CIP ICT PSP Final (Second Interim) Evaluation

Final report

Foreword

The final (second interim) evaluation of the Competitiveness and Innovation Framework Programme ICT Policy Support Programme (CIP ICT PSP) focuses on the effectiveness of the new intervention instruments and on their relevance to the needs and problems in diffusing and deploying Information and Communication Technologies (ICT) particularly in public sector-related activities. This includes efficiency of resource use, effectiveness in engaging organisations that can meet the objectives of the programme, emphasis on tangible outcomes and sustainable follow-up, and the extent to which the programme is contributing to wider EU strategic objectives.

The evidence and findings of this evaluation will inform the design of any follow-up programme by showing where the CIP ICT PSP can make a difference and the extent to which the programme is achieving its objectives. It will also contribute to assessment of the i2010 initiative, and to the implementation of the Digital Agenda for Europe.

The evaluation is based on programme information collected on issues including: appropriateness and complementarities with other programmes, administrative efficiency, effectiveness, utility and outputs, and impact and sustainability of project and partner activities. This information has been collected via:

- Document reviews and analyses,
- Project selection evaluation reports and implementation review reports,
- Stakeholder interviews,
- Focus group discussion with Commission officials,
- Case studies,
- Surveys to collect structured information from project beneficiaries.

Panel of independent experts

The Director-General of Information Society and Media appointed the panel of independent experts to prepare the final (second interim) evaluation report. The report of the expert panel draws on the background support studies land evidence-base listed above and described in more detail in the Annex as agreed by the panel.

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1   Background and introduction

1.1   Policy context

1.1.1   Challenges for European policy

Europe faces continuing challenges including low growth, slowing productivity, current account and budget imbalances, aging populations, slow integration of diverse economies and flagging social cohesion across Europe.

ICT is one of the key drivers of EU competitiveness and sustainable and equitable growth, contributing to greater overall social welfare as well as better economic performance. The key EU challenge is to turn potential improvements into actual gains and improved social welfare. As pointed out in the EC Competitiveness report (2003) one of the key continuing barriers to growth is the need for systemic organisational change:

'In order to exploit fully the potential of the new information and communication technologies, changes are needed in the way enterprises operate. Investments in organisational change may have been insufficient as enterprises may not have fully recognised their importance, or because of the high costs of organisational reform, often significantly exceeding the costs of acquiring ICT capital goods.' *Source: CEC, European Competitiveness Report 2003,* SEC(2003)1299, p. 9.

1.1.2   The CIP and the CIP ICT PSP

To tackle these challenges the European Union has taken a number of important initiatives in the Information and Communication Technologies (ICT) area, including the ICT Policy Support Programme (ICT PSP). The ICT PSP is part of the wider Competitiveness and Innovation Framework Programme (CIP). The CIP programme in general and ICT PSP in particular have been designed to encourage innovative investments that facilitate the transformation of potential productivity gains into actual gains.[1]

In the ICT PSP this should be achieved by encouraging deployment of innovative ICT-based services in private and public sectors, particularly in areas of public interest [Decision No. 1639/2006/EC]. The Programme has three inter-linked goals: Developing the single information space; Supporting innovation / wider adoption of and investments in ICT; and Enabling an inclusive Information Society. One of the strategic aims is to unblock key cross-border policy areas and thereby support realisation of the Digital Agenda for Europe (DAE) and the EU digital market as a more integrated whole.

The key feature of the ICT PSP is ICT deployment. It focuses on technological and organisational innovation and on stimulating the wider uptake of new ICT solutions in real applications, unlike the Seventh Framework Programme (FP7), which focuses on R&D and the generation of new knowledge and ideas. In this respect, the ICT PSP is a downstream oriented programme targeting areas critical for realising the potential of ICT in the European economy and society.

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[1] Presentation Khalil Rouhana CIP ICT INFO Day 28 February 2011,
http://ec.europa.eu/information_society/activities/ict_psp/documents/1_introduction_call5_infoday.pdf

ICT PSP projects and CIP projects in general are not end of pipe projects relying on FP7 results. The overly mechanistic and linear view of the innovation process (science to research to innovation to growth) misunderstands how innovation, productivity and growth are inter-linked. Commercially relevant innovation is largely driven from the demand side. Even when it relies on Framework Programme-related technology push it is rarely a direct outcome of an individual Framework Programme (FP) project, but is a much more non-linear combination of past FP R&D with new elements from the market and from market-driven ICT engineering practices and experience.

This fundamental difference between the CIP ICT PSP and FP7 is essential in understanding its role. The biggest risks in ICT PSP projects are not technological uncertainty, as the majority of these projects do not have substantial new technical development. Instead, the major risks are in implementation, use, insufficient demand, and overcoming systemic challenges to deployment (organisational, institutional, legal and coordinating different institutional levels).

Hence the ICT PSP is largely aimed at correcting systemic and organisational failures endemic in implementing new innovative service solutions across public-private boundaries. It is aimed at addressing interoperability issues and tackling some of the standard market failures associated with deploying new technologies, moving beyond simple demonstration and proof of concept and actually leading to longer term sustainable solutions and services.

The ICT PSP is also an instrument to help build the Single Market. Projects in eGovernment, eHealth, cross border business establishment, and e-identity are designed to provide the necessary preconditions for greater mobility of people and services and make EU Single Market policies technically possible. Parts of the CIP PSP facilitate development of user-led open platforms and coordination of new cross-border public and private services. In this respect the ICT PSP should catalyse further innovation by the public and private sector, channelling EU / national funds to fields of activity that would otherwise not be funded.

1.1.3 The context: The European Information society for growth and employment (i2010)

The European Information Society for growth and employment (i2010) was the main policy context for the CIP ICT PSP until the launch of the Digital Agenda for Europe (DAE). i2010 was adopted in 2005 to promote an open and competitive digital economy, boost innovation, creativity and competitiveness of industry and services, and emphasise ICT as a driver of inclusion and quality of life. It proposed three priorities for Europe's information society and media policies:

- The completion of a Single European Information Space which promotes an open and competitive internal market for information society and media;
- Strengthening Innovation and Investment in ICT research to promote growth and jobs;
- Achieving an Inclusive European Information Society consistent with sustainable development and that prioritises better public services and quality of life.

Regulatory actions, policy coordination actions, and financial instruments were launched to achieve these priorities. The ICT PSP in the CIP is one of the main i2010 financial instruments supporting ICT and the digital economy.

1.1.4 The Digital Agenda for Europe

The Digital Agenda for Europe (DAE) is one of the seven flagship initiatives of the Europe 2020 Strategy launched in March 2010 to address the economic crisis and prepare for the challenges of the next decade. It defines the key role of Information and Communication Technologies (ICT) for Europe to succeed in its ambitions for 2020, and follows on from the i2010 initiative [see COM(2010)245 final, 19/05/2010].

The Agenda's objective is to maximise the social and economic potential of ICT, notably the Internet. Successful delivery of this Agenda is designed to spur innovation, economic growth and improvements in daily life for citizens and economic activity for businesses. Wider deployment and more effective use of digital technologies will better enable Europe to address its key challenges and provide Europeans with an improved quality of life through, for example, better health care, safer and more efficient transport, a cleaner environment, new media and easier access to public services and cultural content.

1.2 CIP ICT PSP Implementation

The CIP ICT PSP runs from 2007-2013. The first call for proposals was made in 2007, the fourth call in 2010. This evaluation is based on data collected for all 4 calls, although only limited amounts of data were available in some areas for Call 4.

1.2.1 Characterisation of the instruments

The programme uses innovative funding instruments to promote demand and user-oriented innovation policies. It has a top-down policy driven instrument, **Pilot A (PA)**, which addresses issues of interoperability in limited number of specific, tightly defined policy areas, assembling a wide network of participants from a large number of countries, aiming to create interoperable solutions/standards across Europe.

The programme also has a complementary more bottom-up demand-led funding instrument, **Pilot B (PB)**, which generally starts with solutions developed and/or tested on a limited scale (e.g. in a single country) and aims to pilot their deployment in a number of sites/test countries, to promote wider adoption. Pilot B projects cover a wider range of policy areas than Pilot A projects and the objectives within these broad areas have changed over time.[2]

Thematic networks (TN) are designed to address a common theme by bringing together relevant stakeholders, expertise and facilities to exchange information and good practices. They are aimed at raising awareness, building consensus and exploring new ways of implementing ICT-based solutions and preparing future pilot or implementation activities.

