

Demand- and user-driven innovation policy framework

June 2009

Ministry of Employment and the Economy
Innovation department /
Demand-Based Innovations
(www.TEM.fi/INNO)



Background and objectives

Implementing the national innovation strategy

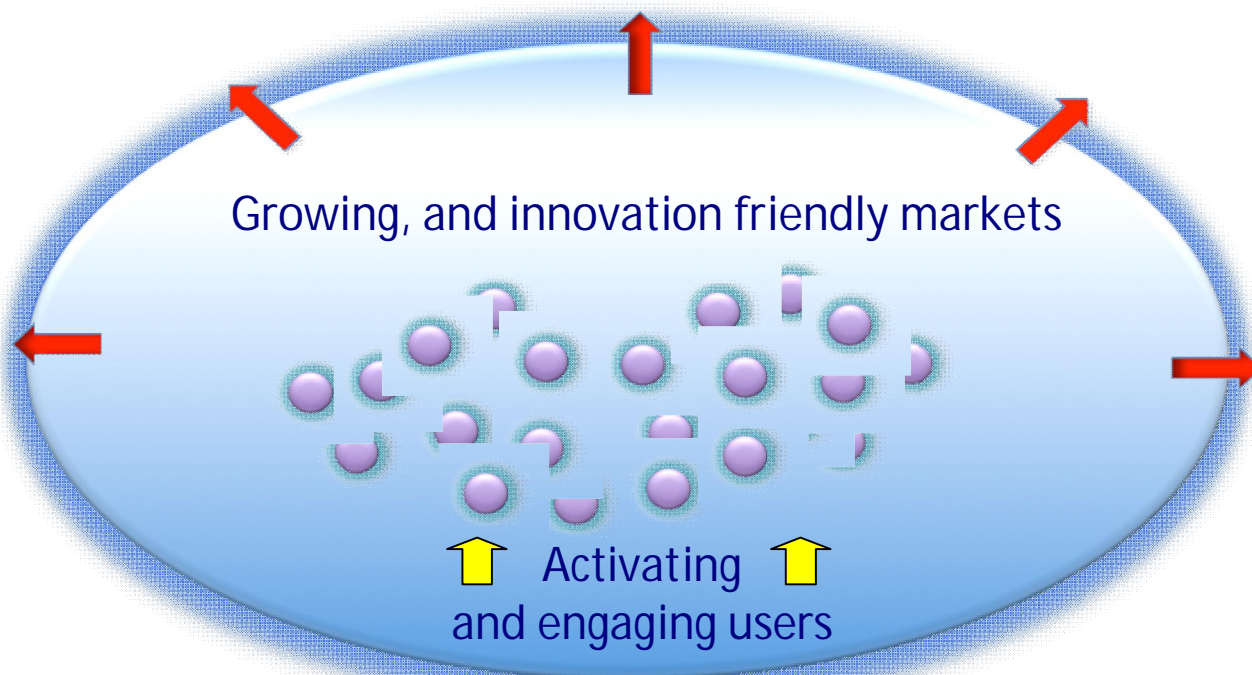
- Ministry of Employment and the Economy has been assigned to outline a policy framework for promoting demand and user driven innovation during spring 2009
- Based on the policy framework, the Ministry will develop an action plan for the demand- and user-driven innovation policy

Objectives of the project:

- To increase understanding of the demand- and user-driven innovation and the implications for the innovation policy
- Utilise the latest research-based knowledge in specifying the key elements of the demand- and user-driven innovation policy



Demand-driven innovation policy



User-driven innovation policy



1. Demand-driven innovation policy



The role of demand-side initiatives in innovation policy

- **Innovation related activities are now seen within a wider context where**
 - Both demand and supply side factors influence the way innovations emerge and diffuse on the markets and within the wider society
 - Policy focus on innovation related demand factors brings new and complementary elements to the innovation policy
 - Many types of actors in the society influence demand, diffusion and acceptability of innovations
- **Demand-side innovation policy recognises and targets also societal issues such as**
 - Climate change and energy supplies
 - Challenges related to ageing population and productivity of public services
 - Environmentally sustainable processes and consumption



