

E-GOVERNMENT IN SLOVENIA: DOES SUPPLY MEET DEMAND OF CITIZENS?

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(not to be quoted!)

Abstract

The main objective of the paper is to explore how well the existing e-government supply in Slovenia meets the demand of its citizens. The research is based on the data gathered through several empirical studies. The supply side of e-government is presented on the basis of website surveys performed in spring 2005 and August 2005.

Three types of administrative bodies were chosen for the survey: a representative sample of 80 out of the total 193 municipalities, all 15 ministries (including 6 bodies in their competence) and all 58 administrative units. In addition, special attention was given to the assessment of 3 life events and 12 basic public services for citizens, the latter defined by and included also in measurements of the European Commission. The demand side is studied on the basis of a telephone opinion survey performed in July 2005 on a representative sample of 1028 citizens aged 18 years or more.

The results of the supply-side survey show that most administrative bodies are presented on the web with information about their organisation and operation. They also offer e-mail communication with citizens. Much downloadable application forms are already available for the procedures in the competence of central government bodies, contrary to the local self-government procedures. Regarding the distribution between central and local government of available e-applications, a similar conclusion can be made but the amount of the e-applications is considerably smaller. E-transactions have not been implemented yet.

On the demand side the survey results show that awareness of e-government among internet users is surprisingly high, as all of them are aware of at least one functional group of e-government (information, e-mail communication with civil servants, downloadable application forms and public e-services). At first glance, the level of e-government usage is also relatively high, as 83% of internet users have already used at least one of the above-mentioned possibilities; however, only a small amount of the provided information, application forms and e-services has already been used. The same is also true of e-mail communication.

On the other hand the results reveal that there is something wrong with the way information, application forms and services are offered. This can be demonstrated with the following findings. Citizens expressed that they would like to have available information and services. A look into the criteria with which the satisfaction with the use of e-government was assessed shows that the existing information is relatively useful yet incomplete and not very easily accessible. Furthermore, the criterion 'ease of access' was assessed as the worst in comparison to application forms and e-services. However, the supply-side survey shows that information is indeed dispersed over a wide range of websites; in order to find them the user should know in advance where to look. In contrast, the majority of application forms and e-services are accessible at one-entry-point leading to the significantly higher assessment of the above-mentioned criterion. Moreover, internet users consider the simplification of administrative procedures, simplification of e-services and one-stop-government as the most important factors (along with greater security) for future e-government development. This confirms again that e-government supply is not fully tailored to the needs and requests of its users.

Chapter 1 Introduction

Practically everyone has some dealings with the government during his/her life. Some people more, other less, depending on their life events or situations. Most of them use traditional or classic ways of interacting with the government: personal visits, regular post, telephone, but those who are adequately IT skilled also have the possibility to obtain particular information and services over the internet. In response to the increasingly sophisticated and comprehensive supply of government information and services online and the higher levels of internet penetration among people and businesses, the number of such users has also risen. However, the question is to what extent the existing e-government supply meets the demand of its users (existing and potential ones)? The answer is interesting from several points of view. The efforts and financial resources invested in developing e-services are to no avail if their users are not satisfied with them. On the other hand, taxpayers are also more and more interested in the return on investment in e-government. And last but not least, it has been known for some time that the development of e-government cannot be measured and evaluated on the basis of

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supply alone (as has mostly been the case) but only in conjunction with the knowledge and consideration of demand. Only then can the real value of e-government be assessed and future guidelines of e-government development defined.

Consequently, the majority of studies which deal with measuring, evaluating and benchmarking of e-government development are refocusing from researching the supply of government information and services online to also researching the demand side of e-government. If we have been studying the web presence, the contents and sophistication of government websites until recently, today we are also interested in the real value that this supply has for its users. We are witness to more and more studies aiming to investigate the extent to which citizens and businesses are aware of e-government information and services online, their preferences in using them, whether they are really using them, whether they are satisfied with them, the reasons for not using them and how they see the future development of e-government.

The main objective of this paper is to explore how well the existing e-government supply in Slovenia meets the demand of its citizens. Can citizens, in their dealings with the government, obtain all the necessary information and services on government websites, are they even aware of them, how accessible and useful are they, what is the level of their satisfaction and what are the reasons for their not using the information and services available online? Hence, the paper deals with the interdependence between the range and quality of supply on one hand, and the level of awareness, usage, satisfaction and demand on the other.

Chapter 2 Methodology

The research is based on the data gathered through several empirical studies, recently performed by the research group at the Institute of informatisation of public administration at the Faculty of Administration in Ljubljana (University of Ljubljana). Up to this time these studies have been focused mainly on the supply side of e-government. We have also conducted the first comprehensive study on e-government user satisfaction, focused specially on the Slovene region. This study now enables us to make comparisons between the existing supply and demand in Slovenia. Furthermore it has to be noted that in this paper we examine only citizens as one of the main groups of e-government users, although the overall study also includes businesses, NGOs and civil servants.

The supply side of e-government is presented on the basis of website surveys carried out in spring 2005. Besides 12 basic public services for citizens, as defined by European Commission, three types of administrative bodies were chosen for the survey: a representative sample of 80 out of the total 193 municipalities, all 15 ministries (including 6 bodies in their competence) and all 58 administrative units in Slovenia.

Besides the presence of these bodies on the web we also study the contents and functionalities of their web pages. Among other things, we check whether the basic data such as postal addresses, telephone numbers, office hours and e-mail addresses of particular bodies are published, whether the organisational structure, duties and competences, legal grounds, visions, strategies, work reports, minutes documents, data on projects, public tenders, valid and draft regulations, budget data and news are available. We also observed the information on administrative and other procedures, application forms, electronic applications, e-services, access to databases, forums, and information in foreign languages, links to other pages and availability of technologies for the disabled. Besides checking the existence of those contents on the web, we also examined the scope and sophistication of the presented contents as well as navigation possibilities and timeliness of presented information.

Special attention was given to the assessment of the development stage of public e-services found on administrative bodies' websites, and to the assessment of 12 basic public services for citizens. For all of them the common European Commission's methodology was applied (see: Cap Gemini Ernst & Young 2005). The approach focuses on evaluating the development level of e-services using a four-stage model. The e-service development level indicates how far the service has developed towards full electronic operation online. The average assessment of services is used to evaluate the percentage of basic public services available on the internet in each country.

