

## eGovernment measurement for policy makers

The eGovernment policy focus has moved over the last five years from being mainly concerned with efficiency to being concerned both with efficiency and effectiveness. This paper examines the current and future development of eGovernment policy making, and the critical role that measurement and impact analysis has in it. From an almost exclusive focus on the efficiency impacts of eGovernment over government itself, there is a clear movement towards an increased attention on effectiveness impacts, as well as to wider governance impacts. This is going hand-in-hand with a change away from measuring only the inputs and outputs of eGovernment initiatives towards a much greater emphasis on analysing and measuring the outcomes for constituents and the impacts on society as a whole, for example through increased public value.

In addition, the article considers likely future eGovernment measurement trends which involve moving both policy target setting and measurement from central government to local government, from the back-office to the front-office, and to front-line professional staff, whether care or medical professionals, police, community workers, teachers, etc. Taking this further, it also seems likely that in the future, constituents themselves will also be involved in policy target setting and measurement when directly related to their own use of public sector services and facilities. The new approach will be to measure local and specific targets through, for example, constituent (user) surveys, for which mass collaboration Web 2.0 tools could probably be used. One of the benefits of such a local, small scale approach is that it is also more immediate and real time, and reduces the need to 'wait forever for the decisive evidence'.



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“ Of utmost importance in this generic approach is the direct linking of outputs, outcomes and impacts to policy objectives which are articulated as three hierarchical levels connected together by one or more intervention logics/processes. ”

## 1 Measurement and the evolution of eGovernment policy

A number of sources<sup>1</sup> point to three major policy goals of government and eGovernment, each with a distinctive view of who the constituent<sup>2</sup> is and who benefits from the policy, as illustrated in Figure 1 and described below. Each of these policy goals assume a different relationship between government and constituents, and need to confront their own policy contradictions or dilemmas:

**1. Efficiency and the search for savings – benefits for government:** a dynamic, productivity-driven, innovative and value for money set of institutions, where:

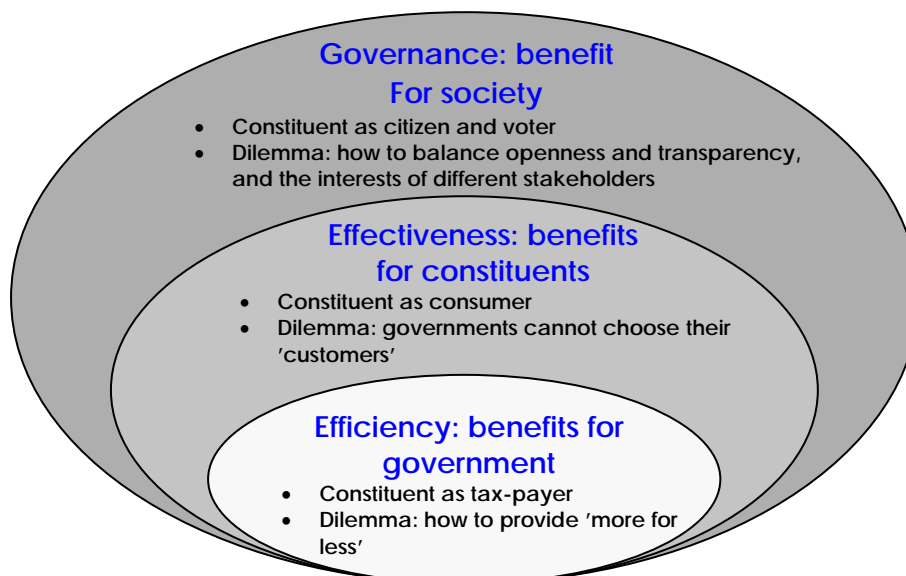
- the constituent is seen as a tax-payer
- the policy dilemma is how to provide ‘more for less’.

**2. Effectiveness: the search for quality services – benefits for the constituents:** producing and delivering inter-active, user-centred, innovative, personalisable, inclusive services, maximising fulfilment and security, where:

- the constituent is seen as a consumer, but where services are provided to all on the basis of need instead of (or as well as) demand
- the policy dilemma is how to pursue both need and demand and how to balance the two.

**3. Governance: the search for good governance – benefits for society:** open, transparent, accountable, flexible, participatory, democratic, etc., where:

- the constituent is seen as a citizen, voter and participant
- there are two policy dilemmas, how to balance openness with legitimate privacy (of civil servants as well as of constituents), and how to balance the ultimately irreconcilable interests of society’s different stakeholders (the latter is, of course, the realm of politics, but it also impacts the sphere of government operation at an apolitical level).



*Figure 1: The evolving policy goals of eGovernment. Source: adapted from Millard & Horlings (2008)*

1 For example Millard & Shahin (2006) and Codagnone & Boccadelli (2006).

2 Instead of the more common term ‘user’, the descriptor ‘constituent’ is used in this article to cover both citizens, businesses and public sector staff, as well as civil and other groups in society who are served or supported by the functions of the public sector.

