



# **Public Services contribution to smart, sustainable and inclusive growth**

Change in demand for Public Services

Client: CEEP

Rotterdam, June 6, 2011

The aim of this fact sheet is to provide participants in the conference the 16-17 June with information to grasp the complexity of the various selected topics. As a second step, this document highlights some links with current EU policies and suggest points for debates.



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Final reports

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## Executive Summary

Changing demographics, rising service expectations and new technologies are some elements that have combined to change the way SGIs are provided. On the demand side an ageing population, rising service expectations, social changes, and technological developments have influenced both the role and cost of SGIs. For example, an ageing population increases the need for spending on health and pensions while at the same time, increased diversity of populations, caused both by movement within the European Union and immigration from new areas of the world, increases the need to share information between SGI providers. On the supply-side, new technologies increase expectations of communication between different service areas within the government. Data sharing has become more common, as users of SGIs expect both government departments and service providers to have access to all pertinent information—information on individual health, tax, and security are just some of the areas that have received attention.

## Points for discussion and debate

- What are other drivers of change that participants observed in their countries?
- Change in the supply-side are often driven by citizens needs. How are these needs taken into account? How should consumer rights be taken into consideration?
- How will an ageing population shift spending priorities?

# 1 Introduction

SGL providers have to adapt to change in the nature of demand. Technological and demographic change continue to have an impact on the perception of SGLs but also change the way these services are provided. The CEEP report, *Anticipation of Change in Public Services*, highlights these shifts, elaborating on the links between supply and demand as well as external pressures.

Two important demand-side trends present themselves: an ageing population and increased movement of populations across Europe, which both change the type of services that are being demanded (greater health services, for example) and the way those services are provided (provided services in more languages, for example). At the same time, on the supply-side, new technologies increase both expectations and opportunities. For example, data sharing has become more common, as users of SGLs expect both government departments and service providers to have access to all pertinent information—information on individual health, tax, and security are just some of the areas that have received attention. This has introduced efficiencies in the provision of SGLs, but also raised concerns over privacy. New technologies also mean that SGLs can be provided in a more efficient way.

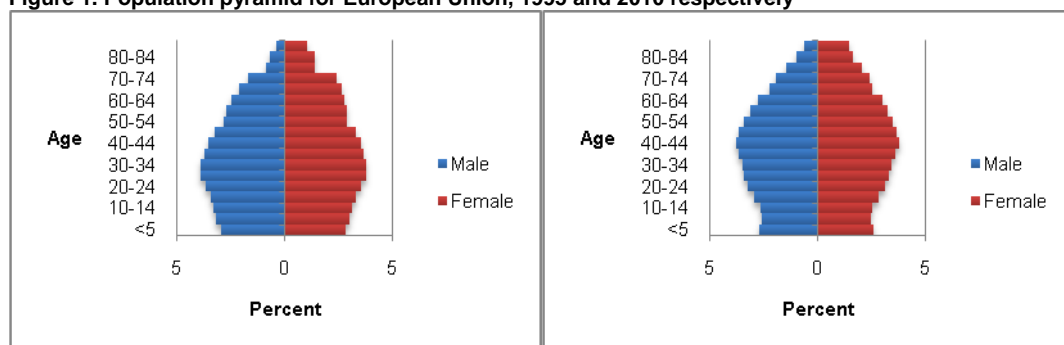
## 1.1 A changing population

The population of Europe has seen some dynamic changes in the past decade, as birth rates have declined and immigration—both internal and from abroad—having increased.

### 1.1.1 Ageing: education v. health

The ageing of Europe has become a generally accepted fact within policy circles. Comparing population pyramids, which show the percentage of a population in various age groups, show a clear trend. The average age of the population is increasing.

