

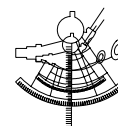
European Trend Chart on Innovation

European Trend Chart on Innovation Policy Review Workshop 10:

“Innovation in Services”

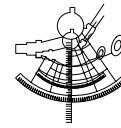
Workshop Input Report

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Policy Review Workshop 10: *“Innovation in Services”*

Executive Summary

Traditionally considered as a heterogeneous ‘left-over’ collection of activities that are not included in the agriculture (‘primary’) or industry (‘secondary’) sectors, the services sector has, until recently been a neglected area of economic policy making. However, the decline in ‘traditional’ manufacturing reported in many countries has often been accompanied by an upsurge in the service sector as a major contributor to the economy.

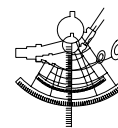
The role of R&D as a source of innovation in the service sector is not well understood. Moreover, existing definitions of R&D and innovation are not always appropriate outside of the industrial, manufacturing or technological frameworks. Thus the significance of innovation in services has not, until recently, received much recognition within government policy making. The academic literature notes that few innovation support policies address innovation in services (e.g. Howells, 2000) and that ostensibly sector neutral measures manifest a bias towards manufacturing or technology development activities (e.g. Miles, 2005). Thus existing national portfolios of innovation support measures tend to be under-utilised by service companies.

However, policy imperatives have focused attention on the potential of innovation in services by both the European Commission and the OECD. Therefore this exercise set out to use the network of policy correspondents maintained under the European Innovation Trend Chart to obtain more empirical evidence on the occurrence of innovation policy attention and support activity to services, specifically relating to:

- policy statements and documents concerning the role of innovation in services;
- policy debate on innovation in the service sector;
- specific programmes/initiatives to promote innovation in the services sector;
- the focus (manufacturing-oriented or horizontal (open)) of such programmes;
- evidence that such measures are neutral or biased towards technology/manufacturing activities;
- evidence of indicators to identify which particular sectors benefit from these programmes.

The results indicate that:

- Several countries have produced **figures and statistics** on the role of the service sector (for example Belgium, Spain, Iceland, Norway) although it should be noted that OECD, EUROSTAT and CIS figures on the sector are also available. Evidence on the significance of the service sector in the national economy seems to be accumulating.

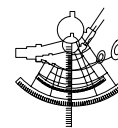


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- Countries such as Finland, Germany and, to a lesser extent, Denmark, Belgium and the Netherlands, together with Iceland and Norway are leading in terms of **policy debate** on the significance of the service sector and on the issue of innovation within it. Debate is also noted in Austria, Italy, Ireland, Sweden, Latvia, Malta, Slovenia and to some extent, Cyprus, Spain and the UK.
- As far as the mention of innovation in services in **policy documents** is concerned, a “leading” group may be identified (comprising Denmark, Finland, Germany, the Netherlands and Sweden) where innovation in services has received significant policy attention. A “following” group in which some reference to innovation in services has been observed in policy documents includes Belgium, Cyprus, Ireland, Italy, Latvia, Malta, Norway, Portugal, Spain, Turkey and the United Kingdom, and to a lesser extent, the Czech Republic and Estonia). Finally, a third group where the topic appears to have attracted no or very little policy attention comprises Austria, France, Greece, Luxembourg, Poland, Slovenia, Slovakia and Switzerland.
- In general, most innovation support measures appear to be of a **horizontal** nature (i.e. open to both manufacturing and service companies), although there is frequently a **manufacturing or technology bias** (which may be a consequence of the national industry structure). However, the number of specific service-oriented measures appears to be growing.
- Only a handful of countries report **specific examples** of services-oriented innovation support measures. These are Finland, Italy, Portugal, Cyprus, the Czech Republic, and Norway. Several other countries note that some horizontal measures explicitly include service companies, including Austria, Belgium, Germany, Luxemburg, Malta Spain, Iceland and Turkey
- Specific services-oriented support measures target industries such as building & construction; healthcare; leisure and tourism; logistics & transport, frequently as a consequence of the role that such industries play in the national economy.
- Relatively few agencies appear to monitor or **assess the uptake** or distribution of innovation support measures on a sectoral basis, including uptake by service sector firms. These include Germany, Italy, the Netherlands, Spain, Sweden (with quite detailed figures), Cyprus, Lithuania and Slovenia.

Lastly, a number of policy recommendations are made. These relate to:

- Opportunities for the Commission to play a greater role in the dissemination of data on the contribution and role of services in the economy and to raise awareness of these issues.
- Opportunities also exist for the Commission to emphasise the need for Member States to increase the coverage of innovation support measures within the service sector by various means
- Innovation support agencies should undertake specific monitoring and evaluation exercises focused on service sector participation in existing innovation support mechanisms to develop understanding of the specific innovation issues concerned and to aid in the development of appropriate policies.



European Trend Chart on Innovation Policy Review Workshop 10: *“Innovation in Services”*

1. Introduction

This report forms an input to the tenth Trend Chart Innovation Policy Review Workshop and Conference (19-20 June 2006). It addresses the theme of “Innovation and Services”. It examines the level of policy awareness and debate and the occurrence of policy instruments employed by countries aimed at supporting, either directly or indirectly, innovation within the service sector or within service-related firm activities. This report covers the EU Member States, Accession Countries and Associate Countries and presents an analysis of a set of structured questionnaires that were designed to elicit information from the various countries covered by the European Trend Chart on Innovation. These have been completed by members of a network of national ‘correspondents’ located in each of the represented countries.

The authors would like to acknowledge these correspondents for their, often very extensive, input to this exercise.

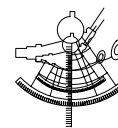
1.1 Conceptual issues

The services (or ‘tertiary’) sector is traditionally considered as a heterogeneous ‘left-over’ collection of activities that are not included in the agriculture (‘primary’) or industry (‘secondary’) sectors. According to Rubalcaba¹ “services are not tangible or material, they are neither storable nor transportable, they are not repeatable or easy to assess and they do not generate physical assets or commerce”. Hill (1977)² defines a service as “the result of a change by means of an action, modern definitions of services highlight their features as a co-productive act where interaction is an essential element”.

In recent years, the role that services play in the economy has gained increasing attention from researchers and from policymakers alike. Many countries have witnessed an upsurge in the growth of the service ‘sector’, irrespective of coincident declines in the importance of the more ‘traditional’ manufacturing sector. In some advanced countries, services may contribute as much as 70% of employment and added value to the economy (Rubalcaba, 2006).

¹ Rubalcaba, L. (2006) “Innovation in services: distinctiveness and policy implications”, article submitted to Research Policy, 2005.

² Hill, T.D. (1977) “On goods and services”. The Review of Income and Wealth, 4.



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Similarly, the significance of innovation in services is also poorly understood. This is partly because of the unclear role played by R&D as a source of innovation in services and also due to the necessity of re-defining processes such as R&D and innovation within a non-industrial framework. Consequently, governments and other actors remain insufficiently aware of its importance and few innovation support policies directly aim at services innovation (Howells, 2000³). At a more general level, although public support for innovation is often intended to be sector neutral, and hence would be expected to benefit the service sector, the “heritage of a manufacturing orientation” tends to constrain the participation of services in these programmes (Miles, 2005⁴). Also, from an actor’s perspective the relevance of such support is often not recognised by services and remains under-utilised.

Given the problems associated with achieving the Lisbon goals, and notably that of raising R&D expenditures to 3% of GDP by 2010, the policy significance of services innovation is clear, not least because of the strong inter-relationship that exists between product manufacture and services. The European Commission recognises the role of services (European Commission, 1998 and 2003⁵) and its last Communication “More research and Innovation” of 12 October 2005 (COM(2005)488) has also addressed in section 3.5 “The potential of innovative services”. The OECD has also focussed policy attention on the subject (OECD, 2001 and 2005⁶).

Prior to this specific exercise, at the country level, a handful of examples of service-oriented research programmes and support measures are already known, notably from Scandinavia: for instance, the Research Council of Norway’s *PULS* programme which “supports research-based innovation” directed towards research challenges in “the service, commerce and logistics sectors”⁷; the Finnish *SERVE*, *KETJU*, *ETX* and *VÄRE* programmes operated by TEKES; and, in Sweden, VINNOVA’s activities in the transport logistics and e-services sectors. German examples include “Service 2000plus”, a study which involved over 300 experts from academia, industry and policymakers, the funding of so-called “Priotären Erstmassnahmen”, and the Special Research Programme for Services *Dienstleistungen 2000* an internet community for services research (<http://www.dl2100.de>). Activity has also been noted in the USA.

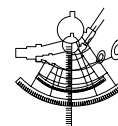
³ Howells, J. (2000) “Services and systems of innovation” on Andersen et al. (Eds) Knowledge and innovation in the new service economy. Edward Elgar, Cheltenham, 215-228.

⁴ Miles, I. (2005) Foresight on services and R&D. Section 1. Main report. Platform foresight. The future of R&D in services: implications for EU research and innovation policy. Report prepared for DG Research, European Commission.

⁵ European Commission, 1998, The contribution of business services to industrial performance: a common policy framework, Communication from the Commission to the Council, COM(1998)534final, EU, Brussels. European Commission, 2003. The competitiveness of business-related services and their contribution to the performance of European enterprises. Communication from the Commission to the Council and the European Parliament, COM(2003) 747. EU, Brussels.

