



DELIVERABLE

Project Acronym: iSAC6+
Grant Agreement number: 238887
Project Title: A unique European citizens' attention service

D2.1 Base line analysis of administrative burdens and improvement locally

Revision: 1.0

Authors:

M Mercè Rovira (UdG)
Terry Keefe (SHU)

Project co-funded by the European Commission within the ICT Policy Support Programme		
Dissemination Level		
P	Public	<X>
C	Confidential, only for members of the consortium and the Commission Services	

REVISION HISTORY AND STATEMENT OF ORIGINALITY

Revision History

Revision	Date	Author(s)	Organisation	Description
1	16/07/2010	Martin Beer	Sheffield Hallam University	Content review and suggestions for completion and improvement
2	28/07/2010	Joanne Rimmer	South Yorkshire Police	Language review
3	28/07/2010	M Merce Rovira	University of Girona	Improvements integration Final content check Format review

Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

This is a public deliverable that is provided to the community under the license Attribution-No derivative works 2.0 Belgium defined by Creative Commons (<http://www.creativecommons.org>).

The license allows you to:

- Copy, distribute, display and perform the work
- Make commercial use of the work

Under the following conditions:

- **Attribution:** You must distribute the work by indicating that this work originated from the iSAC6+ project and that has been partially funded by the European Commission under the CIP-ICT-PSP program and Grant Agreement number +238887.
- **No derivative works:** You may not alter, transform, or build upon this work without explicit permission of the consortium.
- **For any reuse or distribution,** you must make clear to others the license terms of this work.
- **Any of these conditions** can be waived if you get permission from the copyright holder.

1. Document details

Context

WP <X >	OBJECTIVES, TASKS, DELIVERABLES
WPL	UdG
Task 2.1	Legal and administrative requirements will be identified and analysed in every pilot scenario. A model based on the EU SCM will be defined to identify and analyse the administrative burdens reduction achieved by iSAC in the 6 project pilot scenarios The resulting cost model will be used to: Quantify the administrative burdens in iSAC6+ scenarios (D2.1) Quantify the administrative burdens reduction at the end of the pilot phase (D2.2)
TL	UdG
Dependencies	This deliverable is the input of the deliverables D2.2, the analysis of administrative burden reduction and of other project improvements locally at the end of the pilot phase
Starting date	01/05/2010
Release date	30/06/2010
Authors	M Mercè Rovira (UdG) Terry Keefe (SHU)
Contributors	Salvador Guillén (RGR-Comunicació Digital)
Reviewers	Content: Martin Beer (SHU- UdG) Language: Joanne Rimmer (SYORK)
Approved by	

History

Version	Date	Authors/Reviewers	Sections affected
0.01	02/06/2010	M Mercè Rovira (UdG) Terry Keefe (SHU - UdG)	Layout
0.02	15/06/2010	M Mercè Rovira (UdG) Terry Keefe (SHU - UdG) WP2 Consortium members	Layout approval First content /ideas
0.1	25/06/2010	M Mercè Rovira (UdG) Terry Keefe (SHU - UdG)	6, 7, 9, 11
0.2	12/07/2010	Salvador Guillén (C. Digital- RGR)	8, 10
0.3	14/07/2010	M Mercè Rovira (UdG)	All
0.4	15/07/2010	M Mercè Rovira (UdG) Terry Keefe (SHU - UdG)	All
0.5	25/07/2010	M Mercè Rovira (UdG)	Appendices
0.6	26/07/2010	Martin Beer (SHU - UdG)	All
0.7	27/07/2010	M Mercè Rovira (UdG) Terry Keefe (SHU - UdG)	All
1.0	28/07/2010	Joanne Rimmer (SYORK)	All
1.0	28/07/2010	M Mercè Rovira (UdG) Terry Keefe (SHU - UdG)	All

2. Abbreviations

UdG, Universitat de Girona

TER (ES), Terrassa city government

SYORK (UK), South Yorkshire Police – Neighbourhood Watch network

SMED (FR), Saint Médard en Jalles city government

PRA (IT), Prato city government

EIWH (IE), European Institute of Women's Health (gender related health)

BIT (DE), Bremerhaven city eGovernment organization

WP, work package

SAC, Citizens' Attention and Information Services, Citizens' Services, Servicios de Atención Ciudadana (in Spanish), Informació Ciutadana and Atenció Ciutadana (in Catalan), Information and Referral (I&R) and 311 in the USA

iSAC, on line Citizens Information and Service Access

OSS, Open Source Systems

SCM, Standard Cost Model

MSC, Management Score Card

DB, data base

SME, small and medium enterprises

BPM, Business Process Management

PDCA, Plan-Do-Check-Act (Deming wheel)

010, for telephone operated Citizens' Information Service in Spain

TQM, Total Quality Management

ICT, Information and Communication Technologies

CSF, Critical success Factors

OAC, Citizens' Information Office, in Terrassa

OIAC, Citizens' Information Office, in Girona

3. List of Tables

Table 1. From government to people to government with people

Table 2. Five ways to simplification

Table 3. Building the iSAC6+ common Service Model from local diversity

Table 4. The iSAC6+ Service Model

Table 5. Qualitative analysis of a Critical Success Factor

Table 6. Data collection grid model

Table 7. Results track grid model

Table 8. Parameters description and use

4. List of Figures

- Figure 1.** The Maslow's hierarchy of needs
- Figure 2.** An overview of iSAC6+ pilot sites' diversity
- Figure 3.** The Balanced Scorecard Method
- Figure 4.** The iSAC6+ impact at organization level
- Figure 5.** Local - global data management model
- Figure 6.** From local data to "project" data
- Figure 7.** Change Management
- Figure 8.** Connections
- Figure 9.** Business Integration
- Figure 10.** Dops - Strategic in Activity Area
- Figure 11.** SICIMA analysis methodology for Balanced Scorecard
- Figure 12.** The Balanced Scorecard Method
- Figure 13.** Recent data from Terrassa. Telephone to iSAC service

5. Table of contents

1. Document details.....	4
2. Abbreviations.....	5
3. List of Tables	6
4. List of Figures	7
5. Table of contents	8
6. Summary	10
6.1. Scope.....	10
6.2. Purpose.....	12
6.3. Objectives.....	12
7. Background.....	14
7.1. The service model.....	14
7.2. Methodologies to be used in this project.....	18
7.2.1. The Balanced Scorecard method.....	18
7.2.2. The Standard Cost Model.....	20
7.2.3. Challenges to be faced in applying these methodologies in the project.....	22
8. The Service Model.....	23
8.1. The project's testing group	23
8.2. Main features of the service model to work locally	24
8.3. The construction of the common iSAC6+ Service Model	25
8.4. The Service definition:	26
8.5. Challenges to be faced locally.....	27
9. The Balanced Scorecard Methodology	28
9.1. Application to iSAC6+.....	28
9.2. Strategic Measure	29
9.3. Strategic and specific objectives	29
9.4. Rating / measuring improvements (final % improvements)	30
10. The Standard Cost Model Methodology	31
10.1. Developing the ISAC6+ Baseline Data Model	31
10.2. Structure and features	32
10.3. The Baseline Data Model	34
11. Recommendations for implementation	37
11.1. Applying the BSC method Principles.....	37
11.2. Applying the SCM method Principles.....	37
12. Next steps.....	39
12.1. Monitoring data.....	39

12.2. Quality review.....	39
13. References	40
14. Appendices.....	40
13.1. Appendix 1 – The Balanced Scorecard methodology	42
13.2. Appendix 2. iSAC6+ Partner Pilots Description.....	47
13.2.1. Saint Medard en Jalles (FR).....	47
13.2.2. Bremerhaven (GE).....	47
13.2.3. Prato (IT).....	48
13.2.4. South Yorkshire Police (UK)	49
13.2.5. The European Institute of Women’s Health (IE).....	49
13.2.6. The city of Terrassa (ES).....	50
13.3. Appendix 3. Base line measurements. June 2010	0
13.3.1. Measuring the impact on Citizens	1
13.3.2. Measuring the impact on Business	2
13.3.3. Measuring the impact on the Administration	3
13.3.4. Measuring the Social Impact	4

6. Summary

6.1. Scope

iSAC6+ aims to promote and deploy an innovative ICT solution (iSAC) that will considerably enhance the capability of various public authorities to respond to Citizens' Information and service access requirements at the European level.

This solution, named iSAC has been applied at several Catalan municipalities over the last four years and showed a great ability on improving citizens' on line services use, and high internal efficiency. That's a starting point for iSAC6+ to show quantitative evidence of both internal impact and citizens' and business cost and burdens reduction, according to the Services Directive¹ and the Action Programme for Reducing Administrative Burdens².

Two semantic networks have been created, in Spanish and Catalan. Specifically, the service in Terrassa, a city of more than 200.000 inhabitants at 35 km from Barcelona, has been working since December 2006³, and currently provides response to up one third of the queries processed by the SAC city council phone and web services. However, the considerable variety of local SAC requirements including the need to operate in a variety of languages means that additional resources such as semantic networks, and novel strategies in the form of innovative business models, need to be developed in order to deploy the service at the European level.

In recent years, the number of queries received at European Citizens' Services⁴ has increased steadily. The main reasons for this are: demographic changes (population increase, ageing ratio growth, diversity, etc.), social and cultural expectations growth, economic recession, legislative requirements to make all governmental services accessible on-line, increasing mobility of people both across Europe and from further afield.

Local administrations develop their activity near the citizens' daily life and feel very empathetic with their needs even when they may not be responsible for solving all of them.

Administrations created along the time so many layers of them and such a complex organisation of competencies that make citizens' life difficult when trying to accomplish with regulations, access a public service or fulfil a specific need. This makes them a lot of time loss and travelling to different offices or several calls before they reach the correct service point. Local administrations created their SAC to solve this problem, to help citizens to reach the needed resources directly and by spending less time effort and money. This is now a major European programme: the Administrative Burdens Reduction Action Plan which focuses on the legislation complexity reduction and on the simplification process to ease public procedures and public bodies' relationship with citizens. But was a strong need also in the nineties.

In 1995 this was written in a Masters' Degree thesis on Service Quality Management:

¹ The "Services" Directive (Directive 2006/123/EC of the European Parliament and of the Council of 12th December 2006 on services in the internal market

² Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Action Programme for Reducing Administrative Burdens in the European Union [COM (2007) 23 final]

<http://www.administrative-burdens.com>

³ <http://isac.terrassa.org>

⁴ SAC in this project, based on the most common Spanish name for the existing service

SAC, for its proximity to the citizens, is a natural impulse towards citizens' centric services for

- *It builds a bridge between citizens and services, all available services in the city*
- *Has a good knowledge of available services and*
- *Is in the best position to know the needs of the citizens*
- *Is able to develop great empathy with citizens*
- *Is concerned on uncovered needs and*
- *Makes them evident to the city government for their coverage*
- *Is concerned on service improvement through process redesign, service description and documentation, services dissemination, etc.*⁵

In that moment it was very frustrating explaining how to open a business or asking for a building permit in the city. So many separated tasks, so much time, so many duplicated documents and visits to offices... The analyzed case in the thesis was on a citizen moving from Barcelona to Girona to open his own marketing design business due to the economic recession (very much alike to the current situation). The numbers were: half an hour information time (at SAC), 15 visits to the 6 involved departments, and impossible to forecast time to the availability of the final permit, never less than 4 months. After the new SAC was a reality, by 1998, one visit of about 10 minutes was enough to start all process and wait for less than 2 months to have the final green light to start business. Starting a business is one of the most complex administrative processes still now. That's why it is one of the most evident burden reduction objectives and always a good example of what can be done.

It will be a major need with the European citizens moving to a different country in search for work or better places to live. Mobility is highly increasing within the EU. Mobile citizens will find in the new Citizens Services a very good starting point to their new lives abroad.

ICT can help, by building 24h web based access points, and existing semantic search technologies have the responsibility to enhance the common use of on line services to all citizens.

iSAC provides an on-line tool available 24 hours a day, 365 days a year, which has been specially designed to fulfil existing SAC needs and expectations, that are currently met by walk-in offices and phone services. It is multilingual, has been developed using open source software⁶, and is connected to one single database that can be structured as one or several modules. It is able to process different linguistic registers, such as colloquialisms, administrative terms and localisms; searches can be made using single words or sentences, and the system will filter orthographic and grammatical errors. iSAC is modular, and so can be tailored to provide the set of services required by each target organisation, and it improves through continuous use which trains its built-in learning technology. It can also be complemented by on-line users and qualified staff contributions through the implementation of web 2.0 tools.

Specific project objectives are:

- To develop a methodology for measuring cost reduction⁷, at local public service level for both citizens and the administrations, based up on the Standard Cost Model.
- To develop an application of the Action Programme for Reducing Administrative Burdens at Local Administration level.

⁵ M Mercè Rovira, *Velingara. Si t'agrada, vine*. Master thesis. ICT – UPC en Gestió de la Qualitat als Serveis, 1994-95.

⁶ OSS in the rest of this report

⁷ The "Services" Directive (Directive 2006/123/EC) of the European Parliament and of the Council of 12th December 2006 on services in the internal market

- To improve the comprehension of German, French, Italian and English popular use by constructing local semantic networks.
- To develop methodologies needed to build up local semantic networks.
- To adapt the architecture and functionalities of iSAC to different SAC models, so that the existing digital content and information structures, and the service itself can be locally customized.
- To adapt and test iSAC at content specific, non generalist SAC models: the Neighbourhood Watch at the South Yorkshire Police (UK), and the gender sensitive health information at the European Institute of Women’s Health (IE).
- To define a business model that will be used to initiate further deployments of the service after project completion.

iSAC6+ main driving forces to reach both general and specific objectives are a balanced consortium with participants from 6 different EU countries, 6 different pilot scenarios and an innovative deployment model that will be the basis of further implementations of the service at European level.

