VINNOVA REPORT
VR 2009:26

CITIZENS´ SERVICES
- NORDIC AND BALTIC RESEARCH NEEDS

LARS ALBINSSON

UNIVERSITY OF BORÅS
& CALISTOGA SPRINGS RESEARCH INSTITUTE

Title: Citizens´ Services - Nordic and Baltic Research Needs
Author: Lars Albinsson - University of Borås & Calistoga Springs Research Institute
Series: VINNOVA Report VR 2009:26
ISBN: 978-91-85959-83-9
ISSN: 1650-3104
Published: November 2009
Publisher: VINNOVA – Verket för Innovationssystem / *Swedish Governmental Agency for Innovation System*
VINNOVA Case No: 2007-03559

About VINNOVA

VINNOVA, Swedish Governmental Agency for Innovation Systems.

VINNOVA´s mission is to *promote sustainable growth*
by funding *needs-driven research*
and developing *effective innovation systems*.

Through its activities in this field, VINNOVA aims to make a significant contribution to Sweden´s development into a leading centre of economic growth.

Services in public administration can be performed and provided more effectively and at a lower cost by using electronic, interactive services. Major market opportunities, on the international market too, will arise for companies that develop and supply new types of services and products and technical solutions. VINNOVA's programme E-Services in Public Administration covers organisations in public administration (authorities, municipalities, county administrative boards, county councils) and the companies that supply IT and knowledge-based services to them. The focus as far as growth is concerned is on increasing cost-effectiveness in public administration by means of interactive, electronic services and on the demand for the development of new IT-based services that will thus be created.

The VINNOVA Report series includes external publications and other reports from programmes and projects that have received funding from VINNOVA.

Research and Innovation for Sustainable Growth.

Citizens´ Services
- Nordic and Baltic Research Needs

by

Lars Albinsson

University of Borås & Calistoga Springs Research Institute
lars.albinsson@maestro.se

This publication is part of a NORIA-net project entitled "The Citizens' Services - Turning public-private outside-in", financed by NordForsk.

Preface

Citizens are increasingly becoming e-citizens, using Internet and mobile phones more and more in their everyday lives. This allows them to demand services that are developed from a citizen perspective and are integrated between the public and private domains.

Today the majority of services, public or private, are developed by the service-provider organisation as the dominating perspective, not the citizen.

Therefore, by financial support from NordForsk and under VINNOVA's leadership and guidance, the work has been pushed forward to develop a research-funding program in order to drive change in the direction of:

- service development with the citizen in focus;
- research projects aiming at creating useful knowledge for service developers and providers, public as well as private;
- increase in collaboration between public and private services.

The aim of the NORIA-net Citizens' Services project, launched in January 2008, has been to design a joint Nordic/Baltic research program that meets the citizen's needs and resulting in the clients' "ideal research program". The programme plans for a first Nordic/Baltic eGovernment call in 2010.

Client work shops have been organized in all Nordic and Baltic countries during 2008 and 2009, with active involvement of public and private service organisations.

The coordinator of the project is Madeleine Siösteen Thiel, VINNOVA. Partners, aside from Sweden, are Iceland, Estonia, Latvia, Lithuania and Norway. Observers have been invited and participated from Denmark and Finland.

VINNOVA cordially thanks NordForsk for the financial support, Lars Albinsson for successfully moderating workshops and initiating the project, as well as all the project partners and participants in the workshops for all their contributions and active involvement in the development of a joint eGovernment programme for the Nordic-Baltic region.

This report includes the result of the discussions at the workshops, and will be presented in Malmö on November 18 at the *Preconference for the EU 5th Ministerial eGovernment Conference*; "eGovernment Research and Innovation: Empowering Citizens through Government Services across Sectors and Borders".

VINNOVA in November 2009

Ulf Blomqvist
Head of Services
and IT Implementation Department

Madeleine Siösteen Thiel
Project Coordinator

Contents

1 Summary

What are the key issues in citizen-centric service development that research should address? People engaged in the development of services for citizens, both public and private, in six countries – Iceland, Sweden, Lithuania, Norway, Estonia and Latvia – have participated in half-day workshops during 2008-2009 to discuss the challenges research projects should take on, which output is needed and how to conduct them in order to better help service developers. This work has been a key part of the project "Citizens' services – Turning Public Private outside in".

In general, the situation in the six countries is very similar and key findings include:

- The need to improve cross- and inter-organizational service development. There are too many "silos".
- The need to better engage citizens in service design, to increase the use and effectiveness of services.
- The need for more collaborative research projects with researchers, and public and private service developers in an action-oriented and experimental mode.

2 Introduction

This report presents the findings from workshops in six countries with participants from both public and private organizations who work with development of services for citizens. The workshops were conducted as part of the NORIA-net Citizens' Services Project. The report introduces the Citizens' Services Project as background information and continues with presentations of the workshops. The remainder of the report presents findings from the workshops, providing insight into which situations the service developers find most challenging, output from future research projects they would like to see and the way in which such research projects should be conducted.

2.1 The NORIA-net Citizens' Services project

The project "Citizens' services – Turning Public Private outside in", which started in January 2008, is based on the observation that citizens are increasingly becoming e-citizens, utilizing the Internet and cellular phones. This leads to thoughts of integrated services, including user-conducted integration of services. The demands for services developed from the citizen perspective is increasing, which is also leading to an overlap between public and private services.

The majority of services, public or private, are still primarily developed from the perspective of service provider organizations, not from the perspective of citizens'. So-called user-centered design has thus far mostly affected the surfaces of services, not so much the services themselves, their structures or contexts. In particular, there is a lack of integration between services that are meaningful and useful to citizens.

Research along these lines has not yet made any greater impact on service development. A recent study on eGovernment in the EU [1] presents several challenges:

- The general public and industry are not involved in decisions concerning which e-services should be developed next.
- There is a need for "understanding the needs of different users/stakeholders of eGovernment research."
- There is no clear correlation between academic research and the research needed by public administration and the ICT (Information and Communications Technology) industry.
- The development of eGovernment research is not correlated with long-term eGovernment vision and strategy.

- Cooperation between researchers, industry and public administration is not close enough.
- In order to introduce innovations, one must encourage cooperation and more open communications between the public sector, academic institutions and ICT companies PPP (public-private partnerships).
- eGovernment is funded though fragmented funding.

Other research also point to the importance of driving the development of services from a citizen/client perspective and in collaborative networks with diverse members. C. f. [2] [3] [4, 5] [6] [7] [8].