The eGovernment policy focus has moved over the last five years from being mainly concerned with efficiency to being concerned both with efficiency and effectiveness. The next big future move is also likely to include governance issues, along with efficiency and effectiveness, such as simultaneously promoting economic growth, jobs, competitiveness, sustainable development, inclusion, democracy, quality of life, citizenship, trust, continuity, stability, and universal human rights. These three policy goals of government and eGovernment are also those that distinguish the public sector from the private sector, given that the latter generally only sees the constituent as a consumer. (Millard & Shahin 2007)

Accompanying this evolution of policy goals there is a simultaneous development in the way they are operationalised and measured. This has also involved a greater realisation that it is important to be explicit about why measurement in the information society in general, and eGovernment in particular, is being undertaken, i.e. whether its purpose is: (Heeks, 2006)

- a) Prospective direction/priorities: assisting policy makers with strategic decision making about the information society. For some studies, prospective guidance may be more at the tactical level of individual projects, for example, offering lessons learned or best practices for such projects.
- b) Retrospective achievement: letting policy makers know in comparative terms how their country or agency has performed in some information society ranking.
- c) Accountability to stakeholders in particular and to society in general: enabling governments and agencies to be held to account for the resources they have invested in the information society. Ministries of Finance may share an interest in this purpose. Information society officials may have their own purpose in using measurement and impact assessment in order to politically justify their investments.

Specifically, Heeks (2006) stresses the importance of consciously linking information society impact measurement to the policy lifecycle, as this clarifies both the need for it and the means of doing it:

- For policy makers entering the awareness stage, the demand might simply be for help in understanding what the information society is.
- For policy makers at the agenda-setting stage, demand might come more from those seeking to encourage adoption of the information society onto the policy agenda, focusing on the carrot of good news/benefits stories and the stick of poor comparative benchmark performance.
- At the policy preparation stage, policy makers will likely demand an understanding of alternatives and priorities, comparisons with other countries and best/worst practices.
- Finally, at the evaluation stage, they may demand both comparative performance data and the reasons behind that comparative performance in order to move to learning and improved future policy making.

Despite these developments, however, at least five main challenges remain yet to be met by most information society impact analyses and measurements to date:

1. Despite the search for cost savings, they often ignore the real costs of providing information society services and applications. A cost-effective strategy would focus on services where the greatest benefits and/or savings (or revenues) can be made. A sound evaluation (after investing in ICT) and business case (prior to investment) of the impact of information society investments will enable policy-makers to compare benefits alongside other demands for public funds. Better measurement and evaluation will also highlight where efficiency gains or expenditure savings have been made, and thus enable resources to be allocated to where they have greatest impact in a given policy context. (Foley 2005, Codagnone & Boccardelli 2006)
2. They tend to focus on the visible interface with users and to neglect more complex back-office changes, which could be significant in improving service quality or efficiency. Most information society impact analysis still focuses on defining input/output indicators which, on their own, provide a picture which is too static and too limited, without properly capturing transformation processes, the outcomes of transformation, and the policy context. The difficulty in properly addressing

transformation is the dynamic nature of processes. How can a quantitative measure properly capture an amorphous change in a set of features of, for example, the public sector? Thus there is a need for greater focus on processes and outcomes, and not just on inputs and outputs. (OECD 2006, 2007)