⁶ OECD (2001), Innovation and productivity in services. OECD, Paris. OECD (2005) Promoting innovation in services. Working party on Innovation and Technology Policy. 14th October 2005. OECD. Prepared by Tamura, S., Sheehan, S., Martinez, C., and Kergroach, S.

⁷ Although, this has now ended.



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Despite these examples, there is an absence of coherent evidence upon which policy makers may base decisions for future action. An initial analysis of the Trend Chart database revealed little innovation support activity with a services orientation and while many measures may be ‘sector neutral’ the reality in terms of unintentional bias (towards ‘industrial sectors’) and uptake discrepancies (i.e. due to lack of awareness within service companies) is not clear. Moreover, there is even less evidence concerning the effectiveness of such innovation support in the services context.

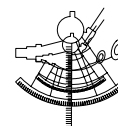
1.2 Methodological issues

The questionnaire was designed in liaison with representatives of DG Enterprise and contained six questions concerning the role of innovation in services as a policy concern at the national level. A seventh question sought suggestions for participants at the June Workshop. The precise questions were:

1. In your country, have there been any policy statements concerning the role of innovation in services, or have policy documents, strategy papers, etc. made explicit reference to this topic?
2. Is there any evidence of policy debate, in your country, concerning the significance of innovation in the service sector?
3. Are there specific programmes or initiatives to promote innovation in the services sector (private sector actors only)?
4. Do existing innovation promotion measures and programmes in your country explicitly focus on the manufacturing sector or are they horizontally oriented (open) to include both the manufacturing and services sectors?
5. If, in your country, there are horizontal/open measures, is there evidence to suggest that they are neutral with respect to the services sector or do they tend to be biased towards technological innovation (rather than, for instance, organisational innovation)?
6. If possible, can you provide any indicators which might identify which particular sectors benefit from these programmes (for example, take up rates of programmes/measures categorised by sector)?

Responses were received from 31 countries (Romania and Israel were absent). Questionnaires were not received for the country groupings (NAFTA & Brazil, MEDA Countries and SE Asia Countries).

Generally, all respondents were able to answer most of the questions. In two cases only, some confusion over the concept of services was noted where respondents had assumed that the provision of innovation support services to firms (particularly SMEs) or the development of e-government services formed examples of innovation support to firms engaged in service sector activities. Responses made in this context have been omitted from this report.



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2. Results

The results are presented in the same order as the policy process could be said to develop, i.e. arising from policy-related debate, possibly supported by data or indicators, through broad policy statements in recognition of the significance of the topic through to the development of general and then specific policy measures. The final section examines the availability of data which provide evidence of the uptake or participation by service sector companies in existing innovation support measures.

2.1 Policy debate on innovation in services

In general, service sector innovation is usually not at the centre of **Austrian** discussion about innovation but there is a growing awareness that a considerable part of innovation activities is performed in the service sector. It is also understood that the Ministry for the Economy and Labour is currently interested in innovation in services and is contracting research on CIS 3 data on this issue.

In **Belgium**, a 2005 OECD economic review of the country noted that

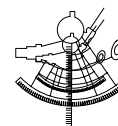
“Innovation policy is also an important lever for increasing productivity growth. In view of the economic importance of service sectors, a refocusing of existing innovation policies is needed to encourage more investments in organisational change, which is a more important aspect of innovation in service sectors than in the rest of the economy. This should be complemented by improving the ICT-using competencies of persons with lower intermediate skills and low education attainment”.

Internally, in the same year (2005) a report from the Belgian Federal Planning Office analysed R&D and innovation activity at a sectoral level. According to this study, in 2001, 82.8% of R&D expenditure of enterprises was undertaken by manufacturing and 13.7% by the business service sector. The 2004 *Belgian Report on Science, Technology and Innovation (BRISTI)* published online⁸ also examines in more depth the different trends in innovation in services using available statistics, notably CIS (see, for instance, chapter VII. Innovation section A. Innovation in Belgium: trends and the importance of services). At the Federal level, a report was also prepared (as a contribution to the revision of the Oslo Manual) to develop a better analytical framework for measuring “innovation in a broad sense” and notably aimed at statistics for measuring innovation in services and organisational innovation⁹.

The past year in **Denmark** has been characterised by a thorough policy debate concerning how the country should prepare for the challenges of globalisation. Innovation has been a pivotal point in this debate and, accordingly, the significance of

⁸ (in French http://www.belspo.be/belspo/home/publ/pub_ostc/BRISTI/BRISTI04_fr.pdf or in Dutch, http://www.belspo.be/belspo/home/publ/pub_ostc/BRISTI/BRISTI04_nl.pdf)

⁹ http://www.belspo.be/belspo/home/publ/pub_ostc/ind/RDinno5_2.pdf



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innovation in the service sector has been emphasised, but in general more emphasis has been given to innovation in manufacturing services and in particular to high tech areas. Over the longer term, the subject has been emphasised in policy documents and related activities (see below).

In **Finland**, the issue of innovation in services has not only emerged in the strategy documents as noted below but, since 2000, has also formed the focus of intensified discussion about the role of service innovations as a major source of economic growth in the future. For example, Finnish participants were actively involved in an extensive OECD study on knowledge-intensive service activities (KISA) which was completed recently. In addition, the Confederation of Finnish Industries has undertaken a specific foresight project, *Palvelut 2020 (Services 2020)* between 2004-2006, which aims to foresee changes taking place in the operational environment of services and what effects these identified changes have on future competence requirements. The project is co-financed by the Finnish Ministry of Education and European Social Fund.

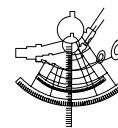
Leisure industries form a sub-theme within debate concerning services in the country. Tekes has, for instance, financed four studies carried out by the National Consumer Research Centre in order to promote discussion and debate on leisure industries: An international research group has produced *Manufacturing leisure - Innovations in happiness, well-being and fun*¹⁰, while a more business development oriented perspective is given by the report *The Leisure Business and Lifestyle*¹¹, Päivi Timonen has published a Finnish report on users of leisure business services and leisure business cluster *Kuluttajien vapaa-ajan haaveet ja elämisklusteri*¹², and Tanja Kotro has published a report: *Knowledge Intensive Business Services, Users and Cultural Intermediaries*. In addition, the Centre of Expertise for Tourism in Savonlinna (in Eastern Finland), a cross-country network centre has organised (spring and summer 2005) a competition to identify tourism innovations (both commercialized and those less well-developed) in order to promote the evolution of the industry. Partners contributing to the competition were MEK (Finnish Tourist Board); Suomen matkailuelinkeino ry (an association of tourist business); and Matkailunkehitys Nordia Oy, a venture capital investment fund established in 1989 specialising in the travel industry. The company is owned by Finnvera and the Finnish National Fund for Research and Development (Sitra).

Germany has already introduced specific public support measures for innovation services, thus debate is well established. For example, in March 2006, the BMBF organised its sixth conference on services, “Innovation - Services – Employment”. In connection with this event, the BMBF presented a new programme “Innovation through Services” (see below).

¹⁰ Mika Pantzar, Elizabeth Shove, eds., National Consumer Research Centre, Publications 1:2005

¹¹ Tanja Kotro, Päivi Timonen, Mika Pantzar, Eva Heiskanen, National Consumer Research Centre, Publications 2:2005

¹² Kuluttajatutkimuskeskus, Työselosteita ja esitelmiä 86:2005



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Policy debate on service innovation in **Ireland** is quite scarce, but does exist. Thus, in a 2004 report by Deloitte for IDA (*Study on the Future of the International Services Centre in Ireland*) there are frequent mentions of innovation in relation to financial services. In its recently published strategic plan the IFSRA (Irish Financial Services Regulatory Authority) stated that as part of its vision it will strive to facilitate innovation, competitiveness and growth in the sector through effective and responsive regulation. Other issues mentioned are: Financial clusters are advocated as a means of increasing innovation and that Ireland should be an environment for product innovation and bringing products into existence quickly: Ireland needs to be “first to market” with new products. The report advocates:

- Enhancing the environment for product innovation and bringing products into existence quickly
- Incentivising product/process innovation by introducing R&D incentives for investigating the feasibility of new products

In **Italy**, innovation in the service sector occurs as the subject of some debate and events on this topic, with a strong focus on ICT. The majority of the debates are organised by private organisations but tend to foresee the participation and dialogue with policy makers. Examples include:

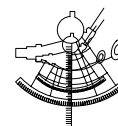
- CNR (National Research Council): *ICT diffusion to SMEs in the field of logistic and transport sectors*¹³.
- Politecnico di Milano (Milano Politechnic): *Technology Innovation in the multimedia sector*¹⁴.
- IDC: 1^o Innovation Forum. Specific session on “Technology innovation to financial and services sectors”¹⁵.