The field is characterized by several strong developments:

- Increased investments in electronic services
- Increased international collaboration, especially within the EU, but also globally
- Increasing overlap between public and private services
- Many public organizations shifting focus from being authorities to becoming service providers

Given this situation and that spending on ICT (for government and health activities) within the EU amounts to €30.8 billion [1], it is necessary, challenging and beneficial to take a few steps in this somewhat new direction.

The Citizens' Services Project proposes development of a research-funding program to promote change to promote:

- Service development based on the perspective of citizens.
- Research projects with a focus on creating useful knowledge for service developers/service providers, both public and private.
- Increased collaboration between public and private services.

This is accomplished by viewing the development of the program as *service development* in its own right, involving public and private service organizations that wish to put citizens at the center of service development.

2.2 NordForsk-funded project

The Nordic countries have a strong position and are far ahead both in research and practice in the field of government services. For instance, Sweden, Denmark and

Finland are all among the eight leading countries in the EU in eGovernment online availability[1].

Nonetheless, NordForsk wishes to see increased research collaboration between the Nordic and Baltic states. It is therefore funding, under the NORIA-net program, the Citizens' Service project, as an important step in the formation of a joint Nordic-Baltic research program.

[1] eGovernment online availability (country, percentage, position in the EU): SE 74% (4), DK 63% (7), FI 61% (8) (EU25 50%) . [1]

3 Summary of results and findings

This section summarizes the results and findings.

3.1 Challenges

The key challenge is the structure of government and how this affects service development. The basic principle for organization of the public sector is the *authority*; an organization that puts demands on individuals based on the general interest of the public. Today, however, both the citizens and the organizations themselves are increasingly viewing the public sector organizations as *service providers*. The concept of citizen centricity is part of this movement. *Authorities* are organized according to the area of authority. From the citizens' perspective, services will often however need to integrate several authorities and may also include private services, in an intertwined process.

The public sector appears to the service developers to be locked into silos of specializations, which the new citizen centric services need to cut across. Legislation, culture, management structure of the public organizations does not support this type of cross-organizational development, and way even forcefully hinder it. This is also visible in the lack of common infrastructure in government, as common entrances and identification systems.

The citizens need improved support to be able to participate or in other ways affect the service developments. Few of the public services are frequently used by any individual, therefore the citizens are most often unskilled and inexperienced users of them. Citizens are also diverse. The result is that few citizens have developed well-founded opinions and ideas of how public should work in more detail. This complicates the service design.

3.2 Ideal Outcome

The main outcome of research the service developers are requesting is improvement in the overall service development process; all the way from inception to service being used by the concerned citizens. This would include the service design aspect, the multi-stakeholder aspect, and the challenges of organizational citizen diversity, as well as the challenges of making efficient use of emerging technologies.

In addition to the holistic development process they point out three issues:

1 A better conceptualization of “services”, especially in contrast to “authority”, that suits public sector conditions and circumstances.

2 Research having a real impact on society, bringing change to the structural obstacles discussed in the challenges above.

3 Common measurement of effects to aid the evaluation and benchmarking of services and service development.

3.3 Ideal research project character

There is a strong urge for open collaborative research projects that involves researchers, public and private practitioners. A basic “action” approach is favored; i. e. research carried as real life experiments. The service developers also feel that many challenges span several academic fields and therefore the research projects should be multidisciplinary and take the practical situation as its focus.

There are strong preferences that research projects should adapt to the timeframes of the practical projects, and preferably span 1-2 years.

3.4 Conclusions for joint research programme

These conclusions are mostly derived from the Finish and Danish workshops, which had a higher degree of participants from the research community.

In general there is a strong support for the cross-regional collaboration. Especially the issues that are considered to be “soft”, i. e. social, political and culture are interesting to explore internationally. Areas of cooperation, which could add value, include pilot projects, test cases. The outcome may be both positive and negative in terms of the findings as pilots and test cases may ensure success or hamper innovation. This includes identifying common/unique Nordic-Baltic traditions and value (e.g. work environment, ethics, consensus seeking).

There are a number of suggested objectives for a joint research programme:

- Multidisciplinary Nordic-Baltic cooperation and transfer of knowledge, including academia as well as private and public organizations through e.g. an open democratized innovation strategy.
- Citzen-centric evidence-based improvement of eGovernment services and public governance with a European perspective respecting the diversity.
- The research should be publicly available and transferable, and should have the aim of making an impact on public attitudes, structures and services.

- Sustainable shareable and trust-generating citizen-centric innovation in governance and processes using ICT as an enabler (increasing effectiveness and efficiency and democracy and eliminating bureaucracy)
- Turning Service Development towards the Citizens:
  - Developing personalised citizen services driven by input and dialogue with citizens, both during service design and also during service delivery.
  - How can the fine-grained knowledge which only citizens posses about their personal situation be incorporated into the services they actually receive? The purpose will be to improve the quality of the citizen's life and well-being overall.
  - This research would benefit from a cooperative, multi-disciplinary approach with a focus on experimenting with, for example, new social networking technologies, perhaps by working with 'lead' citizens in open living labs environments.
  - Aiding citizens in expressing their needs.

4 Citizen-Centric Services

Thus far, the majority of electronic public services have been developed based on existing services. These services have often been performed by staff members using information systems developed to support their work and to make processes effective from the perspective of the organization. The arrival of the Internet inspired organizations to complement many services with a web-based interface, enbabling self-service. In public services, these efforts – while often useful – also revealed problems in the *structuring* of the services; the underlying services were not well suited for the citizens:

- *Organization* follows internal structure

Each organization and each department are responsible for their respective services. This does not take into account that a citizen may need several disparate services to complete what the citizen views as a single matter. This is illustrated below, by the citizen having to use different services from different organizations in the process of building a house.

