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International Conference on Knowledge-based Development and Innovative Entrepreneurship

Baku, 24-25 November 2011

Report on the International Conference on Knowledge-based Development and Innovative Entrepreneurship

I. Format and attendance

1. The International Conference on Knowledge-based Development and Innovative Entrepreneurship was held in Baku from 24 to 25 November 2011, in response to a proposal made by the Government of the Republic of Azerbaijan. This Conference was in line with the Programme of Work for 2011 of the Committee on Economic Cooperation and Integration (CECI) of the United Nations Economic Commission for Europe (UNECE), which was adopted at the fifth session of CECI held from 1 to 3 December 2010, and with the Programme of Work for 2010-2011 of the Project Working Group on Knowledge-based Development of the United Nations Special Programme for the Economies of Central Asia (SPECA). It was organized by UNECE in cooperation with the Ministry of Communications and Information Technologies and the Ministry of Foreign Affairs of the Republic of Azerbaijan.
2. The Conference discussed strategic policy issues for knowledge-based development in the area of innovation, entrepreneurship and public-private partnerships, with special reference to the role of information and communication technologies (ICT).
3. The Conference provided a platform for discussions and broad exchange of experiences and lessons learned among policymakers, representatives of business and academia and other experts and practitioners.
4. The Conference brought together over 100 participants: high-level policymakers, government experts, representatives from academia and the business sector from 21 UNECE member States. Representatives of the International Telecommunication Union and the United Nations Development Programme also attended the Conference.
5. The Conference was opened by Mr. Ján Kubiš, UNECE Executive Secretary, with his speech. It was followed by welcome addresses by H.E. Mr. Ali Abbashov, Minister of Communications and Information Technologies of the Republic of Azerbaijan, and Mr. Hamadoun Touré, Secretary General of the International Telecommunication Union.

6. A high-level segment served as an introduction to the Conference, discussing key issues that were considered in more detail in the three substantive sessions that followed.
7. The substantive sessions covered different policy areas concerning the promotion of knowledge-based development and innovative entrepreneurship:
 - (a) Promoting innovation in the knowledge-based economy: the role of public initiatives;
 - (b) The changing nature of entrepreneurship in the knowledge-based economy; and
 - (c) The role of public-private partnerships (PPP) in promoting ICT infrastructure development.
8. Government representatives and leading experts in these areas from business and academia made presentations covering these issues (available on <http://www.unece.org/index.php?id=26235>). Presentations were followed by interactive discussions among participants of the Conference, which provided opportunities for a broad exchange of views.

II. Summary of discussions

A. Opening of the International Conference

9. The UNECE Executive Secretary stressed the importance of innovation in order to sustain economic growth and to improve living standards, while overcoming resource limitations. A dynamic entrepreneurial sector is an essential element of an effective national innovation system, thus there is a need to develop appropriate conditions for entrepreneurial activities. He stressed that the importance of ICT concerns not only its direct impact on the generation of new products and services, but also its ability to facilitate innovation in other sectors and its contribution to the creation of new business models that can shake up entire economic sectors. Collaboration at the national and the international levels between different stakeholders was highlighted as a key factor contributing to overall innovation performance.
10. The Minister of Communications and Information Technologies of the Republic of Azerbaijan shared with participants of the Conference the country's vision to promote innovation as a means to diversify its economy, thus overcoming the strong dependence on oil and gas. He introduced ongoing public initiatives on research and development (R&D), ICT infrastructure and entrepreneurship, which are part of the policy agenda for innovation and economic diversification in Azerbaijan.
11. The Secretary General of the International Telecommunication Union acknowledged Azerbaijan's ongoing efforts in building a knowledge-based economy as an important initiative to "convert black gold (oil and gas) into human capital". He highlighted the need for affordable broadband access to all, in particular to young entrepreneurs, to ensure successful innovative development of the country. The strategic use of PPP could be considered for this purpose.

B. High-level segment

12. The high-level panel introduced the main issues considered in this International Conference and set a framework for discussions in the following substantive sessions.

