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# [ Introduction ]

Modern information and communication technology (ICT) and electronic services have become part of everyday life of European citizens. We communicate via e-mail and chat-channels, read news on the internet, buy travel tickets and carry out bank transactions electronically and to an increasing extent search for public sector information and services using the internet. A majority of households, businesses and public authorities are connected to the internet and most of these have broadband connection. Nearly all citizens have in addition access to a mobile phone.

The development and use of ICT has created new possibilities, but also challenges, for local and regional authorities. ICT can help to strengthen local democracy and the involvement of citizens in political decision making. It can also help to modernise and restructure the public sector and to develop better and more effective services to citizens and businesses. At the same time ICT can be an important tool for economic regional development, especially in rural areas. But the potential of ICT can only be unlocked if broadband and digital content and services are available in all regions and for all groups of citizens.

The development of Information Society and eGovernment at local and regional level requires a strategic approach. This is why European organisations and networks for local and regional authorities have adopted a Digital Local Agenda (DLA). The DLA aims at

- facilitating the take-up of e-government by local authorities
- promoting sustainable modernisation processes based on intensive use of ICT
- improving public services supported by strong back offices, innovative digital networks and better digital literacy in public administrations
- increasing cooperation between national, regional and local public administrations, also across Europe

The DLA was first adopted at the 2005 European Information Society Conference (EISCO). At EISCO 2007 the participants adopted a "Manifesto on Digital Local Agenda i2010", which was later reaffirmed at the EISCO-conference in 2008.

ICT strategies and action plans must be continuously adapted to technological developments and other changes in society. This manual provides guidance to associations of local and regional authorities on how to assist municipalities and regions in developing strategic ICT plans with politically set goals. The manual describes necessary preconditions for effective administration and electronic services and examples of important focus areas for the deployment of ICT. For these preconditions and focus areas associations are advised to set concrete goals to be adapted by municipalities and regions to local needs and circumstances. In addition associations are advised to define concrete actions that the association can carry out to support local and regional authorities in preparing and implementing the strategy. Examples of goals and actions are listed in annex 1.

The manual is based on documents from member associations, notably a handbook of the Norwegian Association of Local and Regional Authorities, "eMunicipality 2012 – local digital agenda". A focus group created by the CEMR Policy Group on Information Society and eGovernment has reshaped the Norwegian document into a more European composed manual.

Brussels, May 2010

## **2. Why local and regional eGovernment?**

Information and communication technology is by nature trans-boundary and affects all sectors and areas of society. ICT is a key driver of the economy and contributes to increased efficiency in both the public and private sector. At the same time the technology has a great potential to facilitate the strengthening of local democracy, the development of better services and increased interaction between public and private stakeholders and between different public authorities.

### **2.1 ICT as a productivity factor**

ICT is one of the strongest drivers in economic development. It is estimated that ICT accounts for 40 per cent of productivity growth in the EU. Efficiency is as important in the public as in the private sector. Regions and municipalities that wish to attract citizens and companies must promote the provision of broadband and efficient electronic services. Many citizens and businesses today expect local and regional authorities to provide electronic services that are of the same technical quality and efficiency level as those provided by private service providers. Thus, ICT is at the same time an important factor in regional development and the development of local communities.

### **2.2 Participation in the information society**

In order to reap the potential of ICT and to pursue the objective of an inclusive society digital inclusion is crucial. All citizens have to be included in the information society, irrespective of their age, gender, functional ability, skills, geography and ethnic or cultural background. Availability of the electronic infrastructure (broadband) is an important precondition for digital inclusion. Access to digital content and digital services and a common structure of public websites are equally important factors. Digital inclusion is also an important factor in the development of local democracy. Providing and promoting dialogue and interaction via the internet allows local and regional authorities to increase insight into political processes and debates on important local political issues.

## **2.3 More uniform public sector**

ICT can contribute to a more uniform and better co-ordinated public sector. Information and services can be integrated across sectors and public organisations and be adapted to the need of the individual user. Information can at the same time be registered, stored and exchanged between public organisations, including information which is important in securing life and health, thus avoiding citizens having to provide the same information to different public administrations.

## **2.4 Improved service quality**

ICT is an important tool for improving the quality of public services. Making information available on the internet and establishing integrated electronic services can simplify and improve application processes for public services. Good and quick decision making in public case management is highly dependant on up-to-date and correct information.