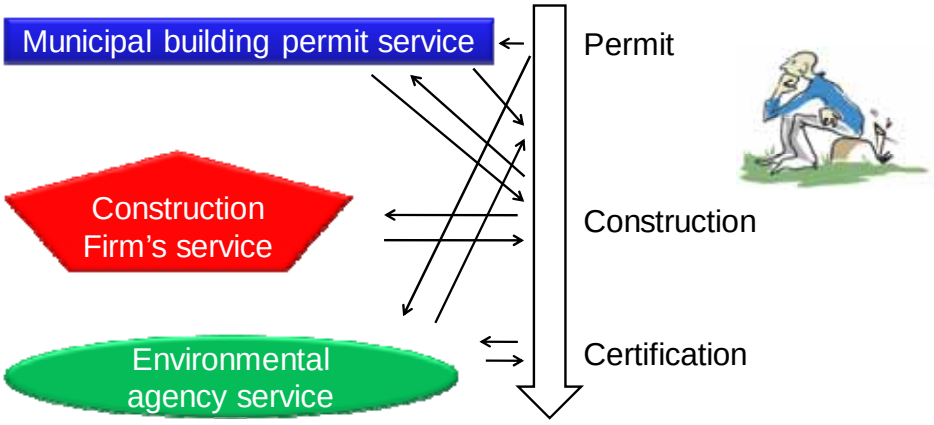
- *Process* from administration

The process is designed and made efficient from the administration's point of view. This may require the citizen to perform tedious tasks in a seemingly illogical sequence. This is illustrated below by a citizen having to *complete the building* before receiving an environmental certificate, rather than obtaining certification for *the building plans* .

- *Language* of experts

As the underlying services are designed to support the professional staff, the language and terminology may not be well suited to the citizen layman. In the example of building construction below, the differences between the following terms may not be immediately obvious to an ordinary citizen: building common area, floor common area, floor usable area and rentable area.

There is also an increasing overlap of public and private services as public markets are deregulated, public services are privatized or outsourced to private companies, and as the market grows for private services that assist citizens and businesses in managing public sector services.



From the citizen's perspective, services are often fragmented and poorly integrated

4.1 Example

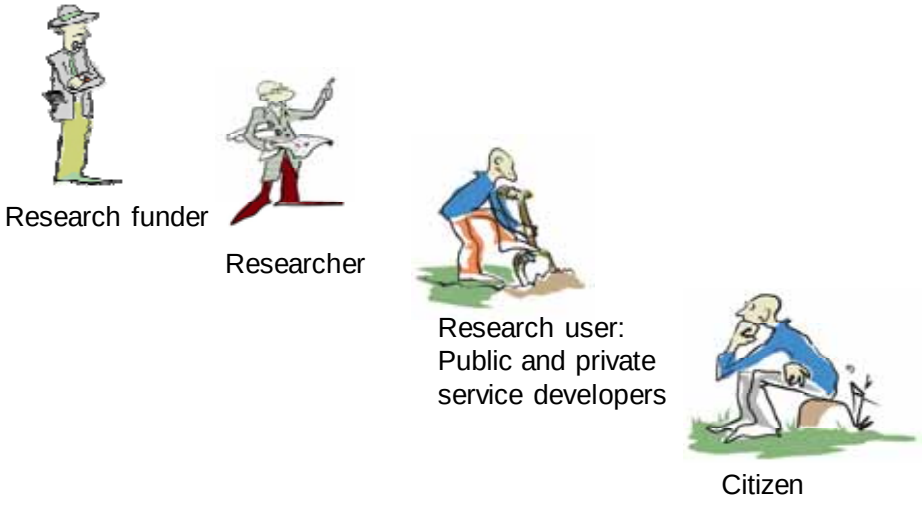
In the Swedish city of Skellefteå, renewal of the downtown area is being discussed. The planning process has changed from being a city council matter to involving both citizens and private companies. The council's web forum quickly filled with links to other, private forums, to proposals from architectural firms and to other cities in Europe. The discussion covers issues of democracy as well as profitability in retail business and emerging trends in the cultural sector. For instance, the establishment of an IKEA store in Haparanda, 160 miles away, is viewed to have significant impact on shopping patterns and the flow of people. The local press conducts their own debates and presents various proposals.

Only by *viewing the situation from the citizens' perspective* is it possible to arrive at any complete or enhanced picture of the services, private and public, which make up the planning process, a process that in itself is public due to the city council's monopoly in urban planning.

These are fundamental questions that are also dependent on cultural developments in different countries.

5 Citizen-Centric Research

The objective of the Citizens' Services Project is to conduct a research program by adapting a citizen-centric approach to actual program creation. This means *forceful involvement of public and private service organization*s that wish to *put citizens* at the center of service development. This can generally be viewed – to certain extent – as reversing the traditional chain of research funding.



The chain from research funding to the citizen

In many cases, research-funding programs are designed by research funders and researchers. The concept of citizen centricity would ideally ask the citizens which research they see the need for. This is unpractical however, as few citizens has any developed views on research, or the time and energy to develop such views within the scope of our project. We are therefore focusing on the needs of service developers, particularly those who put citizens at the center.

5.1 Co-Design Approach

The identification of research needs has therefore followed a co-design process [C. f. 9]. The objective is to discover *situations* in which *service developers* will have use for future research projects. For these situations, the service developers will be

aided in designing an *ideal scenario* for how they would prefer for research to be conducted and the areas on which research should focus.

*Clients (*or *beneficiaries)* of the research projects under the program are *service developers*; *specifically, those who head service development* within public and private organizations, who are interested in *increasing the focus on citizens* and who wish to explore new models of public-private partnerships.

Other *stakeholders* to be considered in the process of designing the research program are:

- Researchers in, for instance, government services, eGovernment, service industries, ICT and service business models.
- Nordic funders of research, both designated agencies and other government bodies.
- The end-clients are naturally the citizens.

In order to develop the research program, workshops with service developers were arranged to find the ingredients for the service developers' *ideal research program*. The project will result in *a research program that identified service developers think is most useful and important*.

5.2 Client Workshop Methodology

One workshop took place in each of the participating countries. The workshops followed the same format, with the same agenda[2]. There was no information presented on the results from other workshops. The overall objective was to make the results of the different workshops comparable and biased in similar way. The approach is a qualitative research approach and is intended to reveal a broad set of issues[3].

These workshops can be viewed as a type of in-depth market research on research results. Market research is often criticized for being less innovative and usually allowing people to express views about things that already exist [8]. The co-design approach focuses on *ideal situations* to overcome these shortcomings. *Ideal* allows participants to be more future oriented and *situations* shifts the focus towards the participants' work, rather than on research projects and the academic view of knowledge.

Having one workshop in each country enables the discovery of similarities, as well as differences relating to culture, for example.

[2] There was one exception – in Iceland, the project partners participated. This is further discussed in the appendix on methods.
[3] This is further developed in the appendix on methods.

Three questions were established on which to base discussions:

- What are the challenging situations in creating citizen-centric services?
- What is the ideal output of research projects addressing these?
- How should such research projects be conducted?