Confcommercio (the Italian General Confederation of Trade, Tourism, Services and SMEs) has organised a conference to present to the national government with a list of ten actions to foster growth and development in Italy. Action number 4 referred to the support of innovation in the tertiary (service) sector, which, according to Confcommercio, should contemplate the introduction of specific fiscal and financial instruments such as tax-incentives; the tax exemption of reinvested profits; access to risk capital; the introduction of vouchers, etc. They also mentioned the need for policy to go beyond the industrial districts and to focus on service districts, open to all innovative enterprises. Other actors include FITA (Italian Federation of the Advanced Tertiary Sector- a branch of Confindustria) which has also analysed the situation of the tertiary sector in Italy and organised Innovation Fora at regional level on the importance of the tertiary sector for the

¹³<http://www.riditt.it/page.asp?page=events&action=detail&IDObject=453&IDObjectType=3&IDmmyyyy=4.2005>

¹⁴ <http://www.efarmgroup.com/files/pieghevoleConvegno.pdf>

¹⁵ <http://www.idc.com/italy/events/innovationforum06/innovationforum06.jsp>



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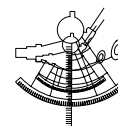
development of the territory. Lastly, CFMT , the Training Centre for the Management of the Service Sector has also organised a Forum focused on “an innovative service sector”.

In **the Netherlands**, much of the reported debate has occurred at the behest of government and has become integrated into policy documents and support actions (see below).

In **Spain** there are official figures that show that enterprises from the services sector are achieving a significant position in relation to innovation in the country (see EUROSTAT and the National Statistics Institute, INE). For example, the introduction of new products and/or processes to market is higher within the services sector than for the industry sector and the most important enterprise in Spain investing in R&D and innovation, according to the EU Industrial R&D Investment Scoreboard, is Amadeus Global Travel (Tourism Sector), with 96th position worldwide.

The role of the service sector is stressed from time to time, but so far this debate has had limited impact in **Sweden**. Most policy makers and other stakeholders in the public debate argue that services have increased in importance (see following section), however, few policy measures have so far been taken to underpin the commitment to the service economy. In addition it is important to note that in Sweden three service sectors (education, healthcare and social service) are regulated. Services are performed mainly within the public sector, therefore, much of the public discussion concerns how to improve effectiveness of (and access to) public service - neglecting the broader approach about innovation in the service sector. For example, the Swedish contribution to the European Commission’s 1998 TSER research programme project “SI4S (Services in Innovation, Innovation in Services)” received negligible response from domestic policy makers.

In the **United Kingdom**, there appears to be very little policy debate on the significance of innovation in the service sector. There has been some academic debate on this topic but mainly as input into international workshops and conference events organised by the EU and OECD, for example. The OECD activities are strongly driven by a few countries in this area including Finland, Ireland and Australia. As part of the UK’s 2005 Presidency of the EU Council a number of priority events were held and one such event concentrated on the “creative economy” (October 2005) where it was noted that “technological developments provide exciting opportunities for the UK’s creative industries to offer consumers a range of new services - and for content creators to engage with their audiences, listeners or readers in new ways”. The Creative Economy Conference enabled senior executives from the audiovisual, publishing and music sectors, creators, intermediaries, users and policy makers from UK and most of Europe to explore the impact of major technological and commercial developments on the creative industries, although the broader issue of fostering innovation in the service sector did not appear to be explicitly addressed.



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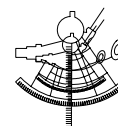
Much of the innovation policy mix of **Cyprus** arose as part of the industrial policy for strengthening the competitiveness of the manufacturing sector, thus service innovation is not really part of the innovation policy debate. However, the issue has been directly stressed in the RIS for Cyprus strategic plan (see below), which has been accepted as a national action plan for the promotion of innovation. Further emphasis is expected to be placed on the topic in the context of the public dialogue and policy design for the preparation of the national action plans for the next programming period, 2007-2013.

Interestingly, although the subject of services innovation has not received much attention in policy debate in **Estonia**, it is felt that, paradoxically, this may be because the country's service sector has been relatively more innovative than the industry sector and hence government attention has focused primarily on the development of innovation in the industry and manufacturing sectors.

In **Latvia** some policy debate is taking place in the context of the development of the new National Innovation Programme 2007-2013 and which may refer to the issue of services by taking into account earlier policy debates on innovation in the tourism sector: in September 2003, a brainstorming Seminar on tourism and spa innovation took place within the initiative of the Regional Innovation Strategy in Latvia, which brought together entrepreneurs and representatives of municipalities of the resort town of Jurmala. In 2005, the Ministry of Economy presented its second award for innovation in the tourism sector and, most recently, in 2006, debate on innovation in tourism sector has examined the development of policy documents and measures for the next programming period of the EU Structural Funds 2007-2013. The draft National Strategic Reference Framework aims to develop tourism as one of major sectors of national economy and envisages support for the development of innovative tourism products while the Draft Operational Programme "Infrastructure and Services" includes a measure to support the development of innovative products for health and recreational tourism, cultural tourism, business tourism and active tourism. Recently policy debate has also started to examine innovation in so-called 'creative industries', (architecture, advertising, art and culture industries, design, film, etc.), which are often on the border between manufacturing and services. In April 2006 a seminar was organized by the Ministry of Culture and Latvian Investment and Development Agency in co-operation with the Ministry of Economy, the Guarantee Agency and the Mortgage Bank, on public support to creative industries. Representatives of creative industries were informed about the possibilities of receiving state support during the next EU Structural Funds programming period 2007-2013 and from the existing state support programme "Support to the development of new products and industries" (LV_70).

Innovation in the services sector has been discussed in **Malta**, within the context of the development of the Maltese Regional Innovation Strategy (MARIS) by the MARIS Steering Committee.

During the preparation of the background documentation for the **Slovenian** Development Strategy policy (see below) some debates focused on promotion of the role of the service



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sector in the national economy. Within this framework the significance of innovation was also debated. However, policy debate on innovation is often biased in favour of technical innovation in manufacturing, and it is mostly within academic circles that attention is drawn to non-technical innovation and the comparative absence of innovation in the service sector. Nevertheless, increasing awareness of the significance of innovation in the service sector can be detected among the managers of firms in the service sector, particularly in the areas where there is more competition in the domestic market (for example mobile telecommunications) or where they are entering foreign markets (ICT firms).

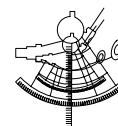
There is some evidence of the increasing importance and interest for intensifying innovation in the Services sectors in **Iceland**. For example, at the opening of the Seed Forum Iceland Conference (2006), the Minister of Industry and Commerce expressed the intent to improve the innovation environment of Iceland's business sector through a number of new projects. The Science and Technology Policy Council has been asked to generate new ideas about how companies can be encouraged to increase operations and specific focus will be paid to so-called 'creative sectors'; more broadly, the issue of how to increase innovation in the service and business sector, which form the largest part of the Icelandic economy, will be examined.

While policies have not been designed specifically to benefit the service sector the priority given by the government to ICT over recent years has produced substantial changes in the public service sector interacting with similar developments in the private sector. The impact of IT in the retail, financial, trade and transport sectors is, to a considerable extent, the technological basis for the rapid growth of Icelandic firms in these sectors in the international arena through investments and buyouts. Similarly, the transport and health sectors have grown enormously. A need for stronger policies to build on the opportunities from Iceland's health services has been identified and a foresight study in this field is in preparation.

One example of public debate on the subject of innovation in service reported for **Norway** is a Nordic conference ("Innovation and Value Creation in the Service Economy" October 2005) organised by the Research Council of Norway in cooperation with the Ministry of Science, Technology and Innovation in Denmark, Tekes in Finland; VINNOVA in Sweden and the Nordic Innovation Centre.

2.2 Policy statements concerning the role of innovation in services

Eleven of the fifteen 'old' Member States reported that government policy statements had made some explicit or implicit reference to the topic of innovation in services. Only three of the new Member States reported such incidences. Similarly, three of the six Associate and Accession countries which reported noted the occurrence of references to the topic. Specific examples are provided below, although three relatively distinct groups may be identified: a "leading" group, where innovation in services has received significant policy attention (and including Denmark, Finland, Germany, the Netherlands and Sweden) a



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“following” group where some reference to innovation in services has been observed in policy documents (including Belgium, Cyprus, Ireland, Italy, Latvia, Malta, Norway, Portugal, Spain and the United Kingdom) and a third group where the topic appears to have attracted no or very little policy attention (comprising Austria, France, Greece, Luxembourg, Poland, Slovenia, Slovakia and Switzerland).

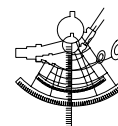
In **Belgium**, despite the focus on innovation in services noted in the above section, none of the three regions appear to have developed a specific policy approach to target innovation in services although certain policy declarations make mention of it. For instance, the Brussels Capital region government has promised to encourage the creative economy in order to benefit as much as possible from growth potential of fashion, design, architecture. It also places an emphasis, logically for a central metropolitan zone on transport and logistics. In Flanders, while no explicit policy statements regarding the role of innovation in services have been made, the policy statement of the Minister of Economy, Enterprise, Science, Innovation and Foreign Trade mentions that Flanders is for a large part a service economy, and that it is important to innovate to keep the providing of these services in Flanders (and expand it)¹⁶.