In the evaluation of life events (LEs) conducted in August 2005, only the characteristics relevant for the design and delivery of e-services based on the life-event approach (Vintar et al. 2004) were considered. The characteristics selected to evaluate e-services were partly defined using the four-stage model, within which several different characteristics were defined from each individual stage. In the implemented methodology for LE evaluation, these characteristics are analysed separately and then aggregated into the overall assessment of e-services. In addition, the clarity of e-services is also considered. The final LE assessment is aggregated from the assessments of LE maturity, usage, and clarity. The LE maturity depends on the level of LE on-line sophistication, which is calculated from the assessments of e-services evaluated within a particular LE.

The demand side analysis is based on a population telephone opinion survey performed in July 2005 using the CATI method (Computer Assisted Telephone Interviewing), which enables quick and reliable data collection on the basis of dynamic sequencing of questions that depends on the previous answers of interviewees (branching). The survey sample was developed using the random digit dialling sampling technique, where in each household identified by the telephone number thus obtained, the actual respondent aged 18 years or older was chosen by applying the last birthday procedure. The final sample included 1028 successful interviews with the average time of 12 minutes per interview. Data were weighted according to the demographic composition of the Slovene population (gender, age, education, employment status and region) which assures the representativeness of the sample in those demographic variables. Subsequently the survey results can be generalised to the whole population in case of an adequate number of respondents and in accordance with the 95% confidence level. When interpreting the results, one should take into account that the share estimation can be generalised only when the number of respondents (n) equals or exceeds 30; in all other cases the share estimations are relatively or highly inaccurate. On the other hand, estimations of mean can be generalised already at only 10 respondents. The questionnaire was composed of eight sets of questions. In addition to demographic questions, we asked the respondents about their use of different information technologies and about their awareness, interest, usage and satisfaction with four different kinds of e-government supply, i.e. information, e-mail communication with civil servants, downloading of application forms and public e-services (in contrast to the definition of e-service in the European Commission's methodology for evaluating the online development of public services that is also used in our supply side analyses, the e-services here are considered only as e-applications and e-transactions). The seventh group of questions referred to e-government in general, where respondents gave answers on their general satisfaction and confidence in e-government, told us about future use of e-government and gave us opinions about their views of future e-government development. Finally, the last set of questions provided some comparative data about people's satisfaction with the 'classic' government.

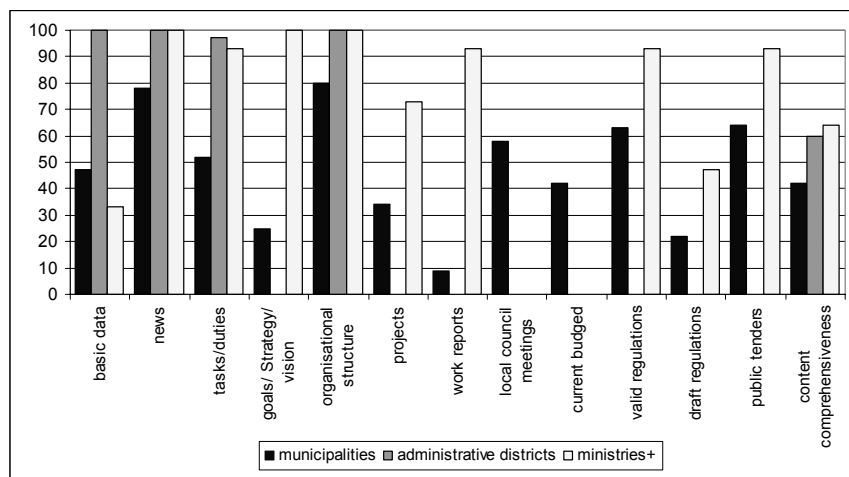
Chapter 3 Supply of e-government

In order to be able to assess to what extent the existing supply meets the users' demand, we must first analyse this supply. For the purpose of this paper, the supply is therefore divided into four functionality groups: information, e-mail communication with civil servants, downloadable application forms and public e-services.

3.1 Information

In 2005, all administrative units (AUs) and ministries in Slovenia were presented on the Internet with their websites while, 21% of municipalities had not created their own websites till March 2005. However, much remains to be done about the websites contents and functionalities (Figure 1).

Figure 1: Information contents on the websites of administrative bodies in 2005



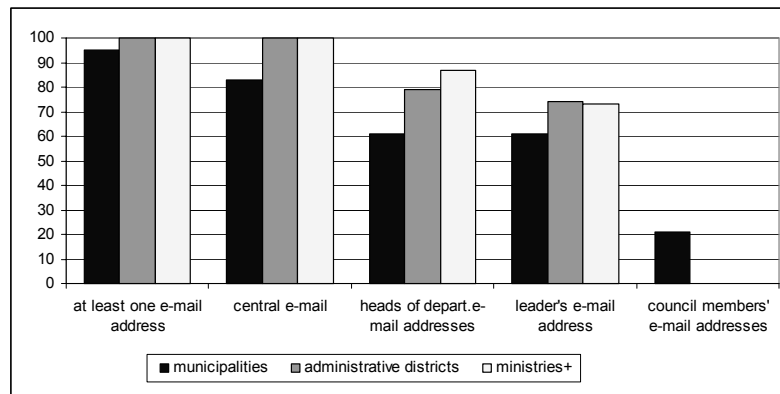
All basic contact information for each AU was published on the administrative units' portal, i.e. central e-mail addresses, phone numbers, postal addresses, office hours and organisational structures. The portal unfortunately lacked information on project goals and work statistics. The budgets, regulations and public tenders relevant for AUs are in the competence of ministries and were therefore not available on the portal. The ministries' websites in 2005 published a variety of information with adequate updating, though surprisingly, still very few ministries (33%) published all basic data (official hours were the most common missing piece of information). Ministries

regularly published news, information on their projects, public tenders and valid regulations, while draft regulations are published very rarely. An average municipality presented only a third of the analysed contents on its website, which points to a relatively poor presentation of municipalities on the web. It is interesting that more than half of municipalities did not publish all basic data.