The workshops followed the same pattern:

An introduction to the project and concept of citizen centricity
Presentation of the three questions
The participants were divided into groups of 3-5 persons.
– The groups were asked to discuss the first question and write challenges on Post-it notes.
– Each group presented their findings and put their notes on a flip chart.
– A joint discussion followed.
The pattern was the repeated for each question.

The approach inherently causes the groups to cluster their findings, which was further aided by the workshop leader.

5.3 Participants

A partner in each country was asked to select and invite participants – service developers, both public and private – to the workshop in their countries. Participants included city council and government staff, personnel from private service companies, as well as consultants and representatives from software companies. The objective was to attain a broad, border-spanning discussion in each workshop. Approximately 15-20 people participated in each country.

A difference was that the Swedish workshop was arranged at a major conference on public services ("the public space"[4]). At this workshop, the participants selected to engage based on topics and presentations in the conference program.

The participants were divided into groups based on their organizational affiliations. The largest group was made up of those following our definition. Two other smaller groups consisted of researchers or research funders. In Lithuania, an academia group participated. This allowed us to also present the findings from these other stakeholders.

[4] Offentliga Rummet in Swedish

5.4 Client Workshops

Client WS 1	April 29	Reykjavik	Iceland
Client WS 2	May 4	Stockholm	Sweden
Client WS 3	June 12	Vilnius	Lithuania
Client WS 4	September 5	Oslo	Norway
Client WS 5	September 22	Tallinn	Estonia
Client WS 6	March 18 (2009)	Riga	Latvia

5.4.1 Additional workshops

In Finland a workshop was held to both confirm the findings from the other countries and to get suggestions for thematic priorities in a research programme.

A workshop was held at the "public space" in Norrköping 2009, concerning findings and research directions.

In Denmark a workshop was to held to confirm the results from the other countries and to get suggestions for which areas that would benefit most from a cross-regional research programe.

The conclusions from these two workshops are included in the summary above.

PRIMARY RESULTS: Research themes, results and project structure

This section presents the primary results from the client workshops. The presentation follows the workshop structure and the questions addressed by the participants. It includes both the findings presented on flip charts by the participants and the workshop leaders' interpretation of the discussions[5]*. Note that while there may already be research on the issues raised here, service developers were not aware of any existing research results, did not consider them useful or accessible, or for some other reason, the research had not had a practical impact.*

[5] This is further developed in the appendix on methods.

6 Challenging Situations

The challenging situations were presented as situations that are problematic, critical and/or providing the best opportunities for developing citizen-centric services. This not only allows problem identification, but also discussions on useful ideas and good examples. The findings are clustered under three headlines: the challenge of discovering citizens' needs, the structure and culture of governments, and the lack of common infrastructures.

6.1 Turning service development towards the citizens

A major concern is how to find out what the citizens want. Several factors were pointed out:

- Citizens are diverse.

There are differences in behavior, expectations and ideals between different groupings. The most often recurring grouping is age – young, middle age, elderly – with younger persons perceived as more proficient and demanding in regards to services in general and electronic services in particular. Age also influences various service needs: younger persons require education and housing; and middle-aged persons often have families, generating needs for schools, healthcare, etc. The newly retired should be separated from the higher age groups, as people in their sixties and early seventies are now generally both healthy and active. The increasing group of 80+ requires extensive health treatment and daily care.

There are also differences between people with different levels of education, technical skills and other factors that compound the challenges of determining useful citizen needs and wishes. Combined with the wide variety of public services, this is a major challenge.

- Citizens are distant from the developments of services.

This makes the participation of citizens, which is deemed necessary, difficult to organize and make productive. There are few established forums and methods for citizens to participate in the design and development of services. Many citizens do not use the services that already exist – either due to not being aware of them or for other reasons – which also challenges evaluation of existing services.

- The citizens don't know what they need.

In general, citizens do not spend a lot of time thinking about new services, and simply asking them what they want is subsequently of little value. The diversity of services

and the way in which needs change over time make it difficult for citizens to clearly express their ideas, as their experience with any particular situation is minimal. Typically, citizens only have children a few times, only build a house once, etc. The service developers also express a need for broader idea identification, wanting an influx of ideas that does not originate solely from public services.

Participants express a certain frustration that after all these years, we are in still in the position of having insufficient insight into citizens' needs and wishes.

6.2 Government Structures and Culture

The notion of citizen centricity has many far-reaching implications for service-providing organizations, especially government and other public sector organizations but not limited to these.

- Government structures do not support citizen centricity.

There are many different types of structures that are designed from a government-internal perspective and therefore ignore, or even hinder, citizen-centric services. The perception of each organization and department as a "silo" is recurring, implying that existing services are designed as monoliths, optimized from an internal perspective, while citizens' needs cut across several silos.

These silos create barriers from several aspects; the key ones are:

- Laws regulating the activities of public organizations: Government organizations' activities in particular are regulated by law. These laws are not usually designed from a *service* perspective and therefore may effectively block citizen-centric service approaches even though this was not the intention.
- Financial issues concerning cross-organizational services: The budgets are often set based on political negotiations and it is perceived as difficult to make joint investments. This is especially problematic in public-private partnerships, where the flow of funds between public and private organizations is both culturally and legally challenging.
- Collaboration between central and local public services (for instance, between national agencies and city councils): There is a lack of collaborative tradition between national government agencies and local city councils. The differences in size, resources and agendas between organizations make practical joint services difficult to achieve.
- Flow of information between institutions: Traditionally, legal and technical implementation, aggregation and sharing of information between different organizations become a larger barrier than often expected.

- Overall coordination of electronic services, especially from the national perspective: It is perceived that a national coordination of electronic services would greatly benefit development. This would make prioritization explicit and increase awareness of ongoing efforts and initiatives.
- Fragmented service development by small entities addressing complex requirements leads to competition for improvement budgets.
- There is a need to change attitudes.

The service developers express a need for new leadership on several levels – political, management and with the individual civil servants. There is a lack of incentives for horizontal collaboration and cross-organizational collaboration, especially concerning collaboration between public and private organizations. There is also a need for new and appropriate:

- Change management: The processes for implementing changes in the public sector could be improved. The tradition is more focused on stability than change.
- Project management: The current project management approaches are perceived as insufficient for the challenges at hand. The narrow focus on production according to specifications could be expanded to cover design and implementation in a dynamic, multi-stakeholder situation.
- Service development approaches: There is a general lack of approaches to service development. According to client experiences, IS development approaches and other methodology are not sufficiently addressing the aspects of service development.
- Understanding of the values of information and services

There is a lack of tools for measuring the financial values of new services. The major focus is often on cost. For instance, the financial gains from shifting from document-based services to electronic services – viewed over time and in the dynamics of increased service developments – could be greater than what is generally perceived today. This is considered a key issue in increasing awareness of the benefits of electronic services on all levels of government.