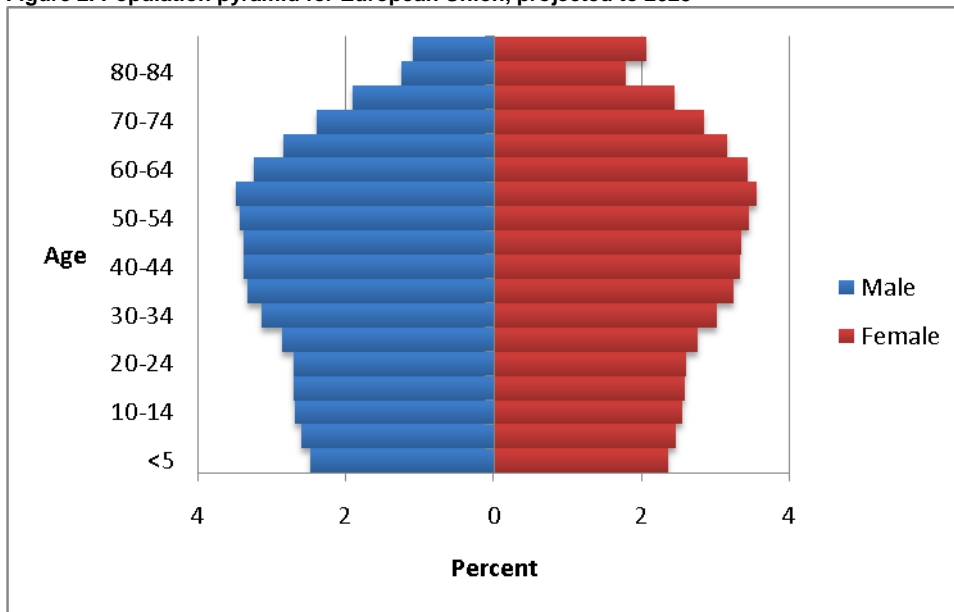
**Figure 1. Population pyramid for European Union, 1995 and 2010 respectively**



Source. Eurostat with calculations by Ecorys

Eurostat projections show no sign of a reversal in this trend (see the figure below). Fewer young workers are going to be supporting more retirees, who will require both health services and pension expenditures. While immigration could introduce one means to reverse this trend, current national policies and politics have shown that allowing a major influx of young workers to balance the pyramid would be all but impossible.

