Bundesamt für Sicherheit in der Informationstechnik

E-Government Phase Plan

Phase 2 “Strategy”

This text is a module of the

E-Government Manual

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Contents

Information on this module

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18.03.2004	Horn	Some changes introduced
16.12.2002	Dr. Hauschild	Minor modifications following the publication of the “Quality criteria” and “Authentication” modules.
13.02.2002	Dr. Hauschild, Horn	Adaptation to the new phase structure, editorial revisions, insertion of activities 2.5 and 2.8
10.09.2001	Dr. Hauschild, Dr. Isselhorst, Oberweis	Version 1

2 Phase 2 “Strategy”

Phase 2 in the e-government implementation process essentially is aimed at identifying online-capable services of a public agency that are already available online or which it would be feasible to implement online. Having been identified in this way, the individual services are evaluated so that priorities can be set. Taking everything together, a strategy for the implementation of e-government is thus developed. To promote staff awareness and also acceptance of e-government within the public agency, senior management of the public agency should then publish a set of e-government guidelines.

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.

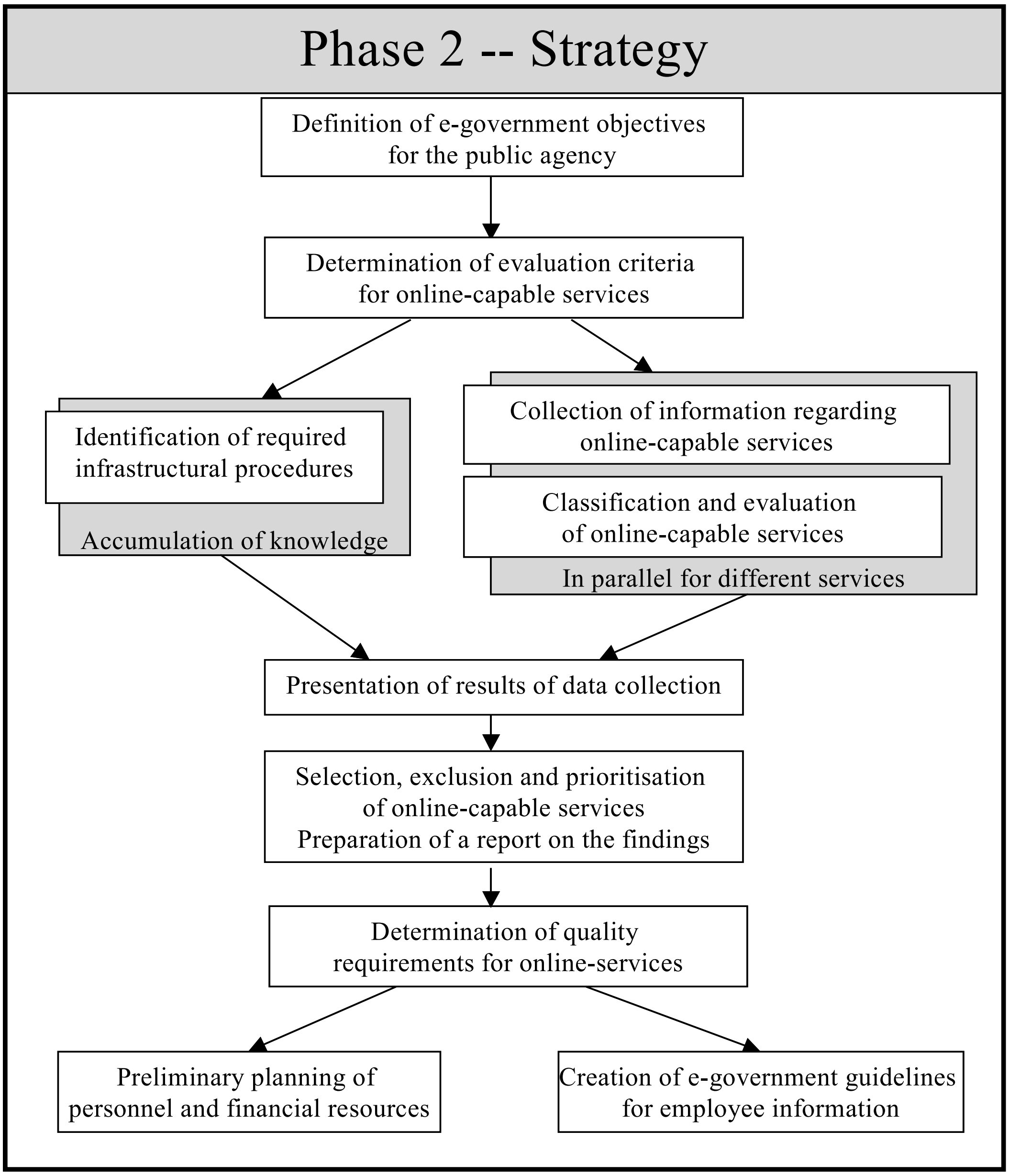

Figure 1: Flowchart illustrating Phase 2 – Strategy

2.1 Activity “Definition of e-government objectives for the public agency”

Initiation responsibility:	Senior management of the public agency
Implementation responsibility:	Senior management of the public agency, E-Government Team

The aim of the BundOnline 2005 initiative is to offer those services of the federal agencies that are online-capable on the internet, in order to rationalise public administration and encourage it to be more service-oriented. The effective accomplishment of this objective requires that priorities oriented towards a given public agency’s objectives regarding the implementation of e-government within the agency are set. This requires that these agency objectives are identified and weighted according to their individual importance to the agency.