13. Panellists stressed the importance of innovation as a source of sustainable competitive advantage. Knowledge plays an increasing role in all economic processes and ICT contribute to the effective use and dissemination of this knowledge.
14. Innovation takes place in a global context, which is driven by growing competitive pressures and the internationalization of R&D. Regional innovation capabilities are important to successfully participate in global networks and attract the interest of foreign investors. Efforts to improve innovation performance should pay attention to the regional aspects and implications of innovation policies.
15. The complexity of innovation processes was highlighted. Innovation is the result of the interplay between different actors, including firms, knowledge organizations and public authorities. Innovation policies should target not only the strengthening of the innovation capacities of these actors but also the improvement of the linkages between them.
16. Panellists agreed that the quality of industry-science links is an important factor in the innovation performance of modern economies. While these links are generally weak in countries with economies in transition, the situation regarding ICT is better. This contributes to explain the faster development of ICT-related entrepreneurial initiatives in Russia and other economies in the region. Cooperative links often involve also foreign companies. However, the potential for cooperation among other countries with economies in transition is not yet fully exploited.
17. An increasingly closer degree of stakeholder interaction has been characteristic of the evolution of innovation support initiatives in most countries. This has benefited from the extensive use of ICT, which have received a growing attention in many countries. In Azerbaijan, these policy efforts have contributed to the improvement of many indicators related to the use of ICT.
18. Innovation policies should be horizontal, targeting different productive and institutional sectors. The complexity of innovation and the fact that many different public agencies may be involved implies the need for strong governance and coordination mechanisms. A variety of instruments could be deployed resulting in a policy mix of mutually reinforcing actions. Monitoring and evaluation mechanisms are important for the effectiveness of innovation policies.
19. A conducive infrastructure creates favourable conditions for the success of innovative entrepreneurship. It was recognised that the development of this infrastructure requires the coordination of public and private efforts.
20. Policies should promote the emergence of knowledge-intensive firms by encouraging entrepreneurship in universities and research organizations and developing a culture that rewards risk-taking and innovation, including through the education system.
21. Innovative entrepreneurs face particular difficulties in raising finance, which should be addressed through specific mechanisms of support, taking into account the different financial needs of firms at different stages of their development. Financing mechanisms of support should be available also at the regional level. In some cases, ICT do not require strong initial outlays, which facilitates the development of small innovative companies that can satisfy strong demand from large companies.

C. Promoting innovation in the knowledge-based economy: the role of public initiatives

22. Panellists in this session discussed the role of public policies to foster innovation, in particular the opportunities and challenges faced by countries with economies in transition. The importance of ICT as a driver of innovation was highlighted. This includes not only new ICT-related products and services but also ICT's contributions to increased productivity in different sectors, creation of new business models and facilitation of collaboration between different innovation partners.

23. Innovation contributes to the expansion of both large corporations and small and medium-sized enterprises (SMEs). Innovation is a result of complex interaction among different innovation actors. Therefore, systematic innovation management is essential for successful and sustainable innovation activities. The need for such innovation management is not well understood among SMEs.

24. Lack of demand and the underdevelopment of the markets for innovation/innovative ideas were identified as obstacles for companies to take risks and to innovate. Support to the emergence of regional and national markets for innovation, possibly through the public and private sector cooperation, was suggested as a means to encourage innovative activities.

25. The innovation challenges faced by many countries with economies in transition include high costs of technology investments, high risk of investing in innovation, lack of access to finance, in particular for SMEs, poorly developed infrastructure, difficulties in the commercialization of R&D results, low interest to cooperate among various innovation actors and limited awareness of the crucial role of innovation for sustainable development.

26. Panellists agreed that the appropriate policy mix promoting innovation in transition economies depends on national circumstances, including the knowledge base, the size of the domestic market, the industry structure and the development of specialized financial intermediaries.

27. The role of governments in promoting innovation/innovative activities concerns not only new regulatory or economic instruments but also facilitating partnerships and encouraging cooperation among different innovation actors.

28. Innovation in the services sector plays a significant role in knowledge-based economies. Knowledge-intensive services can make an important contribution to productivity growth and innovation in other sectors. There is a need to create an environment to facilitate long-term collaboration among innovation actors to facilitate the development of these services.

29. Entrepreneurship is the key driver of innovation, therefore, it is important to remove excessive regulation, bureaucracy and administrative procedures while addressing problems of access to finance, which are particularly acute for SMEs in many countries with economies in transition.

