This report provides a brief synthesis of the participants contributions to the workshop "Research supporting Service Innovation: a workshop for European SMEs" organised by the SME Unit, DG Research on 20 May 2010 in Brussels.

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of the information contained in this report. The views expressed in this report do not necessarily reflect the views of the European Commission.
1. Introduction
2. Defining Service innovation
3. The many faces of research for service innovation
4. Supporting service innovation through the Research for SMEs programme
5. Research and small innovative knowledge intensive companies
6. Conclusions
The services sector accounts for over 70% of total employment and value added in the EU, predominantly by SMEs. How does the Research for SMEs EU programme support SMEs for innovations in this area?

The Research for SMEs programme under FP7 supports innovative SMEs to outsource research to Research Performing institutions (RTD performers), including universities, in order to fulfil specific business needs through solving the related scientific and technological problems. Already at proposal stage it has to be explicitly demonstrated that the results will have a strong business potential for the SME partners of the consortia. In order to best exploit the research results according to their interests, the SMEs acquire all the intellectual property rights they need (ownership, licensing etc). A second scheme under the same programme targets SMEs through their Associations, which outsource research activities on behalf of their members. In a similar way as in the SME scheme, the Associations receive the property rights to the research results, but in this case they are expected to reach whole SME communities.

The programme currently supports 222 FP7 projects with around 260m € EC contribution, involving different business sectors. Due to its bottom-up character, it invites research in any area of science and technology. Projects where the main innovations are non-technical are also supported, for example in organisation, business models, knowledge management, new products and processes for the customer, or in service oriented sectors such as tourism, education, health etc.

However, due to a broad definition of service innovation and the often horizontal nature of research in this area, the identification of research projects promoting service innovations is not obvious. In a bottom up scheme such as the Research for SMEs programme it can be particularly hard to bring such projects together taking account of their service innovation related components, independent of the industries where the research is launched. Most often, it is the ICT and management science areas that are more readily identified with service innovations affecting different economic and industrial sectors. However, research projects which may lead to service innovations may fall under different themes of the Framework Programme.

Innovation in the service sectors and service innovation affecting many industrial sectors attract increasing attention both in the business world and at Commission level. The role of services innovation in supporting employment and economic development was recognised by
the EC report on "Challenges for EU support to innovation in services- fostering new markets and jobs through innovation" (SEC (2009) 1195). The report provided arguments for strengthening services innovation in Europe as an enabler for growth and new jobs, and identified a number of policy challenges, such as for example that current innovation support mechanisms are considered by many to be predominantly biased towards technological innovation.

Services are the most important economic sector in Europe and are composed of a variety of heterogeneous activities. Business services, in particular computer and related activities, and communications services have been fast growing parts of the services sector. Knowledge intensive business services create and diffuse knowledge and act as a driver of innovation in many industries. The drivers of the service economy are predominantly SMEs, and in particular micro enterprises (95% of service enterprises in Europe). As future jobs in Europe are more likely to be created by the services sector, the interest in innovation and SMEs in this sector is increasing.

It is hardly contestable that a lot of innovation in the services sectors has little if anything to do with research activity. However, there is also significant interesting research close to the market and driven by small innovative companies that aims to innovative products and services. Due to the potential impact of such efforts for the European economy, the question of how research could better involve small knowledge intensive companies and could further contribute to innovations in services (including non-technical innovations, business and knowledge management models etc) deserves special attention. Research in this area may suffer from constraints linked to understandings of research as mainly tied to technological development, and may be perceived for example as less ambitious or lacking excellence. However, the Research for SMEs programme gives more weight to the economic impact of the research, allowing projects with higher potential impact to be supported when compared with projects of low economic impact for the SMEs (despite higher scientific excellence for example).