The six different pilot scenarios are: the city government of Terrassa⁸ (ES), the Commune di Prato (IT), the city council of Bremerhaven (DE), the Mairie de St Médard en Jalles (FR), the South Yorkshire Police⁹ (UK), and a non-governmental organisation, the European Institute of Women’s Health¹⁰ (IE)¹¹.

6.2. Purpose

The D2.1 deliverable reports on the WP2 -Analysis of administrative burdens and improvement locally- tasks

This iSAC6+ work package comprises localisation and service assessment tasks. Its main objectives are:

1. To apply a cost model¹² to quantify administrative burdens at local level.
2. To adapt existing Management Score Card tools¹³ to identify measure internal impact, cost reduction and efficiency improvement, on implementing the new on line service.
3. To identify and measure service costs for citizens and business susceptible to be reduced in the pilot scenarios
4. To define the contents of the services in every pilot scenario.
5. To quantify the administrative burdens and cost reduction after project activities in pilot scenarios.
6. To show internal benefits reached through the new service.
7. To define a set of indicators to permanently track quality and improvements of iSAC both organizational and for the citizenship.

6.3. Objectives

The objectives of this deliverable are:

⁸ The city of Terrassa acts in iSAC6+ as both a role model for other partners implementing the new on line Citizens’ Service and as a regular pilot site for the setting of a permanent measurement system under the SCM methodology for Administrative Burdens reduction.

⁹ The iSAC implementation at Neighbourhood Watch Programme at the South Yorkshire Police is a specific volunteer resource centre like service.

¹⁰ The iSAC6+ setting at the EIWH website is intended to improve a highly specialized gender related health information service

¹¹ Identified as TER, SYORK, SMED, PRA, EIWH and BIT, in the future in this report

¹² SCM in the future

¹³ MSC in the future in this document

1. To share the definition of local objectives for service improvement and administrative burdens reduction.
2. To report on the local base line data for the existing Citizens' Information and services access before the project activities.
3. To explain the adaptation of the SCM for a quantification analysis of the reduction of administrative burdens through iSAC.
4. To share the use of the MSC methodology application to be used in the assessment of service improvements locally after the implementation of iSAC.

UdG¹⁴ is responsible for the WP¹⁵ activities, and works with SHU¹⁶ professors as in house consulting, and with Comunicació Digital – RGR, a Barcelona and Valencia based Spanish company with wide experience in management and change processes at several Spanish administrations.

Participants TER, SYORK, SMED, PRA, EIWH and BIT have worked on required Citizens' Information and service access data, participated in the definition of the SCM and MSC methodologies for the project, applied them to their locations and, at will lead the follow up measurements along the project and assess the improvements at the end of the pilot phase.

¹⁴ University of Girona (ES)

¹⁵ For work package in this report

¹⁶ Sheffield Hallam University (UK)

7. Background

7.1. The service model

Rationale

The iSAC on line system for Citizens' Information and Services access was created at the University of Girona from 2005 as a result of the initiative of the city of Terrassa and the financial support of the AOC Consortia and other Spanish public funding systems.

It is a system designed in a cooperative way by highly specialized city staff on Citizens' Information and Services access working in these local services in the city of Terrassa and in the city of Girona for more than 20 years. Thus, it is a *living lab design*, built bottom up, with the involvement of city staff dealing with real daily service as a regular basis. An in depth service analysis was made by project team in the first months of system's development so a PDCA process could bring to life a very similar service to the emulated existing face to face and 010 through a new web channel. Citizens in Terrassa were using the SAC and 010 (the corresponding telephone service) from 1992 and were used to and satisfied with them. Keeping the service model in the new channel appeared as a good strategy for the fastest use generalization among citizens.

Public information (access, dissemination, transparency, information re-use)

The main reason for creating the so well known and successful SAC services in Catalonia at late nineteen eighties¹⁷ and early nineties was a political one. After the dark dictatorial period in Spain, the new democratic governments formed following first local elections in 1979 found it extremely hard to learn how to fulfil citizens' needs. An initial period of *street cleaning* was therefore needed before social impact could gain visibility. When it came to a first line need, strategies were required to find out what citizens really were asking governments to do for them. Opening an office to listen to citizens' needs was a must.

The first wave of Catalan Citizens' Information Services responded to this need. When the Mayor of Girona, as a very personal testimony¹⁸, decided to create the Citizens' Information Service in spring 1989, he pointed at two strategic mandates:

1. Listen to citizens, identify their needs, and try to fulfil them by looking at the municipality first (and gave strong encouragement and mandate to the people responsible for such services to cooperate in such an important common task), followed by other services available all over the city and at other Administrations Regional and National, and
2. Build a service for this city, looking at Barcelona as a model, but build a service for the mid size city of Girona, adequate and affordable, corresponding to its' citizens way of life.

That's how the expansion of Citizens' Information Services start covering all national space, from late nineties and ahead, almost overlapping with web portals opening and eGovernment, and also creating some internal confusion on distribution of responsibilities

¹⁷ 1988, the first one in the country, in Barcelona; 1989 in Girona, the second one; 1992, the 010 and OAC in Terrassa.

¹⁸ Experience from M Mercè Rovira, Girona Citizens' Information Service designer and head 1989 - 2004

and leadership¹⁹. Cooperation and interdisciplinary work is never easy at organizational level, and to some a specific and endemic public management problem...

There are many aspects to public information access. From differing perspectives they can be: a constitutional right in democratic countries, a critical basis for participation, a resource for cooperation and social involvement, one of the most time consuming activity in professional and personal life and, in the digital society, it is also a strategy for cost savings.

Don Tapscott, (nGenera, Toronto, Canada)²⁰, world renowned author²¹ and director of the Government 2.0 programme presented some of its findings and explained ideas from his newest book "*GROWN UP DIGITAL, on how to transform government for the digital age*" at the Ministerial eGovernment conference in Malmö, November 2009²². He pointed out how the internet shows power to change more than the business of government, but democracy itself. And how a strong representation and a new culture of public deliberation built on active citizenship is growing within the new generation of *digital natives*. *The main driver of change is the new Web 2.0 paradigm in which the old eGovernance portal model, which essentially presented content to passive citizens, is being replaced by a new model in which a platform for collaboration between everybody who has something to contribute is provided. ... Active engagement is being driven forward by the younger generations, which have grown up digital and insist on using these tools in their engagement with governments. This is the key change, and the EU should look outwards by launching a Marshall Plan that provides every child on the planet with his or her own computer. This would really herald a new social revolution.*²³

New public services have to respond accordingly to this new social environment. Time for the best service to be given to citizens is over. Up-down isn't anymore, if it ever was, a right way to serve from public administrations. The best "listening and caring" methodologies are at stake too.

Analysing citizens' needs according to the Maslow's hierarchy²⁴²⁵ can help to build services, create content, identify users, prioritize management activities, and reach progressive levels of personalization, find ways for cooperation with people ready to do so, etc. The role of the administration changes at every stage, from responsibility on helping to fulfil critical needs to collaboration with local entities and active groups of citizens that can take a substantial lead on social activities.

¹⁹ The always present and well know issues on leadership, Technology vs. People/content management

²⁰ <http://dontapscott.com>

²¹ Among others:

Growing Up Digital: The Rise of the Net Generation (1999)

Wikinomics: How Mass Collaboration Changes Everything (2008)

Grown up Digital: How the Net Generation is Changing Your World (2008)

Digital Capital: Harnessing the Power of Business Webs (2000)

The Digital Economy: Promise and Peril In The Age of Networked Intelligence (1997)

²² <http://www.egov2009.se/>

²³ <https://vms.qbrick.com/viral.aspx?imageurl=1&targetwindow=blank&allowscriptaccess=1&width=480&height=292&mid=1911623C>

²⁴ A.H. Maslow, *A Theory of Human Motivation*, Psychological Review 50(4) (1943):370-96.

²⁵ <http://psychclassics.yorku.ca/Maslow/motivation.htm>

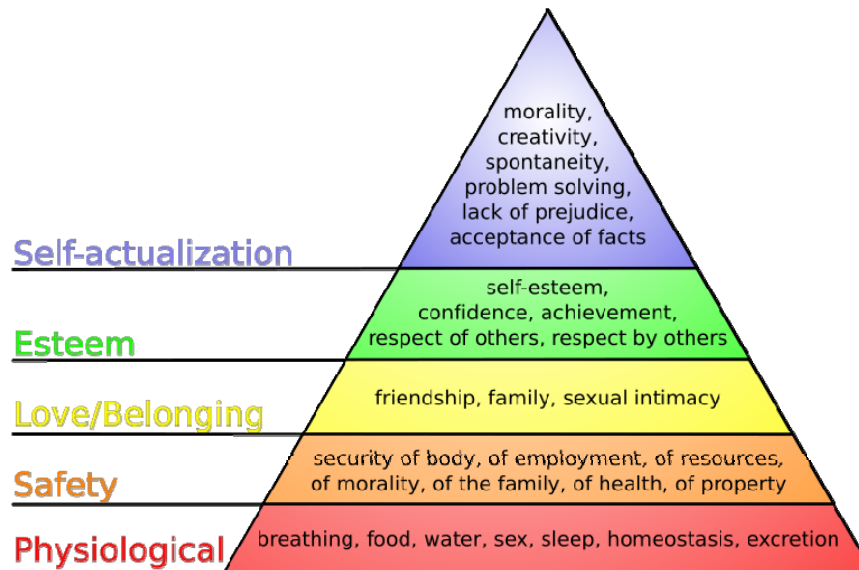


Figure 1. The Maslow's hierarchy of needs²⁶

More than the needs, the culture for accessing information has and is constantly changing. As stated in this blog comment at an American librarian catalogue:

...on changing users' behaviour when accessing information: if just some years ago, we were marked in the navigator "favourites" and searched when needed, now people come across interesting information and use it or store it when it happens. Users find out their interesting "pills" when playing their role in the social media (Twittering, Facebook blogging, etc.), as actually happen to me at <http://twitter.com/susgeek>. ... "our catalogue isn't a "destination spot", rather it is found through a gateway"... "there is an increasing amount of users who find us through RSS feeds, iPhone apps, friend recommendations or a social networking presence (such as Facebook)"²⁷

Even inclusiveness claims for designing for all, public services cannot leave a part new users, uses and channels while serving the most traditional ones. The scope is widening in a way that the need for cooperation is being fairly evident to keep public budgets and service balanced in crisis and no crisis time.

This is a perception on how new services may be built for the current century, for the digital and non digital constituencies.

1. Inclusiveness, adequateness, personalisation. There's no good programme without the participation of the users from the very initial design stages.
2. Collaboration and sharing, participation and co-creation. No satisfactory answer, even if it is certain and officially complete, if it does not include all the range of situations in which its completeness can be estimated. The Re-use of Information Directive²⁸ defines a European framework for public cooperation and resource optimization among public bodies. Application still lies behind the expected results.

²⁶ An interpretation of Maslow's hierarchy of needs, represented as a pyramid with the more basic needs at the bottom.^[1] from Psychology - The Search for Understanding by Janet A. Simons, Donald B. Irwin and Beverly A. Drinnien, West Publishing Company, New York, 1987

²⁷ Laurel Tarulli blog - <http://laureltarulli.wordpress.com/>

²⁸ Re-use of Information Directive – Dir 2003/98/EC

3. Sustainability. No good if unaffordable. SAC created in the eighties may not be sustainable now... if no change is carried out to apply ICT based solutions. The elimination of too expensive services can not be defended without trying to modernize and optimize them.
4. Flexibility. Fast change is the sign of the new society. Services have to be able to rapidly adapt to new demands and social needs.

Every one of these trends applies critically to new Citizens' Information Services.

Gov to people	Gov with people
Analysis & simplification	Active listening Participation Measurement
Collaboration & sharing	Unique systems & ownership Open access Support, shared tools
Social knowledge value	Social networks, CoP Co-creation
Continuous improvement	Research, identification, adoption of BP 3H, PPP

Table 1. From government to people to government with people.
Author M Merce Rovira (UdG)²⁹

The 2010 United Nations e-Government Survey: Leveraging eGovernment at a time of financial and economic crisis launched in early 2010, presented roles and benefits for eGovernment in addressing the world financial and economic crisis. It states, as an example, that

*“the public trust that is gained through transparency can be further enhanced through the free sharing of government data... While technology is no substitute for good policy, it may give citizens the power to question the actions of regulators and bring systemic issues to the fore. Similarly, eGovernment can add agility to public service delivery to help governments respond to an expanded set of demands even as revenues fall short”*³⁰

iSAC is a good example of the evolution to a new services provision at local level. We like to present it by interpreting how the system “feels” when at work. We use to call it “the **Soul of iSAC**”. And we define it as

- a new way **for citizens and business** to access information and services to fulfil their common needs, available 24 hours all year long, from everywhere, for everyone, technology friendly, empathetic, learning and adaptable, complete and responsible on line service.

²⁹ FEMP – Universidad de Salamanca. Seminario Modernización Organizativa y Administración Electrónica en Ayuntamientos Pequeños y Medianos. 2010

³⁰ http://www2.unpan.org/egovkb/global_reports/10report.htm

- a way **for Administrations** to serve better the needs of their changing constituency, mobile and diverse, and improve efficiency and transparency, by making available all information on services and administrative procedures in a unique self assisted system, able to help them in the management tasks for creating knowledge bases and defining new service trends,

That is why we are measuring impact on citizens and business and on the administrations as service providers. The implementation of the new system is affecting the core business at involved administrations, as it establishes new collaborative work environments and service processes, and new dynamics in the relationship between public bodies and its constituency.

7.2. Methodologies to be used in this project

The methodological approach can be split into two aspects, theory and application. The theoretical approach defines the basic principles underpinning the proposed methodology, while the application aspect describes the processes.