Typical objectives include:

Customer orientation

This objective is centred around the provision of online-capable services for the agency’s customers (members of the public, businesses, other public agencies). The selection of appropriate procedures is oriented to customer requirements (for example, the improvement of customer service, transparent and faster administrative processes, avoidance of journeys, barrier free use of agency offerings). Objectives that are internal to the public agency are of secondary importance here. If appropriate, new services that have not actually been offered previously but which are possible with appropriate IT support may be identified. The central issue of this agency objective is, “What services would customers of the agency want to have online?”

Rationalisation

The objective of rationalisation is aimed at achieving savings in the amount of work necessary as a result of the introduction of online services (through the avoidance of media discontinuities) and, if possible, at reducing the personal resources necessary. At the same time, customers benefit from simplification and faster processing. In the foreground is the question, “What services can be provided more efficiently online?”

Improved image

This objective is aimed at improving a public agency’s image by giving customers extra value as a result of innovative and modern online services. A primary consideration here is to convey to the outside world the impression that the agency is effective and progressive. A key question arising from this is, “What online services can permanently improve the image of the public agency?”

Public-private partnership

If a public-private partnership is one of the agency objectives, then the primary focus of interest in the introduction of e-government is to offer services jointly with businesses. This could entail outsourcing tasks, or equally it could entail a shared website or allowing advertising banners to appear on the websites of public agencies. Here the central issue is, “What online services should and can be implemented jointly with the business sector?”

Care must be taken to ensure that the prioritised objectives of the agency are compatible with its strategy, its legal duties and the overriding political strategies.

2.2 Activity "Determination of evaluation criteria for online-capable services"

Initiation responsibility: E-Government Team Leader

Implementation responsibility: E-Government Team

In order to be able to compare the potentially online-capable services, including their implementation, and to select and set priorities, it is helpful to draw up a list of evaluation criteria. At the same time these evaluation criteria can be used to gauge the specific features of online services against the implementation objectives.

The evaluation criteria are derived on the one hand from the defined agency objectives, which should be subdivided into typical sub-goals beforehand. Sub-goals of the agency objective of "customer orientation" might include, for example, independence of use of the service from time or space, shorter workflow duration, making it simpler to avail oneself of the service, or increased process transparency.

However, the selection process also requires that there are criteria relating to the necessary expense and the boundary conditions to be considered. These include, for example, the organisational complexity and the technical challenge of a service, criteria which have a direct effect on the implementation cost and time required for this. Another question that needs to be considered here is for how many customers or business transactions per year a service should be offered online.

A collection of possible evaluation criteria is provided in the module "Evaluation criteria for potentially online-capable services" together with information on how to use them.

The actual evaluation of the services can be carried out after information has been gathered on the potentially online-capable services (Activity 2.3). It may be appropriate to base the information gathering and evaluation on a version of the data entry and evaluation form provided at the end of this module, modifying it to reflect the individual requirements.

Additional resources provided in the E-Government Manual:

- Module entitled "Evaluation criteria for potentially online-capable services"
- Data entry and evaluation form (sample) (Appendix 8.1)
- Module entitled "Quality criteria for a public-friendly and secure website"

2.3 Activity "Collection of information regarding online-capable services"

Initiation responsibility: E-Government Team Leader

Implementation responsibility: E-Government Team

To determine the online-capable services of a public agency that either are already available online or which it would be feasible to implement online, it is a good idea to question the section responsible for performing the service within the agency. It is recommended carrying out a structured interview with the responsible line manager/departmental head. This interview should be structured as follows:

Initialisation

By way of preparation for the information gathering, it is recommended that senior management of the public agency inform the interview partners of the forthcoming information-gathering exercise in order that those concerned can get used to the idea of being questioned and start thinking about the subject.

Introductory section of the interview

As an introduction to the subject, at the beginning of the interview the central question to have emerged during identification of the agency's objectives with regard to e-government should be introduced. The interview partner should then be provided with a brief explanation as to the objectives of the BundOnline 2005 initiative and the effects of these on the organisation's internal implementation. He or she should also be informed of the procedure from here on as set forth in the Phase Plan. It should be explained that the present priority is to identify online-capable services, but that the authority also has a secondary interest in possible ways of improving internal IT support which, for example, might be possible following integration of an electronic workflow management system. It should be explained that this interview is a direct opportunity for the interviewee to shape the development of his work area in the future.

Interview structure

Prior to the interview, in the interests of making the interview as efficient as possible, the services of the relevant organisational unit should be divided into **subject areas**, using the organisation chart**.** The relevant **services** can then be ascertained from each subject area.

