E-Service Delivery

A manual for delivering E-services as a local government in the digital information society

This is a VNG International Product

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Dear reader,

This publication, “E-Service delivery, a manual for delivering E-services as a local government in the digital information society”, has the objective of offering a practical and useful instrument to local governments which are willing to deliver their services by making use of the digital infrastructure. Since organizations and citizens increasingly make use of the wide range of opportunities offered by digital information exchange, it has become one of the main priorities of national and local governments all over the world to make use of the internet in various fields. As delivering services to citizens is one of the most important responsibilities of local governments and involves information exchange, it easily fits the profile of a main target field in terms of e-governance.

However, developing an effective and efficient digital infrastructure for the delivery of E-services involves a lot of time, effort and commitment. For example, substantial changes in the organization and administration are inevitable. Therefore, we developed a manual which offers an overview on how to implement e-service delivery successfully. The manual gives a clear impression of the process involved. Four best practices are enclosed to offer inspiring examples on how to develop effective and efficient e-service delivery.

We hope this manual offers useful input to further develop in this field and motivates to offer citizens a customer friendly portal to the services provided by your municipality.

VNG International
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1. **Introduction**

1.1 **History and background**

*Government information until the eighties*

Government bodies have long been involved in recording, protecting and maintaining data, and managing and distributing documents. This has always been necessary for them to undertake their tasks efficiently and reliably, and interact with citizens. Government bodies produce vast numbers of documents; from reports and statutes to data extracts and permits. To the end of the 1980’s one can identify the following government tasks and their corresponding types of information.

<table>
<thead>
<tr>
<th>Primary Task</th>
<th>Information</th>
<th>Process</th>
<th>Method of interaction/transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Development/steering/guidance</td>
<td>Policy content and decisions of council</td>
<td>Administrative processes</td>
<td>Post, newspaper, folders, participation meetings and telephony</td>
</tr>
<tr>
<td>Management, Enforcement</td>
<td>Such as basic data, information, permits, assessments, extracts, passports, benefits</td>
<td>Management and implementation processes</td>
<td>Post, telephone, physical counter, newspaper</td>
</tr>
</tbody>
</table>

Figure 1. Government tasks and information provision

During this period, informing and communicating were tasks placed with a relatively small group of officials and considered of secondary importance. During this period most communication was unidirectional and supply-driven. In terms of method of working the government was a black box; processes of implementation were not transparent to citizens or indeed other bodies of government. Information was recorded and managed in writing, and documents were kept in physical files.

*The rise of Information Technology (IT)*

In the 1980s governments started using computers, in the first instance, to manage
data. Back then at each municipality there are at most a few computers which functioned as stand-alone machine with a limited number of users.

**IT networks and the internet**

At the end of the eighties governments start to explore the convenience of IT networks. A central powerful computer (mainframe) served the workplace via network cables to keyboards and corresponding monitors, the terminals. The monitors and keyboards (clients) at the workplaces were standardized and did not have processing power (this was in the mainframe). In the early nineties the personal computer became cheaper and people started to realize the benefits of decentralized processing power in the workplace and the possibilities to explore the graphical user interfaces with the introduction of MS Windows. At the end of the nineties, e-mail started to have an impact and governments saw the power of this rapid and effective method of communication.

**Government and its services**

In the nineties the term ‘service’ in western governments received a new connotation. Governments started to realize that citizen satisfaction with and confidence in government largely depended on the way in which governments interacted with their environment. In the way governments served their constituents. Government attracted many clichés; cumbersome, bureaucratic, opaque, non-transparent. The poor image of governments, caused by citizens and companies alike having to make (mostly obligatory) visits to different desks, submit applications, fill in multiple, complicated forms, coupled with the ever critical citizen, all meant it was time to change direction.

In addition to the previously mentioned fields, we see the creation of a new domain of tasks and types of information:

<table>
<thead>
<tr>
<th>Primary Task</th>
<th>Information</th>
<th>Process</th>
<th>Method of interaction and communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service, information and communication</td>
<td>Question, answer, Dossier and Process</td>
<td>Service processes, generic steps</td>
<td>Post, physical desk, folders, telephone, e-mail internet</td>
</tr>
</tbody>
</table>

Figure 2. Information and service process

**Service provision and internet**

At the end of the nineties, the number of internet connections per household
was growing exponentially and the online possibilities for society at large were increasing likewise. Examples included booking holidays, shopping, virtual visits, extracting information, communicating by e-mail, messaging, chatting and personal web pages.

Governments also slowly started setting up websites. The first-generation web sites mainly had basic information such as statistics and could be considered digital municipality brochures. The development of digital government started to take on form. A general term for this modernization process using the internet was called e-government. Goals focused on:

- Transparency and administrative renewal;
- Improving quality of service;
- Efficiency.

1.2 General challenges

Fully-fledged e-government at different levels brings a number of general challenges. These ‘dilemmas’ mean that change is slow and ultimate benefits are hard to see. The changes are generic because they are present at every government level and must be considered in their interrelationship.

**First change: Fragmentation and the supply-oriented government organization**

Government organizations are generally organized in such a way that every government task is incorporated within a specific domain, ministry, implementing organization or division. From these organizational units products and services are supplied to the many different target groups. The demarcated government organizations have a ‘1 on 1’ relation with the target group and the products and services are usually also offered via an own desk. From the government organization’s perspective this is a logical structure and is orderly. Officials expect target groups or customers to find their way to the different desks or counters to obtain the service required.

Because the employees, tasks and processes within these organizational units often provide a whole package of activities from the delivery of the application to the handling of the products and services, this means the information and communication regarding these products and services is also demarcated. If we show this in a diagram, for example a municipal organization will look as follows:
Figure 3. Fragmentation in government

This principle of demarcated service provision is called a supply-oriented method of working. In this situation the divisions usually use their own systems - the so-called back office applications. In these applications data is maintained that supports the individual processes such as; address, residence, location and specific case. For government bodies that are further along the e-government process it has been shown that it is hard to facilitate the mutual exchange of this data. For the target groups also it is not always clear which counter corresponds with which service. Another huge drawback is that the data is not consistent in the different administrations and that municipality clients must fill in separate forms for each request. Nine out of ten times this data is available somewhere.

**Second change: agreement between information and communication channels**

The way in which the governments communicate occur via the post, telephone, physical counter and increasingly via the internet. These communication channels usually operate in parallel ‘next to each other’. The method of communicating and the contents differ per channel. Different divisions are responsible for the way in which the channels are organized. So it is possible that the information provision, depending on the channel, differs in quality and that the answering of questions also differs. For governments that are starting to offer e-service it is difficult to gear these channels to each other. This while huge benefits can be gained here for both the efficiency of the administrative processing and handling of questions.

It has been shown that if the introduction of e-government by the various channels approach has not been properly designed in advance, this can lead to huge problems later in the development process.
The risk exists that for example the post registration systems cannot handle the e-service systems (via internet) and that counter officials still register the applications directly in the back office systems and telephone contacts are not registered at all. In this case it is hard to obtain a complete overview of the quality of the service.

Figure 4. Service channels

Third change: the exchange of data and documents between governments

There will be a time in the e-government process when government bodies mutually exchange data and whereby customers no longer have to visit each individual government body. Governments will work together in ‘chains’ and information exchange will occur via digital networks. In some countries you can already see initiatives of so-called central government portals - ‘my government’ - in which the different chains of government service converge and where visitors can apply for products and services in a personal way, can monitor progress and have insight in data.

Governments that commence with digitalization must take into account this future development. This means that not only the technical level is needed to work with open systems and open standards but also that data, dossiers and process information at a certain point must be ready for exchange in the chain.
1.3 Path towards fully-fledged e-service

In addition to the general questions around e-services it is important to recognize the different phases involved in introducing them. This helps the municipality estimate where the organization is in the development process and also in project planning. The development towards a fully-fledged e-municipality occurs via the following phases.

**Phase 1 - the information phase**

This phase involves setting up a municipal website which contains mainly statistical information and supplements existing “send” communication instruments like news and press releases, information on the municipal organization and contact information. On a limited scale documents are published that concern administrative decision making, regulations, important events and projects. In this phase thinking is put into the products and the services delivered by the municipality and the way in which the requests for permits and subsidies must pass along the channels; physical desk, post and telephone. In this phase huge benefits can be obtained by a complete information exchange in which citizens and companies
can independently read online what is needed and what the procedures are. When effective the municipality will see a decline in telephone contacts.

**Phase 2 - the interaction phase**
Here the possibilities of digital contacts via the website are introduced. Digital forms are published and the organization must solve the challenge of authentication and identification of people submitting the forms. On-line payment possibilities are used to collect charges that correspond with the published products and services. This phase is characterized by accurately mapping the processes behind the products and services. After all the submitted forms must end up in the right place in the organization. The organization works on setting up an employee file for authorizations of submitted applications. In this phase facilities are designed so that the application can be followed online by customers and whereby the digital intakes can be managed by organization staff.

**Phase 3 - multichanneling and channel integration**
In this phase the channels post, telephony and physical desk are equipped with facilities for electronic services. The e-services are only used by the users of the internet but also serve as basis for the information and communication exchange with other channels. The internet slowly becomes the basis for the organization’s complete provision of information. By also including these new channels in the digital system, the processes of information provision are mutually strengthened and the (e)services are increasingly expanded. Questions are quickly answered because the sources of information slowly start to move from the back office (knowledge among officials) to the virtual front office. In this phase provisions are taken for central data exchange that support the processes and ensure that the processes improve mutually. In this phase measures are taken for central management of case files independently of specific processes. The municipality gains insight in its affairs and employees get accustomed to increasingly working with digital (collective) dossiers. Analogue files slowly start to disappear and the number of (case) files increases.

The application of a building permit for example can occur both via internet and other channels. As an applicant requests information via the post, telephone, counter or e-counter, the same information source is constantly consulted (see also paragraph 3.3) and the application can be started in digital form. The intake ends up in the central work flow supply and is sent to the right division (via the intranet). The applicant can follow every relevant step via a webpage and a dossier is built up online which the applicant also has access to. The central front office employees can consult the customer information and relevant status, and file information.
**Phase 4 - chain integration**

The organization is now ready to connect to information sources beyond its walls and such things as national databanks. The data, documents and dossiers can be made available to other government bodies and facilities like a national personal website for all government information and services\(^1\). To the customer it no longer matters from which government body the information is requested or the service which is being applied for. Status information is available and governments can increasingly organize processes efficiently through digital possibilities.

The above phasing does not necessarily have to occur sequentially. If managed well phases can be implemented simultaneously and processes and functionalities can be explored in sub-areas in exchange with other governments. The main reason for this is that the development of the e-municipality can be designed process by process. Of course generic facilities must be in place though these can be applied step by step.

