplify ▪ Participation	▪ Info overload ▪ Access ▪ Privacy			Some examples			
Macedonia	▪ Reduce paper ▪ 24/7 convenience ▪ Save time, money	▪ High cost ▪ Awareness ▪ Data protect		Some use examples	▪ Citizen diary ▪ eDemocracy ▪ user satisfaction		Some examples	▪ OGP ▪ Various laws ▪ Anti-corruption
Montenegro	▪ Better access ▪ ICT accept	▪ High cost	Some examples	▪ Discussion fora ▪ Others	▪ eParticipation ▪ ePetition			▪ Some examples ▪ future open budget tools
Serbia	▪ Users not just customers ▪ Meet needs ▪ Cross-border ▪ Less admin ▪ Less CO2	▪ Leadership ▪ Motivation ▪ Access & use ▪ Privacy		Some use examples	▪ eParticipation ▪ eForum		Some examples	▪ Freedom of access to info by default ▪ Anti-corruption

There are two areas in which the WB countries are so far relatively undeveloped, at least when it comes to European and global leaders. First, service personalisation where only Montenegro has some examples, and secondly collaboration with users on, for example, service development where none of the countries could mention any examples. Related areas are the use of Web 2.0 and social media as well as feedback and participation features, but here all countries have some initial examples with the exception of Albania, although neither does Kosovo[74*] use Web 2.0 or social media.

Three of the countries also say they are beginning to implement some initiatives around open data which is one of the hottest topics in global eGovernment especially amongst the most advanced countries. Finally, transparency and trust are strongly related and are seen by many as fundamental building blocks of eGovernment, although not always easy to achieve. In this context, Serbia and Montenegro have quite ambitious initiatives on freedom of information by default and open budget tools respectively, whilst Albania, Bosnia and Herzegovina, Macedonia and Serbia have anti-corruption initiatives. Of particular interest is that Croatia and Macedonia are current members (and Albania is planning to join) of the Open Governance Partnership established under the auspices the United Nations in 2011, which commits members to work together on transparency and openness using peer review and measurement.

74 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

4 Summary status and strategic development of eGovernment in the Western Balkans

Using the evidence presented in sections 2 and 3, this section draws together the common and disparate threads to provide a summary overview of eGovernment in the Western Balkans.[75] It first focuses on the contrasts between the 6 ReSPA member countries and Kosovo[76*] and then examines the opportunities and challenges they appear to share.

4.1 Contrasts within the Western Balkan countries

As concluded in section 2, there seem to be two groups made up of the 6 ReSPA member countries and Kosovo* as far as eGovernment is concerned:

1. A leading group, where, although Croatia remains the leading WB country, Serbia and Montenegro are catching up fast.
2. A lagging group, consisting of Albania, Bosnia and Herzegovina, Kosovo* and Macedonia, which, although they have made good progress, have not moved so quickly nor as comprehensively as the leading group – although Macedonia has done exceptionally well on some measures such as the rollout of eGovernment services according to the eSEE scores and the development of the five key base registers.

The subsequent analyses in section 3 have overwhelming validated this initial conclusion, as summarised below, together with other relevant contrasts.

4.1.1 eGovernment benchmarking and rankings

The overall UN eGovernment global benchmarking for 2010 and 2012 showed that Croatia is the leading Western Balkan country and that its overall[77] global UN ranking improved between 2010 and 2012. However, this was entirely due to improvements in the ICT infrastructure, whilst in terms of eServices no comparative progress was made and in terms of eParticipation the country slipped significantly down the global ranking. Croatia is followed in the overall ranking in 2012 by Serbia, Montenegro, Macedonia, Bosnia and Herzegovina, and Albania respectively. Just looking at the Western Balkan context, Serbia has significantly improved its overall position jumping from fifth in 2010 to second in 2012.

In terms of eServices and eParticipation, three other WB countries apart from Croatia have also slipped in the comparative global ranking between 2010 and 2012: Albania, Bosnia and Herzegovina, and Macedonia. However, Montenegro and particularly Serbia have significantly improved their global rankings in eServices and eParticipation

The 2010 eSEE survey is based on the EC framework rather than the UN's. However, the positioning of countries in terms of eServices is very similar to the UN's eServices ranking in 2010, with the exception of Serbia and Montenegro which seem to be already in some flux regarding eGovernment as noted above.

This conclusion is strongly reinforced when the actual UN data, rather than the global ranks, are examined. This shows that the leading group of Croatia, Montenegro and Serbia have not only significantly higher scores in 2012, but also achieved a much higher point increase in both absolute and percentage terms between 2010 and 2012, compared to the three lagging countries of Albania, Bosnia and Herzegovina and Macedonia.

It can also be seen from Table 4 that the 6 ReSPA member countries did increase their UN point scores between 2010 and 2012, so all made improvements. The issue is that the three leading countries seem to be making much faster progress than the three lagging countries.

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75 For an explanation of the main terms used in this section see section 3.

76 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

77 The overall ranging is based on three equal parts: ICT infrastructure; human capital; eServices (which also incorporates eParticipation).

In terms of whether or not the Western Balkan countries undertake their own in-country benchmarking, only the three eGovernment leaders do so. Croatia performs rigorous and systematic benchmarking, as part of its impending accession to the EU. Montenegro performs an annual analysis based on the European Commission methodology. In Serbia the latest annual eGovernment related benchmarking took place in 2009 at the sub-national level.

4.1.2 ICT infrastructure

In terms of ICT infrastructure relevant for eGovernment, the best data is that collected by the ITU in relation to ICT access, ICT use, skills and ICT price, which validates the two distinct groups in the WB, consisting of Croatia, Serbia and Montenegro in a leading group, and Albania, Bosnia and Herzegovina, and Macedonia in a lagging group. (Kosovo[78*] is not covered by the ITU.) However, there are a few exceptions, for example, mobile cellular subscriptions are relatively high in Albania, as is the percentage of households with a computer in Macedonia. Also, in terms of ICT use, the two group pattern does not hold for the percentage of individuals using the Internet, nor for fixed broadband Internet subscriptions – in both cases differences between the six countries are not great, although in both Croatia still remains the clear leader.

4.1.3 eGovernment interoperability and data exchange

The leading countries tend to be more advanced in terms of their interoperability frameworks, particularly in adopting and implementing the European Interoperability Framework 2.0 (EIF 2.0) and/or ISA. Two of the three leading countries, i.e. Croatia and Montenegro, appear to have overcome many of the technical barriers to data exchange, but share challenges like lack of coordination between separate ministries and agencies, as well as organisational barriers with the other Western Balkan countries.

4.1.4 Base registries

In terms of progress towards establishing five key electronic base registers, Croatia is by far the most advanced country, however, the other so-called leaders, Montenegro and Serbia, have less developed base registers which, in fact, are no better developed than some of the so-called lagging countries. This is likely to be because both Montenegro and Serbia have had their impressive eGovernment development only in the last one to two years. Macedonia also performs very well in terms of base registry development as it has, like Croatia, had a longer eGovernment development path, though at a lower level than Croatia in most though not all areas.

4.1.5 eGovernment use

In the group of 6 ReSPA member countries and Kosovo[79*] four of them are covered by the European Commission's annual Eurostat survey of the demand side, i.e. Croatia, Macedonia, Montenegro and Serbia, but only intermittently and at different times. The available data show that Croatia has somewhat greater usage of eGovernment services than the others, but also that Serbia's eGovernment usage has risen significantly since 2011.

4.1.6 eGovernment user interface[80]

In terms of more advanced navigation, only Croatia and Serbia are using life events, whilst Macedonia has a more specialised approach with service lists, types and user segmentation. These three represent some of the leading countries. Similarly, two of the three leading countries, Croatia and Montenegro, use specialised search facilities, only accompanied by Albania.

78 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

79 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

80 An eGovernment user interface refers to the electronic interface between the public administration and the user, for example a web-site or a portal, the use of a mobile phone or tablet for voice, text or graphics, a kiosk display, etc. – see section 3.6.

4.1.7 User empowerment and centricity[81]

The eGovernment leaders, Croatia, Montenegro and Serbia, are also often front-runners in new forms of user empowerment and centricity, although Macedonia and Bosnia and Herzegovina also have many such features. For example, only Montenegro has some examples of service personalisation, and Croatia, Serbia and Macedonia say they are beginning to implement some initiatives around open data. Croatia and Macedonia are current members of the Open Government Partnership, and Serbia and Montenegro have quite ambitious initiatives on freedom of information by default and open budget tools respectively.

4.2 Common opportunities and challenges for the Western Balkans countries

4.2.1 Progress on ICT infrastructure, data protection and interoperability frameworks

As also found in the 2010 eSEE survey[82], the countries of the Western Balkans are overall doing quite well in terms of ICT infrastructure. For example, most of the reported impacts of eGovernment policies are in the back office and related to the ICT infrastructure. This corresponds well with the overall stage most WB countries are at in developing eGovernment, as well as with the impression given from the UN benchmarking data where the clearest improvements in eGovernment between 2010 and 2012 were in terms of ICT infrastructure. This is also sensible given the need to establish the basic building blocks of eGovernment (especially in the form of standardisation, interoperability, eAuthentication and base registries), even though these can be seen as necessary but not sufficient conditions.

The survey shows that all countries, with the exception of Kosovo[83*], have legal mandatory provisions in place for data protection as a necessary building block for eGovernment, especially for the exchange of personal data between the public sector and citizens and businesses and for personalised services.

With reference to interoperability policy frameworks, most of the countries mention the European Interoperability Framework 2.0 (EIF 2.0) and/or the ISA Programme, which shows good attempts to align to these important international standards which should bring many rewards and opportunities in future.

4.2.2 eGovernment interoperability and data exchange

The survey has shown that many of the purely technical barriers to interoperability and data exchange in the Western Balkan countries appear to have been overcome, although more so in the leading countries. However, there are still standardisation and definitional tasks in most of them. Semantic interoperability (see section 3.5.2), as elsewhere, is one of the biggest challenges particularly because of siloisation[84] and the lack of definitions and standards, as well as the slow progress in tackling these barriers. Organisational barriers are also important, especially staff resistance and uncertainty, siloisation and lack of coordination. Overall, legal barriers seems less challenging, but there are still legal legacies that take time to address, as well as some uncertainty about compliance with EU regulation, and rapid technological change which often makes it very difficult for both legal and organisational changes to keep up. As indicated in section 3.5, these barriers severely hinder the medium and longer-term development of eGovernment and thereby curtail the ability to make significant longer term savings and other efficiencies, and make it more difficult to develop advanced services and better policies. For example, base registries will not be able to easily interoperate. The most advanced European eGovernment countries, for example the Netherlands and Denmark, have gone furthest in developing interoperability and data exchange between them and the use of base registries, but most European countries are making good progress mainly compatible with the EIF 2.0.