Collection of information about individual services

In order to identify online-capable services, it is recommended carrying out an **input-output analysis.** This procedure checks what input or output can be provided online, i.e. over the internet. Therefore for each individual service the first step is to work out the possible inputs (e.g. query or application) and outputs (e.g. information or notice) with the associated information flow (e.g. e-mail). In a second step, to prepare the way for the classification and evaluation of online-capable services to be carried out later on, the following questions should be answered:

- Is it necessary to stick to the written form? (In the classical procedure is it essential that the input or output is signed by hand?)
- How often is the service provided? (Number of business transactions per day/month/year)
- Who are the customers of the service? (Members of the public, companies, public agencies)
- Does the technical manager exercise any judgement? (Do any decisions that have to be made require the exercise of judgement or can all decisions be automated?)
- Are there any problems/risks as regards providing the service online? (List of the problems/risks to be expected, e.g. acceptance, interoperability, insufficient resources, need to group together individuals services, need to optimise the back office)
- Are any parts of the service already provided online? (Where does the service lie in terms of the “Classification of e-government procedures” module?)
- Are any other internal services necessary? (Are any other internal organisational units, e.g. the purchasing department, involved in performance of the service?)
- Are any other external services necessary? (Are any other external organisational units, e.g. the Procurement Office, involved in performance of the service?)

Identification of products for online sales

If an online shop is to be set up as a service for selling products of the public agency, then in a further step, a “product poster” should be created for the products concerned. This should consider the following aspects:

- Product description
- Is the product already marketed today or will marketing only commence in the future?
- Who are the customers of the product? (e.g. members of the public, businesses, other public agencies)
- Are the goods in question “electronic goods” or “physical goods”? (e.g. a file to be downloaded as opposed to a printed book)
    - How big is the data volume of the “electronic goods”? (Volume of data to be downloaded in MB)
    - How are the “physical goods” marketed? (Marketed by the agency or by a third party)
- Into what price bracket does the sales price of the product fall? (Free of charge, less than €10, between €10 and €100, over €100)

- How high are total sales per year?
- How high would sales from an online shop be expected to be? (Estimate of the number of business transactions per year, compared with the total number, expressed as a percentage)
- Is there a batch size? (Minimum order quantity, maximum order quantity)
- Is it possible to receive the product regularly? (Subscription)
- Are any discounts given? Is there any graduation of prices? (e.g. with particular customers or from a particular order quantity)
- Does the customer expect to be given an invoice that is acceptable for tax purposes? (Acknowledgement)
- Are there any other framework conditions? (e.g. only to be given to a particular set of customers)

As a result of this information collection process the e-government services that are already available can be compared with those that have been identified as potentially implementable as of a particular date (date of the interview) for the particular office concerned. Moreover, the products which are to be marketed through an online shop should be quantified and classified as regards the internet commercial platform that is necessary for this.

Concluding remarks

One should then ask as an open-ended question which tasks in each work area are viewed as being the most important with regard to the future and which objectives ought to be realised through improvement of (electronic) processing. The technical manager responsible should also have the opportunity to assess which service from his work area he feels it is the most important to make available online. When looking for completely new services which could signify a critical step as regards fulfilling the agency's objectives, it is often also helpful to invite the interviewee to give ideas and suggestions as regards IT, e-government etc. in an open question.

Concluding procedure

On the basis of the results of the data collection process, it may be appropriate to review for completeness and/or to expand the evaluation criteria identified in Activity 2.2. Similarly, any additional information provided by the interviewee in connection with the selection of and setting of priorities among online-capable services (Activity 2.7) can also be helpful for making decisions.

Additional resources provided in the E-Government Manual:

- Data entry and evaluation form (sample) for potentially online-capable services (Appendix 8.1)
- Sample questionnaire for collecting information about products for an online shop (Appendix 8.2)

2.4 Activity "Classification and evaluation of online-capable services"

Initiation responsibility: E-Government Team Leader

Implementation responsibility: E-Government Team

Classification

To achieve a structure for the online-capable services, it is a good idea to start by classifying each service identified. Here it is recommended using a bi-dimensional classification system which distinguishes between "Media discontinuity", "Media continuity" and "Automation" along one dimension and "Information", "General service" and "Customer-specific service" along the second dimension. This classification system facilitates the process of deciding what degree of IT support should be aimed for and how customers should authenticate themselves to the agency. Instructions as to how the classification system should be applied in detail are contained in the module "Classification of e-government procedures".

If part of the service is already provided online (e.g. information is already offered or e-mail addresses are already published), then as part of the classification process the ACTUAL status should be compared with the TARGET status. Should additional parts of the service then be implemented, the classification scheme will show a improvement.

Evaluation

Once classification is complete, an evaluation of the online-capable services can then be carried out. The evaluation criteria developed in Activity 2.2 are used here and the evaluation is carried out separately for each service. The aim of this evaluation is to support the selection of appropriate online services.

Following this evaluation, the results must be analysed. First of all the evaluation can be used to determine whether and to what extent the objectives that have been set can be achieved with the relevant service. An assessment of the complexity of the procedures and the technical challenges can then be carried out.

Possible synergy effects should be considered already at this point. Often technical investment makes it possible to implement several services. When an online shop is set up, the costs of implementation and initial start-up generally are incurred only once, but the shop can then be used to market a wide range of products. In some cases it should be beneficial to implement cross-agency solutions.

The first stage of seeking out synergy effects is presented in the next activity, Activity "Identification of required infrastructural procedures"" (Activity 2.5) which, as shown in Figure 1, should ideally be carried out in parallel to information gathering and evaluation.