For example:

- ICT can be utilised in the education sector to create a better learning environment and to adapt teaching to the abilities and interests of individual students. ICT can provide access to up-to-date sources of knowledge and provide opportunities to interact and share knowledge with others. Communication and cooperation between home and school can also be strengthened by ICT.
- In the health sector ICT can promote more accurate documentation and faster exchange of information between general practitioners, hospitals and local healthcare services. Reliable patient healthcare depends on the availability of accurate medical information at the point in time when this information is required.

## **2.5 Efficiency and release of resources**

There are often a large number of different ICT systems in even a medium sized municipality. Financial, salary and management systems are required to efficiently administer the organisations' resources. Case handling and archiving systems are required to ensure good administrative practices. Geographic information systems are required for planning, registration of environmental data and general case management. Electronic commerce can promote lower procurement costs. Local authorities can reduce costs by cooperating when purchasing equipment and software and in the operation of data systems. The development and application of systems that are based on open source can also give better and more cost effective solutions. Energy efficient computers and servers can help to reduce energy consumption and CO<sub>2</sub> emissions.

ICT is becoming an increasingly important tool for restructuring work processes and facilitating release of human resources. Electronic data processing has in many countries been used for several decades. However, it is still possible to reap major efficiency gains, in particular as a result of the increased opportunities for electronic information exchange which the internet has provided.

Analysis of manual and electronic work processes in Norwegian municipalities has shown that the use of electronic information exchange between a local authority and individual users can raise the efficiency of some processes by more than 90 per cent.

These gains can be attributed to less paper work, more easily available information and reduced time for case handling. Gains are most obvious where case management can be based on pre-set criteria, where information is automatically obtained from databases and where pre-filled application forms are used. Resources that have been freed from reduced paper work and less elaborate administrative routines can be used to create better and more comprehensive services.

## **[ 3. Vision for the digital municipality or region ]**

It is important to have an overall vision for local and regional e-government and e-services which can serve as a guideline for individual actors in setting their own goals. Ideally this vision should deal with important areas such as citizen dialogue, service quality and efficient administrations and how ICT can be used to strengthen these areas. A viable vision for European local and regional authorities could be as follows:

***" Local and regional authorities should actively use information and communication technologies to strengthen citizen dialogue, deliver high quality public services and organise effective administrations."***

## **4. The role of national associations of local and regional authorities**

National associations of local and regional authorities should strive to be an important development partner for their members and work to promote ICT development along several paths:

- Protect and promote the local governments interests with respect to National governments and European authorities, suppliers and other organisations
- Contribute to the development of appropriate ICT-architecture, standards and requirement specifications for data exchange and systems integration, ideally in cooperation with central authorities
- Inspire and contribute to eCapacity building and increased ICT-competence in the local governments sector through proposals and recommendations, advice, bench-learning and development of tools and guidelines.

National associations could also initiate the establishment of national ICT-forums for their members with the aim of exchanging knowledge, experience and information about best practises etc.

# 5. Preconditions for efficient administration and electronic service delivery

## 5.1 Strategic ICT management

Local and regional authorities are investing significant amounts in the procurement and operation of ICT systems. If the benefits of the ICT investment are to be realised it is important that executive officers and managers at all levels have sufficient knowledge about ICT management and development, based on the opportunities that the technology can provide for improved efficiency and better services. Politicians must also have sufficient knowledge and understanding to be able to make good strategic decisions in the ICT area.

Decisions about new technological solutions must be based on strategic goals for the organisation. The implementation of new work processes must be firmly rooted in the top management, but changes are not possible unless all those involved are motivated to reap the benefits. Better documentation of benefits and sound control of the implementation of ICT projects is necessary if ICT investments are to be justified and seen as important tools for raising quality, increasing efficiency and releasing resources. To achieve this, methods need to be developed and knowledge and experience communicated.

The benefits linked to ICT investments can in general not be realised without organisational changes and competence raising in the organisation. Often cultural changes must also be achieved. Benefits can easily become invisible because freed resources, which are mainly personnel resources, are immediately transferred to new or other assignments or to raise the quality of existing services.

### **Goals for local/regional authorities**

*(To be completed by associations)*

### **Actions for national associations**

*(To be completed by associations)*

## 5.2 Systems architecture

ICT systems architecture provides a structure for data management. The architecture sketches the organisations' business processes, data and systems and the relationship between them. It is basically a type of organisational structure and can be compared to developing a new residential district. During this process, organisational architecture establishes the functions of the district – housing in one place, employment in another, recreation in another etc. However, it also determines which infrastructural facilities must be included - such as roads, public transport, cycle paths - in order to optimize the links between these functions.