The role of innovation in services has been emphasised repeatedly in recent years in **Denmark**. A recent example is an investigation, named “Innovation in Knowledge intensive services”, where a number of the factors influencing innovation are mapped. While the conditions and opportunities for, barriers to and benefits of innovation are well documented in the case of manufacturing industry, the corresponding information is still quite limited in the case of knowledge-based service industries. In connection with a growing recognition of the increasing importance of knowledge-based service industries in the economy and in the overall development of business, it was seen that there was a need to study the innovation activities of the services sector in more detail – hence the rationale for the study. Another example concerns a recent report from an independent Think Tank, set up by the Ministry of Science, Technology and Innovation, where a number of recommendations have been put forward in relation to innovation and research within the culture and entertainment sectors.

Perhaps unsurprisingly, given **Finland’s** lead position in innovation, since the early 2000s Finnish innovation policy actors have certainly become aware of the significance of innovation in the service sector. The Science and Technology Policy Council of Finland considered the role of services, in particular, knowledge intensive services, in its review *Knowledge, Innovation and Internationalisation* published in 2002. The Council notes that a substantial part of the economic growth and new jobs is created in the services sector and that knowledge-intensive service industries in particular may have a great impact on the growth and development of other fields as well. Further, it is assessed that

“the general prerequisites for innovation are largely the same in the services industries as in other branches. Service innovations are often not

¹⁶ http://www2.vlaanderen.be/ned/sites/regering/beleidsnotas2004/moerman/economie_ondernemen_wetenschap_innovatie_en_buitenlandse_handel.pdf, page 13-17, in Dutch



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technical but rather gradual improvements in existing processes. Research and development is typically carried out in cooperation with clients and suppliers of technical solutions. This is why the protection of intellectual property, for instance, may be of crucial importance to all parties concerned.”

The Council also pays attention to specificities of the market structure in services which according to the Council “often differs from the market for manufactured goods” and that “in some fields the public sector plays an important part as a service supplier, as a regulating force or as a procurer of services”. In its recommendations and issues of foremost development needs, the Council encourages the ministries “to promote social innovation and service innovations by means of joint cluster programmes and relevant strategic planning, and foresight to be conducted in international cooperation”.

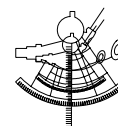
Tekes, the Finnish Funding Agency for Technology and Innovation, refers explicitly to innovation in services in its mission statement: “Tekes promotes the development of Finnish industry and the service sector by technological means and through innovations”. Further in the vision on economy Tekes states that:

“New knowledge-based high-growth sectors are emerging as ICT, forest and metal clusters remain globally competitive and successful. Industry has a central role in the economy. Services are increasingly important in providing new jobs as well as enhancing added-value and in renewing the industry.”

In **Germany**, no specific policy statements were reported but there is already a tradition in offering public support for innovation in services by the Federal government, dating from the mid-1990s when a new initiative “Services for the 21st Century” was initiated. From 1998 to 2003, support was focussed on research in management methods, methods to increase innovative capacities in specific clusters (handicraft, health, facility management, financial services). More information on specific programmes is provided in a later section. In March 2006 the BMBF announced that €70 million will be made available until 2010 for offering grants to firms and research institutions in order to perform research in favour of services. This money is part of the new programme “Innovation through Services”, which has been announced recently¹⁷.

While many of the policy documents produced in **Ireland** refer to the services sector, particularly financial services and software services (which are areas of major growth), the focus is mainly on growth plans, regulation, skill needs and competitiveness rather than service innovation and R&D. Some of the statements on the ‘knowledge economy’ refer to a wider interpretation of innovation than technological innovation. For example, an EU conference was held in June, 2004 in Dublin on “Foresight for Innovation - thinking and debating the future: shaping and aligning policies”. In this, one workshop on

¹⁷ See www.dl2100.de, the programme text - in German - is available at: www.lunapark64.de/dienstleistungstagung/file.php?id=40&code=ef5ef2e7bfa61dc4a37f8607c6e12b94



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Entrepreneurship and Innovation discussed “the policy framework, which must support creativity, design, innovation and sustainability in its broadest sense”. Thus, the debate has just begun, but has not progressed very far yet. Also in 2004, the Irish Government published “Building Ireland's Knowledge Economy - The Irish Action Plan for Promoting Investment in R&D until 2010” which related to the Lisbon agenda. This document contained only two mentions of service innovation. Enterprise Ireland's (EI) most recent strategy statement (2005-2007) includes a new sustainable business model of Market-Knowledge-Innovation-Export Sales/Internationalisation. This is based on the earlier work of the Enterprise Strategy Group and mentions both manufacturing industry and services. EI is responsible for indigenous development. The Software, Services and Emerging Sectors Division of EI is focused on companies targeting global software markets in Financial Services, Public Sector, eLearning, Telecommunications, eCommerce, Digital Media, Middleware and Tools as well as key services markets including Education and Financial.

In **Italy**, innovation is gradually becoming a priority in the policy agenda although the current debate is not specifically focused on innovation in the service sector, but addresses innovation in all the different economic sectors (see above). However, some references to the topic of innovation in the service sector can be found in several recent documents:

- Piano triennale degli obiettivi del Ministero delle Attività Produttive: indirizzi e priorità di politica industriale (Three-year Industrial Policy Plan: lines of action and priorities. Ministry of Productive Activities)¹⁸
- Piano per l'Innovazione Digitale nelle Imprese 2005 (Action Plan for ICT Innovation in Enterprises 2005)¹⁹
- Piano per Innovazione, Crescita ed Occupazione (Plan for Innovation, Growth and Employment)²⁰
- Piano per la Logistica (Logistics Plan)²¹

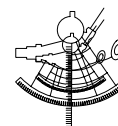
The topic of innovation in services appears to be well-developed in policy debate in the **Netherlands**. For example, the Ministry of Economic Affairs has asked the Advisory Council for Science and Technology Policy (AWT) to issue advice on innovation in services with the aim being to determine whether current innovation policy serves to properly facilitate innovation in services or if adjustments are necessary. In earlier recommendations related to innovation in businesses, as a general guideline for shaping policy the AWT pointed out the fact that innovation is more than knowledge development or technical development alone. ‘Innovation’ does not exist unless knowledge is being applied. When it comes to whether innovations will succeed, the non-technical aspects are becoming increasingly important. In response to the request, the AWT checked

¹⁸ http://www.attivitaproduttive.gov.it/pdf_upload/documenti/phpOYBpL6.pdf

¹⁹ http://www.mininnovazione.it/ita/normativa/pubblicazioni/piano_impres_2005.shtml

²⁰ <http://cordis.europa.eu/innovation/it/policy/cip.htm>

²¹ http://www.governo.it/GovernoInforma/Dossier/piano_logistica/piano.pdf



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whether this general guideline also applied to service-related innovations, and whether additional action might be necessary. The AWT commissioned a number of studies on the topic of innovation behaviour among service companies with 1-500 employees, and spoke with representatives of large service organisations (those employing over 500 employees). The AWT's prevailing attitude is that non-technical knowledge is fundamentally important for innovations in services, and is usually at the core of service innovations. Therefore, this conclusion was also the impetus to argue for the previously mentioned guideline – namely that innovation is more than knowledge development or technical development alone – to be repeated with even more emphasis. The Council arrived at the following recommendations for service-related innovation policy:

- Broaden the scope of policy to include non-technical forms of innovation; remove the restriction to technical forms of innovation, not only in the Research and Development (Promotion) Act (WBSO) but also in other instruments.
- Adapt the mix of policy tools, use the economic value of innovations as the main pretext, focus more attention on utilising knowledge, and make room for demonstration projects.

Additionally, the AWT considers the following matters to be important for service innovations:

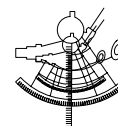
- Policy must place more emphasis on cooperation between businesses.
- Focal points must be formed in research in order to simplify cooperation between businesses and knowledge institutes.
- Special attention must be paid to improving the establishment of networks between universities of professional education and service providers.
- The absorption capacity of businesses must be increased: stimulate the hiring of more highly educated employees and continuing education.

These points relate to – and can be applied to – all types of service developments and all service sectors. Specific themes for each service sector also remain in place. The AWT recommended carrying out an analysis for each sector to identify the particular innovation-related opportunities and obstacles, and joining the companies in taking concrete action to stimulate innovation. In doing so, an approach similar to the key areas of the innovation platform could serve as an example²².

It should also be noted that in the 'key areas' approach of the Innovation Platform, two key areas in services were identified, namely "Pensions and Social Security" and "The Hague: Residence of Peace and Justice". Currently, innovation programmes are being developed for these key areas²³. Likewise, in the *Industry Memorandum: Heart for Industry* (2004) of the Ministry of Economic Affairs, industry and services are explicitly seen as intertwined. Also, in the renewal of its innovation policy mix, the Ministry of

²² AWT (2005) "To better serve services: Innovation policy for services", Advice 66, September 2005.

²³ See: EZ (2005) "Organiserend Vermogen: Sleutelgebieden-aanpak: samen werken aan innovatie op kansrijke gebieden"



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Economic Affairs has introduced a basic package and a programmatic package of instruments²⁴. In the basic package there are instruments for all companies, including service providers, while in the programmatic package, instruments for specific thematic (key) areas are bundled. One of the key areas is Creative Industry, which embodies many service providers.