Figure 2. Population pyramid for European Union, projected to 2025

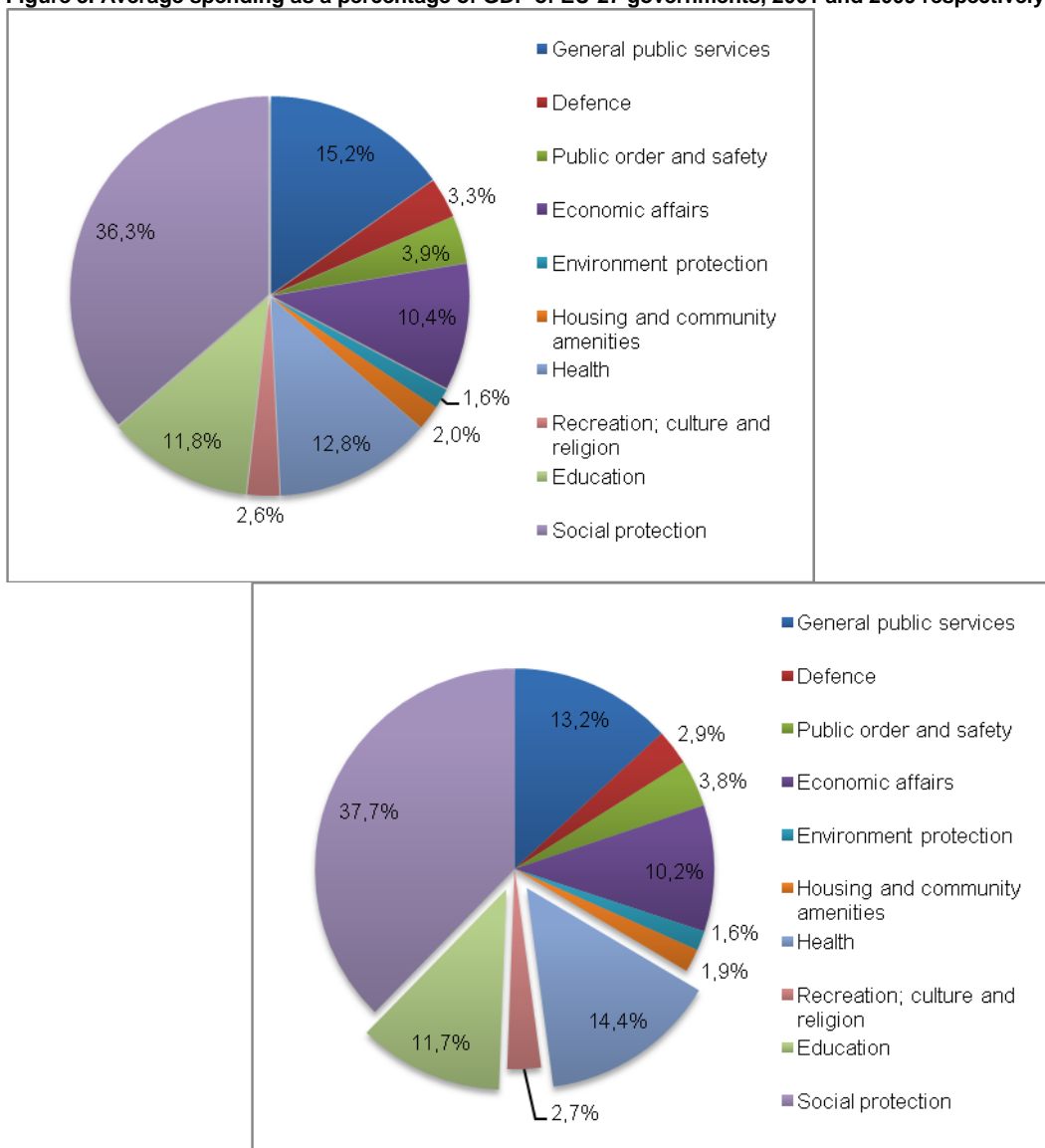


According to the 2009 Ageing Report<sup>1</sup>, “on the basis of current policies, age-related public expenditure is projected to increase on average by about 4 ¾ percentage points of GDP by 2060 in the EU – and by more than 5 percentage points in the euro area. Most of the projected increase in public spending over the period 2007-2060 will be on pensions (+2.4 p.p. of GDP), health care (+1.5 p.p. of GDP) and long-term care (+1.1 p.p. of GDP). Potential offsetting savings in public spending on education and unemployment benefits are likely to be very limited (-0.2 p.p. of GDP for each item).” Accounting for these, the total costs of ageing till 2035 are estimated to increase by 2.7 percentage points of GDP (using 2007 as the base year). Across Europe, ageing cost increases are estimated particularly high in Luxembourg and Greece (over 9 percentage points of GDP), and Slovenia (close to 7 percentage points of GDP) till 2035. Poland is the only country where age-related spending is estimated to decline rather than increase, saving 2.7 percentage points of GDP till 2035 largely owing to implementation of substantial pension reforms.

These pressures on financing of SGIs have caused some to suggest that an intergenerational, demographic clash of priorities will take place, with pressure being placed on education spending to pay for programmes for the elderly. Looking at current spending, one can see a small uptick in health spending, though education spending has remained steady as a percentage of GDP for the EU-27. Any intergenerational shift in spending, for now, remains somewhat speculative and a potential point for debate. One could argue that the economic imperative for education spending, given the EU-2020 agenda for innovation, will mean that more pressure will be placed on spending for pensions and health services (on a per-person basis). At the same time, it could also be argued that spending in these areas will simply follow the demographic trends.

