Knowledge generation and dissemination and industry-science linkages and collaboration in the innovation process

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Business not government drive innovation

- Innovation is “new to Ukraine” not “new to the world”
- Based on upgrade not IP
- Innovation capacity is low
- High growth companies low employment generators
- Innovation rates are low
- Some higher that are sector specific
- Big companies low innovators
- Ukraine is losing ground in innovation
Foundation for innovation

Innovation

- Creative ideas: market led / technology push
- Innovation is Research, Development and Design driven
- R&D&D needs to be relevant
- Investment in R&D and numbers employed in R&D falling
- Reducing levels of innovation
- R&D not relevant to economy

Communication / infrastructure

- Commercial forums
- Fairs and exhibitions
- Industry Associations
- Technical publications
- Some active consultants
Why a decline in impact of R&D on economy?

- Loss of scale since 1989
- R&D - neither internationally good or locally relevant
- Public R&D not managed
- Public sector R&D not valuable in economy
- Authorities misjudge value of R&D
- More international R&D links

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Policy options

- Buyer/Production driven
- Management capacity
- Use FDI better
- Not just regulatory reform
- Back winners – target sectors
Policy options

- Unlock sector specific barriers
- ISO and CMMI standards in ICT
- International links
- Improve ICT penetration in population
Recommendations

- Target R&D spend
- FDI needs to include R&D activities
- Create SME / Foreign company links
- Improve industry-science links
- Evaluation of investment in R&D
- Public procurement needed to enhance innovation
Industry-science linkages and collaboration in the innovation process

- Needs incentives
- Better match between supply and demand
- Too many constraints on supply side
- Ownership of IP
- Innovation
- Value of the output
- Low demand by business for innovation.
- Lack of capacity for knowledge transfer
- Seek knowledge from abroad
- Lack of absorptive capacity in business
Knowledge supply, demand and protection

- Measuring technology transfer
- Over commitment to fundamental research
- Standard too low .. no impact
- Too much output as technology and legal documentation
- Internally generated innovation is declining
- Funding modern equipment
- Innovation focussed on new to company not new to world
- IP rights legislation modernised
- Most registered IPR from foreign companies
- Utility models are now commonly used by domestic companies
The measurement of industry-science links

• Data is incomplete – need measurement.
• IPR protection is low.
• Lack of R&D by business ...too state focused
• Links between Research Institutes and branch institutes are weak
• HEI lack focus on commercialisation
Recommendations

- Assess innovation – baseline
- Professionalise technology transfer offices
- Support stakeholder collaboration and cluster building
- Link universities to SMEs
- .... National technology strategy