

Bundesamt für Sicherheit in der Informationstechnik



E-Government Phase Plan

Preface to the Phase Plan

and

Phase 1 “Initialisation”

This text is a module of the

E-Government Manual

<http://www.e-government-handbuch.de>

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Contents

0	Preface to the Phase Plan.....	4
1	Phase 1 “Initialisation”	6
1.1	Activity “Information workshop e-government”	7
1.2	Activity “Information and participation of the Staff Council”	9
1.3	Activity “Briefing the workforce”	10
1.4	Activity “Selection of an E-Government Team”	11
1.5	Activity “Setting up the E-Government Project”	14
1.6	Activity “Qualification of E-Government Team”	15
7	Checklists	17
7.1	Checklist for Phase 1	17
9	Author Profile.....	18

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0 Preface to the Phase Plan

The “E-Government Phase Plan” is designed as a practical guide for e-government project managers tasked with implementing electronic services in a public agency. As well as the purely technical and IT security issues, the organisational aspects necessary for efficient e-government operations are also addressed. In accordance with its central role in the implementation of e-government, the Phase Plan is intended to also constitute a kind of “roadmap” through the E-Government Manual, in that the modules already published or still to be written are assigned to particular phases of the e-government implementation or ongoing e-government operations.

The Phase Plan should be viewed as a *suggestion* for a possible approach which will support the project leader in his demanding task. The specific procedure to be followed in introducing e-government services in a public agency will be determined by each project leader on the basis of the particular circumstances in his organisation.

The keynote of the Phase Plan is the division of the e-government implementation process into a series of *phases* that build on each other both in time and as regards content. In each case this will entail important milestones being achieved, so that the implementation process can proceed as speedily as possible overall. Whereas in some activities conceptual principles are laid down for *all* e-government services in the agency, other activities affect only one or a few services. Accordingly, many services can be handled as a matter of priority while others are only tackled relatively late on during implementation.

In some cases, the interim results of the individual phases form the basis for strategic decisions by senior management, which are of paramount importance for setting the course for the e-government implementation process. However, one must not exclude the possibility of the results of later phases making it necessary for conclusions drawn in earlier phases to be revised and appropriate modifications to be undertaken.

With regard to the implementation of e-government projects, it should be noted that e-government is a living process which is subject to continuous organisational and technical change. It is therefore necessary to constantly review the suitability and (internal and external) acceptance of e-government services in continuous operation and, if necessary, to introduce new projects to change and modify things. Areas requiring particular attention include the following:

- changes in the legal basis for services
- changes in demand and the importance of the service
- new technical platforms and systems
- IT security developments (new security systems *and* new or extended attack potentials)

Only continuous modification of IT services to altered requirements and new organisational framework conditions can guarantee the enduring success of e-government initiatives.

The E-Government Phase Plan is currently under development. Once complete, it is to consist of six phases which are to be published in stages as independent modules:

1. **Initialisation.** The e-government project is initiated in the Phase 1. An E-Government Team is set up for this purpose and qualified for the project. The Staff Council should also be included at this early point and the rest of the workforce should be briefed.
2. **Strategy.** The central task in Phase 2 is to identify and assess the online-capable services, bearing in mind the public agency's objectives regarding e-government. It is then decided which of these services should be implemented.
3. **Analysis.** The services identified in Phase 2 are investigated in more detail. Both the protection requirement for individual sets of data and the resulting security requirements are determined, while the processes underlying the service are investigated and opportunities for optimisation are identified.
4. **High-level design.** The information technology resources necessary to supply the e-government services are determined, taking into account present circumstances and any possible externally usable platforms. In parallel to this, existing IT security concepts are expanded or re-written.
5. **Implementation and test.** The necessary hardware is procured and installed according to the priorities that have been assigned. The software that is necessary is purchased or created and modified to the specific circumstances. The new components are integrated in accordance with the IT security concept. In addition, the necessary staff qualification measures are carried out.
6. **Implementation and initial operation.** After successful completion of the necessary functional tests, an IT security audit and pilot operation, the new on-line services are gradually put into operation. The implementation is accompanied by PR and marketing campaigns.