6.3 Common Infrastructures and security

The establishment of several common infrastructures is perceived as crucial, both to the development of services and the uptake of services used:

- A common system for identification of citizens and organizations

Even in countries where such systems exist, such as Estonia, it has been reported that the systems are not often used in services. This may indicate that the establishment of a

common identification system is not enough in itself. There is also a need for further research in the use of digital signatures.

- Behavioral changes: It has been experienced that digital signatures require and inspire behavioral changes among citizens and service providers. These have not yet been explored in any useful manner.
- Legal issues: There are many unresolved legal issues regarding the practical and easy use of digital signatures.
- Ease of use: To be widely used, digital signature systems must be easier to use, both for citizens and for service developers. Selections of digital signature systems are usually based on technical or security considerations, instead of on the situations in which citizens are to use them.
- System support and the possibility of a European standard: National and international support for digital signature is viewed as a key enabler. This also includes the concept of an official electronic address that would provide the ability to reliably send electronic communications to all citizens.
- There is a need for further investigation of the relationship between personal data protection and service ease-of-use.

The situation today is that high security means less usage; an undesirable correlation. The citizens are concerned with integrity, while at the same time, demanding accessible, easy-to-use services. Citizens' varying notions of integrity, trust and security are not sufficiently defined or understood to support the development of break-through technology or services.

- Interplay between different channels

Citizens often access services through various channels – the Internet, cellular/mobile phones and landline/fixed phones – and from offices. Sometimes a citizen will prefer different media or channels for dealing with various aspects of the same matter. There is a need to improve understanding of how the interplay between channels makes the services coherent, attractive and simple from the citizens' perspectives. This also includes new types of electronic services, such as "silent" services that are carried out automatically on behalf of the citizen, requiring little interaction.

7 Ideal Output of Research

The ideal outcome is the service developers' wishes for outcome of research projects. Ideal research output encompasses many types of results, both in the form of knowledge and actual change.

7.1 Improvements in overall service Development processes

- Improvements in overall processes for service development

Processes, projects and efforts to develop services with a citizen focus are still ad-hoc based and more or less chiefly dependent on individuals. Results that can improve the situation should include:

- Better ways to conduct development projects: In response to the challenges above, service developers want better ways to conduct development projects. This would include the service design aspect, the multi-stakeholder aspect, and the challenges of organizational diversity, as well as the challenges of making efficient use of emerging technologies.
- Policies better adapted to support citizen-centric service development: Policy in general must also consider the service perspective, which often will be a new dimension.
- Improved models of cooperation: There is a lack of tested and accepted models of cooperation, both between government agencies and departments, but even more importantly, in private-public partnerships.
- Research projects on services should result in actual pilot projects.

It is considered vital that research projects develop and test their results, methods, systems, etc. in actual situations. There is a need for more experiments and tests, which is perceived to be instrumental in driving development, and providing a solid base for larger investments and initiatives.

- Better ways to handle emerging technology, including open standards, mobile technology and biometrics

New technologies appear continuously, and costs and difficulties in adapting to and adopting them are significant. There are needs both for projects supporting the uptake of new technologies on an individual basis, as well as for improved strategies for dealing with the technological surge in general.

7.2 Research projects having an Impact in society

- Establishment of a common gateway to the public sector

There are examples of attempts to establish common electronic gateways to public services in most of the participating countries but with no apparent success. While no one has refuted the concept of a common gateway, there is still no working model for attainment. There is a clear need for exploring this issue further.

- There is call for the legal and organizational changes that are deemed necessary for public-private partnerships.

This means not only a description of these changes, but also executing the processes for achieving them while still respecting democratic processes. The service developers perceive a strong drive towards increased public-private partnerships, which is hampered by legislation, both in terms of excessive regulation of public organizations as to what and what not they may do, and in terms of a lack of models for public-private cooperation. In this respect, the service developers urge actions that lead to *change*, not just suggestions.

- Projects resulting in awareness and increased use of existing services

This is a delicate issue as the lack of use of existing services can be viewed as a service design failure. Nonetheless, the service developers feel that awareness is an important issue. The call is for efforts leading to greater awareness, among decision makers, politicians and citizens. Awareness may imply educational approaches, as e-services require some initial skill to use, evaluate and understand.

- Innovative and creative

Research project may also be a useful context to explore new, even radical or ground breaking ideas. At least some of the research should have this quality.

7.3 Common measurement of Effects

- Key Performance Indicators (KPIs)

Especially for public services, there is a need for widely accepted international KPIs. [Author's comment: Most participating nations have been able to present at least one survey that put their respective countries at the very top of ICT take up and usage.] The diversity of surveys combined with the lack of more generally accepted KPIs makes benchmarking difficult. Benchmarking is considered an effective tool both in guiding efforts and in motivating and prioritizing projects. These KPIs should include measurements of impact on society. There is a lack of measurements that take broader impact into account. For instance, in some rural areas the use of electronic public

services is a key driver in increasing uptake of ICT, which in turn is necessary for education. This type of broad, indirect or secondary impact is seldom measured today.

- Measurement of "customer satisfaction" regarding the public sector

The "customer satisfaction" surveys of today most often focus on a single service or a single organization. These should be complemented with surveys from a broad citizen-centric perspective. The service developers deem that this would provide an alternative view, likely to indicate needs for developments different than those derived from the more narrow surveys.

- There is a lack of readily accessible information on best practices, as well as failures.

A useful way of sharing is considered an important innovation platform in itself. The opinion of service providers is that one often learns as much, or perhaps even more, from failures than from success stories. Sharing of failures, though, is considered a delicate matter. To make any sharing system work, it has to be designed as a practical tool for those fully occupied with planning or executing projects. Even if the service developers are aware of the existence of sharing tools and sites, obtaining information is too inefficient.

- Follow-up research on effects after services are launched

Many projects have no budgeted funds remaining after a service is launched, and key project members often dispersed to other jobs. There is subsequently a lack of follow-up studies, both with respect to the projects themselves and the services developed. Any follow-up is often disconnected from the project that developed a particular service, which is considered to impede learning.