The core principle has been to use proven, recognised and complementary tools and approaches rather than attempt devising iSAC6 specific methods. The tools described below come from, or are derived from good administrative and business practice. There are three components to the assessment:

- Measures - The Standard Cost Model taken from EU Guidance
- Indicators - The iSAC6+ Base Data Model
- Monitors – The Balanced Scorecard Model

The Standard Cost and Balanced Scorecard models are described in the section below. The format and operation of the Data Collection Model is described in detail in the section following this “The Standard Cost Model methodology in iSAC6+”.

The methodological philosophy underpinning the choice of methodologies is systems theory. Systems theory provides the basis for the Balanced Scorecard approach described below. In particular, Soft Systems Methodology provided the approach for developing a shared understanding of the project purpose and strategic aims. A good description of the various aspects of Systems Theory can be found in "Systems Thing, Systems Practice by Checkland and Holwell³¹.

7.2.1. The Balanced Scorecard method

Rationale

Progress at a strategic level will be monitored and managed using a Balanced Scorecard. The Balanced Scorecard is an organisational analysis tool widely used to present an holistic view performance and progress towards achieving core strategic objectives. It is described in detail in Appendix 1. The method was developed around 10 years ago in US based Business Schools³² and is well documented and supported by high quality academic and business literature. It has subsequently been widely adopted and is

³¹ Checkland, P and Holwell, S, Systems Thinking, Systems Practice, John Wiley & Sons 1990

³² Kaplan, R. S. & Norton D. P. "The Balanced Scorecard: Measures that Drive Performance", Harvard Business Review, January/February 1992
Kaplan, R. S. & Norton D. P. "Putting the Balanced Scorecard to Work", Harvard Business Review September/October 1993

recognised as a proven strategic tool, used extensively in both public and private sector organisations.

The choice of the Balanced Scorecard as a strategic monitoring tool was based upon the need for a tool which could satisfy three requirements. These were:

- which could produce an aggregate view of performance data from a range of different and disparate organisations.
- it is important to establish indicators for use in pilot scenarios. These indicators must be stable over time, but there is also an acceptance that in a project situation such as iSAC6+ there will be a process of evolution during review periods member that the rating limit for successive periods of time defined as the Organization must evolve in a given period.
- Critically, the chosen approach needs to balance hard, quantitative measures with soft, qualitative indicators.

The BSC must be balanced between:

- External indicators (voters and citizens) and internal indicators (processes, resources, innovation and growth).
- The performance indicators (measurement of past actions) and inductors indicators (that drive future performance).
- Objective measures of performance and subjective measures related to future actions that lead to achieving the established goals

When all indicators are structured form the BSC the final BSC integrator is shown in the next figure.

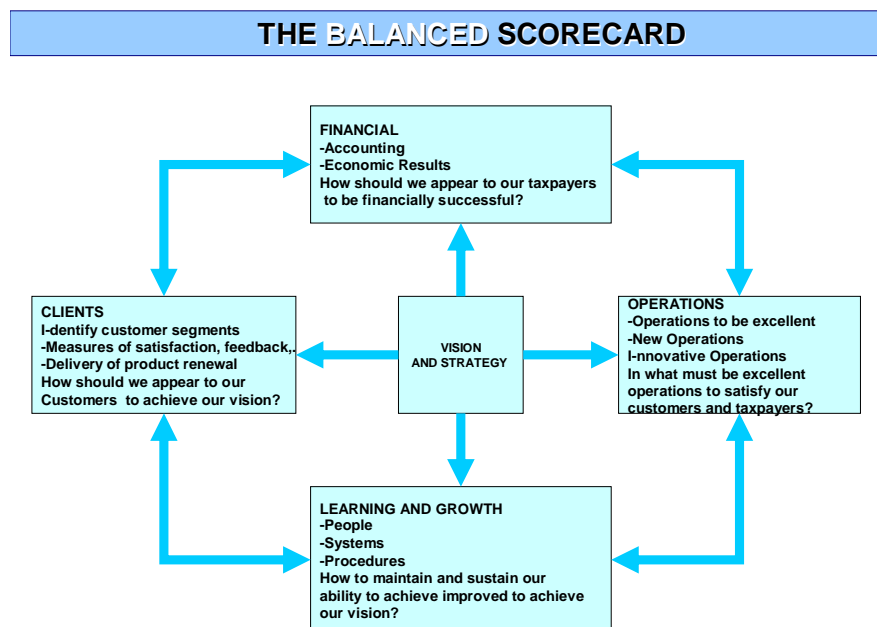


Figure 3. The Balanced Scorecard Method

Experience among team members, from both operational and academic perspectives, indicated that the Balanced Scorecard approach offered a proven and reliable way of satisfying requirements.

7.2.2. The Standard Cost Model

Rationale

In autumn of 2003 a number of European countries formed a network, committed to using the same methodological approach when measuring and tackling administrative burdens³³. All countries had come to the realization, that common problems were faced and that only a common approach could help solve these problems.

These 'founding fathers' of the network chose the Standard Cost Model as the common approach. Members of the network all use the Standard Cost Model because it provides transparent measurements, which are ideal when trying to simplify legislation and reduce administrative burdens. In the summer of 2005 the *OECD* also chose to apply the SCM method in connection to the 'OECD Red Tape Scoreboard'.

The Standard Cost Model (SCM) was launched in March 2007 by the EU Commission as part of its Better Regulation Strategy. The purpose of the Standard Cost Model was, and continues to be, to provide a common cost assessment tool which would support the Action Programme objective which:

“aimed at measuring administrative costs, identifying and reducing administrative burdens, without undermining the underlying objective of the legislations”³⁴

To this end the Standard Cost Model provided a standard formula which could be applied against any proposed policy change or legislation to assess the administrative cost or burden.

The core formula as described in the Impact Assessment Guidelines is

$$\text{Cost} = \mathbf{P} \times \mathbf{Q}$$

where **P** (for Price) = Tariff x Time and

Q (for Quantity) = Number of businesses x Frequency)

For the purposes of the iSAC6+ the formula has been stated as:

$$\text{Cost} = \mathbf{Price} \times \mathbf{time} \times \mathbf{quantity}$$

All countries which are applying (or seriously considering applying) the Standard Cost Model to measure the burdens stemming from their legislation are invited to join the Network.

³³ <http://www.administrative-burdens.com/default.asp?page=196>

³⁴ Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Action Programme for Reducing Administrative Burdens in the European Union [COM (2007) 23 final] <http://www.administrative-burdens.com>

One of the most significant network recommendations is **simplification**. Here are the five ways for simplification issued by the SCM network³⁵

Ways to simplification	Actions to take
1. Remove, reduce, merge or improve regulations	<ul style="list-style-type: none"> • Remove the regulation • Use alternatives to regulation • Remove the information obligation from the regulation • Exempt groups or sectors of stakeholders from the obligation • Consolidate/ merge secondary legisl. and requirements • Simplify the terminology and reduce complexity
2. Simplify the process to comply with regulations	<ul style="list-style-type: none"> • Remove unnecessary forms, inspections or data requests • Reduce the time taken to fill out forms • Prioritise resources • Reduce the frequency of information requests • Harmonise requests for information with other inf. obligations
3. Data-sharing and joint up government	<ul style="list-style-type: none"> • Collect the data from other government bodies • Collect the data directly from stakeholders' ICT-systems • Set up one-stop-shop systems for stakeholders • Develop standard definitions in legislation
4. Develop ICT-solutions and services	<ul style="list-style-type: none"> • Make forms and data requests available on the internet • Pre-populate forms • Make forms "intelligent", do not request irrelevant data • Make electronic one-stop-shop systems so that stakeholders can make use of joint Government web-portals
5. Provide better guidance and information	<ul style="list-style-type: none"> • Develop better and more accessible guidance • Rewrite guidance in simpler language • Separate compulsory from voluntary requirements in guidance • Make regulations available on-line, through a joint public portal.

Table 2. Five ways to simplification.³⁶

³⁵ www.administrative-burdens.com

³⁶ <http://www.administrative-burdens.com/default.asp?page=172>

Thus it can be seen that the primary objective of the standard cost model is to quantify costs in whatever form they take. In iSAC6 the proposal is to use the model in a more comprehensive way that assess the value of positive impacts as well as negative ones, which is how costs are usually treated. In practice this means that the model will measure benefits as well as costs. In business terms, the proposal is to use the Standard Cost Model as the basis for a Benefits Realisation exercise. The content and operation of the model is described below, but to summarise, it will enable project partners to identify where benefits accrue from using iSAC6, and to quantify those benefits alongside costs.

7.3. Challenges to be faced in applying these methodologies in Citizens Information and Service Access

The EU Standard Cost Model as a base model for evaluating the impact of iSAC6+ has a number of benefits, but it also presents challenges.

The SCM was developed to assess the potential cost impact of proposed new legislation and changes in policy requirements upon organisations and businesses, and to a lesser extent to citizens³⁷. From this point it has been further developed as a tool to assist in measuring the cost burden on citizens.

It is essentially a quantitative tool, designed to identify negative impact in terms of cost and expenditure. It does not easily accommodate qualitative impacts on less tangible aspects such as quality of life, satisfaction, or social cohesion.

There are also difficulties applying the SCM to positive factors such as service improvement or enhanced economic opportunity. The most recent addition to the Impact Assessment Guidelines provides guidance on assessing and measuring Social Impact, for example the impact on health, the environment, employability and social cohesion. Essentially the guidance suggests ways in which impact can be "monetarised", but does not promote any single methodology. The guidance is acknowledged in the Data Model below, but more work will need to be done on Social Impact costs once the iSAC6+ model has been in operation for a while.

The SCM Guidance material on assessing the impact of bureaucracy simplification measures may also help identify costs and benefits.

Finally, the Standard Cost Model is primarily focused upon the impact of legislation and policy changes on business organisations. The impact upon individual citizens is included but the guidance is minimal, though increasing. The challenge for iSAC6+ is that the proposed data collection model will need to indicate and measure costs on citizens, in situations where costs may not have been clearly defined or even identified. Furthermore, the hoped for impact of iSAC6+ is that individual citizens and service providers are recipients of positive benefits rather than costs. To this end the proposed model will include the concept of benefits as negative costs.

³⁷ EU Commission Impact Assessment Guidelines (January 2009)

8. The Service Model

8.1. The project's testing / piloting group

The iSAC6+ Consortium has a fairly diverse set of pilot sites. This was already intended when designing the project, in order to reaching the maximum level of complexity in the European wide test of the iSAC system.

Project leaders were also looking for applying it to a specialized Information Service, as it is the case of the EIWH. The solution was always tested in environments of Citizens' comprehensive Information and Services access (SAC), and the semantic needs of a specialized service may be slightly different from this.

Size would be an issue, either. The size of the organization providing the service, mainly a city government bringing complexity to the services provision, and the amount of queries to afford in a comparable period of time depend very much on size and territorial trends.

The service model at every city would be highly linked to the political model of city government. Policy issues determine priorities and calendars at service level.

Cultural and social issues at country level would also affect the new service implementation and evaluation. Public services' competence frame between the several administration layers, and perceived public service value affect confidence and trust, though use of those services. Demographics (age groups) would also be critical to the type of services and channels to use to reach them, and its evolution.

Technological maturity of the local society, socio economics and wellness will determine the service demand at every moment and can be very dynamic too. A highly demanding constituency act as a steering power for the modernization of public services and steer the level of eGovernment development: ICT use at family level, ICT maturity of school system, band width availability and prize, public internet access points (Internet café like) for public-free internet use, a widely deployed strategy in mid size cities all over Europe, etc.

Project negotiation and contract signing process did the rest: a new and (apparently) quite different organization came into the Consortia by substitution of a UK partner: SYORK. Working together we realized there's not a main difference and objectives converge and fit very well in the group. They are going to test the iSAC system to improve their relationships between the Police and the volunteers working within the Neighbourhood Watch network. Though, a slightly different use of basic iSAC, but still very similar to the local environments which at the end they intend to build bridges between citizens and their available services locally, regionally, etc. here it will be more evident this capacity of network building –working with the volunteer network in a regular basis- the capacity seek by local administrations with their constituency at the end.

The general overview of the test group for iSAC6+ purposes is:

- Three city services: Saint Medard en Jalles, Bremerhaven and Prato
- One NGO, The European Institute of Women's Health, specialized information provider on gender related health.

- A Regional police service, South Yorkshire Police, through their Neighbourhood Watch volunteer network.
- The city of Terrassa, acting as a role model for it has the basic system successfully working from December 2006. But also acting as a true pilot in order to better evaluate and measure citizens' satisfaction, and to measuring administrative burden reduction in the city, from the SAC perspective.

8.2. Main features of the service model to work locally

One of the main activities within the WP 2 in the first months of iSAC6+ project was a visit to all pilot scenarios in order to make sure consortium partners share the main ideas and talk common words from the very first days and along the project. A common agenda for all local sessions was established:

1. In depth explanation of the service model in which iSAC was created and introducing the system as it was intended to be implemented and tested at everyone of them.
2. Comment, share views, solve questions, and build comparisons, with the original city model
3. Explain in depth the iSAC's back office administration and system's technological requirements and possibilities
4. Measurements, indicators, next steps in the WP2.

The results of these visits were quite visible. The team was able to build a common understanding on the project objectives, activities and challenges, and know first hand what was expected and what could and couldn't be done with the available system. Sometimes we expect too much from a system we only know from presentations. We felt we needed to share all the information available on the system and on the project framework, and avoid misunderstanding and delusion along the process.

A description of all separate pilot scenarios can be found in Appendix 2. This contains the details information collected during pre diagnose visits, completed with partners reviews, group meetings and one on one work from there.

From this overview of local data integration, the WP2 team built a project common view of the Service Model, within a frame of local diversity and being respectful of local objectives on the new service development.