<sup>1</sup> European Commission (DG ECFIN) and the Economic Policy Committee (AWG) (2009) “[The 2009 Ageing Report : Economic and budgetary projections for the EU-27 Member States \(2008-2060\)](http://europa.eu/epc/pdf/technical_press_briefing_ageing_report.pdf)” and the technical press briefing of the report available at [http://europa.eu/epc/pdf/technical\\_press\\_briefing\\_ageing\\_report.pdf](http://europa.eu/epc/pdf/technical_press_briefing_ageing_report.pdf)

**Figure 3. Average spending as a percentage of GDP of EU-27 governments, 2001 and 2009 respectively**



Source: OECD-Stat with calculations by Ecorys

### 1.1.2 Diversity of population

While much of the discussion of migration focuses on immigrants arriving from outside of European Union borders, flows of workers within the EU are just important as those without. Looking at the statistics in the table below, for example, Germany experienced much higher migration from citizens of other EU member states than those outside and many other countries have seen nearly 50% of newcomers from within the EU. The Czech Republic, Spain, and Slovenia seem to be the three countries with the highest levels of non-European immigration.

**Table 1. Immigration in Europe**

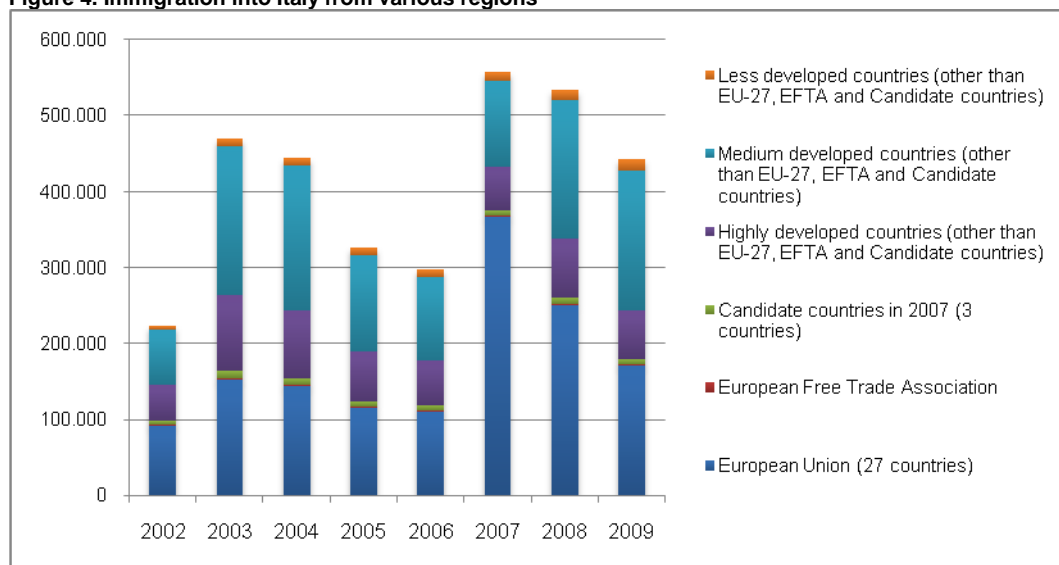
	Total immigrants		Nationals		Citizens of other EU Member States		Citizens of non-member countries	
	1000s	%	1000s	%	1000s	%	1000s	%
Belgium	150.8	:	:	:	:	:	:	:
Bulgaria	1.2	1.1	92.9	0.0	0.1	0.1	7.0	
Czech Republic	77.8	1.7	2.1	17.6	22.7	58.5	75.2	
Denmark	57.4	19.9	34.6	20.0	34.8	17.5	30.5	

	Total immigrants	Nationals		Citizens of other EU Member States		Citizens of non-member countries	
Germany	682.1	108.3	15.9	355.9	49.2	237.9	34.9
Estonia	3.7	1.6	47.5	1.0	26.0	0/9	25.6
Ireland	63.9	17.9	27.9	32.1	50.3	13.5	21.1
Greece	:	:	:	25.7	:	49.0	:
Spain	726.0	33.8	4.7	193.3	26.6	498.9	68.7
France	216.9	64.0	29.5	63.9	29.5	89.0	41.0
Italy	534.7	38.2	7.1	212.9	39.8	283.7	53.1
Cyprus	14.1	1.1	7.8	6.5	46.0	3.4	23.8
Latvia	3.5	0.9	27.1	1.6	46.0	0.9	26.9
Lithuania	9.3	6.3	68.2	0.4	4.0	2.6	27.8
Luxembourg	17.8	1.0	5.4	13.9	78.3	2.8	15.9
Hungary	37.5	2.0	5.3	17.7	47.1	17.9	47.7
Malta	9.0	1.2	13.0	4.5	49.8	3.3	37.1
Netherlands	143.5	40.2	28.0	55.4	38.6	38.9	27.1
Austria	110.1	15.3	13.9	55.3	50.3	39.1	35.5
Poland	47.8	35.9	75.0	3.1	6.4	8.9	54.0
Portugal	29.7	9.6	32.3	4.1	13.7	16.1	54.0
Slovenia	30.7	2.6	8.6	2.1	6.7	25.9	84.4
Slovakia	17.8	1.4	7.6	8.5	47.8	7.9	44.6
Finland	29.1	9.2	31.6	7.3	25.2	12.3	42.4
Sweden	101.2	17.9	17.6	30.4	30.0	52.6	52.0
United Kingdom	590.2	85.1	14.4	197.7	33.5	307.4	52.1