**Information guide**

The following chapters successively offer a guide to completing this development process and the preparations that need to be taken, an explanation is given on how to organize the introduction and how to get people involved. We explain the way in which the organization can maintain control of the long-term introduction process. We also explain which e-services lend themselves to an easy start and what information and communication models can be used for the development of the (e-) municipal process structure, the so-called ‘information and process architecture’. We give tips for the purchase or development of the required software and describe the conditions and the technical facilities needed for this. We describe management and security, a summary and list of dos and don’ts.

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\(^1\) In the Netherlands a personal webpage has been introduced named ‘mijn overheid.nl’ for all citizens in the Netherlands
2. Preparation, first steps

After a general introduction of e-government this chapter discusses the main preparations that municipalities can take to ensure a successful start to the project-based approach to introducing e-services.

2.1 Orientation / Vision

A municipality that wants to start e-government must think carefully about the achievable objectives that accompany the long-term vision on services. The introduction of e-services is a long-term process which has a large impact. The effective introduction of e-services can raise efficiency, improve speed and accuracy of communication and favourably impact the entire organization. Management and staff need to be enthused by the vision for an e-service approach as part of strategy. Sketching a ‘step-by-step’ path is more helpful for administrative commitment than a sketch of a one ‘big bang’ introduction.

**Structural model**

A model to break down the vision in administrative fields in which the role of Internet or ICT can play an important changing role is the following.  

![Structural model](image)

Figure 6. Structural framework for e-government vision

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2 Structural model of the VNG, “from municipality to e-municipality” VNG 2001
**Society**

‘Society’ covers developments in local society to which a municipality must respond. Themes include mobility, employment and the danger of a digital divide between citizens. Mobility includes the questions whether ICT will enable more people to work from home and if the distance between workplace and work environment will change. The digital divide concerns the risk of groups of citizens gaining unreasonable benefits of ICT against groups that gain access at a later time, or groups that never gain access. A municipality can fulfil an active role here by stimulating the use of internet. Experience is currently being won here by the use of local digital ‘concept’ or test services, initiatives which offer local residents the possibility to get acquainted with the internet and the use of the PC in general. There are also good examples of groups of citizens that get together on the internet to discuss construction of a new residential area for example. This can create social structures even before new homes are built and occupied. These types of initiative can affect the way a municipality communicates with its citizens on the design of a future residential district for example.

**Service**

Services, in the widest sense of the word, and their introduction, are the main topics of this booklet. They receive plenty of attention but are hard to implement. It means converting a traditional method of service delivery to a more modern one whereby optimal use is made of the internet. This includes supplying information and information exchange and making transactions via internet possible. Through the introduction of e-services the municipality gets a better grip on service in general. New internet systems also support other service channels and the municipality gains insight in the quality behind the underlying processes. Customers see improvements in the way e-services have been made possible, and in the way the municipality handles customers’ questions via the other channels. Customers feel they are better served and can look behind the scenes.

**The internal organization**

The ICT revolution currently at work in society is mainly externally oriented, and has an important role for the communication department. But municipalities will have to move from a past of divisional computerization to a future where front and back office are intimately connected with each other. Achieving this is what a successful e-municipality must do. It does not only involve connecting systems to each other, but also changes in work processes and organization culture. The use of intranet for internal communication and workplace digitization are examples.
Employees will increasingly work digitally and desks with paper files will slowly make way for flexible workplaces with files on the computer. Staff will use the internet to communicate directly with their customers and share knowledge between themselves.

**Politics and policy**

For politics and policy the introduction of ICT has been slow. Other than the word processor and electronic mail these processes are difficult to support with ICT infrastructures. Although change is noticeable even here. Over past years numerous municipalities have introduced council information systems increasingly to the internet. There are numerous examples of discussion sites where citizens and government interact. A point of attention here is the status of a discussion via internet. Many decision-making procedures lie formally anchored in statutory regulations from a time before internet. And many discussion sites are created not by government but by interest groups. How should these be handled by government?

**A coherent vision**

The vision should at least include the following (connected) elements:

- Social developments such as individualization, democratization, globalization, increasing verbal character of the population and the use of internet. These factors also show the ways in which a municipality sees itself according to the various citizens’ roles. A common model here in relations to the municipality is; the citizen as customer, citizen as coproducer of policy, citizen as voter and citizen as subject\(^3\).
- A description of relevant national ‘centralized’ developments where the municipality to a greater or lesser degree must take into account the introduction of new laws.
- A description of relevant current developments or local projects in the service domain and the relationship this has to the introduction of e-service.
- The way in which the municipality has currently organized its service and underlying processes and how this will change in the future.
- The way in which the organization handles customer contacts between municipality and people and how this should be done differently in the future.
- A conversion of organizational strategy to requirements of information provision (such as the ‘24x7’ availability of data and documents), possibilities

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\(^3\) Tops and Zouridis, 1994 en 1996
to react, and online insight in the progress of applications.

- The areas where ICT or simply the internet can play a role in developing municipal activities, a description of current departmental or fragmented systems and the ways to indicate problems and benefits in connecting processes and information flows through the use of internet systems.
- The relationship between current methods of working and culture (mostly analogue) and future digitization.
- A description of the benefits of a modern government organization that embraces digitization.
- A sketch of phasing outlines.

In the early phases benchmarking and comparing situations with other front runners is helpful in defining and refining one’s own strategy.

### 2.2 Prerequisites for e-service delivery

The benefits of e-government and ingredients for the vision have been described in previous chapters. This must all be adopted by people (both internal and external) and inspire to great plans and enthusiastic teams. To put flesh on the theory there are prerequisites for a flying start:

**Need for a management sponsor**

The task of writing the long term vision and practical conversion to an action plan has to be first issued by a municipal authority, or ICT or communications specialist. This management support role in the process is crucial for a good result. The appointed sponsor must truly embrace the process and be the messiah to other decision influencers. This means mastering the subject matter. The ‘sponsor’ will believe in innovation.

**Motivated officials**

Motivated officials with affinity for the subject matter are needed. These are generally found in information management or the area of services or citizen affairs. Most organizations have innovative thinkers and ambitious officials who believe in and want to help such an ambitious process. In any case the administration must free up one or more officials to prepare the e-services process and to ensure employees feel involved with and committed to implementation. Because this is a long-term process with complex changes, it is also necessary to prepare a programme and a management structure. Management may thus not come from an
existing service or sector but appointed over the services. Appointing a programme manager at the level of existing directors is part of this. The team members from the organization become members of the programme team and given a specific role.

**Team building**

It is important for the members of the team to be enthusiastic and not to have a 9 to 5 mentality. Certainly in the first year, hard work will need to be put in to make the e-programme a success. The administrator generally will want to see quick results and this means creating a dynamic atmosphere in which team members are ready to invest best efforts. This can be achieved by:

- Positioning the team high in the organization;
- Offering a temporary extra salary allowance;
- Involving members in important top meetings;
- Launching the team with fanfare via internal news reports;
- Lightening team members’ other (non-programme) tasks.

The team should generally combine the following skills for a successful approach. If the budget is tight more roles can be allocated to fewer officials. And new team members can also be hired:

<table>
<thead>
<tr>
<th>Competence/ role</th>
<th>Official / function</th>
<th>Result/contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project-based work</td>
<td>Project leader, programme manager</td>
<td>Action plan at process level, planning, milestones, SMART objectives</td>
</tr>
<tr>
<td>Information strategist/ policy expertise</td>
<td>Information manager, policy assistant</td>
<td>Substantive argument, converting vision to practical goals</td>
</tr>
<tr>
<td>Information analyst Process expertise</td>
<td>Information manager employee</td>
<td>Process models, information architecture</td>
</tr>
<tr>
<td>Communication and marketing</td>
<td>Communications advisor, project leader, programme manager, change manager</td>
<td>Communication plan/ paragraph, presentations, processing important actors, support from officials</td>
</tr>
<tr>
<td>Design</td>
<td>Designer</td>
<td>Sketch/ designing the layout, ‘look and feel’</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Researcher</td>
<td>Students, researchers</td>
<td>User research, customer survey, test reports</td>
</tr>
<tr>
<td>Internet expertise</td>
<td>Webmaster, usability accessibility expert, project leader, functional manager, functional designer</td>
<td>Conditions and designs of internet pages, functionality</td>
</tr>
<tr>
<td>Substantive IT expertise</td>
<td>ICT specialist,</td>
<td>Technical facilities, arranging hosting, access to internet and intranet</td>
</tr>
<tr>
<td>Supporting the project leaders</td>
<td>Management assistant</td>
<td>Arrange facility affairs</td>
</tr>
<tr>
<td>Networks</td>
<td>Project leader, programme manager, policy assistant</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Trainer</td>
<td>Training, instructions and user manuals</td>
</tr>
<tr>
<td>Legal knowledge</td>
<td>Lawyer, legal worker</td>
<td>Protocols, assessing legal possibilities, legal advice</td>
</tr>
<tr>
<td>Professional expertise of the processes that need to be digitalized, this can be a different official per e-service</td>
<td>Executive staff, technical policy assistant</td>
<td>Steps, activities, checklists per digitized process, representation on behalf of divisions.</td>
</tr>
</tbody>
</table>

Figure 7. Project team and competences

### 2.3 Strategy development / work plan

Once the vision is described, administrative support has been obtained and the contours of the design teams are visible project proposals can be initiated.
**Project proposals**

The officials associated with the start up of the e-programme will use brainstorming sessions to create a first vision into a realistic action plan with associated costs. The structural model shown in paragraph 2.1 can also be used here to outline projects and their phasing.

![Figure 8. Project proposals for e-government](image)

For each component a proposal can be made to start. In the first phase projects will mainly be in the service, internal organization and administrative information provision to show the relationship between these fields and have the different areas take parallel steps. The internet technology and applications needed to realize the many e-services lie in between these project areas. Per component an annual objective is formulated and a budget prepared. It is important to adapt current and sectoral initiatives to the e-programme. This can help to better argue financing and better involve the divisions. Consider the replacement of a registration system for post.