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81 The terms user empowerment and user-centricity refer to the ability of users themselves to have some control over the appearance, configuration and functionality of the eGovernment interfaces and services they use – see section 3.7.

82 UNDP: "*eGovernance and ICT usage report for South East Europe* ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

83 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

84 'Siloisation' is when different ministries, agencies and even departments act as 'silos', i.e. operate independently from each other, leading to a lack of interoperability between them, which in the long-term increases costs and reduces the ability of the government as a whole to function efficiently and effectively.

4.2.3 Base registries

One conclusion from the study is that it takes time to establish base registers, and that rapid progress in eGovernment can take place over the short term somewhat ahead of their full development, as exemplified by Serbia, and that this is arguably a good strategy. However, a limit to progress in eGovernment is likely to be reached quickly without strong focus on the development of base registries, which will probably mean in most countries that it is good policy to keep the two aligned as much as possible.

In terms of the development of the different base registries, the most developed is the business and legal entity register, though very closely followed by the population register. These two are, arguably, the two most fundamental base registries, certainly as seen in most other fast developing eGovernment countries around the world. They together provide the fundamental building blocks of collaborative and whole-of-government eGovernment given that they underpin virtually all transactions between any users and any part of government. The evidence from the survey seems to show that overall priorities seem to be correct.

4.2.4 Stronger focus on barriers than benefits and the need for measurement

The evidence from the survey shows that it is often easier to articulate the barriers than the benefits of eGovernment, but this is very typical of even the most advanced eGovernment countries, and arguably indicates a realistic focus on barriers and therefore how they might be addressed and overcome. Several barriers are typical of the majority of the WB countries, and do reflect global experience, especially at the stage of development the WB countries are at. These include lack of institutional will, poor understanding and planning, silo mentality between departments and ministries, a strong concern about costs with the concomitant problem of how to demonstrate that these can be met or outweighed by the benefits, as well as some legal, technical and security issues.

The issue is often that barriers and associated costs and problems tend to be short-term and relatively easy to identify and quantify also in monetary terms, whilst benefits tend to be longer-term and much more difficult to identify, let alone quantify in financial terms. All large organisations have this similar problem, including in the private sector as evidenced by the tendency to short-termism by many companies especially in a poorly regulated environment. This is why accurate and robust measurement, KPIs[85], sound long-term business and social cases and cost-benefit analyses are so important. It may be no coincidence that, for example, Korea, Australia, the UK, the Netherlands and Denmark have been using such advanced tools for a number of years, and that they also rank very high in the UN eGovernment survey for eServices.

4.2.5 Gap between supply and demand in eServices

Although much of the ICT infrastructure seems to be in place, which is of course essential, it is not yet as well used as its potential would allow. As indicated above, ICT infrastructure can be regarded as a necessary but not sufficient condition. One example of this is that in most WB countries, but especially in the lagging countries, there is a gap between supply and demand of eGovernment services, certainly in terms of service sophistication. This is unsurprising, as the same challenge exists across much of Europe as well as globally. However, given that the WB is at a lower level of supply and use than most of Europe, the supply-demand gap here seems to be related more to less developed service sophistication on the supply side than to a demand-side ceiling being reached in much of Europe due to a limit as to how often users need to use what are mainly administrative services.

4.2.6 eGovernment user interface[86]

There is a wide variety and number of different portals and portal combinations across the WB. There are no intrinsic advantages or disadvantages in this, as long as they are simple, easy to find and linked, as well as being clear in terms of their specific functions and purpose. In contrast, specialised navigation or search features are not yet typical. On the other hand, all countries either have one or more eID and eAuthentication systems, or

85 KPIs means Key Performance Indicators, i.e. measures of performance of an organisation. KPIs are commonly used by an organisation to evaluate its success or the success of a particular activity in which it is engaged. Sometimes success is defined in terms of making progress toward strategic goals.

86 An eGovernment user interface refers to the electronic interface between the public administration and the user, for example a web-site or a portal, the use of a mobile phone or tablet for voice, text or graphics, a kiosk display, etc. – see section 3.6.

have them under active development. Similarly with ePayment systems where all countries apart from Kosovo[87*] have systems in place or under active development. Both eID and ePayment are essential tools for transactional services so the development of these systems points to strong future developments of such services.

4.2.7 User empowerment and centricity[88]

According to the survey, 6 ReSPA member countries and Kosovo* espouse a strong focus on user benefits and barriers, and there are many common threads. The most common benefit is time savings mentioned by five in the abovementioned group, followed by cost savings and convenience mentioned by three. Transparency and better information are also mentioned by two countries. Barriers to usage also form distinct patterns with the most common being lack of access mentioned by four countries and poor eSkills mentioned by three. Others barriers featured are data protection, privacy, awareness and high cost, each mentioned by two countries. Both these benefits and barriers strongly reflect those identified in most European countries.

There are two areas in which the WB countries are so far relatively undeveloped, at least when compared to European and global leaders. First, service personalisation where only Montenegro has some examples, and secondly collaboration with users on, for example, service development where none of the countries could mention any examples. Related areas are the use of Web 2.0 and social media as well as feedback and participation features, but here all countries have some initial examples with the exception of Albania, although neither does Kosovo[89*] use Web 2.0 or social media. In terms of open data and transparency and trust, developments in the WB countries are varied but on the whole not yet advanced.

87 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

88 The terms user empowerment and user-centricity refer to the ability of users themselves to have some control over the appearance, configuration and functionality of the eGovernment interfaces and services they use – see section 3.7.

89 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

5 Country proposals for eGovernment capacity building in the Western Balkans

Table 17 provides a synoptic overview of country recommendations for future ReSPA projects and activities in the field of eGovernment capacity building in the Western Balkans. In most cases, additional information and more detailed explanations are provided in the country profile annex.

The following are the main proposals taken from Table 17 and the individual country reports grouped under coherent headings. This will enable a balanced assessment to be made in relation to level of support across the countries, feasibility, costs involved, time required, expertise needed, other resources required, and synergies with other activities. These are all tasks which it is assumed ReSPA, together with the seven Western Balkan countries, is able to undertake.

1. Regional networks
   - Continue the ReSPA eGovernment network
   - Collaborative network with practitioners
   - Regional University Network
   - Register pools of expertise for specialised help
   - Brokering and matching function

2. Regional centres
   - Regional eAcademy
   - Regional Research and Development Centre
   - Regional Interoperability Centre
   - Contact centre for electronic appointments in Health Care Centres and hospitals (via e-mail, SMS, phone call)
   - Municipal contact centre

3. Training, education, workshops and seminars
   - Training of trainers
   - Prepare curriculum on eGovernment for target groups
   - Learning from neighbouring countries about eGovernment
   - Regional approach to common problems

4. Issues to be addressed by capacity building initiatives
   - Change management
   - Privacy impact assessment (personal data usage)
   - Management of IT projects in administration (from idea and technical specification to acceptance)
   - Measurement of eGovernment outcomes
   - International measurement of eGovernment
   - IT security – basics

Table 17: Summary of country proposals for eGovernment capacity building in the Western Balkans

Albania	B&H	Croatia	Kosovo*	Macedonia	Montenegro	Serbia
▪ Regional eAcademy (including ICT park mission) at regional level. ▪ Regional Universities Network ▪ Regional research and development centre ▪ Regional interopera-bility centre.	▪ Training of Trainers for regional eGovernment development ▪ Organizing workshops for eGovernment Regional Network members ▪ Establishing annual ReSPA eGovernment conference.	▪ Design, develop and implement eGovernment learning portal ▪ Train the trainers for eGovernment education ▪ Prepare curriculum on eGovernment for target groups.	▪ Learning from neighbouring countries about eGovernment ▪ Training and seminars ▪ Publish regional and other eGovernment studies in local languages as well as English.	▪ Change management ▪ Privacy impact assessment (personal data usage) ▪ Management of IT projects in administration (from idea and technical specification to acceptance) ▪ Measurement of eGovernment outcomes ▪ International measurement of eGovernment ▪ IT security – basics ▪ Open data – for data owners (how to get them) ▪ Open data – for users/developers (next step) ▪ Copyright and open software ▪ Cloud computing ▪ Data exchange – ex-officio.	▪ Collaborative network with various groups of practitioners ▪ Organize a regional approach to common problems ▪ Continuation of eGovernment network.	▪ Legal environment for governance – benefits of harmonisation, coordination on the level of entire public administration ▪ Business portals or Virtual Business fairs – synergies and training between businesses ▪ Business Processes ▪ Data governance ▪ Management and control of IT resources ▪ Training and education ▪ Contact centre for electronic appointments in Health Care Centres and hospitals (via e-mail, SMS, phone call) ▪ Municipal contact centre ▪ Public Funds Management ▪ GIS ▪ Studies on citizen satisfaction, on business needs and government benefits of open data, on how to involve WB in pan-European eServices, on PPPs, on economic benefits evaluation.

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

- Open data – for data owners (how to get them)
- Open data – for users/developers (next step)
- Copyright and open software
- Cloud computing
- Data exchange – ex-officio.
- Legal environment for governance – benefits of harmonisation, coordination on the level of entire public administration
- Business portals or Virtual Business fairs – synergies and training between businesses
- Business Processes
- Data governance
- Management and control of IT resources
- Public Funds Management
- GIS
- eProcurement

5. Conferences and other events
   - Establishing an annual ReSPA eGovernment Conference
   - In the context of the Conference, run a Western Balkans eGovernment Awards competition

6. Surveys and studies
   - Studies on citizen satisfaction, on business needs and government benefits of open data, on how to involve WB in pan-European eServices, on PPPs, on economic benefits evaluation.
   - Publish regional and other eGovernment studies in local languages as well as English

7. Web and online presence
   - Design, develop and implement an eGovernment learning portal

These proposals are also incorporated in the recommendations in section 7.

6 Country proposals for eGovernment project opportunities in the Western Balkans

Table 18 provides a synoptic overview of country recommendations for eGovernment project opportunities in the Western Balkans. In most cases, additional information and more detailed explanations are provided in the country profile annex.

The following are the main proposals taken from Table 18 and the individual country reports grouped under coherent headings. This will enable a balanced assessment to be made in relation to level of support across the countries, feasibility, costs involved, time required, expertise needed, other resources required, likely donors and other external financial sources, and synergies with other activities. These are all tasks which it is assumed ReSPA, together with the seven Western Balkan countries, is able to undertake.