Then the decision of the group was:

1. Work locally with local strategic and specific objectives to reach an outstanding local Citizens' Information Service, and
2. Work at project level on a common Service Model to identify general project results

8.3. The construction of the common iSAC6+ Service Model

	Comparison to the SERVICE MODEL	ADMIN needs	TECHNOLOGICAL needs	LOCAL issues
TER	3 + years working Mature SAC Intensively used by citizens	Admin. Burden & User satisfaction measurements	Migrating to new internal solutions	Looking for excellence & Quality
PRA	Very similar to model Mature URP-SAC	Service excellence	Distiller Several DB Accessibility	Need for + efficient access system Chinese community
SMED	Data integration Connecting local, regional, national procedures	Unique data sets	Manager	Will stimulate new service?
EIWH	On line service Forum for community building OSS exp. (since 1995)	Language sets + user base expansion for multiple audiences	Manager Interested to examine the potentials of the Distiller	Health data & Health policy Examples for Irish org. on ICT use & DB mgt
SYORK	On line service	Testing security issues	Distiller Wiki/Forum? Security! Very dynamic data	Neighbourhood watch Looking for excellence
BIT	Similar to model on eGov web site On line service	Internal integration stimulation	Distiller 100% on line service + frequent refresh DB	Will stimulate new service

Table 3. Building the iSAC6+ common Service Model from local diversity.
Author M Mercè Rovira (UdG)

ISAC6+ SERVICE MODEL MAIN FEATURES

1. More efficient access system
2. Admin. burden reduction and simplification
3. Service excellence and quality shift
4. Data integration and data uniqueness
5. Multiple language service expansion
6. Better user experience and audience expansion
7. Security improvements
8. Technological improvements for full on line services
9. Health specific data access test
10. Exemplification for wider ICT use (citizens, organizations)
11. Will stimulate the creation of new services

Table 4. The iSAC6+ Service Model.
Author: M Mercè Rovira

8.4. The Service definition:

**iSAC answers open queries from all citizens and business
in a self service mode 24 x 365**

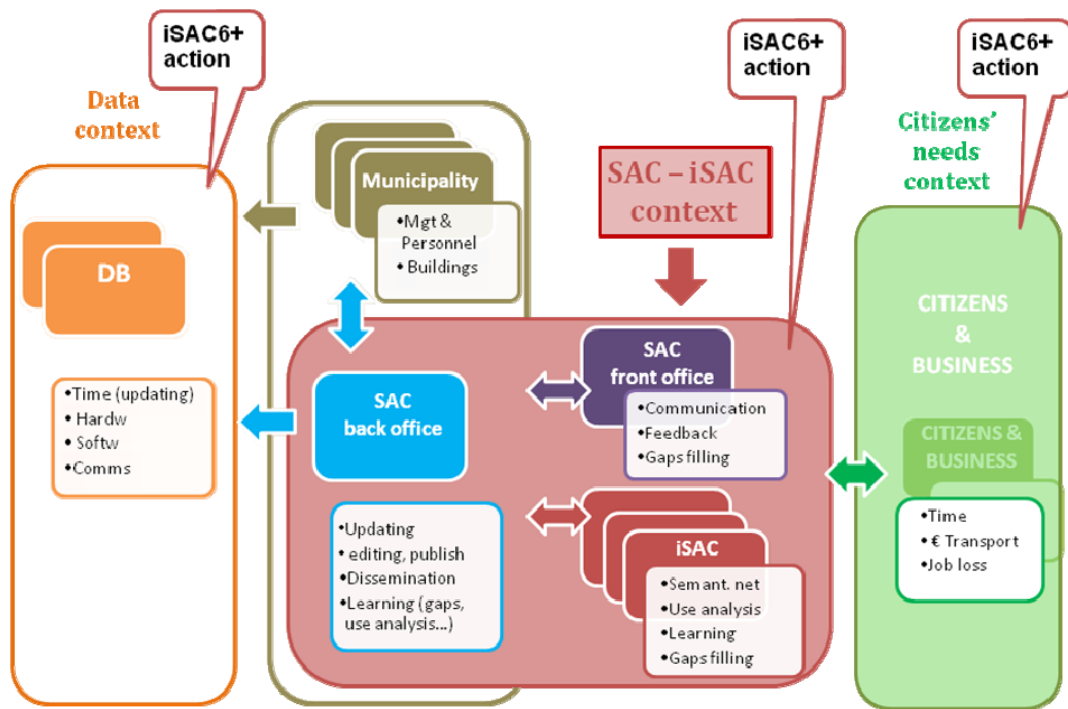


Figure 2. The iSAC6+ impact at organization level.
Author: M Mercè Rovira (UdG)

8.5. Challenges to be faced locally:

- Matching language use
 - o Queries in citizens' natural language and their way to communicate with the administration:
 - Local forms and vocabulary
 - Colloquialism
 - Melted languages
 - o And formal government language, culture
- Multiple languages are needed at every EU city
 - o Residents
 - o Migrants
 - o Visitors and temporary residents
- Retrieving diverse information sources
 - o Structured information (DB)
 - o Non structured web information
 - o Non structured textual docs
 - o Image, video, etc.
- Dispersion, desegregation of information within the organization
- Need for COLLABORATIVE WORK in the administration
- Interoperability with other eGov programs

9. The Balanced Scorecard Methodology

9.1. Application to iSAC6+

The BSC is a tool to drive organizational change. The application of the Balanced Scorecard to iSAC6+ will be based upon DROP-STRATEGIC, a proven approach developed and used by a member of the project consortium. Its aim is to align the organization, and each of its processes, with the objectives set by the Directorate of it.

The DROP-STRATEGIC tracks the deployment of the Strategic Objectives and the Specific Objectives and maps Critical Success Factors against them for each Activity Area.

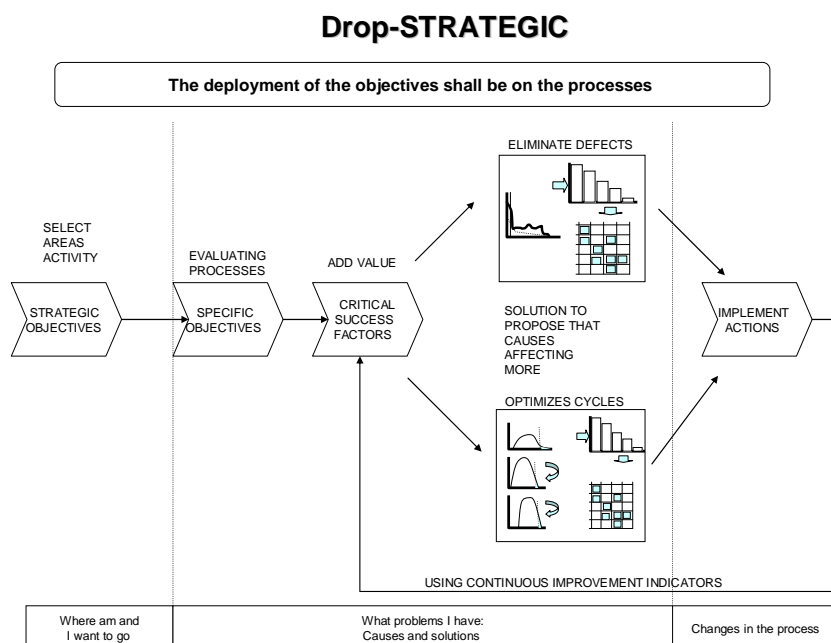


Figure 7. DOPS Strategy in Activity Area.

Author: Guillen Salazar, S³⁸

The result achieved in implementing the Goals can be seen through the Critical Success Factors. These results are measured very well by observing the change in the flows that has occurred or the tasks performed. For example, increase or decrease in the number of calls, or the number of visits. That is, variations in the number of tasks performed. Another example can be the increase or decrease in the duration of the visit or call. That is, variations in the duration of the Task.

All these measures monitor the organization: Tasks, Agents and Agencies. Each of these measures is called indicators. The set of all Indicators Monitoring allows the organization.

38 GUILLEN SALAZAR, S. WINFIELD, L., Database Support for Workflow Management: the Wide Project. Kuwer Academic Publishers; 1998.

And set of all actions taken to implement the objectives are the Planning. This technique is called Business Integration and is represented in the figure below

The implementation of iSAC in each of the pilot scenarios produces alterations in its organizational structure and procedures performed to date. The BSC tool will indicate how well the change made impact on the objectives proposed in the SCM.

Therefore, the SCM must be deployed in a specific control panel that allows monitoring the transformation undergone by the pilot stage. Without this specific BSC SCM, it is impossible to assess the role played by iSAC in the process of change.

9.2. Strategic Measure

The strategy of implementation of SCM requires BSC in defining a series of models that represent aspects of the Organization that may change during the implementation of iSAC.

Measuring impact on the organizations implementing iSAC is easy if we are able to identified the impact areas beforehand.

To identify the impact areas used SICIMA³⁹ analysis methodology. Then exposed to a form adapted to this project:

- Define the requirements of specific business model of each pilot scenario and the environment in which it operates. The requirements are the conditions imposed by the model and the environment. Requirements limit the choice of target. If not identified requirements, selected targets may be non-viable.
- Define the objectives. The objectives are as an organization that is structured to overcome the limitations imposed by the requirements.
- Define information requirements, processes, resources and organization. The requirements set to introduce changes in these four elements to fulfil the objectives. Usually the requirements are known as the Strategic Objectives.
- Define the specifications for information management, process management, staff management and communication management. The specifications set out in detail how to modify the functioning of the Organization to fulfil the requirements expressed in the Strategic Objectives. The specifications are expressed through specific objectives.
- Define Work Flow Model, known as the Procedure's Manual of the organizations. Really what is defined at this point is like, every goal, amending previously existing Procedures Manual. In organizations that have no written procedure's manual is necessary to establish how it should change the behaviour of the organization and its people face every day situations.

9.3. Strategic and specific objectives

The Strategic Objectives of Area Activity identify areas for improvement and the strategic focus of the improvement. This will determine what processes should be improved and that improvement is expected to be introduced.

To evaluate the processes selected in the previous stages, it's necessary to noted the deviations from the Strategic Objectives and agree changes to introduce in the processes. These changes are the Specific Objectives.

³⁹ SICIMA Analysis. Basado en CIMOSA (CIM Open System Architecture). Consorcio AMICE: European CIM Architecture. SPRIT 688. Incorporating Norm ENV 40003 (CEN/CENELEC) as a EU standard on organization modelling

And the third stage is to establish the improvements or results to be obtained if the Specific Objectives are met. That is, the changes show that the objectives are being met. Critical Success Factors are. Process attributes are those that, when amended, define the degree of improvement in this process.

To properly integrate the three steps described should be the analysis described in Figure 5. This methodology based on SICIMA developed by Organizational Research Group (GIO) of the Universidad Politécnica de Valencia and Universidad Politécnica de Cartagena.

9.4. Rating / measuring improvements (final % improvements)

All strategic objectives and even the specific objectives, in most cases, are difficult to understand for the people of the Organization that are not managers.

For people located at the base of Organization, the indicators are understandable expression of the objectives because materialize into practical and easy to measure what is expected.

The indicator tells us that the fact should be measured but it is the rating that indicates the particular value that is expected to achieve the objectives.

In applying these concepts to iSAC is very important to establish indicators that can be used in pilot scenarios that are stable over time, but the rating of the indicator for each of the pilot stage is what personalizes the objective in this Organization for a period of time. It is important to remember that the rating limit for successive periods of time defined as the Organization must evolve in a given period.

As a final conclusion, a well-built BSC not only shows the current status of an organization but identifies specific items that must be managed to head the organization.

10. The Standard Cost Model Methodology

10.1. Developing the ISAC6+ Baseline Data Model

The base data model has been developed in an evolutionary way with partners, working systematically through a series of four exercises to develop the structure for the proposed Baseline Data Model.

The stages were:

- Defining anticipated benefits and specific objectives by describing processes with potential iSAC6+ interventions. The WP2 team worked with partners on this.
- Defining costs – identifying where stakeholders and participants are likely to incur costs in order to use or provide the Citizen Advisory Services. This includes describing "soft", qualitative costs and benefits in the second part of the collection grid.
- Identifying indicators needed to calculate costs.
- Identifying base data required to generate indicators.
- Include selection of workshop tables.
- Include final table or reference to appendix.

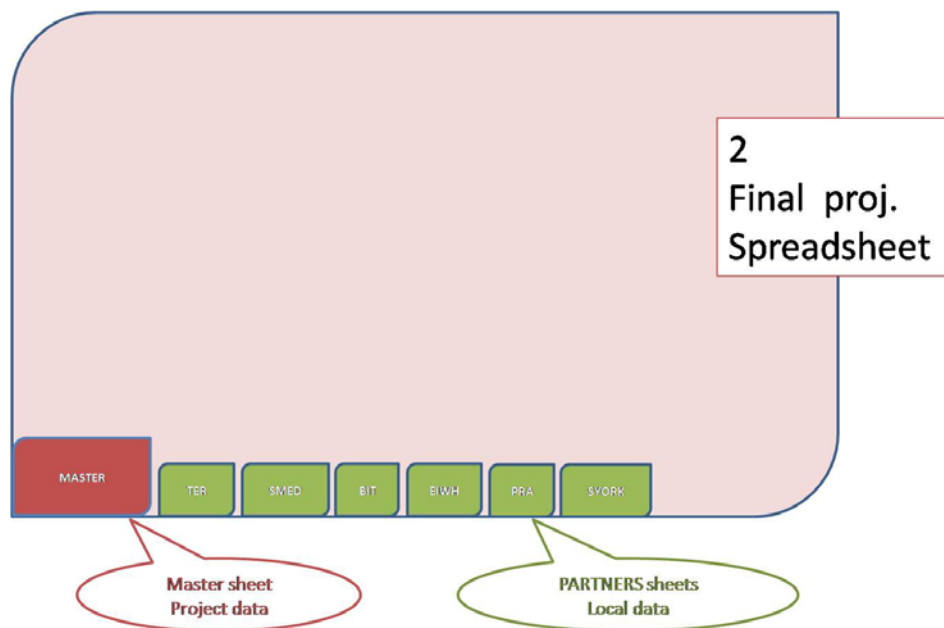


Figure 4. Local - global data management model

10.2. Structure and features

The range of objectives, indicators and measures which emerged from the Work Package workshops features of the proposed data **model have been structured and clustered as described in the following paragraphs.**

At the highest level the data is split into two sections to reflect the basic nature of the measures, quantitative and qualitative. Indicators are separated at a high level into two: directly measurable costs, originally referred to as hard factors, made up of those which are clearly defined, naturally measurable and capable of being represented in terms of quantifiable cost.

indirectly measurable costs, referred to as "soft" factors during the early stages, a term which the Work Package team felt was potentially misleading and which was replaced with "Social Impact", a term consistent with the most recent Impact Assessment Guidance. These indicators are largely qualitative, and as such difficult to cost in precise quantitative terms. They are nonetheless significant outcomes of using iSAC6+ and can be identified and given a cost value through a process of analysis, research and estimation. The aim is to convert largely qualitative indicators into credible quantitative estimates, in line with the European Commission Impact Assessment Guidelines (January 2009) guidance.