3.2 E-mail communication

Almost all analysed administrative bodies offered at least one contact e-mail address on the web in 2005 (Figure 2). Moreover, most ministries also published the e-mail addresses of ministers, heads of departments and other employees, while only about 60% of municipalities published the e-mail addresses of the major departments and their heads.

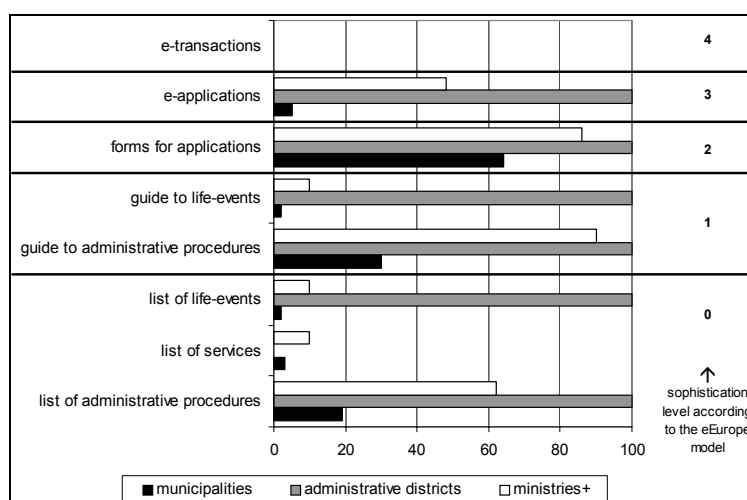
Figure 2: Percentage of e-mail addresses available on the web in 2005



3.3 Downloadable application forms and e-services

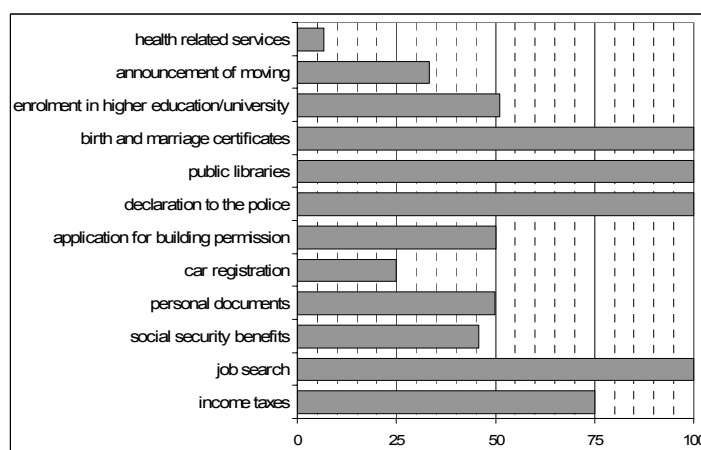
The uniform guide for administrative procedures at the administrative units' portal deserves special praise. It is well accomplished in terms of its structure and contents and provides exhaustive information on practically all administrative procedures in the AUs' competence along with most application forms. However, one misses several transaction services that would give real value to the information provided. In the beginning of 2005, only birth, marriage and death certificates could be ordered via the portal, and an individual could also view his/her own personal data from the central population register. Compared to the previous research, ministries had improved much in respect of administrative procedures (Figure 3). More than half of the ministries had a list of administrative procedures or a list of services, 90% of them had a description of at least one procedure, 86% published application forms and 43% of them also allowed their electronic filing and submission. The most interesting services on the third level of development are: pre-enrolment in higher education, job search, different e-tax services, obtaining data from the land registry, declaration to the police and ordering data from the criminal register. Only some municipalities published lists of services or administrative procedures, 30% of them provided guides to at least one administrative procedure, about 64% offered at least one application form and only 5% (two municipalities) also provided electronic applications (report on the number of night's lodging and paid fees, planning information). In addition, one municipality allowed the monitoring of procedures via the internet or SMS messages.

Figure 3: Development level of e-services in 2005



Four out of twelve basic public services for citizens reached the highest possible level of sophistication (Figure 4): ‘obtaining birth and marriage certificates’, services provided by public libraries, ‘declaration to the police’ and ‘job search’. Among them, the ‘job search’ service is the only one with the Stage 4 as the maximum possible stage (the possibility of an electronic supply of pre-selected jobs related to the given profile of the job searcher). The remaining three services have the maximum possible stage limited to 3². All four mentioned services together with the ‘application for building permission’ service reached a higher level of online sophistication than the average of European countries. Among the remaining analysed basic services, the ‘income tax’ service is the only one that reached Stage 3. It is implemented within the ‘e-Taxes’ system enabling citizens to complete and submit applications and follow the progress of the procedure, while the delivery of final results is still performed in the classic manner. Payments can be effected electronically through different e-banking services; however, these are not linked with the e-Taxes system and hence not taken into account in measurements.

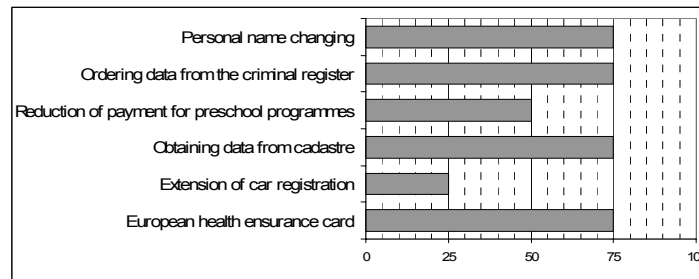
Figure 4: Sophistication levels of 12 basic public services for citizens in Slovenia



For the purpose of comparison with the demand side of e-government six additional public services were analysed (Figure 5). Most of them reached Stage 3 of online sophistication. On the other hand, only limited information was offered for the ‘extension of car registration’ while a downloadable form was available for the ‘reduction of payment for pre-school programmes’.

² For some services (due to their characteristics) the maximum possible stage of development was limited to Stage 3 (personal documents, declaration to the police, birth and marriage certificates and changes of address).