Policy objectives

- **Demand-side innovation policy promotes innovation-friendly markets characterised by growth, innovativeness and rapid diffusion of novel products, services and processes**
 - The policy stimulates demand for innovations and/or directing it towards innovative products and services by
 - Influencing consumer and organisational behaviour
 - Directing public sector demand towards innovative products, services and solutions
 - Increasing confidence towards innovative products and services
 - It promotes the type of market conditions where demand can be an effective driver for innovation by
 - Introducing lead market initiatives in the areas where global demand and scalability create attractive opportunities
 - Taking a systemic approach in stimulating demand, confidence and positive attitudes towards innovations

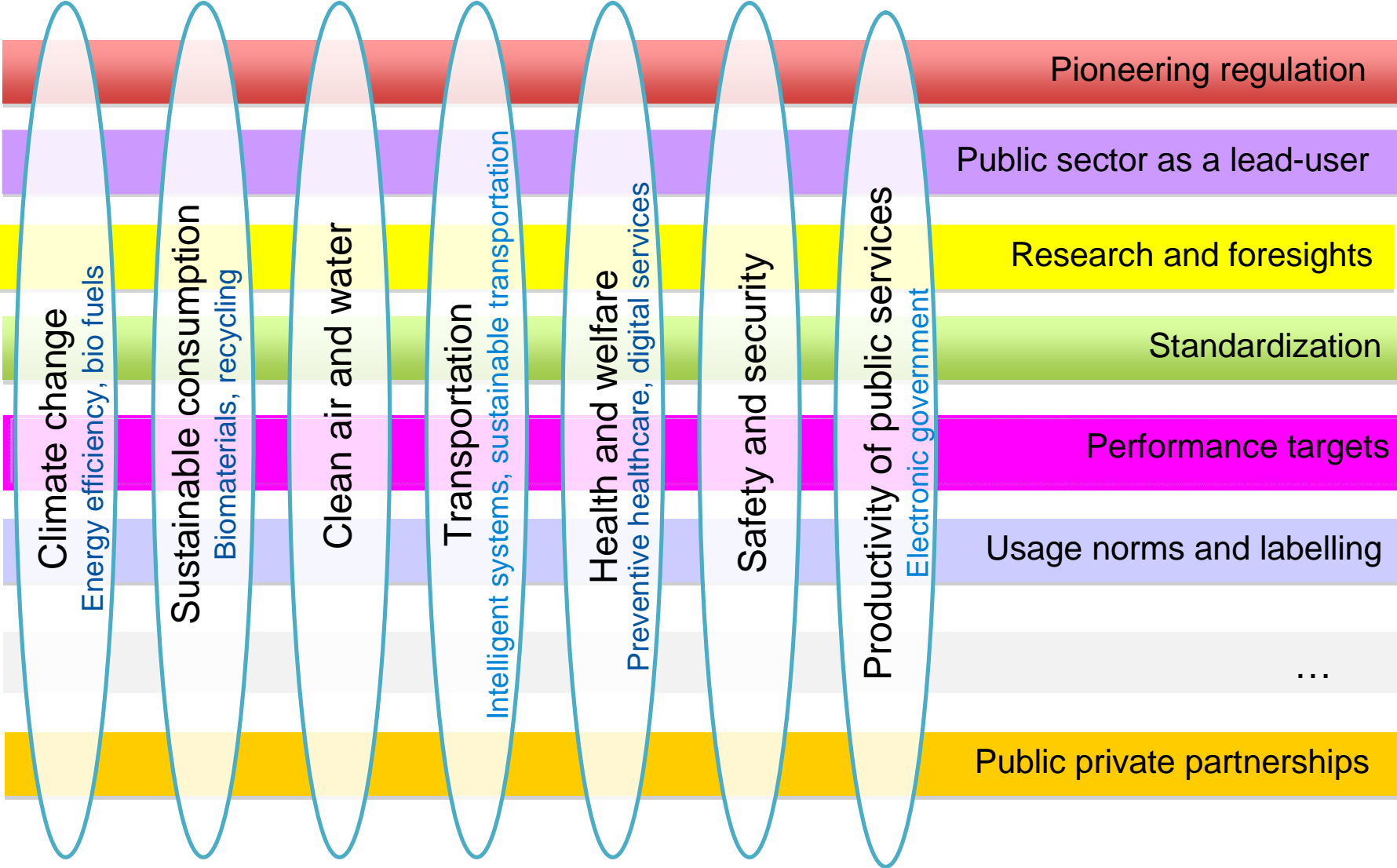


Added value of the policy for the business

- **Demand-driven innovation policy seeks to improve the competitiveness of businesses**
 - By creating demand and markets for innovations
 - By improving the conditions for take-up and commercialisation of innovations
 - e.g. through faster time-to-markets and diffusion of new innovative products, services and solutions
 - By developing systemic approach to the development of coherent, innovation friendly regulation and norms



Demand-side policy and thematic priorities



Definition

Demand-driven innovation policy promotes innovation and diffusion of innovations by stimulating demand for and creating better conditions for the take-up of innovations



Policy framework

The central elements of demand-driven innovation policy

Knowledge and capability development

- **Foresights**

- Identification of key socio-economic trends and potential leading edge activities
- Communicating the results to wide audiences

- **Research**

- Focus on major societal challenges and developments
- Analysis of demand-side innovations and their potential benefits

- **Education and training**

- Innovative procurement practises
- Consumer awareness and readiness to take-up innovations
- Standards as a means to create stimulus for the market approval and take up of innovations

Regulatory reform

- **Regulatory development**

- Future oriented, coordinated, innovation friendly regulation
- Performance based regulation and demanding performance based targets as a way to motivate market actors

- **Recommendations and labelling**

- Increased transparency as a way to enable well-informed consumer choices
- Usage norms as a way to influence demand

- **Competition**

- Stimulation of well-functioning, effective markets
- Demand and competition as drivers of innovation

- **Standards**

- Standards that create markets and support innovation