The basic SCM formula is applied through the model, although it may be found to be difficult to apply it fully to Community Costs.

The model includes costs and benefits. Costs are straightforward, but benefits are shown as negative costs. This is in line with good accounting convention and will enable the project to show a bottom line figure which reflects the true burden and benefit for the citizen of using iSAC6.

Both Costs and Community Impact are further sub-divided into three clusters each, namely Costs to Citizens, Businesses and Administrations. The sub-divisions are based upon the SCM Guidance. The guidance is not prescriptive, and recommends that users make judgements which take into account the needs of the situation and the data collection burden in relative to the scale and value of the project. This we have done.

Data collection grid (SCM & MSC models)

Cluster / Activity Area (4)	Strategic Outcomes (5)	Specific objectives (6)	Critical success factors (%) (7)	Indicators (8)	Information source (9)	Activity Standard Costs (10)	Price	Time	Quant	Final cost	Improvement rating %
Citizens (users) (1)											
Business (users) (1)											
Admin (provider) (2)											
Social impact (3)											

1. Impact on Citizens / business = Cost of burden to citizens / business
2. Internal impact = impact on the organization - Sustainability and efficiency
3. Social impact Identification is a goal in iSAC6+ . Measurements to be done qualitatively
4. Area of activity: citizen, Administration and Employees (that can be also include in Administration)
5. Strategic Outcomes = expected benefits - describes the benefits we expect for a set of actions
6. Specific objectives = result - describes any specific result we expect to reach by implementing iSAC in the specific sites
7. Critical success factors – criteria we want to achieve to meet strategic objectives (Expected improvement - %)
8. Indicators – describe one or more measurable indicators for each result
9. Source - where we gather information from
10. Activity Standard Costs – indicate the cost parameters for each outcome (cost per hour of employee, cost citizen's trip, ...)

Table 5. Data collection grid model

Track of Results

Activity area	Specific objectives (1)	Critical Success factors % (2)	Costs Before iSAC (3)	Costs After iSAC (4)	Level of improvement % (5)
Citizens					
Business					
Administration					
Social impact					

1. Specific objectives – They come from the strategic ones and are defined for the services provision
2. Critical Success Factors - Expected value after iSAC (indicated in % of improvement)
3. Costs Before iSAC6 - Measured value before iSAC = base line service measurements
4. Costs After iSAC6 - Measured value after iSAC
5. Level of improvement - Expected improvement after iSAC (indicated in % of improvement)

Table 6. Results track grid model

10.3. The Baseline Data Model

Progress

At this stage the model is complete for Direct costs as described above. The same model will be used as the basis for collecting and analysing Social Impact costs. However, we anticipate there may be some alterations to the way in which the model to reflect the qualitative nature of many of the measures.

It is important to note that the data currently contained within the model is indicative at this stage. Partners have agreed a model which will over time allow them to present a consistent set of data and indicators. At this early stage partners are refining their methods of data collection while at the same time developing their expertise in using the model. The planned date for populating the model with a complete and consistent set of baseline data is at the next review point in December 2010.

Data Model Contents

The table below contains a detailed description of each element of the model.

	Title	Description	Data
	Activity Area Cluster	Information, indicators and data separated into the three clusters where costs are incurred,	Citizens, Business, or Administration. These clusters will be repeated for the analysis of Social Impact.
Balanced Scorecard Data The information and indicators used to support the BSC analysis.	Strategic Objectives	Policy level expectations of benefits to be gained from iSAC6+	Text description e.g. Reduce staff costs
	Specific Objectives	Measurable outcomes supporting the strategic objective	Text description e.g. reduce staff time
	Critical Success Factors	Achievement target for each Specific Objective	Target figures e.g. 10% reduction
	Indicators	Indicators of performance against CSF	Text description of the activities or outputs which indicate performance against CSF.

	Data before iSAC	A baseline total figure gathered before iSAC6 implementation. This column is related for each element of the SCM formula	SCM total
	Data after iSAC	Total cost at each of the Review points used to indicate performance against the CSF target.	SCM total
	Information Source	An explanation of the source and nature of the data as an indicator of the accuracy and reliability of each measure.	Text
Standard Cost Model Data	Activity Standard Cost	Description of the specific cost incurring activity.	Text
	Can this be measured	An indication of whether partners have data readily available. NOTE: Not all partners can provide the same set of data.	Y / N
	Price	The price incurred for the activity, e.g. Public Transport fare, equipment purchase.	Unit cost in Euros
	Time	The duration of the activity where appropriate, e.g. to calculate loss of earnings.	Hours
	Quantity	Number of occurrences in a year.	Number
	Final Cost	The total cost burden for the activity over a year in Euros.	Euros

		SCM calculation PxTxQ	
		NOTE The default figure for each formula element is "1" to ensure a valid calculation.	
Final Improvement		Percentage of Total Cost Burden against Baseline figure to show performance against the CSF target.	Percentage
Comments		Explanatory notes from each partner as appropriate.	Text

Table 7. Parameters description and use.
Author: Terry Keefe (SHU)

From Σ to integration

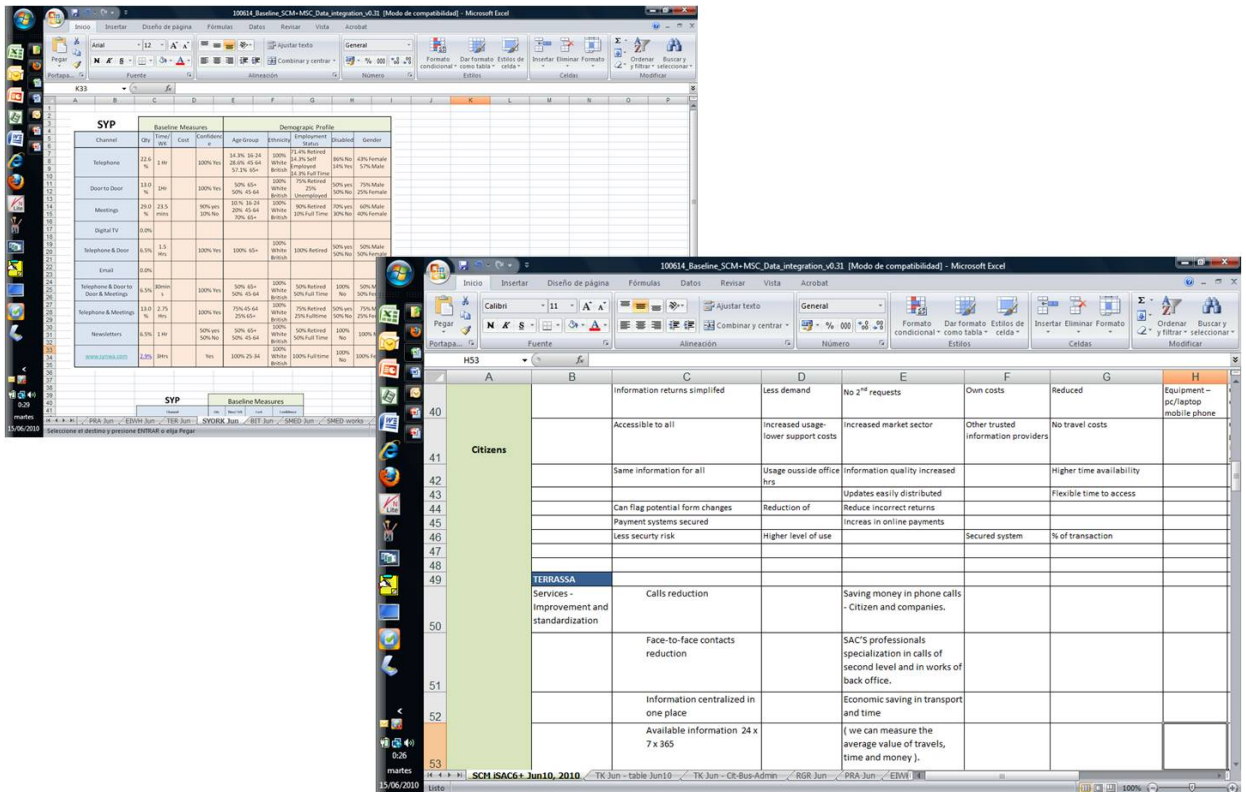


Figure 5. From local data to project integrated data

11. Recommendations for implementation

11.1. Applying the BSC method Principles

The BSC addresses a very complex reality which must be sufficiently analyzed in depth before applying the BSC. The dynamics experienced by partners during the ISAC6+ project tasks evidence this fact.

Therefore, applying the BSC requires the organization to allow time to mature in this methodology. It is very common after the first definition of the Balanced Scorecard is some improvements happen quickly. For stability, it is very important to ensure that strategic and specific objectives are well defined and have certain stability over time.

It must be very careful when defining the indicators. These must be accurate (indeed appropriate measure), accurate (in similar circumstances are equal values) and sensitive (small changes made are reflected as changes in the value obtained), so as not to distort the reality they represent.

To ensure the successful implementation of the BSC must respect the following rules:

Before implantation

- To compare similar cases (BENCHMARKING-BEST PRACTICES)
- Discover shortcomings and loopholes in the process to optimize
- Design, together with the Project Team Process flow map to optimize
- Review quantitative data and information to optimize Process
- Analyze work habits of users of the process to optimize
- Propose actions and changes needed to optimize the process
- Indicate the most appropriate ICT for the result of the redesign process

BEFORE and DURING IMPLANTATION

- Cooperate with the Bureau in the present to the agents who perform the process.
- Use the Work Meetings with the teams as a mechanism INVOLVEMENT
- Promote inter-personal communication to reduce resistance to change

After implantation

- Prepare the equipment in TEAMBUILDING SKILLS
- Train teams in TECHNICAL ANALYSIS PROCESS
- Instruct the implementation team
- Train teams coordinator of the new redesigned Process

11.2. Applying the SCM method Principles

The approach is to use the SCM throughout, appropriately adapted and developed to include a range of factors and measures which include qualitative and beneficial impacts as well as monetary costs. This intention is that the baseline data model will be capable of producing a balance sheet for the project, similar in concept to a Benefits Realisation appraisal.

1. The data collection burden on partner organisations should not become a major cost in itself. Therefore it is a core principle that data should as much as possible be

generated from existing local data collection exercises. In some cases where the indicators are deemed sufficiently important but where no data is currently available, consideration will be given to conducting surveys.

2. The data collection and cost assessment process will be subject to a controlled review process, approximately every six months to report to each meeting of the PEB. The core methodology is based upon experience and therefore a largely proven approach. It is therefore unlikely to require change. The context is however fresh territory and there are lessons to be learned about the choice of indicators and measures, Therefore the operation of the model will be reviewed as described above to assess its performance, confirm the indicators and measures are appropriate, identify options for improvement and, where necessary, introduce changes..
3. Initially, up to the first review point, the emphasis will be upon direct costs. During this period further work will be undertaken to refine the tool to enable it to collect, assess and cost Social Impact as described above.

Progress will be monitored and managed using a Balanced Scorecard as described above.

12. Next steps

12.1. Monitoring data

Local base line data was collected at project first months, from October 2009 to February 2010 at all pilot sites.

Some partners already had service data available for this period, from their own periodical measurement system. Other partners built a collecting system from scratch to reach initial data to continuously compare data evolution during and after project activities. A specific measurement and data control model was built and is shared by all partners within a complex and complete frame for results tracking.

Periodical measurements will be done twice a year, in a six-month base, in December and June each year from June 2010.

First results –December 2010- will not be very different from the base line data. The system's set up time frame at local sites is from March 2010 through end of August 2010. Then cities will start the training period: system's testing and improvements locally, semantic testing and training, and content improvement and completion. This is considered to be a three to six-month labour intense process to be carried out by highly specialized local employees on service providing. In some of project's local pilot sites with no Citizens' Service already in place it is expected to be the most difficult task on the project development process. In these sites also, the initial data collection was a great challenge for the organization. The effort some of them had to carry out was considerable to reach some data to start with. At other organizations, time was spend in convincing the actual personnel on the value of it and on the fact that measurements had to be done. The agreement on a common model was a major success from where to start measuring in the same direction and with comparable expected results.

The WP2 professional team will make available supporting resources during the next critical period, to make sure all local authorities count on the needed help to avoid delays in the project results measurement. The service is expected to be available at all local scenarios for citizens by mid 2011 with acceptable results.

During project time, WP4 is going to make available a more advanced semantic system to improve relevance of results, though accuracy on the query's answer. Final project measurements, before June 2012, will have to show this system's improvement in comparison with current iSAC results in Terrassa, for example.