Portugal reports several policy statements mentioning the relevance of innovation in services. For instance, in the Technological Plan it is specifically stated that “The Technological Plan has a wide understanding of innovation as a process of adopting new processes and methods, new products and new services”. The same document remarks that innovation is not limited to science and technology, *strictu sensu*, but also includes other dimensions, such as organisational innovation. The Plan specifically mentions innovation projects in tourism industry as well as in fashion industries.

The most relevant **Spanish** policy document addressing this sector in particular is the Spanish National Plan for Scientific Research, Development and Technological Innovation (2004-2007). Specific Priority Areas have been defined within the R&D&I NP 2004-2007, which include the areas deemed of strategic importance for the Spanish Science-Technology-Enterprise System. Actions in each of the areas have also been set in motion by means of National Programmes. The thematic breadth of those programmes requires the establishment, where appropriate, of subprogrammes with specific management structures. Thus, within the Thematic Area “Information Society Technologies” there is the National Programme for Services Technologies for the Information Society, implemented and managed by the Ministry of Industry, Tourism and Trade (MITYC). This includes a horizontal strategic action about security and trust on information systems and communications and on the services based on and for the Information Society. The R&D&I NP 2004-2007 also defines a Horizontal Programme called “Strategic Action for Tourism Technologies”²⁵.

In **Sweden**, three policy documents are particularly relevant: The national innovation strategy: *Innovative Sweden: A strategy for growth through renewal*, the research bill: *Research for a better life and the national Lisbon strategy* and the *Swedish Reform Programme for Growth and Employment 2005-2008*. These documents reveal that:

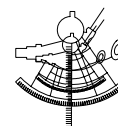
- The biggest international expansion has occurred in the service sector, which frequently has strong ties to Swedish manufacturing.
- By comparison with other OECD countries, Sweden has a large public sector. Half of all university graduates work in the public sector. Sweden is well to the fore in the development of public e-services for enterprises and the general public.

²⁴ "EZ (2005) "Strong basis for delivering top performance: Renewed instruments for entrepreneurs from the Ministry of Economic Affairs"

²⁵ For more information on these National Programmes and Actions, visit:

<http://www.mityc.es/PortalAyudas/Servicios/ConvocatoriasAyudasPublicasMITYC2006/>.

The definition of programmes and actions for the R&D&I NP 2004-2007 is summarized in the Official State Bulletin B.O.E 67/2005 - ORDEN PRE/690/2005.

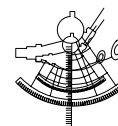


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- It is Sweden's traditional basic industries and engineering industry that create the most value growth. By virtue of their size, these industries will continue to dominate Sweden's economy for the foreseeable future. Growth will depend on the interplay between old and new within and between different industries and technologies.
- Apart from products with a high knowledge content, demand is now steadily growing for services that are connected with traditional manufacturing goods in one way or another. To succeed not just in developing and delivering a certain product, but also in adapting it continuously to demand and supplementing it with various forms of services, requires an ability to combine industrial expertise with systems thinking.
- A larger proportion of older people in the population poses new demands, not least for public services in the health and care sectors. Information technology is a necessary support in making activities more effective and efficient.
- In recent years, the service content of the economy has become more important and the deregulation of the services markets requires new methods for dealing with (financial) risks. Intellectual property rights have thus become more important for assessing business risks and the future value of investments.
- The larger companies, which often purchase services from smaller enterprises, are dependent on a surrounding structure of creative partners for cooperation.
- Through private and public e-services, IT is now making a substantial contribution to quality, utility and pleasure in most people's private and professional lives and has a natural place in most businesses. Public e-services are of great importance to fostering increased quality and productivity in the information society.
- To stimulate the development of electronic services in the public sector, a delegation for development of public e-services has been established.
- E-services and IT support in the health care sector are a priority area, enabling the electronic communication of information between health authorities and different levels of the health service. A national IT policy for e-health and other care services has been proposed.
- Sweden is putting together a new strategy for consumer policy that will encourage sustainable economic growth and welfare. The spotlight will be on, among other things, consumer interest within the services sector, and ways of finding out more about consumer and market behaviour.

Finally, of the older EU Member States, few policy documents make explicit reference to innovation in services in the **United Kingdom**, but the role of the service sector within the economy is frequently referenced in policy documents and available data indicates that services account for most of the UK's productivity gap, approximately in proportion to their share of economic output²⁶. In addition, the 2003 Innovation Report²⁷ highlights

²⁶ See, for example, "Competing in the Global Economy – the Innovation Challenge", DTI Economics Paper No 7, Department of Trade and Industry 2004.



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the need for the UK to raise the level of innovation in its service industries in order to counter the outsourcing of low-value added administrative jobs to developing nations. It notes that services accounted for 56% of GDP in 1981 and 72% in 2001 and that UK productivity in services is no better than in manufacturing when compared with its major competitors. The report identifies the increasing use of technology in areas such as retail banking and computer games to improve business processes and customer service, and that almost a fifth of business R&D expenditure takes place in services.

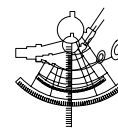
Turning to the new EU Member States, **Cyprus** has, over the last thirty to forty years, been transformed into a services-based economy, with tourism as the most significant contributor to CGP. Although well-recognised by local policy makers, service innovation has only very recently been included in the innovation policy agenda. The issue is for the first time explicitly addressed in the context of the Regional Innovation Strategy for Cyprus (RISC). The RISC strategic plan, officially approved by the Government in 2006, highlights the importance of the service sector for the innovation system and foresees specific measures aiming at enhancing innovative culture and activity in the Cypriot tertiary sector. The topic of service innovation passes horizontally through the five axes of the RISC plan. However, special emphasis has been placed on tourism sector as indicated by the measure 3.1 that foresees the "Development of a Masters Programme in Tourism Studies" to improve human resources skills in the industry and the measures 5.1 "Innovation Prize for Tourist Enterprises" and 5.3 "Virtual Promotion of Alternative Forms of Tourism" aiming directly at the promotion of innovation in the tourism enterprises.

Following on from the debate on innovation in the creative industries in **Latvia** (see above), support to creative industries is emphasised in the new National Development Plan 2007-2013.

Malta, with a similar services-based economy reports a reference to support for innovation in services through the innovative start-up programme in its 2006 National Budget. In addition, the National ICT Strategy 2004-6 also mentions the topic while support for e-business and commerce services through tax credits is referred to in the Official text published in L.N 333 of 2005 Tax Credit (Electronic Business) Rules, 2005 Income Tax Act (CAP. 123).

Although the **Polish** strategy document "Increasing innovativeness of the Polish economy until 2006" makes explicit reference to innovation in services, the focus is clearly on product innovation. The newly adopted document "National Reform Programme 2005-2008" includes a specific measure aimed at the development of ICT, i.e. e-government, e-business, e-learning and e-health and the definition of innovation activity according to the Act on Supporting Innovation Activities (29 July 2005) includes services, yet innovations in services have to be the result of technological investments.

²⁷ Department of Trade and Industry, "Innovation Report - Competing in the Global Economy – the Innovation Challenge", December 2003.



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A brief reference is made to innovation in the service sector in the **Slovenian** Development Strategy (2006-2013) in a section dealing with research, innovation and technology, where it states that it is necessary to increase the level of innovation activity in the entire business sector, not only in manufacturing, but also in the service sector. Similar wording is used in the Resolution on the National Research and Development Programme (2006-2010).

Other countries reporting less significant references to innovation in services include the **Czech Republic** (in the National Innovation Policy 2005-2010), while the new version of “Knowledge-based **Estonia** 2006-2013” mentions that the knowledge-based economy is characterised by the high added value of products and services, but does not elaborate beyond this basic premise.

Among the Accession and Associate countries, although in **Norway** there have been no particular policy statements concerning the role of innovation in services, the importance of the service sector appears in several public speeches by the Minister of Trade and Industry, and in December 2005 the Ministry of Trade and Industry published a commissioned report on Innovation in Services²⁸. Similarly, only oral reference to the issue appears to have been made by **Swiss** policy makers.

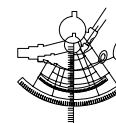
Lastly, the recent science and technology strategy of **Turkey**, which was approved by the Supreme Council of Science and Technology in 2004, emphasises the need for developing innovative services which make use of the results of research. Similarly, the issue of services innovation is cited in the vision and the strategic objectives and actions of the science and technology strategies.

2.3 Policy instruments supporting innovation in services

Each country correspondent was asked to provide any examples of policy instruments which were explicitly or implicitly designed for the support of innovation in services. In addition, information was sought on whether existing innovation support measures explicitly focused on the manufacturing sector or whether they were horizontally oriented (i.e. open to include both the manufacturing and service sectors). In the case of horizontal measures, further information was sought on whether there was evidence to suggest that these were neutral with respect to services or whether they tended to be biased towards technological innovation (rather than, for instance, organisational innovation).

An overview of the results of these questions is provided in Table 2.