7.4 Stronger conceptualization of "Service"

- What is public *service* and *authority?*

Is it a good "service" for a citizen to be stopped by the police for speeding? The concept of service does no directly translate from business into the public sector. The relationship between service providers and citizens is often different, as a citizen may not freely choose a service provider or even whether to use the service at all. This is also connected to what "authority" means in the public sector under a "service paradigm". The conceptualization of service thus far has been imported from business, with the online bank as the archetypical electronic service. This issue needs to be further developed to promote innovation of new service concepts. This will also help citizens to develop more useful expectations, fitting the context of the public sector.

This conceptualization may include the relationship between non electronic services and classifications of the possibility, ease and consequences of turning existing services into e-services.

8 Ideal Research Project Activities

How should a research project be conducted to be of use? Many of the participants had little experience of research projects; research and researchers being relatively invisible in their work. Nonetheless, they could express ideals for how research projects could be more useful components in service development and the furthering of knowledge.

8.1 Partners

- Crucial that projects include academia, and public and private practitioners

There was a unanimous view that partners from all three sectors must participate in research projects. Lacking the perspective of one or two of these partners is considered a "show-stopper". They perceive that all three partner types have essential contributions to make. This also relates to the issue of finding out what citizens want and need.

8.2 Cooperative Approach

- Allowing both more active and passive stakeholders to participate

It is unlikely that all partners will be able to expend an equal amount of energy and resources on a research project. A key issue is therefore finding models for cooperation that allow for different types of engagement.

- Establishment of useful roles and division of work between partners

Assuming that many people from all of the three partner types have little experience from collaborative research projects, it is necessary to establish useful roles that people can relate to and effectively fill. There is also a need for establishing models for division of tasks. The service developers feel that there is concern by all parties in engaging in joint activities as it is unclear as to what is required of them.

- Covering all phases of projects

Research projects should preferably follow all the phases of a service development project. The project-holistic perspective is considered a key quality. This includes the early phase of project conception, as well as follow-ups and aftermaths.

- "Action research"

The service developers strongly prefer research project to be of the "action research" type[6], meaning working in practice, and combining and developing both theoretical and practical knowledge. There are two arguments given. The first is that they believe in learning by doing. The second is that they expect the presence of all three partners to contribute to the success of the practical part of a project.

- Multidisciplinary

Several of the challenges spans multiple academic fields; Economics, Social sciences, law, Technology etc. Projects should therefore take it basis in the practical situations and comprise a mix of researchers, rather than be split up in research fields.

8.3 Science parks for the public sector

- Why aren't there any?

Collaboration and experimentation is necessary and the types of open experimental arenas used in operating businesses should also be adopted in public services innovation. Geographical proximity fosters long-term relationships and increases spontaneous connections, as well as increasing the chances of serendipitous meetings.

8.4 Openness

- Research results available to all

Available to all implies more than just the sharing of documents; it calls for results to be in a form and language that are useful to the practitioners. It also implies that the practitioners must take the time to explain their perceptions to researchers.

- Test new services and ideas live

Research project should embrace an open and experimental style. This includes deploying public beta versions, and establishing platforms for students and other citizens to test. The argument is for collaborative exploration and innovation in an open setting, which is deemed more effective than the in-house and closed models traditionally utilized in public service development.

8.5 Length

- 1–2 years

The service developers want short projects, matching the typical cycles of development projects. This means about two years for project development frameworks, methods

[6] This should be taken in wider sense based on the term's general meaning, rather than the more precise definition of *action research* in the scientific community. (There is, of course, a considerable commonality.)

and other general results. Six months to one year is considered suitable for projects more oriented towards a specific service. They should ideally follow the public sector budget cycles in order to increase close collaboration between researchers and actual, full-scale projects.

9 Differences between Countries

The service providers also pointed out significant differences between the participating countries.

9.1 Size

The participating countries differ considerably in size, although all are internationally regarded as small. Iceland, with approximately 300,000 inhabitants is the smallest and lacks, for example, a regional structure of government, something which is a key component particularly in the governance of Norway and Sweden, for example.

Size also has an impact on the distance between political leadership and citizens in general. In Iceland, some 30% of the voters in the last election were reported to have had direct contact with at least one member of parliament. This figure for the other countries is likely to be significantly lower. This distance factor may have an impact on the scope of change possible for a project. In larger countries, ambitions are often lower as it perceived to be too difficult to attain a far-reaching scope.

9.2 Level of Education

The Baltic countries argue that the generally low level of education, especially in the rural districts, is a significant factor. While it is considered to be hampering to development, it also is an area where the uptake of electronic services could have a positive effect beyond the immediate use, as it provides an inroad into the digital world and may help citizens in their wider education and development.

9.3 Infrastructures

While the Nordic countries in general have large landline-based telephones systems, allowing broadband connections for most citizens, the Baltic countries are more dependent on the construction of mobile broadband networks. This causes differences in preferences for citizens and service providers. It also affects the service developers as they have to adapt their services not only to the different technologies but also to the varying usage contexts.

10 Other stakeholders' input

In Sweden and Lithuania, non-service providers also participated – in Lithuania, researchers; and in Sweden, both researchers and research funders. There were of course a number of overlapping issues, particularly on the need to better engage citizens in the design and development of services. The researchers also, unsurprisingly, stressed the need for more and longer research funding. There were three points worth mentioning in this context:

- Monitoring systems for services

There is a need to monitor services, not only individually but as systems from a citizen's point of view. This implies continuous, systematic follow-up of services:

Developments

Demands/needs

Usage

- More funding for dissemination

There is a need to focus more resources on dissemination of results, experiences, pilot studies and shareable services. Too much emphasis is put on producing results; more energy should go into making them known.

- Need for "models" for service brokers

If there is more sharing of services and more collaboration on service development and production, there will be increased needs and opportunities for brokers. These organizations will work to connect services, people, needs, problems, ideas and resources. How should such brokerage organizations be set up to work effectively?

APPENDIX

11 Methodological Issues

The basic methodology has been discussed above. However, three issues must be addressed in more detail. (I wish to thank Prof. Olov Forsgren for his review of this section.)

11.1 Selection of workshop participants

The selection of participants was made by the national representatives in their respective countries. The advantages of this are that key players could be identified and engaged more effectively than if project management in Sweden had arranged the invitations. However, this also implies that the local organizers bias selections at their own discretion. Because we have found that key players are often pressed for time and difficult to engage, we think this trade-off was to our advantage. We do not think a more strict approach to selection would have resulted in participants with the same experience and influential positions.