12.2. Quality review

From partners' defined specific objectives and critical success factors, the WP2 team will build in the next months a Quality frame for the new service.

Service data is expected to have a permanent track locally after the project time frame. The main shared idea within project team is that the project objective is the creation of new and outstanding services for citizens, or highly improving current eGovernment services. Quality measurements have to show it with clear evidence.

In the next months, project's Quality references are to be agreed at group level and shared within the deliverable **D2.3 Quality service indicators report** due at project's month 15th – November 2010.

13. References

1. *The "Services" Directive (Directive 2006/123/EC of the European Parliament and of the Council of 12th December 2006 on services in the internal market*
2. *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Action Programme for Reducing Administrative Burdens in the European Union [COM (2007) 23 final]* <http://www.administrative-burdens.com>
3. EU Commission Impact Assessment Guidelines (January 2009)
4. The iSAC on line system at the City of Terrassa website - <http://isac.terrassa.org>
5. M Mercè Rovira, *Velíngara. Si t'agrada, vine*. Master thesis. ICT – UPC en Gestió de la Qualitat als Serveis, 1994-95.
6. web page <http://dontapscott.com>
7. *5th Ministerial eGovernment Conference 2009. Teaming up for the eUnion Conference Proceedings*. Malmö, 19-20 November 2009.
8. Don Tapscott [speech at the 5th Ministerial eGovernment Conference 2009](#). Malmö, 19-20 November 2009.
9. A.H. Maslow, [A Theory of Human Motivation](#), *Psychological Review* 50 (4),1943
10. [Classics in the History of Psychology](#). An internet resource developed by Christopher D. Green. York University, Toronto, Ontario. ISSN 1492-3713. *A Theory of Human Motivation*, A. H. Maslow (1943). Originally Published in *Psychological Review*, 50, 370-396. *Posted August 2000*
11. *An interpretation of Maslow's hierarchy of needs, represented as a pyramid with the more basic needs at the bottom.*^[1] from *Psychology - The Search for Understanding* by Janet A. Simons, Donald B. Irwin and Beverly A. Drinnien, West Publishing Company, New York, 1987
12. [Laurel Tarulli's blog](#)
13. Re-use of Information Directive – Dir 2003/98/EC
14. FEMP – Universidad de Salamanca. Seminario Modernización Organizativa y Administración Electrónica en Ayuntamientos Pequeños y Medianos. Universidad de Salamanca, 2010
15. [United Nations E-Government Survey 2010. Leveraging e-government at a time of financial and economic crisis](#). ISBN: 978-92-1-123183-0.
16. Checkland, P and Holwell, S, *Systems Thinking, Systems Practice*, John Wiley & Sons 1990
17. Kaplan, R. S. & Norton D. P. "The Balanced Scorecard: Measures that Drive Performance", *Harvard Business Review*, January/February 1992
18. Kaplan, R. S. & Norton D. P. "Putting the Balanced Scorecard to Work", *Harvard Business Review* September/October 1993
19. Guillen Salazar, S. Winfield, L., *Database Support for Workflow Management: the Wide Project*. Kuwer Academic Publishers; 1998.
20. *SICIMA Analysis*. Basado en CIMOSA (CIM Open System Architecture). Consorcio AMICE: European CIM Architecture. SPRIT 688.

14. Appendices

14.1. Appendix 1 – The Balanced Scorecard Method

14.1.1. Usefulness of the Balanced Scorecard

The BSC of an organization provides a detailed “picture” of the activity developed to achieve the objectives set by management.

BSC allows to photographing the organization at predetermined time periods, for example, each month. The sequence of "pictures" shows the dynamic of change experienced by the organization.

This information identifies the deviations that occur in the organization and impede achieving the agreed objectives. With this information, the management of the organization agrees to the changes necessary to achieve the objectives. In addition, the evolving structure of BSC as they evolve the objectives of the organization.

Continuing the cinematic metaphor, not only can see the image of the organization in motion, but also allows:

1. For changing the plane of the camera as you want to see new aspects of reality. And it also allows the camera zoom to get closer to the necessary details.
2. For achieving all that is necessary for the BSC that properly constructed.
3. For a better understanding of the theoretical basis and methodology of BSC to build it.

14.1.2. Theoretical basis of Balanced Scorecard

Systems' Theory is at the foundation of BSC. The complex reality of an organization should be reduced to a set of indicators that represent levels of performance and the progress towards achieving a set of strategic objectives.

First, we must identify the problem or aspect of the organization to manage or learn. It is the Activity Area.

Within the Activity Area elements are observed actively modifying the events that occur in the Activity Area: individuals, groups of people, computers, etc. It is necessary to identify them. These are called Agents.

Also in the Activity Area are observed flows of information, materials, etc. Agents are exchanged between them. These flows correspond to Entities, objects or people who are transformed by tasks performed by agents. When an entity comes in contact with an agent is upgraded.

An example of entity is the record, a folder that is being transformed every time an agent performs the task of writing a new document and adds it to the file. That is, within the Activity Area Entities transformations occur by the agents. Each of these transformations is called Task, an ordered set of tasks as a Process. Until we can identify and represent each and every one of the processes taking place in an Area Activity is not fully understood the Activity Area.

But we must go one step further in the knowledge of the Activity Area. Should be identified in each task the mechanisms used by the agents to decide. That is, agents do know because things. Why choose one or the other alternative.

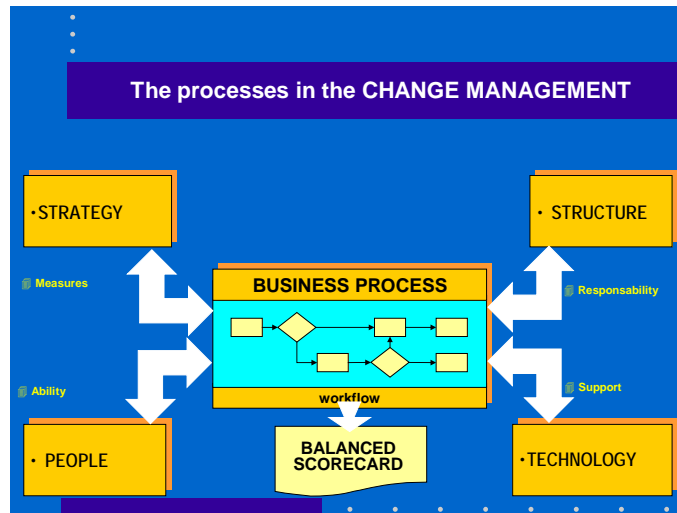


Figure 6. Change Management.

The elements of the organization (strategy, structure, people and technology) are integrated in the processes developed by this organization. The control panel displays, through the state processes of these elements.

The organizational change is made in the processes, monitors the control panel and is measured through the amendments made to the strategy, structure, people and technology.

We are now able to build a BSC. We can relate the goals of the organization where the process should be modified. We can relate the change you want to achieve the objective with the amendment to be made in each task of each process

14.1.3. Rationale and objectives

The BSC is a tool to drive organizational change using a methodology called DROP-STRATEGIC.

Its aim is to align the organization, and each of its processes, with the objectives set by the Directorate of it.

The result achieved in implementing the Goals can be seen through the Critical Success Factors. These results are measured very well by observing the change in the flows that has occurred or the tasks performed. For example, increase or decrease in the number of calls, or the number of visits. That is, variations in the number of tasks performed. Another example can be found on the increase or decrease in the duration of the visit or call. That is, variations in the duration of the Task.

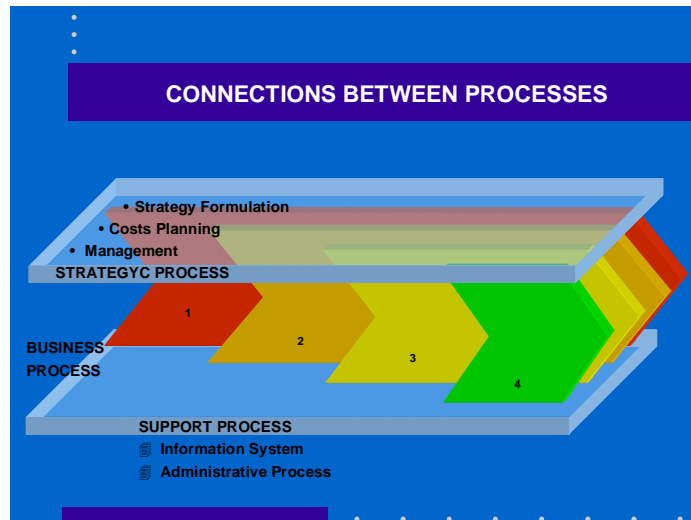


Figure 8. Connections.
 Author: Guillen Salazar, Salvador

All these measures monitor the organization: Tasks, Agents and Agencies. Each of these measures is called indicator. The set of all Indicators Monitoring allows the organization. And set of all actions taken to implement the objectives are the Planning. This technique is called Business Integration and is represented in the figure below

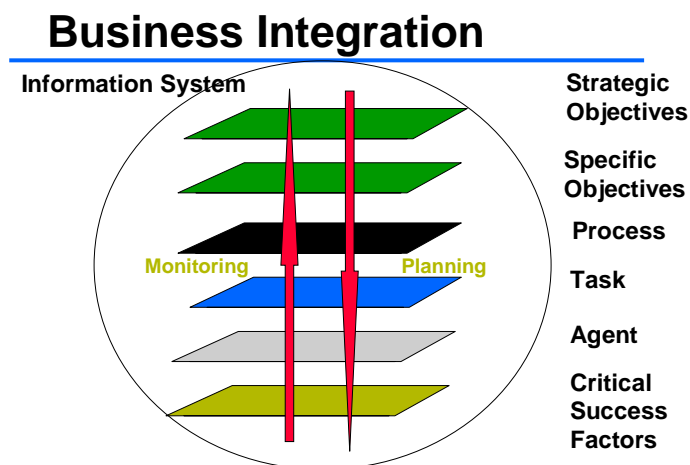


Figure 9. Business Integration.
 Author: Guillen Salazar, S.

14.1.4. Critical success factors (targets %)

After the Critical Success Factors set must be designed to perform measurements to evidence the achievement of planned results. You get a set of indicators to monitor each Critical Success Factors.

A form should be filled for each of the success factors considered. This form will help identify the indicators. Here is a proposal for a questionnaire.

Qualitative analysis of a Critical Success Factor

1. Is it quantifiable factor? How?
 2. Is it measurable factor? How?
 3. Is revisable factor? How?
 4. Does it indicate the results of the process factor during the time? How?
 5. Does it indicate the factor on progress towards the targets in time? How?
 6. How does a change factor in the process?
 7. Are fees accepted factor in the company?
 8. Is the factor value accepted by other companies? What?
 9. Is the collection of data easily accessible? Is the integrity of the data reliable? Is it possible to estimate the extent of the resulting factor easily?
 10. Is the factor documented or published openly? Where?
-

Table 5. Qualitative analysis of a Critical Success Factors

14.1.5.Strategic Indicators at BSC Model

Once each process is bounded the definition of their indicators is needed. There are two complementary approaches to identify indicators:

- Indicators that provide a comparison between the real and the proposed process through the objectives. Most common are cost, quality and service life cycle.
- Indicators that provide a comparison between the current state of Critical Success Factor and final status to be achieved. They reflect the expectations of customers.

A closer examination of the indicators of quality, cost, cycle, etc, above shows some important details:

Quality. It's a proven fact that if the quality costs, lack of quality costs more. In this sense to consider:

- Excessive meetings to discuss problems
- Products and services are not accepted (rejections, time spent in repetition, customer complaints)

Stages. A reduction in the life cycle of service would decrease costs. The measures to consider are:

- Time needed by service performed
- Timeout
- Ratio of hours utilized against the total
- Time spent on activities without added value
- Time required for quality control
- Relationship with suppliers information

Costs. All costs of the process are directly related to the Critical Success Factors. To reduce costs will have to investigate the life cycle of the product or service quality, lack of information on the needs of the customer, vendor relationships, excessive control of the process, etc.

For a good understanding of the process a route through it is recommended to reach a joint vision of bringing together each of its tasks. It should also make a detailed description of the process, for which there are different techniques

We deduce from the discussion given that the identification and selection of indicators will be made from the processes in each Activity Area. It is called Management by Processes and Business Process Management (BPM).

Therefore, the BSC of a BPM-based organization can:

- Manage each department in an integrated manner to achieve the objective of the entire organization.
- Improve the results because it increases the external customer satisfaction (citizen and business) and also the internal customer (employees of the council).
- There is an "owner of process." He is responsible for maintaining control of the process, analyze performance indicators targets and lead continuous process improvement.
- Reduce interdepartmental conflict. All Departments know the implication of his work on the final result. They know that value added to the chain and what is your contribution.
- Increase the efficiency of processes. By reducing process variability and the dependence of the factors "unexpected."
- Provide flexibility, change and innovation in a controlled manner to suit the needs and expectations of customers.
- Developing a Systems Quality Management and subsequent certification of the same.

The BPM is a new way of approaching the old problem of the flexibility of the organizational structures. Therefore, the BSC has an impact on the organizational structure, adapted to the requirements set by the objectives. An organization revolves around the organizational structure it has. Only adapt to the changing environment by modifying this structure. Modification can be generated from within a controlled or a cataclysm from the outside.

But an organization is structured around the processes that are naturally adapted to the changes affecting these processes. Processes, in turn, are constantly changing with changes in technology markets and requirements of citizens and businesses. This gets the organization to easily adapt to the needs of its customers. This means that the organization is permanently geared to the customer (citizens, businesses and City staff).

