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High-level Substantive Segment: Innovation Performance Review of Armenia

Draft Conclusions and Recommendations

Conference room paper submitted by the secretariat

Introduction

The objective of this document is to present the draft conclusions and recommendations from the *Innovation Performance Review of Armenia*, which will be discussed at the High-level Substantive Segment of the eighth session of the Committee on Economic Cooperation and Integration. The *Innovation Performance Review* is a policy oriented document seeking to provide advice to policy-makers and other stakeholders on possible policy actions aimed at stimulating innovation activity in the country, enhancing its innovation capacity and improving the overall efficiency of the national innovation system. The *Review* has been prepared by a team of international and national experts on innovation policy mobilized by the UNECE secretariat in consultation with the national authorities. Recommendations are contained in chapters 2-7 of the *Innovation Performance Review of Armenia*.

National innovation system and innovation governance

Armenia has made considerable progress in the establishment of a national innovation system (NIS). Many important ingredients of this process are in place: strategic vision, political will and support at a high level of government. Building an NIS has been set as a strategic objective by the Armenian authorities who have undertaken concrete practical steps in implementing this objective. Importantly, this process is underpinned by a systemic understanding of innovation.

However, within this understanding of innovation, a narrow interpretation of innovation prevails, focusing on frontier (cutting-edge) technological innovation. Such a biased understanding is reflected both in the innovation policy mix and in the efforts to support NIS formation and implementation. As a result, a range of innovation-related activities are left out of the scope and coverage of the existing policy instruments. Ultimately, this reduces the overall effectiveness of the policy efforts and does not support the establishment of a full-fledged and efficient NIS.

Recommendation 2.1

The understanding of innovation should be widened to include also non-technological aspects. Emphasis should be put not only on cutting-edge technological innovation but also on the

introduction of technologies that may exist elsewhere but are new to the Armenian market as well as innovative processes and services. The authorities could:

- *Undertake an awareness raising campaign both among policy makers and other innovation stakeholders to promote a broader understanding of innovation;*
- *Review critically the innovation strategy with a view to identifying the main gaps in the current orientation that result from the prevailing narrow view of innovation;*
- *Develop an implementation plan for introducing supplementary components in the national innovation strategy and the related areas of innovation policy.*

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Strategic documents draw on key national assets such as the strong science base, the large Armenian diaspora and traditional national values such as education and skills. Special emphasis is put on components of the NIS that are seen as a priority (“NIS pillars”). Implementation relies on creating a self-enhancing momentum that builds on the demonstration effects of successful implementation; therefore, the strategy starts with areas that have a greater chance of success.

However, a number of building blocks and linkages that are vital for a well-functioning NIS are still non-existent. The most critical among these gaps are the poor linkages between education/science/R&D and industry. Also, innovation intermediaries and support institutions in the country are rather weak. Early-stage financing is practically non-existent. As a result, the local environment is not conducive to innovative entrepreneurship.

Strategic and policy initiatives demonstrate an understanding of the main constraints within the national context (small, land-locked economy with limited natural resources). The strategic aim of transforming Armenia into an R&D centre of multinational high-tech companies is well aligned with these constraints. However, greater focus needs to be assigned to the internationalization of Armenian R&D institutes and businesses by their integration into global value and supply chains.

Recommendation 2.2

The authorities should undertake a concerted policy effort to develop the building blocks and linkages that are currently missing in the NIS and are not targeted in the current strategic orientation. The following actions could be considered:

- *Carry out a critical analysis of key missing components of the NIS and prioritize them in terms of their importance for the efficient functioning of the NIS;*
- *Devise a supplementary medium-term action plan for further institutional development of the NIS;*
- *Design policy instruments targeting, specifically, the establishment and strengthening of now missing or weak linkages in the NIS;*
- *Incorporate an international dimension when addressing existing weaknesses, in particular with regard to industry-science linkages, innovation intermediaries and early-stage financing while also promoting the integration of Armenian R&D institutes and businesses into global value and supply chains.*
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Poor industry-science linkages constitute one of the weakest structural components of the Armenian NIS. The governance structure (split between the State Committee on Science and the Ministry of the Economy) de facto reinforces the disconnection between the two sub-sectors rather than

building bridges between them. On the other hand, Armenia has a strong science base in some areas which is not employed to its full potential.

Recommendation 2.3

The authorities should undertake a targeted policy effort to strengthen the industry-science linkages within the NIS both internally and across borders. Possible actions could include:

- *Designing specialized policy instruments that support innovation projects which cover the full innovation cycle from research to the market and which are conditional on collaboration between Armenian R&D institutes (including those within the National Academy of Sciences -NAS) and local businesses;*
- *Introducing initiatives that encourage collaborative R&D and innovation projects involving Armenian R&D institutes (including those within the NAS) and businesses from other countries. Possible joint schemes for promoting innovation could be discussed with potential foreign partners;*
- *Designing and putting in place policy programmes jointly run by the State Committee on Science (SCS) and the Ministry of the Economy to implement these instruments.*

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The disconnection between the governance of R&D and of innovation is part of a broader problem – the overall fragmentation of the Armenian NIS. There are too many bodies tasked with the implementation of different innovation support programmes, which often are very small. Fragmentation is an impediment both for conducting a coherent national innovation policy and for coordinating between the different bodies with responsibilities in the area of innovation support. In addition, the current role of the NAS in the national innovation governance system is somewhat ambiguous, being dependent on project R&D funding from the State Committee on Science (SCS) but without clear attributions in other stages of the innovation process.