30. Intellectual property rights (IPR) play a crucial role in creating the right incentives for innovation. There is a strong need for better IP policies to support innovation efforts. However, this is an area where capacity in many countries with economies in transition remains limited.

D. The changing nature of entrepreneurship in the knowledge-based economy

31. Panellists in this session discussed the major challenges and policy options conducive to the development of innovative entrepreneurship in the UNECE region. The panel considered the legal and regulatory conditions for enterprise development and commercialization of applied research results. The panel discussed the ways and means of strengthening linkages between firms and knowledge-generating partners, and of creating an environment favouring the establishment of start-ups and academic spin-offs.

32. It was agreed that the development of innovative entrepreneurship in emerging market economies was hampered by both general obstacles to enterprise development, e.g. excessive administrative controls over the establishment and operation of private companies, and those specific to innovative start-ups and academic spin-offs. Among the latter the speakers noted the insufficient links between research institutions and industry, lack of entrepreneurship training at universities and financing difficulties.

33. In developed market economies, a variety of instruments is used to promote linkages between research institutions and industry. These tools include collaborative R&D programmes, technology platforms, clustering and regional growth pole policies, science parks and support to university liaison offices. In emerging market economies, programmes for collaborative research in areas of practical interest to enterprises could become the first instrumental step towards a closer collaboration among innovation stakeholders.

34. International good practices show that governments play a leading role in promoting innovative entrepreneurship. In Turkey, for example, the Government offers non-repayable grants as well as tax rebates and insurance premium support to promote new innovative companies. The scope of these instruments is growing, with increased budgetary allocations to finance the initiatives under the so-called Techno-Entrepreneurship Capital Support Programme.

35. The panel noted that international opportunities for collaboration among universities and industries in countries with economies in transition, which sometimes have a long history of cooperation, are not used to its full potential. Governments should facilitate international joint ventures in research and production, which could be helpful in raising the technological levels and competitiveness of emerging market economies.

E. The role of Public-Private Partnerships in promoting ICT infrastructure development

36. Panellists in this session discussed issues related to the financing of the development of the ICT infrastructure, including the role of governments and the private sector. The panel also touched upon the question of using PPP as a model to bridge the gap between the existing and required ICT infrastructure needs. The main focus of the discussion was the experiences and examples of PPP projects in ICT infrastructure in the UNECE region and beyond.

37. The panel agreed that the main drawback in ICT infrastructure projects procured through the PPP model was related to rapid technological development, which posed a considerable (and often unbearable) risk on the private sector partner in view of the long procurement period.

38. Notwithstanding this in-built disadvantage, panellists shared their experiences in adopting the PPP model in both soft and hard infrastructure projects. A number of successful case studies were presented, such as the high-speed broadband infrastructure

projects in sparsely populated areas. Such projects allowed citizens' access to telemedicine services in remote rural areas, that significantly increased the access to primary care and improved the life of patients as they reduced arduous trips to the nearest health care centre.

39. The panel agreed that asset and lifecycle management was crucial to the success of a PPP project, irrespective of the type of project. To make PPP projects successful, there is a need for: stakeholder buy-in at all levels; excellent communication between the parties; good commercial governance; a design that is both innovative and feasible; quality in the construction; stakeholder accountability to the public and investors; and profitability for investors and operators.

III. Closing of the International Conference

40. The UNECE Director of the Economic Cooperation and Integration Division thanked moderators, panellists and participants for their active involvement in the discussions. On behalf of the UNECE, he extended his special gratitude to the host Government for the efficient organization and the cooperation extended to UNECE during the preparation of the Conference.

41. The Deputy Minister of Communications and Information Technologies of the Republic of Azerbaijan noted with satisfaction the results of the Conference, which addressed real needs of the host country as well as of other countries with economies in transition. He expressed his appreciation to the UNECE secretariat for preparing this important Conference and stressed the high quality of the event.

42. The main outcomes of this Conference were reported to the UNECE Committee on Economic Cooperation and Integration at its sixth session on 30 November - 2 December 2011, and will be presented to the fifth session of the SPECA Project Working Group on Knowledge-based Development in 2012.