Systems and systems architecture are not goals in themselves. However, when they are correctly implemented, they support the strategy of the organisation. Working with systems architecture helps to manage organisational changes. Architecture also supports communication, by means of principles, models and standards.

Local and regional authorities are among several public organisations that are busy establishing online government. Information is exchanged with a number of partners in order to serve individuals, businesses or civil society organisations with the desired products and services. Co-operation between public organisations is therefore of essential importance, and architecture supports co-operation by means of agreements with regard to standards, reference models and basic registries.

The average organisation may have a large number of applications and systems to maintain, and in many cases, identical data is stored in a number of different system areas. Systems architecture helps to prevent the system from becoming too large and unmanageable.

Systems architecture generally consists of:

- Architectural principles: Guideline principles with regard to specific domains, for example communication channels, work processes, ICT systems, connection of systems, technology, security and management.
- Models: Rough drafts of the solutions to particular types of cases and degree of compatibility between these solutions.
- Standards: Jointly made decisions and agreements between stakeholders for areas such as technology and work processes. This allows organisations and the supporting ICT systems to work harmoniously.

An example of model architecture for local and regional administrations is shown in Annex 2.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

### 5.3 Interoperability and open standards

The functioning of electronic administration and services in government at all levels depends on systems being able to interact with each other and with citizens and the business sector in a seamless manner.

Lack of interoperability and opportunities for seamless data transfer between different systems is probably the biggest obstacle for automated case management. Ensuring seamless data transfer between different systems can significantly increase the efficiency of public sector case management and ensure better data quality.

The main advantage of open standards is the capacity to be interoperable with other software systems. Thus, a software application based on open standards is fully interoperable with any other application using the same standards, and it is possible for other applications to use the same standard. Therefore, local and regional authorities should try to achieve “vendor-independence”, which is to retain the ability to change software products or producers in future without loss of data or significant loss of functionality. Furthermore, good eGovernment services should never require citizens to purchase or use systems from specific vendors in order to access public services.

While software based on open standards may not always be available, local and regional authorities should encourage its development, and indicate their preference for open standards to vendors through preferential procurement of software based on open standards wherever it is available.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## 5.4 Open source software

Open source software is software that can be used for any purpose, studied by examining the source code, modified or improved and distributed with or without modifications. Open source software is copyrighted by its authors, and is made available under copyright licences that provide the freedoms required by the above definition.

Open source is based on a concept of sharing technology and competence. Open source software provides greater freedom for customers, better opportunities for local business development and increased competition. Local authorities in one country normally deliver the same public services and require software with approximately the same functionality. Major benefits can be achieved by setting up an 'ecosystem' of local authorities with the objective of developing and maintaining the same open source solutions.

The largest barrier to the implementation of open source is lack of user competence. This can be lack of knowledge of legal matters, licensing rules, security and circumstances relating to software development and maintenance. Another barrier is linked to the problems of integrating open source and proprietary software. It is also important that software suppliers embrace the open source business model and deliver products based on open source. It is an important task for national associations to provide information about the advantages and challenges linked to the introduction and use of open source software.

### **Goals for local/regional authorities**

*(To be completed by associations)*

### **Actions for national associations**

*(To be completed by associations)*

## 5.5 Information security and protection of privacy

New technological solutions and high complexity increases the need for implementing regulations and procedures for information security in the public sector. The use of mobile units, memory sticks and wireless networks implies higher security risks. Social security numbers and enterprise numbers are widely used in public sector ICT systems for data capture and other purposes. Using social security numbers in Internet based services increases the risk of identity theft.

Electronic ID and electronic signatures are frequently required for (complete) electronic communication between public administrations and citizens and the business sector. The use of standardised electronic signatures allows a number of public services to be set up and developed and provides opportunities for better security. It is however important that local and regional authorities carry out risk analyses to uncover potential security holes and prepare procedures which ensure that sensitive information is not accessed or obtained by unauthorized persons.

Goals and plans for information security and privacy protection must be rooted in the entire organisation. Security is not only a management responsibility. A high degree of security can only be achieved where all employees understand and follow the procedures and routines for good security. Security improvement must be a continuous process.