The SME Workshop "Research Supporting Service Innovation" aimed to discuss research policy as it relates to SMEs, which can benefit from research and innovation in the services sector of the economy. These can be SMEs within the services sector itself or SMEs in the manufacturing sector, which benefit from innovation in the services sector. The workshop involved several projects, mainly under FP7. Despite mainly deriving from ICT and

---

management and consequently not being representative of the full scope of service innovation, the presented projects enabled a closer look to current EC support in the area. In this sense the workshop helped to highlight service innovation in existing research, and ask practical questions i.e. what could be done better according to the experience of project coordinators, SMEs, researchers and other stakeholders. The current report draws on the speeches and discussions of the participants during the workshop, but is structured according to the main thematic areas addressed rather than the order of the speakers' presentations in order to facilitate further analysis and suggestions for further action.

2. Defining Service innovation

"A lot of people do research related to service innovation without knowing it".

Service innovation is about doing things better and doing better things (as opposed to making better things, goods etc). Since the 1980s the trend is for all services to become more technology intensive (for example electronic card systems, mobile phones etc). Still, some services are more people intensive, which can either refer to low skilled or highly qualified labour, the latter being typically knowledge intensive companies when involving high skills (ICT for example).

The concepts of service innovation are most familiar in certain sectors. In software the difference between service innovation and process innovation is less clear and they are especially close ("Software as a service" or SaaS in management science). Typical examples of service innovation where SMEs have a major role in supplying or using services to improve performance are E-learning and knowledge management areas, for example research in Customer Relationship Management (CRM).

Characteristic of services is that they involve their customers, often in intense and interactive ways. They may be standardised or specialised, or following specific user requirements. Innovation in services may have different aims, for example to simplify processes, to create more value added, to improve interaction with the user etc. Service innovation can be multidimensional, involving technology and product innovation, customer interface and service delivery, organisational innovation and innovations related to new network and value chain configurations.

Service sectors innovate in different ways. In the case of high tech knowledge intensive businesses, these are similar to other high tech forms – i.e. with R&D and technology driven innovation. Professional knowledge intensive business services, social and creative services
are very innovative, often taking the view of responding to their clients needs (present needs as well as future needs, i.e. what the client might want in the future).

3. The many faces of research for service innovation

You may be a manufacturer supplying services –
Or one that needs the development of a new service for your business

Service innovation happens in all sectors, sometimes creating totally new sectors and markets. Often, these new service sectors are technology-driven, in particular by ICT but also, for example, by new satellite navigation systems, or new testing methods based on biotechnology or nano-technology. Clearly, the borderlines between services and manufacturing become increasingly blurred.

The service sector used to be organised mainly vertically, following a model most typical of large enterprises. Today there is strong evidence of a shift towards more horizontal structures in many knowledge intensive areas. While research in the service sector is not new, it was mainly limited to marketing and management areas and concerned large corporations. Computer science was the first to recognise that its major business in the future will be delivered as a service. Often, knowledge intensive business services create clusters – consisting for the large majority of SMEs.

From an SME perspective, research in new business models and processes is particularly important because knowledge management methodologies and technologies which have been developed for big companies do not serve the SMEs’ needs well. The latter are flexible and often need to move from one task to the next. Services for SMEs in this area have enormous potential and can satisfy vital needs of the companies, but it is still hard to convince SMEs on the adoption of these technologies. Although R&D in the service sector may need a more technical foundation, what is also needed is R&D in innovation management, which takes account of bottom up and open innovation processes.

Service SMEs operate in different markets, with different structures and institutional frameworks, and with different profiles of competition between SME and large companies. For SMEs the role of one’s own R&D activities is replaced by a mix of different strategies combining business transformation through organizational innovation, open learning through interactions with clients, and the acquisition of equipment. Organisational innovation, typically originating from services, increases progressively with the size of companies, although it also depends much on sector of activity. But, even if small firms are less engaged in organizational innovation in relative terms, their role and impact can be higher in terms of
driving innovation outputs, for example through public-private networks. Such networks can be a huge opportunity to improve innovation in services.