The following guideline for planning of the first year can be used (the fields have been filled with examples of the objectives). nb chapter 3 handles the options in greater depth!
<table>
<thead>
<tr>
<th>Structuring / Phase / Objective</th>
<th>Information</th>
<th>Interaction</th>
<th>Multichanneling</th>
<th>Chain integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal organization</td>
<td>Digital telephone book for internal staff</td>
<td>Web form to record new and remove departed staff</td>
<td>One counter for all internal services to staff and managers</td>
<td>Shared service centres for support to other municipalities and governments</td>
</tr>
<tr>
<td></td>
<td>News on intranet</td>
<td>Forum functionality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative information</td>
<td>Publication of council documents, decisions and regulations</td>
<td>Web form ‘questions for the council’</td>
<td>Online broadcasts of meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Photo and text presentation of staff and council</td>
<td>poll</td>
<td>Local on-line voting</td>
<td>National on-line voting</td>
</tr>
<tr>
<td></td>
<td>Council agenda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e-Service</td>
<td>Products and services catalogues</td>
<td>Authentication</td>
<td>Digital processing of cases by post, telephone and physical desks</td>
<td>Access via website to other government services</td>
</tr>
<tr>
<td></td>
<td>The first web forms for citizens and companies</td>
<td></td>
<td>One counter for all municipal services</td>
<td>Intake and access to other government organizations</td>
</tr>
</tbody>
</table>
### 2.4 Commitment of all involved parties

It helps to involve the whole organization early by such things as competitions for a new programme or project name, names for the various new services to be offered and the internet systems themselves (e.g. “e-counter”, “Insite”, “Paper is Past”, “Demand and Supply” and so on). A group of representatives at qualified staff level allows the team to obtain advice and consultation on programmes and progress. The various departments will be visited to outline planning, the vision, and introduction strategy.
3. Possibilities

Not all services can be tackled simultaneously and not all services are immediately fully suited for e-service for reasons of security, privacy or other statutory provisions. The project team has to select the electronic services that can be placed online and the extent to which the process behind the service is digitized.

3.1 Which services can be delivered as e-services?

An e-municipality must benefit as much as possible from digitization so that as many questions and requests from citizens and companies as possible can be answered online. We hereby differentiate between questions that a) can be directly answered via information or knowledge pages on the website and b) questions that can be asked online after which a process (or case) is started. The answers follow at a later stage. This may be an answer in the form of a decision or a legal document such as an extract from the population register. Certain products cannot be provided online for reasons of security or the required physical form (such as official paper, necessity of a watermark etc) or have to be distributed by post such as passports or driving licences. The citizen must generally visit the town hall for this. So in all digital ‘questions and answers’ a distinction can be made in the extent to which e-services can be provided by internet.

In addition to applications, requests and answering questions, what can also be considered an e-service is the tracking of the status of an application via the municipal website. Depending on contents every question not immediately answerable can be followed online. Simply by saying ‘your question has been received, ‘your question is being processed or ‘your application has been answered’ client reassurance and satisfaction are created. The relevant status is sent to the applicant concerned via e-mail, with a link to a webpage. In principle every application can be submitted digitally. However because the security technology to replace the signature or physical check has not yet been introduced in most countries, governments will still prefer a letter or a visit to city hall for certain applications.
3.2 Selecting the services

E-services can be selected in many ways.

A citizens’ survey
A municipality can use a simple survey to assess which services the inhabitants of a municipality would like to see online. It should be remembered that not all inhabitants will have an internet connection at home. However numbers have been increasing enormously over past years. There are also options to use internet in cafés and at work. In addition to a classic once-only survey using questionnaires, a municipality can also log questions appearing on the website. The website needs a search field and the system must store all entered search terms. If the municipality analyses this consistently it quickly becomes clear what visitors need from the site. Information that is missing can be provided as new knowledge or information pages and digital forms.

Efficiency
The more questions are answered via the website the more the number of physical contacts and handling of letters is reduced. This means officials can plan their work better, and managers can monitor work pressure better. This can mean more efficient processes. In choosing which e-services to introduce the number of questions in the current method of working should be assessed. The most frequently asked questions per channel can help to make a choice as to e-services and to place information on the website and carefully update them.

Level of security
Because the government has a duty to carefully handle all data and the identity of applicants, not every service can be handled online. As described in paragraph 3.1, this factor greatly determines the use of website digitization. Different levels of security can be distinguished:

1 Open form/ data check
The lowest level of security is that whereby the applicant fills in all information on the digital form, and on receipt the municipality verifies the applicant’s identity with current official data and subsequently answers via mail, telephone or post. The online provision of both password and login name have the same level. The municipality cannot check an applicant’s identity (authentication). In
using this level the municipality must weigh the consequences of misuse. An instrument to assess which services qualify for this, is the comparison of this method with telephone applications. The same level of security is generally applied here. Such things as reporting fallen trees or defective traffic lights can also be reported by telephone without an identification check.

2 Personal login name with password
The code is originally requested online by the applicant and is sent after a data match by post to the applicant’s registered home address. The combination of login name and password subsequently provides access to the online services. A municipality can develop and introduce this system itself, however national systems make it easy for inhabitants to use the same digital key for multiple government services. An example in the Netherlands is DigiD, the organization that manages the digital identities of citizens for the national government. Depending on the level of confidence that an identity provider is given, this will also put more trust in the provided identity, as a result of which the identity could use more functionality. This system is generally combined with the sending of an SMS code. At the time of application the identity provider sends an SMS to the registered mobile phone with a code that can be used once. Most municipal services can be protected at this level. Because official documents in relation to the provider’s identity (in this case the municipality) will still be needed for the foreseeable future, this type of security is used with physical transfer by post or at the desk.

3 Biometrics
This form of security uses body features of the applicant verified by the municipality. Biometrics can in principle replace passes, keys, passwords, codes, photos and signatures and is currently insensitive to fraud. Because this requires a national system this form of security will not be immediately available for municipalities. Various governments are preparing for this method of security. In Belgium a start has been made with adding a chip in passports on which data is stored. A combination of this digital passport, a card reader at the user’s home and a finger print reader can achieve a very high level of security.

Payments
The municipality correctly requests what are generally modest payment for many of its products and services, so-called charges. Nowadays, these charges can also
be collected online. Banks have created systems with which municipalities can link up. They can choose from the use of direct online banking, the single direct debit mandate or the use of giro collection forms. Direct banking and the single direct debit mandate have the advantage that money is guaranteed and collected immediately. For the use of giro collection forms the municipality can decide to collect the money during the process or after it. Depending on the guidelines, it is not always possible to collect in advance. Then there is always the risk that the payment is not made, while the service has been delivered.

**Monitor for e-municipalities**

One way to help local governments make choices is the use of a monitor in which all important elements for digital service can be scored. Per element, functionalities are named which must be realized after a certain period in the municipality’s website. Such a score model also adds to a form of competition between the participants of the monitor. It is helpful to have such a test at a national, but if this is not available municipalities can set up a measuring rod together (for example in the region). Such a model is generally subdivided into the areas: User-friendliness, Transparency, Service, Personalized service and accessibility. Appendix A shows a monitor completed by the municipality of Dordrecht.

**Consensus**

Selection of the (first) e-services can also be managed by the level of support. Not all operations or departments are e-minded. Some may be in the middle of a reorganization or other development. Some departments want to modernize. It helps to seek out all those that look positively towards on the use of e-services. Putting too much pressure on ‘obstructionists’ can create a negative reaction from the rest of the organization!

### 3.3 The e-service structure

When the choice has been made of services to be offered in digital form, the project team must think about the introduction approach at the process level, the e-service structure.

**Outside in**

In developing and introducing the e-service structure it is important to reason on

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4 Freely translated from the guidelines of www.advies.overheid.nl
Figure 10. Model ‘Answer’
the basis of the applicant, the visitor to the website, ‘the customer’. We call this ‘reasoning from the outside in’. The model ‘Answer’ serves as guideline.

Knowledge or information pages are pages that describe a product or service that a municipality delivers or a relevant theme like an important event. Suppose a visitor wants information on passports. The visitor enters the search term ‘passport’ in the search field. They navigate through a menu or, if questions on the passport are listed in the top 10 questions, click these directly on the homepage. The visitor is directly led to the information or knowledge page on passports. It contains standard elements to be included in any knowledge or information page. The first webpage always contains a brief description, the frequently asked questions and various links.

This model stands or falls with organized editors. Most websites generally consist of unstructured web pages where the visitor can search via search field or via the navigation layout. The consequence is that the relationships around the answer to a question are unclear or that a large amount of ‘hits’ are shown (we call this the Google method). If we systematically enter the Answer model, each question is answered in the same structured manner. References provide the possibility to link to unstructured web pages. In most cases, however, the question has already been answered. It is thus important to indicate an organization unit that will protect the quality of the products and the services pages as well as the references. The quality can be much improved by understanding what a visitor wants. Imagine that in the log a certain word appears frequently, and that this word has not been provided with a structured information or knowledge page, the editorial office should find and publish this information. For each page there are ‘owners’ chosen from the organization that ensure topicality.

**The process behind an application**

If a question means that the municipality has to carry out work of which the quality and the completion time needs to be protected, we speak of a ‘case’.

**An example - change of address**

Say an inhabitant moves house and wants to report a change of address. They enter ‘address’ or ‘change of address’ in the search window. The visitor comes to the products and service page and reads the frequently asked questions. The visitor wants to submit the change online. If the identification details are correct, the visitor
will be linked to the ‘change address’ form. Certain details are already filled out because the municipality knows the applicant by means of the digital key. The applicant fills out the new address details and sends the form. The in tray of a certain staff group receives a new case. One member of staff handles it according to pre-agreed steps. This leads to the change being processed in the registration system; the case is ready and the applicant receives confirmation. If they had wanted the applicant could follow the entire process on the website. The applicant also receives e-mails providing a link to the webpage with the current status.

In handling a digital case the following elements are important:

A process description needs to be made of the process with the activities and people carrying out the activities described in detail, including conditions.

a. What information does the municipality need from the applicant to be allowed to handle the case (information, document)?
b. What is the turnaround time?
c. What is the level of authorization (open or closed)?
d. Do charges need to be collected?
e. Who can implement or have access to which step (authorization)?
f. Which decisions are relevant?
g. A checklist per phase in the process
h. Which phases can be distinguished in communication to the applicant?
i. Which documents belong in the case file?
j. Which characteristics are relevant or even obligatory?
k. To which records (people, companies, and addresses) are links needed?

When mapping the process elements above it is important the department takes part. From the start of the design of the case, a process owner must be announced with a responsibility and a mandate.

If these dates are known, the system will be organized and a digital form will be prepared after which the case will be placed online. From that moment the application can be handled on the website.
4. Functional and Technical features

Having described the e-service possibilities of products and services, this chapter looks at the translation of the desired process change into functional and technical features.

4.1 Important elements in the functional and technical approach

The provision of e-services demands systems that make this method of providing services possible. We hereby distinguish between a) the technical facilities (IT infrastructure, hosting) and b) the functional design and corresponding software. It is important to make this distinction because the technical infrastructure is subordinate to the functional architecture of the processes to be supported and because the introduction of e-services means a different working method. A strong relationship thus exists between the functional approach and the way in which the municipality sets up its processes and systems.