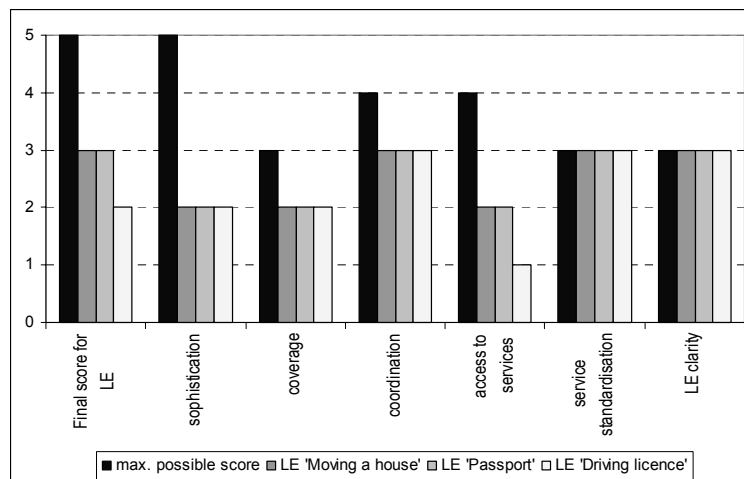
Figure 5: Sophistication levels of additional services for citizens in Slovenia



A life-event approach is considered as a user-friendlier way of e-service provision. We analysed some citizen-oriented life events (LEs) provided at the Slovenian governmental portal e-Uprava³ (Figure 6). These services were all part of the standardised guide for administrative procedures at the administrative units' portal. Therefore, the standardisation of services and LE clarity were given maximum scores, meaning that all services are organised and structured in the same way and the LEs are presented in such way that they can be easily understood. The LE coordination reached the 'step-by-step' level meaning that services within one LE are gathered at one point, but each one must be initiated separately.

The presented three LEs were given very low scores for accessing the services method and LE sophistication (determined from scores for services within LEs), which consequently led to poor final scores. For these LEs, only the 'Frequently asked questions' rubric was available out of all four analysed accessing methods (the remaining three were: key steps, check list and intelligent e-guide through LE). Only one service offered downloadable forms ('obtaining driving licence') while all other services were presented only as information.

Figure 6: Comparison of characteristics assessments for life-event evaluation on a Slovene portal



Chapter 4 Demand for e-government

In the previous paragraphs we briefly examined the supply of the Slovene government online. However, all this information, the possibilities of e-mail communication with civil servants, access to application forms and e-services are of no use if there is nobody able and/or willing to use them. The demand for e-government is analysed following its natural order of development.

4.1 Technological conditions

The first prerequisite for the use of e-government is, naturally, the existence of a critical mass of personal computer users whose PC usage has been upgraded with the use of the internet. According to the results of our

³ <http://e-uprava.gov.si/e-uprava/en/portal.euprava>

study in July of 2005 there were 58% computer users and 49% internet users aged at least 18 in Slovenia⁴. This means that

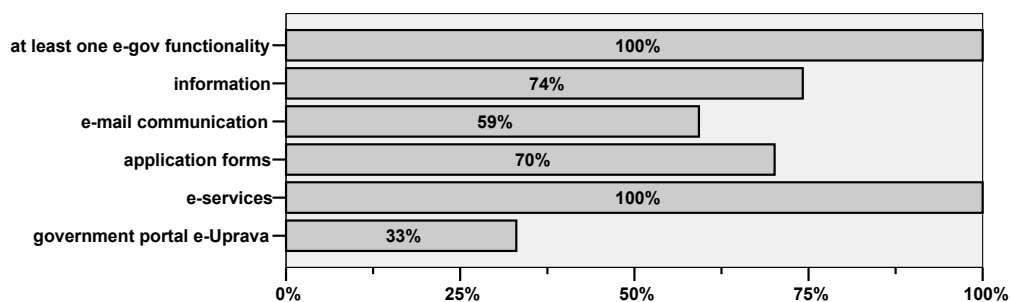
- 49% of the Slovene population use the internet and therefore meets the minimal technological conditions for e-government use.

Among reasons for not using computers, respondents most frequently mentioned no need to use it, being too old, not having a computer, lack of interest, lack of skills and lack of money. On the other hand computer users who do not use the internet, most frequently revealed that they do not use it because they have no access to it. However, approximately 40% of them also said that they would most likely start using internet in the following 12 months.

4.2 Awareness of e-government

The second precondition for e-government use is the knowledge about what can be obtained from using it and what can be done over the internet. If people are not aware of the existence of e-government they can do nothing. We note that questions concerning awareness were asked to all interviewees irrespective of whether they use the internet or not, but non-users should first start to use the internet in order to meet the first precondition to use e-government and were therefore excluded from observations in this research. The results show a high level of awareness of particular kinds of e-government among internet users, as all of them know at least one of the four e-government functionality groups about which they were asked (Figure 7). Internet users have the best knowledge of e-services, followed by the information that internet users can obtain from web pages of different administrative bodies, and their awareness of application forms. The possibility of e-mail communication with civil servants is the least known service of all. Nevertheless, the favourable impression is somewhat spoiled by the very poor people's awareness of the government web portal 'e-Uprava' (only 33% of internet users are aware of it), as it is the main entry point to all information and e-services of the Slovene civil service.

Figure 7: Awareness of individual e-government functionality groups among internet users (n=507)



If we project those results to the whole population, we obtain the following results:

- 49% of the Slovene population use the internet and are aware of at least one e-government functionality group;
- 37% of the Slovene population use the internet and are aware of public information;
- 35% of the Slovene population use the internet and are aware of application forms;
- 49% of the Slovene population use the internet and are aware of public e-services;
- 29% of the Slovene population use the internet and are aware of e-mail communication with civil servants;
- 16% of the Slovene population use the internet and are aware of the government portal 'e-Uprava'.

All these individuals are potential users of e-government.