Many participants to the workshop highlighted particularly the concept of service innovation in relation to traditional sectors including manufacturing. Such approach emphasises the trend to combine the products with the services in many sectors, so that the user receives not just a classical product but a whole range of ways of doing associated with his needs. Service innovation can play an important role in supporting traditional industrial sectors in Europe, including helping them obtain competitive advantages at the global level. However there are differences between manufacturing sectors and service and ICT sectors in the management and protection of knowledge, which depend on some characteristics of the products such as secrecy, easiness to imitate, possibilities to share and increase value by sharing, appropriateness of patenting etc. In some cases adopting new, and often more open and collaborative ways of knowledge management and protection can have beneficial results for traditional manufacturing sectors, release potential and shape new ideas, thereby promoting more innovation.

In conclusion, the importance of service innovation for manufacturing is vital, and more attention needs to be paid at EC level to this area.

4. Supporting service innovation through the Research for SMEs programme

The Research for SMEs programme supports research activities which may lead to service innovations, and can help SMEs turn ideas to new technologies and bring them to market

The main part of the workshop has been dedicated to the experiences of SMEs and SME Associations with the FP and the SME specific schemes in particular. The presentations and discussions highlighted the importance of innovation for SMEs supplying or using services. The FP7 projects which were presented at the workshop had a strong and clear service related component directly targeting new ways of doing things in areas as different as tourism and textile manufacturing².

The Research for SMEs work programme has been described as an excellent vehicle to couple applied research with real-world requirements. However, in order to be successful the projects need to rely on foundations of a good business model: for this, incremental steps have been described as key. As SMEs need "less planning and more action", the appropriate innovation

² see Annex to the report attached
circles are shorter and faster. A number of participants have suggested that projects in the area of ICT enabled service innovations benefit most from smaller consortia and short duration. Such characteristics enable the projects to be more flexible and more easily accommodate appropriate adaptations in a changing environment. A view expressed by some suggested that support for small knowledge intensive companies could be optimised by delivery through stages: first support for small, initial projects, then follow up projects based on incremental proposals. At the last stages, and after having proceeded carefully from one successful step to the next, funding from EIB and private investors such as VC should be effectively used. In this respect, actions at EU level should support SMEs’ needs to find investors that can support their innovative and often necessarily risky efforts from research to market.

Flexibility has been often pointed out as a main characteristic of dynamic innovative SMEs. The same characteristic however has been suggested as crucial for SME research projects. Flexibility helps ensuring that SMEs get what they need out of the project, including what they may discover they need during its lifetime, to the extent that it is possible to accommodate such adaptations. Flexibility is certainly depended on what formal rules are in place but, it has been highlighted at the workshop, it also relies strongly on the actual relationships between RTD performers and SMEs in a consortium. These internal relations can be characterised by different degrees of interaction and collaboration within the same set of rules. For example, one consortium might listen continuously to the needs of SMEs which actively participate during the whole project lifetime while another might carry on with some of the RTD partners committed to completing the work as planned and others loosing interest. When small adaptations are requested by the SMEs so as to best serve their commercial interests with the expected results, in the view of some participants, RTD performers should have the willingness to accommodate changes if possible within the existing constraints (contractual, financial, ethical etc.) On the other hand it might make sense, according to some participants, to introduce a different balance of sharing of risk between SMEs and RTDs, as currently the RTD performers can expect to be reimbursed in the last instance by the EC. Evidently the discussion of how best to strike a balance between flexibility and predictability is very broad, and many aspects need to be taken into account.

With respect to Associations, there is a high potential impact through their involvement in research supporting service innovation. This is especially the case when the Associations continue to be actively involved after the lifetime of the project with the dissemination and
exploitation of its results. However, there are different considerations for Associations outsourcing research which might not affect SMEs, for example with respect to commercial exploitation aspects. While in the case of SMEs there is a direct clear expectation of commercial benefit expressed in a business plan already before the project starts, for many Associations the economic impact might be described more broadly. Finally, differences in language and national institutions and cultures can be particularly important in the area of services-related research.