1 Phase 1 “Initialisation”

E-government is a top priority. Successful implementation requires an effective team to supervise implementation from start to finish. Against this background, Phase 1 of the E-Government implementation process is devoted exclusively to initialisation of the e-government project within a public agency.

The main activities in this phase are the exchange of information and ideas between all the parties involved in the public agency, along with the appointment and qualification of a competent E-Government Team, whose first task – part of Phase 2 – will be to identify which services of the public agency are potentially online-capable.

The actions that are required here are outlined below, with a detailed explanation provided in each case. The diagram below shows one possible temporal sequence of these activities. To save time, it is recommended processing several activities in parallel.

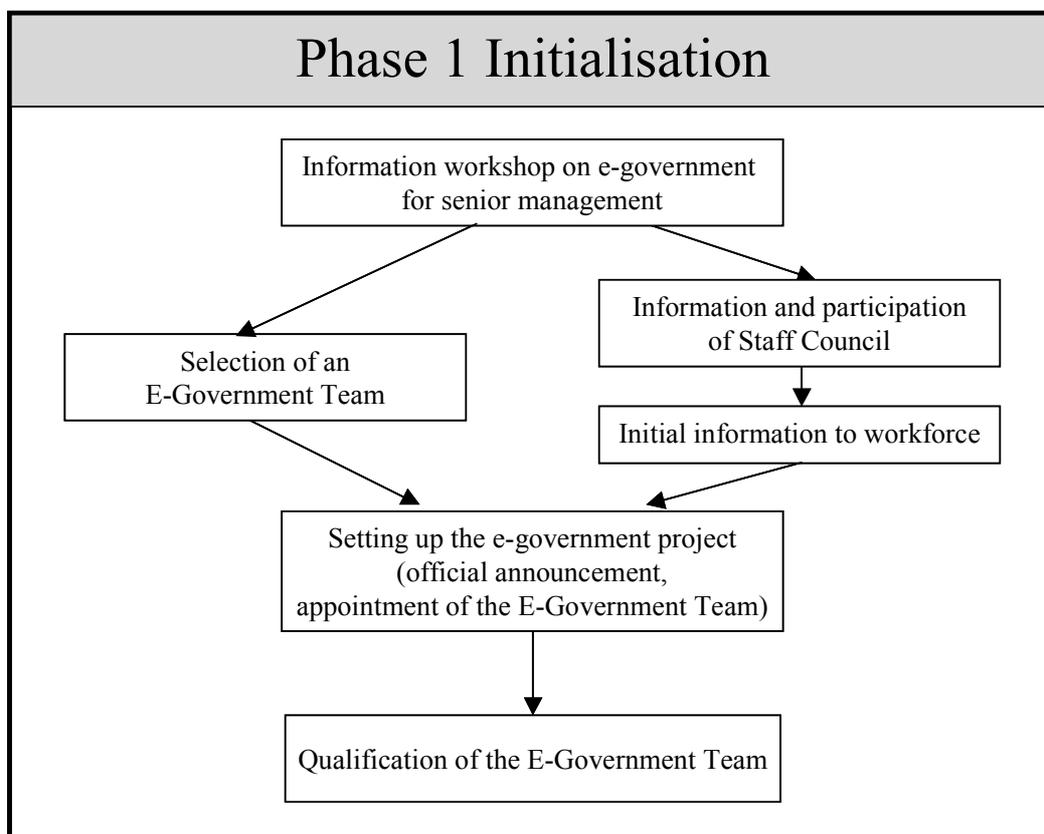


Figure 1: Flowchart illustrating Phase 1, Initialisation

1.1 Activity “Information workshop e-government”

Initiation responsibility: Head of the public agency

Implementation responsibility: Head of Organisational Section, Head of IT Section

The e-government information workshop is intended as a kick-off event to make the senior management of a public agency aware of the subject of e-government, explain the necessary first steps and provide a platform for discussion of the e-government objectives of the agency. It should be attended by the director and senior management of the agency, especially by the heads of the central department and the IT Section. Presentation of the subject should be prepared and delivered by expert, eloquent and convincing staff.