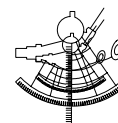
²⁸ http://www.odin.dep.no/nhd/norsk/dok/andre_dok/rapporter/024141-990006/dok-bn.html



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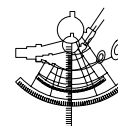
Table 2: Policy instrument examples in support of innovation in services

Horizontal/ manufacturing	Tech/ manuf. bias?	Explicit programmes	Examples/Notes
Austria			
Generally horizontal	Tend to favour manuf.	One (regional) only	Call for "innovative services" (City of Vienna)
		Promotion progs are not specifically designed for the service sector, but do not explicitly exclude them	Service-specific programmes were introduced in connection with "new economy" programmes which generally address firms in the service sector. These activities were not intended as a specific promotion for service sector companies but for the broader new economy/information society issue.
Belgium			
Mostly horizontal	Tech. biased?	No explicit, but some implicit examples.	In Flanders, of three measures directly subsidising innovation in industry two implicitly include services innovation (BE_16 and BE_58) and one more explicitly (BE_57, SBO programme). In Brussels and Wallonia, most aids are open to the business service sectors
			The participation of enterprises from business services, software services, etc. is also evident in, e.g., the clusters programme in Wallonia (BE_60). E.g. the eco-construction cluster involves architects, engineers, etc. In Brussels, thematic support to specific industries (urban industries or ICT) also aims to encourage co-operation between manufacturers and service providers.
Denmark			
Mostly horizontal	Probably tech. biased	None known	
Finland			
Shifted from industry oriented to horizontal	Less tech bias now	Some explicit	Tekes technology programmes (FI_12): CUBE; FinnWell; Serve - Innovative Services; Leisure business (?)
			See Section 2.4
France			
Mostly horizontal	No evidence	No explicit; most are implicitly open	
Germany			
Most horizontal Very few sectorally oriented	Possibly <i>service</i> bias See Section 2.5	Some explicitly open to service firms (as well as manuf. firms)	E.g.. DE_17, DE_10, DE_12, DE_19, DE_28, DE_26, DE_57, DE_16, DE_06, DE_76 and DE_67 to DE_71 (the thematic R&D programmes).
Greece			
Tend to be horizontal	No evidence	No explicit	
Ireland			
Generally horizontal: manuf. or targeted at internationally traded services (e.g. soft-ware dev., financial services, other business services)	Probably tech. biased	No explicit	Following are equally applicable to service innovation: IE_31 FUSION; IE_28 Business Incubation Centre programme; IE_26 Research Technology & Innovation (RTI); IE_24 Campus Companies Programme; IE_21 Business Expansion Scheme (BES) and Seed Capital Relief; IE_8 Actions relating to Equity Finance for Innovation:- Seed & Venture Capital Measure; Enterprise 2000 Fund; the Millennium Entrepreneur Fund; Campus Companies Venture Capital Fund; IE_6 Protection of Copyright - Copyright Bill
Italy			
Generally horizontal	Formerly strong tech. bias – now shifting	No explicit programmes	The Law 185/2000 Titolo I -Capo II "Misure in favore della nuova imprenditorialità nel settore dei servizi" (ex legge 236/93)" foresees incentives to stimulate the creation of new service enterprises also in the field of innovation.
Luxembourg			
Horizontal	Most tech. oriented	No explicit programmes	LU_18 Awareness programme on innovation management techniques (covers organisational innovation)
Netherlands			
Horizontal	Tech. bias	No explicit programmes	A new innovation programme is planned for the Creative Industries
			Following are implicitly open to both manufacturing and service sectors: NL_3 BBMKB SMEs Credit Guarantee scheme; NL_5 WBSO (R&D (promotion) act) [recently, process innovation was included as well];



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			NL_22 Syntens; NL_23 Venture Capital scheme; NL_41 Training Facility; NL_47 Innovation vouchers; NL_51 RAAK - Regional Attention and Action for Knowledge circulation
Portugal			
Generally horizontal	Possibly some tech. bias	Some programmes which cover certain services	Applicable to services: URBCOM; SIVETUR Following cover both manufacturing and services PT_15 (SIPIE), PT_16 (SIME), PT_22 (Integration of doctors and masters in companies), PT_33 (IDEIA) and PT_50 (NEOTEC). New SIME covers innovative projects concerning services in Tourism, Health, Fashion, Habitat and Renewable Energies.
Spain			
Horizontal	Unbiased (unless focused on technical objectives)	Some explicit (but with Info Soc orientation)	Examples include: ES_17 (PROFIT); ES_22 (ARTE/PYME II)
Sweden			
Horizontal	Some tech. & manuf. bias (reflects industry composition)	No explicit programmes	Besides complementing manufacturing with services, most Swedish efforts are focused on IT in general and improvement of effectiveness in the public sector (service innovation). This includes, e.g. to establish IT in home health care (new medical technologies for self-treatment, home care and decentralised care) and making services from governmental agencies available online.
United Kingdom			
Generally tech. focused	Possibly some tech. bias	No explicit programmes	
Cyprus			
Mainly horizontal	Generally tech. biased	No explicit programmes	Some specific measures foreseen (see Section 2.4)
	Exception - see across		Measures of the Human Resources Development Authority (CY_22, CY_29) are more biased towards organisational innovation and utilisation of human resources in order to promote innovation at the operational level.
Czech Republic			
Generally horizontal	Largely tech. oriented	No explicit programmes	One has explicit reference: the INOVACE programme (CZ_29)
Estonia			
Horizontal	Manuf. and tech. biased	No specific programmes	
Hungary			
Many are horizontal	Unknown	No specific programmes	Following may be considered eligible to services: HU_1: Application-oriented co-operative RTD activity; HU_73: Innovation and research activities of SMEs; HU_89: Innovative Education Support Systems; HU_99: "Irinyi János" Programme; Sub-programme "B" for the realisation of individual inventors' R&D results and innovative ideas; HU_100: Establishing a model incubator centre for biotechnology (BIOINKUB)
Latvia			
Few horizontal	Explicit or implicit manuf. focus	No specific programmes	Representatives of creative industries have been made aware of opportunities from the new LV_70 "Support for development of new products and industries"
Lithuania			
Most horizontal except areas excluded from state aid	Mainly neutral, but most benefit engineering	No specific programmes	Following are implicitly open to manufacturing and service sectors: LT_21, LT_20, LT_19, LT_16
Malta			
Mainly horizontal	Neutral	No explicit programmes, but...	Malta Enterprise e-business tax credit scheme supports development and take up of e-commerce (e-business services)
Poland			
Horizontal	Manuf. bias	No explicit programmes	Following include manuf. and services sectors: PL_22: Support to product and technological competitiveness of enterprises; PL_24: Improvement of competitiveness of SMEs through investments
Slovakia			
Horizontal	Manuf./tech. bias	No explicit	



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		programmes	
Slovenia			
Mix of manuf. and horizontal	Manuf. bias	No specific programmes	
Bulgaria			
Generally horizontal	Mostly neutral	No specific programmes	Some programmes relating to Information Society, ICT and public services
Romania			
<i>Nothing reported</i>			
Turkey			
Some horizontal	Tech. biased, recent moves to use Oslo defn of research	No specific programmes	State support for R&D (TR_5) is open to manuf. and service sectors
Iceland			
Horizontal	Some tech. bias	No specific progs but shift towards service sector	Some progs cover innovation in business organisation in addition to tech. innovation; Technical Development Fund (IS_18) and New Business Venture Fund (IS_4) increasingly target "new" sectors (i.e. services)
Israel			
<i>Nothing reported</i>			
Liechtenstein			
No innovation policy	Not known	No specific programmes	
Norway			
Most horizontal	Some target manuf., others services. Some bias due to traditional focus on tech. R&D	Most are implicitly/ explicitly open to services	Puls – now merged with BIA (User-oriented Innovation Arena)
Switzerland			
Mostly focused on manufacturing – some horizontal	Where horizontal tend to be neutral	No dedicated programmes	

2.4 Specific examples of services-oriented innovation measures

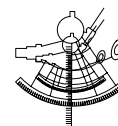
Details of a number of specific examples of innovation support measures with an explicit or strong orientation towards the services sector were identified, these are presented below.

Finland

In recent years Tekes, has paid more and more attention to service innovation alongside technological innovation in its technology programmes (FI_12). Innovative services are understood to be an important aspect of business development within different industries.

- CUBE – The Building Services technology programme 2002-2006²⁹, is an example of a technology programme which ties together services and new technological opportunities for business development. It has aimed to develop internationally competitive building services and technology-based service products for commercial and residential spaces; strengthen the service capacity of building services technology in the real estate business; make available spaces that accommodate user needs, with an emphasis on modernising the existing real estate base; produce added value for real estate owners through life cycle

²⁹ <http://www.tekes.fi/cube>



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economic and functional spaces; and utilise ICT and energy technology innovations.

- FinnWell – The Healthcare technology programme 2004-2009³⁰, includes a clearly identified service aspect: the underlying idea of the programme is that technology only improves the quality and profitability of healthcare services if new procedures are simultaneously developed in as innovative a manner as the products themselves.
- Recently Tekes has launched a new Serve - Innovative Services technology programme (2006-2010). As its name indicates services are a focus of the programme which aims to encourage the development of innovative service concepts and service business models in companies; strengthen and diversify service related innovation activities, especially in SMEs; improve productivity and quality of service activities in various industries; and boost academic research in the area of service innovation and service business.
- Finally, in early 2004 Tekes started preparations for technology programme focusing on the leisure business. During the preparation phase, Tekes assessed the potential/need for a new leisure business programme and the final decision was due at the turn of the year 05/06 but no confirmation of the programme's implementation has been found.