Pilot A structure and implementation: Pilot A projects in general have an appropriate structure for carrying forward applications based on interoperable cross-border infrastructure and platforms. Applications are based largely on existing technologies, with some development of "missing" elements. Relatively large numbers of countries are involved, with national participation based on formal commitment from central government at ministerial / ministry level or through government agencies that act on behalf of central government. The four Pilot A projects (three in eGovernment and one in eHealth) that have received second-round funding have expanded their coverage of Member States in the second phase and some countries have made the results coming from eGovernment projects mandatory in government infrastructure frameworks.

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[2] See CIP ICT PSP Work programmes 2007-2010.

The project target for private businesses is to have major software and services suppliers platform-compliant. Project participants emphasise that they are not FP R&D projects, distant from the market. Their approach is different, focusing on deployment and use. The re-usability and scalability of infrastructure and platforms has been stressed. Open standards are an intrinsic part of Pilot A projects and projects generally work with major European and international standard-setting bodies.

Pilot B structure and implementation: Pilot B projects are coordinated by private sector firms in the majority of cases (over 50% compared with 40% private sector participation) and are also relatively often coordinated by industry associations, so they potentially have a greater orientation towards business models / sustainability and users. This is borne out by the online survey and the thematic review of Pilot B projects.[3]

In a number of cases a concept that is well developed / developing in one country is being trialled across other European countries. Pilot B projects tend to result in one or a group of "owners" that will potentially be involved in subsequent development / commercialization if there is any, and firms are very sensitive to cooperating with competitors. In particular there may be issues in getting competing commercial businesses to cooperate in close-to-market or market-led projects, particularly if there are few major enterprises in a particular sector. Nevertheless, Pilot B projects aim at encouraging competition, potentially developing market-led solutions with wide applicability. This is an incentive for business involvement either to supply new ICT-based public interest services developed in Pilot B projects or to gain experience in promising new market areas.

Thematic Network structure and implementation: Similarly to Pilot As and Pilot Bs, Thematic Networks are in many cases coordinated by private sector firms (nearly 40%), but a considerable number of these are business associations, and, overall, associations of one kind or another lead nearly 40% of TNs. Consortia usually comprise all key stakeholders to achieve the objectives, targeted outcomes and expected impact. Analysis and the interviews show that in most cases Thematic Networks are conceived by a core group of organisations, from 2 to 5, who develop the founding idea and then recruit other stakeholders. In some cases, notably where the network provides a service to internal or external stakeholders and participants, the networks are proving to be sustainable.

This instrument is largely characterised by the scaled funding scheme, which only covers meeting and travel costs and does not include project costs. Furthermore, analysis has shown that in many cases the coordinator has to support a significant administrative burden for the whole network.

Best Practice Networks (BPNs): These are used in eContent activities to promote the adoption of standards and specifications to make European digital libraries more accessible and usable. They combine the "consensus building and awareness raising" function of thematic networks with large-scale implementation of one or more specifications or standards. After discussion in the network each BPN trials one or more implementation approaches to test their validity and, if necessary, to adapt them. The final output of a

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[3] The online survey of participants undertaken for this evaluation had a response rate of 40% - 475 respondents out of 1200 identified participants in Calls 1-3 (See the evaluation support studies in Annex). The online survey was checked for representativeness across thematic, instrument and participant variables and had a high level of completeness in terms of numbers, coverage and reliability of replies.

particular BPN will reflect both large-scale implementation of different approaches and cross-fertilisation from clustering activities.

Best Practice Networks concentrate on Theme 2, eContent. They were introduced in the 2009 Work programme and included in Call 3 and Call 4. The earliest contracts are still only in their first year, and the others are in their initial start-up phases.

1.2.2 First Interim Evaluation

This Final (Second Interim) Evaluation of the ICT PSP expands and builds on the First Interim Evaluation.[4] It expands the first evaluation in terms of assessment of outputs, impact and sustainability issues, and it builds on the previous evaluation in terms of appropriateness and complementarities with other programmes, administrative efficiency, effectiveness and utility. Differences in focus between the two evaluations reflect the different points in time when they have been conducted, and differences in the scale and scope of the data collected and qualitative assessments for the Second Interim Evaluation. The most important finding when comparing the two evaluations is that there is full compatibility in terms of the findings on efficiency, effectiveness and utility in the two Evaluations, with the same Programme strengths and weaknesses highlighted in both. This gives further confidence that the recommendations in this Final (Second Interim) Evaluation reflect a broad consensus with the recommendations of the first expert panel.

1.2.3 Some key data on the ICT PSP

The CIP ICT PSP budget is still being allocated and spent. The EC contribution in 2007-2010 is EUR 325 million, approximately 45% of the EUR 730 million total budget for the 2007-2013 period. The funding distribution in WP 2007-2010 is Pilot A projects 25%, Pilot B projects 58%, Thematic Networks 8%, Best Practice Networks 9%. The total number of projects funded over the period 2007-2010 (Calls 1, 2, 3 and 4) is 128 (see Table 1).[5] Of these 128 projects 22 (17%) were awarded from Call 1 (2007), 19 (15%) from Call 2 (2008), 47 (37%) from Call 3 (2009) and 40 (31%) from Call 4 (2010), with numbers set to further increase in the last three years of the programme.

It must be emphasised that that the CIP ICT PSP programme is still being implemented, and the 2011, 2012 and 2013 Work Programmes are still to be launched. Over half of the programme's budget, nearly EUR 390 million, has still to be committed, and most of the projects, (Pilot As, Pilot Bs, Thematic Networks and Best Practice Networks), have still to be completed, monitored administratively and evaluated in terms of their wider socioeconomic and societal impacts.

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[4] CIP ICT PSP Interim Evaluation Panel Report

http://ec.europa.eu/dgs/information_society/evaluation/non_rtd/programmes/cip_ict-psp_interim_evaluation_report.pdf

[5] The following projects have been funded in different calls but they are counted as one in the first call funded: epSOS and esSOS 2 (PA); PEPPOL and PEPPOL Enlargement (PA); STORK and STORK 2 (PA); SPOCS (PA).

Table 1. Results from calls

Call	Projects	Participants
1 CIP-ICT-PSP-2007 (total)	*22*	*369*
Pilot A	3	38
Pilot B	8	111
Thematic Network	11	220
2 CIP-ICT-PSP-2008	*19*	*332*
PA	1	12
PB	12	178
TN	6	142
3 CIP-ICT-PSP-2009	*47*	*731*
BPN	4	85
PA	1	66
PB	38	492
TN	4	88
4 CIP-ICT-PSP-2010	*40*	*659*
BPN	4	113
PA	2	101
PB	26	267
TN	8	178
Total	**128**	**2091**

The following figure shows the distribution of projects over different policy areas.

Figure 1. Number of projects per thematic area
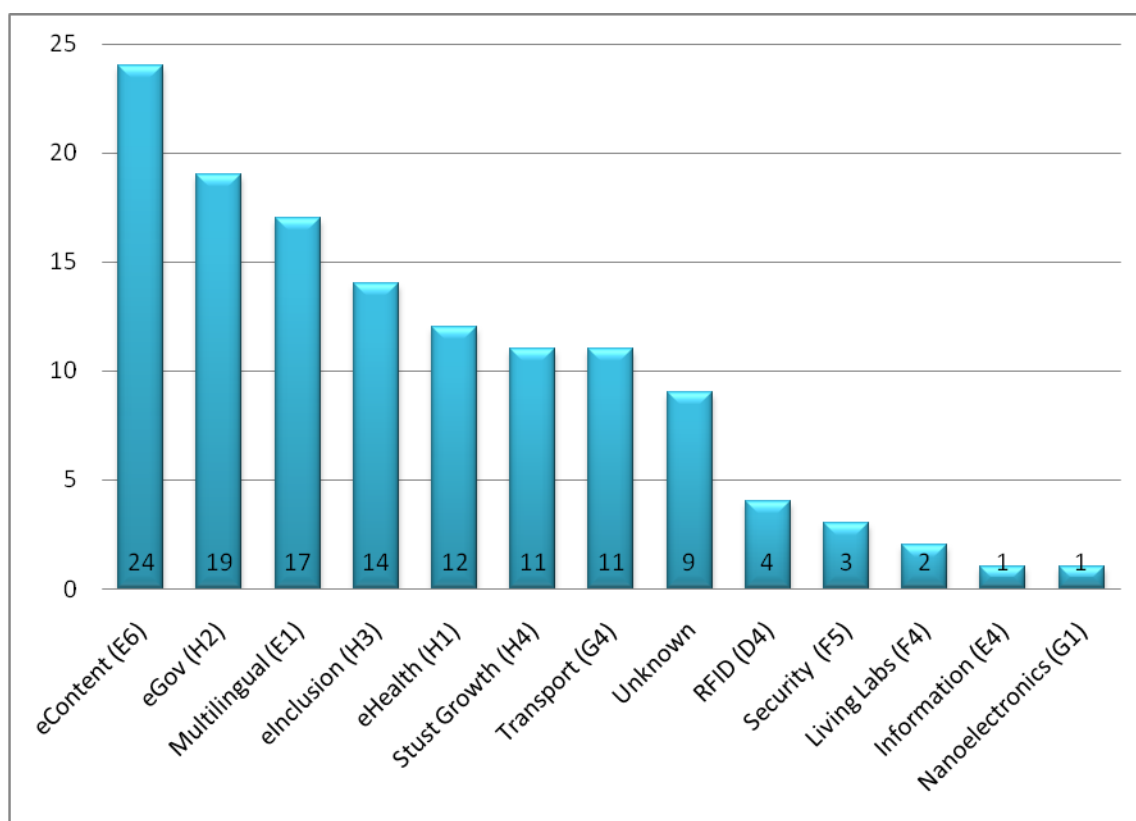
Note: Codes in brackets are for the units in DG INFSO managing the different areas.