![Figure 11. Distinction between IT and process/functionality level]

Paragraph 4.2 shows how the programme team can make the conversion from thinking in service processes to software.
**IT Infrastructure**

The technical foundation is important as the software chosen must function properly. At least a number of basic facilities are required; an active network, a good and safe Internet connection, computers with a browser at workplaces. In acquiring and introducing new software, different choices are possible on selecting the right IT infrastructure: will the new e-service systems be ‘hosted’ internally or externally. Today external hosting is becoming more popular than having one’s own computing centre. This acquisition of customized functionality from an external party is called ASP (application service provision) or SAAS (software as a service). The advantage is that the municipality only needs to focus on desired functionality, availability and performance.

4.2 Process model, information architecture and software

Having chosen the vision, plan of approach and e-service structure the municipality, before it develops or purchases software, has to think about the functional information/software architecture that dovetails best with e-government.

*The information architecture describes the way in which information and data flows are handled and which software components are used in this process.*

**The service process model**

Because with the introduction of E-government we are busy adapting the municipal service process, the information architecture is mainly based on the elements that are necessary. To define the desired information architecture we use the following service process model that could apply to any e-service (Figure 12)\(^6\).

The orange fields show the process elements that prevail for any municipal process when it comes to the service.

**The service process**

The client will approach the municipality through different channels. A first activity is the ‘classification’ of the question. If the question can be answered directly, or if the client needs further guidance in answering, we find ourselves in the ‘Assist and Inform’ activity. In such cases the question can be answered and the contact terminates. If the question leads to a case (see also 3.3 ‘the process behind an application’) the case is ‘recorded’.

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\(^6\) EGEM 2006, www.egem.nl
Figure 12. Process model for municipal service

During ‘treatment’ the client is actively informed about status and relevant data; documents are added to the case file using ‘administrative management’. The model makes clear that, during activities at service level and at back office level, treatment requires a certain amount of data, involving so-called data collection. In the process model the generic elements and activities that prevail for each process are presented in a different colour.

The desired functionality to support the main components: “process service” and the “data collections” therefore only needs to be purchased once and is no longer a separate internet system for every new service! This is important because most governments assume a previous software situation (see also 1.2, ‘fragmentation and the supply-oriented government organization’).

**Information architecture in the old situation without e-government**

In most municipalities in the current situation functional architecture looks as follows:
Each department has its own software which is used by its own specialists. Registration and client contact moments are usually entered directly in the system. Basically, the systems are kept separate. Data are kept up-to-date at several places; departments only have rights to their own systems. We call these systems ‘back office applications’. They were developed for specific tasks and usually require intensive training sessions to be able to use them. In addition to these systems the documents created in the back office are usually kept up-to-date in physical files. The entire file is thus a collection of analogue documents and back office records.

If we could pull the existing model through to the internet, to the external world outside the municipality, the following problems would present themselves:

- Difficulty to have one counter;
- The data remains registered double in the different domains;
- Users require knowledge of different applications;
- Each application has its own authorization;
- Each application has its own security method;
- Applications are not optimally available;
- Each application has its own shape and image.

To avoid these problems e-municipalities use the so-called functional e-government information architecture.
Between the back office systems and the client interface there is a new generic software layer, the so-called ‘mid-office’ or ‘innovation office’. This mid-office is used for all e-services. The mid-office links the service processes to the implementing back office and supports the management of the generic data collections. The mid-office can be accessed on the Internet through the intranet portal. In this way staff have access to the requested products and services and can handle matters. For certain activities, next to the mid-office, the back office system must also be continuously used. This is not bad because transferring data usually does not require more time than entering data from physical documents. Nevertheless, in such cases technical connection can lead to efficiency benefits. A simple business case can prove this. Suppliers need to make their systems suitable for digital data exchange; this development moves slowly. This however should not stop a municipality from introducing a mid-office.

The other benefit of the mid-office is that for certain processes in the back office, no back office system is needed. Simple records can generally function perfectly well with the functionality of the mid-office. The mid-office mainly focuses on supporting the main components “process service” and data collecting from the process model.
4.3 Generic software components in the mid-office

In the mid-office we distinguish some important components that are linked. Below are the most important.

‘Answer’ component
The most important functions of the ‘Answer’ component are providing information and knowledge pages in such ways as the search function and FAQs (frequently asked questions).

Decision tree functionality
This creates the possibility to guide a client question, on the basis of pre-defined choices, to the right answer page or form. This form is registered through the web, telephone, desk or post intake in the ‘case system’.

The case system
This is the heart of the mid-office. The case system allows for the management of all cases and provides insight into the status of current and completed cases. The case system again is connected to ‘file functionality’.

File functionality
Each case needs a file in which documents can be saved. Back office systems do not need to purchase a document saving functionality because this is done in the mid-office. Using this functionality at central level allows authorized staff to easily access the information from any internet-connected workstation.

Data storage
At case records several data are reused and added once again. Registering these data properly in the source at one department and unlocking them centrally at the mid-office allows the municipality to serve all other administrations. The data used are then consistent and complete. Basic and key registrations can matter to any issue as a result of which the government is usually legally obliged to register data. Examples include addresses, buildings, objects, subjects, companies and cadastral information. If we systematically register these data at case records you can use the same method to search for relevant files. For instance, you might need all permits at address x. client details allow the municipality’s front office to become acquainted with the client despite the lack of personal and individual contact. Requesting client details quickly provides an image of the contact moments
Figure 13.
Mid-office components

Client contact centre - www.dordrecht.nl – call centre, counter, post room, Intranet portal, e-counter, my counter

Client

Employee

Chain partner

Decision tree

Products
FAQs
Answer

Database
basic records

web - intake
telephone - intake
counter - intake

post intake
web service

process support
decisions, publications
Cases

document creation/ templates

Dossiers documents

department X
department X

back office

department z
and the problems of the citizen concerned. At contact moments the municipalities no longer needs to ask for the sake of asking and the citizen will feel he is known and recognized. Staff details are used to distribute matters and to authorize access to information on the intranet.

**Case files**
These are the files and related documents of completed and current cases. The ‘catalogues’ file for instance includes all case types the front office can choose from if the client’s request cannot be answered directly. The product catalogue (see also 3.3 model “Answer”) describes all information and knowledge pages used to classify questions. Then there is the ‘public’ information which can be found on other governmental sites or at local libraries.

**Document creation and templates**
One often needs to create documents of similar type. This functionality can be found in ‘document creation’ which means someone does not need to create a new document time and again but simply design it once and use the template for each new case.

### 4.4 Points of attention on introducing e-government software

A municipality introducing e-government will need to break the process into phases to manage the process effectively. The following aspects should be kept in mind when introducing e-government information architecture:

**Go for a simple start with restricted functionality**
Although an e-government structure is behind all municipal services, the municipality starting out begins best by launching e-services through the website. This slows down internet access and allows departments slowly to get used to digital working. Departments responsible for post-registration, archiving and telephone activities only need to join later. In this way the municipality can best overcome resistance.

Initially the municipality restricts itself to purchasing and introducing a generic content management system for the main layout and structure of the website and some standard tools for poll, news and press releases. Add to this a product and
service catalogue, the FAQs function, a simple case system to manage digital requests and a forms generator. Also in the first phase the municipality could remove the pay function and introduce an initial authentication and identification form.

**Connecting to back office systems**
Since the new Internet software will need to be used in addition to existing back office system for an extended period of time, specialist services could object to what they might consider an inefficient method. The municipality should continue introducing new systems nevertheless. Retyping documents is just as expensive as introducing data from a paper document in the case of e-services so at least it should not involve additional work. Since new Internet systems are open in terms of exchange of information it would be a matter of time to replace the classic back office applications and make them ‘web-based’ to easily connect matters. In this way staff would also get used to using the intranet as the digital intakes or cases on the intranet are presented at the desks.

**Digitising cases by mail, at the desk or by telephone**
Once the first services are offered online (this should take 6 to 12 months) a project can be initiated to run post to the mid-office as well. At this stage the document and file management part of the mid-office will replace existing document management systems. A request by mail is also recorded in the case system and can be followed on the website. In this way some 100 services at the most can be digitized annually. Once the municipality is used to working with digital web and post intakes these tools will also be used behind the desk and on the telephone for the sake of client contacts. To initiate this multi-channel phase (see section 2.4) one does not need to wait until all services are offered from the web. But this phase should only commence 12 to 18 months after the start of the programme.
5. Implementation

Once the phased objectives have been described and the information and process models set out, the implementation team starts up. This chapter discusses implementation and management activities for digital information supply and e-services.

### 5.1 Project-based approach

The project approach is significant when it comes to introducing e-services. Previous chapters indicated the complexity of the e-services, related processes, required software and the staff who need to welcome this method, as well as agreeing with and adapting to all commissioning authorities, major stakeholders and clients. To properly manage these during introduction, many activities have to be carefully planned before project staff start. Here it is important to identify and describe all the parties relevant to the change and implementation process. One typically works back from the objectives and the specific results, to the required actions, linking staff, time and money needs. These data should be detailed in the plans for each project. There are several methods for project-based working (e.g. Prince II). In this chapter we discuss the most important aspects.

**Detailed planning**

The team members meet at planning sessions to brainstorm about actions necessary to reach the various results desired. A handy guide in this process is to describe the functionality to be used at a certain moment on the website and intranet.
The functionality always represents a number of activities behind the systems. We distinguish the management tasks of the new information systems (at mid-office level) and the users’ organization to carry out activities in case of a certain form of interaction through e-services with clients or end users.

**Virtualization**

The functionality is outlined in the planning after which the designers start making prototype screens. These show what the services should look like at the interface with the client. If the organization develops the functionality itself these will, in addition to the functionality description, be the guidelines for the software design process. If the organization chooses to order software in the market these prototypes will help it select suppliers effectively. The process of making prototypes is called ‘virtualization’. Here the design team visualizes the new working methods subsequent to delivery. The virtual drafts are also used during e-government workshops. Employees gradually receive the same images with future activities on the intranet.

**Project management**

Project managers must create an atmosphere of reaching agreement. This includes aspects such as a standard way of progress tracking with project status reports submitted by project teams say once every two weeks. These reports are discussed; deviations and bottlenecks are placed on the agenda. Project progress is frequently discussed with the official commissioning authority.

**Information management and project documentation**

The programme team has to prepare a proper project document. Here the intranet can again play a major role. Project plans for the entire organization are published; all project documents are carefully filed. Power Points used for lectures are also filed including all newsletters and reports.
5.2 Communication and consensus

The organization and client will need to be familiar with the presence of the e-program and the many projects. A communication project is needed for this. Parties involved need to become acquainted with the objectives and the consequences for the organization and the services offered. Communication tools are used at the following levels:

- Level 1 Policy-making
- Level 2 Management
- Level 3 Department
- Level 4 Process and staff
- Level 5 Internal and external users

Different agreement options apply to the different levels.