Along with this, for every online-capable service the following selection criteria are prepared to assist senior management with its decisions:

- Degree of satisfaction of agency's objectives
- Number of customers

- Number of business transactions
- Workplaces in the agency that require equipping
- Complexity
- Technical challenge

Advantages/obstacles and problems/risks

White Paper

On the basis of the results obtained here and in the parallel Activity 2.5, a proposal can be made as to which potential online services and which infrastructural procedures in the agency should be implemented and which of them should not be implemented due to insufficient demand in relation to the expected costs.

Report

All the results of data collection, including the evaluation and the proposal for a decision, must be set down in writing as a report and passed to senior management.

Additional resources provided in the E-Government Manual:

- Module entitled “Classification Scheme for E-Government Procedures”

2.5 Activity “Identification of required infrastructural procedures”

Initiation responsibility: Head of E-Government Team

Implementation responsibility: Core team, IT specialists

A single service generally comprises several discrete steps (cf. definition in the “E-government glossary”). To distinguish which activities an agency should regard as paramount, it is recommended identifying discrete steps within the services to be implemented for which, due to their technical and organisational characteristics, independent solutions should not be developed for each service but a single solution for all services and/or a single implemented should be carried out.

These common infrastructural procedures should be identified in this activity. For this purpose all services must be broken down into their component steps and scrutinised for steps that are common. It should be noted here that when several services are compared, their security requirements can be very different and therefore it is only possible to combine similar steps when they all depend on similar security requirements. For example, depending on the service, applications can entail no entry of personal data, they can require the use of a form or no form, while notices issued by public agencies can contain information of an entirely general nature (notices of costs or taxes, e.g. property tax) or personal, particularly sensitive data (e.g. tax assessment notice). There will be significant differences in the technical and organisational aspects of implementing these different cases. The subjects of protection and security requirements are investigated in detail in Phase 3.

The aim of this activity is not to determine hardware components, operating systems or application software, but to determine what infrastructure, both of a technical and of an organisational nature, is necessary in order to provide online certain elements of services that are required frequently. Such procedures can be implemented later, for example, through organisation-wide solutions (i.e. solutions that apply right across a given public agency, department or throughout the country) if there are common platforms or model implementations and processes.

The results of this investigation should be presented in the next activity carried out by senior management of the public agency, with the aim of identifying infrastructural procedures that are of relevance for the agency.

Examples of an assignment are provided below:

Service Element	Offline solution approaches	Online solution approaches
Provision of general information about the service	Information sheets available in the agency	Information with search engine and situation concept on the web
Provision of information regarding responsibilities	Notice in the agency, notification in information publications	Information offered on the web, taking into account the protec

(name, e-mail address, phone number, address, opening times)	of the agency or access only available via central office	tion of information of a personal nature about employees
Provision of forms	On view in the agency, sent by post	Form server with PDF forms for downloading, HTML forms for online completion
Range of customised forms	Completion by employees of the public agency during on-site visit by customer (e.g. after presentation of personal ID)	Interactive input forms that are linked to the agency's databases (after satisfactory authentication)
Acceptance of charges	Paying office/cash desk on-site	Online payment e.g. by pre-paid card, credit card, electronic purse, direct debit
Processing of general queries	Switchboard, central information point, answers to frequently asked questions (FAQ) as a notice in the agency	E-mail hotline, answers to FAQ on website
Processing of specific individual queries	Dealt with by person responsible following receipt of postal communication, queries by telephone, face-to-face contact (authentication e.g. via reference number)	Dealt with by person responsible following receipt of e-mail communication, completed www form or similar (authentication as before)
Receipt of applications	Incoming mail or personal submission in the agency, time stamp, validity conferred by signature where necessary	Received as e-mail or completed www form, electronic time stamp, validity conferred by signature where necessary
Processing of applications	Circulating file, co-signature, office memorandum, queries, requests for documents, archiving	Workflow or document management, additional signatures, requests to members of the public by e-mail, electronic archiving
Creation and dispatch of notices/documents containing general information only	Release and printout by responsible person, dispatch by post (letter/postcard)	Release by responsible person, dispatch by simple e-mail
Creation and sending of notices/documents containing sensitive information	Release by responsible person and automatic printing with official stamp without signature or creation with signature, dispatch by post, protection of confidentiality by envelope	Release by responsible person, reproduction of official stamp or signature, automatic dispatch by e-mail (or by post?), protection of confidentiality through encryption

2.6 Activity "Presentation of results of data collection"

Initiation responsibility: Head of the public agency

Implementation responsibility: E-Government Team

To present the results of the collection of information about and evaluation of online-capable services, the E-Government Team should invite the decision-makers within the agency to a presentation. The following people should be invited to attend:

- Head of the public agency
- Head of the "Central Division"
- Heads of the specialist departments concerned
- Head of Public Relations
- Head of IT
- Budget Department representative
- Staff Council
- E-Government Team

The report on the findings (duly approved by the head of the agency) can be sent out along with the invitation to the presentation. If there are other hierarchical levels in the agency (e.g. division) then the report should be previously agreed with these levels. In this way, for example, the survey results for all the departments in a division can be discussed, structured and amplified together with the divisional heads concerned.