Source. Eurostat

While the number of foreign-born citizens as a percentage of overall population in Europe remains relatively constant, levels of immigration in Europe are higher than a decade ago owing to opening labour markets. Focusing on Italy as an example, immigration from non-European sources as a total percentage of immigration has remained relatively constant over the last decade, with some peaks and valleys over the years. Nonetheless, the overall numbers of immigrants, as shown in the figure below, have increased.

Figure 4. Immigration into Italy from various regions



Source. Eurostat with calculations by Ecorys

## 1.2 The policy imperatives of a changing population

Lower government revenues and increased expectations require new thinking in how to deliver SGIs. New technologies open the way to reduce costs while delivering better services. eHealth initiatives, for example, allow patients to spend more time at home, which studies have shown to be beneficial to patients, as they remain within comfortable surroundings. While this lowers everyday operating costs, perhaps more importantly, it also means fewer capital expenses, as new hospitals can be deferred because the current capacity can service more people.

At the same time, moving populations make it more difficult for service providers to understand their clients. Language becomes more of an issue, for instance, as service providers need to find a way to accommodate those with poor language skills alongside the local population.

### 1.2.1 Example of adaptation from the health sector: eHealth

While the term eHealth only came into use in the year 2000, it has since become widely prevalent. Most eHealth initiatives emphasize the communicative functions of health services and specify the use of networked digital technologies, primarily the Internet, thus differentiating eHealth from the field of medical informatics.<sup>2</sup> Examples of eHealth initiatives include:

- ePrescription
- EHR patient summary
- Telehealth
- computerized physician order entry
- Patient ID
- Professional ID
- Citizen card
- Professional card
- Standards (technical/semantic)

Proponents of eHealth argue that this movement is important because it creates a safer and better-integrated system, where information about a patient can be more easily shared. This helps to prevent records from being lost while reducing duplicate effort, administration errors, and even mistaken identity.

One of the key drivers behind changes to the provision of health services is the increasing use of information technology, such as online and mobile services. Placing information online has provided patients access to more information regarding their condition, treatments options and prevention methods. Healthcare professionals can also share general and patient-specific information. Electronic patient records enable both patients and professionals to follow their health history, even if they have been treated in various locations.

Electronic records have also opened up the possibility to monitor patients remotely, which reduces demand for hospital and doctor's appointments. At the same time, this potentially offers more equal access to health services, as online and mobile tools can serve patients in remote and rural areas.

In addition to improved quality and access, eHealth tools and services may create efficiency gains within healthcare. Gains can potentially be made through easier scheduling and follow-up systems and through better communication between various practitioners.

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<sup>2</sup> Pagliari C, Sloan D, Gregor P, Sullivan F, Detmer D, Kahan JP, Oortwijn W, McGillivray S. What is eHealth (4): A Scoping Exercise to Map the Field? *Journal of Medical Internet Research*, 2005; 7(1): 68-87.