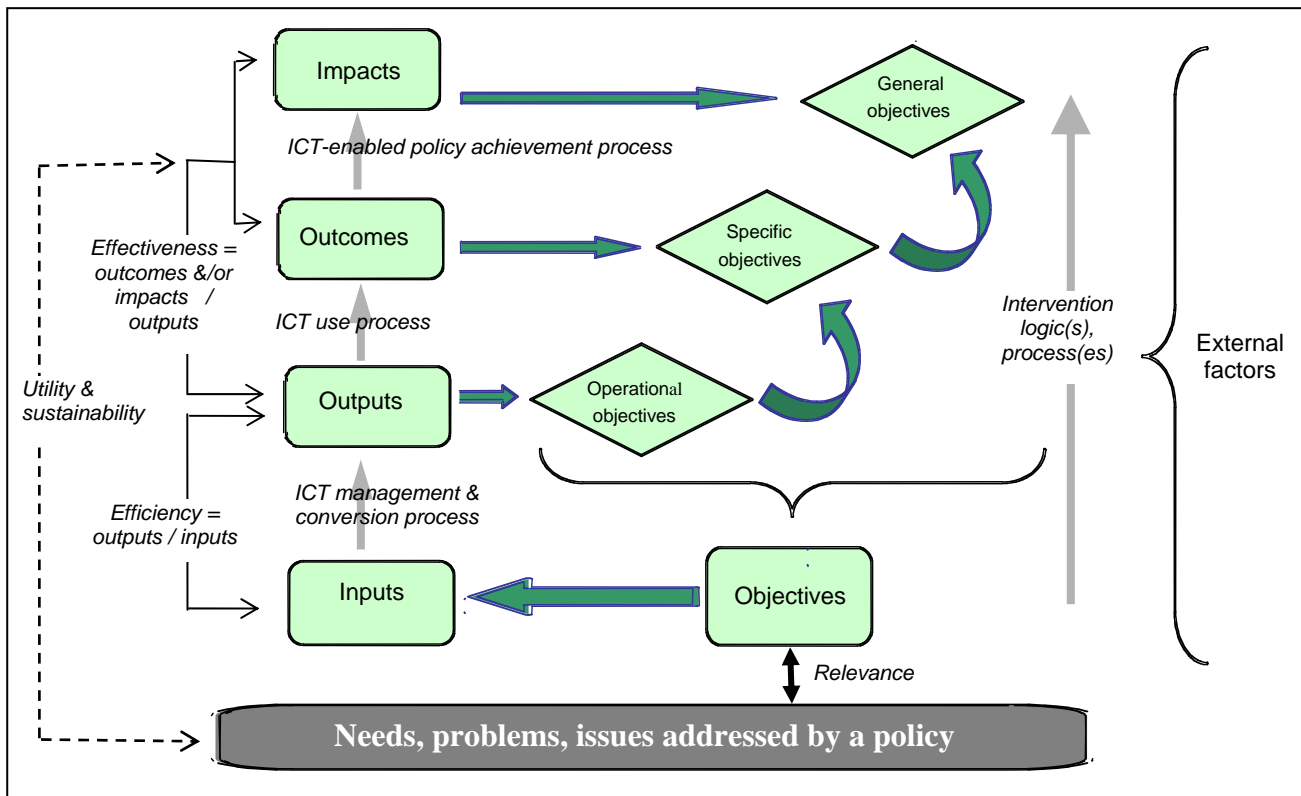
3. Many existing information society frameworks and surveys do not have a clearly defined purpose, and do not allow for specific national contexts and priorities. (Jansen, 2005)
4. Continuing uncertainty and lack of clarity about what should be compared with what, and what caused what, when developing, employing and interpreting the results of information society impact analysis. (Behn, 1995)
5. They do not explicitly or clearly articulate the links between information society and policy goals, nor justify the use of ICT in terms of how it can support and promote societal benefits and the public value of good governance. (Heeks 2006, Millard & Shahin 2006, Codagnone & Boccardelli 2006)

## 2 Policy measurement

Within the broader information society domain, both Heeks (2006) and Millard & Shahin (2006) have constructed an eGovernment analytical framework and evaluation system using a policy impact assessment approach based on three levels of objectives, similar to that used by the European Commission (2006)

Figure 2 draws on all these approaches and illustrates all the main structural components of a generic impact analysis reference system, which synthesises these concerns with the existing European Commission impact assessment framework (European Commission, 2000, 2006), and also contains all the elements and their inter-relationship necessary to address the above challenges. It also suggests a robust nomenclature given that many terms are often used inter-changeably in the literature. This generic approach does not need to be operationalised in its entirety, as specific parts or levels can be considered on their own, but at the very least it should be used as a conceptual background framework for understanding the more holistic context of particular implementations.

Figure 2 shows, first, how the objectives of a given policy need to be derived from identified needs or problems, and evaluated for relevance. Next, how the objectives need to be operationalised, first in terms of the inputs needed to produce a set of outputs. Further, the efficiency of the policy can in principle be assessed by relating the outputs produced to the inputs employed. In addition, outputs should themselves lead to outcomes, and, in turn, to impacts, and these should then be evaluated against the outputs to determine the policy's effectiveness. The whole sequence of inputs to impacts, matched to objectives is linked by one or more intervention logics, or processes, which provide the rationale for their specification and inter-relationships. In addition, the overall utility and sustainability of the policy's impacts can be related back to the needs originally identified.



**Figure 2:** Generic impact analysis and measurement reference system. Source: adapted from Millard & Shahin (2006)

Finally, although the system is essentially closed, we should not ignore important external factors which are here defined as beyond the immediate control of the policy makers and practitioners implementing the policy. These external factors, or 'noise', need to be temporarily excluded otherwise the model becomes too complex, so we simplify and thus distort reality. But this is justified if we thereby improve our overall understanding and ability to develop policies and act in ways which lead to desirable impacts, and thus improve our ability to relatively accurately measure and predict the consequences of any interventions we may wish to make. However, although we initially exclude external factors over which we do not have immediate control, we also need to analyse these factors in terms of the risk that they will not function in the way expected and their potential importance to disrupting the model if this happens.

Of utmost importance in this generic approach is the direct linking of outputs, outcomes and impacts to policy objectives which are articulated as three hierarchical levels connected together by one or more intervention logics/processes. This provides a robust and rational link between measurement and policy objectives, without which the five challenges above will not be adequately addressed, and also facilitates understanding of purpose and learning, as well as impact analysis.