The following subjects are recommended for discussion:

- Objectives of the agency's E-Government initiative
- Evaluation criteria
- Summary of the report on the findings
- suggestions as to which services are suitable for selection as online services
- suggestions as to the infrastructural procedures to be implemented

2.7 Activity “Selection and exclusion of online-capable services”

Initiation responsibility: Head of the public agency

Implementation responsibility: Head of the public agency, E-Government Team

Following the presentation of results in Activity 2.6, a decision must be made as to which of the online-capable services and which of the underlying infrastructural procedures should in fact be implemented and which should be discarded. In addition, provisional priorities should be set, i.e. so as to determine the sequence in which implementation should occur. It can be a good idea here to start with pushing ahead services which are quick to implement so as to be able to demonstrate successes at the implementation of the e-government initiative at regular intervals. This can set a positive signal within the public agency, thus promoting acceptance both within and outside of the agency.

The difficulty in this activity is to link existing plans for the near future successfully with the lessons learnt from the initialisation of e-government. New objectives of a customer-oriented approach must be reconciled with the existing points of focus. Bearing in mind the scarcity of resources, the art is to use synergy effects but without creating frustrations.

As a result it is necessary to specify with services are to be implemented when and with what interim measures. To facilitate monitoring and tracking of the objective and successive progress, it is recommended presenting this implementation strategy in a visual form. This pictorial representation can appear as follows for the three online services A, B and C.

Further details are contained in the module entitled “Classification Scheme for E-Government Procedures”.

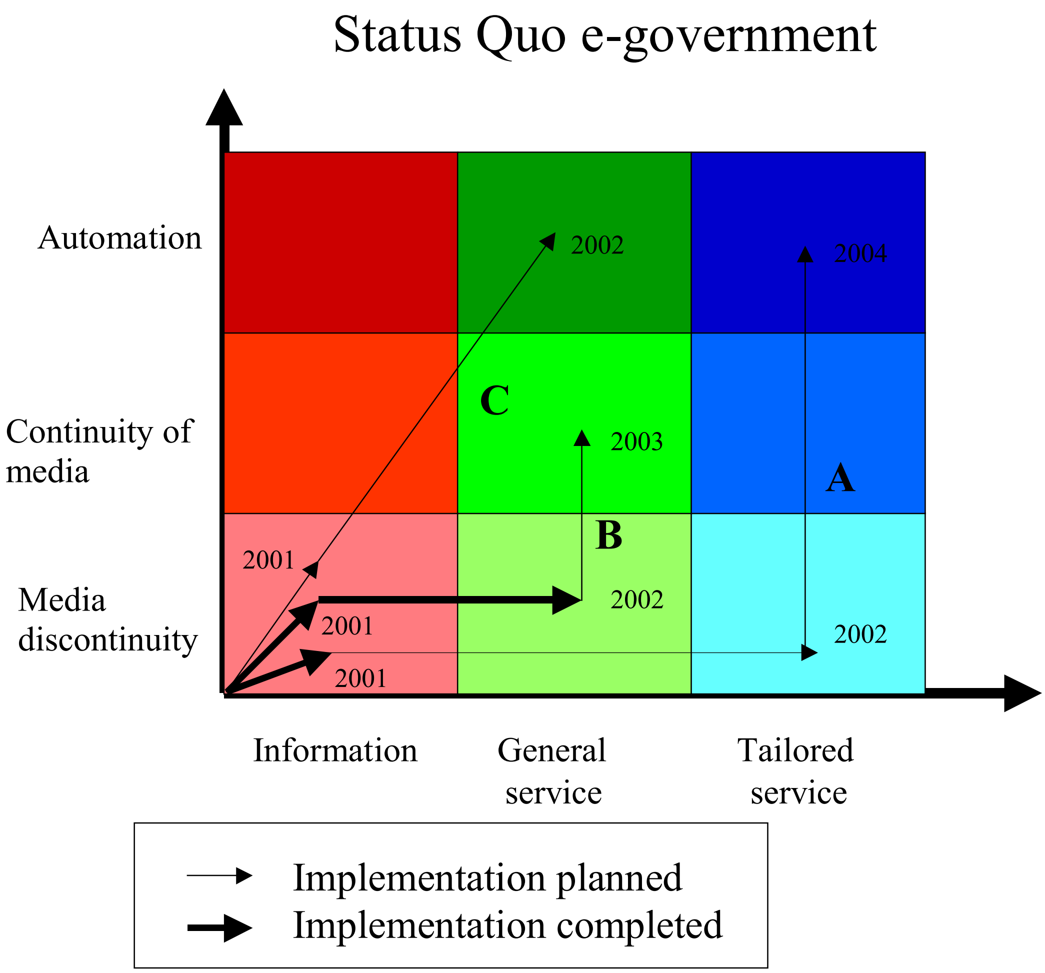

Figure 1: Possible way of presenting the implementation strategy.

Additional resources provided in the E-Government Manual:

- Module entitled "Classification Scheme for E-Government Procedures"

2.8 Activity "Determination of quality requirements for online-services"

Initiation responsibility: Head of E-Government Team

Implementation responsibility: Core team, senior management, persons responsible for the technical procedure

It has now been determined which services of the public agency should in future also be offered over the internet. The selection is based among other things on the agency's previously agreed objectives with regard to the implementation of e-government.