The board
The board is involved in a general sense. Most important it wants to know when the end results will be reached, whether costs will remain within budget, and that the organization will adopt the new service without too much resistance. Frequent discussions between programme managers and the board’s portfolio holder are necessary to obtain consensus.

Management level
At management level it is mainly important to properly map impacts on departments and carefully discuss developments with the departments. At this level a steering group is ideally appointed to discuss progress and resistance on a monthly basis (see 5.4). This management steering group has a twofold role: first of all in this way the organization emphasizes the fact that the most senior managers also understand the significance of e-services. Secondly it is a great platform to inform directors about the various developments. The board of directors too is unfamiliar with the digital form. The steering group here also has a communications function.

Department level
This is mainly about frequent direct visits to departmental meetings and personal discussions with the manager. Discussing plans and consequences for staff are fixed items on the agenda.
Staff and process level
Daily communication and adaptation activities between the team and organization take place at staff and process level. This receives careful attention if good results are to be achieved. At this level effects on the organization can easily be managed; changes following new e-services and translated functionality can be properly discussed and implemented. Creating working groups in which department staff participate leads to a sense of involvement. The programme team needs this knowledge to properly arrange processes in the new systems and to eventually test matters. It is important to properly communicate (interim) results to the organization. The feeling must be created that one is working constantly on the digitization process.

End users
Transaction costs decline with rising usage so end users should be approached by as many different media as possible. The programme team should pay careful attention to this target group. They are the final users of the digital services. They should be informed and involved with a complete programme. Components include training workshops, internal newsletters, district visits, cinema advertising, standard letters, signs, signposting municipal vehicles, billboards and commercials on local radio and TV. The team needs to create an image to have target groups realise that the municipality is investing in better and more efficient processes which will make things easier for everyone ‘24x7’. After the programme itself, the information and communication process should become a fixed part of the municipality’s daily statements. Systematic use of communication will allow the municipality to obtain ‘no returns’. But promises will have to be kept.

5.3 Staff training
During the implementation period the project team will have to invest in training sessions and the design of user-friendly screens. There are various groups:

- People in charge/ content managers;
- Internal and external users;
- The functional managers in the mid-office.

Training people in charge
During development when functionality is tested staff must play the role of users. Training is organized for departments concerned. All new functions are communicated
through intranet news. Launching an intranet environment is thus necessary to continue exchanges between Internet and workstations. 

**Training internal and external users**

It is better to introduce functionality in stages and to start with simple and general tools such as an intranet news facility, department pages communicating “who does what”, a ‘Questions and Answer’ application on which staff can sell things to each other, and a digital telephone book. The IT department will ensure the intranet starts automatically on starting the computer. This will allow staff to gradually get used to the new interface, also by reading newsletters and searching for colleagues. The project required to realize this also fall under programme guidance, (internal organization), and are included in the programme planning. Staff should also be able to surf the World Wide Web. Initially the organization will have to encourage use. An Internet protocol for surfing behaviour should provide a standard; using the Internet in a person’s free time should be permitted. In this way staff will learn to use the Internet in a natural way. The programme team should also organize consultation on how to use the Internet and intranet. Introductory days for new staff should include use of Internet and intranet.

Screens should be designed using intuitive build-up and user tests. Training sessions should be organized for citizens locally. This will help people not familiar with the Internet. 

**Training functional managers**

During development (future) managers of the mid-office will be involved in software acquisition and implementation. The functional managers will receive training to familiarize them with the ins and outs of the software so they can pass on this knowledge to new users and help in case of disruptions or to answer users’ questions.

5.4 Organization culture and dealing with resistance

The introduction of e-government may raise a person’s resistance for several reasons:

- Unfamiliarity;
- Loss of power;
• Conceptual differences;
• Non-transparent implementation;
• Pressure of work.

**Unfamiliarity**
Resistance to new digital working methods can be overcome if staff users are closely involved and consulted in the design and introduction process. Workshops, test panels and visits to municipalities that are in an advanced stage of digitization all help. Younger employees oppose the digital approach less because they will be used to working with the Internet at school and at home. ‘Older’ employees will have to be made familiar with the Internet through training sessions. Using intranet tools such us ‘offered for sale’, ‘question and answer’, ‘digital telephone book on intranet’, newsletters and simply access to the Internet at the workplace will all have positive effects.

**Loss of power**
This is usually associated with the horizontal, multi-department computerization that is part of good e-government. Chapter 4 explains that departments are usually connected with a specific software application and have their own process responsibility. The new Internet systems take on a higher priority and may reduce some people’s authority. Naturally, the specific process responsibilities will continue but departments will have to comply with general interaction and communication standards. So the programme team should present a good story explaining the necessity of the service. A soundboard group with heads of department will help. A certain consensus is required for this. Managers too need to discuss the letting go of their own classical style with clients. In this area the administrative sponsor is also frequently called upon.

**Conceptual differences**
This kind of resistance develops if managers or staff interfere in the design of the information architecture and digital processes. It usually manifests itself at departments that have an important policy role in the current situation in terms of communication, documentary information supply, ICT or service provision. In the realization process the responsibility and the significance of the many actors will have to be recognized; and phasing choices will have to be made. For instance, archive legislation will have to be recognized but the introduction of an electronic desk cannot be frustrated because of the multiplicity of rules in this field. Rules in current legislation cannot be applied entirely in the analogue situation. While
observing legislation, try not to assume the minimal situation in the analogue processes. Improvements can follow afterwards.

**Non-transparent implementation**

This is explained by the way in which the ‘client’ is closer to implementation when processes are digitized. In the current situation the municipality is usually a ‘black box’ of processes. Citizens are not sure what happens to their requests. By digitizing processes departments’ activities become clearer to both citizens and colleagues in other departments. The thought of being exposed to the outside world is scary. The programme team should realize this and thus spotlight the positive sides such as the simplicity of finding information, also for other departments, and the possibility to work efficiently on improving the process. The organization should make clear that improvements are appreciated and that departments using the Internet for the first time are given the opportunity to perform better. This approach thus uses a ‘reward and appreciation culture’ rather than a ‘punishment culture’.

**Pressure of work**

This type of resistance is experienced as if the new e-services required new or additional actions. More work rather than less. Usually these are imaginary actions but, as the process becomes transparent in this way, and because other departments can have a look, things might seem more involved than they used to be. Assistance can be useful at departments that have difficulty. Examples include monitoring incoming transactions and eliminating e-service stock within completion time. The programme team has to carefully monitor matters at these departments. Letting go too quickly can mean that e-services remain unused and that one might conclude that things were not introduced properly at the start. This will give a negative image to the programme team.

**5.5 Maintaining the digital infrastructure**

As the new functions are put into use the management and maintenance process begins. Especially at the start many wishes are expressed by users and process workers: the departments behind the e-services. The programme team should take this into account on developing services and functions. Since the new Internet and intranet platform does not have a specific owner at the start of the program, one has to be found. The most obvious is to call in the ICT or communications
department. Nevertheless, experience teaches that this new department for the management of e-government instruments and quality protection at the process level should be assigned to a new central department. The mid-office or innovation office has the task to quickly signal new developments or opportunities, evaluate them for suitability and risk, and introduce them into the existing organization.

Processes within this new department are characterized by a high degree of flexibility; encouraging innovation. The ICT and communications departments (as well as the documentary information supply department at a later stage) retain their responsibilities. This new mid-office department will constantly balance the needs of the different parties and maintain a central directing function.

The project team retains its multidisciplinary character by facilitating user groups and frequently solving matters with technical managers at the ICT department as well as the documentary information managers. Further development will be agreed with the communication staff and information managers.
6. Summary, tips and tricks

In this chapter we discuss possible traps one can face in introducing e-government. We highlight the most important things one should take into consideration at the start and during implementation. Certain aspects are considered in other chapters.

6.1 Guiding development

Ensure the acceptance of a vision and implementation programme at organization level. Steer e-developments centrally with a programme team in addition to the regular organization. Provide sufficient budget. Do not leave implementation to one specific sector or department. Initiatives at department level only usually lead to stagnation and resistance at a later stage of the e-process. This is mainly the result of the vertical working method as described in chapter 1. The ‘having as many flowers bloom as possible’ principle eventually works against the organization if the generic approach has to be applied. Departments then refer to investments made at their own level. Also at the highest level in the municipal executive try to avoid division with regard to the e-portfolio. This will directly reflect on the entire organization and can lead to major delays.

6.2 ICT instruments, technology and functionality

As has been described in chapter 4, determining an information architecture helps one set the rules for selection and acquisition of software which the new information
facility should comply with. It is important to use the objectives of e-services as the start, not other ‘important’ fields of interest of a specific department for instance. Use generic software components as much as possible and also steer matters during development and acquisition. Generic components make sure not every process has to be provided with different software. Try not to digitize the entire process household directly and start simple by describing products and services. If a tool is then purchased to digitize processes, so-called work flow management (WFM), do not dive deeply into the process. In the first years allow the department managers a certain degree of flexibility to steer their process for themselves. Diving too deeply into WFM too quickly will lead to much resistance. Also, WFM instruments are usually very expensive. First you should focus on the parts of the service providing process (chapter 3.3) rather than treatment at the back office although efficiency profits are booked there later on.

Differentiate between technical management (the hosting environment) and the desired functionality development from the information architecture. Functionality is a form of ICT but in this type of project an existing IT management department receives too much authority, and because software managers, the so-called application managers, are close to the company process at the department, protection and development of a new group functionality is usually under-illuminated.

In addition IT departments usually target managing existing technical systems such as computers, networks, servers and operating systems. The introduction of e-services however requires an ICT functional approach whereby the relationship with the service is dominant and not the capabilities of the technical infrastructure.

### 6.3 Culture and organization

Appreciate departments that co-operate. Make clear that working together has positive effects on the organization and do not pay too much attention to troublemakers. Good discussions must be held but at a certain moment the choice of the central team will determine the success of further development. A sector or head of department should not resist this. The party sponsoring the programme team will also have to show constant support. The internal media should communicate the process as irreversible. Discussions should be possible in special soundboard groups. Management will have to continuously draw departments’ attention; the so-called ‘corridor chats’ will have to be shifted to the public domain. Make sure that heads of departments with a role in the digitising process include a separate section
in the standard management report. Award co-operative departments, for instance by publishing complimentary interviews in the organization’s internal magazine.

6.4 Management and further development

Do not let management rules interfere with developments. Involving professional disciplines such as communications and ICT is important, but bear in mind that these departments restrict themselves to classic communication and information management. Setting up new mid-office management or an ‘innovation’ department is necessary.