***Goals for local/regional authorities***

*(To be completed by associations)*

***Actions for national associations***

*(To be completed by associations)*

## **5.6 Broadband**

Broadband development is important for promoting value generating activities. This applies in particular to regional development and the possibility for companies in remote areas to obtain proximity to national and international markets and share the same competitive conditions as more centrally located companies. Both businesses and citizens need broadband access in order to participate in today's information society. It is therefore important that local and regional authorities plan a suitable broadband infrastructure to meet these needs.

If goals for increased electronic interaction across administrative levels, sectors and geographic boundaries are to be realised, ubiquitous broadband of sufficient bandwidth is required. Broadband is also important for the development of new electronic services.

Particularly in rural and remote areas it has become evident that commercial suppliers are not able to deliver high speed networks and services. To achieve full coverage public financing is therefore often necessary. A significant proportion of broadband expansion in recent years has in fact been financed through public grants including EU funds and been realised by cooperation between local and regional authorities and broadband companies.

When full broadband coverage has been achieved, the next challenge is to increase the overall broadband capacity. So far, only a small proportion of European households and businesses have access to broadband capable of delivering high speed internet, TV and video services.

The principle of equal access for all and free competition must be properly managed to prevent monopoly situations and to ensure that users have sufficient access to the required infrastructure. Local and regional authorities should ensure that publicly owned or financed infrastructure is set up as open networks available to all service suppliers.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## **5.7 Green IT**

Approximately 40 per cent of the world's total ICT costs are related to energy consumption. If current growth in capacity requirement continues, this figure will become dramatically higher in the years ahead. Servers and server rooms account for a major proportion of energy consumption in public administrations and this consumption continues to grow. The energy consumption can be reduced by consolidating and virtualising servers and by using power management systems. Suppliers in the ICT market see a competitive advantage in the supply of more environmentally friendly products. The challenge however is that local and regional authorities still demand such products too rarely.

Product lifetime is a significant factor in energy consumption and environmental impact. The public sector should set environmental requirements to the production and disposal of PC, printer and similar equipment. A strategy should also be developed to extend the lifetime and evaluate recycling or redistribution of products.

Automation of work processes can reduce energy consumption. Digital services such as on-line application forms on the Internet allow citizens to apply for services without having to use paper forms and postal delivery services. The introduction of electronic procurement and electronic invoicing is another measure which can reduce the consumption of energy and other resources.

Local and regional authorities have many interactions and assignments which involve a great deal of travel. Modern communication technologies, such as video and telephone conferencing, can allow authorities to reduce emissions and increased use of home offices can diminish the need for transportation.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## **5.8 eCapacity building and increased ICT-competence**

Lack of eCapacity and ICT competence among civil servants is regarded as the largest barrier to achieve the goals stipulated in EU and national eGovernment plans. Local and regional authorities should examine the digital competence of their employees in order to obtain an overview of basic and specific ICT competence. It is important to ensure that all employees have a minimum of knowledge. The specific knowledge requirements should be followed up with analyses and training. It is important that local and regional authorities provide either internal or external training at the correct level. Many authorities can benefit from providing e-learning solutions for their staff.

The need for ICT competence varies between different groups of employees. For executive officers and managers, the need is largely linked to the effect of ICT as a strategic tool. For other employees it can be linked to the use of specialised professional systems. It is of particular importance that front office personnel have competence to guide citizens in the use of digital services. An example of a "code of practice" for front office personnel is shown in Annex 3.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

# 6. Focus areas for deployment of ICT (examples)

## 6.1 Local democracy and participation in the information society

Well functioning local democracy depends upon good communication, dialogue and interaction of public authorities with citizens and between citizens. Active use of ICT can strengthen this interaction.

ICT is an excellent tool for increasing the visibility of political processes. Local and regional authorities can publish political issues on the Internet and use ICT to make it simpler for citizens to obtain information about activities and decisions in political forums. Committee and Council meetings can be broadcast on the Internet either live or as a recording. This can help make political debates and processes more transparent to citizens.

Digital channels for dialogue between citizens, the administration and local politicians can expand the political arena and the ability of citizens to influence policy. This type of dialogue can increase knowledge of the needs and problems that citizens are concerned about and can provide authorities with the opportunity to explain decision processes. Topics that are particularly suitable for this type of dialogue include budgetary issues, spatial planning and development, prioritisation of public services, service descriptions and declarations. Digital surveys can be used to map public opinion in large and controversial local or regional political issues. Such surveys can provide better information and increase citizens' involvement.