To get an organization to develop a BSC based on a BPM essential conditions must exist:

- Active involvement by the management.
- There are defined objectives on the project and expressed clearly.
- A clear and comprehensive understanding of own working methods as a basis for improvement.
- Willingness to change and adapt through the discoveries made during the implementation of the management model.
- Realize that the environment is changing and that we must anticipate.
- Willingness to share information.
- Define optimal processes first and then apply.
- Supporting the process of change within the organization to be transformed.
- Be open to new ideas with creativity and innovations to existing processes.
- Conclusions justified by data collected during the project.
- An ongoing effort.
- The institutionalization of the BPM model consensus.

14.2. Appendix 2. iSAC6+ Partner Pilots Description

14.2.1. Saint Medard en Jalles (FR)

St Medard is the smallest town in the project, at the department of La Gironde (FR). They do not have a unique information service for the citizens, the city council departments answer their own queries on the themes they are responsible for. The city has a reception desk and a telephone desk to refer citizens to the appropriate service.

Main service –SAC– philosophy and characteristics –proactivity, data uniqueness, collaborative environment– raised high interest on the city staff. One of the main impacts we expect from iSAC6+ in the organisation is the aggregation of all DB in a unique one.

As for system requirements, probably there is going to be a need for using a DB managing system –the “manager”- to complete existing DB. There is an intranet very much used to access employee information and private data for management purposes. iSAC may be the system for accessing it. All web management is supported with DB, so retrieving the information is not going to be a major problem. They have very good services at their level, but lack the connexion among them

Among the top ten demands to the city are: Education services –school lunch and after school activities-, local calendar of events, and complaints for non satisfactory services. Employment services, for which they relay on the national system “pole emploi”.

The main aim for the system at the city is for connecting local, regional and national administrative procedures to iSAC so that they can benefit from an easier access.

The city opened months ago an external impact measurement on users’ satisfaction on public services use. Yet the WP coordinator pointed out the value of iSAC internal impact, which can only be measured through a major attention effort along the first implementation steps and service period – the butterfly impact.

The city does not see the need for a unique Citizens’ Information Service yet, but a unique DB to provide the same answer from all city departments when asked. Results will make further recommendations to the management team.

14.2.2. Bremerhaven (GE)

The BIT at Bremerhaven city council is the technology agency for the city government. They are responsible for the eGovernment programme of the city. There exist a wide set of local procedures, and links to some national ones of frequent use by citizens, organised by Life Events, responsible department and alphabetical order. The introduction of the iSAC access facility will help citizens to better find and use more all resources available at their current facility and accessed by “Google mini search”. eID is available for some services, but still has a low use (eID is a paying and expensive service in Germany).

A wide availability of council information already exists: History, Economic and demographic data, etc. Tourist information is available in a separate web page, under the unique city portal, cause is maintained by a private provider, very well differentiated from the City web site with a dark background to always make sure citizens are aware they are in a “non official” web page. A calendar of events for the City and the city area is available,

provided by a private Company and linked at the City portal. The city manages its own calendar of “official” events, separated and not contained in the city general events calendar which looks as “a cultural and recreation” events calendar. This is a situation unthinkable in the Spanish Cities with this service available. Usually when the city takes the lead on a unique city events calendar, NGOs, active organizations and governments work together with the private sector to reach a unique DB with all events in town available to all for several uses on their own.

There is no 3-digit number –Spanish 010-like- for general information access. A project is coming for a national 115 number for general information purposes (like the 012 Citizens’ Services at Regional Government level in Spain).

A wide spread of different public services information and access to all city departments exists, with non integrated information service. Yet, public employees do not clearly see the need for it. There is a Citizens’ Information Service which offers access to city services and administrative procedures, usually non standardized paper models.

There is a great deal of improvements to make evident locally through iSAC, for external users as well as at internal level: an impact to citizens, improving ALL citizens’ access to information and services in a more inclusive and empathetic way; an impact on the City’s organisation and culture, using a unique semantic facility to easily access information for city employees to give to the citizens any time it is required, and for management purposes.

The city already has a wide range of data for web portal use, but there is no data available as base line for citizens’ use of city facilities, and new measurements were not easy from city employees at this time.

Service data in Bremerhaven are expected to be really comparable to the available in the city of Terrassa.

The city of Bremerhaven works in other EU projects that may have some connections with the final service to be provided: digital signature as an example.

14.2.3.Prato (IT)

Prato has main similarities as a city to the city of Terrassa: a textile industrial past, and its short distance from a major reference city (Florenca, here; Barcelona, there).

Holds a mature URP –Italian name for Citizens’ Information Service- with a very similar service frame compared to Terrassa.

There exist four main DB where to retrieve information from, plus the traffic and emergency information, and the NGOs and local entities, which already exists in Terrassa as a main data used by citizens:

- “Concorsi” - Employment (at national level, but created and updated from Prato)
- “Tempo Libero”, with and to the Prato Province
- “Come fare per...”, local procedures plus national more common ones
- “Indirizario”, corresponding to iSAC’s directory of local resources

Its main need is for a good search facility to reach all available information in the web site so to rise citizens satisfaction up to the maximum levels for city services. The current web site has 4 different search engines, no one really satisfying. Service data in Prato are

expected to be really comparable to the available Terrassa data, due to its similarities on service, city model, etc.

No telephone service available in Prato currently, but some “green numbers” (free of charge telephone information services carried out by state, provincial, local administrations) do exist for specific themes, like environmental services, for example.

The city partner is mainly concerned on web use. They are currently working on a new measurement system for web use, as part of a wider Italian project, named “Metiamoci la faccia”, to create a more visible icons set (emoticons like) to better invite users to give feed back.

The city raised the accessibility improvement, for it is a major issue in the recent Italian law. The city works together with other administrations on several innovation projects: digital signature, services personalisation, etc.

As a specific trend in the City of Prato is the existence of a big Chinese community of 20.000 plus inhabitants, with serious problem of integration, to whom the city is intended to consider expanding the new web service since they are very cooperative with the city activity.

14.2.4. South Yorkshire Police (UK)

Through their Neighbourhood Watch volunteer network they are going to use the system to share information, concerns and activity on social and security issues at involved neighbourhoods. The “Neighbourhood Watch” service was created about 20 years ago as a national programme in UK. It is a voluntary programme to helping the police to keep more secure English cities and neighbourhoods with the participation of residents watching and caring for their neighbours. There exist an intranet with a lot of information (national and local), not always interesting for the general public, and with main security concerns. Security is going to be a major issue in the SYORK pilot. Semantic capability search is very important in this site, and personalisation would be a good issue also, but it is not yet available in iSAC.

Proactivity is a good feature for the Neighbourhood Watch service. iSAC wiki would also be taken as an objective for the community programme. The language here is English, the SYORK currently do not consider a multilanguage system as needed. Main content available is on training materials (pdf), documents, Neighbourhood Resource Watch DB. Access to Easy Connects DB (regional information) would be an issue to be considered.

Some technology mismatch look as a possibility with the SYORK DB... It has to be analyzed carefully. The SYP does not use OSS software yet, but they are starting to consider using it for some purpose.

The cooperating staff from the Sheffield Hallam University (SHU) –Terry Keefe- has worked with SYORK intensively to define main iSAC features for SYORK.

14.2.5. The European Institute of Women’s Health (IE)

Specialized information provider on gender related health to women and men. Their aim is to increase the dissemination level of the valuable information they provide to women and men world wide. The quality of their DB needs a better strategy and tools for a wider

access, and a multi language facility to better reach Middle East, Asia, African, South American women, sometimes so far from a freely available and easy to reach quality health information in their cultural and social situations.

The EIWH intends to:

- Provide the project with information in one or more languages to widen its users' access
- Allow the development of a test model for consumers who require to access data from transnational sources.
- This model will then be examined as a potential tool that can be used in the dissemination process for EU projects and their results.
- Allow the development of data with an Irish interest to demonstrate to Irish organisations that require manage, maintain and develop their need to continuously improve and expand services: Extra - office timeframes and consistency while not increasing or preferentially reducing costs at a time where public resources are rationed tightly.

Inclusive capacity of iSAC to reach less knowledge persons on Asia, Africa (Muslim women) is highly desired. Core information in EIWH is quite stable: high level professional health information, welfare info in IE, NIE & UK. The Open Source market is gathering impact and it should be pointed out that this not only provides an open situation for development (and indeed feedback for public bodies to improve the services, but it also minimises the economic leakage from the EU area by avoiding/replacing the use of proprietary systems from external sources. This also ensures the lifetime and onward development by the participants rather than strictly one company economic or financial factors.

The EIWH is preparing a set of web tools for the provision of Gender information models and documents to support the needs of public policy makers and decision makers, at both European and regional levels, with models of good practice for “engenderment” purposes. This will require the development of a specialised database and other additional services to meet and support the end user needs and requirements. Services will require to be provided with the appropriate levels of consistency and performance to meet all end user needs. ISAC6+ provides an appropriate platform for this and its related activities, namely consistency of services with scalability. The initial web content will contain approximately 600 pages of related information and the database will be designed to support all EU languages. The initial trencher of database entries will contain information in up to 9 language sets.

They need presentation materials as: demos, flyers, etc. to start sharing projects' aims and framework to be shared among their stakeholders. Many decision makers in their environment are anxious or ignorant about technology solutions. They may use any excuse to avoid this. Other possible partnerships to complement the local action are foreseen at local / IE level.

14.2.6. The city of Terrassa (ES)

They are acting as a role model; they already have the basic system successfully serving Terrassa citizens from December 2006.

They are considered at all effects as a pilot site because they never evaluated to such extend the service provided, and the success and citizens' satisfaction in detail (they have extended service data for 2007-2010). And they are a pilot too because they will be measuring administrative burden reduction from Citizens' Information Services perspective, never done in Terrassa before.

Qualitative data for the best service perception already exist, but they are going to quantitatively measure local improvements too.

One of the redundant goals at the last Mandate Policy is to consolidate the City Council like an effective, agile, modern and professional administration, which works interdisciplinary and becomes more and more available to citizens, improving the transparency and access to information. From the Citizens' Information Service we conceive this goal from an integral point of view and multichannel, in order to facilitate the relationship between the City and citizens.

- Services are available 24h with iSAC. The system has access to all the information of the 010 and gives a suitable answer in a very high percentage of cases, applying semantic technologies.
- *Infoservice* terminals allow access, in a very easy way to all information available at the municipal web site. They are placed in strategic points of the city and allow for use when citizens need it out of home or work.
- Face to face information is given at central and neighbourhood offices
- From the 010 citizens can access information and services, make complaints and suggestions, an start easy personal procedures.
- The citizens can also address the Council through e-mail, fax, postal mail, SMS.

The iSAC on line service in Terrassa compared with 010 information service. 2008 & 2009 - 30% of service

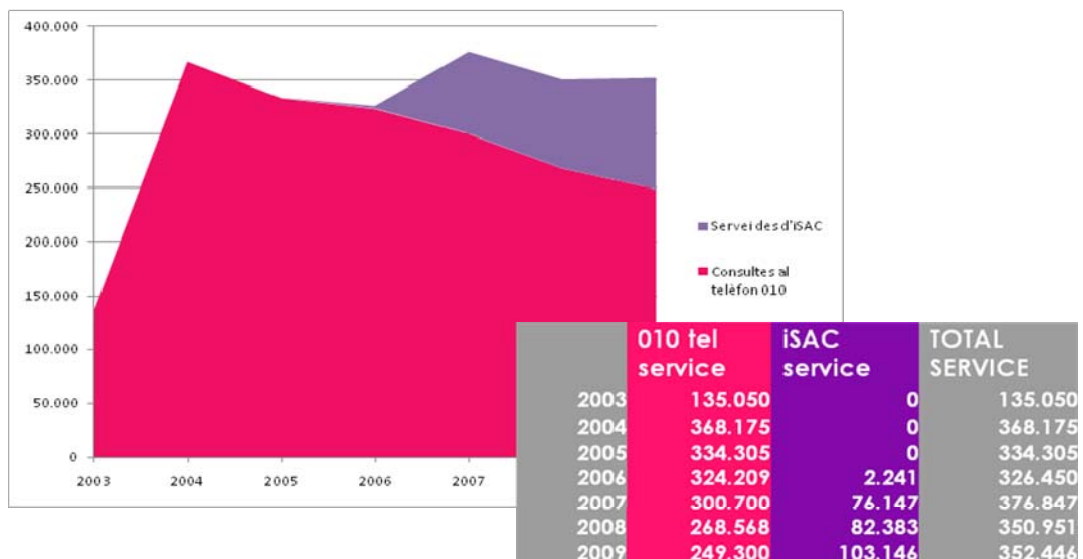


Figure 13. Recent service data in Terrassa: the 010 telephone compared with the iSAC service in the years 2008 and 2009

The comparison between iSAC results and 010 telephone service results is adequate due to the quite generalized assumption that 010 and web services offer more similar service to citizens –access to information- than face to face offices –which deal more with administrative procedures.

The SAC service is conceived like an integrated service to the citizen, as it includes all the procedures related to municipal census of inhabitants, tax management, registry of entry documents, services information with practically no limitations, and relationship with other administrations. This is a model started in the year 1996 with the centralization of all the economic services in the main building of the city government and basically after the remodelling of the physical space and after a process of organizational change, between years 2002 and 2004. In 2003 a territorial deconcentration process started too, from downtown to all districts in the city. More than ten new offices were opened. The last years, moreover, signed agreements of collaboration with other administrations allow citizens to carry out a lot of formalities in the SAC which formerly required a displacement to Barcelona and other cities.

The service is completely citizen centric. This gives the city a high management value as a motor for change in the internal processes of modernizing the rest of city services, guaranteeing a continuous improvement and adaptation to new citizens' needs.

In the SAC, services are classified according to a citizens use typology, not depending on the department as it is more common in other cities like ours':

- Services for social collaboration (notice of damages at streets, open air furnitures, etc.). The city wants to make it very easy for citizens to reach the city management.
- Services for the legal accomplishment of duties. The city is going to a model where the citizens can comply with their legal duties with the minimum possible effort, understanding the best procedure is the one with no need for it (maximum simplification).
- Demand for personal or social services. The city is speeding up response to these demands by establishing accurate and specific mechanisms according to each type of them (subsidies, social assistance, etc...).