This was also a consideration when deciding to conduct the workshops for only about three to four hours. The trade-off is between the length of time and the number of key people participating. A full-day workshop would most likely have yielded less prominent participants, but more in-depth discussions. To engage people in higher positions, we believe that we would have had to adopt in an interview form, and consequently missing the dynamic discussions between participants. This conclusion is based on experience only, however, and not substantiated in any other way. We believe this is a topic that in itself, is worthy of more attention. What are good strategies for engaging key stakeholders?

11.2 Role of workshop the leader

The co-design approach recognizes that the workshop leader must achieve a balance between having own ideas and being a neutral facilitator. In this case, the key was to act as an *interpreter*. Because the participants came from different types of organizations, there was a need to help them clarify statements and understand each other. This of course, implies a certain bias. The same reasoning applies in preparing this report, which also can be said to be *interpretative*. The process was never intended to reach a consensus, which was not likely to occur, especially not within the workshop format. The objective was to raise a spectrum of issues that the participants thought sufficiently covered the questions placed. The original flip chart has been retained and can be made available for scrutiny. An advantage of having a single workshop leader,

who also prepares the report, is not only that what is on the flip-chart can be reported, but also the interpretations of the surrounding discussions.

A key point in co-design is that the participants do not have ready answers to be extracted, but rather that the discussions result in them forming opinions based on their experiences. Therefore, we believe that this type of approach yields more significant results than a survey approach.

11.3 Language

A special topic of concern was which language to use. The project is conducted in English, which was also the language used in the first workshop. The conclusion from this workshop was, however, that using a non-native language slows discussion and impedes nuances. Therefore, at the rest of the workshops, the groups discussed matters in their native languages, but results were presented and discussed in English. This allowed for better group discussions while still permitting the workshop leader to act as interpreter and clarifier. In each of these workshops, there was also a local assistant, fluent in both the native language and English, assisting group discussions under the guidance of the workshop leader. We did not find reason to repeat the first workshop as the participants' expressed their satisfaction with the outcome.

11.4 The time frame

The workshops have been conducted over year, a year that has been dominated by a dramatic downturn in the economy, which have affected the participating countries to very large degree. In particular the Latvian WS that took place in March 09, was conducted in a different setting than the others.

Another effect of the time frame, is that the later workshop participants may have had an idea of some of the findings from the earlier ones. Again, the Latvian workshop may be a particular case, as a first version of this report was distributed to the partners, before it.

The findings and discussions in the later workshops, did not deviate in any noticeable was. Therefore, no particular concerns are raised or included.

REFERENCES

References

1 Osimo, D., M. Turk, and A. Nilsson, *eGovernment research in the EU: overview report*. 2007, eGovernet: Stockholm.

2 Albinsson, L., et al. Turning the Internet Around – e-Me: The Students Ideal e-Service. in eChallenges 2006. 2006. Barcelona, Spain: IOS Press.

3 Lind, M., et al. Integrated Development, Use and Learning in a Co-design Setting: Experiences from the Incremental Deployment of e-Me. in eChallenges 2007. 2007. The Hague, The Netherlands.

4 Grönlund, Å., et al., *Managing electronic services : a public sector perspective*. Practitioner series,. 2000, London: Springer. xxx, 238.

5 Forsgren, O., The e-power - Integrating e-commerce, e-government and e-learning into coconstructive learning networks. 2001.

6 Hippel, E.v., *Democratizing innovation*. 2005, Cambridge, Mass.: MIT Press. x, 204 p.

7 Huston, L. and N. Sakkab, *Connect and Develop: Inside Procter & Gamble's New Model for Innovation* Harvard Business Review, 2006. **84**(3): p. 58.

8 Krippendorff, K., *The semantic turn: a new foundation for design*. 2006, Boca Raton: CRC/Taylor & Francis. 349 p.

9 Albinsson, L., M. Lind, and O. Forsgren. *Co-Design: An approach to border crossing, Network Innovation*. in *eChallenges 2007*. 2007. The Hague, The Netherlands.

ORGANIZERS

Organizers

Project coordinator
Madeleine Siösteen Thiel, VINNOVA, Sweden,
madeleine.siosteen-thiel@VINNOVA.se

Sweden – VINNOVA
Madeleine Siösteen-Thiel, madeleine.siosteen-thiel@VINNOVA.se
Irene Martinsson, irene.martinsson@VINNOVA.se
Johan Lindberg, johan.lindberg@VINNOVA.se

Norway - Research Council of Norway
Trond Knudsen, tk@forskningsradet.no
Kim Davis kid@forskningsradet.no

Lithuania - Information Society Committee under the Government of Republic of Lithuania
Kjell-Åke Holmberg, k.holmberg@ivpk.lt
Natalija Selskaite, n.selskaite@ivpk.lt

Iceland – RANNIS/Research liaison, University of Iceland
Margarét Björnsdotír, msb@hi.is
Sigurður Guðmundsson, sigurgud@hi.is

Estonia - Ministry of Economic Affairs and Communications/State Chancellery
Katrin Hänni, katrin.hanni@riso.ee
Monika Saarmann, monika.saarmann@riso.ee
Oliver Väärtnõu, oliver.vaartnou@riigikantselei.ee

Latvia - Ministry of Regional Development and Local Government former Secretariat of Special Assignments Minister for E-Government Affairs
Inese Betaga, inese.betaga@raplm.gov.lv
Juris Jansons juris.jansons@raplm.gov.lv
Dace.baumgarte, Dace.baumgarte@eps.gov.lv

Client Workshop Organizer
Lars Albinsson, University of Borås & Calistoga Springs Research Institute,
lars@maestro.se

Meeting reporters
Haukur Arnþórsson, haukura@hi.is
Tomas Pranckevičius, t.pranckevicius@ivpk.lt
Uku Vainik, ukuvainik@gmail.com
Reima Suomi, Reima.Suomi@tse.fi
Morten Meyerhoff Nielsen, morten.meyerhoff.nielsen@teknologisk.dk

Character illustrations
Lotta Grönkvist, lotta@maestro.se

Thank you Harald Botha of NordForsk for generous support and help.
This publication is part of a NORIA-net project entitled "The Citizens' Services - Turning public-private outside-in", financed by NordForsk.

A special thank you to all participants, who in a sense are the actual authors of the key part of this report.