1. Regional networks
   - Establishment of ReSPA Online Campus
   - Establishment of the regional Online community of eGovernment practitioners
   - Continuation of regional network of eGovernment practitioners

2. Regional centres
   - National Training Center, (e-academy)
   - eGovernment Education Point for ReSPA countries
   - Municipal contact centre

3. ICT infrastructure and communications projects
   - ICT infrastructure for schools and universities
   - Building a unique national platform for GIS
   - Unified communications for emergency 112 short number
   - Building regional semantic for interoperability
   - Regional Initiative for Open Data
   - eGovernment Data Governance
   - eGovernment Business Process Management & Reengineering

4. eGovernment enabler project ideas
   - Developing eContent for eGovernment
   - Design and implement regional eIdentification system
   - On-line community (Web 2.0 technologies) combining communication C2G, blogging, discussion forums, news from government and special groups for civil servants (national and local level) for quality in preparing and implementing new projects.

5. Functional governance areas
   - E-register so that parents can check the results of their children

Table 18: Summary of country proposals for eGovernment project opportunities in the Western Balkans

Albania	B&H	Croatia	Kosovo*	Macedonia	Montenegro	Serbia
Concrete projects: ▪ National Training Center, (e-academy). ▪ ICT infrastructure for schools and universities ▪ E-register so that parents can check the results of their children. ▪ Unified communications for emergency 112 short number. ▪ Building a unique national platform for GIS	▪ Establishment of ReSPA Online Campus ▪ Establishment of the regional Online community of eGovernment practitioners	▪ eGovernment Education Point for ReSPA countries	▪ National Judicial Network Project ▪ Accounting Offices Automation Project ▪ Central Census Management System Project ▪ Internet Tax Office Project ▪ National Police Network Project ▪ Government Supply Office's Electronic Sale Project	▪ Building regional semantic for interoperability ▪ Developing eContent for eGovernment ▪ Code of conduct ▪ Regional Initiative for Open Data	▪ Continuation of regional network of eGovernment practitioners ▪ Design and implement regional eIdentification system ▪ On-line community (Web 2.0 technologies) combining communication C2G , blogging, discussion forums, news from government and special groups for civil servants (national and local level) for quality in preparing and implementing new projects.	▪ Establishment of innovative business networks and quality enhancement of public services- Business portals and Virtual Business Fairs ▪ eGovernment Business Process Management & Reengineering ▪ eGovernment Data Governance ▪ Management and control of eGovernment IT resources ▪ eGovernment Human Resources Capacity Building ▪ Contact centre for electronic appointments in Health Care Centres and hospitals (via e-mail, SMS, phone call) ▪ Municipal contact centre ▪ Software for Public Funds Management

*This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

- Internet Tax Office Project
- National Police Network Project
- Establishment of innovative business networks and quality enhancement of public services- Business portals and Virtual Business Fairs
- National Judicial Network Project
- Contact centre for electronic appointments in Health Care Centres and hospitals (via e-mail, SMS, phone call)

6. Management projects
   - Accounting Offices Automation Project
   - Central Census Management System Project
   - Government Supply Office's Electronic Sale Project
   - Code of conduct
   - Management and control of eGovernment IT resources
   - eGovernment Human Resources Capacity Building
   - Software for Public Funds Management

These proposals are also incorporated in the recommendations in section 7.

7 Main recommendations and conclusions

The country proposals in sections 5 and 6 have been incorporated as specific components of the recommendations in this section. Recommendations will need to be considered by ReSPA together with the six ReSPA member countries and Kosovo[90*] as part of a balanced assessment based on the following factors:

- the level of support across the countries
- the feasibility of the initiative
- the costs involved
- the time required
- the expertise needed
- other resources required
- likely donors and other external financial sources
- maximising synergies with other activities.

7.1 Key considerations and objectives for Western Balkans' eGovernment

There are three overriding considerations for successful collaboration amongst WB authorities in relation to successful eGovernment development.

7.1.1 Institutional will and resources

The main overriding requirement to make eGovernment cooperation happen at WB level is institutional will, including the commitment of the necessary resources. It is absolutely essential to get clear high level buy-in from each participating country, and this is achieved by making a strong case which also emphasises forward-looking strategic opportunities and threats.

7.1.2 A realistic approach to cooperation

Second, cooperation is the key. Progress and power derive from involving people rather than from dictating to them, especially in a relatively new area like eGovernment. Ensuring that countries 'own' the process, and directly experience the benefits of progress, is absolutely essential. Thus, risk, experimentation and trial and error are important, as long as this is containable, forward looking and does not repeat the same old avoidable mistakes, because dealing with risk naturally and logically leads to innovation. Furthermore, innovation is increasingly about collaboration, not just between governments but also with other stakeholders in the private and civil sectors, with user groups, and with global partners. Collaboration is also about agreement and buy-in, through sensible support and incentives, at every level of government.

One of the principal reasons why eGovernment has not become a more important activity in the WB to date is probably because different countries have quite different ambitions and levels of progress. Many countries have been far too busy working on their own national agendas and activities, and their resources are limited. Thus, it is important to adopt a 'variable speed' eGovernment model so that countries can advance at different paces and in different action areas through a process of 'positive competition', whilst also being stimulated and encouraged to increase the pace and widen the scope of their national eGovernment ambitions. This must go hand-in-hand with developing eGovernment initiatives and services at WB level, and of course linked to and part of European eGovernment developments.

7.1.3 Five objectives for Western Balkans' eGovernment cooperation

There are five inter-linked objectives for WB eGovernment cooperation which should provide the framework for all else:

i) develop eGovernment at WB level through cooperation and competition
ii) support the development of eGovernment at individual country level

90 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

iii) maximise the synergy between the two and align with EU standards and programmes
iv) engage with various stakeholders within and outside the region to maximise learning and benefits for the WB countries and the region as a whole
v) ensure that eGovernment is used as a tool at WB and national level to promote socio-economic and cultural development – two-way trust is needed to achieve this: trust in government by society and trust by government of society – and if it doesn't do this, then the tool must be refined or abandoned, as eGovernment is a means to an end, and not itself an end.

7.2 Headline recommendations

The headline recommendations, which the comparative survey and the background research undertaken for this report point to, are the need for the six ReSPA member countries and Kosovo[91*] to focus on the following eight cross-cutting issues that interconnect eGovernment and public administration:

1. The need for a long-term strategic approach together with institutional and legal backing to actively support a realistic but ambitious eGovernment strategy for collaboration across ministries and departments. At individual country level this collaboration is necessary to enhance the overall efficiency and effectiveness of public administrations. At regional level collaboration is needed to increase learning and shared development between countries given that there are both many common issues and challenges which can be solved together and that the leading countries (particularly Croatia, Montenegro and Serbia) can assist the other countries with the success they have already achieved. The most important issues to focus on in the first instance are in the following seven points.

2. Change management to counteract resistance to positive change, covering also project planning and management and the development of both financial and social business case approaches.

3. The training and support needed to develop professional and highly competent staff able to collaborate and commit to the strategies and plans for eGovernment and public administration development. Training a cadre of top and middle-level leaders, who understanding the changes needed, the opportunities and challenges, and who possess good leadership skills, is of utmost importance.

4. A strong, clear and mandatory legal framework for eGovernment underpinning the necessary technical building blocks shared across government, particularly standardisation, interoperability, data exchange, base registries, eID, eAuthentication and data protection, and then clear plans over the longer term to put these in place, aligning with the European Union standards and frameworks where relevant.

5. User-friendly and accessible eGovernment services of high quality enhancing user empowerment and centricity, and with both a financial and a social business case.

6. Move towards open government, transparency, open data and the use of social media, again with both a financial and a social business case.

7. Gearing eGovernment development to directly contribute to addressing the societal challenges resulting from the economic and social crisis, specifically in relation to cutting government costs whilst also improving services, and addressing in particular unemployment (especially amongst the youth), lack of growth and social cohesion.

8. Continuous measurement and monitoring of eGovernment in order to fine tune both the financial and the social business case.

91 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

7.3 Capacity building and cooperation recommendations

The following capacity building and cooperation recommendations are based on the country proposals summarised in section 5 together with the other evidence presented in this report as well as European and global good practices.

7.3.1 Regional networks and centres

Capacity building recommendation 1:
Continue the existing ReSPA eGovernment network
Most countries see high value in the existing ReSPA eGovernment network and value this as a prime means for collaboration. This should continue and be strengthened as proposed in many of the following recommendations.

Capacity building recommendation 2:
Set up a Centre and Network of Excellence for Western Balkans eGovernance
Many countries also propose various other kinds of regional networks and centres, and this can be very valuable as long as sufficient institutional and financial support is provided. The recommendation is to set up a Centre and Network of Excellence for Western Balkans eGovernance[92] with a small low cost physical unit supporting a wider network, perhaps organisationally linked to *ReSPA*, for example with the following roles:

- Ensure this is linked to wider government and public sector issues, such as good governance, so that eGovernance is not considered as a separate activity.
- Research into and provide support to WB countries on top-priority WB related eGovernment issues in order to develop regional approaches to common problems, to be determined in detail by the countries and ReSPA, such as:
  - the eight cross-cutting issues described in section 7.2
  - joint collaboration and research on regional interoperability linked to EIF 2.0
  - joint collaboration and research on regional eProcurement linked to EU standards and developments
  - joint collaboration and research on regional eID and eAuthentication linked to EU standards and developments
  - citizen satisfaction
  - business needs, administrative burden reduction, support to competitiveness, etc.
  - local ICT sector needs and support
  - civil society needs, promotion of social cohesion and inclusion
  - the financial and social business cases of eGovernment services
  - user-friendly, accessible and user-centric eGovernment services
  - eHealth appointments and contacts
  - municipal and local level eGovernment
  - Government 2.0 covering *inter alia* open government and open data, trust, eParticipation, Web 2.0 tools, open innovation, etc.
- Establish a biennial (every two years) ReSPA/WB high level eGovernment Conference, for strategic and policy agreements on non-binding collaboration, and link this in terms of timing and focus to relevant European high level (e.g. ministerial) conferences.
- In the context of this biennial conference, run a Western Balkans eGovernment Awards competition. Although categories of prizes need to be specified, the types of solutions/services could be determined by the competition participants themselves in order to support open and collaborative innovation. Prizes would be awarded on the basis of value to citizens or businesses and value to the public sector, for example in terms of cost savings.
- Establish a biennial eGovernment seminar, to run in alternate years to the high-level conference, for the tactical, review and planning of WB eGovernment collaboration.
- Establish open data 'hackathons' moving around the WB to encourage especially the youth but also involve small start-ups and SMEs as well as the large ICT companies and perhaps universities and sponsors.
- Provide common facilities for training, workshops, seminars, etc.