This generic impact analysis reference system is thus able to:

- Facilitate analysis and measurement, by identifying steps or levels of the process of ICT use which are operationally amenable to these purposes. Without this, there is no conceptualisation of different types or levels of impacts or of the difficulties of measurement, and no idea of any causality of the impacts being analysed.
- Be policy relevant, by explicitly linking these levels to high level policy goals through one or more intervention logics/processes which attempt to show the connection between ICT use and desired impacts. This also serves to stress that analysis and measurement are not ends in themselves but must have a purpose, and that this purpose must be made explicit. It shows that, in the case of measurement, it is not the actual score itself which is important but how and why the score was produced, i.e. there is a need to focus on an analysis of what lies behind the score. In fact impact measurement loses its purpose if there is no clear understanding of how the various combinations of factors have produced the impact.

- c) Take direct account not only of factors over which information society policy makers and practitioners have control, but also of 'external factors' over which they have little or no control given that these can also be significant in determining whether or not high level policy impacts are, in fact, achieved.
- d) Understand for whom the analysis and measurement is for and how they will be used. For example, impact measurements are likely to be very different and used in different ways by:
  - policy makers (e.g. for designing and implementing policy and in which policy interventions to invest)
  - researchers (e.g. theorising and empirically testing public sector change)
  - practitioners (e.g. for understanding how to change public sector processes)
  - constituents as citizens and businesses (e.g. which school or hospital to choose or which region to invest in)

Both Heeks (2006) and Millard & Shahin (2006) adopt a holistic approach which links eGovernment into the overall policy development process, but also allows operationalisation and measurement to take place at one or more steps/levels as long as their place in the whole policy framework is appreciated. Being explicit about pursued objectives and measures also allows policy-makers to verify that the proposed logic of intervention is reasonably strong. Further, this is also a way to promote a common understanding of the aims of the policy, which is also necessary when it is implemented, monitored and measured through specified indicators in order to evaluate its success or otherwise.

An important point to note is that such a generic impact analysis reference system is both a conceptualising and operational tool. It provides a comprehensive framework for conceptualising policy development and implementation, and the role of impact measurement as part of this. It shows that impact measurement is not a separate add-on after the fact of policy making. At base, the system provides a checklist for understanding policy impacts and how they can be measured. Its operationalisation enables a fuller understanding of what is being measured and why, as well as of the operational difficulties of measurement, including the use of surrogates, logistical challenges and the cost of measurement.

Conceptualising the components of the system in this way also allows the caveats and risks of making any compromises in measurement to be made transparent, so that a judgement can be made about whether or not the value and usefulness of measurement is undermined. This, in turn, enables an acceptable trade-off to be found between the costs of measurement, on the one hand, with its value and usefulness on the other. It thus changes the mindset and appreciation of those undertaking and interpreting impact measurement, including in situations when only parts of the system (such as output measurement) are operationalised whether for reasons of purpose, cost or operational difficulty.

### 3 Applying the policy measurement framework to eGovernment

Figure 3 illustrates how eGovernment policy objectives can be analysed using the generic analytic and measurement framework outlined above. This is further elaborated below.