VINNOVA´s publications

November 2009

See www.VINNOVA.se for more information

VINNOVA Analysis
VA 2009:

01 Svenska tekniker 1620 - 1920

02 Effekter av statligt stöd till fordonsforskning - Betydelsen av forskning och förnyelse för den svenska fordonsindustrins konkurrenskraft. *For brief version in Swedish and English see VA 2009:11 and VA 2009:12*

03 Evaluation of SIBED. Sweden - Israei test bed program for IT applications. *Finns endast som PDF*

04 Swedish possibilities within Tissue Engineering and Regenerative Medicine

05 Sverige och FP7 - Rapportering av det svenska deltagandet i EUs sjunde ramprogram för forskning och teknisk utveckling. *Only available as PDF*

06 Hetast på marknaden - Solenergi kan bli en av världens största industrier

07 Var ligger horisonten? - Stor potential men stora utmaningar för vågkraften

08 Vindkraften tar fart - En strukturell revolution?

09 Mer raffinerade produkter - Vedbaserade bioraffinaderier höjer kilovärdet på trädet

10 Förnybara energikällor - Hela elmarknaden i förändring

11 Sammanfattning - Effekter av statligt stöd till fordonsforskning. *Brief version of VA 2009:02, for brief version in English see VA 2009:12*

12 Summary - Impact of Government Support to Automotive Research. *Brief version in English of VA 2009:02, for brief version in Swedish see VA 2009:11*

13 Singapore - Aiming to create the Biopolis of Asia

14 Fight the Crisis with Research and Innovation? Additional public investment in research and innovation for sustainable recovery from the crisis.

15 Life Science Research and Development in the United States of America - An overview from the federal perspective. *Only available as PDF*

16 Two of the "new" Sciences - Nanomedicine and Systems Biology in the United States. *Only available as PDF*

17 Priority-setting in the European Research Framework Programme

18 Internationellt jämförande studie av innovationssystem inom läkemedel, bioteknik och medicinteknik

19 Investering i hälsa - Hälsoekonomiska effekter av forskning inom medicinsk teknik och innovativa livsmedel

VINNOVA Information
VI 2009:

02 Forskning om chefskap. Presentation av projekten inom utlysningen Chefskap; förutsättningar, former och resultat. *For English version see VI 2009:03*

03 Research on the managerial tasks: condition, ways of working and results. *Finns endast som PDF. For Swedish version see VI 2009:02*

04 Högskolan utmaningar som motor för innovation och tillväxt - 24-25 september 2008

05 VINNOVA news

06 Årsredovisning 2008

07 Innovationer för hållbar tillväxt. *For English version see VI 2009:08*

08 Innovations for sustainable Growth. *For Swedish version see VI 2009:07*

09 Forska&Väx.

10 Ungdomar utan utbildning - Tillväxtseminarium i Stockholm 4 mars 2009

11 Cutting Edge - Swedish research for growth

VINNOVA Policy
VP 2009:

01 TRANSAMS uppföljning av "Nationell strategi för transportrelaterad FUD" åren 2005 - 2007. Två uppföljningar - en för 2005 och en för 2006 - 2007. *Only available as PDF*

02 VINNOVAs internationella strategi - att främja hållbar tillväxt i Sverige genom internationellt forsknings- och innovationssamarbete

VINNOVA Report VR 2009:

01 Affärsutveckling inom träma faktur och möbler - hur skapas effektivare värdekedjor? *Only available as PDF*

02 Användarna och datorerna - en historik 1960 - 1985

03 First Evaluation of the Berzelii Centra Programme and its centres EXSELENT, UCFB, Uppsala Berzelii & SBI Berzelii

04 Evaluation of SAFER – Vehicle and Traffic Safety Centre at Chalmers - a Centre of Excellence with financing from VINNOVA. *Only available as PDF*

05 Utvärdering av forskningsprogrammet SkeWood. *Only available as PDF*

06 Managing and Organizing for Innovation in Service Firms - A literature review with annotated bibliography. *Only available as PDF*

07 Den tjänstedominanta logiken - Innebörd och implikationer för policy.

08 Tjänster och relaterade begrepp - Innebörd och implikationer för policy.

09 Underlag för VINNOVAs satsningar inom transportsäkerhetsområdet. *Only available as PDF*

10 Utmaningar och kunskapsbehov - Om innovation, ledning och organisering i nio olika tjänsteföretag. *Only available as PDF*

11 De två kulturerna på Internet - En utmaning för företag, myndigheter och organisationer. Huvudrapport

12 Uppföljning av VINN NU-företag

13 Kartläggning av svensk FoU inom området IT och miljö - med fokus på teknikens indirekta och systemmässiga effekter. *Only available as PDF*

14 Forska&Växa - Hållbar tillväxt genom forskning och utveckling i Små- och Medelstora Företag

15 Tjänsteinnovationer för tillväxt

16 Behovet av genusperspektiv - om innovation, hållbar tillväxt och jämställdhet. Utvärdering. *Only available as PDF*

17 Ekonomisk omvandling och makrologistiska kostnader. *Only available as PDF*

18 En undersökning av innovativa företags syn på strategiskt utvecklingsarbete i spåret av lågkonjunkturen. *Only available as PDF*

19 The Public Sector - one of three collaborating parties. A study of experiences from the VINNVÄXT programme.

20 Från hantverkskilt till hästföretag - Genusperspektiv på innovation och jämställdhet

21 Innovationer för hållbar vård och omsorg - Värdeskapande vård- och omsorgsprocesser utifrån patientens behov

22 Organising Work for Innovation and Growth. Experiences and efforts in ten companies

23 Mid Term Evaluation of the Institute Excellence Centres Programme

25 The Innovation Platform

26 Citizens´ Services - Nordic and Baltic Research Needs

27 Kina och internet

28 eGovernment of Tomorrow - Future scenarios for 2020

Production: VINNOVA´s Communication Division
Printed by: Arkitektkopia, Stockholm, www.arkitektkopia.se
November 2009
Sold by: Fritzes Offentliga Publikationer, www.fritzes.se

VINNOVA´s mission is to promote sustainable growth
by funding needs-driven research
and developing effective innovation systems

VERKET FÖR INNOVATIONSSYSTEM – SWEDISH GOVERNMENTAL AGENCY FOR INNOVATION SYSTEMS

VINNOVA, SE-101 58 Stockholm, Sweden Besök/Office: Mäster Samuelsgatan 56
Tel: +46 (0)8 473 3000 Fax: +46 (0)8 473 3005
VINNOVA@VINNOVA.se www.VINNOVA.se