It has to be noted here that awareness of e-services is calculated by aggregating spontaneous and encouraged awareness. First, interviewees were asked about their general awareness of public e-services. 65% of internet users responded that they were aware of them. Next we also asked those internet users who answered that they were aware of public e-services to list some. Here the respondents had considerable difficulties, as 37% of them could not recall even one. However, the income tax declaration proved to be by far the best known e-service – 37% of the people who are aware public e-services were familiar with it. This e-service also receives the most media attention. The second best known e-service is ordering birth or marriage certificates, which is known to 12% of respondents, while the third most frequently cited e-service is the access to or ordering of a copy from the land registry, which is known to 7% of those who are aware of public e-services. Other e-services were cited

⁴ The percentages are fully comparable with the data from the Slovene statistical office, which measured almost 60% of computer usage and 43% of internet usage in the first quarter of 2004 among residents aged 16-74 (SORS 2004)

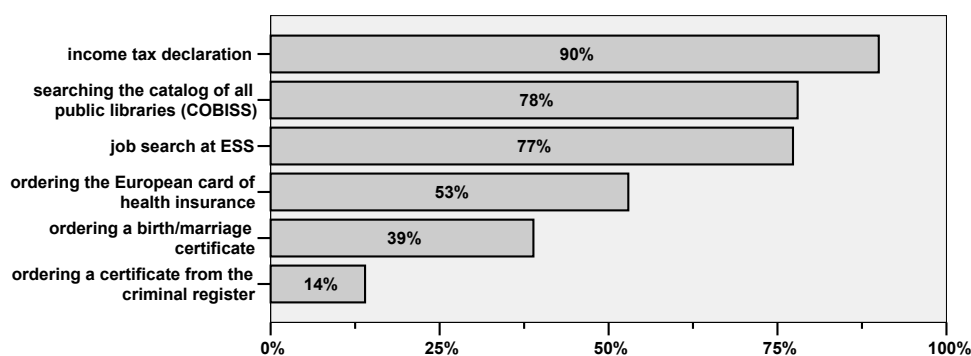
sporadically. All in all, the respondents listed 24 different public e-services they were aware of. Nevertheless, we must take into account that some respondents are likely to know at least one particular e-service, but at the time of the interview they really could not remember even one. To reduce this error, we named six e-services to those internet users who did not list any e-services spontaneously, asking them if they are aware of those. The results of this encouraged awareness were much better. By aggregating spontaneous and encouraged awareness we obtain the real awareness of public e-services.

If we project the results of e-services awareness to total population, we find that (Figure 8):

- ❑ 44% of the Slovene population use the internet and are aware of the e-service income tax declaration, i.e. 90% of internet users;
- ❑ 38% of the Slovene population use the internet and are aware of the e-service catalogue search of all Slovene public libraries (COBISS), i.e. 78% of internet users;
- ❑ 38% of the Slovene population use the internet and are aware of the e-service job search at the Employment Service of Slovenia, i.e. 77% of internet users;
- ❑ 26% of the Slovene population use the internet and are aware of the e-service ordering the European card of health insurance, i.e. 53% of internet users;
- ❑ 19% of the Slovene population use the internet and are aware of the e-service ordering the birth or marriage certificate, i.e. 39% of internet users;
- ❑ 7% of the Slovene population use the internet and are aware of the e-service ordering a certificate from the criminal register, i.e. 14% of internet users;
- ❑ 2% of the Slovene population use the internet and are aware of the e-service access to or ordering a copy from the land registry, i.e. 7% of internet users.

All these individuals are potential users of the mentioned public e-services.

Figure 8: Awareness of six public e-services among internet users (n=507)

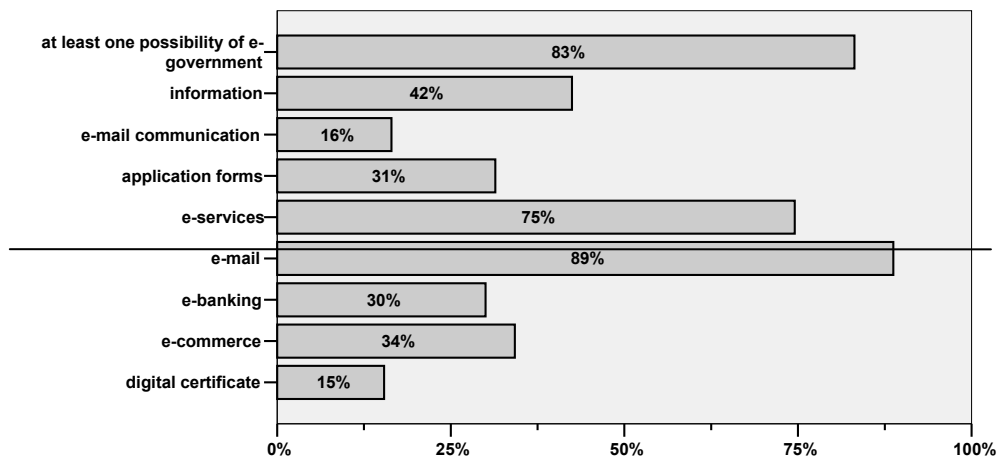


4.3 Use of e-government

Questions concerning the use of particular functionality groups of e-government (information, e-mail communication with civil servants, application forms and e-services) were asked of all those internet users who are aware of them. 83% of the interviewed internet users have already used one of the functionality groups. Among individual e-government functionality groups, public e-services are used the most, since 75% of those who are aware of them have already used at least one e-service. Additional information was used by 57% of those who are aware of them, application forms were used by 45% of those who are aware of them, while only 28% of those who are aware of the possibility of e-mail communication with civil servants have already used it. After projecting those portions to all internet users we obtain the following results (Figure 9):

- ❑ 41% of the Slovene population have already used at least one e-government functionality group, i.e. 83% of internet users;
- ❑ 37% of the Slovene population have already used at least one public e-service, i.e. 75% of internet users;
- ❑ 21% of the Slovene population have already obtained information from administrative bodies websites, i.e. 42% of internet users;
- ❑ 15% of the Slovene population have already downloaded application forms, i.e. 31% of internet users;
- ❑ 8% of the Slovene population have already communicated with civil servants via e-mail, i.e. 17% of internet users.

Figure 9: E-government usage and usage of some information technologies among internet users (n=507)



Users of individual e-government functionality groups were also asked to say on which websites and what kind of information they had been looking for, to whom they had already sent e-mail, from which websites they had already downloaded application forms and which public e-services they had used. The answers showed that information users most frequently search information on the web pages of municipalities (23% of users), ministries (22% of users) and the government portal 'e-Uprava' (21% of users), while the web pages of the Tax Administration, The Government of the Republic of Slovenia, the Slovene parliament and courts are used less frequently (by a respective 14%, 12%, 5% and 5% of their users). The remaining 22 websites that were cited by respondents were used by only one respondent each. Information users most often look for basic data about administrative bodies (48% of users), information on administrative procedures (44% of users) and legislation (26% of users). Most information users (58%) also pointed out that they have always found the information they were looking for.