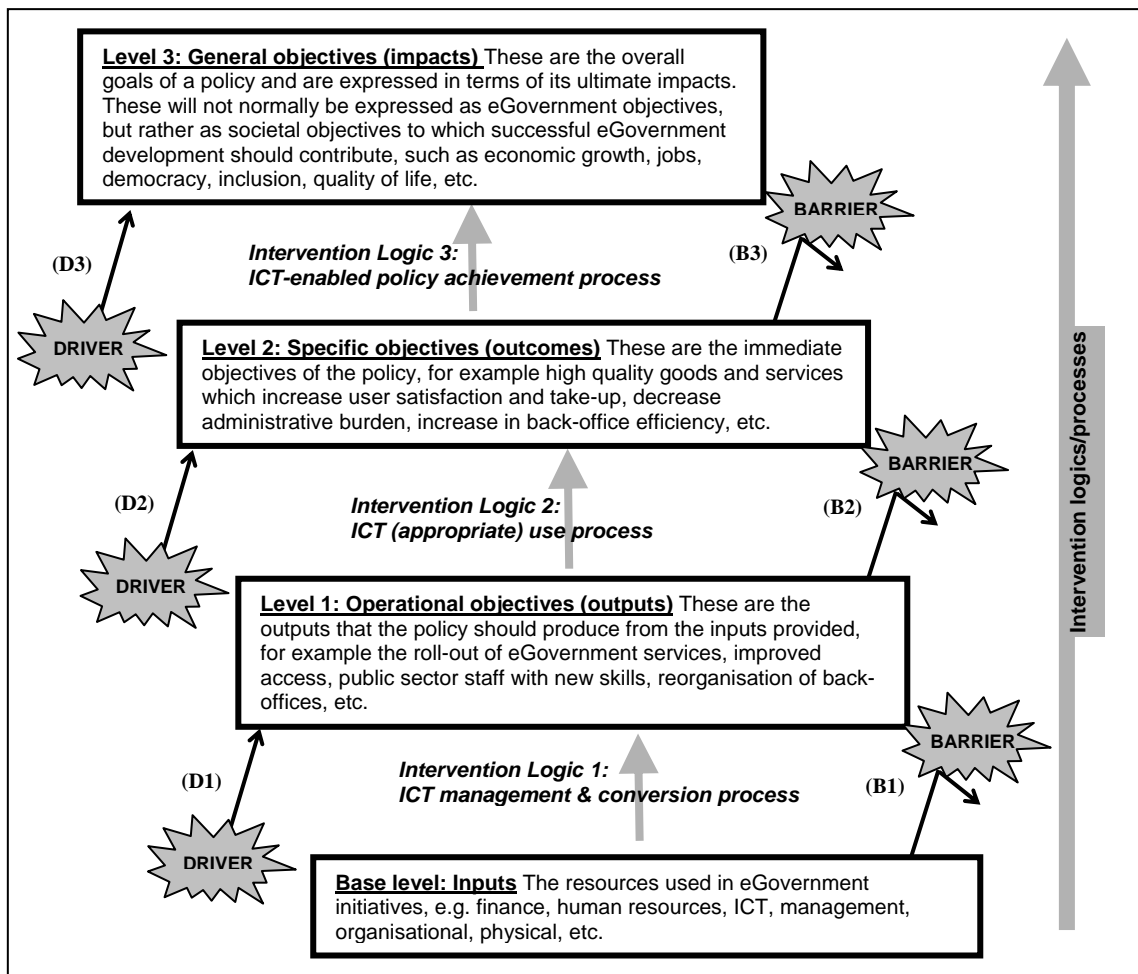


Figure 3: eGovernment policy objective and evaluation levels. Source: adapted from Millard and Shahin (2006)

The lowest base level in Figure 3 consists of the policy-defined inputs, whilst the next three levels consist respectively of the policy outputs, outcomes and impacts, each expressed as a hierarchy of three levels of objectives. The levels are described as a hierarchy as each one contributes to the level above, and thus also needs to be evaluated and measured in relation to the level above. For example, level 1 may produce staff with new skills and this can be measured in its own right, but this also needs to be measured against level 2's requirement that these new skills actually do contribute to increased user satisfaction or reduced administrative burden, i.e. that they are the appropriate skills which are applied through appropriate processes and used in an appropriate way. This kind of domino effect is termed the 'intervention logic' and describes the processes which link the levels.

Figure 3 also shows that the objectives and measurement levels are offset from each other, thus emphasising that, because of possible external factors, achievement at one level may not successfully contribute to achievement at the next level. Thus, it is important to attempt to align the different levels in the hierarchy, by examining these external factors as potentially useful drivers or potentially disruptive barriers which are beyond the immediate control of the policy itself.<sup>3</sup> This is a problem typically overlooked in policy making,

<sup>3</sup> External factors can also be understood as those which were originally not included in the intervention model because they were not under the direct control of the policy maker or practitioner, or because their inclusion would have made the model too complex to understand, but which have nevertheless been found important in causing path deviations. Investigating them now as external factors is simply a way of (belatedly) recognising their importance and attempting to re-introduce them to the intervention logic model. These external factors are also equivalent to the OECD's 'antecedents' and 'constraints' (OECD, 2007, p. 38.)

measurement and evaluation, and there are typically three reasons why success at one level may not automatically mean success at the next:

1. The intervention logic (process) is faulty, in which case it needs to be re-designed. This is normally within the control of the policy maker or practitioner.
2. An assumed external driver, which should contribute to successful progression between two levels, is either absent or does not act in the way presumed. Such drivers are beyond the immediate control of the policy maker or practitioner, and may not even be directly related to eGovernment. For example, other government or public sector policies related to economic development, infrastructure, education and training, policies by other economic sectors, actions by consumers, civil society, etc.
3. An unanticipated, or wrongly anticipated, barrier arises which hinders successful progression between two levels. Such barriers are beyond the immediate control of the policy maker or practitioner, and could be structural or other factors which have a negative or not-conducive effect. For example, missing, non-supportive or damaging political, institutional, cultural and economic conditions, legal framework, sector and market conditions, organisational structure and size, etc.

It is important to examine, and where possible measure, both drivers and barriers, as external factors beyond the immediate control of the policy maker or practitioner. This is done by, first, ascertaining their importance for the successful progression between two levels. Then, if they are important, the risk that they will fail to support progression (in the case of a driver) or mitigate progression (in the case of a barrier) needs to be assessed. Finally, for external factors which are both important and high risk, an analysis should be made of whether or not the policy maker can exert any control to make them conducive. Where the possibility of such control is minimal, consideration needs to be given as to whether or not there is an adequate link between the levels, and thus whether or not the policy intervention should take place at all. These can be termed 'killer assumptions'.

One example of how a policy can successfully take account of and understand these external factors, in order to move successfully between levels in the hierarchy, is by articulating the assumptions necessary to do so. For example, an assumption between inputs (at base level) and outputs (at operational objective level 1) could be that suitable eGovernment applications can be procured, built and installed, i.e. that such applications or their components are in the market place at an appropriate price. Examples of assumptions between operational objective level 1 and specific objective level 2 could be that the citizens for whom the applications are made available already have certain skills, motivations and needs.