92 The actual name is less important than what such a centre does and how it does it.

- Monitor eGovernment developments in the WB area, in Europe and globally, to increase WB awareness of the leading edge.
- Undertake a brief but detailed survey of the European and global sources of financial and other support which could support the development of WB eGovernment.
- Encourage and support WB countries join European projects and programmes where possible and relevant.
- It is especially important to ensure linkage and as much alignment as possible to EU developments in eGovernment policy, research and deployment (see section 2.4) – see also section 7.3.6.
- Act as an independent think tank which can function as a neutral trusted third party 'ombudsman' ('champion' and 'watchdog') at WB level, for example helping to develop and monitor citizens' and business' interests, acting as a point of grievance and complaint, and generally protecting the rights of different actors in terms of data mis-use, data security, privacy and other issues. This would show to society at large (citizens, businesses, etc.) both that WB eGovernment is not only in the interests of public administrations but also in their interests and that they have some ownership and influence on it.

Please note that if such a centre and network were set up it could also act as the organisational framework for many of the following recommendations.

7.3.2 Facilitation and brokerage

Capacity building recommendation 3:
Set up WB registers of expertise, capacities, skills and good practices
Recognise each country's strengths and weaknesses, and provide mutual support on that basis, by setting up registers of expertise, capacities, skills and good practices. This can work in three ways. First, countries leading in a specific area can provide their expertise and support at the WB level. Second, one-on-one mentoring assistance can be provided to individual countries weak in the given area or which wish to improve their performance. Third, two or more countries with a similar challenge or policy can collaborate in achieving their common aims. In fact, working groups or cross-country teams on particular issues could be established on this basis. Regional leaders can act as mentors and experts for others. The most important for the region as a whole are the eight topics listed in section 7.2, and other subjects that can be tackled as agreed by the representatives of each country together with ReSPA.

Capacity building recommendation 4:
Organise staff exchanges
Organise staff exchanges for short or long periods, through secondment programmes, study visits, etc. It makes sense for many WB countries to cooperate directly together, given their similar language and cultural backgrounds, and the very similar eGovernment challenges and opportunities they face. Learning from neighbouring countries about eGovernment is a high value approach.

Capacity building recommendation 5:
Set up a shared online collaboration space
Set up a shared online collaboration space for WB actors with good practice, communities, a journal, etc. (cf. European ePractice portal[93]), for example to house the WB expert databases, as well as for example, events, blogs, common documents, knowledge bases of good practices, a learning portal, etc.

7.3.3 Training, education, workshops and seminars

All countries agreed that various forms of training and workshops should be prioritised.

Capacity building recommendation 6:
Common support and training for different WB eGovernment staff
Set up a common support and training programme for different WB eGovernment staff, specifically CIOs, senior management and decision-makers in the first instance, but this would also be very beneficial for website managers, eService design staff, civil servants engaging in public online discussion and forums or providing citizen support in specific areas, and for middle managers, etc. This could be done both on a formal and

93 http://www.epractice.eu/

informal basis. This will help extend the benefits which countries have already experienced through participating in ReSPA activities more widely across the countries to other groups. Capacity building of WB public sector agencies is a critical task, and cooperation at WB level can improve economies of scale and scope

Capacity building recommendation 7:
Prepare common but flexible WB eGovernment curriculum
Based on the specific recommendations in this report, as well as the status and needs of WB eGovernment development as summarised in section 4, a common but flexible WB eGovernment curriculum for different categories of eGovernment staff should be developed. This could draw on the WB registers of expertise, capacities, skills and good practices, as well as external experts. Liaison with the main international organisations, like the EC, the UN and the OECD, should also be established as each of these is considering developing or supporting CIO and leadership training, for example through the UN University network.[94]

Capacity building recommendation 8:
Train the trainers
In order for common training, education, workshops and seminars to be effective, a cadre of high calibre trainers needs to be identified, supported and where necessary trained. Again this should draw upon the WB registers of expertise, capacities, skills and good practices recommended above, but should also examine the role of the main international organisations and the UN University network also mentioned above.

7.3.4 Strategic focus areas for capacity building initiatives

Drawing on the main observations made in section 4 on the status and strategic development of eGovernment in the Western Balkans, a number of critical recommendations can be made about the necessary strategic focus for capacity building initiatives.

Capacity building recommendation 9:
Initiate a workshop, seminar and online learning series on specific issues
Initiate a workshop, seminar and online learning series on specific issues, including for the working groups and cross-country teams already in existence. These can be both face-to-face and online (asynchronous forums as well as real time webcasts or 'webinars'). The subjects of the workshops and seminars can be guided by the eight topics listed in section 7.2. Learning around these issues will need to be ongoing and not simply short-term and should focus on supporting the double alignment process described in section 7.3.5 below. The main strategic issue areas where capacity building is most required according to section 4[95] are summarised in the following recommendations.

Capacity building recommendation 10:
Learn from the leading WB countries
Croatia, Serbia, Montenegro and, to some extent Macedonia, are the eGovernment leaders in the Western Balkans. All seven countries have, of course, their strengths and weaknesses, but the countries named show consistent leadership across most of the main strategic areas addressed in this report, so their experience and expertise need to be exploited as much as possible in order for all WB countries to learn and progress together. In addition, Slovenia as a former part of Yugoslavia with many language and cultural similarities to the other WB countries covered by the current ReSPA collaboration, could be consulted and involved given its fast progress in eGovernment over the last five years as a member of the EU. Slovenia's leap-frogging experience could be a practical inspiration to many other WB countries.

Capacity building recommendation 11:
Legal and regulatory basis
The evidence in this report, as well as previous studies[96] shows that the legal and regulatory basis for eGovernment in most WB countries is satisfactory, particularly in the leading countries. However, there remain many legacy legal impediments particularly in the area of establishing and building the base registries which need attention.

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94 Currently being developed by the UN Universities in Macao and Maastricht.
95 Reference should be made to the relevant sub-sections of section 4.
96 For example, the eSEE study: UNDP: "*eGovernance and ICT usage report for South East Europe* ". 2nd edition. Sarajevo 2010
http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

Capacity building recommendation 12:

Structural and organisational issues

Structural and organisational configurations are a feature of the broader governmental and public sector character of the WB countries. Mainly because of this configurational legacy and its slow to change and to adapt nature and ways of working, this often results in strong siloisation[97] which is the biggest barrier to advanced eGovernment development. Many European and other countries tackle this barrier by setting up a cross-government (across ministries and agencies) eGovernment 'task force' or specialised unit typically reporting direct to the Prime Minister's or President's office. This provides top-level institutional support and urgency, especially if backed by the necessary financial resources and willingness to adapt legacy legal and organisational structures where needed.

Capacity building recommendation 13:

Management and leadership issues

The key to successful eGovernment policy and implementation is to develop a cadre of top and middle-level leaders, who understanding the changes needed, the opportunities and challenges, and who possess good leadership skills. There should include a strong focus on change management, project planning, business case development and adequate monitoring and measurement.

Capacity building recommendation 14:

Empower and trust the civil servant

Empower and trust the civil servant through applications and systems which enable public sector staff, many of whom are frontline professionals, to themselves contribute to the development of new services and policies through direct access to data and tools and on the basis of appropriate policies and organisational arrangements. Many civil servants see the real time performance and impact of public services on citizens. They would be able to generate appropriate data and other inputs which could improve lived service experience if they were given the data, tools and incentives to do so, for example by being able to participate in a professional capacity in citizens' social networks to offer advice and knowledge. Moreover, many civil servants also experience a blurring of their personal life with their professional life, and this could be beneficially exploited by allowing them to have some choice of the tools they use at work and allow them to also use these tools in their private lives. Sensible structures and data protection systems will of course be needed to enable this to happen but the potential benefits are enormous – civil servants are the key to good eGovernment.

Capacity building recommendation 15:

ICT infrastructure, data protection and interoperability frameworks

ICT infrastructure, data protection and interoperability frameworks are all progressing quite well in the WB especially in the last five years, although with various weaknesses in different countries, and tend to be the main reason underpinning most eGovernment improvements seen. These issues clearly represent some of the necessary but not sufficient conditions for long term successful eGovernment so should continue to be improved in order that some of the other strategic areas below can be supported. (See section 4.2.1 for further details)

Capacity building recommendation 16:

eGovernment interoperability and data exchange

Many of the technical barriers to eGovernment interoperability and data exchange have been overcome but there remain a number of very important challenges which need addressing, preferably through collaboration across WB countries and in alignment with parallel EU developments (see section 4.2.2 for further details):

- Standardisation and definitional issues
- Semantic interoperability
- The siloisation barrier
- Organisational and staff resistance barriers
- Some legal legacy issues.

97 'Siloisation' is when different ministries, agencies and even departments act as 'silos', i.e. operate independently from each other, leading to a lack of interoperability between them, which in the long-term increases costs and reduces the ability of the government as a whole to function efficiently and effectively.