The presentation should cover:

- Introduction to the BundOnline 2005 initiative
- Definition of e-government
- Aims of e-government
- Examples of online services
- E-government tasks in this organisation
- Initial suggestions for online services
- Explanation of the E-Government Phase Plan
- Opportunities presented by e-government (customer satisfaction, service orientation, rationalisation, 24/7 service, improved image etc.)
- Improvement of efficiency and quality through avoidance of media discontinuities with use of workflow systems
- Project risks for e-government (financing, complexity, lack of acceptance, legal basis etc.)
- Security principles (encryption and electronic signatures)
- Implementation of accessibility on the internet
- ...

Additional resources provided in the E-Government Manual:

- Module entitled “Presentation Slides for the Workshop” module
- Module entitled “Top Priority E-Government: Guidelines for Heads of Public Agencies”
- Module entitled “E-Government Model Projects of the BundOnline 2005 Initiative”

- Module entitled “Classification Scheme for E-Government Procedures”
- Module from the “E-Government Phase Plan”
- Module entitled “Accessible E-Government”

1.2 Activity “Information and participation of the Staff Council”

Initiation responsibility: Head of the public agency

Implementation responsibility: Head of the public agency

As e-government can make changes necessary in the organisational structure of the public agency and in the execution of tasks at the workplace, fundamental changes in working methods and working processes, and rationalisation effects, staff representatives should be briefed early on the e-government initiative so as to pave the way in advance for the necessary staff acceptance. No later than when implementing the project results, there will inevitably be co-determination or co-operation matters that fall within the remit of the Federal Staff Representation Act (BpersVG) or equivalent state regulations.

Staff representatives will also be involved at later stages of the planning and implementation of e-government as part of the E-Government Team that is set up to carry out the project (see Activity 1.4).

1.3 Activity “Briefing the workforce”

Initiation responsibility: Head of the public agency

Implementation responsibility: Head of the public agency

To create transparency at the beginning as to how e-government is to be implemented in the public agency, it is important that the workforce should be briefed. This can help to allay fears, encourage acceptance and motivate staff to use the updated procedures.

At the outset staff should be informed about the BundOnline 2005 initiative and the associated opportunity to update administrative practices in the sense of making them more service-oriented. The first steps of this project should also be announced: the appointment of an E-Government Team, the gathering of information about potentially online-capable services within the public agency and the decision as to which of these services should be implemented. To utilise the experience and potential for coming up with good ideas of the workforce, they should be asked to introduce into the e-government project suggestions for improvement that can be implemented as part of the implementation of online services.

Passing on information on the latest status of the project at regular intervals will assist in maintaining the desired project transparency. For this purpose it is recommended publishing regular reports of interim results on the internet, as part of an “E-government information pool”. The next information that can be passed on is the appointment of the E-Government Team as the point of contact for staff (Activity 1.4) and the content of the agency’s E-Government Guidelines (Phase 2).

1.4 Activity “Selection of an E-Government Team”

Initiation responsibility: Head of the public agency

Implementation responsibility: Head of the public agency

The introduction of e-government in a public agency requires a project team that carries out the project work on a long-term basis and is committed to the success of the project. This is referred to below as the **E-Government Team**.

The E-Government Team consists typically of a **core team** plus additional associated members who are only temporarily involved in the project. For example, the core team could consist of three members of staff with the following profiles:

Team leader:

Dynamic, innovative, creative, assertive, possessing good powers of persuasion, leadership qualities, experience in the area of project management, knowledge in the areas of information technology and organisation, having an overview of the task and service spectrum as well as of the use of IT within the organisation.

