

# United Nations Economic Commission for Europe

- INNOVATION
- PERFORMANCE REVIEW
- OF UKRAINE

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Geneva



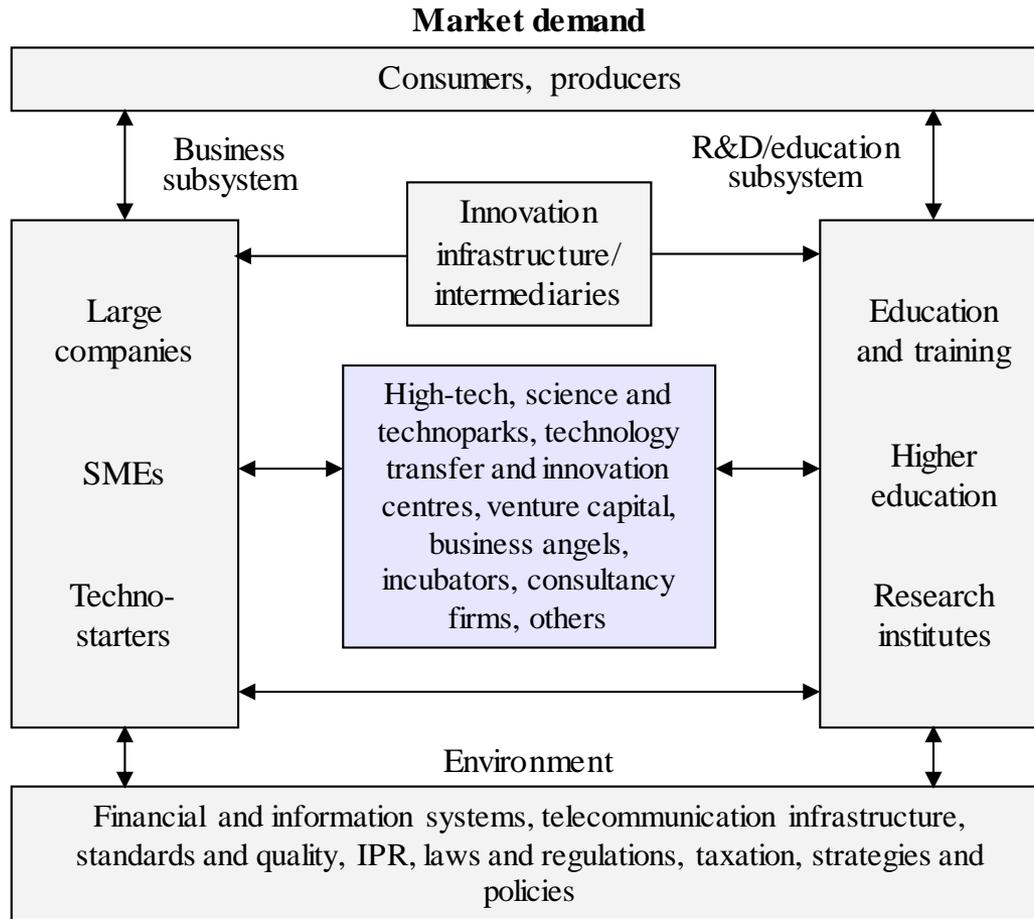
## National Innovation System: Definition

**NIS:** Network of institutions in the public and private sector whose activities and interactions initiate, import, modify and diffuse new technologies and useful knowledge.

Crucial factors for NIS to function:

- Interactions between sub-systems and especially between science and business is at core of NIS
- Decision making paths and relationships is the precondition for developing better horizontal and vertical coordination on innovation strategy and implementation
- Incentive structure to improve the effectiveness of the system

# Underlying concept: the National Innovation System



Source: Adapted from: C. Freeman (1987), National systems of innovation: the case of Japan, in: Technology policy and Economic Performance, London, Printer Publishers

## Innovation Governance: Definition

### **Innovation Governance:**

Organisational form and relationship between different decision-making bodies along the entire policy cycle:

- o *Policy formulation*
- o *Policy implementation*
- o *Policy monitoring and evaluation*