The table below shows the distribution of total funding and average funding by instrument.

Table 2. Number of participants and funding per instrument

Instrument	Participants	EC funding per instrument	Average funding per participant
BPN	198	€ 31.820.598	€ 160.710
PA	217	€ 84.260.053	€ 388.295
PB	1048	€ 181.170.034	€ 172.872
TN	628	€ 24.466.419	€ 38.959
Total	**2091**	**€ 321.717.104**	**€ 153.858**

During the period, Pilot A projects received on average the largest funding per project (for 7 PAs), while Pilot B got most of the total funding (for 84 PBs).

During the four calls (based on incomplete information for Call 4) public administration organisations (PUB) received on average the largest amount of funding per participation, and private companies (PRC) received the largest share of total funding (33%).

Table 3. Number of participants and funding by type of organisation[6]

Type of organisation	Participants	Percent	Total EC funding	Percent	Average funding
Private company	727	34,77%	€ 106.443.230	33,09%	€ 146.414
Public administration	501	23,96%	€ 92.601.223	28,78%	€ 184.833
Higher education	253	12,10%	€ 37.643.527	11,70%	€ 148.789
Other	230	11,00%	€ 33.469.480	10,40%	€ 145.519
Research organisation	195	9,33%	€ 25.250.901	7,85%	€ 129.492
Unknown	169	8,08%	€ 23.921.959	7,44%	€ 141.550
Standards body	16	0,77%	€ 2.386.785	0,74%	€ 149.174
Total	**2091**	**100%**	**€ 321.717.104**	**100%**	**€ 153.858**

Of the 2091 participations in the four calls of the CIP ICT PSP, 688 participations have an entry with the same legal name in FP7. This represents 32.9% of the total entries.

However some organisations participate in multiple projects. Of the 1653 *unique* organisations participating in the CIP ICT PSP over the four years there are 426 unique organisations also participating in a FP7 project. This represents 26% of total organisations participating in the CIP ICT PSP programme.

The table below shows these participations per type of organisation and in comparison with the 2091 total participations, including multiple project participations.

Table 4. CIP – FP7 participants by type of organisation

| Type of organisation	Percent of CIP ICT PSP -FP7 common participants	Percent of total participants (2091)
Higher or secondary education	28,8%	78%
Private for profit company	26,0%	25%
Non-profit research organisation	17,2%	61%
Public administration	14,4%	20%
Other	6,5%	20%
Unknown (Call 4)	6,5%	27%
Standards body	0,6%	25%
Total	**100%**	**33%**

Almost 80% of higher education organisations (HES) participated also in FP7 projects and more than 60% of the Non-profit research organisations (REC) also participated in FP7 projects. All other organisations are much lower.

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[6] PRC= Private for profit Company, PUB = Public Administration, HES = Higher or Secondary Education, REC = Non-profit Research Organisation, STD = Standards Body.

The relatively small overlap of participants (particularly from the private sector and public bodies) confirms that the ICT PSP is a distinctively different policy instrument compared to the FPs.

The distribution of numbers of participants by country is somewhat skewed, as shown in Figure 2 below. This suggests that programme administrators need to pay attention to the outcomes that may be expected from this distribution. This issue is discussed in more detail in Point 2.4 below.

Figure 2. Country distribution (participants) per instrument, Calls 1-4
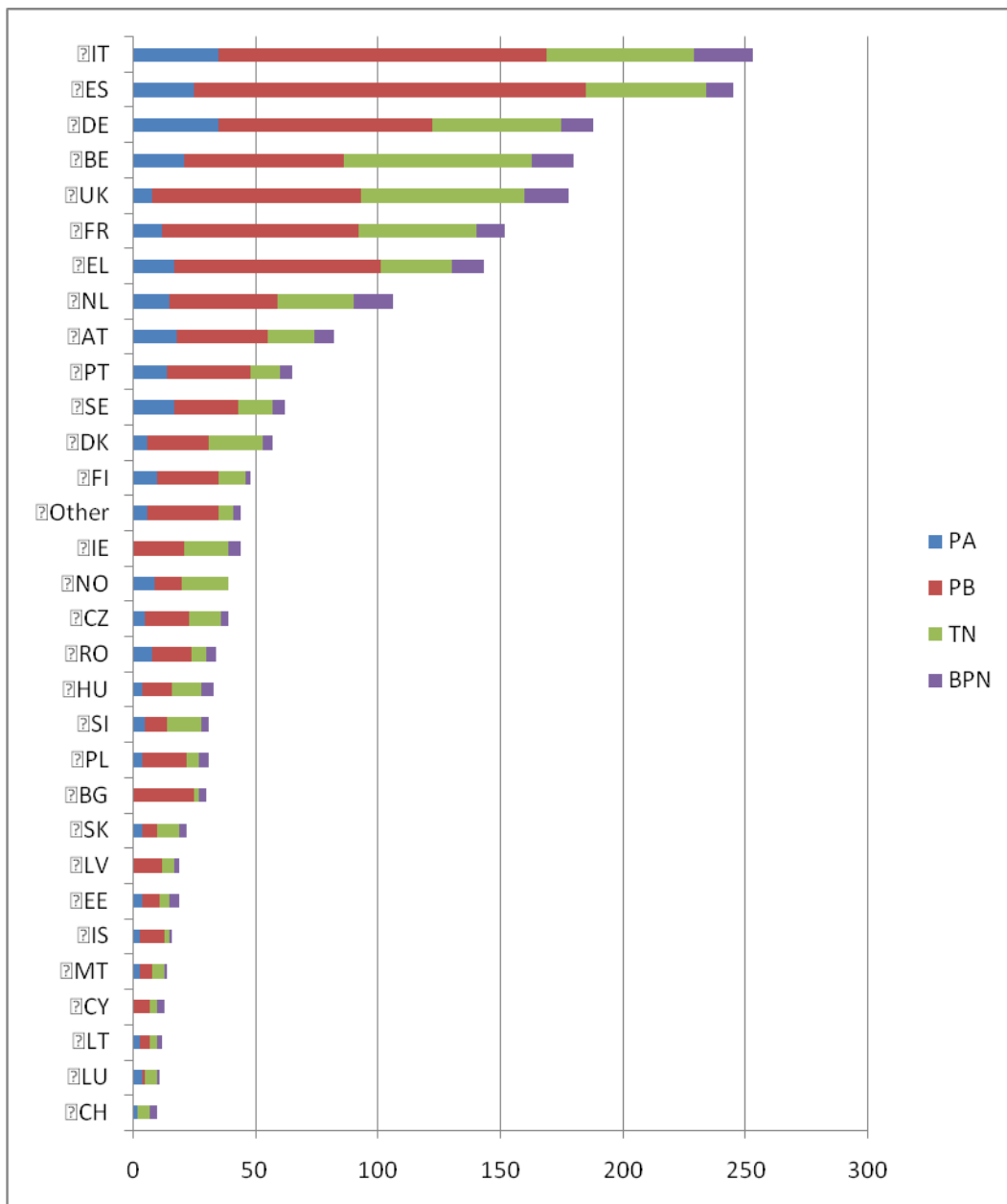
Note: "Other" countries include participations from Israel, Japan, Monaco, Serbia, The former Yugoslav Republic of Macedonia, Turkey and the United States.