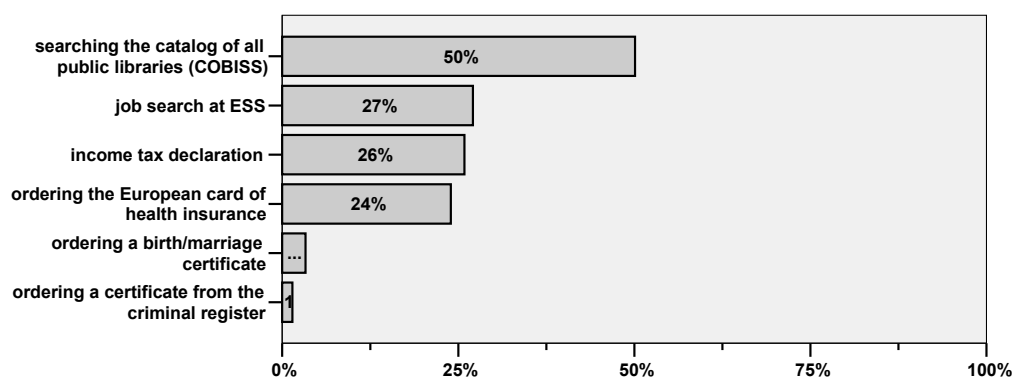
On the other hand, users of e-mail communication mostly communicate with ministries (25% of users) and municipalities (23% of users) while they rarely send e-mails to other administrative bodies.

Users most frequently download application forms from the web pages of Tax Administration (20% of users), ministries and the government portal 'e-Uprava' (10% of users each) and from municipal web pages (9% of users), while other web pages are accessed rarely.

Among the 12 different public e-services that respondents used or tried to use at least once, only 6 e-services were used by more than 1% of internet users. On the basis of sorting those services by level of their usage and recalculation of proportions of use to all internet users and to the whole population we find out the following (Figure 10):

- ❑ 25% of the Slovene population have already used the e-service searching the catalogue of all public libraries (COBISS); i.e. 50% of internet users
- ❑ 13% of the Slovene population have already used the e-service job search at the Employment Service of Slovenia, i.e. 27% of internet users;
- ❑ 13% of the Slovene population have already used the e-service income tax declaration, i.e. 26% of internet users;
- ❑ 12% of the Slovene population have already used the e-service ordering the European card of health insurance, i.e. 24% of internet users;
- ❑ 2% of the Slovene population have already used the e-service ordering birth or marriage certificates, i.e. 3% of internet users;
- ❑ 1% of the Slovene population have already used the e-service ordering certificates from the criminal register, i.e. 1% of internet users.

Figure 10: Usage of individual public e-services among internet users (n=507)



4.4 Satisfaction with the use of e-government

Users of individual functionality groups of e-government also assessed their satisfaction with its usage and satisfaction with the e-government as a whole.

The satisfaction with information was assessed using three criteria: ease of access (do they find information quickly and easily), usefulness (was information helpful) and completeness (do they find everything they need in most cases). The satisfaction with e-mail communication with civil servants was considered in terms of the speed and usefulness of reply. The satisfaction with downloading application forms was assessed only by the ease of access. On the other hand, e-services were evaluated using five criteria: ease of access (do they find it quickly and easily), ease of use, completeness (do they resolve their life situation wholly or not), security/protection of privacy and satisfaction with e-service on the whole. Each criterion was assessed with a value on the scale from 1 (very unsatisfied) to 5 (very satisfied).

The survey results indicate relative satisfaction with all e-government functionality groups, since all means (average values) of the answers exceed 3.7 (Figure 11, Figure 12). However, it is also commonly known that respondents tend to give more positive scores than negative. Thus, if we exaggerate a little, we can say that all scores lower than 5 are poor and should be examined carefully.

Moreover, a more detailed review of the results shows that users are least satisfied with e-mail communications, especially with the speed of the reply, where the mean of the answers is 3.7, and also the usefulness of the reply is assessed only slightly better.

In assessing information, users were most critical with their completeness (mean of the answers is 3.75) and ease of access, while usefulness of information was assessed rather better (mean of answers is 4.05).

On average, users are most satisfied with the use of public e-services. Although the mean values of all criteria exceed 4.2, there is still enough room for their future improvement. The worst criterion here was security/protection of privacy, which is more likely the consequence of users' perceptions than a faithful reflection of the current state. Completeness of the service was assessed only slightly better, which means that the existing e-services resolve users' life situations only partially. On the other hand, the criteria 'ease of access' and 'ease of use' reached the mean values of 4.32 and 4.35, respectively. Users also assessed the satisfaction with the e-service on the whole, where the mean value is 4.28, which is completely in accordance with individual criteria.

Figure 11: Satisfaction with the use of information, e-mail communication and downloading of application forms (n=210, 83, 159)

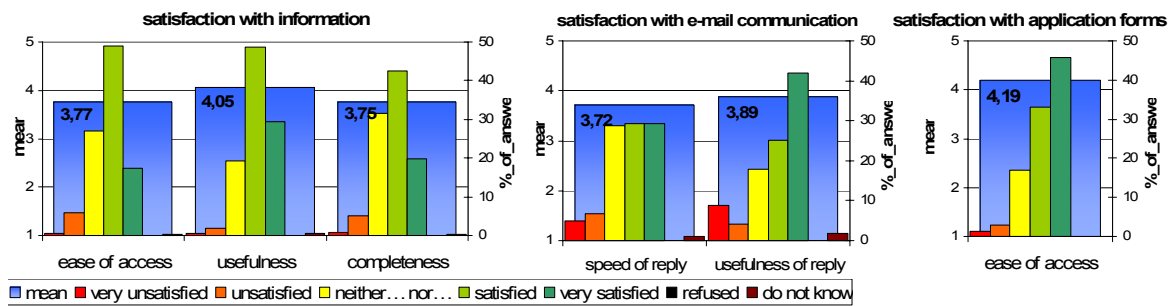
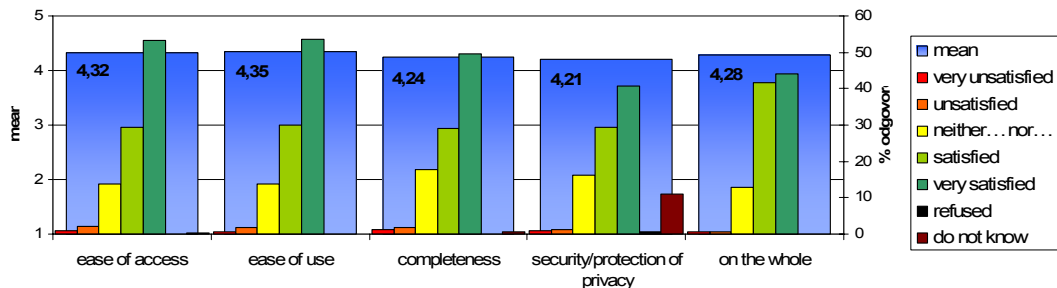