### Critical factors:

- The nature of innovation nowadays requires governance of innovation policy that integrates all players, incl. private sector
- Overcome traditional sectoral division in decision making
- Governance at a high level
- From individual policy instruments to set of instruments (policy mix)

## NIS and innovation governance in Ukraine: the 3 pluses

1. Broad awareness in and recognition of the importance of innovation for the future growth and competitiveness of Ukraine and efforts to define priorities and organise the institutional element of the NIS: *more than 80 laws and regulations at national and subnational level over about 15 years*
2. Efforts to direct the establishment of elements of the innovation infrastructure as well as incentives: *techno- and science parks, technology transfer centres, incubators, loans, funds, project grants, etc.*
3. The state of market economy in Ukraine is allowing for entrepreneurship: one can start a company and entrepreneurs are not “hunted”

## NIS and innovation governance in Ukraine: the 3 challenges (1)

1. A balanced and stable NIS and governance:
  - Streamlined laws and regulations at all levels
  - Quality of policy/strategy documents to cover the entire cycle from formulation, implementation and monitoring/evaluation
  - Streamlined and clear responsibilities for the innovation governance

## NIS and innovation governance in Ukraine: the 3 challenges (2)

2. Strong link between science and business (which is very weak at present):
  - Influence the entire innovation cycle – from idea to realisation: make science as well as industry equally responsible for the success
  - Influence the entire cycle of an innovative enterprising - from start ups to growth: entrepreneurship at universities, technostarters both as a spin off from R&D units and universities and from large enterprises, incentives to overcome the “valley of death”
  - Bring science and industry together on national and regional level via clusters, technopartners programmes; link internationally

## NIS and innovation governance in Ukraine: the 3 challenges (3)

3. Chose an innovation governance model:
  - Sectoral and departamental approach or cross-sectoral and cross-departamental approach
  - Address primarely the sub-systems of the NIS or the relationships and the interactions in the NIS
  - Make innovation a national priority for all players in the NIS: bring the leadership at PM's or President's level and organise a broad, horizontal national innovation platform

# Recommendations (1)

## Recommendation 2.1

Innovation policy would benefit from an integrated consideration of the various components of the national innovation system. This holistic approach should result in the identification of weak elements and an emphasis on linkages between different sub-systems as important policy targets. The notion of innovation should be broadened, recognising that technology is only one dimension of the innovation process. The authorities should give special attention to:

- *The business enterprise subsystem, in particular the promotion of innovative SMEs;*
- *The commercialisation of science (e.g. technostarters);*
- *The linkages between science and industry through policy measures that target collaboration between these two subsystems; and*
- *The role of innovation intermediaries, with due consideration to the particular needs of small innovative enterprises.*

## Recommendations (2)

### Recommendation 2.2

The effectiveness of Ukraine's policy efforts in the area of innovation has been undermined by the lack of a consistent vision that included concrete steps to implement it. The authorities should consider the development of a **National Innovation Strategy of Ukraine** as single comprehensive document that would integrate and replace many of the existing policy initiatives. Such a document would encourage a consideration of the impact of any measures in the national innovation system as a whole. This National Innovation Strategy would:

- *Set up clearly national priorities in the promotion of innovation and identify the policy measures to realise this strategy; and*
- *Define how the strategy will be implemented, monitored and evaluated as well as assign well-identified resources and responsibilities for these tasks.*

## Recommendations (3)

### Recommendation 2.3

Innovation policy involves many different ministries and agencies, which requires a concerted effort to coordinate actions in an effective way. The authorities could consider the establishment of a National Innovation Council, in order to promote a cross-sectoral and cross-departmental approach in the design and implementation of innovation policies. In the organization of the work of the **National Innovation Council**:

- *In addition to ministries and government agencies, representatives from the business and academic sectors could also be included as members;*
- *The chairmanship role could be performed by a figure with wide national support to ensure wide awareness and visibility of innovation initiatives in the country; and*
- *The State Agency on Science, Innovation and Informatization (SASII) could act as the Secretariat of this Council and coordinating unit in the policy implementation process.*