2   Observations

2.1   Introduction

The ICT PSP is demonstrated to be an innovative programme introducing a policy-oriented demand and user-oriented innovation dimension to the main research strands of the Units of DG INFSO.

The ICT PSP specifically focuses on the deployment of general interest (public) services, largely using existing technologies and building in many cases on successful national service models. The ICT PSP aims at piloting projects aimed at critical issues of competitiveness and social welfare in the European Union. The programme setup targets high and broad stakeholder involvement and aims to achieve high administrative efficiency. The administrative process is designed to fit the specific nature of the programme. The evaluation analysis shows the clearly complementary roles of Pilot As and Pilot Bs. In general, funding levels appear satisfactory, although issues of the effectiveness of the funding mechanism in relation to the objectives have been raised in particular with regard to the Thematic Networks.

In terms of utility, the panel believes that the ICT PSP is relevant, coherent and useful and has a value-adding impact. Furthermore, the Panel believes that the programme in this or in a future transformed form should continue, as it is addresses key challenges for improved European productivity and social welfare based on the use and application of ICT. Nevertheless it is necessary to analyse utility and outputs in detail across the different programme instruments notably in the areas of their impacts and sustainability to increase the long-term value of the programme.

The panel believes that the procedure for selecting Pilot A projects and their evaluation process should be adjusted to the special nature of Pilot As to do justice to their complicated scale and interoperability objectives.[7] The challenge is to foster joint action and recognise the limited possibility for competition due to the requirement to involve Member State organisations, while at the same time ensuring transparency in design and selection processes, and critically monitoring project quality through evidence-based evaluation.

2.2   ICT PSP organisation and balance across types of instruments

It appears that for the more open-ended Pilot B projects the ICT PSP works well as an organisational format based on a competitive selection procedure. In contrast, Pilot A projects are a top-down policy-driven instrument aimed at large numbers of stakeholders where competition among different projects and platforms would undermine the aims of developing scale and interoperability at EU level. They therefore usually lead to a situation in which only one proposal (two in only one case) is submitted to the open calls for proposals within the ICT PSP.

The conclusion of the panel is that Pilot As are attracting the relevant stakeholders and effectively addressing specific mature policy objectives. In these terms they are successful and should continue as they seem to be an effective working model of how to enhance more widespread uptake of new innovative pan European cross border services.

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[7] It should be noted that this evaluation covers Calls 1 to 4, and potential changes in Call 5 are not necessarily taken into account.

Involvement of end users (citizens, businesses, patients, etc.) is critical for the deployment of innovative services. Project analysis shows that those users are directly involved in the service design of Pilot B projects. Pilot B projects should therefore also continue because they are demand and user-led and have a more innovative service character than Pilot A projects focusing on extended cross-border interoperability.

Thematic Networks (TNs) are basically 'deepening relationship' activities. However, it is very difficult to measure whether this has been achieved without more tangible objectives. In the current setup there is no way to measure the real impacts or outputs of Thematic Networks. Hence, the expert panel suggests that they be re-designed as preparatory mechanisms for Pilot A projects, or as ex post supporting activities to encourage wider participation in Pilot A projects. Accordingly, their number should be significantly reduced and they should be better focused. This issue was raised as a Recommendation in the First Interim Evaluation and is further stressed in this Evaluation.

As noted, the selection process for Pilot B projects works well overall. It, however, needs to be more selective in terms of approving only proposals that are sufficiently strong in all aspects, including deployment, dissemination, and follow-up plans. Of the 39 available implementation review reports, 32 consolidated implementation review reports have been analysed as a further objective source of evidence, particularly to gain insights on progress, implementation and sustainability issues. Analysis of these review reports shows that, despite generally good or acceptable overall technical progress, the expert reviewers have often reviewed exploitation and sustainability issues critically. Only about 25% of the projects have a good exploitation plan, and many need considerable further development or are incomplete. It should be stressed that in order to increase the chances of successful exploitation, planning needs to start in the early stages of projects, given the innovation and deployment character of ICT PSP projects as opposed to FP projects.

The Pilot B instrument has been designed as a bottom up initiative, addressing a relatively wide variety of objectives within themes, with only a few projects dealing with similar topics. This can lead to fragmentation and dispersal of effort, and projects may still not produce widely applicable marketable services. Thus there may be a need for projects to be grouped in fewer themes and objectives within themes to develop critical mass.

For example for Pilot B projects more clustering activities or instruments, as is the case for the Best Practice Networks, could be envisaged. "Critical mass" is related to recognition that wider deployment cannot be reached through a single pilot (be it finished or not), but through a longer mobilisation effort to which pilots contribute over a number of years. Different Pilot B projects can have synergies and learn from each other; furthermore, they can cover slightly different aspects of the same phenomenon, exploring new cross-border service areas more thoroughly. This issue was raised as a Recommendation in the First Interim Evaluation and is further stressed in this Evaluation.

In sum, the weaknesses that have been identified in developing feedback loops with final users, in exploitation plans and developing business plans and follow-up sustainability strategies all suggest that project selection processes need tightening. It should be noted however that the project implementation review reports are still mostly interim snap shots, designed to critically improve projects in mid-course. This means that these reports must be seen in the light of this interim stage, highlighting where there is room for improvement and change of focus, designed to provide a critical assessment of achievements so far and suggest improvement to achieve the next milestones. The Expert Panel understands that this implies

that the implementation review reports focus more on critical comments than trying to sing and praise. The panel does however consider that despite this potential bias the reports are a valuable independent and objective measure of project progress, quality and sustainability.

2.3 Administrative efficiency and information sources

There is high overall satisfaction with program administration by participants. However in terms of initial information for the programme, the project participant survey showed that online sources are especially relevant. National Contact Points (NCPs) do not seem to be very important sources of information for ICT PSP participants and on-line sources were cited as the most important source of information, as Figure 3 below shows.

Figure 3. CIP ICT PSP information sources (%)
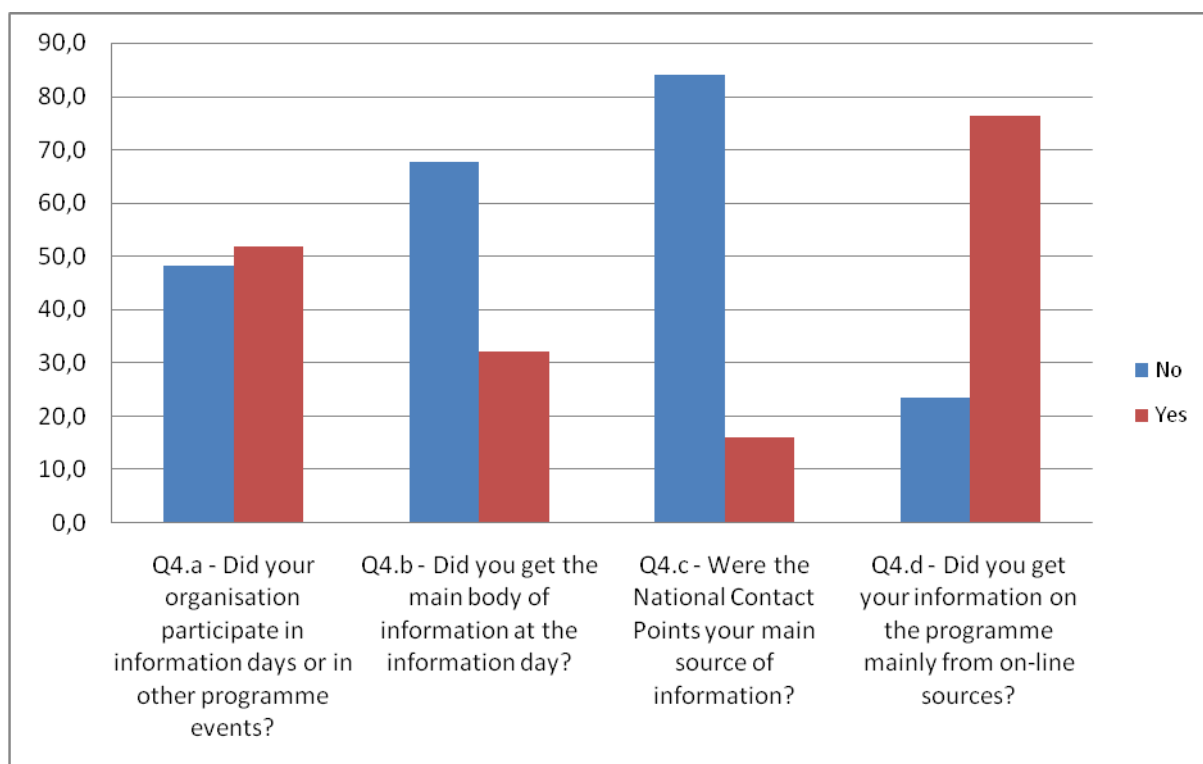
Source: Online survey of participants.