Organisational team specialist:

Possessing a general overview, innovative, flexible, sound knowledge of the task and service spectrum of the agency, project management experience desirable, experience in organisation and process analysis and optimisation desirable.

IT team specialist:

Sound knowledge of information technology, innovative, open-minded in matters of IT security, sound knowledge of the IT environment of the agency and of internet technologies in general, project management experience desirable, knowledge of web page design and programming for accessibility.

The team leader will normally also be appointed to the position of **E-Government Co-ordinator**. Depending on the size of the agency, the scope of the work, the work already performed by way of paving the way for e-government and the existing know-how of the relevant members, it may be sensible to reduce the size of the core team to only one or two members. However, it is important to ensure that effective deputising arrangements are made.

As well as the core team, additional staff should be assigned to the E-Government Team to act in an advisory capacity as required, on these lines:

IT Security Officer:

As the opening up of the public agency to the internet creates new security problems, especially when this goes beyond simply offering information to the direct integration of customers into administrative processes, the IT Security Officer should be involved at an early stage.

Data Protection Officer:

E-government presupposes both the receipt of person-related data over the internet, for example through online applications, and also the transmission of such data as the product of an online service. This requires that security mechanisms are employed to safeguard data protection. It is therefore necessary to involve the Data Protection Officer in the E-Government Project.

Member of the Staff Council

The introduction of online services may also impact the organisational structure of a public agency as part of process optimisation. It is therefore advisable to involve the Staff Council in the E-Government Team at an early stage.

Person from the Legal Department

The online implementation of services presupposes that the regulatory framework actually allows this. Introduction of the “qualified electronic signature” and its legal equivalence with a hand-written signature in the German Civil Code and the Administrative Procedures Act are opening up new possibilities. In order to be able to assess the legal framework conditions and determine which changes to procedures are legal, the E-Government Team should have the services of an experienced legal expert.

Member of IT Co-ordination Department

For the IT resources used, e-government means a restructuring and possibly extra purchases. The advent of internet access, support for services without any media discontinuity and the introduction of new security mechanisms at the IT workstations require that the use of IT is co-ordinated with the existing information technology. To link the planned further development of in-house IT with e-government, it is a good idea to involve the IT Co-ordination Department.

Staff from the Budget Department

Rapid introduction of online services will in some areas also require the provision of financial resources. This affects the purchase of external expertise, the creation of the necessary software and the procurement of the computers and networks that are needed. To support smooth financing, it is a good idea to involve someone from the Budget Department in the project.

Public Relations staff

To augment the use of e-government activities, the new services and their access channels must be supported by Public Relations work. Press releases and direct approaches to customers can be used to draw attention to the new services. For this purpose it is a good idea to include a person from Public Relations in the project.

The question of what percentage of their working time individual staff will need to spend on the E-Government Project cannot be answered across-the-board. This will depend especially on the size and structure of the public agency, the degree of IT support and the number of online services that have been and could still be implemented. However, it is to be expected that the core team will need to devote between 50 % and 100 % of their time to the project if everything is to run

smoothly. On the other hand, the other team members will not need to spend nearly as much time on it.

The following powers must be transferred to the core team.

- The right to visit and make suggestions to senior management of the agency
- The right to question and involve the section heads and organisational structures affected
- Project management function
- Access to team members who are participating in the project

1.5 Activity “Setting up the E-Government Project”

Initiation responsibility: Senior management of the public agency

Implementation responsibility: Senior management of the public agency

After the E-Government Team, consisting of the core team or E-Government Coordinator together with associated members, has been selected, the project “Implementation of E-Government as part of the BundOnline 2005 Initiative” is officially launched by senior management of the agency with the appointment of the team and the official announcement of the project. In parallel with this, the project team members are assigned and released from their other duties to the required extent.

At the same time the project is announced internally in order in particular to announce and prepare the way for the information gathering that is necessary in Phase 2. In addition, the necessary personnel and financial resources for Phase 2 of the project are released and timescales are defined for this first phase. (Resource planning for succeeding phases is only possible when Phase 2 is over, as only at that point is the scope of the online services that are to be implemented known.)