Examples of assumptions between specific objective level 2 and general objective level 3 could be that the framework of laws, political processes and institutions which has led to outcome benefits for one group of constituents at level 2 undermines the outcome benefits of other groups. In other words, there is a benefits trade-off between different groups, resulting in policy winners and policy losers. This undermines level 3 objectives which generally attempt to spread benefits and reconcile the interests of different groups. Ultimately, this is a political question designed to increase the overall level of public value. Clearly if these assumptions, which are beyond the immediate control of the eGovernment initiative, are not met then the impact of the initiative in terms of improved issue-based politics or trust will be highly limited.

## 4 Example components of an eGovernment policy measurement framework

In the following, the main components of an eGovernment measurement system, reflecting the policy analysis framework levels, are outlined in sequence from the bottom to the top of Figure 3.

### 1. Inputs

Inputs could include:

- ICT
- human resources (people and skills)
- organisational resources (leadership, management, teams, organisational knowledge resources, etc.)
- legislation (including the rule set which governs eParticipation)
- other materials and facilities, such as property, infrastructures, etc.

- public agency cultures (mindsets and ways of working)
- finance and budget (development and operational costs)

Inputs could, in principle, feed directly into any upper level, not just the operational objectives level. For example, particular inputs may need to be brought into play to link between the operational objectives level and the specific objectives level. However, for reasons of simplicity they are only shown at the base level in Figure 3.

## 2. Intervention logic 1: ICT management and conversion:

The ICT management and conversion intervention logic is (the explanation for) how the inputs should be able to achieve the outputs in the level above, and could include:

- ICT procurement
- software and hardware development
- cooperation between all relevant stakeholders (including public-public-partnerships, public-private-partnerships and public-civil-partnerships)
- development of support networks.
- business process re-engineering
- training and human resource management
- knowledge management
- awareness raising (internal and external, including branding)
- capacity management
- development, implementation and adjustment of action plans
- financial allocation and control
- project, performance, quality and risk management
- monitoring, evaluation and impact assessment systems
- leadership
- political commitment.

## 3. Outputs (operational objectives)

Inputs are converted to outputs (defined as the operational objectives) by the ICT management and conversion intervention logic.

The actual outputs are normally produced goods or services, but can also be other changes or operations which should be produced if the ICT management and conversion intervention logic is successful. Outputs could include:

- HW, SW, applications, services, etc., rolled-out, available and operational
- establishment of eGovernment services delivery channels (and linking to non 'e' channels), including channel integration and channel switch point implementation
- access to and use of the digital infrastructure
- changed working procedures related to the implemented ICT systems
- back-office business processes re-engineered
- organisational changes
- interoperability and integration established between technology, information and data, processes, services and organisations
- establishment of systems for identity, security and trust
- completed staff training courses
- involvement of all actors/stakeholders (including public-public-partnerships, public-private-partnerships and public-civil-partnerships)
- completion of eGovernment studies and surveys
- implementation of awareness raising campaigns.

#### 4. Intervention logic 2: ICT use

The ICT use and intervention logic is (the explanation for) how the outputs should be able to achieve the outcomes in the level above, and could include:

- sharing of information, data, business processes and services
- development / promotion of technology / organisational / regulatory / legal integration, interconnectivity, interoperability and standards
- cooperation between all relevant stakeholders (including public-public-partnerships, public-private-partnerships and public-civil-partnerships)
- development of business models (e.g. for service delivery across all channels and stakeholders, including intermediaries)
- whole value-chain cost-benefit analyses
- use of tools such as benchmarking, good practice, KPI, ROI
- training and human resource development and capacity building
- awareness raising (internal and external, including branding)
- institutional development / building
- change management
- strategy development and implementation
- financial planning, allocation and control
- foresight and scenario development
- research (e.g. market, anthropological) and studies
- monitoring, evaluation and impact assessment systems
- leadership
- political commitment

#### 5. Outcomes (specific objectives)

Outputs are converted to outcomes (defined as the specific objectives) by the ICT use and intervention logic, and could include:

Specific outcomes for the government agency (or provider) could include:

- increased efficiency, including cost reduction, resource rationalisation, greater productivity, etc.
- time savings
- staff who are more competent and skilled in their jobs and thus achieve greater output, etc.
- less bureaucracy and administration (administrative burden reduction)
- more transparency, accountability, etc., within the agency
- increased staff satisfaction
- increased security for the agency
- redeployment of staff from back-office (administration) to front-office (service delivery)
- increased agency agility and innovation

Specific outcomes for constituents could include:

- successful access to and use of eGovernment services
- time savings
- less bureaucracy and administration (administrative burden reduction)
- more convenience
- more transparency, accountability, etc., for users
- increased user satisfaction
- increased service fulfilment (problem solved)
- increased security for users

eGovernment outcomes depend on how and in what way the eGovernment outputs are used. For example, does the development of applications and services, the reorganisation of the back-office or the training of staff as operational objectives, actually lead to savings in time and money, less bureaucracy, increased user take-up and satisfaction as specific objectives? These outcomes, as specific eGovernment objectives, may be stakeholder dependent, so that cost savings for the public administration could result, depending on how they are used, in poorer instead of better services for citizens. Thus, the achievement of one set of specific eGovernment objectives for one stakeholder may result in the non-achievement of another set of specific eGovernment objectives for another stakeholder.