Thus the role of NCPs needs to be strengthened and they need to be more visible if they are to serve a more useful purpose.

2.4 Programme participation: An issue for concern?

Participation in the programme by different Member States is skewed, raising questions regarding the wider impacts of the programme. There are also questions as to whether Pilot A participation has been too skewed to achieve comprehensive pan-European impacts. The share of ICT PSP funding across the EU27 is compared with the share of ICT services value added in Figure 4 below, and it clearly shows the skewed distribution of funding by country.

To reach the anticipated pan-European impact of Pilot A projects, most if not all Member States should be involved. Although there are a number of reasons why Pilot A participation may vary across the EU27, if these projects are transformed into pan-European infrastructures, it is important that participation is high in the Pilot A projects themselves, to

test concepts across the range of EU27 countries and to share experience before any launching of pan-European infrastructures.

Figure 4. EU27 country shares of funding compared with shares of value added in ICT services
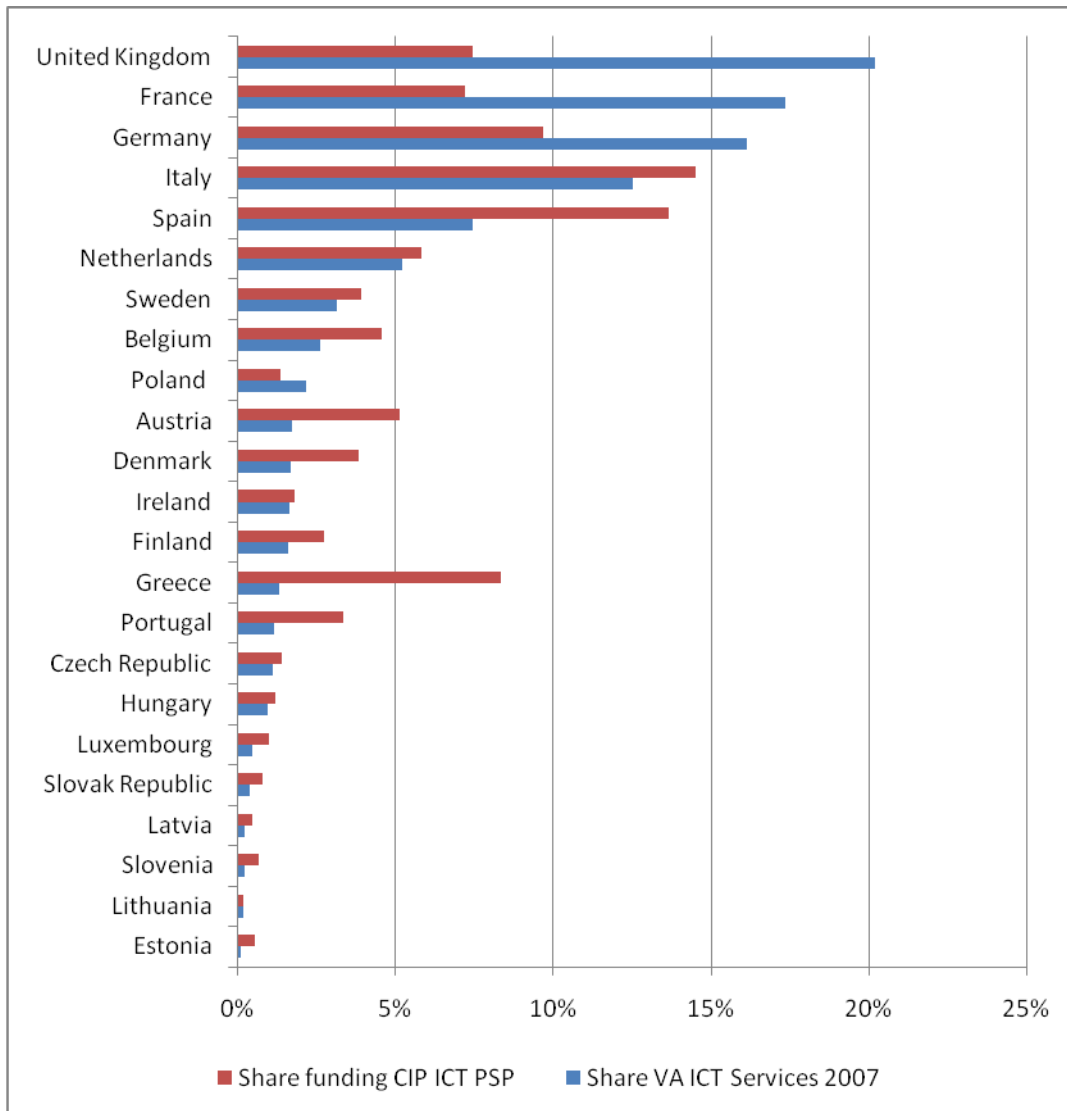
Sources: Commission internal data and EU KLEMS.[8]

Twenty five out of the twenty seven Member States are involved in one or more Pilot A projects, with only Bulgaria and, surprisingly, Ireland being absent from all Pilot As. Call 4 Pilot A projects had more countries involved and a better balance between countries, suggesting that projects are achieving coverage objectives better over time. An overall observation is that the UK and France have relatively low participation in Pilot A projects, whereas midsized countries such as Austria, Belgium, the Netherlands and Sweden are more involved. On the positive side, expansion calls for some of the Pilot A projects have increased the number of participating countries.

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[8] The total funding of individual project participants per country (Call 1-3), and the Value Added (in EUR at 2007 exchange rates) for ICT service sectors (NACE 64 and 72). Not included: Malta, Cyprus, Romania and Bulgaria.

Another important indicator of the skewed distribution of participation is shown in project leadership. Italy and Spain (the largest participants overall) together supply 36% of the coordinators (Spain over 21% of the Pilot B coordinators), whereas France and Italy lead the majority of Thematic Networks.

Overall, it is important that countries that have more developed ICT service infrastructures and businesses with experience in creating new ICT-based services participate more actively in these projects to ensure that projects are cutting edge, and that lagging countries participate more fully to speed their catch-up.

2.5   Effectiveness in reaching objectives

An overall assessment of the effectiveness of the ICT PSP will only be possible after the majority of projects have entered the exploitation stage. Hence, this interim evaluation can give only preliminary insights into the final effectiveness of the programme. Nevertheless, based on existing evidence there is considerable scope for improving the effectiveness of individual projects and clusters of projects and the ICT PSP overall.

Analysis of all available consolidated project implementation review reports shows that improvements are often needed in terms of meeting stated objectives and impacts, including involving users, developing exploitation plans and having sustainability strategies.[9] However it must be remembered that the interim project implementation reviews are designed to provide advice to improve the functioning and outcomes of projects, and the reports by their nature aim to highlight weaknesses and focus on areas for improvement.

There were only three implementation review reports available for Pilot As and analysis of these reports was hampered by lack of information in some crucial areas, notably on stakeholder and user involvement and on tangible applications and the development of standards. To improve this, reviewers should be provided with complete and consistent checklists to enable more complete and comparable project reviews.

Pilot Bs have been reviewed more extensively, but comprehensive and comparable cross project analysis was hindered by differences in the structure and content of the implementation review reports. This is another argument for strengthening the compatibility of review reports, including potential more 'objective' scoring measures. The implementation review reports show that only a minority of projects have positive outcomes in terms of balance in partnership, access to target markets and exploitation plans suggesting that these aspects need strengthening from the very beginning of project implementation. A small number of review reports show major project weaknesses while others provide no information or evidence on critical issues at all. In some cases this may be due to differences in the review reports, again suggesting the importance of further harmonising the approach and presentation of review reports as they provide a potentially valuable source of programme monitoring information for mid-term programme correction.

The Pilot B review reports recognise that some projects effectively reach their objectives and demonstrate significant impacts. However, most review reports indicate that the results in terms of management, organisation and user involvement are partial or limited. The business

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[9] Good, acceptable, limited, very limited, no information available. See Annex, "Review report analysis".

models of Pilot Bs are mostly weak and in two thirds of cases (9 of 14 projects reviewed) the reviewers provided no evidence of business models. Only a few of the reviewed projects were on track: in several cases action was needed, in many others no evidence was found or the item was not addressed in the review report. It should be noted that at the same time most reviewed Pilot Bs had met their foreseen milestones, suggesting that planned milestones in the original project design were not well-aligned with the more critical project review criteria (access to target markets, exploitation plans etc.) used by expert reviewers.