Figure 12: Average satisfaction with the use of public e-services (n=355)



Since satisfaction with public e-services was calculated as the average of assessments of individual e-services we should also look at satisfaction using individual e-services that were most frequently assessed ($n \geq 10$) (Figure 13, Figure 14, Figure 15, Figure 16, Figure 17). A comparison between the means of values of satisfaction with e-services as a whole reveals that obtaining European health insurance card is the best assessed e-service (Figure 16), its mean value being 4.54. It is an undemanding service that does not require a digital certificate. The user simply enters his/her personal data and the number of their national health insurance card in web form and by submitting it orders the European card of health insurance, which is then posted to him/her in a few days. According to the simplicity and type of the service, the high score does not come as a surprise at all.

The second best assessed e-service is the income tax declaration, where the mean value of the service's overall assessment is 4.34 (Figure 13). Here the criterion of security was rated the lowest, which is probably a consequence of the fact that a digital certificate is needed in order to use the service and that here we have to deal with more sensitive data. A similar conclusion could also be made for the e-service of obtaining a birth or marriage certificate (Figure 14). On the other hand, completeness of the income tax declaration is rated the best. However, the Slovene Tax Administration still has many possibilities to improve the e-service (see also Figure 4), such as automatic notifications about deadlines, pre-entered application forms, payment of assessed income tax, etc.

The interesting thing is that in spite of the highest possible development stage (see Figure 4), the job search e-service at the Employment Service of Slovenia is the worst rated e-service (the mean value of the overall assessment of the e-service is 3.96). Here the respondents gave the lowest score to the completeness of the service (Figure 15).

Figure 13: Satisfaction with income tax declaration (n=112)

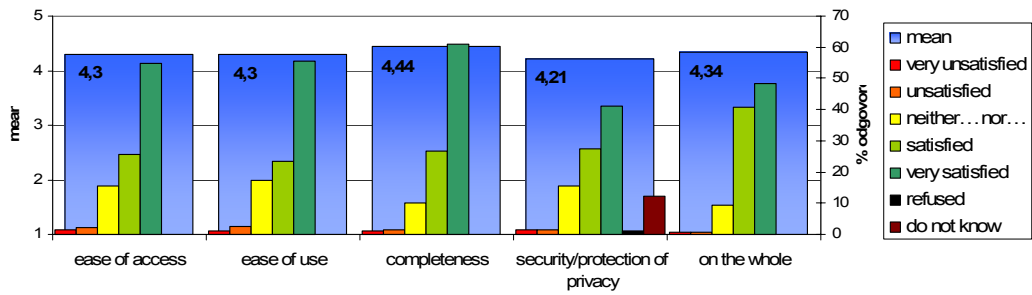


Figure 14: Satisfaction with obtaining birth/marriage certificate (n=10)

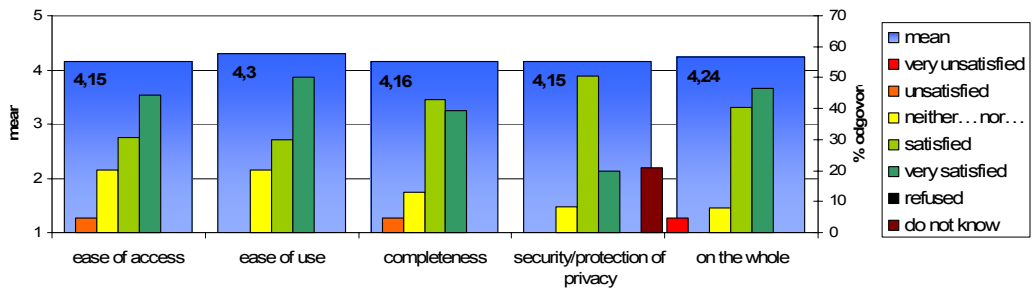


Figure 15: Satisfaction with job search at Employment service of Slovenia (n=94)

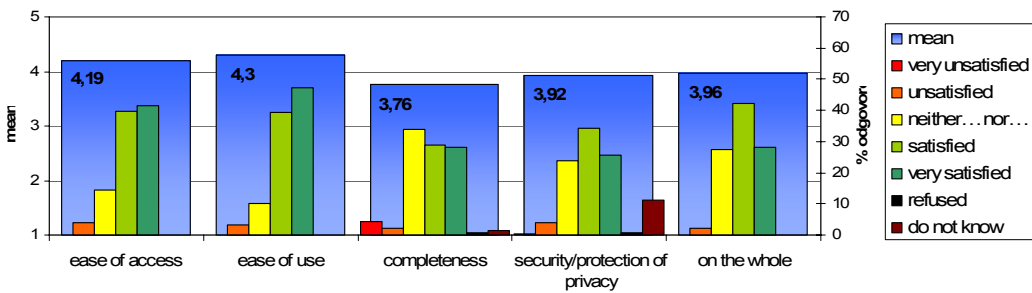


Figure 16: Satisfaction with obtaining European health insurance card (n=101)