## 6. Intervention logic 3: ICT-enabled policy achievement

The ICT-enabled policy achievement intervention logic is (the explanation for) how the outcomes should be able to achieve the impacts in the level above, and could include:

- policy decision-making and trade-offs
- policy and strategy development and planning
- financial commitment, planning, allocation and control
- monitoring, evaluation and impact assessment systems
- awareness raising (internal and external, including branding)
- leadership
- political commitment
- foresight and scenario development
- research (e.g. societal impacts) and studies
- changed laws or regulations

## 7. Impacts (general objectives)

Outcomes are converted to impacts (defined as the general objectives) by the ICT-enabled policy achievement intervention logic. Impacts are at the societal level, and encompass what eGovernment outcomes should contribute to. This could include:

- economic productivity
- economic growth
- jobs
- competitiveness
- local and regional development
- environmental improvement and sustainable development
- inclusion
- democracy, participation and citizenship
- quality of life / happiness
- increased justice and security
- universal human rights and peace

These general objectives are not specific to (e)government, but are general policy goals often articulated as ‘public value’ impacts to which (e)government specific objectives can contribute. It is important to note that other outcomes from, for example, the business sector or civil society, will also be important contributors to policy impacts, thus constituting some of the external factors of Figure 3. Public value itself is a slippery concept but can be defined in the present context as achievement of society’s goals for socio-economic and sustainable development.

### External factors

External factors consist of the drivers and barriers, which are partially or fully beyond the control of the owners of the eGovernment initiative, which may intervene between each of the three objectives levels, respectively aiding or hindering the achievement of the upper level.

Examples of drivers could include other government or public sector policies related to economic development, infrastructure, education and training, policies by other economic sectors, actions by consumers, civil society, etc. Examples of barriers could include missing, non-supportive or damaging political, institutional, cultural and economic conditions, legal framework, sector and market conditions, organisational size, etc.

## 5 Two major eGovernment policy measurement trends

There are presently two major trends in policy making and policy measurement in eGovernment, both of which can be expected to become more important in the future.

### 1. Up the policy value chain

First, there is increasing emphasis on making and measuring policies higher up the policy value chain, i.e. moving from a focus on inputs and outputs to greater focus on outcomes and impacts. This implies a movement from efficiency to effectiveness and thence to governance in Figure 1, although this does not necessarily mean that the first is being discarded, rather that all three policy goals are being linked and measured more explicitly together as one system. In essence, this is synonymous with a move up the eGovernment policy objective and evaluation levels from 1 to 2 to 3 in Figure 3, but again this does not necessarily mean that the lower levels are being discarded, but rather that the higher levels are being included for the first time. For example, the European Commission has recently started to measure eGovernment take-up and citizen centricity (level 2) in addition to eGovernment roll-out (level 1) which has been the main if not only focus until 2006. (CapGemini 2007) Similarly, in 2005 the European Commission started for the first time to take initial steps to articulate and measure the broader policy impacts of eGovernment on competitiveness, growth and jobs. (European Commission 2005).

### 2. From centre to local and down the hierarchy

Second, there is a trend which is not yet widely established but is now being seriously discussed and piloted in some parts of the public sector. This is to move both policy target setting and measurement:

- from central government to local government / local practitioners
- and from the back-office to the front-office
- to front-line staff, whether care or medical professionals, police, community workers, teachers, etc.
- and to constituents themselves: individual citizens, families, communities, localities, businesses and their organisations, etc.

This type of policy target setting and measurement is using, for example, staff and user panels to design standards and outcomes, such as person-centric measures of success in education, health and social care, to complement the top-down and macro measures of targets and standards provided by central government. (Leadbeater & Cottam 2008). If public services are to be accountable to constituents, they no longer need to be accountable to central government, meaning fewer targets imposed from the centre, and less emphasis on command and control through centralised measurement systems. Thus, as control and accountability move from the centre to the service front-line, and even include the participation of constituents, responsibility for target setting and measurement also need to be decentralised and devolved.

At face value this implies greater risks through loss of control by central government, but this is mitigated by a spread of risk to other actors including front-line staff and constituents themselves. Thus, politicians will share both control and risk and will not be solely accountable for failure. This will also enable greater risk taking and better risk management in the public sector which often requires completely new thinking and much less reliance on centrally imposed standard targets.

The new approach will be to measure local and specific targets through, for example, constituent (user) surveys, for which mass collaboration Web 2.0 tools could probably be used. One of the benefits of such a local, small scale approach is that it is also more immediate and real time, and reduces the need to 'wait forever for the decisive evidence'. Such an approach is needed as decisions on spending are devolved down to local front-line level, as well as in many cases to private and civil sector partners, or even to constituents themselves. This does not mean the end of targets or central measurement, but attempts to apply targets

and measurement to things that truly matter, i.e. different types of value including the personal and private value of constituents.