- Development of the standardisation system and procedures

Infrastructure improvements

- **Systemic demand-side innovation policy**

- Improved coordination and consistency in innovation policy design and implementation
- Policy actions to promote and enable lead-market development
- Better achievement of jointly agreed targets through improved coordination and governance of public sector of activities

- **Public private partnerships**

- Exploring new and more effective ways to build partnerships
- Creating opportunities for new types of partnerships and effective delivery of public sector services

Incentives for demand-driven innovation

- **Financing and tax incentives**

- Taxation as a means to create demand for innovations
- Financing for R&D and innovation projects

- **Pioneering public sector**

- Setting example, by increasing public sector led pioneering activities
- Increased resources for demonstration and reference projects
- New development environments and platforms for piloting innovative products, services and processes
- Better incentives for innovative public procurement
- Opening up of data bases and public sector held content for commercial use
- Increasing digital services and novel service delivery method

2. User-driven innovation policy



The role of user in innovation policy

- **Users have increased their power over suppliers**
 - Globalisation and the Internet have empowered users enabling
 - Well-informed choices among products and services
 - User influence over the content of available products and services
 - Active user participation in product and service development
 - User and consumer demand are now more sophisticated due to
 - Raised awareness and changes in consumption habits
 - Extensive utilisation of information and communication technologies and global access to suppliers
 - Widespread education and democratization of knowledge



Policy objectives

- User-driven innovation policy promotes user-driven innovation in public and private sectors
 - This involves formulation of new policy framework and instruments
- Policy also provides stimulus for
 - Systematic collaboration / engagement with users in innovation activities
 - Better understanding of the benefits of user-driven innovation
 - Research and knowledge on user and user-driven innovation
 - The development of platforms and tools enabling user-driven innovation
 - The development of advanced analytical tools for customer needs analysis, user innovation and market trends
 - Design (strategic / user-centric) as enabler for user needs based innovations
 - Utilisation of internet tools in analysing customer behaviour
 - Business ethnography and other tools user needs analysis
 - Foresight methodologies