5. Research and small innovative knowledge intensive companies

EU research enables small companies to establish long term research and business relations with partners from other countries, and thereby helps small firms to internationalise. In addition, being involved in an EU project can give a small SME "a boost" in visibility at the local/ regional market. But there are some characteristics of knowledge intensive services which highlight their differences from other sectors, such as in questions of ownership, protection and management of knowledge. For some participants, the IPR rules of the SME schemes can be to some extent "tricky" for open source models. Small companies that work in open access often find that patents and IPR protection is not always a driver of innovation. In areas of open source and collaboration the main value is created by use, and the main question is not who owns the knowledge. As was suggested at the workshop, for Free and Open Source Software (FLOSS) innovation models, transfer-not protection- of knowledge is the key. With respect to the role of SMEs in the projects, it was suggested by many speakers that SMEs should be more active and strongly encouraged by the scheme to be more involved. In addition, demonstration activities should be supported.

6. Conclusions

Building the Innovation Union requires a new understanding of innovation, and a broadening of research and innovation policies, taking account of the importance of innovation in the service sectors.

There are clear trends that service sectors not only grow but are becoming more research intensive. SMEs, especially microenterprises are the key players, and therefore directly concerned about EU policy on research and service innovation. Knowledge intensive SMEs,
which are often found in areas underpinned by ICT, deserve special attention, but manufacturing sectors are also affected in vital ways.

The workshop addressed issues on service innovation and research as well as on the work programme for SMEs and on EU research more broadly, while providing a good ground for interaction between SMEs and researchers in this area. This is important to take place during the projects' lifetime and even at an early stage at the European level, in order to facilitate mutual learning, rather than only promote dissemination when the results are available.

Within this context, this workshop has been a small but important contribution to the question of what could be done at the level of European research programmes to support service innovation for SMEs. In particular it contributes to understanding what the characteristics of these projects are, how well they fit into existing programmes, and what could be adapted to increase the impact on SME competitiveness. The workshop has brought together researchers, SMEs, EC policy makers, academics, associations, funding agencies, intermediaries and other stakeholders in a lively forum on these questions. As such, it has provided clearer views of the problem, and given some directions for further action.

The workshop has confirmed that there is much interesting research which can lead to innovations which may or may not have a strong technological component. The specific SME schemes have a strong emphasis on economic impact and commercial value of the research results, thereby providing an excellent vehicle for projects which can demonstrate a high business impact by going beyond the state of the art, even if the research is not the most advanced on scientific and technological criteria. In fact, non technical innovations which may require research and collaboration between SMEs and RTD performers in order to move towards the market, can find their place in the SME schemes.

However, small knowledge intensive companies, which can play a strong role in the Innovation Union, have expressed concerns and pointed out characteristics and needs deserving further consideration. Such concern for example the roles of RTD and SMEs, the question of sharing and protection of new knowledge, simplification and flexibility.

Furthermore, taking account of the importance and weight of the service sectors in the economy, and their potential in innovation and job creation, more can be done to develop and support the small knowledge intensive service companies in the EU. To the extent that research can play a strong role in promoting innovation in particular when these small dynamic players are concerned, the SME programmes could further develop their approach. In line with the broad understanding of the concept of innovation, programmes should ensure
that proposals in any area and economic sector are not discriminated against due to not falling within – actually blurred- traditional borderlines.

Particular issues in services-research concern the size and duration of projects, adaptability and problems of promoting the new service technologies and methodologies in a wide context, Standardisation can play a role in this regard, and this area needs to be further examined, not just in relation to technical standards. Protection and sharing concepts for intellectual property should be better understood in relation to innovation in services. New models of IPR are emerging in this area, which can also influence more traditional sectors. Finally, more research on service innovation is needed and faster development and dissemination of innovative business models. Appropriate forms of IP and knowledge transfer would need to be developed. More emphasis at the EU level on service innovation and the role of research is required. More systematic presentation of service related results could help in this direction.