The opportunity of citizens to influence policy can be promoted through a number of different channels, such as websites, e-mails, blogs, wikis, chat and mobile phone text messages. New web technologies promote forms of interaction which can strengthen local and regional democracy, but can also change it from representative to more direct forms of democracy.

Electronic services and information from local and regional authorities must be made available to all citizens irrespective of age, gender, functional ability, skills, location and ethnic or cultural background. Requirements on the universal design of all new information and communication technology should follow EU-regulations, based on the guidelines from the World Wide Web consortium (WAI). The WAI requirements place particular emphasis on universal design, availability for those with reduced functional ability and technological platform independence. Citizens that for some reason do not want to or cannot use

electronic devices when contacting public authorities, must have the option to make contact in traditional ways, by telephone or by visiting public offices.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## **6.2 Electronic services for citizens and businesses**

The development of electronic services for citizens and businesses makes it possible to create better and more effective services for the public 24/7 and the possibility of increasing efficiency of internal processes. Some local and regional authorities have already established a number of interactive services like online application forms for nurseries, schools, social services, building permits etc. However, most local and regional authorities have still a long way to go before they can deliver such services and be able to reap the benefits of automated solutions. The so called "electronic service steps", illustrated in annex 4, can illustrate the necessary process for developing fully integrated electronic services.

Local and regional authorities generally deliver services based on the same regulations and basic requirements. This means that electronic solutions could also be very similar. Therefore, local and/or regional authorities should cooperate when developing new electronic services. They will benefit greatly if efforts are made to develop common standards and requirement specifications and to facilitate the sharing of technology and competence. It could be an obvious task for national associations for local and regional authorities to support this form of cooperation.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## **6.3 Electronic interaction in the health sector**

Local and/or regional authorities are often responsible for providing health care and social services. These services often demand a great deal of the total financial resources and it is of utmost importance that they are implemented in an effective way. Electronic communication between doctors, chemists, hospitals and the local healthcare and social services can help transferring resources from administrative procedures to actual

care. At the same time it can improve health and social services through better, more accurate and more easily available electronic patient records.

So far the potential has only been realised to a limited degree. Paper based and ICT based solutions often exist side by side. Different technological solutions and lack of standards prevent cooperation and information flow, both within and between organisations.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## **6.4 ICT in primary and secondary education**

The use of digital tools is today recognised as a basic skill comparable to reading, writing, arithmetic and social skills. The use of ICT varies significantly between individual schools and between municipalities and regions. Even though the use of ICT in basic schooling has increased, it focuses in general on simpler exercises such as word processing. This indicates that many schools have not managed to utilise the potential of the technology to provide students with better learning tools or to change teachers teaching practice.

Increased use of ICT in schools needs to go hand in hand with greater diversity of usage patterns and more computers with different set ups and user adaptations, in line with individual students' learning needs and skills.

It is important that schools ensure efficient procedures for achieving good and stable operation, that the systems are flexible and that they support the school's requirements. Replacement and renewal of digital tools and teaching resources should be integrated as a regular expenditure in the school budget. ICT should also be included as a permanent part of the school development programme in every municipality and region.

Schools must plan and implement systematic competence development of school management and teaching personnel if goals for a "digital competent school" are to be met. School management must contribute to and promote an ICT learning culture and share good experience, methods and procedures with other schools. Availability for all is an important principle in basic schooling. ICT solutions in the education sector should be based on this principle and the use of open standards. This ensures seamless integration between ICT systems and that all users have access irrespective of technological platform. This should be set as a requirement in public procurement.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## 6.5 Electronic procurement and invoicing

Public procurement is subject to a number of regulations which are set by international trade agreements, legal acts and regulations and codes of practice. These stipulate the basic requirements which apply to competition, non-discrimination, transparency, verifiability and predictability. Procurement by electronic means can improve and simplify the way public authorities purchase products and services. Electronic procurement and invoicing can reduce total procurement costs and substantially lower transaction costs. Moreover, once a contract has been awarded following a tender, e-procurement processes can continue to reduce administration costs and improve efficiency.

Immediate gains can be obtained by introducing scanning of incoming invoices, followed by manual or electronic procedures for attestation and payment. The next step could be semi- or fully automated integration with back office systems. Some European countries have also developed national e-procurement portals or integration hubs which contain tools to assist public authorities in the e-procurement process.