It is recommended deriving from the defined agency objectives quality requirements to cover proceedings from here. Only in this way can the correct questions be asked during the next phase of process analysis, so that the objectives that have been set can be achieved in the design of the online services.

Some requirements should be imposed globally for the entire public agency, whereas others are relevant only to a specific service. For the agency-wide requirements, it is imperative that senior management is involved in the decision-making process.

What quality requirements should a public agency impose? If **customer orientation** is one of the primary considerations in introducing e-government, then, for example, it will be important to avoid customers having to make journeys and to provide services quickly and transparently. On this basis, for example, the following quality requirements can be derived:

- All forms must be available for online retrieval.
- Incoming electronic correspondence is to be confirmed immediately with an automatically generated acknowledgement of receipt.
- A reply is to be given or notified to the addressee no later than five working days following receipt of the correspondence, explaining the current processing status of his enquiry and when he can expect to receive a reply or formal notice.
- The search engine on the home page of the public agency is to produce the correct page straightaway in 90% of search enquiries.
- All the services are to be provided on a barrier free basis, so that they are accessible to and can be used without problems by all customers.
- On every page of the website links are to be provided to
    - a page containing complete provider identification (name of public agency, contact person, postal address, e-mail address, telephone number etc.)

- data privacy statement (a statement of the agency's data privacy policy)

Possible quality requirements in the area of "**improving efficiency**" could, for example, include:

- All staff involved in a technical procedure are to always have electronic access to all files that are necessary for this procedure.
- All incoming paper documents in critical services are to be scanned on the day of receipt and made available to the responsible person in electronic form.
- Co-signature chains are to be shortened.
- Queries (e.g. requests for documents) relating to documents that have been received in electronic form are to be sent by e-mail. Only if no response is received from the customer within a week are these to be also sent out by post.
- The web address of the relevant online offering is to be printed on every document issued by the public agency in order to minimise the number of letters arriving by conventional means in the future.

Particularly strong requirements must be imposed as regards data protection and data security. These aspects are considered under activities "Assessment of protection requirements" and "Derivation of security requirements" in Phase 3.

Additional resources provided in the E-Government Manual:

- Module entitled “Quality Criteria for E-Government”

2.9 Activity "Preliminary planning of personnel and financial resources"

Initiation responsibility: Head of the public agency

Implementation responsibility: Head of the public agency, E-Government Team

At the end of Phase 2, it is the responsibility of the head of the public agency to plan in sufficient resources to cover implementation. A corresponding proposal as to when what resources are needed, should be prepared by the E-Government Team in advance. For this purpose, the implementation strategy defined above can be used to provide temporal orientation.

The following personnel resources must be provided:

- Members of the E-Government Team must be allowed sufficient time off their other duties. It is to be assumed here that the scope of work will not reduce during succeeding phases, as a number of analytical and planning tasks will need to be performed.
- Contact persons must be named for every online service to be implemented and they must be freed of other duties to a sufficient extent. For every service, a technical manager must be appointed to provide the information content and support the decision process on implementation issues. The amount of time for which staff will need to be made available depends on the complexity and cannot be stated across-the-board.

It is usually not possible to estimate the financial resources that need to be made available to implement the online services across-the-board. This depends especially on whether different services can be integrated on a common IT platform or whether platforms can be used across organisations or even on a national basis. The time at which the resources need to be provided is determined by the implementation strategy.

2.10 Activity "Creation and publication of E-Government Guidelines for staff information"

Initiation responsibility: Head of the public agency

Implementation responsibility: Head of the public agency, E-Government Team

For a public agency, the systematic introduction and implementation of e-government can mean that established processes and structures for the performance of tasks have to be modified. This departure from the long-established way of working, the possibility that personnel may be streamlined, the consistent use of information technology and the transparency of work activities and progress to third parties can result in people having reservations about e-government. To encourage acceptance of e-government right from the start, it is a good idea to inform all the staff of a public agency early on about the objectives, necessity and planned extension of the spectrum of services in connection with e-government.

Publication of a set of E-Government Guidelines by senior management of the public agency is a suitable way of passing on this information officially and at the same time of making clear the support being given by senior management. The aim of the guidelines should be "acceptance through transparency". Typical contents of such E-Government Guidelines are:

- Information about the BundOnline 2005 initiative
- "What is e-government?"
- Objectives of the public agency with regard to e-government
- Customer orientation, services and new access channels
- Regard for IT security and data protection
- Internal advantages of e-government (less time spent on routine work, increased personal responsibility)
- Participation of all staff of the agency by contributing own ideas, suggestions for improvement and constructive criticism for e-government
- Introduction to E-Government Team members
- Contact partner(s) for questions regarding e-government
- Planned online services
- Implementation timetable
- Participating organisational units
- Involvement of the Staff Council
- Training programme aimed at qualifying staff for e-government

These E-Government Guidelines should not exceed two to three pages in length. The guidelines themselves must be signed by senior management of the agency and should be notified to all members of staff. In particular, it is a good idea to encourage all staff to become actively involved by actively seeking their ideas and suggestions for improvement. To supplement publication of such a set of guidelines, consideration should also be given to putting on an information event for the areas and staff concerned.