Try introducing information management to also include the information architect. Setting up such a function could help the organization (besides the technological capabilities) achieve company objectives from an information and systematic overview. Information and knowledge thus become pivotal. The value of the organization would also be expressed in how information supply activities are managed and developed further.

Find co-operative partners, follow closely other governments who are further advanced in this process and learn from their experiences.
7. Four best practices Dordrecht, Heusden and Blagoevgrad

Best practice - E-service delivery in Dordrecht, The Netherlands

The City
Dordrecht (pop 125,000) is a famous old Dutch city that sits on an inland peninsula in the Drechtsteden region (pop 260,000) in the province of South Holland.

Core services
Six regional municipal organizations share in handling main public sector tasks of social affairs, urban development, public services, economic development and social support.

Typical city features
City policy targets innovation, networking, and good service to citizens. City managers want their work to be close to residents, transparent, accessible, appreciated and optimally efficient. One way this latter is being achieved is by separating contact with the citizen (the demand side) from the actual services themselves (the supply side). This allows the citizen to interact with the city at many different places, but back-office production activities are in a separate place where everything is combined and organized efficiently. For this, internet and e-services are used extensively. Several times in recent years Dordrecht has been voted one of the best e-connected cities of the Netherlands.

Reasons for digitization and e-services
- 24x7 availability;
- Responds to rising popularity of internet in society;
- Raises efficiency, speed and reliability of operations and services;
- Reduces costs and failures rates.
Foreign examples
In 2001 the city took the decision to introduce e-services in the domain of management information, services and internal organization and started investigation of foreign e-practices (including Singapore and Finland). Teams were formed per discipline, and ran their affairs in parallel with current operating systems.

<table>
<thead>
<tr>
<th>Organization</th>
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<tbody>
<tr>
<td>A flexible process and information architecture was adopted (front office – mid-office – back-office) and applied in over 100 processes (from population register extracts to tree felling permits and new address notification to financial aid for wheelchairs). The entire process was handled by the one multidisciplinary team headed by the town clerk and programme manager.</td>
</tr>
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<table>
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<th>Process</th>
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<tr>
<td>The collaborative effort between line managers, political direction and a motivated team of professionals was ultimately secured in the processes and central information management department. An in-house R&amp;D team designed and refined software. Information management functions are managed in a fully integrated manner.</td>
</tr>
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<table>
<thead>
<tr>
<th>Technical</th>
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<tr>
<td>A fully web-based and open source infrastructure manages all formats and message services.</td>
</tr>
</tbody>
</table>

The teams adopted an ‘outside-in’ approach to understand how best to provide the services from the position of the citizen. First a listing of all municipal products and services was prepared. Each one was described, explained, what was needed from the citizen to effect the process and how the citizen should apply. Digital forms were designed. The programme was widely advertised by flyers, brochures, gadgets, internet, TV, radio and outdoor advertising.

Consensus and agreement
These were reached by:
1. firstly supporting existing processes with internet systems and running both in parallel rather than suddenly changing from one to the other,
2. approaching departments that were in favour of the changes,
3. showing appreciation of this publicly,
4. creating an advisory group with respected people of business and politics,
5. having managers and staff themselves contribute to the creation of the digital support.
The software was mainly designed in-house. It had to be fully web-based, and split into components that could operate independently yet were of generic character so could be used for all processes.

Dordrecht itself designed its product and services catalogue, a form generator, and business applications. The city sold the distribution rights of some e-service components to a developer in 2003. But insisted other municipalities had the right to use them. Software was largely hosted in the city IT infrastructure. Small components such as basic content management system CMS, authentication and the job bank were hosted as SAAS (Software as a service) by market parties.

As of 2007 over 100 processes have been digitized and the innovation culture is palpable across the whole organization. Efficiencies save the city many hundreds of thousands of euros a year even though this was not the top priority. It turned on quality and modernization.

Examples of digitized processes.
- Applications for building, car parking or event permits;
- Print-outs of population registry or city administration;
- Applications for passport or driver’s license;
- Applications for serving alcoholic drinks and food permit;
- Obtaining a property valuation;
- Complaint against city dog tax or applying for dog tax;
- Applications for wheel chairs.
- And many, many more.

Modernizing services using e-facilities meant the creation of a better image of how the organization was becoming more service-oriented.

Communication channels
Dordrecht uses two important models for communication between citizens, city and city departments. The first model (Figure 12, Page 31) shows the difference between the service character of the processes, the necessary information collection required for this and the separated back-office processing. Intakes are made at the multi-channel front-office, the mid-office holds the main databases and generic systems, and city staff address the application via the intranet portal on each workspace.

The second model (Figure 10, page 26) shows how the e-service user can always
use the Question-Answer approach of e-services to move through the system for the right information, maps, transactions and information pages. For each citizen transaction a separate case dossier is created. The process steps are shown and the necessary documents attached as needed. Each phase is closed down with a checklist and a document. Finally the work is complete. Relevant items like the application form and the permit say, and the process as a whole can be consulted on the web site via a ‘track and trace’ page. The steps and phases and necessary documents are modeled by a digiteam (information managers and specialist staff). From then on applications can be handled digitally.

**QUESTION-ANSWER PROCESS**

**Conclusions**
Introducing e-services has created a culture of revolution. Various movements such as the Client Contact Centre and the regionalization of the services provided have been linked inseparably with the new information and process model. Clearly of importance in achieving success were client awareness, generic software, support and trust from the top, readiness to invest, a multi-disciplinary team, time and practice all proved important. Managing information and processes are strategic elements in municipal development, and to ensure their success experienced information manager should be appointed.

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Best practice E-service delivery in Heusden, The Netherlands

Background
Heusden, The Netherlands, is a municipality of 44,000 offering a total of some 400 products and services to its citizens. In order to take advantage of all of the current and expected future, benefits of the IT and e-sector, the council decided to investigate, design and implement a new structure based on the fact that citizens should be able to receive all services and information via the Internet.

The Heusden Way of Working (HMW)
The local authority’s solution was the ‘Heusden Way of Working’, an integrated project in a flexible and paperless work environment built on the beliefs that:
   a) Employees are mature, independent and able;
   b) Municipality staff tasks should respond to citizens’ needs;
   c) Workflow is organized around information requirements;
   d) Efficiency is top priority.

Design
The design of the new way of working, the new IT infrastructure and new workplace required an integral approach. Development of the new project concept was divided into steps; development by phase, definition, concept and plan (2000); implementation with the focus on new ways of working, management systems, archiving, ICT, and buildings (2001-2002); and evaluation of functional organization and techniques (2003). It was completed in 2003. The development of the new concept was an interactive process with the result that:
   • There was awareness in the organization about opportunities and threats, necessary organizational changes, responsibilities of management and;
   • A detailed programme of facilities for the organization.

Processes are being constantly adapted and upgraded, and workflow between front office and back offices reorganized to structure work processes around clients. The municipality also adopted a more radical view in changing or abolishing outmoded procedures. The aim was to abolish 10–15 % of all processes, either because they were no longer needed or because their processing was too complex.
Specific goals
The overall project objectives were threefold:
1) The citizen should be central and seen as a valued customer;
2) Integrated workflows should be established;
3) Employees should be able to work flexibly.

These objectives were complemented by the following sub-objectives:
1) An ideal knowledge sharing environment should be achieved;
2) Workflow and documents should be 100% digitized;
3) Employees should be process and client-oriented;
4) Maximizing the professionalism of the organization;
5) Establishing a striking corporate identity.

Resources employed
*Human:* All staff in Heusden municipality were affected by the project and proved keen to work on it together.
*Financial resources:* The council decided that the money previously dedicated to a new town hall could be used (16 million Euros). Project implementation cost of 12.2 million Euros (10 million for construction and 2.2 million for ICT.)
*ICT:* The software required for this project was developed by the municipality in collaboration with private sector partners.

Skill upgrading under new way of working
Some municipality staff had to upgrade and adapt their skills.
1) How to optimally communicate and interact with citizens,
2) How to handle new IT and computer applications,
3) How to work within a learning organization with a flexible work environment.

Changes to work tasks, roles and responsibilities of staff
The new work environment enables staff to work very flexibly and according to the task they must fulfil. In general, the municipality underwent a shift in its dealings with its citizens. Heusden staff now work under the conviction that, “It is we who have to move first and not the citizen”. This meant a change in roles and status as the citizen is now at the centre of work and not the process.

Organizational change
One of the most important changes in the implementation phase was the introduction
of a flexible work environment, the result of the one-stop philosophy. To achieve this other tools had to be introduced, effective systems for sharing information for example. As a result, 100 percent digitization was the goal. This was done by equipping every employee with a laptop and WLAN access to a server.

**Results**

*Tasks are more transparent*

The implementation of knowledge sharing and ICT-based working led to tasks and procedures becoming more transparent. Processes had to be revised and reviewed and obsolete processes and services abolished. In future fewer staff will be needed.

*Front office and back office interaction changed*

The new system required a change in interaction between front office and back office staff. New ways of interaction are being explored.

*Mid-office*

The mid-office was introduced to co-ordinate workflow and document management between front and back offices. It is the system manager.

**Lessons and conclusions**

*Required IT skills do not change dramatically*

Heusden Way of Working is a good example of a change project not requiring dramatic changes in IT skills. Although work flow is 100 percent digitized, the main skill changes relate to the social and human ‘soft skills’. Communication, self-management, initiative, and ability to adjust are the basic skills staff need in such a setting.

*Result-orientation*

The integrated approach of the Heusden Way of Working makes it possible to implement a result-oriented staff evaluation system. Clear targets are set and evaluated annually for all staff. This demonstrates that the transparency created by working in an e-environment also creates opportunities in human resource management.

*Leaders have to communicate the vision*

For the successful outcome of a project it is important that leaders communicate the vision, draw a clear picture of the outcome wanted and have the necessary social and soft skills to motivate, integrate and support employees in helping achieve.
Heusden Way of Working as forerunner
Heusden was the first Dutch municipality to fully introduce a flexible and paperless working environment. Total investment costs had to be carefully budgeted. At that time (2001-2003) total costs were € 15 million for an organization of 300 people (€ 4 million for ICT and € 11 million for restructuring two office buildings).