Typically Phase 2 takes between four and eight weeks to complete. The manpower resources required depend critically on the size of the agency and the number of interviews that need to be carried out to collect information on the online-capable services.

Additional resources:

- Practical guidelines, “Project management in the Federal Ministry of the Interior and business area”

1.6 Activity “Qualification of E-Government Team”

Initiation responsibility: E-Government Team Leader

Implementation responsibility: E-Government Team

Many of the members appointed to the E-Government Team will come with sufficient expertise and experience gained from their original tasks. This will certainly be true of the IT Security Officer, the Data Protection Officer, and the persons from the Legal Department and the Budget Department. However, the possibility cannot be excluded that the described functions are not performed or are only performed to a limited extent. If no IT Security Officer has yet been appointed in the agency, then there will be no one person who possesses the necessary expertise.

In every case it is necessary to ensure that the core team is qualified in relation to the requirements of the project. The following is a list of the expert knowledge and experience which has to be available in the team as a whole:

- **Experience in project management**
 - Project planning and management
 - Presentation skills
 - Interviewing and communication skills
- **Organisation**
 - Sound general knowledge of the organisation and range of services carried out within the public agency
 - Process analysis and optimisation methods
- **Legal principles**
 - Legal principles of the relevant laws and regulations relating to the services provided by the public agency
 - Legal principles of levying charges for agency-specific services
 - Legal principles relating to electronic signatures and their use in e-government
 - Data protection law
- **General knowledge of information technology**
 - Client/server architectures
 - Workflow systems
 - Internet technologies
 - Existing IT environment within the agency
 - Available e-government solutions (including other public agencies)

- Knowledge of web design and programming for accessibility
- **Sound knowledge in the areas of IT security and data protection**
 - Security management
 - Encryption and digital signatures
 - Authentication mechanisms
 - IT baseline protection
 - Firewall technology

If knowledge of some of these areas is missing, then it should be built up through appropriate qualification measures or else bought in the form of external consultancy. (In the area of IT security, the reader is referred at this point to the support provided by the BSI – see <http://www.bsi.bund.de>).

Additional resources provided in the E-Government Manual:

- All modules of the E-Government Manual

Additional support offerings:

- Training courses offered by the BAKöV / FH Bund

7 Checklists

The following checklist can be used to ascertain whether all the essential results of the present phase are available. It can also be used where the above activities have been carried out in a different order or in a different form.

7.1 Checklist for Phase 1

Outcome(s)	Who?	When?	Done?
Staff Council is involved			
E-Government Project has been set up			
E-Government Team has been appointed			
E-Government Team has the necessary skills			

9 Author Profile

Dr. Timo Hauschild, BSI



After studying Physics and Journalism at the University of Hamburg, Timo Hauschild worked on an international research project as well as at the Rossendorf Research Centre (Dresden) and the Institut Laue-Langevin in Grenoble, France. After obtaining his PhD in Physics, he joined the consultancy department of the Federal Office for Information Security (BSI) in 2001. Since then he has been working on further development of the E-Government Manual. In parallel to this, he also provides consultancy services to public agencies in connection with the introduction of e-government.

Dr. Hartmut Isselhorst, BSI



Dr. Isselhorst studied Mathematics and Computer Science at the Aachen University of Technology, obtaining his doctorate in 1988. He then worked in industry as a management consultant, specialising in IT security. After moving to the Federal Office for Information Security (BSI), he developed the idea of the IT Baseline Protection Manual, which has been updated at regular intervals since it was first published by the BSI in 1994. Dr. Isselhorst is also the departmental head in the BSI who is responsible for “Strategic Applications” and “Internet Security”. Dr. Isselhorst also devised the E-Government Manual and is in charge of the services provided by the BSI regarding secure e-government, especially the provision of consultancy services to public agencies on the introduction of electronic signatures.