Capacity building recommendation 17:
Base registries
Base registries take time to establish as evidenced by Croatia and Macedonia as leaders in this area, both of which have been focused on eGovernment development for longer than other WB countries. It is also clear that many 'quick wins' in eGovernment can be obtained without well developed base registries, as evidenced by Serbia, but that in the medium to longer term a strategic focus on base registries as fundamental building blocks for eGovernment is imperative, especially for citizens and businesses as top priorities. (See section 4.2.3 for further details)

Capacity building recommendation 18:
Barriers to and benefits of eGovernment
For eGovernment staff, it is much easier to understand and articulate the barriers to eGovernment, particularly because these tend to be easiest to identify and measure, especially in the short-term, even though in many cases their solution requires longer-term effort. These barriers often include lack of institutional will, poor understanding and poor planning, a silo mentality, concerns about the costs of eGovernment, and the problems of demonstrating and measuring the benefits of eGovernment against the more easily measured costs. This means that more effort should be put into measuring benefits as well as costs, despite the challenges, including KPIs and other measurement and benchmarking tools. If something is not measured (or at least realistically assessed) it risks being neglected regardless of its importance. In this context, adopting robust financial and social business case tools is also recommended. (See also section 7.4.4, and see section 4.2.4 for further details)

Capacity building recommendation 19:
Gap between supply and demand in eServices
Much of the ICT infrastructure is in place but is not yet well used. Again, ICT infrastructure can be seen as a necessary but not sufficient condition for long term successful eGovernment, so increasing strategic focus is now needed on more advanced user-friendly and accessible eGovernment services of high quality. (See section 4.2.5 for further details)

Capacity building recommendation 20:
eGovernment user interface
Most countries do have, or are actively developing, one or more eID, eAuthentication and ePayment solutions linked to the eGovernment services. However, other aspects of the user interface are much less well developed, for example specialised navigation or search facilities. (See section 4.2.6 for further details)

Capacity building recommendation 21:
User empowerment and centricity
The most commonly mentioned benefits for users are savings in time and money and greater convenience, with concomitant barriers as lack of access and poor eSkills, and these are also important in the WB countries. However, there are two important areas requiring strong strategic focus where the WB countries are under-developed, i.e. personalisation which permits users themselves to have some control over the design and content of their eGovernment interface, and collaboration between the public administration and the user in designing and developing services. Related areas also requiring focus are the use of Web 2.0 and social media, as well as open data, transparency and trust, where developments in the WB countries are varied but on the whole not yet advanced. (See section 4.2.7 for further details)

7.3.5 Other specific issues which could be addressed by capacity building initiatives

To supplement the high priority strategic focus areas outlined in section 7.3.4, most countries also specified numerous issues which could be addressed by WB capacity building initiatives.

Capacity building recommendation 21:
Supplement the strategic focus areas for capacity building initiatives with specific issues proposed by individual countries

Supplement the strategic focus areas for capacity building initiatives with specific issues proposed by individual countries. These issues can be agreed between representatives of the WB countries, for example from those topics they have already suggested shown in section 5[98], not included in the above, which country representatives experience a need for in their daily work:

- Open data – for data owners (how to get them)
- Open data – for users/developers (next step)
- Copyright and open software
- Cloud computing
- Data exchange – ex-officio.
- Legal environment for governance – benefits of harmonisation, coordination on the level of entire public administration
- Business portals or Virtual Business fairs – synergies and training between businesses
- Business Processes
- Data governance
- Management and control of IT resources
- Public Funds Management
- GIS
- eProcurement.

7.3.6 Double alignment process

Capacity building recommendation 22:
Initiate a double alignment process between WB countries and with EC programmes
Initiate a double alignment process between WB countries and with EC programmes, particularly exploiting the ongoing development of eGovernment strategies and initiatives in the WB and against the unfolding of the EC's eGovernment support and financial programmes which are expected to be in place by early 2014 (see sections 2.2 and 2.4). The next twelve months are therefore critical to undertake this double alignment.

The purpose is to carry out: 1) eGovernment alignment between the countries at WB regional level, and 2) to align this with the EU level, in terms of eGovernment strategies, which recognises that the two levels are different but that there can and should be substantial overlap in content and mutual learning. The key to alignment is not to force conformity or similarity but to identify and exploit this overlap. Alignment therefore does not mean replication but rather a high level of synergy, and recognises the existing specialisations of individual countries and how these can be used cooperatively for the benefit of all countries.

Alignment between the six ReSPA member countries and Kosovo[99*] is important for mutual help and learning directly supported by ReSPA focusing first and foremost on the eight issues identified in section 7.2, as well as the other issues mentioned above. However, alignment with EU strategies and EC programmes (as described in section 2.2 and 2.4 as well as in section 3) is also extremely important. Although these are advisory on EU Member States and other associated countries, they are nevertheless very important for future collaboration with and membership of the EU. These European strategies, frameworks and programmes also represent globally the most advanced strategies and frameworks although of course not leading on every issue.

7.4 Specific project recommendations within the capacity building and cooperation framework

Project opportunities are here defined as specific and concrete project ideas which might be funded by available European and other international funding and support programmes, as well as by other or private donors within or outside the region.

It should be noted that most, if not all, of the recommendations made for capacity building in section 7.3 can also be prime candidates for project development.

98 Note, there is some overlap between country proposals for capacity building issues to be addressed (in section 5) and their proposals for project opportunities in section 6.
99 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

7.4.1 Projects likely to be supported by European support and financing programmes

It has been explained in this report (mainly in section 2.4) that all European support and funding programmes are currently under revision and out to broad including public consultation, and are first expected to become concrete in the latter half of 2013 with a start in early 2014. On this basis, this section focuses mainly on those areas where it is clear that European support and finance is likely to be available. In addition, various overarching European strategies are already in place and will continue until 2020 (although subject to mid-term revisions probably in 2015-16), especially the EU 2020 Strategy[100], the Digital Agenda Europe[101], as well as the Innovation Union[102]. This enables at least the major contours of European thinking in relation to eGovernment to be quite clearly discerned.

Project recommendation 1:
European Interoperability Framework
Projects related to the European Interoperability[103] Framework (EIF version 2.0, 2010)[104], which as identified in section 7.3 are a crucial building block for European eGovernment development. Related European initiatives on eID, eAthentication and cross-border services are also important opportunities likely to be continued in the future.

Project recommendation 2:
EU's Re-Use of Public Sector Information (PSI) Directive (2012)
Projects related to the EU's Re-Use of Public Sector Information (PSI) Directive (2012)[105], i.e. opening up government data for use by other actors such as citizens, businesses, civil groups, etc. (is currently under detailed discussion for final agreement).

Project recommendation 3:
eGovernment Action Plans
Projects related to the four priorities of the current European eGovernment Action Plan (2011-2015)[106] which give much scope for a wide variety of projects:

- User empowerment: eGovernment services to empower citizens and businesses, e.g. increased access to public information, strengthened transparency and stakeholder involvement.
- eGovernment should support the further construction of the digital single market: high quality eGovernment services, mobility, creating synergies in eGovernment solutions, to reduce administrative burden, increase transparency and potentially generate costs savings.
- eGovernment to enable efficiency and effectiveness, to reduce the administrative burden, improve organisational and administrative processes, facilitate information sharing and simplify interaction with the Commission.
- Implementation through key enablers and the necessary legal and technical preconditions, including interoperability of systems to exchange, process and correctly interpret information.

Note, the current eGovernment Action Plan expires in 2015 but is likely to be enhanced and upgraded in line with EU 2020, the DAE and the Innovation union, as well as by the thinking summarised in the next project recommendation.

Project recommendation 4:
Public sector innovation addressing societal problems
Projects related to public sector innovation involving ICT, especially those which help to meet pressing societal problems and focus on open and social innovation (like the ageing society, greater demands for health care, increasing poverty, employment and jobs, climate change and sustainability, etc.).[107]

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100 Europe 2020 http://ec.europa.eu/europe2020/index_en.htm
101 Digital Agenda Europe http://ec.europa.eu/information_society/digital-agenda/index_en.htm
102 Innovation Union http://ec.europa.eu/research/innovation-union/index_en.cfm
103 Interoperability is the term used to describe the ability of diverse systems and organizations to work together (inter-operate). It is often used in a technical systems engineering sense, or alternatively in a broad sense, taking into account social, political, and organizational factors that impact system to system performance. The European Interoperability Framework for European Public Services (EIF 2.0: see footnote 51) covers four parts (levels): legal interoperability, organisational interoperability, semantic interoperability, and technical interoperability.
104 European EIF 2.0, "European Interoperability Framework for European Public Services", 16 December 2010: http://ec.europa.eu/isa/documents/isa_annex_ii_eif_en.pdf
105 http://ec.europa.eu/information_society/policy/psi/index_en.htm
106 European Commission (2010) The European eGovernment Action Plan 2011-2015: Harnessing ICT to promote smart, sustainable & innovative Government. http://ec.europa.eu/information_society/activities/egovernment/action_plan_2011_2015/docs/action_plan_en_act_part1_v2.pdf
107 Informal feedback to the authors of this report from the European Commission in December 2012), is that public sector innovation

Project recommendation 5:
Digital Agenda Europe indicators for benchmarking ICT developments
Start to align the WB countries with the Digital Agenda Europe indicators for benchmarking ICT developments[108], as well the new eGovernment benchmarking to be undertaken in 2013. For good policy making and good assessment of policy impacts in the eGovernment area, robust benchmarking is needed, preferably between countries so comparisons can be made and best practices can be shared.

7.4.2 Projects which might by supported by other international organisations

Project recommendation 6:
World Bank funded projects and programmes
Outside Europe, the main feasible source of support and funding from international bodies is from the World Bank which does provide assistance, including finance, to many countries to develop eGovernment and related areas. A good example of this is in Moldova where, between 2009 and 2011, the World Bank ran a capacity building programme "Enhancing Information and Communication Technology (ICT) in Moldova", also supported by Estonia, Singapore and India[109]. Three of the main topics addressed were governance, anti-corruption, and information and communications. A route like this potentially represents a relevant future source of finance and support for eGovernment related initiatives for the Western Balkans

7.4.3 Country proposals for project opportunities

Country proposals for project opportunities, summarised in section 6, which are not otherwise addressed in this section, are as follows:

Project recommendation 7:
ICT infrastructure and communications projects
- ICT infrastructure for schools and universities
- Building a unique national platform for GIS
- Unified communications for emergency 112 short number
- Building regional semantic for interoperability
- Regional Initiative for Open Data
- eGovernment Data Governance
- eGovernment Business Process Management & Reengineering

Project recommendation 8:
eGovernment enabler project ideas
- Developing eContent for eGovernment
- Design and implement regional eIdentification (eID) system
- On-line community (Web 2.0 technologies) combining communication C2G, blogging, discussion forums, news from government and special groups for civil servants (national and local level) for quality in preparing and implementing new projects

Project recommendation 9:
Functional governance areas
- E-register so that parents can check the results of their children
- Internet Tax Office Project
- National Police Network Project
- Establishment of innovative business networks and quality enhancement of public services- Business portals and Virtual Business Fairs
- National Judicial Network Project
- Contact centre for electronic appointments in Health Care Centres and hospitals (via e-mail, SMS, phone call)

and meeting societal challenges through, for example, social innovation, is likely to be an important European eGovernment focus in future, based on the European Commission (2012) report "ICT for governance and policy modelling", prepared for the Public Services Unit in DG CONNECT by Jeremy Millard and Maria Wimmer, August 2012. (See section 2.3)

108 http://ec.europa.eu/digital-agenda/en/our-targets

109 http://wbi.worldbank.org/sske/case/moldova-e-transformation

Project recommendation 10:
Management projects

- Accounting Offices Automation Project
- Central Census Management System Project
- Government Supply Office's Electronic Sale Project
- Code of conduct
- Management and control of eGovernment IT resources
- eGovernment Human Resources Capacity Building
- Software for Public Funds Management

7.4.4 Other proposals for project opportunities

In addition to the above, there are two very important eGovernment development areas which should be considered for project opportunities.