Several reviewed Thematic Networks show particular weaknesses in partnership balance, in the progress towards the access to the target market, plans to ensure sustainability, stakeholder commitment, and stakeholder involvement for sustainability.

2.6 Utility

Pilot A projects address large-scale economic, social and societal issues and are largely designed by the European Commission services themselves. They involve a large number of European stakeholders essential to design the cross-border services and set up the necessary institutional, regulatory and interoperability/standardisation frameworks.

Most Pilot As have been successful in demonstrating the viability of services, in promoting regulation and standardisation, and the first stage in establishing cross-border infrastructures.

Nevertheless, there are questions related to their sustainability and to funding the service platforms that are essential to the operation of the service. In many cases it is clear that involvement of end-users is still needed and that development of large transaction volumes is both critical and difficult. Pilot A implementation may also benefit from more industry involvement to test the new cross-border infrastructures before their wider adoption.

Pilot Bs are much more geared towards users and based on a bottom-up approach. In many cases this makes them more directly related to user needs. The status of achievement of objectives is less positive according to review reports. Approximately 50% of the review reports indicate only limited or very limited achievement of objectives, the main reasons being overambitious goals, delays in the project planning, quality issues and changes in the consortium, so the projects seem to have been overambitious in terms of objectives to be reached. Technical problems, doubts on the prototypes, and low innovativeness are mentioned in some projects, whereas in other cases solutions have been seen as fairly satisfactory.

Thematic Networks have in some cases demonstrated the capability to aggregate high-level competences in specific ICT policy thematic areas. In some cases the ICT PSP instruments have acted as an enabler of network development, in other cases they have helped set the foundations for a significant expansion of existing network activities.

2.7 Impacts and sustainability - the current picture

The potential impacts of the ICT PSP are much greater than the current impacts. In several important policy areas the ICT PSP has been able to bring Member States together to test deployment of innovative ICT applications at real scale. These actions aim at stimulating demand and facilitating formation of markets in areas with high untapped potential such as cross-border e-health services. However, it is still too early to identify whether this potential is being realised, as most pilots were launched in 2008 or later, and most are still grappling with mid-term implementation.

Pilot A and Pilot B projects have different sustainability challenges. Sustainability here is defined as the continuing deployment of innovative cross-border services after the end of the project, either singly or in complementary clusters of projects.

Pilot A: The continued operation of Pilot A projects requires, in most cases, the creation of viable business models to continue service delivery after project funding is completed. They also require governance structures to maintain service requirements, certification, further development of standards, cost sharing etc. For these pilots to become fully operational, they may further require the drafting of new legislation in participating Member States setting appropriate interoperable standards requirements. Evidence so far indicates that the Pilot As contribute to the standardisation process and identify areas where new regulation or legislation is required.

Although the subject areas of Pilot As are important for developing the single digital market, they raise questions as to why there has been relatively little expressed demand for innovative cross-border solutions in these areas and the extent of systemic and organisational failures in meeting such demand. In some sectors, such as health care, there is a multitude of standards and precautionary legislation within countries that inhibits cross-border service delivery. In such cases, Pilot As can be useful in promoting single cross-border standards. However, at the time of preparing the expert panel report there is little evidence that building infrastructure of this kind is directly stimulating cross-border transactions, emphasising the need for well planned and concerted efforts to raise awareness and expand user involvement in developing and testing the new services. As the Pilot A subject areas have been chosen to develop innovative new cross-border services and interoperable service platforms that have so far been neglected by market participants, it is crucial to strengthen user uptake and widespread experimentation and use of these platforms, in particular to develop mechanisms to ensure cross-border interoperability in the most promising areas.

Pilot B: Pilot B projects test solutions and applications in a few sites, usually in a limited range of countries. We may question whether their wider deployment is a realistic goal, as many of the projects do not seem to achieve the development of specific mechanisms to secure wider deployment. So far, it seems that the major business partner or coordinator can have a strong interest to spread/expand the deployment of the particular tested solution, but how deployment will be pursued over the longer term is often weakly addressed and unclear. According to the on-line survey and the implementation review reports, the projects have so far devoted too little attention to their after-life, a situation that could potentially be improved by better clustering of project and building critical mass.

The panel strongly encourages the current discussions within the Common Strategic Framework on cross-project links and a possible follow-up or second stage for promising Pilot B actions to better assure their sustainability.

Thematic networks: In the current setup some Thematic Networks provide effective responses to user needs and which appear sustainable. In several cases ICT PSP funding has been used to strengthen existing networks. However, based on the detailed analysis for this final evaluation[10] the panel is not convinced that the weaknesses pointed out in the Recommendations of the First Interim Evaluation have been sufficiently improved, in particular related to the lack of structure and lack of clearly defined purpose and outputs. Funding is generally seen to be too low and spread thinly, going mainly to the central

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[10] In particular the implementation Review Reports, interviews and the Focus Group.

coordinator, leaving little role or initiative to members. The reason may be inappropriate instrument design: resources are only sufficient for partners to attend a few conferences, they are divided evenly among participants irrespective of their inputs or outputs, and there are no funds for specific studies or follow-up activities. Low effectiveness could also be due to Thematic Networks not having sufficiently realistic and concrete goals. The all-inclusiveness of TNs could be one reason for the difficulty to find experts external to the networks that can act as reviewers and sounding boards for their development.

Detailed project interviews have indicated that the main burden of work in networks rests most of the time on a core subgroup of 5 to 7 partners. In general there are difficulties with the large number of partners, and in some cases the consortia are too large for the budget and the effort. There are complaints about lead times. In case of resource-intensive activities it is unrealistic to carry them out with the given budget without a major additional investment by partners. This ICT PSP instrument is more effective as a supporting opportunity rather than to launch new initiatives. This raises questions as to the appropriateness of the flat rate funding model and partner numbers requirements, and the extent to which these could be modified to better reflect and encourage actual effort.

Best Practice Networks: It is difficult at the present stage to assess impacts and sustainability of BPNs, as there are no review reports available and most projects are in their very early stages. Compared with Thematic Networks, participants are more oriented towards supporting integrated cross border working groups to develop and validate applications, facilitating the development of new, cross-border ICT application concepts, and building a critical mass of public administration bodies to respond to collective needs along the lines of Pilot B projects. BPNs appear far more engaged in user-related activities, which potentially provide a solid basis for project sustainability. The strong focus of BPNs on content provision makes it simple to gather partner interests. Again a core group is the starting point for the network, independent from ICT PSP.

2.8   Sustainability as a long-term aim

Even though there is potential for sustainable results from the CIP ICT PSP actions, and the immediate uptake within the pilots seems to support this, the panel is concerned about the ability of the projects to achieve longer-term sustainability. The objectives of the CIP ICT PSP are not to develop pilots as ends in themselves, but to develop realistic and sustainable ICT-based solutions and services, particularly in areas of public interest, that can be deployed after projects are completed. According to the on-line survey most project consortia do not have clear exploitation plans and strategies to attract additional investment. Even where projects have articulated a vision for future deployment, they have lower commitments to raising extra funding and finding new partners and a relatively low degree of realism regarding exploitation (see Survey results report).

Pilot A: A major challenge for Pilot A sustainability is financing the common cross-border infrastructure. This is in part due to the nature of the two-sided infrastructure markets:

- the infrastructure will be maintained if there is demand to use it,
- supply side software and service providers want assurance that the infrastructure will be maintained before guaranteeing supply and deployment of software and services based on the infrastructure.

This is seen as a costly externality by individual Member States, with a maximum of only 50% of costs financed by the Commission under the current arrangement. In addition, for

Pilot A projects it is suggested that they need to be better marketed to non-participating member governments to increase the cross-border impacts of projects.

Pilot B: Pilot B projects are rather weak in deployment, there are relatively few plans for additional investments, and "visions" for the future are more frequent than clearly laid out plans to finance future activities, as evidenced in the participant survey (more than half of the 247 pilot B survey respondents have nothing in place or not even a vision) and confirmed by the implementation review reports. In projects examined in the case studies prepared for this evaluation, exploitation plans are poor, sustainability has not been tackled early enough in project implementation, and there is little evidence of operational business models. Overall the expert panel believes that these weaknesses need to be addressed in redesigned and strengthened selection and evaluation processes, and through close monitoring and reviewing during project life, to ensure timely development of exploitation and sustainability planning.

