

### EDU-LAB wp3:

e-learning course 4: Strengthening the regional economic development

Theme 4: RIS3/Smart specialization

Session 3: Creation of innovation friendly business environm



#### A. Strategy and the need for action

Intention is to create in Europe a market that stimulates and encourages innovation and in so doing provides firms with the incentive to raise their R&D level and to apply successfully the full range of new technologies:

#### 1. Market for innovations as the central driver

Achieving the goal of an Innovative Europe requires a new paradigm of mobility, flexibility and adaptability to allow R&D and innovation to create the value that can then support quality of life. The paradigm shift cannot be confined to the narrow domain of R&D and innovation policy, important though that is. Simultaneous and synchronous efforts are needed at all levels in three areas:

- creation of a market for innovative products and services;
- providing sufficient resources for R&D and innovation; and
- improving the structural mobility and adaptability of Europe.





#### A. Strategy and the need for action – cont.

#### 2. Europe breaking out from an unsustainable path

Europe must break out of structures and expectations established in the post-WW2 era which leave it today living a moderately comfortable life on slowly declining capital. This society, averse to risk and reluctant to change, is in itself alarming but it is also unsustainable in the face of rising competition from other parts of the world. For many citizens without work, or in less-favoured regions, even the claim to comfort is untrue. This is about putting research and innovation at the centre of the endeavour to recapture the entrepreneurial vigour and value-creation that are needed to sustain and improve the European way of life.

Aim is to build upon the achievements and actions already in process through the revised Lisbon Strategy for growth and jobs, the National Reform Programmes and actions towards the 3% objective, but also to broaden the scope of measures being employed and to intensify and accelerate those already being implemented.



- A. Strategy and the need for action cont.
- 3. Remedies not diagnosis alone but first recognise the problems
  - There is a large gap between the rhetoric of a political system that preaches the knowledge society and the reality of budgetary and other priorities that have shown little shift in preparing to engage with it. Emphasis is on remedies not diagnosis but we must also recognize the magnitude of the problem. There are many indicators both of insufficient effort to innovate and of the consequences of not doing so:
  - Productivity falling behind. For the first time in the post WW2 era the average growth rates of real GDP, labour productivity and total factor productivity have continued to fall further behind those of the USA for a period of almost a decade.
  - Failing to capitalize on the application of ICT. Productivity growth has in recent years been driven mainly by the ICT-using services sector and it is precisely here that the difference is most obvious - productivity growth in the EU is relatively stable across time in contrast to a very large acceleration in the as it successfully applies ICT



- A. Strategy and the need for action cont.
- 3. Remedies not diagnosis alone but first recognise the problems cont.
  - Losing out as large firms globalize their R&D. The net imbalance of R&D investment by EU firms in the USA compared with US firms in Europe increased five-fold between 1997 and 2002, from about €300m in 1997 to almost €2b in 2002. It is well known that several major European firms no longer site new R&D initiatives in Europe. Additionally, US R&D investment has been growing at a much greater rate in areas outside the EU about 8% per year in the EU and 25% per year in China.
  - Locked into unmodernised traditional sectors and under-investing in services
    R&D. Europe has a manufacturing profile that has a relatively low share in ICT related sectors, and a structural trade deficit in high-tech manufacturing. Its services sector invests considerably less in R&D (0.2% GDP compared with 0.7 % of GDP in the US)





- A. Strategy and the need for action cont.
- 3. Remedies not diagnosis alone but first recognise the problems cont.
  - The productivity challenge is made more urgent by an ageing population. Europe is caught in a demographic squeeze of declining birth rates and rising life expectancies. According to Eurostat, by 2050 the working population will decrease by 52 million, even after allowing for net migration, and there will be a sharply rising dependency ratio, with the proportion of people over 65 rising from 16.4% in 2004 to 29.9% in 2050. In this situation, the present health and welfare systems are not sustainable. Ageing is also a specific problem in the research labour force with over one third of highly qualified scientists in the 45-64 age group. This, coupled with the declining interest of young people in a research career creates a double effect, dramatically cutting the available human resources needed to realize the European knowled society.



#### A. Strategy and the need for action – cont.

#### 4. Additional challenges

 To this list can be added a series of underpinning social and cultural challenges, including creating jobs, absorbing immigrants, improving education (particularly to create interest and excitement in science and technology), exploiting cultural diversity and addressing inequalities within the EU exacerbated by enlargement. There are growing problems in the transport network and high external dependency in energy supplies. Businesses face high labour market costs and inflexibility, inefficient regulation, risk aversion and lack of entrepreneurial spirit. For new Member States the difficulties in extracting maximum benefit from Structural Funds remain a barrier. More generally, they face a brain drain to better off Members and beyond Europe, and a second brain drain away from science and technology into better rewarded professions..



#### A. Strategy and the need for action – cont.

- 5. Affording and reinforcing European values
  - A market-led vision does not mean an abandonment of what is distinctive about European values but rather the use of the force of the market to preserve them, both by harnessing innovation to engage with public services and by creating the wealth necessary to finance the equality, health, social cohesion and common security that our citizens desire. Investments in education, science, research and innovation should not be seen as alternatives to investments in the welfare society in Europe, but as necessary though not sufficient means to ensure its sustainability, albeit through a reformed social model conducive to innovation.