14.3. Appendix 3. Base line measurements. June 2010

14.3.1. Measuring the impact on Citizens

ISAC6+ project - WP2 - measuring administrative burden and costs reduction and improved performance																		
Activity Area (Clusters)	Management Score Card data (MSC)						Standard Cost Model Data (SCM)										FINAL RESULTS	
	Strategic Objectives	Specific Objectives	Critical Success Factors %	Indicators	Data BEFORE ISAC June 10	Information source	Activity Standard Cost	Can this be measured Y/N	Price per unit (in Euros)	Data BEFORE ISAC June 10	Time (in Hours)	Data BEFORE ISAC June 10	Quantity (per Year)	Data BEFORE ISAC June 10	Final Cost	Data BEFORE ISAC June 10	Improvement Rate % AFTER ISAC	
Impact on CITIZENS	Services - Improvement and standardization	Calls reduction	15% of reduction	% of calls reduction	352.115	Telephone system (quematic)	Telephonic rate	Y	0,0685		1		3,64**		24.119,88		18%	
		Face-to-face contacts reduction	15 % of reduction	% of visits reduction	156.025	visits mgt system (q-matic) year 2009*	Travel rate	Y	0,63		1		1,61**		98295,75**		8'4 % achieved	
		Available information 24 x 7 x 365	More than 95 % availability	Time of availability	98 %	ISAC manager	Systems' maintenance cost (HW+ SW).	N										98%
		Easier eProcedures	5 % increase eProcedures	% increase	19.193	TI service, Innovation and Quality service and ISAC manager	Internet conecction cost/ Time cost	Y						0,2*				
		semantics improvement	10 % reduction questions without answer	% reduction	7%	ISAC manager	staff Income	Y										
	Provide easier access to services	Increase Internet site search	10% in the 1 st year	number of visitors	260 000/year	Logfile		N				?						
		Improve acces for elder & disabled	qualitative questionnaire of using	number of elder & disabled using public access points		Survey in public acces points		N				N						
		Provide Q.information	10% in the 1st year	number of non answered queries	6600	Citizens survey	included in call costs	N				330						
	Better information	Increased convenience and value to citizens	10% in the 1st year	number of redirected queries	30525	Citizens survey	included in call costs	N				5088						
			20	Q.information made available	Information queued for entry to system	Web service Statistics user survey	Personal Time	Y	6.00 per hr	6.00 per hr	0,5	0,5	6.7 million (page views)	6,7		Scope to mprove processes	Identifies methods and services to provide a	
	Ability to provide feedback	Identify user needs, issues	25	Comments, queries and suggestions received give higher sense of participation	Low levels of feedback	System data and statistics	Personal Time	n	n/a	Provides inclusion in activities	A/A	A/A	A/A	A/A	A/A	A/A	A/A	
	More language sets	Increase range of citizens	15	Higher rate of page views	Limited ability to meet needs of non English speakers	Internal web statistics	Personal Time	n	n/a	Limited mostly to one language								
	Easier retrieval of needed information	Reduce duration of search	-0,3	Time spent per session on the selected databases		Log file anlysis	Time for on-line visit	Y	Average hourly wage (€/h)	12	Average duration of visit (hours)	0,05	Number of sessions	5400		3240		
			-0,5	Number of clicks														
	Increase user satisfaction on website search	Increasing level of satisfaction	> 5/6	Average score assigned by interviewed user		Customer Survey		N										
	Reduce costs for NHW co-ordinators	Reduce telephone costs for NHW co-	5% reduction in 1st year	NHW Co-ordinators sharing information via telephone		Survey	Telephone Calls	Y	Average Telephone call rate		0,25		900		87,24 €			
		Reduce travel costs for NHW	5% reduction in 1st year	NHW Co-ordinators sharing information via NHW Meetings		Survey	Travel	Y	Average travel fare £4.90		N/A		12		65,14 €			
		Reduce potential earnings time spent at NHW meetings	5% reduction in 1st year	NHW Co-ordinators sharing information via NHW Meetings		Survey	Time	Y	Average hourly rate £5.93			2		12		157,67 €		
	Reduce time for NHW co-ordinators to share NHW information	Reduce Door-to-Door interactions and therefore save	10% reduction in 1st year	NHW Co-ordinators sharing information via Door to Door		Survey	Time	Y	Average hourly rate £5.93			2		12		157,67 €		
		Reduce need for face to face NHW Meetings therefore	5% reduction in 1st year	NHW Co-ordinators sharing information via NHW Meetings		Survey	Travel	Y	Average travel fare £4.90			N/A		12		65,14 €		
Reduce the need to distribute NHW Newslettes to share		5% reduction in 1st year	NHW Co-ordinators sharing information via NHW Newsletters		Survey	Time	Y	Average hourly rate £5.93			1		12		78,84 €			
Increasee usage of synwa.com	Improve usage of synwa.com to share NHW information	200% increase in 1st year	NHW Co-ordinators sharing information via synwa.com		Survey/SYNWA Membership	Online	Y	Average Broadband			3		12		159,53 €			

14.3.2. Measuring the impact on Business

iSAC6+ project - WP2 - measuring administrative burden and costs reduction and improved performance																		
	Strategic Objectives	Specific Objectives	Critical Success Factors %	Indicators	Data BEFORE iSAC	Information source	Activity Standard Cost	Can this be measured Y/N	Price per unit (in Euros)	Data BEFORE iSAC	Time (in Hours)	Data BEFORE iSAC	Quantity (per Year)	Data BEFORE iSAC	Final Cost	Data BEFORE iSAC	Improvement Rate % AFTER iSAC	
Impact on BUSINESS	Service improvement and standardization	Easier eProcedures	5 % increase eProcedures	% increase	19.193	IT service, Innovation and Quality service and iSAC manager.		Y					0,2*					
		Available information 24 x 7 x 365	More than 95 % availability	Time of availability	98 %	iSAC manager iSAC visits per year	Systems' maintenance cost (HW+ SW).	N										98%
	Reduce cost burdens on citizens	Reduce face to face visits	5% reduction in 1st year	business visits to office	12100				2	0								
								30,31 €	0									
		Reduce telephone calls	10% reduction in 1st year	number of calls	24475				0,10 €	0								
	Provide relevant Q information		10% in the 1st year	number of unanswered queries	2200	survey	included in call costs	N										
			10% in the 1st year	number of redirected queries	10175	survey	included in call costs	N										
	Better Q information	Increased value to organisations and professionals	20	More quality information made available	Increased service to users	Internal Trials	Staff rates	y	18.00 per hr	18.00 per hr	0,5	0,5	0.8 million page views	0.8 million page views	4.5 x 0.8 million	25% more		
	Ease feedback	Better identify needs, service gaps	20	Comments, queries and suggestions received	Less knowledge of user requirements	From user emails and checks with users	A/A	A/A	A/A	A/A								
	Increase web use rates	Increase languages info is provided	15	Higher rate of web use	Information in other languages than English has a higher level of use	Internal stats	A/A	A/A	A/A	A/A								
Ability to extend information services	Easy creation of new services	10	Num of new services	Limited service offering	Internal review	A/A	A/A	A/A	A/A									
Reduce cost on Business	Reduce potential, earning time spent at NHW Meetings	5% reduction in 1st year	NHW Co-ordinators sharing information via NHW Meetings			Survey	Time	Y	Average hourly rate £5.93		2		12		157,67 €			

14.3.3. Measuring the impact on the Administration

iSAC6+ project - WP2 - measuring administrative burden and costs reduction and improved performance																		
	Strategic Objectives	Specific Objectives	Critical Success Factors %	Indicators	Data BEFORE ISAC	Information source	Activity Standard Cost	Can this be measured Y/N	Price per unit (in Euros)	Data BEFORE ISAC	Time (in Hours)	Data BEFORE ISAC	Quantity (per Year)	Data BEFORE ISAC	Final Cost	Data BEFORE ISAC	Improvement Rate % AFTER ISAC	
Impact on the ADMINISTRATION	Service improvement and standardization	Easier eProcedures	5 % increase eProcedures	% increase	19.193	TI service, Innovation and Quality service and ISAC		Y					0,2*					
		Reduction av. time in calls	10% reduction	% reduction attention time	1 min + 20.sec	Qmetrics	Telephone fare	Y						*				
		Centralized information DB	All data in a unic DB	Number of DB	1	IT service	Systems' maintenance cost + tech staff incomes	Y								7000 *		
		Reduction of calls	15% of reduction	% of calls reduction	352.115	Telephone system (q-metric) year 2009 *	Telephonic rate	Y	0,0685		1			3,64**		24.119,88		18%
		Reduction of face contacts	15 % of reduction	% of visits reduction	156.025	visits mgt system (q-matic) year 2009 *	Travel rate	Y	0,63		1			1,61**		98295,75* **		8'4 % achieved
	Increase efficacy and efficiency	Increase number of website users	8 % increase in 1 st year	number of internal online access		Log file analysis	number of access logs	Y										
		Reduce response time	0,05	answer time		internal data (manual survey)	staff time per answer	Y										
		Increase use of central up-to-date information	60% increase in 1 st year	increased number of DB available for employees to answer citizen's queries	11000	internal data (manual survey)	number of available DB	Y										
		Increase employee time to administrative tasks	0,1	time of telephone answer		internal data (manual survey)	staff time cost per call	Y										
	Improve info mgt	More frequent info updates	20	Info online in less than 2 days	Updates could take up to 4 days	Testing on alternative services		n										
	Create new services	Better identify needs, service gaps	25	Better management of users feedback	Low levels of feedback	Testing on alternative services	Staff rates and time	Y	18.00 per hr	Identified issue:	50 x 30	Required staff trained in html	680 pages	340	18000	340 pages		
	Improvement of internal use of ISAC	Faster path to requested page	-0,5	Number of clicks		Log file analysis		N										
		Shorter duration of search	-0,3	Time per session		Log file analysis	Time for access to on-line DBs	Y	Average hourly rate	21,00	Average time of search	0,05	Numer of searches	5.532		5.809		
	Improve website editors tasks	Faster path to requested page	-0,5	Number of clicks	Improve searching for web site editors, better web site management	Log file analysis		N										
		Shorter duration of search	-0,3	Time per session		Log file analysis	Time for access to on-line DBs	Y	Average hourly rate	21,00	Average time of search	0,05	Numer of searches	# REF		1.936		
	Simplify management of customers surveys	Reduce complexity on on-line surveys	-0,7	Time preparing on-line surveys	Simplified management of customers surveys	Activity monitoring	Time spent	Y	Average hourly rate	21,00	Average time spent	40	Number of surveys	2		1.680		
	Increase usage of synwa.com	Increase usage of synwa.com to share NHW information	200% increase in 1st year	NHW Co-ordinators sharing information via synwa.com		Survey/SYNWA Membership	Online	Y	Average Broadband subscription £12			3		12		0,00 €		
	Reduce personnel costs and overheads	Reduce the need to distribute NHW Newsletters to share NHW information therefore saving production costs.	10% reduction in 1st year	NHW Co-ordinators sharing information via NHW Newsletters		Survey	Time	Y	Average hourly rate £5.93			1		12		0,00 €		
		Reduce need for face to face NHW Meetings therefore saving personnel costs and overheads	5% reduction in 1st year	NHW Co-ordinators sharing information via NHW Meetings		Survey	Travel	Y	Average travel fare £4.90			N/A		12		0,00 €		
	Improve confidence	Improve consistency and clarity of NHW information shared	5% increase in 1st year	Confidence measure		Survey	?	N	N/A			N/A		N/A		N/A		
Increase NHW audience specifically 16-34 age bracket	Increase the awareness of NHW information in 16-34 age bracket	5% increase in 1st year	NHW Co-ordinators aged 16-34		Survey/SYNWA Membership	?	N	N/A			N/A		N/A		N/A			

14.3.4. Measuring the Social Impact

iSAC6+ project - WP2 - measuring administrative burden and costs reduction and improved performance																		
	Strategic Objectives	Specific Objectives	Critical Success Factors %	Indicators	Data BEFORE iSAC	Information source	Activity Standard Cost	Can this be measured Y/N	Price per unit (in Euros)	Data BEFORE iSAC	Time (in Hours)	Data BEFORE iSAC	Quantity (per Year)	Data BEFORE iSAC	Final Cost	Data BEFORE iSAC	Improvement Rate % AFTER iSAC	
SOCIAL impact	Services - Improvement and standardization	Easier eProcedures	5 % increase eProcedures	% increase	19.193	IT staff, Innov. & Quality iSAC data		Y					0,2*					
		Semantics improvement	10 % reduction questions without answer	% reduction	7%	iSAC data	staff Income	Y										
	Reduce impact on environment	Reduce mobility	0,1	number of face to face contacts		Citizens' survey	regional/ national data on travel cost	Y										
	Improve administrative performance	More services at same cost	0,05	new services		internal data (manual survey)	internal data on services	Y										
	Reduce digital divide	Improve elder & disabled access	0,05	new accessible services		internal data (manual survey)	internal data on services	Y										
	Model of good practice	Widen reach of good information	30	Citations and links	Improvements identified	Desktop research	n/a	n	n/a	need identified	Included in staff costs	Low activity	Regional Database of policy actions	0	Staff costs above		100,00%	
	Improve dissemination of EU actions	Increased use of web service	20	EU policy statements	Some activity	Desktop research	n/a	n	n/a	need identified	Included in staff costs	Low activity	360 items per annum	120 items	Staff costs above		200,00%	
	Increase available on line information	Increase available topics	0,5	Additional information	Resource restrictions	Internal research	n/a	n	n/a	activities identified								