Italy

- A private initiative is T-LAB (Laboratory of the Innovative Service Sector), a kind of “meeting point/exchange place” for managers operating in the service sector. The initiative was launched by CFMT (Centro Formazione Management del terziario) and from this initiative a book has been recently published *T-LAB Laboratorio del terziario che innova* which presents fifty successful cases of innovative firms operating in the tertiary sector³¹.

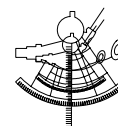
Portugal

Although most programmes do not distinguish between services and manufacturing industry, in the context of POE/PRIME, specific measures have been addressed to service industries, for example:

- URBCOM (the incentive system for commercial urbanism projects) and SIVETUR (the incentive system for supporting strategic tourism activities). Both measures are not exclusively intended to support innovation in these industries, but they have nevertheless been used as an instrument for financing innovative projects in this areas.
- More recently, in the context of the last revision of PRIME, specific support has been geared towards the clustering of activities in Tourism, Health, Fashion and Habitat; this includes not just manufacturing activities but also the provision of support services. Similarly, in the Renewable Energies cluster the provision of sophisticated support services was also encouraged.

³⁰ <http://www.tekes.fi/finnwell/>

³¹ <http://www.terziario.org/>



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- Following the recent revision of SIME (the main system of incentives for companies) calls have been launched eliciting innovative projects concerning services in Tourism, Health, Fashion, Habitat and Renewable Energies. Projects involving innovation in services are also sought in biotechnologies, ICT, new materials and nanotechnologies (as an instrument for the valorisation of R&D activities).

The services sectors considered are generally the following: construction, commerce, tourism, transportation, information services, R&D services, and architectural and engineering services.

Cyprus

There are currently no measures in force directly focused on promoting innovation in the services sector, (although the sector is not excluded from the current set). However, with the implementation of the RISC strategic plan the policy mix will contain three more measures directly applicable to the tourism sector:

- measure 3.1 “Development of a Masters Programme in Tourism Studies”, measure 5.1 “Innovation Prize for Tourist Enterprises” and measure 5.3 “Virtual Promotion of Alternative Forms of Tourism”
- Additionally, early in the summer, 2006, the Cyprus Federation of Employers and Industrialists will launch the “Cyprus Innovation Awards”, an annual contest which will include three types of innovation awards: innovation in manufacturing, innovation in services and innovation in the public administration.

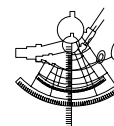
Czech Republic

- The INOVACE programme within the Operational Programme Industry and Enterprise (2004-2006) operated by the Ministry of Industry and Trade explicitly covers innovation in services (CZ_29): “...The aim of the programme consists in supporting projects focused on increasing technical and utility value of products and services, or projects resulting in increased effectiveness in production processes and services, thus enhancing long-term competitiveness of entrepreneurs and their sustainable development”.

Norway

Most measures and programmes in Norway are horizontally oriented (open) to include both the manufacturing and service sectors. This is particularly so for the measures administered by Innovation Norway, although some of the measures have a particular branch focus. Some measures of Innovation Norway focus on traditional manufacturing branches such as e.g. maritime firms and some focus on service branches such as tourism, but most measures are implicitly or explicitly horizontally oriented to include both manufacturing and service firms. An example of a measure which is implicitly open to both manufacturing and service sectors is NO_07 The BIT programme

Research programmes of the Research Council of Norway may be seen as biased towards manufacturing firms in terms of focusing mainly on traditional R&D (thereby excluding



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other sources of innovation and value creation). For horizontal/open measures the traditional focus on technological R&D implicitly excludes service firms, many of whom do not relate to the traditional conception of R&D and emphasise that other forms of knowledge systematisation and production are important for their innovation and value creation (e.g. through customer/market analyses).

- Until January 2006 there was a specific research programme (Puls) administered by the Research Council of Norway. This has been merged into a larger research programme - BIA (User-directed Innovation Arena). Puls aimed to promote increased innovation and knowledge content in the Norwegian service sector, included trade and logistics, through R&D based innovation, effective innovation processes in networks of cooperating actors, increased competence within service firms, increased international cooperation as well as improvement of the knowledge base related to the importance of services. The target groups were suppliers of logistics and transportation services, trading firms and their partners in the value chain, suppliers of services with electronic content, suppliers of internet based and mobile services, knowledge intensive business service firms, relevant public services and R&D institutions related both to technology and society³².
- The new BIA programme of the Research Council of Norway is an explicitly horizontal and neutral measure focusing on research based innovation independent of branch and project focus and targeting knowledge intensive firms and their cooperating R&D environments more generally. There is also an explicit requirement that project participants must cover the whole value chain of the innovation process supported by the Council, not only technological innovation processes³³.

2.4 Indicators relevant to services-oriented innovation measures

Two major types of indicators were presented by the results of the survey: indicators relating to the overall size and composition of the services sector (and its contribution to the economy), and more specific indicators relating to the take-up or distribution of participating companies. The following are the examples provided – it is anticipated that more extensive figures on the significance of innovation in services are available in several Member States from sources such as the Community Innovation Surveys.

³² For more information on the finished Puls programme:

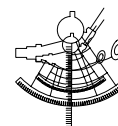
<http://www.forskningradet.no/servlet/Satellite?cid=1088801846556&pagename=puls%2FPage%2FHovedSide&site=puls>

³³ Information on the new BIA programme:

<http://www.forskningradet.no/servlet/Satellite?c=MidlerParent&cid=1119339932461&pagename=ForskningradetNorsk%2FMidlerParent%2FVisMedDenneTilhorighet>

or the web site of the programme:

<http://www.forskningradet.no/servlet/Satellite?cid=1119339919270&pagename=innovasjonsarena%2FPage%2FHovedSide>



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2.4.1 General figures on services' contribution

As noted earlier, a 2005 report from the **Belgian** Federal Planning Office analysed R&D and innovation activity at a sectoral level. The results indicated that, in 2001, 82.8% of R&D expenditure of enterprises was undertaken by manufacturing and 13.7% by the business service sector. The 2004 Belgian Report on Science, Technology and Innovation (BRISTI), recently published online³⁴ also examines in more depth the different trends in innovation in services using available statistics, notably CIS (see for instance chapter VII. Innovation section A. Innovation in Belgium: trends and the importance of services). At the Federal level, a report has also been prepared (as a contribution to the revision of the Oslo Manual) to develop a better analytical framework for measuring “innovation in a broad sense” and notably aimed at statistics for measuring innovation in services and organisational innovation³⁵.

In **Spain**, official figures show that enterprises from the Services Sector are achieving a strong position in relation to innovation (see EUROSTAT and the National Statistics Institute, INE). For example, the introduction of new products and/or processes to market is higher within the Services Sector than for Industry. More specific figures are given below.

Statistics show that, in terms of employment, the services sector in **Iceland** is by far the most important, covering 71.2% of the workforce in 2004, a figure comparable to those in the other OECD countries. The major individual sectors are health services (14.7%), trade (12.7%), real estate (9.3%), education (7.8%) and transport and communications (6.9%). Today, business services are the most innovative service sector.

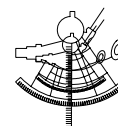
As noted above, in December 2005, the Ministry of Trade and Industry in **Norway** published a commissioned report on Innovation in Services³⁶. In its introduction this states that:

“The service sector represents three out of four working hours in Norway. Close to 50% of total employment is found within the private service sectors (retail trade, transport, finance, ICT, tourism, entertainment, business consulting, domestic services etc.). We find approximately the same figures for value added. Furthermore, in terms of value added, the private part of the service sectors is twice as important as the public part. This picture is not that different from what you find in the rest of the OECD countries, where growth in service value added is significantly higher than growth in manufacturing value added. In virtually every OECD country, all employment growth is found in the service industries. Employment in manufacturing, agriculture and fisheries is decreasing, see OECD (2005).”

³⁴ (in French http://www.belspo.be/belspo/home/publ/pub_ostc/BRISTI/BRISTI04_fr.pdf or in Dutch, same url except ends /BRISTI04_nl.pdf)

³⁵ http://www.belspo.be/belspo/home/publ/pub_ostc/ind/RDinno5_2.pdf

³⁶ http://www.odin.dep.no/nhd/norsk/dok/andre_dok/rapporter/024141-990006/dok-bn.html



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2.4.2 Programme take-up and participation by the service sector

At a very general level, in **Germany**, an R&D survey by SV-Wissenschaftsstatistik, *Federal Report on Research*, indicates that the service sectors that benefit most from Federal innovation programmes are software (NACE 72), R&D service providers (NACE 73) and technical services (74.2, 74.3). S. At a more programme specific level, figures are available for ProInno (DE_28). An evaluation of the impacts of Pro-Inno has been published which offers figures on the levels of participation³⁷. A more descriptive part of the evaluation (module 1) has been published as a brochure. The programme was relaunched in 2004, and is now called Pro-Inno II. A preliminary report on the uptake of this programme is also available³⁸.

Some data on programme take-up are available for **Italy**: Relating to PIA-Pacchetto Integrato di Agevolazione (IT_25), the financial resources (data related to 2003 call for proposals) were allocated as follows: 83% to manufacturing enterprises sector and 17% to service sector. The main beneficiaries of these incentives in the service sector are ICT and R&D enterprises; as concerns the Law 388/2000 – E-commerce incentives (IT_52), more than the 60% of beneficiaries are enterprises operating in the service sector (data related to 2003 call for proposals).