These trends are also likely to see a strong move away from sole reliance on process targets (such as number of cases handled) towards a focus on constituent targets, like satisfaction and service fulfilment. This will be a decisive move away from Weberian bureaucracy, where due process within strict rules was all important, to allowing detailed front-line adaptation and decision-making within an overall framework of policy, legal and financial rules. This reflects wider performance management trends away from process measurement, so that, rather than seeking results in better processes for their own sake, ensuring that public sector performance directly and overtly serves public value instead will become the main focus of policy making and measurement.

One example is worth describing to illustrate what is meant. Recent trials in the UK involve providing individual constituents with their own personal budgets for social services. In the 'Putting People First' programme, 2,000 disabled persons across the UK have been given a financial allocation, in cash form if they wish but in most cases this is held by the local authority to be spent in line with the person's own wishes once their care plan is approved. This can be spent on their own choice of care assistants, to join clubs rather than day centres, and go to hotels or on package breaks rather than to residential homes for respite care. Here, the individual, within a framework of rules and with the help of a personal civil servant adviser, is able to set his or her own service targets, spend resources to meet them, and measure the results through their own evaluation of satisfaction and quality of life.

Although the trials have not yet been fully assessed, the emerging results are so positive for the individuals concerned that ministers have decided to push ahead and make the approach the basis of all adult social care services across the UK. Ivan Lewis, the care services minister said: "There is absolutely no doubt that people who use individual budgets say it has transformed their lives."<sup>4</sup> ICT has been the enabling tool in linking the six government departments whose efforts and resources needed to be integrated to implement these trials, and has also been used by many of the disabled people and their carers to access necessary information and make their choices.

## References

- Behn, RD (1995). *The Challenge of Evaluating M-Government, E-Government and I-Government: What Should Be Compared with What?*, Belfer Center for Science and International Affairs (BCSIA), Kennedy School of Government, Cambridge, Massachusetts, USA.
- CapGemini (2007). *The User Challenge: Benchmarking The Supply Of Online Public Services. 7th Measurement for the European Commission, DG INFSO, September 2007.*
- Codagnone, C. & Boccardelli, P. (2006). *Measurement Framework Final Version, Delivered within the eGEP Project for the European Commission, DG Information Society, Unit H2, retrieved 10 August 2008 from [http://82.187.13.175/eGEP/Static/Contents/final/D.2.4\\_Measurement\\_Framework\\_final\\_version.pdf](http://82.187.13.175/eGEP/Static/Contents/final/D.2.4_Measurement_Framework_final_version.pdf)*
- European Commission (2000). *The new programming period 2000-2006: methodological working papers. Working Paper 3, "Indicators for monitoring and evaluation: an indicative methodology", DG Regional Policy, European Commission, Brussels.*
- European Commission (2005). *The impact of eGovernment on competitiveness, growth and jobs. IDABC eGovernment Observatory, Background Research Paper, February 2005.*
- European Commission (2006). *Impact assessment guidelines. SEC(2005)791, 11 June 2005, with March 2006 update.*
- Foley, P. (2005). *The real benefits, beneficiaries and value of eGovernment. Public Money and Management, January 2005, CIPFA.*

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<sup>4</sup> *The Guardian* newspaper, 10 December 2007.

Heeks, R. (2006). Understanding and measuring eGovernment: international benchmarking studies. Paper prepared for UNDESA workshop, "E-Participation and E-Government: Understanding the Present and Creating the Future", Budapest, Hungary, 27-28 July 2006.

Jansen, A (2005). Assessing E-government progress– why and what. Department of e-government studies, University of Oslo, Norway: [http://www.afin.uio.no/forskning/notater/7\\_05.pdf](http://www.afin.uio.no/forskning/notater/7_05.pdf)

Leadbeater, C and Cottam, H (2008). The user generated state: public services 2.0. <http://www.charlesleadbeater.net/archive/public-services-20.aspx> (accessed 7 March 2008).

Millard, J and Horlings, E (2008). Current eGovernment trends, future drivers, and lessons from earlier periods of technological change. Interim Report of the eGovernment 2020 Vision Study for the European Commission, DG Information Society and Media, eGovernment and CIP Operations Unit, May 2008.

Millard, J; Shahin, J et al (2006). Towards the eGovernment vision for EU in 2010: research policy challenges. For the Institute of Prospective Technological Studies, Seville, Spain, European Commission, DG JRC.

Millard, J; Shahin, J et al (2007). Study for the Impact Analysis of FP5 e-Government projects. Under the WING Framework Contract for Impact Analysis, for the European Commission, DG INFSO, April 2007.

OECD (2006). eGovernment as a tool for transformation. Organization for Economic Co-operation and Development, Paris, 26-27 October, 2006.

OECD (2007). eGovernment as a tool for transformation. 35th Session of the Public Governance Committee, 12-13 April, 2007, GOV/PGC(2007)6, OECD, Paris.

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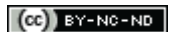


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