Project recommendation 11:
Common measurement standards, approaches and indicators suitable for the WB countries
Develop common measurement standards, approaches and indicators suitable for the WB countries, including performance monitoring, whilst enabling specific country differences. These must be linked to EU and global standards and align and merge with them as soon as possible, but there is arguably a specific WB need over say the next five years. The focus should also be to move from input/output based measurement and monitoring to outcome and impact based (for example on user satisfaction), and to take account of and cooperate with international measurement standards. There is an opportunity for collective WB efforts to collaborate with and influence the important work being done in this area particularly by the UN, the OECD, the WB, the WEF, as well as the EU.

Project recommendation 12:
Mobile eGovernment (mGovernment) services
Focus on developing innovative WB-wide mobile eGovernment (mGovernment) services, especially for use by GPS-enabled smart phones. These will be very popular with WB youth, and will help grow SMEs and civil organisations in the ICT and services sector through PPPs (public-private-partnerships) and PCPs (public-civil-partnerships), as well as through the release of suitable public sector data. Mobile connections are fast becoming the de facto global infrastructure, and establishing a strong position in this area could open export and collaborative opportunities for WB countries and companies.

7.5 Proposals for specific country developments

7.5.1 Albania

Albania has had a late start in implementing eGovernment and developing an information society. ICT implementation in government began in 2005, and was used as a tool to fight corruption and increase governance. This late start means that Albania does not have the usual problems with legacy systems, on the other hand, the country has a great deal of catching up to do, both in terms of infrastructure developments and developing sufficient human resources for digitisation of, not just government, but also civil society and in the business community. The Albanian Government has accordingly made ICT development one of its top priorities, and introduced the "Digital Albania" initiative calling for an acceleration of ICT penetration and use in Albanian government. Achieving the objectives of the "Digital Albania" will require infrastructure investments, institutional reforms, legislative improvements, capacity building and effective implementation of these policies.

Albania faces a range of common problems an institutional barriers typically experienced by less developed countries when developing eGovernment such as:

- The Administrative Law
- Lack of leadership
- Lack of skills
- Costs and financial restrictions

- Poor coordination within government
- Lack of semantic interoperability
- Workplace and organisational inflexibility
- Lack of trust
- Poor technical design
- Authentication and identification
- Relationships between public administrations, citizens and other ICT actors.

Albania has taken a lot of wise and appropriate steps with its Digital Albania and other strategic initiatives to rectify the above mentioned problems and barriers, but we believe that Albania can benefit hugely from increased international cooperation in developing human resources within government, eGovernment itself and an information society.

Albania should increase its focus on adequate monitoring and measurement. This will help prioritise scarce resources. Measurement standards and performance monitoring, intimately linked to EU and global standards, and aligned and merged with them, should be a priority for the country. Lack of trust in services, not trusting that financial data will not be disclosed and that personal data will not be revealed, requires increased monitoring, auditing and measurement.

Perhaps with the help of other WB or EU countries, Albania should also focus on getting the judicial backing to create a clear and mandatory legal framework for eGovernment reinforcing the basic building blocks of standardisation, eAuthentication and base registries. This implies a revision of the administrative laws. Getting external help for the process of legal revision would probably be helpful.

A stronger focus on change management and building professional and highly competent staff committed to strategies and plans and able to cooperate, should be a priority. In this regard ReSPA could be a very valuable knowledge and training source for Albania. Generally institutions in Albanian government do not invest in IT training skills, and the country experiences problems with IT specialists seeping out to the private sector which offers better salaries. If Albania is serious in its eGovernment ambitions, investment in human resources and change management must have high priority – eGovernment is not just about infrastructure, hardware and software – it's also about people, skills and organisational relationships.

The lack of cooperation and coordination between institutions results in data duplication, when primary data from other institutions is not used. Although NAIS is creating a register of registries to support semantic interoperability, there is still a need for more and better eServices to citizens and businesses. Albania should consider mobile eGovernment (mGovernment) services as a means of supplying services to more citizens, who may not have constant access to computers but who use phones one a daily basis. SMS services could be a good initial first step, with potentially huge impact.

Albania should use social media to build awareness of eGovernment. Even if citizens' eSkills are not advanced, people are becoming more familiar with social media. Presently there is no co-production of content between users and government in Albania, social media and Web 2.0 tools are one of the means that could be useful for initiating the dialogue with citizens i.e. on co-production of content.

The NAIS initiative on building a common platform for publishing open government data is most welcome, and an important step reflecting the government's will to continue the fight against corruption, to govern with maximum transparency, and to improve participation of citizens in government decisions.

7.5.2 Bosnia and Herzegovina

Bosnia and Herzegovina started introducing eGovernment with the adoption of the Information Society Development Policy and Strategy by the Council of Ministers (CoM) of BiH in November 2004. Although adopted and declaratively supported, the vast majority of envisioned policies and actions has never been implemented, because state institutions lacked internal capacities to implement them. The project targeting the 2004-2010 timeframe was ultimately a failure. The ongoing Public Administration Reform (PAR) project incorporated some of the policies and actions started in previously mentioned documents, and when the Strategy and Action plan for PAR by the CoM BiH, was adopted in 2006 the aim was to reform the Bosnian public administration and substantially improve it by 2016. By late 2012, there are still no visible and more practical results of those efforts as only one project (Bosnia and Herzegovina's Interoperability Framework) is in implementation phase.

Bosnia and Herzegovina has a very complicated political and administrative structure. Implementation and development of eGovernment is done both on state level, entity level (Federation of Bosnia and Herzegovina, and Republic of Srpska, and in some cases Brcko District of Bosnia and Herzegovina) and local level.

The lack of strategic eGovernment does not mean that eGovernment projects are not being implemented; on the contrary, but their implementation is highly decentralised in terms of strategic eGovernment management and driven by ad-hoc established and usually donor-driven projects, which are not being implemented under some specific eGovernment strategy and action plan.

The main barrier for implementing eGovernment services in BiH is a lack of understanding and institutional will within government institutions management. The lack of a shared vision and strategy for the development of eGovernment in BiH, specifically as each level of government develops its own eGovernment solutions without coordination with other levels of government, results in data duplication and waste of resources.

Some of the BiH government levels should realise that eGovernment is not just about implementing individual IT projects; it is an overall public administration reform process which has to be adequately supported by regulative and organisational measures. There is a need for the now missing strategic eGovernment decision-making, and a necessity for enhancement of government-wide eGovernment management and development capacity.

Technical building blocks shared across government, particularly standardisation, interoperability, base registries, eAuthentication and data protection, are a prerequisite for developing advanced and modern eGovernment. Ad hoc and separate eGovernment projects within individual government organisations are just first steps, but modern eGovernment and sophisticated eServices require cooperation and exchange of data within government and with both civil society and businesses. Currently there is no specific policy document regarding interoperability in Bosnia and Herzegovina, and due to the complex administrative structure of BiH, there are certain legal barriers to data exchange. Bosnia and Herzegovina has a dilemma if the country wants to develop eGovernment further – and it must. There has to be overall political and legal backing to actively support a strategy which can get collaboration across the various levels of government. The need for a long-term strategic approach incorporating a strong, clear and mandatory legal framework for eGovernment must be established *and implemented*. As a reflection of the situation, BiH has basic registers for population, businesses and cars that are fully digital within each responsible government entity, but they are not available online and citizens cannot check their data. With the present situation, the lack of cooperation and semantic interoperability, means that BiH can't develop the technical building blocks for modern eGovernment.

For citizens lack of trust in the services and information provided by government can be a huge barrier, not just for the individual, but for society as a whole. User-friendly and eAccessible eServices of high quality will enable time savings when services are available irrespective of location, when government responds faster to requests, when people do not have to queue at government offices and there is direct access to information on government websites. BiH can't realise such savings in the present situation. As all other countries progress in their information society developments, BiH will lag behind. The country will not be able to adequately develop its economy, and will relatively digress. EU membership accession will also become more distant, as BiH government will not be equipped to interact with other EU countries and institutions electronically and share data.

Accompanying adequate institutional will and strategy should also be change management, project planning and the development of professional and highly competent staff committed to the strategies and plans and able to cooperate. Civil servants are the key to good eGovernment. Trust in and empowerment of civil servants through applications and systems which enable public sector staff to contribute to the development of new services and policies through direct access to data and tools is also a must. BiH has not yet recognised the true power of using social media to promote its work. There are no provisions for receiving and using user feedback. Many civil servants see the real time performance and impact of public services on citizens. They would be able to generate appropriate data and other inputs if they were given the data, tools and incentives to do so, i.e. social media.

Finally it is expected that 2013 will be the year in which benchmarking bodies will be designed and a benchmarking method developed, and where actual measurements will be performed. We strongly encourage BiH to start doing so, and link and align benchmarking and measurement to EU and global standards from the start. Measurement is a prerequisite for establishing business and social cases for eGovernment and to identify best practices, thereby enabling society and government to prioritise scarce resources to achieve maximal benefit from their use.

7.5.3 Croatia

Croatia is the most advanced state in the WB group of countries of this study. It is evident from the country input from Croatia that the EU accession process of the country has been hugely beneficial to eGovernment developments, and that Croatia has been very active in aligning policies and strategies with equivalent EU standards and norms. As an example, in October 2011 the Croatian government decided to establish eGovernment development goals in the State Administration for 2011-2015 in line with the EU's "eGovernment Action Plan 2011-2015". Another example is Croatian participation in the Interoperability Solutions for European Public Administrations (ISA), thus becoming familiar with EU policies in the field of interoperability. Amongst the plans for the near future is the development of eGovernment services supporting the rights of citizens to travel, work, study and live, as well as the freedom for businesses to establish and to provide services, in any EU Member State.

It would truly not be fair to base recommendations for Croatia on only the data gathered for this study. As the leading eGovernment country in the WB (disregarding Slovenia which is not associated with ReSPA or the eSEE process), Croatia aspires more to a comparison with the most advanced European countries than with the other WB states. This implies that our recommendations are based on a more world-class eGovernment agenda than the WB background. So this deliberately raises the bar!