It is also a good idea for the E-Government Team to report regularly on project progress so as to maintain transparency regarding the E-Government Project after it has begun.

Additional resources provided in the E-Government Manual:

- Sample of a set of E-Government Guidelines (planned)

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.

7.2 Checklist for Phase 2

Outcome(s)	**Who?**	**When?**	**Done?**
Objectives of the public agency with regard to e-government have been determined			
List of Online-capable services has been assembled			
Decision has been made as to which online-capable services should be implemented			
List of priorities for the online-capable services to be implemented has been drawn up.			
High-level planning of resources has been completed.			
"E-government information pool" has been set up for staff.			

8 Annexes

8.1 Data entry and evaluation form (sample) for potentially online-capable services

The form below is intended to serve as a guide for the process of collecting information on online-capable services. The aim of the data collection exercise is to gather information about the services provided by the agency so that a list of priorities for their implementation can then be drawn up. The form is divided into three sections.

Part 1 of the data entry and evaluation form

The first part is used to gather information rapidly with the aim of establishing whether the service is a candidate for consideration in e-government or not. It can be used as the basis for questioning the responsible departmental head or person responsible for the technical procedure.

Service	

What form do the interfaces to the customer take (input-output analysis)? Where is the written form necessary (e.g. signature / use of official stamp)?	
Input	**Output**

Customer profile			
Who are the customers of the service? (Members of the public, companies, public agencies, special target groups)			
How many customers currently use this service?	Very large number	Many	Few
How often is the service currently provided?	Daily	Several times a month	Seldom
How many users of the present service might be expected to use an equivalent online offering?	Many	Few	None
Do customers expect this service to be online? / Have customers already expressed such a wish?	Yes	Partially	No.
Is it to be expected that customers will furnish themselves with the necessary technical means (e.g. card reader) in order to use this service?	Yes	Partially	No.

Status, objectives and obstacles to implementation	
Are any parts of the service already provided online? If so, which parts and how?	
Which additional parts of the service could also be implemented online?	Information:
	General service:
	Customer-specific service:
Are any problems to be expected if the service is provided online (e.g. acceptance among staff or customers, legal requirements, co-ordination with other public agencies etc.)?	

Part 2 of the data entry and evaluation form

The second part of the form contains questions aimed at assessing the benefits of providing the envisaged service online. Once again, this form can be used as the basis for questioning the responsible departmental head or person responsible for the technical procedure. However, data collection is now confined to those services that were identified in part 1 as basically online-capable.

Every public agency should adapt the form to its particular requirements by choosing which questions are relevant and adding extra questions specific to the agency in question. In particular, the questions must be consistent with the agency objectives previously defined. If rationalisation, for example, is not one of the aims of introducing e-government, then the questions associated with this subject can naturally be omitted without substitution**.**

Service	

Assessment of the benefits of implementation (1/2)			
Agency objective: customer orientation			
Is it a case of a new service that has not been provided for?	Yes.	Partially	No.
Will online provision of the service enable customers to initiate, track and conclude services at any time and from any place?	Yes.	Partially	No.
Will the processing time associated with the service be significantly reduced by providing it online?	Yes.	Partially	No.
Will the service become more transparent to the customer as a result of being provided online?	Yes.	Partially	No.
Will the customer gain extra value by having the service provided online?	**Yes.**	**Partially**	**No.**

Assessment of the benefits of implementation (2/2)			
Agency objective: rationalisation			
Will any procedures carried out within the agency be simplified as a result of the service being available online?	Yes.	Partially	No.
Can the service be provided without media discontinuity?	Yes.	Partially	No.
Can the service be automated?	Yes.	Partially	No.
Will staff be relieved of routine work as a result of the service being provided online?	Yes.	Partially	No.
Will it be possible for any decisions to be localised because the service is provided online (e.g. signature authorisations)?	Yes.	Partially	No.
Will any rationalisation effects be possible because the service is now provided online?	**Yes.**	**Partially**	**No.**
Agency objective: improved image			
Can the image of the public agency be expected to be enhanced as a result of customers enjoying the benefits specified above?	Yes.	Partially	No.
Is this service one that is much in the public eye (is everyone talking about it)?	Yes.	Partially	No.
Once the service is available online will it be suitable for marketing activities?	Yes.	Partially	No.
Will the image of the public agency be enhanced by online provision of this service?	**Yes.**	**Partially**	**No.**
Agency objective: public-private partnership			
Is partnership with business enterprises on the provision of this service legally feasible?	Yes.	Partially	No.
Is partnership with business enterprises on the provision of this service sensible from the point of view of the customer?	Yes.	Partially	No.
Can costs be saved by working together with private suppliers?	Yes.	Partially	No.
Can the agency's image be enhanced through collaboration with business enterprises?	Yes.	Partially	No.

Is this service suitable for public-private partnership?	**Yes.**	**Partially**	**No.**

Part 3 of the data entry and evaluation form

The third part of the form is devoted to the expected costs of implementation and the resources available. The form is not suitable for use as the basis for interviewing the head of department, but should be completed in co-operation with the IT and organisational experts of the agency. It is recommended examining the assessment again after the process analysis (Phase 2) has been performed.