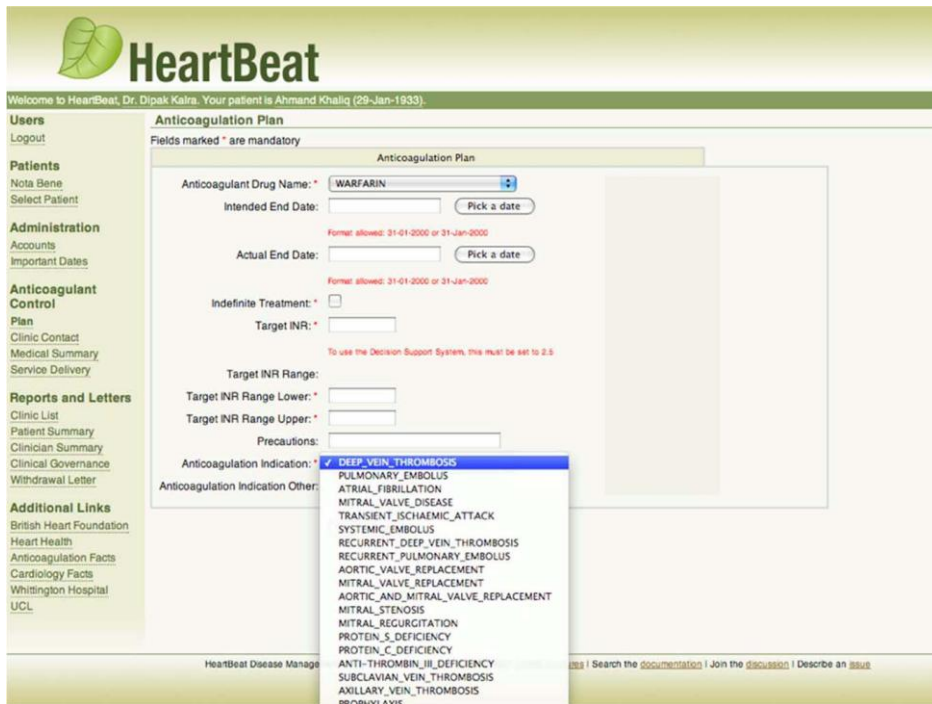
A more detailed outline of potential areas for saving costs and increasing efficiency can be found from Table 1 below.

**Table 2.**Health Systems: Examples of Potential Areas for Saving Costs and Increasing Efficiency

Patient registration	<ul style="list-style-type: none"> <li>• One-time registration</li> <li>• Information available on subsequent visits</li> <li>• Serves multiple purposes (e.g. vital statistics registries in addition to care)</li> </ul>
Creation of persistent record	<ul style="list-style-type: none"> <li>• Improved speed and efficiency of care delivered</li> <li>• Information base developed for wide variety of direct care and administrative uses</li> <li>• Data is entered once</li> </ul>
Payments of services	<ul style="list-style-type: none"> <li>• Automatic billing and payment system</li> <li>• Documentation of billing and payment actions</li> </ul>
Remote diagnostics	<ul style="list-style-type: none"> <li>• Reduce clinic visits</li> </ul>
Referrals	<ul style="list-style-type: none"> <li>• Efficient access to closest available resources</li> </ul>
Scheduling follow-ups	<ul style="list-style-type: none"> <li>• Automatic messageing to public and providers</li> </ul>
Disease surveillance	<ul style="list-style-type: none"> <li>• Real-time surveillance and resource allocation</li> </ul>
24x7 call centres	<ul style="list-style-type: none"> <li>• Decreased need for in-person clinic visits</li> </ul>
Performance review	<ul style="list-style-type: none"> <li>• Aggregation of data by factors including district, region, provider, and disease</li> </ul>

#### **Case: Electronic patient records in North Central London**

The North Central London Anticoagulation and Stroke Prevention Service (NCLASPS) in the U.K., supports hospital outpatient departments and community sites to offer warfarin doses to patients. Before the introduction of electronic records, blood samples from patients visiting hospitals or clinics would be analysed in batches. This introduced errors, as samples would occasionally be mixed up. As well, the increasing use of junior doctors in shifts introduced further errors as doctors unfamiliar with patients would over or under-subscribe. Recently, the HeartBeat system was introduced to allow doctors to better track dosages, offering full patient histories. The system also allowed administrators to review the practice of individual doctors and the clinic.