**Goals for local/regional authorities**

*(To be completed by associations)*

**Actions for national associations**

*(To be completed by associations)*

## 6.6 Other focus areas

Focus areas for deployment of ICT in local and regional government may vary between countries in Europe. In some countries municipalities or regions may be responsible for cadastral services and geographical information systems, systems for environmental surveillance, systems for public works (roads, water supply, sewage), transport, public planning systems and building permits etc. It may be necessary to include such areas in the manual and set necessary goals and actions for local and regional authorities in the respective country.

# [ Annex 1 ]

## **Examples of Goals and Actions**

### **Strategic ICT Management**

#### Goal

By (year), chief executive officers in local/regional administrations should have acquired sufficient ICT competence to take charge of ICT strategy development and realise the benefits of ICT investments.

#### Action

The association will initiate training courses for CEO's in preparing and implementing a strategic ICT-plan.

### **ICT Systems Architecture**

#### Goal

By (year), local/regional authorities should have prepared an ICT architecture based on overall goals and strategies.

#### Action

The association will develop guidelines for preparing local/regional ICT-architecture.

### **Interoperability and open standards**

#### Goal

By (year), local/regional authorities should have implemented requirements for the use of open standards for all new software.

#### Action

The association will encourage suppliers to adapt the use of open document formats and relevant national and international open standards into their systems.

## **eCapacity building and increased ICT-competence**

### Goal

By (year) all civil servants in front offices and service centres should be able to promote digital self service solutions for citizens and businesses.

### Action

The association will develop guidelines for evaluating ICT-competence and offer eCapacity-building courses for the civil servants in local and regional administrations.

## **Electronic services for citizens and businesses**

### Goal

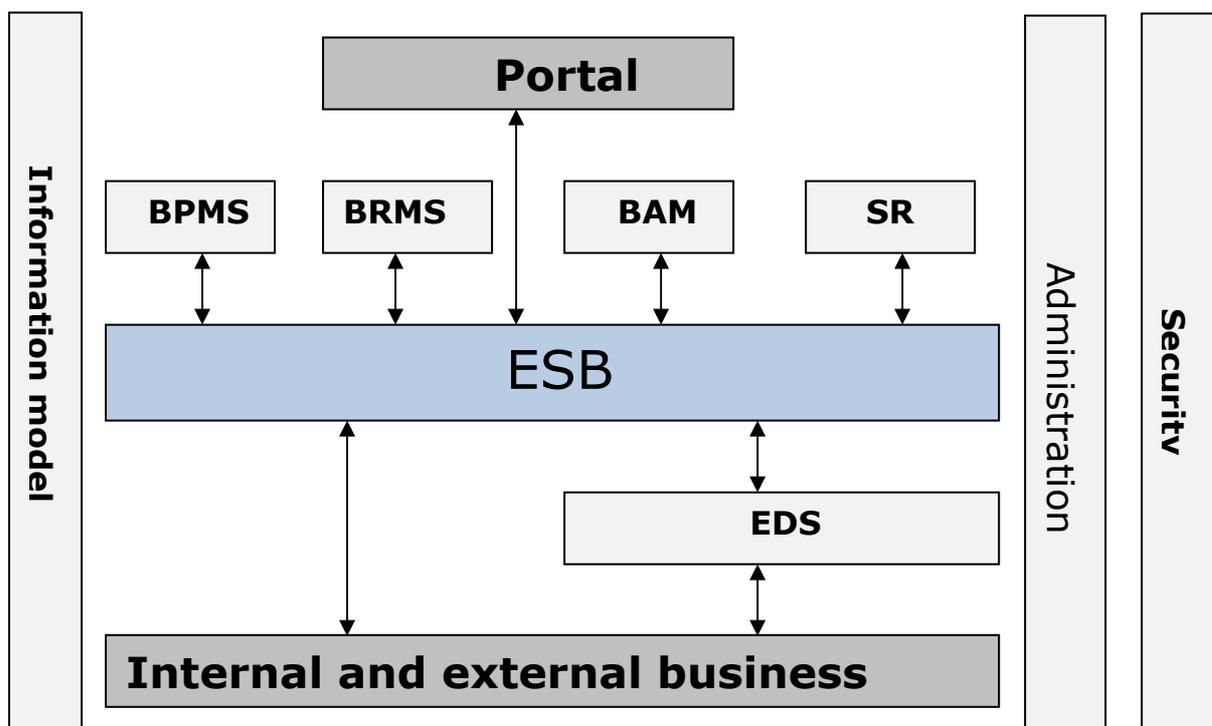
By (year), local/regional authorities should be able to offer electronic self service solutions at level 4 (see annex 3) for the most frequently used services.