In **the Netherlands**, the most important innovation scheme in terms of size is WBSO (NL_5). Each year, SenterNovem (the innovation agency) publishes a report on the use of the WBSO scheme. The figures for 2004, indicate that WBSO participation was 72% by industry and 20% by services (the remaining 8% is unknown).

The Annual Report 2005 of the **Spanish** agency COTEC³⁹ analyses data in relation to the results for the R&D&I National Plan for the last closed period (2000-2003). According to this study, the sectoral percentage distribution of the number of financed innovation projects is as follows:

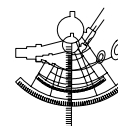
- 59.3% for Scientific and Technological Thematic Areas: 14.3% Biomedicine; 9.1% ICTs; 8.1% Industrial design and production; 7.8% Resources and technologies for Agrofood; 5.5% Materials; 14.5% Others.
- 19.5% for knowledge promotion.
- 13% for sectoral Areas.
- 8.2% for non-oriented entrepreneurial projects.

Relatively detailed figures are available from **Sweden**. In general, uptake of horizontal measures is biased towards technological innovations, largely as a reflection of the structure of the Swedish economy, where, compared with similar countries, the

³⁷ <http://www.bmwi.de/Redaktion/Inhalte/Pdf/P-R/pro-inno-untersuchung-der-wirksamkeit-langfassung,property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf> (German only)

³⁸ http://www.forschungskoop.de/pro_inno_pdf/pi_bilanz_0106.pdf (German only)

³⁹ <http://www.cotec.es/index.jsp?seccion=17&id=200506270002>



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manufacturing sector is still relatively strong and dominated by large international engineering groups. It is notable that the Swedish manufacturing sector's contribution to GDP has increased during the 1990s, although many of the critical parts for the Swedish automotive or telecoms sectors are no longer manufactured in Sweden – but only assembled in the country – a feature that further stresses the importance of logistics as a competitive factor for Sweden. Hence, innovations in services are already important for the manufacturing sector.

While manufacturing companies have dominated policy measures in the past, a brand new initiative - Research & Growth (SE_40) – may provide an indicator of change. The initiative is an open research programme addressing competitiveness in SMEs and a total budget of SEK 100 million (about €9.7 million). The results from the first call reveal that a majority of the applying SMEs are in the service sector.

Distribution of applications in the R&D programme Research&Growth 2006

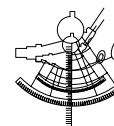
	Number	%
Granted applications for manufacturing companies	19	39.58
Granted applications for service companies	29	60.42
TOTAL	48	100
Rejected applications for companies in the primary sector	9	3.54
Rejected applications for service companies	153	60.24
Rejected applications for manufacturing companies	92	36.22

A proxy of benefiting sectors can also be obtained from VINNOVA's funding of R&D. The current distribution of resources for R&D and demonstration (2005) shows that manufacturing based sectors still dominate:

R&D funding from VINNOVA 2005

Sector	MSEK	%
ICT	209.3	19.0
ICT Usage / Services	52.1	4.7
Biotech	125.1	11.4
Production / New Materials	97.4	8.8
Automotive	166	15.1
Transportation / Logistics	41	3.7
Working life	50.8	4.6
Other	360	32.7
TOTAL	1,102	100.0

This distribution can be compared to the distribution of receiving sector/technology fields in the new Research & Growth programme.



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R&D within the Research & Growth programme, 2006

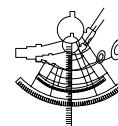
Sector	Percent of funding
Environment technology / Energy	11
Life Science (incl Biotech)	32
ICT (incl both hardware & services)	27
Automotive and transportation	3
Production / New materials	19
Forest based industry	2
Working life	3
Others	3

VINNOVA's overall financing correlates quite well with the receiving sectors in the Research and Growth programme (Except for the Environment technology/Energy) - indicating that there may be service-based SMEs within the traditional manufacturing sectors and that the distinction between the industry and service is blurred.

There is evidence that services tend to participate less in research and innovation activity in **Cyprus**, particularly insofar as the participation rates in available innovation policy measures are concerned. However, in the programmes of the Human Resources Development Authority (CY_22, CY_29) the participation rates are almost equally distributed between manufacturing and services (mainly commerce and tourism).

In **Lithuania**, there are no officially developed sectoral indicators but, as an example, the take-ups from the Phare 2002 support schemes "Direct support to enterprises" and Single Programming document measure 3.1.7 "Direct support for R&D in business" may be used. In the 2002 round of PHARE 26 enterprise projects were funded: 11 of them were directly related to service sector development (electronic applications in e-commerce, tourism, development of call-centres, IT and IT consulting services, etc.), and two were concerned with organisational innovations in manufacturing. From measure 3.1.7 "Direct support for R&D in business", seven projects have so far received funding, one of which concerned an R&D service enterprise project. It should be noted that any innovative project supported in the service sector must contain a technological and/or R&D-related component.

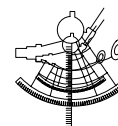
Limited information from **Slovenia**, based on unofficial estimates of the results of public calls for different forms of innovation promotion, seems to indicate that there are practically no service sector firms applying for such support.



3. Main conclusions and recommendations

The above analysis of the survey points to some clear conclusions concerning the position of the services sector and the role of innovation within it:

- There is a growing body of **evidence** of the significant role that the service sector plays within the economy. Much of this evidence may be obtained from sources such as OECD, EUROSTAT and via the CIS, although data on the role of services is also being collected through national reviews (for example, in Belgium, Spain, Iceland and Norway).
- Although it is clear that, in some countries, services are not on the policy ‘radar’, in others **debate on the topic of services** and the role of innovation within the sector is well advanced. Thus, among the Member States, in Finland, Germany and, to some extent the Netherlands debate has progressed sufficiently to be translated into policy design and implementation. Belgium, Cyprus and Italy also indicate relatively extensive debates on the subject, while Denmark, Ireland, Latvia, Malta, Slovenia, Spain, Sweden and the United Kingdom have all looked at the issues to varying levels. Among the non-Member States, Iceland and Norway complete the strong Scandinavian focus on this topic.
- In several instances, debate has been **translated into policy documents** and official pronouncements on the role of services. Leading countries in this respect include Denmark, Finland, Germany, the Netherlands and Sweden. In other countries, policy documents are beginning to make reference to the topic of services and service innovation, but progress is patchy and in some countries, no documentation referring to the topic may be detected.
- In general, most **innovation policy support measures** tend to be horizontal or neutral concerning the sectors they target. However, largely because of the emphasis that such measures place on technological R&D, manufacturing innovation or on product development, or because of the significant role of the manufacturing sector in the national industry structure, there is a bias towards manufacturing or technology-based innovation activities and companies.
- Despite this, or perhaps due to this bias, there are comparatively **few examples of innovation policies** aimed at the support or promotion of innovation in services. An exception to this is perhaps measures in support of Information Society objectives and ICT application and uptake (including e-business, etc.). However, many of the latter do not explicitly focus on innovation within the service sector but rather on the application of such technologies to it.
- In addition to a handful of measures which target services in general, **specific service fields** are also targeted including: building and construction; healthcare; leisure and tourism; logistics and transport.
- The evidence suggests that relatively few agencies monitor or assess the **relative participation rates** of service companies in their innovation support measures. Exceptions may, however, be found in Germany, Italy, Spain, the Netherlands, Sweden and, to a lesser extent, Cyprus, Lithuania and Slovenia.



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Based on the above analysis and conclusions, a small number of recommendations can be put forward:

- 1) In order to assist the evolution of debate on the topic of services, there are opportunities for the Commission to put in place more activities aimed at disseminating data on the contribution and role of services in the economy of Member States (and more generally) and develop further initiatives (such as the upcoming Thematic Workshop) to raise awareness of these issues. Other initiatives could include the support of for a designed to foster increased debate between academic studies into service sector innovation and policymakers.
- 2) There are also opportunities for the Commission to emphasise the need for Member States to extend the target audiences for innovation support (to include more service sector actors); to make existing measures less manufacturing oriented and more sectorally neutral (through changes in eligibility criteria, for example) or to raise awareness of existing innovation support opportunities and their relevance among service sector companies.
- 3) Innovation support agencies should ensure that monitoring of participation rates is conducted in order to avoid discrimination of certain sectors.
- 4) Evaluation studies of both horizontal or specifically targeted innovation support measures (i.e. oriented towards service sector companies) should be conducted to determine whether they have differential impacts.

Lastly, the Norwegian correspondent offered the following piece of advice on the subject, which is worth repeating here:

“In order to grasp and understand the dynamics of innovation in service firms there is a need to acknowledge other types of knowledge production. The contribution from the broader innovation system to service firms’ innovation, i.e. from actors outside the firm’s value chain, is possibly of another kind compared to manufacturing. Genuine new knowledge developed and established in relations between actors in value chains is of much greater importance for the innovation and R&D of many services firms than knowledge related to physical products. A value chain perspective is therefore crucial in order to understand the frameworks of innovation in service firms.”