### Case: Emergency Neuro Image Transfer System (ENITS) in Ontario, Canada

In cases of head trauma, health service providers in the Canadian province of Ontario would transfer all head trauma cases to either the United States(38%) or to a specific neurosurgical centre (62%). After the introduction of ENITS, which has allowed neurologists to share images and access patient records, 64% of cases were treated in the original clinic. This meant fewer risks of transferring traumatized patients and also saved more than C\$50M in costs. The province has now brought this system in place for all 100 acute care facilities across the province.

### Case: Texts formHealth

While many e-health initiatives tend to rely on custom or online systems, mobile phones have also become a tool for education and information sharing. iPhone applications often offer individuals basic information about first aid. Mobile phones have also been successful in transferring data from rural areas in places like Africa, where for example, patients are given mobile phones with which they can communicate with doctors about their condition.

#### 1.2.2 Migrating populations:the need for information sharing

While much of the focus of the innovation has been on research & development and education, migration has played an important role on at least two levels. First, the European Union and many Member States have taken actions to make migration easier for highly skilled individual. The Netherlands, for example, introduced a system for *kennismigrants*—knowledge workers—that would simplify immigration procedures for companies wanting to hire staff when the local talent pool proved insufficiently shallow. Second has been the desire of the European Union to create a unified European Research Area. The belief is that the idea of a single market also needs to extend to its workers. Researchers need to be free to easily move to regions of the EU where they can make best use of their skills.

Given the expectation that movement across European borders should be easy, more and more, citizens expect that the services they rely upon will also follow them, and that the quality will be relatively the same. Health care and pensions, so affected by demographic changes, are also influenced by these changed expectations. For example, individuals expect that if they make

contributions in one country, they should be allowed to continue to make contributions if working in another without affecting their ability to retire. Following workers across borders means greater information sharing.

As well, accommodating a larger European Research Area generally means that service provision needs to take into account workers whose first language will probably be different than the working language of the country. This can generally mean providing services in both the local language as well as a more common language, such as English.

### Case: Government portals

Government web sites can be one of the first places that newly arrived individuals turn to find out about SGIs, and the language in which those portals are offered can differ quite substantially, depending on existing cultures in a particular country or the existence of large groups of newcomers. A complete list can be found in the table below.

**Table 3.** Language of main government portal

Country	Web site	Languages
Austria	<a href="http://www.help.gv.at/">http://www.help.gv.at/</a>	<ul style="list-style-type: none"> <li>• English</li> <li>• German</li> </ul>
Belgium	<a href="http://www.belgium.be/eportal/">http://www.belgium.be/eportal/</a>	<ul style="list-style-type: none"> <li>• Flemish</li> <li>• French</li> <li>• German</li> <li>• English</li> </ul>
Cyprus	<a href="http://www.cyprus.gov.cy/portal/portal.nsf/dmlcitizen_gr/dmlcitizen_gr?OpenDocument">http://www.cyprus.gov.cy/portal/portal.nsf/dmlcitizen_gr/dmlcitizen_gr?OpenDocument</a>	<ul style="list-style-type: none"> <li>• Greek</li> </ul>
Czech Republic	<a href="http://portal.gov.cz/wps/portal/_s.155/6966/place">http://portal.gov.cz/wps/portal/_s.155/6966/place</a>	<ul style="list-style-type: none"> <li>• English</li> <li>• Czech</li> </ul>
Denmark	<a href="https://www.borger.dk/Sider/default.aspx">https://www.borger.dk/Sider/default.aspx</a>	<ul style="list-style-type: none"> <li>• Danish</li> <li>• English</li> <li>• French</li> <li>• Arabic</li> <li>• Spanish</li> <li>• German</li> </ul>
Estonia	<a href="http://www.eesti.ee/est">http://www.eesti.ee/est</a>	<ul style="list-style-type: none"> <li>• Estonian</li> <li>• English</li> <li>• Russian</li> </ul>
Finland	<a href="http://www.vaestorekisterikeskus.fi/">http://www.vaestorekisterikeskus.fi/</a>	<ul style="list-style-type: none"> <li>• Finnish</li> <li>• English</li> <li>• Swedish</li> </ul>
France	<a href="http://www.service-public.fr/">http://www.service-public.fr/</a>	<ul style="list-style-type: none"> <li>• French</li> <li>• German</li> <li>• English</li> <li>• Spanish</li> </ul>