# B. Creating a market for innovative products and services

- 1. The importance of lead users
  - Lead users or launching customers are those who are prepared to take the higher initial costs and risks involved in early adoption of an innovation. They can provide important feedback to the final development of the product or service;
  - In return they can gain better abilities to use and benefit from the innovation, and increase the chance that it meets their specific needs;
  - An early market of sufficient scale offers the potential for a higher return on investment and with that, reduced risk;
  - Proximity and local requirements are key features of many such markets and relationships and hence influence the choice of R&D and business location..



- B. Creating a market for innovative products and services – cont.
- 2. Key steps to create lead markets
  - Provide a harmonised regulatory environment across the EU favourable to innovation and based on early anticipation of needs;
  - Use standards-setting powers to demand high technical performance levels and reach agreement on new standards quickly and efficiently;
  - Use public procurement to drive demand for innovative goods, while at the same time improving the level of public services; and
  - Foster a cultural shift which celebrates innovation and a desire to possess innovative goods and experience innovative services, such that Europe develops as a natural home for innovators.





- B. Creating a market for innovative products and services – cont.
- 3. Exploiting new opportunities for public procurement to drive innovation
  - Possibilities for technical and competitive dialogues between purchaser and supplier, a necessary condition if each side is to understand the other;
  - The facility to specify requirements in terms of functional performance or standards, which allows suppliers to produce any configuration of technology they feel can meet the need;
  - Options to permit variants, thus opening up bids to alternative ideas;
    and
  - Conditions that allow transfer of intellectual property to the suppliers,
    and hence allow them to exploit their innovations in wider mark



- B. Creating a market for innovative products and services – cont.
- 4. Other market changes are needed to improve the operating environment for innovative firms. These include:
  - The need for light touch and harmonised regulation and the removal of those which are creating ever rising compliance costs without clear benefit. In this context the Better Regulation element of the Lisbon Strategy with its aim to withdraw, screen and assess the impact of regulation is an important element if entrepreneurship is to flourish;
  - Setting world-class standards that grab the market, in the mould of the GSM and ADSL experiences





- B. Creating a market for innovative products and services – cont.
- 5. Efficient and effective intellectual property systems:
  - IP systems including national and Community legislation, court systems, assistance services, etc. – also structure the market and the knowledge economy. European IP systems provide a high level of protection but suffer from drawbacks such as national discrepancies and high costs, which hamper both developers and users of technology, especially when considering cross-border collaborations.
  - A balanced set of improvements is called for, including the Community patent system for obtaining and enforcing patents on an EU-wide basis. In the short term, urgent action is needed to finalise the draft European Patent Litigation Agreement, which would address the national fragmentation of the existing European patent system, and the associated high litigation costs and legal uncertainty.



- B. Creating a market for innovative products and services – cont.
- 5. Efficient and effective intellectual proper ty systems cont.:
  - Action is also required on more specific fronts. For instance, there is a need to balance the interests of holders and users of intellectual proper ty, particularly when compliance with a standard involves use of patented knowledge. It is also important to facilitate the transfer of knowledge and intellectual property from publicly-funded institutions to industry. Finally, better awareness and training regarding intellectual proper ty has to be offered more systematically in the education system, in order to equip all new graduates with the knowledge management skills Europe needs in the 21st century;



### An innovation-friendly regulatory framework

- A growing body of evidence suggests a strong relationship between investment in research and innovation, and economic growth. Therefore, opportunities need to be systematically sought to encourage and support innovation for sustainable growth, jobs and competitiveness.
- The regulatory environment may constitute enabling factors or perceived or real regulatory bottlenecks – barriers, frameworks not sufficiently friendly for innovation, implementation problems or gaps – to innovation. Business, other stakeholders, EU institutions and Member State authorities should work together to ensure an optimal regulatory framework to foster innovation.
- The systematic use of the Better Regulation Guidelines to assess key areas of innovation where the design and implementation of EU regulation is considered to have an important influence and can help dismantle barriers to growth, employment and competitiveness of EU business.





### An innovation-friendly regulatory framework

- A forward-looking regulatory approach within the framework of the Better Regulation Agenda could help to increase the level of investment in Europe through innovation, thereby supporting the priorities of the Juncker Commission:
  - Boost jobs, growth and investment
  - An internal market with a strengthened industrial base
  - A stronger Digital Single Market
  - A more efficient and effective energy union
  - An accelerated climate change policy .





#### An innovation-friendly regulatory framework

- The Commission services will further develop the preliminary analysis already undertaken, working together with the Presidency of the Council in the first half of 2016 to collect further suggestions on the relationship between innovation and regulation, indications of regulatory barriers to innovation and suggestions for simpler, clearer and more efficient regulation supporting growth and jobs. The Commission will consider asking the REFIT Platform to examine the resulting case studies and collect further evidence on a wider range of issues concerning the relationship between existing regulation and innovation.
- The concept of Innovation Deals will be further assessed, following the pilot action in the Circular Economy, to ensure increased opportunity for innovation within the existing regulatory environment at EU, national, regional and local levels..





### Main sources (pdf available):

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- 3. Better regulations for innovation-driven investment at EU level,
- Commission Staff Working Document, Directorate-General for
- Research and Innovation, 2016
- 4. Creating an Innovative Europe, Report of the Independent
- Expert Group on R&D and Innovation appointed following the
- Hampton Court Summit and chaired by Mr. Esko Aho, ISBN 92-
- 79-00964-8, European Communities, 2006



### Thank you for your attention!