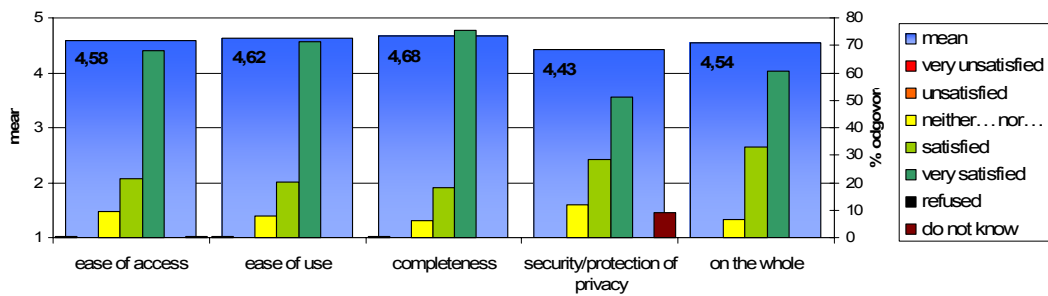
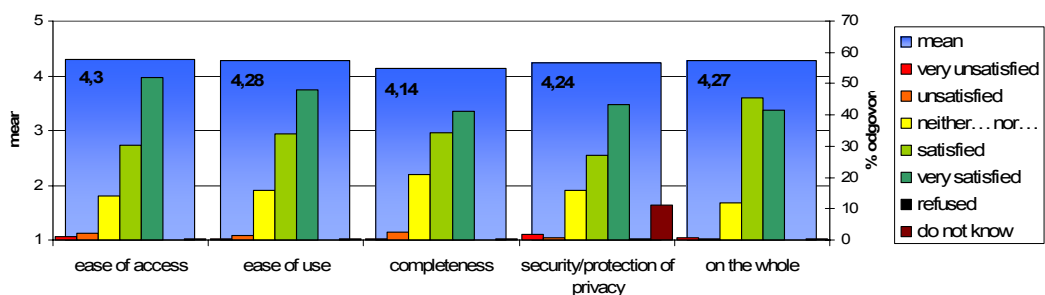


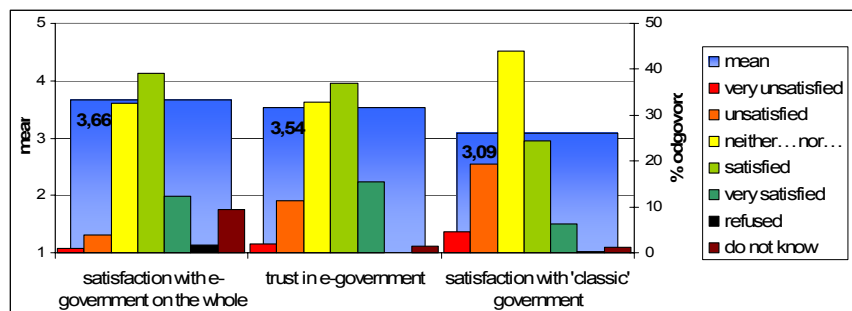
Figure 17: Satisfaction with searching the catalogue of all public libraries (COBISS)



Those respondents who expressed satisfaction with individual e-services also expressed their willingness to use the service, if needed, in the future. The analysis shows that the great majority (about 90%) of current users are willing to use the e-services also in the future, which is in accordance with their relative satisfaction with the use of these e-services. Those who did not guarantee future use listed the following reasons: no need, bad experience, more willing to use traditional ways of dealing with government, does not solve my life situation on the whole, complicated use and bad security.

In the end, all e-government users estimated their confidence in e-government and their general satisfaction with electronic and classic government on a scale from 1 to 5. Interestingly, the results reveal that the general satisfaction with e-government is considerably lower than the satisfaction with individual e-services (Figure 18, Figure 12), indicating that the general public opinion on e-government is not as good as people's concrete experiences with e-services. However, compared to the satisfaction with classic government the situation is not so bad (Figure 18).

Figure 18: Satisfaction with e-government on the whole (n=417), trust in e-government (n=421) and satisfaction with 'classic' government (n=421) among e-government users



Chapter 5 Does supply meet demand?

The results of the supply-side survey show that most administrative bodies are presented on the web with information about their organisation and operation. They also offer e-mail communication with citizens. Many downloadable application forms are already available for the procedures in the competence of central government bodies, contrary to the local self-government procedures. A similar conclusion can be made regarding the distribution of available e-applications between central and local government, but the amount of these e-applications is considerably smaller. E-transactions are not implemented yet.

In case of information published on administrative bodies' websites and on the governmental portal 'e-Uprava', the results of telephone survey show that that information is known to about three quarters and is used by about 40% of internet users. The possibility of communication by e-mail is known to 60% but used only by 16% of all internet users. While 70% of all internet users are aware of downloadable application forms, merely 30% have already used them. Public e-services are surprisingly very well known as all internet users are aware of at least one. The percentage of usage is also quite high – 75% of all internet users. In general, all internet users are aware of and 83% of them have already used at least one of the above-mentioned functionality groups.

Based on these figures we can conclude that awareness of e-government among internet users is surprisingly high, mostly thanks to e-services. At the first glance, the level of e-government usage is also relatively high but only a small amount of the information provided, application forms and e-services has already been used (see Figure 9 and Figure 10). In spite of the fact that e-mail communication is possible with all administrative bodies, it is very rarely used. Those who are aware of individual e-government functionality groups but have not used them yet, also expressed their reasons for not using them. The large majority of them are of the opinion that they have no need to use them (71% of information non-users, 79% of e-mail communication non-users, 63% of application forms non-users and 67% of e-services non-users). In addition, 20% of e-services non-users are more willing to use traditional ways of dealing with the government and 27% of application forms non-users believe that there is no benefit using them.

On the other hand, the answers to the question "What information and services would you like most to be online?" reveal that respondents would like to have the already available information and services. This indicates that there is something wrong with the way they are offered. The results regarding the satisfaction with the use of e-government (Figure 11 and Figure 12) confirm this statement. For public information, we can conclude that the existing information is relatively useful but incomplete and not very easily accessible. Furthermore, the criterion 'ease of access' was assessed as the worst in comparison to application forms and e-services. The supply-side survey shows that information is indeed dispersed over a wide range of websites; to find it the user should know in advance where to look. In contrast, the majority of application forms and e-services are accessible at one-

entry-points leading to the significantly higher assessment of the above-mentioned criterion. Moreover, internet users consider the simplification of administrative procedures, the simplification of e-services and one-stop-government as the most important factors (along with greater security) for the future development of e-government.

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