If we look at the percentage of Internet users having used Internet in last 12 month for obtaining information from websites of public authorities, 21 % have done so, and 10% have submitted completed official forms to public authorities in 2011. In comparison, 78% of Danish users have obtained information from public authorities' websites and 64% have sent filled forms to public authorities in the same period. Croatia is still below the EU average regarding users' interaction with public authorities.

One thing is aligning the public administration and eGovernment policies and strategies with the EU; another is the active development of eGovernment and eServices. The business community in Croatia is reported as being quite happy with the country's eGovernment developments, but barriers still exist for citizens and the public administration itself. Politicians must have an awareness and basic knowledge of eServices and an understanding of eGovernment, in order to make the appropriate political decisions necessary for the development of eGovernment. The same lack of eSkills and awareness in the civil service is also reported.

A stronger focus on change management, project planning and business case development is necessary, both to gain support for the eGovernment process in the administration and political and legal backing to support a realistic but ambitious strategy which can establish collaboration across ministries and departments. eGovernment solutions and services should be based on well defined and published technical standards and policies, and the legal background must be considered.

A stronger focus on eSkills development both within public administration, but also amongst the general public is required. This should go hand in hand with awareness raising both within the civil service, but also in civil society. To develop the Croatian society and economy, even if there is no real tradition of using new technologies and engage with the new, user-friendly and eAccessible eServices of high quality must be developed and promoted. Even if the base registries are all fully digital, some are still not available on the Internet and some (personal documents and social benefits) do not allow users to edit their data. Geospatial and land registry data are not connected to the government interoperability system. Base registries are one of the fundamental technical building blocks that can enable service personalisation in Croatian eGovernment services, something not possible at the present time.

A common commitment to making all suitable public sector data open, and the general recommendation of establishing open data 'hackathons' to encourage especially the youth but also involve small start-ups and SMEs as well as larger companies, universities, NGOs and sponsors, could be a method. Presently there is only a project regarding publishing data from cultural heritage, foreign affairs, jobs, and statistics, but the range of possible open government data is much more than this. Open data is yet another method of inspiring transparency and trust in government, and we strongly encourage Croatia to take advantage of the opportunities offered here.

Finally, a more widespread and systematic use of social media, not just by the primary government portals, but also by ministries and government organisations internally and externally, should be encouraged for sharing ideas, cooperation and engaging citizens in a dialogue with government. When government seems more open and approachable, civil society will be more ready to engage.

Finally, the Croatian public service should further engage itself in modern organisational developments such as increased focus on education and HR principles (personal development plan with roles and responsibilities), developing the human skills of civil servants (language education, presentation education, communication skills, problem solving), plus further emphasis on professional skills in finance, ICT, project management and the legal environment. This will mean that employees gain a basic knowledge of eGovernment, its environment and benefits for different target groups, and that project managers focus more on the integral implementation of eGovernment and take into account cultural, socio-political, legal, organisational and technical considerations. Technical staff such as IT Engineers also need to consider the government environment and incorporate the multidimensional aspects associated with eGovernment into applications. The management level should not ignore its leadership role, nor that change management is required.

7.5.4 Kosovo[110]*

The Ministry of Transport and Communications has developed *The National Strategy for Information Society for 2006-2012*. Furthermore, in 2007 the Government of Kosovo* adopted *The Strategy for Public Administration Reform* (SPAR) and the *Action Plan for the period 2007-2012*. SPAR was proposed by the Ministry of Public Services (now MPA) and based on the work of the Group of Experts for Public Administration Reform (GERAP), which included a broad spectrum of government officials and civil society representatives. An adoption of the Law on Information Society Bodies is awaiting the parliament's approval and in the future there is a plan to draft a law on eGovernance which will enforce the use of eServices.

Kosovo* has one of the lowest internet penetrations in Europe (48%), but a much higher mobile penetration (85%). The country has and is developing the infrastructure necessary even having eGovernment services, and its resources seems to have primarily been put into this. At the present time there are still plans for the rollout of Internet connections in rural areas. The next step is developing the eSkill level and expertise in ICTs as well as eGovernance awareness for citizens, businesses and civil servants. At present there is quite an inequality in access to information.

The future eGovernment law will establish the policies for interoperability in Kosovo* and will use the European Interoperability Framework (EIF) of 2010 to set priorities. The Electronic Governance Strategy 2009-2015 has been adopted and the Kosovo* Interoperability Framework, entirely based on EIF is under development. Population and business basic key registries are fully digital, available online, interoperable and citizens can check their data. However both geospatial data, real estate and cars registries only exist in paper mode. It is a little uncertain if population and business registries are fully digitised. The exchange of citizens' data between government institutions takes place between the central Civil Registry and the municipalities. Other exchanges are fairly limited. Kosovo* does not have eID or eAuthentication, but a single-sign-on solution is under development for government eServices and there is no ePayment systems in the country.

Web 2.0 tools such as social media are only available from some municipality websites and government institutions do not participate in social networking. There are provisions to receive requests, comments and feedback in the e-Portal, but no collaboration with users is taking place. Finally there are no provisions for offering open data to the public in Kosovo*, and there are no government initiatives to promote transparency and trust through eGovernment.

The obstacles for eGovernment in Kosovo* are many and include the following:

- lack of awareness to use eGovernance services
- financial issues
- leadership failures
- interoperability issues
- institutional unwillingness.

It appears to us that eGovernment developments in Kosovo[111]* have been largely donor-driven, something that can result in uncoordinated and ad-hoc eGovernment development. However, the donor projects have funded

110 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

111 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

basic necessary infrastructure. All the specific project recommendations themes within the capacity building and cooperation framework earlier in this report are relevant for Kosovo*, as the country has a long way to go.

We might however offer specific advice for Kosovo*, given its situation. As Internet penetration is so low, and mobile penetration so much higher, the country may be able to jumpstart the roll out of eGovernment services by initially offering and implementing them as interactive SMS mobile services, thereby reaching the widest possible audience. Should Kosovo*[112] do so, it is very important that these services are described and promoted from the web-based service portals, and that services are planned so they can later be implemented on more sophisticated platforms.

Finally, we recommend that Kosovo* involves itself heavily in international knowledge transfer and training opportunities, such as the ones offered by ReSPA and others. The country should be able to benefit from other countries' experiences and good practices, and perhaps be able to leapfrog in its development by learning from its neighbouring WB countries, as well as from other EU countries.

7.5.5 Macedonia

In Macedonia the National e-Government Strategy 2010-2012 has been adopted. The National eInclusion strategy was adopted in 2011 and the national strategy for Public Administration Reform was adopted in 2010. Other legal revisions and changes such as the law on electronic management and archive material are amongst the legal initiatives in recent years.

The Ministry of Information Society and Administration is now (as of 2010) the central coordinator and responsible for implementation of the central initiatives and systems, and is also responsible for management and reform of public administration in Macedonia. However, generally it is the individual managing authorities who are responsible for implementing eServices and eGovernment solutions.

Macedonia experiences some legislative and regulatory barriers to eGovernment from non aligned older legislation and lack of judicial backing to actively support eGovernment developments. Typically existing legislation contains strategic priorities, which implies that legal barriers takes time to remove. The lack of bylaws that offer solid guides and instruments for supporting the legal implementation of laws in the eGovernment area is further complicated by the fact that IT professionals and legal experts do not "speak the same language". It is our understanding that Macedonia could benefit from professional outside expertise in developing a framework and adequate process planning for legal revisions of existing laws in light of eGovernment requirements.

Several key base registries are still only partially digital (population, geospatial, real estate and cars) while a range of other registers are fully digital, available online, connected through the government interoperability system and where citizens can check their data. The policies for interoperability are established by the Law for Electronic Management and its bylaws. The Unique Environment (UE) – for data exchange among state/public institutions – interoperability system has been established, compliant to the Law for Electronic Management, but only four institutions are connected to it. However, there are no established standards or developed methodologies for semantic interoperability. Further, the exchange of data is based on bilateral agreements between individual agencies, and the non existence of unique IDs that are not a "speaking numbers" are major barriers for data exchange. There does not really seem to be an incentive for government organisations in Macedonia to exchange data and for most of the services and documents, customers are charged directly with administrative taxes and fees. Switching to electronic data exchange, introduces financial clearing problems among the involved institutions, as the customer pays for the service in total. Exemptions from the total fee is not possible under current laws. If Macedonia wants to develop eGovernment further these barriers must be removed. Interoperability must be backed institutionally, judicially and financially from above. It is an essential framework condition and technical building block for modern and effective eGovernment and information society development. But Macedonian eGovernment services need also to be developed further and include e.g. service personalisation, which again is a problem due to the lack of interoperability.

The lack of trust and cooperation between institutions, evident in the lack of interoperability, is also present within public administrations themselves. There is a lack of knowledge and experience of good budget planning

112 This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

of eGovernment and IT projects. The salary system for administration does not attract experts to apply for positions in administration, in fact it discourages them. In addition, IT experts have no or little idea of how the administrative back office works, and there is a lack of respect of the coordinating authority unless their intervention actually benefits the receiving institution. The non-inclusion of all relevant parties (departments and users) when designing eGovernment solutions, results in inappropriately defined needs and requirements. We therefore recommend that Macedonia considers a much stronger focus on business process reengineering, change management, promoting professional and highly competent staff committed to strategies and plans and able to cooperate. Macedonia should utilise e.g. the resources available from ReSPA and other international training organisations, to develop adequate skilled and change minded personnel within public administration, able to handle the transformation of government.

Macedonian government must also raise awareness of the real benefits from eGovernment solutions, both from an institutional and a user perspective. A multi-channel approach could be used explaining how to use existing eGovernment services, the rights and obligations of service use, data protection, cyber crime and help desks both internally for civil servants, and externally for citizens and businesses. Social media could be a valuable tool in this, as it fosters knowledge exchange. We would encourage Macedonia to utilise social media, both within government and between government organisations for knowledge exchange and cooperation, but also with citizens. Macedonia does however already offer quite sophisticated tools such as the citizen diary, the eDemocracy portal and the "traffic light" device in government offices for measuring customer satisfaction. We highly applaud the Macedonian efforts in fostering dialogue with citizens, but perhaps the time is now to loosen control over the dialogue channels and widen the range of communication platforms to also include social media, something many citizens, businesses and public servants are already acquainted with and use regularly.

Finally it would be very beneficial to implement specific eGovernment benchmarking measures and suitable indicators, including performance monitoring, linked to EU and global standards.

7.5.6 Montenegro

The objectives of the previous strategy for information society development (2009-2013) in Montenegro have been defined in line with the objectives the eSEE Agenda+ and the EU i2010 Agenda.