### Action

The association will prepare documentation and guidelines which describe best practices for procurement and implementation of interactive services and monitor the progress.

# [ Annex 2 ]

## Model architecture for local and regional eGovernment



- BPMS** = Business Process Management System
- BRMS** = Business Rules Management System
- BAM** = Business Activity Monitoring
- SR** = Service Registry/Repository
- ESB** = Enterprise Service Bus
- EDS** = Enterprise Data Services & Virtual Database

# [ Annex 3 ]

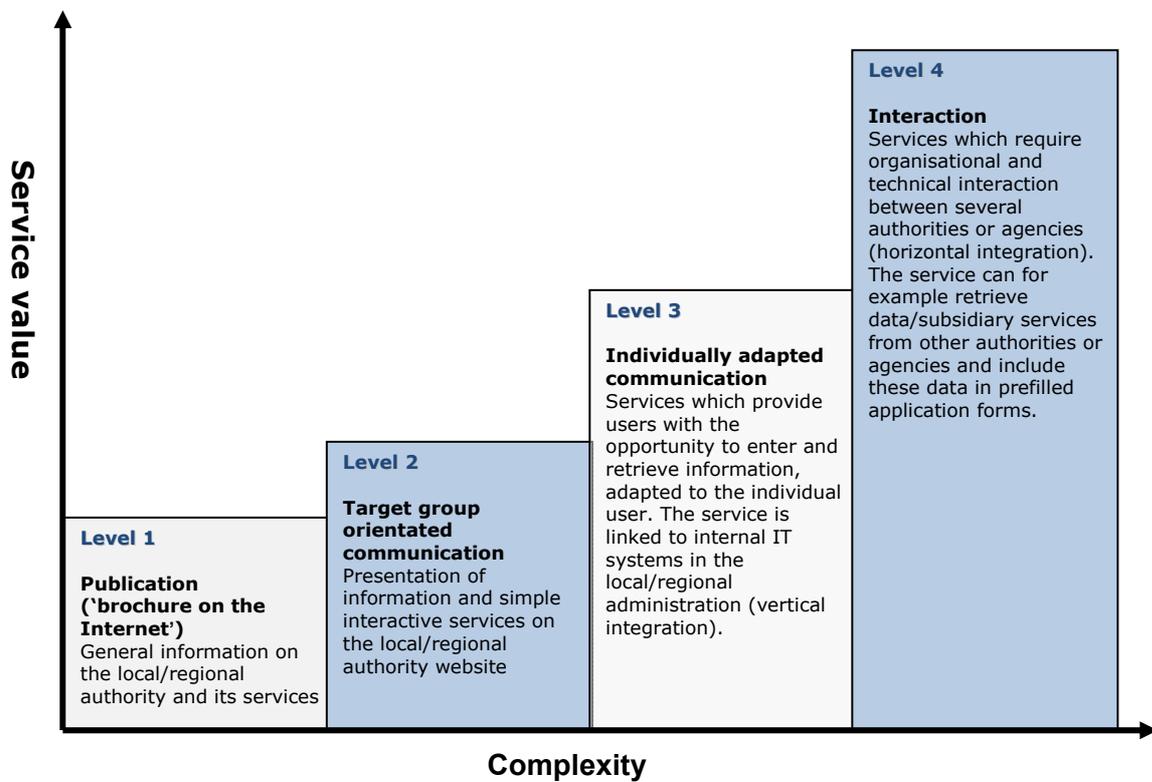
## **Code of practice for “Digital Ambassadors”**

From Local Government Denmark ([www.kl.dk](http://www.kl.dk))

1. I know the websites and self-service systems in my municipality.
2. I recommend the citizens to use self-service whenever it can meet their needs.
3. I have pedagogic competences which I actively employ to cope with the citizens’ uncertainty when they use new channels.
4. I make clear the necessity and advantages of digital self-service every time I have the opportunity
5. I share my knowledge and experiences as a digital ambassador.
6. I have and use digital signature.
7. I have and use ebox/document box (secure web-based document management system).
8. I use easySMS (application for easy text messaging).
9. I assist and recommend my network to make use of digital self-service.
10. I am a fan of digital self-service on Facebook.

# [ Annex 4 ]

## Electronic Service Steps





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