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Improving E-government in Blagoevgrad, Bulgaria

Background to the task

Bulgaria’s municipality of Blagoevgrad started work in automated administrative work in the period 1997-1999. For several years the network was developed and individual programs were successfully introduced for computerization of activities of various departments and directorates. In 1998 a digital model was developed for most of Blagoevgrad’s property register and that of some adjacent villages. In 1999 the city received the prestigious SAVVI award for this from the Association of Experts in Communication and Marketing of USA municipalities. Recognition for innovation in local government and good communication with citizens was conferred for ‘Information Systems and New Technologies in Blagoevgrad’. The main problem in this period was that while programs solved tasks in their relevant area, data exchange between the systems was manual. With the increase of information flows, higher demands on administration and the need to raise productivity, new technological solutions and improvements were proving necessary.

Current status

Today Blagoevgrad has a newly-built computer network with a renovated topology of 120 stations and speed of 100Mbps. Each key member of staff has a computer and access to peripheral devices; printers, scanners etc. and 70% of computers have up-to-date configuration. Five servers operate with top quality data protection. The departmental Information Services and Technologies team closely follows all new software products and technologies coming on the market. The opinions of experts from other municipalities and the problems arising at start-up are studied carefully to choose the most suitable solution.

Objectives

It is clear that there is no ultimate or best solution, but a competent IT specialist can streamline staff activities and make staff work more productively by choosing better software products and technological solutions. The key objectives of the information and technological activities in the municipality are raised work efficiency and computerization of operations; implementation of integrated administrative services and electronic archive and provision of transparent accounting, control and administration.
Database organization and related software

These are essential for the reliable functioning of the information system. The software covers three main areas:

- Back office administration activities of accounting, finance, municipal property, rents, cadastre, investment activities.
- Upgrading the electronic filing system to ensure inter-departmental and inter-agency archiving and document exchange.
- Provision of operational environment for active communication with users to ensure web-service delivery.

The main activities of the municipal administration, such as property, rents, regulatory regimes, cash and cadastre are served with the software products of the Acastre family. The electronic municipal property register provides for management and accounting and in municipal property acquisition and disposal. The database links five departments of the municipal administration and avoids the discomfort of co-ordinating applications from different programs. The main criteria in the selection of specialized software products are their capabilities for automation of specific activities, for data exchange with systems already introduced, and possibilities for longer term maintenance.

This system, served by Acastre Office, provides document flow management, and municipality task performance by optimizing filing both between the administration and the users of services and between the municipal units. Electronic signature facilities and specific technological solutions have been implemented. The filing system has made it possible to record original documents and their electronic variant. Documents created by staff are stored in their natural format, for example, *.doc. The system offers internal exchange of electronic documents and a complete electronic archive with document loss reduced to a minimum. Hierarchical access to documents means the possibility of monitoring the work of staff.

With Acastre e-Security Blagoevgrad was the first municipality to introduce the intra-departmental digital signature. It guarantees the identity of the person who signs and the fact that the signed electronic document is not later modified.

Acastre-Communicator ensures exchange of electronic documents with other institutions such as the regional administration, the municipal council, two ministries and over 100 municipal and other administrations.
Internet as communication channel and related web services raise the standard. The municipality web site was updated and the capabilities of the server expanded. The new system is based on PHP 5 and relational data base MySQL; www.blgmun.com internet server protection has been improved. The web site provides information about the municipal administration and its activities as well as a set of forms for services accompanied by models.

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**Award**

In 2003 the city was among four municipalities nominated in the section ‘Best web site of an institution in terms of public information access’, a prize instituted by Access to Information /AIP/.

As a result of the efforts of the team the number of web site visits in the past two years doubled to almost 65,000 in 2006.

The users of services can check the status of the file cases registered by them on-line on the web page of the municipality. To that end the *Acastre-File System* programme generates a unique code for each file case, printed out upon entry and submitted to the applicant. Thus data protection is guaranteed. For that purpose the *Case Filing Unit* was equipped with additional peripheral devices – post-printers for printing out case file data generated by the software product.

**Citizen Information and Service Centre**

A new approach is provision of information through an Information Portal which is
part of the *Citizen Information and Service Centre*. The system is based on the *Touch Screen Monitor* in the computer network. With the help of the easily accessible menu the desired information is displayed and the citizen is able to select and download information on the administration, the services offered, technological maps and to check status of registered case files - Case File Information.

A reliable identification system with a universal electronic signature offers exchange of information with external organizations.

The ambitions of the municipality leadership and the *Information Services and Technologies* team to enable the administration to function effectively in a contemporary organizational environment, to be open to new solutions, to provide broad public access to information and services through electronic exchange, and improve the speed and quality of services to citizen and businesses are being achieved with some success.

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Upgrading Administrative Services in the Blagoevgrad E-Region, Bulgaria

The Region

The Blagoevgrad region is in south west Bulgaria to the east of Macedonia and to the west of Greece. The regional administrative centre is the city of Blagoevgrad. The region encompasses a total of 14 municipalities of varying populations and economic development. In 2007 the population was 354,000, or 4.2 % of that of the country. The surface is 6,450 square km, or 5.8 % of national surface. By this indicator it ranks third among other regions in the country after Bourgas and Sofia. Blagoevgrad is an important geographical location. The E79 international highway to Greece passes through it. While the four border checkpoints located on its territory favour cross-border co-operation, over 80% of the region is mountainous and transport infrastructure is unevenly developed. Besides the international transport corridors, local roads are generally not satisfactory.

Regional administration and main government institutions are in the city of Blagoevgrad. For municipal administrative services, the applicant citizen or business has to visit the regional centre at least twice – both to request the service, and then to receive the finished document. For most applicants this central administrative service delivery is not satisfactory. However, the administrative centres of the 14 municipalities are relatively evenly located in the region. The citizen’s access there is easier than Blagoevgrad. Moreover, they have staff and technical capabilities that can provide applicants access to the services and agencies located in Blagoevgrad.

It is this that underlies the project “Upgrading Administrative Services in Blagoevgrad E-Region”.

Project objective

The essence of the project was to create the organization and technical facilities to allow citizens to obtain what they used to obtain from Blagoevgrad Regional Administration from the nearest municipality office thus making huge savings in time and cost of travel. Inter-institutional co-ordination of some administrative services was also to be done simultaneously. Project implementation would build on advances in IT technologies, transfer of electronic documents via a protected channel and the use of electronic signatures. This responded to one objective of the
implementation of the national programme for E-Government.

**Initial questions**

One serious challenge in project implementation was the variation in human and technical resources and the (lack of) preparedness of the 14 municipalities and the regional public structures involved. An important condition for project implementation was step-by-step execution.

Then answers to the following questions were needed.

- Who was to coordinate the overall work and institutional efforts?
- Had similar projects already been implemented and was experience available?
- Who would be involved in decision making on administrative and procedure issues?
- Who would be involved in software and technical provisions?
- How would administration staff be prepared for the changes in their mode of work?

**Participants**

The coordination of project implementation and participants was undertaken by the Regional Governor and his administration specialists. The group of participants was defined and each signed a memorandum of intent to implement the project. This laid the foundation for the co-operation to follow. Participating in the Project at this stage were:

- The Regional Administration - Blagoevgrad;
- The 14 municipalities of the region;
- The District Court;
- The Regional Inspectorate for Public Health Protection and Control (RIPHPC);
- The Regional Directorate for National Construction Control (RDNCC);
- The Regional Inspectorate for Environment and Waters (RIEW);
- The Territorial Directorate of the National Revenues Agency (TD of NRA);
- The Regional Police Directorate.

The project remains open to new participants who might join and extend the range of services.
II. Project Implementation

- FIRST STEP – All participants sign Memorandum for Partnership;
- SECOND STEP – Administrative services to be included were selected. Of the several hundred services the best candidates were selected by the following criteria:
  - Frequency requested;
  - Not requiring large numbers of documents;
  - Not requiring documents that required verification by experts
- THIRD STEP – Regulate the service delivery procedure and mode of payment;
- FOURTH STEP – Creation of a protected channel for document exchange;
- FIFTH STEP – Create possibility to directly exchange electronic documents between the two most widespread information systems in Bulgaria at present – Acastre and Archimedes;
- SIXTH STEP – Sign agreements with project participants;
- SEVENTH STEP – Media presentation of project possibilities.
- EIGHTH STEP – Maintain sustainability and further development.

Two working groups of specialists from the administrations involved were established:
- A working group for selection of services to be included in the project and development of procedures for their execution;
- A working group of IT specialists on issues of software and technical provision.

The second group of IT specialists and an expert from the Foundation for Local Government Reform (FLGR) worked on the implementation of the protected channel for electronic document flow, the introduction of the electronic signature and the training of specialists on electronic service provision.

Worth special mention was the problem concerning the absence of a national standard for data exchange between the different electronic document flow management systems used by the individual administrations. That greatly impeded the use of the common communication channel and in some case necessitated additional operator intervention.
As a positive outcome project implementation meant a possibility was provided for the first time in Bulgaria for a direct exchange of electronic documents between document systems created by different developers – Acastre by the team of the Technical University in Sofia and Archimedes by David Holding. To this end a direct exchange port was installed in each of these two systems - of particular importance, because the two information systems taken together are used by some 75% of state structures in the country that introduced such systems. Moreover, direct exchange of electronic documents between state structures and municipalities using one of these two software products, can take place across the country, and not just in the Blagoevgrad region.

Conclusions, lessons learned, replication
In the course of the project we discovered that:

1. The degree of motivation of municipal and state agency leaders and specialists involved for the project was important;
2. Traditionally excessive centralization created complicated and sluggish procedures for the regionally located structures of the central state institutions including permission to be part of the project. It was a strong demotivating factor.
3. Some central state agencies were reluctant to go beyond the limits of the narrow departmental concepts and work with other agencies in integrated IT projects;
4. There were insufficient trained specialists able to introduce, maintain, operate and develop the software and technical facilities;
5. There was a shortage of funds for realization of project deliverables and informing users of the new administrative services provision;
6. There was insufficient motivation, information and preparedness of users for changes in the existing organization of administrative services delivery;
7. There was a lack of national co-ordination for implementation of projects, publicity and assistance in the dissemination of good practices.

The process of provision of complex electronic administrative services and exchange of office electronic documents through the complete protected channel does not require any serious additional financial resources. Transfer of documents among institutions is ensured and the time for performance of administrative services is reduced. The procedures are fully applicable in the other regions of the country.
Project implementation achievements
1. Complex administrative services in which required documents were issued by administrations in the project and sent to the service provider through channels without involvement of the applicant.
2. External administrative services performed outside the place of request by an administration included in the project, all on the ground of the documents issued by the applicant.
3. Unification and popularization of administrative services in regional municipalities.
4. Reduced mailing costs in exchange of documents between the institutions and regions.
5. Faster exchange of documents and reduced efforts in input and output registration.
6. Initiation of partnerships and team work between many different institutions.
   - Easier access to services of individual administrations – different channels of access;
   - Reduced number of citizen contacts with individual administrations;
   - Reduced possibilities for corruption;
   - Speeding up process of service provision;
   - Saving citizen’s time and money.
8. Establishment of a protected channel for electronic data and document transfer, used both for provision of administrative services and transfer of official information among project parties. Further project development envisages establishment of a regional portal, increasing the electronic administrative services and drawing new partner institutions into the framework.