Success through user-driven approach

- **Users and user communities are increasingly important for business success**
 - New technology development alone is no longer sufficient as value creation is increasingly based on tailored product-service offerings
 - Better understanding of user needs is an increasingly important source of competitive advantage
 - New research and analysis tools as enablers of user-driven innovation
 - User innovations represent huge potential across the industries
- **Renewal of public sector services**
 - In public sector services context user-driven innovation policy places active and empowered citizens in the centre of services renewal



Value for businesses and public sector

- **User-driven innovation activities creates competitive advantages**

- User needs are in a central role throughout the innovation process
- Better understanding of users and user communities creates many opportunities for value creation
- Early identification of emerging market trends can shorten time-to-international markets
- Commercialisation related risks are lower
- Users can provide almost unlimited external resources through their inputs in new applications development and content production

- **User-driven innovations can improve the quality of public services**

- Increased ability to supply tailored value adding services
- More flexibility through bottom-up service development



User-driven innovation policy - New perspectives and opportunities

- **User-driven innovation policy**

- Improves the input-output ratio of innovation activities through more effective commercialisation
- Enhances the impacts of innovation policy in areas which have not been covered so far
- Stimulates renewal in products, services as well as discontinuous discontinuous innovations
- Focuses attention on citizens and their needs as a driver of renewal for public sector services



Definition

User-driven innovation policy fosters innovation in private and public sector that is conducted by user or is based on user needs and systematic collaboration with users.



Policy framework

The central elements of user-driven innovation policy

Knowledge and capability development

- **Research**

- More emphasis on user-driven innovation
- Development of indicators for user-driven innovation

- **Education**

- Users' role as an active and responsible participants
- Multi-disciplinary education and multi-skilled citizens
- Emphasis on arts and design related knowledge and skills
- Strategic design as a business development tool (e.g. service design)
- Intellectual property and intellectual asset management in open innovation context

- **Methods and tools**

- Better availability and use of advanced methods including foresight, business ethnography, internet and user needs analysis

Regulatory reform

- **Better utilisation of public sector held data and user information**

- Evaluation of data protection and privacy regulations
- Making public sector held data more readily usable for user-driven innovation activities

- **Collaboration with users**

- Regulatory reform to empower citizens influence and ability to make choices
- Stimulus for partnerships in public service production

- **Intellectual property**

- Renewal of the institutional framework to make it more suitable and supportive for open and user-driven innovation
- More consistent regulation of the intangible value and liabilities resulting from user-driven innovation activities

Infrastructure improvements

- **ICT infrastructure**

- Improvements targeting better quality, trust and more open architectures
- Open and interoperable ICT-infrastructure supporting user-driven innovation especially within the public sector

- **Development platforms and environments for public private partnership**

- Support for networks that enable user-driven innovation activities reaching across different sectors and branches of administration

- **Renewal of public sector services**

- Promoting user-driven development as a mainstream activity within the public sector
- Adoption of service design principles in the public sector

Incentives for user-driven innovation

- **Financial incentives**

- New instruments for supporting user-driven innovation
- New financing criteria for existing instruments enabling better support for user-driven innovation
- Other new types of incentives for open innovation and for public sector context

- **Building user awareness and channels of influence**

- Raising awareness of user-driven innovation among citizens, businesses and public sector
- Stimulus for user influence through empowerment and improved channels of influence

Demand-driven innovation policy

- Improves the ability to adopt innovations
 - Facilitates demand for innovative products, services and solutions
- Enhances the capability to interpret market needs and demand potential
 - Demanding and innovation friendly regulation
 - Standardisation supporting innovativeness
 - Awareness and knowledge development
 - Innovative public procurement
 - Regulation as a stimulus for competition

Innovation friendly markets

Demand, competition and innovation culture as drivers of innovation

User-driven innovation activities

- Awareness and knowledge development
- Design as an enabler for user-driven innovations

- More systematic collaboration with users in innovation activities
- Utilisation of advanced methods in identification and analysis of user needs and trends
- Developing innovation policy and measures for promoting user-driven innovations

User-driven innovation policy