Pilot A proposals showed limited attention to end-users according to the Call Evaluation Reports. These solutions are "market-driven" by the participating government departments and through them driven by citizens and businesses, their ultimate users. When end users are clearly defined, they appear to be not adequately included in project design and implementation, which then creates problems for long-term sustainability.

The panel stresses the importance of having higher industry involvement levels especially in Pilot A projects, in order to ensure the acceptance, take up and deployment of the standards and interoperability specifications resulting from these projects. Public Administrations will need assurance of compatibility and appropriate use of standards before deciding on large investments for major development. This however is not a one-way decision process and can be achieved only by involving industry and having industry contribute and buy in to the elaborated standards. Against this view there is the argument that Public Administrations should design their services and make their choices in an unbiased manner not influenced by single technology or solution providers. Larger involvement of industry in the initial design process may lead to solutions being biased towards specific industry partners. Therefore other ways to directly and structurally involve industry on a wide and representative scale should be examined. Such involvement should aim to consult and inform industry and at the same time create the basis for buy-in at later stages.

Pilot Bs should be guided towards improved project design, consistent with the programme guidelines. Only 25% of the Pilot B projects are satisfactorily building balanced partnerships for a sustainable future, according to the mid-term implementation review reports.

The majority of the surveyed project participants in Thematic Networks state that there is medium, quite high or high probability that their project will be sustainable beyond EC funding despite lack of clear funding strategies, suggesting that extending the current partnership is easier than securing financial sustainability. Although sustainability factors are very similar for both start-up and operational projects, start-ups are more likely to look for additional EC funds while operational projects are more inclined to look for non-EC funding. BPN projects are more likely to focus on financial requirement for sustainability than TN projects, but even in BPN projects, those in operation are more likely than start-ups to have consolidated sustainability actions in place that focus on financial requirements. BPN projects prioritise sustainability issues a little more than TN projects, but both give these high priority.

2.9 Linkages, financing and SMEs

2.9.1 Linking with other programmes

The CIP ICT PSP has not developed appropriate linkages with other EU programmes. In general there is a strong linkage to FP7, at least at the policy level, but when it comes to the EU Regional Programmes, national programmes and other CIP instruments and programmes (such as SME financing instruments) there is little evidence of such linkages.

By linkages the Expert panel does not mean full integration of actions (i.e. an automatic loan guarantee for an SME in a successful CIP ICP PSP project), but better use of the possibilities in other programmes, more guidance and awareness, and maybe even selection and evaluation criteria, related to other programmes to strengthen the leverage effect of ICT PSP. For example, regional programmes and actions could be complemented by pilot actions funded through ICT PSP. There are also opportunities for improving coordination between ICT PSP and other CIP pillars, and between the Directorate-General for Regional Policy and CIP Directorates-General. This issue was raised as a Recommendation in the First Interim Evaluation and is further stressed in this Evaluation.

2.9.2 Finance. Improvements required

It seems that by and large participants consider funding appropriate given the objectives of the projects. There are differences across different types of participants, but overall, surveyed project participants reported that there were no particular issues with the amounts of project financing. However, this does not apply to project management tasks, where coordination is funded at 50% unlike the 100% in FP7, and there has been criticism in some cases of SME financing, e.g. compared with 75% FP7 financing for small firms. In addition there is reason to believe that Public (non-profit) Research Organisations, and some key not for profit non-government organisations (NGOs) are hampered in participating due to the 50% own contribution requirement. Efforts to simplify rules and execution of programmes does not necessarily imply that one size fits all, and it is recommended that a flexible and simple funding level mechanism be designed to accommodate the needs of different stakeholders.

Suggestions for improving funding arrangements include: adapting to ICT PSP some of the financial models from FP7 including a guarantee fund; improving project management financing options so that overall project coordination costs do not weigh solely on the coordinator; expanding third-party participation options; increasing flexibility along the lines of FP7 but customised for ICT PSP to avoid confusion with FP7; and improving funding structures for ICT start-ups. There was also some criticism of inflexible contractual mechanisms which have inhibited some government ministries/agencies directly joining Pilot A projects, necessitating them joining via proxies, adding to their project overheads.

Overall the expert panel believes that on the basis of the collected evidence there are no clear financial barriers in project implementation, but that there are some particular detailed issues that need addressing for individual groups, notably new firms, SMEs and Public (non-profit) Research Organisations and NGOs.

2.9.3 Searching for SMEs

There were great expectations of the role of SMEs in the initial conception of the CIP and the ICT PSP (Decision No. 1639/2006/EC). For example, in the Programme establishment and design it was hoped that by improving support for SMEs they will develop, validate, integrate and rapidly scale-up new ideas, services and products, offering opportunities both for

innovative SMEs in the ICT sector and for SMEs that make better use of ICT to improve their products and services.

Although SMEs are addressed in the ICT PSP both as direct and indirect beneficiaries, it appears unrealistic to aim to attract very large numbers of SMEs into the pilots, when the main focus is on public administrations and software/service providers, and this has been reflected in the design of the Work Programme. In the main, the ICT PSP supports complex public–private projects focused on deployment in areas where technology based SMEs are not the major players. Analysis shows that SMEs are likely to be at the edges of ICT PSP networks. It is more realistic to expect limited direct involvement, and aim to maximise indirect spillovers to SMEs.

Nevertheless there is still room for improvement and a stronger role for SMEs in the ICT PSP. Funding mechanisms need to be examined to ensure that there are no unnecessary barriers to SME participation, provided that this does not weaken the overall rationale and direction of the ICT PSP.

3   Future directions

3.1   Organising future governance arrangements: Challenges for Pilot A projects

Future governance of the projects is a central challenge, related to financing the core infrastructure and expansion to a next larger phase if projects are successful. A positive feature in Pilot A implementation is the growing interconnections between projects to ensure interoperability and effective standards setting. The expert panel suggests that common and integrated governance and financing structures be considered for related projects (e.g. eGovernment) across common platforms and related Pilot A projects. (e.g. e-identity).

3.2   Developing a strategic approach to critical mass

The EU does not have an articulate policy on diffusion and deployment of new technologies unlike the well-developed strategy for R&D. Partly this is understandable, as diffusion and deployment should be largely the job of the market. On the other hand, coordination failures endemic in diffusion and deployment require a more strategic approach to realise ICT PSP objectives. For example, more systematic analysis is needed of demand for deployment of ICT in the public sector to support cross border mobility and the single EU digital market. Without such analysis it is difficult to prioritise and select the most promising thematic areas.

It is desirable that funding areas have continuity and cross-links within project clusters. This is particularly important in that inevitably some projects will fail and hence critical mass should ensure that some good projects recuperate investments in projects that fail. In short, critical mass should be introduced at the level of groups of projects in related thematic areas as an important selection criterion.

In contrast, calls have been dispersed on too many objectives in the thematic areas (in Calls 1 to 4, the 84 selected Pilot B projects are divided over 30 different objectives in 10 themes). It could be argued that these thematic 'pools' create the necessary 'critical mass' of projects. Unfortunately, similar but not identical calls create confusion about strategic directions of the ICT PSP. In addition, areas that rest on 1-2 projects may not be in a position to generate significant market demand for new innovative services or develop common standards.

3.3 Creating critical mass

The Commission recognises that the main challenges to the development of new cross-border ICT-based public interest services include the relatively slow uptake of ICT innovations in the public sector and the high fragmentation of markets due notably to a lack of interoperability across the Member States. In order for Pilot B projects to contribute to meeting this challenge, a critical mass / clustering of projects is needed.

To reach critical mass to overcome the twin challenges of fragmentation and slow uptake, the CIP ICT PSP has to make policy choices in a few core areas and encourage building critical mass and cross fertilization within themes across annual Work Programmes. Changing foci somewhat to test competing solutions over successive calls may keep project areas at the "cutting edge", and reduce possible duplication of effort, but risks confusing prospective project participants and user groups. In the panel's opinion, funding in some areas has also been insufficient to reach critical mass within and between projects. For example the initial plan was to have total funding of around EUR 6 million per Pilot B project, but total funding has in the main been well below this amount, often < EUR 4 million, and ICT PSP project funding is often competing with e.g. Regional Funds to attract good projects.

The Commission has recognised the trade offs and from the 2009 call onwards there has been discussion that core themes be repeated and focused to a greater extent. First steps in this direction have been made, but they need to be developed systematically and cross-fertilisation across project clusters strengthened. The Panel endorses the clustering of Pilot B projects, but there must also be a requirement for coordination across different clusters to ensure interoperability of deployed solutions. The Panel also believes that clustering will enhance cross-fertilisation and increase the chances of tangible and sustainable outcomes, that it will help expand the use of results from one or two successful projects after initial subsidy financing has ended, and that it will underpin stakeholder involvement and help mobilise users of project outputs.