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The key task of VNG International is strengthening democratic local government. It is a small, dynamic company annually managing some 60 plus projects and programmes with a focus on decentralization and capacity building. VNG International supports local governments, their associations and training institutions in developing countries and countries in transition.

VNG International’s approach

For VNG International, strengthening democratic local government means working on three inter-related levels:

• The individual level-training and motivating municipal staff and elected representatives;
• The organizational level-advising local authorities on their organization structures and working methods;
• The institutional level-adapting financial relations, laws and institutional arrangements.

The VNG International approach builds on:

• Colleague-to-colleague cooperation
• Institutional linking

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National Association of Municipalities in the Republic of Bulgaria

Strengthening local democracy and developing local communities

Founded in 1996, the National Association of Municipalities in the Republic of Bulgaria represents and defends the common interests of municipalities at the central level. According to the Local Self-Government and Local Administration Act it is entitled to develop proposals for change and improvement in local self-government regulations, to prepare opinions and proposals on the draft budget of the country concerning municipalities, and to be a member of international associations.

Scope of work of the National Association of Municipalities in the Republic of Bulgaria

Representatives of the National Association of Municipalities in the Republic of Bulgaria participate in the councils of regional policy, social policy, small and medium-sized enterprises, tourism, cadastre and property registry, application and monitoring of the national plan for agricultural and rural area development, and others. Representatives also participate in the governing bodies of the pre-accession programmes ISPA and SAPARD as well as in the governing committees of many donor programmes facilitating financial support to municipalities.

• Consultative papers: consultative papers are regularly written to assist members in preparing and implementing municipality budgets, determining local fees, service charges and handling other complicated issues;

• Handbooks and reference books containing information on relevant topics such as municipal property and finance, concessions, civil registration, successful practices of local governments in Europe, legislation, health care and education, lobbying, etc.;

• Training: experienced trainers, timely topics and interactive exercises assist members to improve their capabilities;

• Information services: twice a month the Information Bulletin is issued; circulation of 1500 copies.
“The projects implemented by Bulgarian municipalities on the basis of their bi- or trilateral partnerships within the framework of the LOGO East programme support to build-up of capacity for the provision of high quality services in public transport, services for children and youths, assistance in the development of sustainable projects, one-stop information provision, urban planning and water management, fighting water losses etc.

LOGO East is a door to partnership, a spring of ideas to enrich municipal know-how, and a source of improvement of the services we provide to citizens”.

Bogomil Blchev, NAMRB Managing Board Member
Mayor of Gabrovo municipality:

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www. namrb.org
### A. User-friendliness

| a1 | Does the website have a search engine? | Yes |
| a2 | Does the website provide access to www.overheid.nl? | Yes |
| a3 | Does the website have a list of frequently asked questions (FAQs)? | Yes |
| a4 | Does the website contain information/pages in English? | Yes |
| a5 | Does the website have a privacy statement? | Yes |
| a6 | Does the website provide a list of policy themes, files or specials, with an introduction for each theme and the possibility in each theme to click on to (board) papers and/or documents that regard the theme? | Yes |
| a7 | Does the website provide an overview of the changes to the site over a certain period (at least one week)? | Yes |

### B. Transparency

#### Announcements

| b1 | Are periodical (legally obligatory) announcements published on the site? | No |

| b2 | Does the website offer visitors the possibility to subscribe to an announcement reminder function? | Yes, a selection based on postcode or district and a selection based on kind of announcement |

#### Permits

| b3 | Is it possible to view a permits file online, and if so: how many types of permits can be accessed? | Yes, at least three types can be accessed |
| b4 | Does the online permits file comply with the Internet Publication Model Vergunningen van Advies Overheid.nl? | Yes |
| b5 | Which search entries are required to find these permits on the web site? | Two search entries are available |

### Administrative information
| b6 | Does the website provide access to the administrative data system | Yes, through an archives function of more than a year |
| b7 | Can the administrative data system be searched separately? | Yes, through combined search (e.g. theme and date combined with a key term) |
| b8 | Does the website include the Residents’ Annual Report 2005? | Yes |
| b9 | Is there a separate section/page where documents related to the accepted WOB (Government Information Act) requests are published? | Yes |

**Decentralized legislation**

| b10 | Does the website show all prevailing regulations/byelaws? | Yes, in accordance with the Decentralized legislation Internet Publication Model |

**Co-operative Catalogues**

| b11 | Can products/services be found from other governmental website Using ‘Co-operative Catalogues’? | Yes |
| b12 | Can products/services or other governments be found on the products catalogue using ‘Co-operative Catalogues’? | Yes |

**GIS & Plans**

| b13 | Is at least one up-to-date zoning plan available on the site? | Fill out address show what can and cannot be done in the scope of the zoning plan at that address |
| b14 | Does the website present information other than the zoning plan in its own GIS application? | Yes |

**Interactivity**

<p>| b15 | Does the site explicitly mention responding times to e-mails? | No |
| b16 | Does the website include a mailing list or e-mail newsletter for which you can register separately? | Yes |
| b17 | Are leaflets and brochures available through the website? | Yes, online ordering and electronic delivery |</p>
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>b18</td>
<td>Does the website provide information about the complaints procedure?</td>
<td>Yes, process is described step by step</td>
</tr>
<tr>
<td>b19</td>
<td>Participation: Does the website provide the possibility to discuss online certain administrative or policy-related themes? (forum, list of discussions)</td>
<td>Yes</td>
</tr>
<tr>
<td>b20</td>
<td>Does the website provide the name and contact details of managers who are directly involved in the theme/subject?</td>
<td>Yes, names and contact details</td>
</tr>
<tr>
<td>b21</td>
<td>Does the website provide a manager’s weblog?</td>
<td>Yes</td>
</tr>
<tr>
<td>b22</td>
<td>Does the site provide a list of important/frequently used telephone numbers?</td>
<td>Yes, presented together</td>
</tr>
<tr>
<td>b23</td>
<td>Customer satisfaction: Does the site provide recent customer satisfaction research or review committee report?</td>
<td>Yes</td>
</tr>
<tr>
<td>b24</td>
<td>Other: Does the site provide information about what to do in calamities, and on emergency services?</td>
<td>Yes</td>
</tr>
<tr>
<td>c1</td>
<td>C. Services: Collect household refuse</td>
<td>Information</td>
</tr>
<tr>
<td>c2</td>
<td>Collect bulky refuse</td>
<td>Transaction</td>
</tr>
<tr>
<td>c3</td>
<td>Levy sewerage charges (also for companies)</td>
<td>Information</td>
</tr>
<tr>
<td>c4</td>
<td>Property tax (OZB) (also for companies)</td>
<td>Transaction (DigiD)</td>
</tr>
<tr>
<td>c5</td>
<td>Waste collection levy (also for companies)</td>
<td>Information</td>
</tr>
<tr>
<td>c6</td>
<td>Apply for construction permit (also for companies)</td>
<td>Downloadable form</td>
</tr>
<tr>
<td>c7</td>
<td>Report damage/maintenance of roads/pavements and such (road maintenance)</td>
<td>Transaction</td>
</tr>
<tr>
<td>c8</td>
<td>Apply for passport</td>
<td>Uploadable form (DigiD)</td>
</tr>
<tr>
<td>c9</td>
<td>Purchase/let building land</td>
<td>Downloadable form</td>
</tr>
<tr>
<td>c10</td>
<td>Apply for driving licence</td>
<td>Uploadable form (DigiD)</td>
</tr>
<tr>
<td>c11</td>
<td>Peruse zoning plans (also for companies)</td>
<td>Information</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Type</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>c12</td>
<td>Apply for a GBA (municipal personal records database) extract</td>
<td>Transaction (DigiD)</td>
</tr>
<tr>
<td>c13</td>
<td>Apply for income and capital declaration</td>
<td>Not applicable</td>
</tr>
<tr>
<td>c14</td>
<td>Apply for a service for the disabled (WVG or services for the disabled act)</td>
<td>Transaction</td>
</tr>
<tr>
<td>c15</td>
<td>Apply for remission of taxes and levies</td>
<td>Transaction (DigiD)</td>
</tr>
<tr>
<td>c16</td>
<td>Apply for a social assistance benefit</td>
<td>Information</td>
</tr>
<tr>
<td>c17</td>
<td>Submit new address (removal)</td>
<td>Transaction (DigiD)</td>
</tr>
<tr>
<td>c18</td>
<td>Report damage to public green areas</td>
<td>Transaction</td>
</tr>
<tr>
<td>c19</td>
<td>Request a tree felling permit</td>
<td>Transaction (DigiD)</td>
</tr>
<tr>
<td>c20</td>
<td>Submit an objection (also for companies)</td>
<td>Uploadable form (DigiD)</td>
</tr>
<tr>
<td>c21</td>
<td>Apply for a parking permit (also for companies)</td>
<td>Transaction (DigiD)</td>
</tr>
<tr>
<td>c22</td>
<td>Apply for an events permit (also for companies)</td>
<td>Downloadable form</td>
</tr>
<tr>
<td>c23</td>
<td>Collect industrial waste (only for companies)</td>
<td>Information</td>
</tr>
<tr>
<td>c24</td>
<td>Apply for an environmental permit (only for companies)</td>
<td>Information</td>
</tr>
<tr>
<td>c25</td>
<td>Purchase/let industrial premises (only for companies)</td>
<td>Transaction</td>
</tr>
<tr>
<td>c26</td>
<td>Apply for an entrance/exit permit (only for companies)</td>
<td>Transaction</td>
</tr>
</tbody>
</table>

### D. Personalized services

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>d1</td>
<td>Is the organization connected to DigiD?</td>
<td>Yes</td>
</tr>
<tr>
<td>d2</td>
<td>If the answer to question B16 is yes: is this a personalized newsletter? (meaning that the user can select subjects for himself)</td>
<td>Yes</td>
</tr>
<tr>
<td>d3</td>
<td>Does the website provide the possibility to follow the status of a product/service request online?</td>
<td>Yes</td>
</tr>
<tr>
<td>d4</td>
<td>Does the website provide the possibility of a personalized digital desk (“my desk”)?</td>
<td>Yes</td>
</tr>
<tr>
<td>d5</td>
<td>Does the website provide the possibility to pay a service or product requested/provided directly?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### E. Accessibility

|   | Score web guidelines test | 88 |

1 SMART: Specific, Measurable, Acceptable, Realistic, Time-constrained