Assessment of the costs of implementation (1/2)			
Technical complexity / challenge / implementability			
Will a lot of workstations have to be equipped with new computers or other new IT equipment (printers, scanners etc.)?	Yes.	Partially	No.
Will a lot of personal computers need to be reconfigured or provided with new software?	Yes.	Partially	No.
Does this service make high demands on other items of IT equipment (servers, routers etc.)?	Yes.	Partially	No.
Is it obligatory or desirable for documents to be signed by the agency?	Yes.	Partially	No.
Is it necessary to receive signatures? (Does the customer need to be able to give a signature?)	Yes.	Partially	No.
Is a legally binding time stamp necessary?	Yes.	Partially	No.
Is it necessary to use or offer encrypted communications?	Yes.	Partially	No.
Is it necessary to set up an electronic workflow (or to extensively change one) in order to achieve the above objectives regarding the online provision of service?	Yes.	Partially	No.
Is it necessary to set up an automated processing system in order to achieve the above objectives regarding the online provision of service?	Yes.	Partially	No.
Is it necessary to collect fees online?	Yes.	Partially	No.
Is it necessary to specially protect the computer system against occasional failures?	Yes.	Partially	No.
For how long do documents associated with the service have to be archived or remain readable, i.e. how long do reading facilities and storage media need to be retained for?	More than 10 years	5-10 years	Less than 5 years
Is the service unique in that technical standard solutions cannot be used?	Yes.	Partially	No.
How big is the technical effort and technical challenge?	**Very high**	**High**	**Not much**

Assessment of the costs of implementation (2/2)			
Organisational complexity			
Number of workstations involved	Many	Few	One
Number of departments concerned	Many	Few	One
Number of decision-makers concerned	Many	Few	One
How many actions are involved in providing the service?	Many	Few	One
How many rounds of communication or interaction between customer and agency are expected to be necessary in the course of providing the service?	Many	Few	None
If the service is provided online, what additional costs will be incurred as a result of the fact that other agencies that are involved are not working online?	Substantial	Little	None
How much change is required to the internal workflow in order to be able to provide the service sensibly online?	A lot	Not much	None at all
How complex (e.g. time-consuming or labour-intensive) is online provision of the service?	**Very complex**	**Complex**	**Not very complex**

Availability of resources			
Is there enough experience available in-house (especially as regards organisation and IT) to plan and execute implementation of the service in-house?	Yes.	Partially	No.
Do the staff have enough knowledge to implement the changes to the future daily routine that are necessary?	Yes.	Partially	No.
Will implementation of the service meet with acceptance among the staff affected?	Yes.	Partially	No.
Is the necessary technology already available?	Yes.	Partially	No.
Is any money available in the budget plan for implementation of this service?	Yes.	Partially	No.

Additional resources provided in the E-Government Manual:

Module entitled “Evaluation criteria for potentially online-capable services”

This data entry and evaluation form can be retrieved for further processing as a Word document from the e-government hotline (mailto:egov@bsi.bund.de).

8.2 Data entry form (sample) for products of an online shop

This form is devoted to the special questions which arise in connection with online sale of products, irrespective of whether they are free or not. The questionnaire is based on a form created jointly by the BSI and the German Federal Statistical Office. It can be retrieved for further processing as a Word document from the e-government hotline (mailto:egov@bsi.bund.de).

1. Product description

____

2. What type of product is the product concerned?

Physical product (e.g. book) ___________

Electronic product on data media ☐

Electronic product for download ☐ Size: ___________ MB

Online access to databases ☐

3. What is the primary target group at which the product is aimed?

General public ☐

Businesses, interest groups and professional associations ☐

Government and public administration ☐

Education, academia, cultural establishments ☐

Other ☐

namely: ___________

4. Is this product already on sale today?

Yes, online ☐

Yes, but not online ☐

No ☐

5. How is this product marketed?

Marketed by the agency ☐

Distributed by both the agency and third parties ☐

Distributed externally ☐

6. In what price bracket does the product lie?

Free of charge ☐

Less than €10 ☐

€10 up to and less than €50 ☐

€50 up to and less than €100 ☐

€100 and over ☐

7. How often is this product sold? (One answer only)

At present	Expected when online		
		Daily	☐
Approx. ___________	Approx. ___________	times a month	☐
Approx. ___________	Approx. ___________	times a year	☐

8. Is a subscription solution desirable for periodicals?

Yes ☐

No ☐

Already implemented ☐

No periodicals available ☐

9. Should particular customer groups be given a discount?

Yes ☐

No ☐

Already implemented ☐

10. Is any graduation of prices according to the quantity ordered planned?

Yes ☐

No ☐

Already implemented ☐

11. Other observations regarding online sales

____

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. As a head of department at the BSI, Dr. Isselhorst is responsible for the IT Baseline Protection Manual. He also provides consultancy on security to selected federal departments and advises the Bundesbank in the areas of secure electronic payment transactions and secure e-commerce. 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.

Rainer Oberweis, BSI

Rainer Oberweis obtained a degree in Electrical Engineering from the University of Kaiserslautern in 1996. While working in research and technology at the Data and Information Centre, he was responsible for creating IT security concepts on projects in the areas of health and education. In 2001 he joined the German Information Security Agency in Bonn. As a section head, he is responsible for advising federal agencies on the implementation of e-government projects and is also involved in writing the E-Government Manual.