Country	Web site	Languages
Germany	<a href="http://www.bund.de/DE/Home/homepage_node.html">http://www.bund.de/DE/Home/homepage_node.html</a>	<ul style="list-style-type: none"> <li>• German</li> <li>• English</li> </ul>
Greece	No immediately obvious portal site	n/a
Hungary	<a href="https://magyarorszag.hu/">https://magyarorszag.hu/</a>	<ul style="list-style-type: none"> <li>• Hungarian</li> </ul>
Ireland	<a href="http://www.citizensinformation.ie/en/">http://www.citizensinformation.ie/en/</a>	<ul style="list-style-type: none"> <li>• English</li> <li>• Irish</li> <li>• Polish</li> <li>• Romanian</li> <li>• French</li> </ul>
Italy	<a href="http://www.italia.gov.it/itagov2/">http://www.italia.gov.it/itagov2/</a>	<ul style="list-style-type: none"> <li>• Italian</li> </ul>
Latvia	<a href="http://www.li.lv/">http://www.li.lv/</a>	<ul style="list-style-type: none"> <li>• Latvian</li> <li>• English</li> <li>• French</li> <li>• Danish</li> <li>• German</li> <li>• Russian</li> <li>• Spanish</li> <li>• Chinese</li> <li>• Finnish</li> <li>• Arabic</li> </ul>
Lithuania	<a href="http://www.lrv.lt/">http://www.lrv.lt/</a>	<ul style="list-style-type: none"> <li>• Lithuanian</li> <li>• English</li> </ul>
Luxembourg	<a href="http://www.eluxembourg.public.lu/">http://www.eluxembourg.public.lu/</a>	<ul style="list-style-type: none"> <li>• French</li> </ul>
Malta	<a href="http://www.gov.mt/">http://www.gov.mt/</a>	<ul style="list-style-type: none"> <li>• Maltese</li> <li>• English</li> </ul>
Poland	<a href="http://www.egov.pl/">http://www.egov.pl/</a>	<ul style="list-style-type: none"> <li>• Polish</li> </ul>
Portugal	<a href="http://www.portaldocidadao.pt/POR TAL/pt">http://www.portaldocidadao.pt/POR TAL/pt</a>	<ul style="list-style-type: none"> <li>• Portuguese</li> </ul>
Slovakia	<a href="http://portal.gov.sk/Portal/sk/Default.aspx">http://portal.gov.sk/Portal/sk/Default.aspx</a>	<ul style="list-style-type: none"> <li>• Slovakian</li> </ul>
Slovenia	<a href="http://e-uprava.gov.si/e-uprava/en/portal.euprava">http://e-uprava.gov.si/e-uprava/en/portal.euprava</a>	<ul style="list-style-type: none"> <li>• Slovenian</li> <li>• Italian</li> <li>• Hungarian</li> <li>• English</li> </ul>
Spain	<a href="http://www.060.es/">http://www.060.es/</a>	<ul style="list-style-type: none"> <li>• Spanish</li> <li>• English</li> <li>• Regional language</li> </ul>
Sweden	<a href="http://www.sverigedirekt.se/">http://www.sverigedirekt.se/</a>	<ul style="list-style-type: none"> <li>• Swedish</li> </ul>
The Netherlands	<a href="http://www.rijksoverheid.nl/">http://www.rijksoverheid.nl/</a>	<ul style="list-style-type: none"> <li>• Dutch</li> </ul>

Country	Web site	Languages
United Kingdom	<a href="http://www.direct.gov.uk/en/index.htm">http://www.direct.gov.uk/en/index.htm</a>	<ul style="list-style-type: none"> <li>• English</li> <li>• German</li> <li>• French</li> <li>• Spanish</li> <li>• Polish</li> <li>• English</li> </ul>



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