The Ministry of Information Society and Telecommunication is in charge of proposing and implementing policies regarding information society development, eGovernment and ICT infrastructure. A few other elements are covered by other government institutions. The regulatory framework has been improved and broadband internet access is now much better compared to 2009. The improvement of administrational procedures is one of the priorities of the public administration reform, and eGovernment is the means. This implies re-engineering business processes, or implementing new business processes where processes are not well established. Such a change has already started, and will be emphasized particularly in establishing interoperability. The benefit of effective services means not only business process simplification, but also higher quality of administrative services for citizens and business. G2G eServices are already created (e.g. eDMS, eGov portal, and government electronic sessions) and have had an impact on cost savings and time reductions.

However, civil servants, well informed about the content of administrative process and procedures, do not have sufficient ICT skills. There are many civil servants who started to improve their ICT skills especially when faced with G2G eServices, even to the extent of learning English. Civil servants with a lot of experience and knowledge in using internet and G2G eServices have had an influence on the quality and performance of their institutions' activities. Another aspect is the influence of more accountability of the government institutions. Through the implementation of the electronic document management (DMS) system, roles and responsibilities inside the institutions become clear and task performance is recorded. Second, the institutions are aware that their activities becomes more transparent when public eServices are introduced, which forces them to become responsible and effective. However, Montenegro also recognises that digital literacy, resistance to changing business processes and the financial crisis constitute institutional barriers. We conclude that the country will benefit from increased international knowledge sharing and training, such as offered by ReSPA, which can be very beneficial for further strengthening eGovernment and organisational developments.

There are no specific policies outlining the creation of an interoperability framework, but within the scope of

the ICT for Public Administration pillar in the Strategy of Information Society Development (2012 -2016) there is a goal to establish an interoperability framework and to enable data and information exchange between public registers and other information systems. The National Interoperability Framework (NIF) was accordingly adopted at the end of 2011.The document contains explanations for the importance of interoperability, principles, key interoperability areas, which state and local authorities will participate, the key state authority that will coordinate the establishment of the interoperability framework, available IT infrastructure resources and key registers that will be within its scope. But the Montenegrin NIF doesn't comply fully with EIF 2010 with respect to recommendations for the business requirements, open standards, and use of XML data interchange schemas at the NIF level. Accordingly, some semantic barriers exist as there are different data and information standards used for organisational services.

Understanding the semantics of each service is an important issue. The quality of data also poses a problem. The same is true for lack of horizontal coordination and collaboration, where changes in business rules or unsatisfactory workflows pose organisational barriers, the removal of which may be both difficult and take time. Insufficient adaption to existing legislation, not examined and assessed by the authority responsible for information society development, may pose future problems even as Montenegro plans to adopt a general law regulating all electronic interactions between different authorities and digital registries. Presently the population, business, real estate and cars registers are fully digital and the first three are available online. Citizens can check their data in population and real estate registers. There are direct connections to the Central Citizens Registry from the Government institutions. Data consolidation will be one of the key future activities. Montenegro developed the eGovernment portal euprave.me which launched in April 2011. A cooperation of 10 state institutions now provides 30 electronic services for businesses and citizens. The ambition is to ensure access to the hundred most used services from government agencies and local self-governments on the eGovernment portal by 2014, increasing to 200 services in 2016. These very ambitious goals may be endangered by the problems identified for Montenegrin interoperability.

The Montenegrin government has not shied away from using Web 2.0 tools nor engage in electronic dialogue with citizens. We highly applaud the initiative where a system for electronic public debates has been developed for the eGovernment portal and where each government institution is obliged to provide material for public debates where users can comment electronically. Further the ePetitions system aiming to ease public participation in Montenegrin political life should be applauded.

The Ministry for Information Society and Telecommunications has a department for the promotion of the information society. One of the key activities is raising awareness of the importance of information society and implemented key eGovernment projects. In promotional activities transparency is being stressed as being of special importance. A more valuable transparency initiative will be provided by implementation of the 'budget allocation tools' service for citizens and the 'open budget service' with appropriate information on budgeting and reporting on annual expenses. These are important steps, which should be supplemented by making additional open government data available. Presently the government only publishes materials from governmental sessions. Open government data made available in machine-readable format could in the future result in additional services provided by private actors or NGOs, acting as supplements to the range of eServices already provided by or planed to be provided in the eGovernment portal.

7.5.7 Serbia

The 'Strategy for the development of electronic communications in Serbia from 2010 to 2020' and the 'Strategy for Information Society Development in the Republic of Serbia until 2020' constitute the digital agenda for the Republic of Serbia**.** The electronic communications strategy focuses on taking a pragmatic view of the measures necessary for Serbia to ensure it is in a favourable position in the global economy, bearing in mind the global financial crisis, while the information society development strategy defines the basic objectives, principles and priorities.

A public administration reform strategy with an action plan for the period 2009 to 2012 emphasises the low development of electronic public services as a burden for Serbia, outlining problems such as insufficiently developed joint communication network, digitalisation, standardisation and coordination of information systems in state authorities and lack of competent human resources.

A new Public Sector Reform Strategy and a connected action plan for the upcoming years of 2013-2017 is expected to be adopted in first half of 2013.

Five different ministries are responsible for Serbian eGovernment, but primary and foremost are the Ministries of Justice and of Public Administration, while the eGovernment executive is the Directorate for the Digital Agenda in the Ministry of Foreign and Internal Trade and Telecommunications (MTT).

Serbian eGovernment policies and strategies have up until now had very limited impact on Serbian society. A single long-term strategy document making Serbian government focus on eGovernment does not exist. A plethora of divided and separate information systems in all levels of government and public enterprises makes data security, access, exchange and reuse expensive or difficult to implement. ICT consolidation, creation of new jobs, access to public information etc. is very different to realise in the present situation, which also endangers and complicates Serbia's accession to the EU.

However, it should also be noted that Serbia has made extremely impressive progress in eGovernment over the past 1-2 years. The country has achieved many quick wins which are reflected in international benchmarking results so that it now stands alongside Croatia and Montenegro as eGovernment leaders in the Western Balkans. On the other, hand it is clear that Serbia has not yet adequately addressed the fundamental eGovernment basics like lack of interoperability standards and semantic definitions, data exchange, base registries, etc., which means that this fast progress will soon hit a wall and be difficult to maintain unless these more long-term issues are tackled.

Although the Serbian ambition might be to use eGovernment and electronic communications as a means for developing the Serbian economy and building the information society, in our understanding Serbia is still far from reaching its goals and has low understood to what extent government itself and the relationship between government and civil society must be transformed. Modern eGovernment and realisation of the information society implies a whole of government transformation and collaboration, with strong institutional and judicial backing.

The Serbian inputs for this report, stress the lack of a focused strategy and poor understanding and capabilities on all levels of government for what eGovernment really is. eGovernment is much more than technical issues. The last benchmarking of Serbian eGovernment was prepared by the NITIA in 2009[113], and although yearly benchmarking at the sub-national level by the Vojvodina ICT Cluster is performed, common and international comparable measurement standards, approaches and indicators, should be used for performance monitoring. By measuring and quantifying eGovernment and information society development, the benefits and successes of eGovernment initiatives can be demonstrated, and scarce financial resources spent where they will have maximum effect and produce long-term benefits. Performance monitoring will also help focus senior management's attention on the governance, leadership, change management and cooperation amongst institutions required for successful eGovernment transformation.

Problems of missing cooperation between government institutions are also evident in the lack of interoperable services. Traditionally, cooperation between state bodies in the Republic of Serbia is poor. Each institution considers their own data to be the authoritative version, as it was collected by them, whereas the data collected by other institutions is considered non-reliable. In a large number of public bodies data does not exist digitally or is not available from a central source. Different databases have been developed in an uncoordinated manner and separately, and there are no common standards even for interoperability. Different institutions use different data descriptions for the same set of data, so the lack of semantic interoperability is a huge problem in Serbia. This is also evident when we look at the base key registries. Only the business register is fully digital and available online. Population, geospatial data, real estate and cars registers are only partly digital and only partly available online. We understand that a Serbian National Interoperability Framework is being prepared. It must be stressed that such a framework will have no effect if institutional, management and judicial backing is lacking. Data exchange between government bodies is much more than a technical issue. It has organisational, legal and business process implications too. We strongly encourage Serbia to draw upon the expertise of other WB and EU countries and international organisations such as ReSPA, not just in formulating the strategy, but also for the necessary change management, training and business process re-engineering required.

113 www.digitalnaagenda.gov.rs/wp-content/uploads/2011/07/Stanje-razvoja-eUprave-u-RS-2009.pdf

An institution-centric approach to eGovernment is a thing of the past; modern government requires strong cooperation with civil society and the business community. Capacity building not just within government, but also for citizens and businesses are required. This also means extensive sharing of knowledge, awareness rising of government eServices, building computer literacy and so forth. Government interaction with society must not just be one-way communication, it is about collaboration. Creating modern government in Serbia will require a complete change of the mindset at all levels; political, management, civil servant and societal.

7.6 Conclusions

This report has demonstrated the strengths and weaknesses of eGovernment development in the six ReSPA member countries and Kosovo[114*] based jointly on a detailed questionnaire completed by these countries as well as on desk work undertaken by the authors. It has underlined the importance of eGovernment to all countries, but also more specifically how the countries of the Western Balkans should respond to the potential it offers. The report has also demonstrated the importance of the next few years for the six ReSPA member countries and Kosovo*, supported by ReSPA, to take firm, ambitious but realistic steps to ensure that they, both individually and collectively, can maximise the benefits available.

Working together and aligning with each other as far as possible, especially in relation to the eight issues described in section 7.2, should be undertaken as a matter of urgency. Also very important is further aligning this WB regional alignment with the overarching EU and EC strategies and eGovernment plans, and with the European financial and support programmes currently being developed with an expected launch at the beginning of 2014, as described in this report. This will both maximise the benefits of eGovernment for the six ReSPA member countries and Kosovo*, given that Europe represents the most advanced eGovernment region globally, as well as maximise their possibilities to benefit from these programmes.

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114 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

ReSPA is the international organization established as a joint initiative of the European Union and the Western Balkans Countries. ReSPA organizes and delivers training activities, high level conferences, networking events, mobility schemes, summer schools, study tours and publications, in the pursue of transferring new knowledge and skills as well as facilitating the exchange of experiences both within the region and between the region and the EU Member States in Public Administration Reform and Civil Service in the Western Balkans. ReSPA is located in the municipality of Danilovgrad, 25 km away from Podgorica, the capital City of Montenegro.

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