Best Practice Networks have been designed to tackle some of the critical mass issues, foreseeing higher budgets and larger number of participants, as well as a stronger link with concrete activities. The project reviews will show whether BPNs are capable of generating critical mass and the effects on outputs and outcomes.

3.4 Developing the new frame beyond 2013. The Common Strategic Framework and ICT PSP: Marriage of different programme rationales for administrative convenience

The panel notes that the Framework Programme and the Competitiveness and Innovation Framework Programme have different characteristics of research and innovation and that the programmes to support them are different. There are major qualitative differences between support for generation of new knowledge and support for diffusion and deployment of innovative services. Only some parts of the innovation eco-system operate on the logic of R&D push, while a significant part operates on demand-led deployment of innovative services. These important conceptual and policy differences are at the core of the ICT PSP, and broadly of CIP.

Since there are strong indications that the future Common Strategic Framework will cover both kinds of activity, the panel highlights that the differences between the two programme types must be taken into account when designing instruments, participation rules and funding principles in the future strategic framework. The CIP ICT PSP programme goals,

instruments, principles and participating organisations are different from those in the FP research programme, and these differences should not be blurred for the sake of administrative convenience.

4   Recommendations

Based on a review of available evidence and detailed project analysis the expert panel recommends:

- **The positive, unique and innovative role of the ICT PSP.** The ICT PSP has a range of positive attributes (a unique and pioneering innovation instrument, directly policy-related, complementary portfolio of instruments, wide stakeholder participation) that contributes to its strengths and differentiates it from research support programmes. It is designed to provide new platforms for innovative cross-border public services in areas where there are continuing systemic and organisational risks. The panel recommends that the challenges of developing new cross-border public services in the selected areas need continuing recognition and that resources going to develop these public services be strengthened.

- **Continuing the ICT PSP as an innovation deployment policy instrument.** The unique features of the ICT PSP are its focus on deployment of ICT innovations and addressing systemic and organisational risks, and these features should be maintained in any follow-up. The top-down policy-driven approach in large-scale projects (Pilot A) should be continued, as it is a working model of how to enhance more widespread uptake of new innovative services at EU level. The bottom-up demand-driven projects (Pilot B) can provide new and innovative cross-border services in new government service-related areas (eContent, eHealth and aging, eGovernment and eEnergy/eTransport), and promote interoperability and the development of wider markets for innovative public services.

- **Differentiating the ICT PSP from the Framework Programme in any post-2013 follow-up.** There are major differences between support for generation of new knowledge and support for diffusion and deployment of innovative services. These differences need to be reflected in policy design and delivery and maintained functionally and administratively while streamlining future procedures to make project participation and administration simpler and more efficient. For large-scale Pilot A projects, common and simple governance structures should be developed for common cross-border infrastructures, platforms and technologies to increase synergies and reduce duplication across related projects.

Within the overall context of the expert panel's positive appraisal of the role and importance of this kind of programme, its innovative nature and efficient administration, the following Recommendations are made to improve the functioning and increase the impacts of the Programme in terms of developing longer-term sustainable cross-border public interest services:

- **Tightening selection processes, strengthening project reviews and making them more systematic.** Project selection needs to be tightened so that no projects are selected in a particular call area if the proposals do not satisfy the requirements concerning exploitation and dissemination plans and follow-up sustainability strategies, possibly by making the threshold for passing the evaluation higher and making sustainability

strategies a more prominent requirement in selection evaluations and project outputs. The project review system should be strengthened to focus more explicitly on project effectiveness, outputs and sustainability, reviews should be more comparable, and the information collected via the review reporting system used to monitor the whole programme and where necessary used for mid-term correction. A core project review template specific to the ICT PSP should be further developed (for instance to include common objective scoring measures) and used consistently across all project areas to provide a better overview of progress of the whole programme.

- **Sustaining sustainability.** Sustainability criteria in particular need to be strengthened. They need to be built more explicitly into selection and evaluation processes, in addition to mechanisms to spread information and experience learned from the projects. Sustainability of the use of results after initial subsidy financing has ceased is a major difference between innovation projects in the ICT PSP and FP research projects, and this strategic difference needs reinforcing.

- **Developing a strategic approach to critical mass.** Given the relatively low funding levels and the high fragmentation of proposals, it is recommended that broad objectives within funding areas be better focused and have greater continuity and cross-project synergies. The current annual work programme is beginning to recognise this, and it is needed to enable forward planning, build cross-project critical mass and create synergies between projects. It is further recommended that coordination within clusters of projects be required, especially for Pilot Bs, but also Pilot As in neighbouring areas, to ensure interoperability. The Panel believes that clustering will enhance cross-fertilisation and increase the chances of tangible and sustainable outcomes, that it will help expand the use of results from successful projects, and help mobilise users of project outputs. This issue was raised as a Recommendation in the First Interim Evaluation and is further stressed in this Evaluation.

- **Expanding stakeholder involvement.** The programme mobilises a wide range of stakeholders from public authorities, businesses, and other stakeholders. The balance in stakeholder involvement could however be improved in particular for Pilot A projects. It is recommended that two areas be addressed: increasing industry involvement, but not necessarily as full partners, in Pilot A projects, and enhancing participation of public research organisations as they fulfil an important brokerage role in the innovation system. In addition the relatively low participation of Public Administrations in Thematic Networks needs to be addressed.

- **Paying more attention to end users.** End users are often vaguely defined and not adequately embedded in project design and implementation, raising challenges for long-term sustainability. The role and engagement of end users should be strengthened in selection criteria across all instruments.

- **Overcoming hurdles to SME participation.** The panel believes that it is unrealistic to expect more than limited direct involvement of SMEs in the programme, and instead aim to maximise spillovers to SMEs as is recognised in the Work Programme. Nevertheless it is recommended that funding mechanisms be designed so that there are no unnecessary barriers to SME participation in projects, for example in funding of project management tasks, exploring whether a guarantee fund is merited, and improving funding structures for ICT start-ups and new entrants.

- **Rethinking Thematic Networks**. It is suggested that Thematic Networks be re-designed to fulfil more limited specific tasks, for example, preparatory or follow-up mechanisms for Pilot A projects, developing focused expertise centres, exploring specific policy issues, or exploiting best practice exchange mechanisms. Their number should be significantly reduced, which appears to be the case, and measurable impacts and outputs strengthened. Experience with the Best Practice Networks could be used as a model to help cluster and group the activities of several Pilot Bs. This issue was raised as a Recommendation in the First Interim Evaluation and is further stressed in this Evaluation. In addition the panel suggests changing the instrument rules to allow additional partners to be recruited once the project is contracted. Allowing more time to recruit the right partners would reduce the risk that the list of partners is inflated at the proposal stage.

- **Linking with other programmes.** The ICT PSP has not sufficiently strong linkages with other EU programmes covering the same substantive application areas, such as those funded from the European Regional Funds. It is recommended to improve information flows and linkages with these areas to strengthen both the ICT PSP and the overall impact of EC innovation support. This issue was raised as a Recommendation in the First Interim Evaluation and is further stressed in this Evaluation.

ANNEX

The evaluation was supported by the following evidence-based analytical studies:
- CIP ICT PSP Literature review, January 2010, Luca Remotti, Francesca Borelli, Emilie Normann.
- CIP ICT PSP Descriptive analysis from calls 1, 2, 3, 4, April 2011, Francesca Borelli, Babis Ipektsidis.
- CIP ICT PSP Survey results report, May 2011, Robbert Fisher, Luca Remotti, Babis Ipektsidis.
- CIP ICT PSP Focus group report, May 2011, Luca Remotti, Robbert Fisher.
- CIP ICT PSP Case study report Pilot A, May 2011, Robbert Fisher, Luca Remotti.
- CIP ICT PSP Case study report Pilot B, May 2011, Michael Dinges.
- CIP ICT PSP Case study report Thematic Networks and Best Practice Networks, May 2011, Luca Remotti, Jeremy Millard.
- CIP ICT PSP Case study report eGov, May 2011, Robbert Fisher, Luca Remotti, Jeremy Millard.
- CIP ICT PSP Case study report ICT for Sustainable Growth, May 2011, Dieter Elixmann.
- CIP ICT PSP Review report analysis, April 2011, Francesca Borelli, Luca Remotti.
- Interviews with project coordinators and participants conducted by the Expert panel.