Recommendation 2.4

The authorities should consider possible measures to streamline innovation governance structures, including:

- *Developing options for the gradual merger of those implementation bodies currently under the functional responsibilities of the Ministry of the Economy;*
- *Organising a public debate on the rationale of establishing a new public body governing both R&D and innovation which would take over the respective functions now undertaken by the SCS and the Ministry of the Economy*
- *Reviewing the functional role of the NAS in the NIS in order to improve its integration within the governance of innovation activities and its participation the commercialization of research results.*

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There is a strong dependence on innovation policy instruments supported by donor funding (both official aid and private sources), which is also a factor in explaining the programme's fragmentation. While donor aid has been instrumental in helping to initiate some funding programmes, such an orientation cannot be regarded as a sustainable long-term policy course. In addition, excessive reliance on aid in the NIS strategy carries certain risks such as those of aid addiction and possible capture by private interests.

Recommendation 2.5

The authorities should plan and implement measures for fully aligning with national priorities, all support programmes that are jointly run with donors while aiming to gradually reduce the relative share of donor funding within innovation support. The following actions could be considered:

- *Establishing clear criteria under which the government operates and co-finances, jointly with donors, innovation support programmes that support national strategic objectives;*
- *Reviewing innovation support programmes jointly with donors with a view to ensuring that they contribute to the achievement of national priorities and to the streamlining of innovation governance structures, avoiding excessive fragmentation;*
- *Developing options, as part of long-term budgetary objectives, for increasing the share of own public sources allocated to innovation support programmes in order to gradually reduce the reliance on donor funding.*

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Framework conditions, innovation policies and instruments

There has been significant progress in recent years in developing a legal framework for science and innovation and creating a number of supporting institutions. However, the impact of public initiatives is limited by the lack of an innovation culture in large parts of the business community, the science and education sector and public administration.

Recommendation 3.1

The public authorities should explore ways to increase general awareness of the importance of innovation. Possible activities could include:

- *Promoting successful business concepts and innovative companies as role models in the media and at national/international conferences, including with the support of the Armenian diaspora;*
- *Developing media campaigns encouraging an entrepreneurial spirit in higher-education and research institutions.*

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Armenia has developed a number of support initiatives seeking to promote innovation in the private sector. The Enterprise Incubator Foundation (EIF) is an effective tool, given its relative autonomy and its organizational/institutional proximity to the business sector which is the main target group. However, its coverage is in practice limited to the information and communication technologies (ICT) sector. The Technology Transfer Association is also a promising experience. The impact of public support is limited by low demand for innovation.

Recommendation 3.2

The authorities should strengthen efforts to increase innovation activities in the private sector, building on existing initiatives. The following actions could be considered:

- *Enhancing the role of the EIF as an autonomous and policy-oriented “one-stop” innovation support agency with a mandate that extends effectively beyond ICT;*
- *Introducing a large, self-standing and visible programme to support R&D and innovation in the SME sector. The programme should have a fixed annual budget and no thematic*

priorities. It should be administered under clear and understandable guidelines, application procedures and selection criteria;

- *Strengthening participatory elements in the design of innovation policies with the involvement of the private sector;*
- *Using regulations and standards to encourage innovation, for example, for energy saving;*
- *Strengthening the innovation capacity of the business sector through training on innovation management, R&D support, marketing and internationalization;*
- *Drawing lessons from the work of successful private initiatives like the Technology Transfer Association with a view to using this experience in other areas, such as low-tech innovations or non-technological innovations.*

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There have been significant changes in the institutional structure and funding mechanisms of public R&D in order to encourage commercialization. Further reforms would facilitate the commercial orientation of research and its transformation into innovation.

Recommendation 3.3

The authorities should continue ongoing efforts to strengthen applied R&D and commercialization activities in public research institutes, including through:

- *Increasing the competitive elements in the funding provided to institutes developing technologies with commercialization potential;*
- *Strengthening the role of the National Academy of Sciences in innovation, distinguishing between two its main missions: basic research and applied research, with increased amounts of funding coming from contract research for companies.*

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In order to improve policy design and implementation, it is essential to be able to monitor and assess the impact of policies. In Armenia, the poor statistical base and the limited evaluation culture make it difficult to obtain a clear picture of technological capabilities and this poses clear challenges for evidence-based policymaking.

Recommendation 3.4

The authorities should devote efforts to improving the statistical system and introducing robust policy evaluation methods, so that decisions can be grounded on a solid empirical basis. The following directions could be considered:

- *Aim to adopt international standards regarding R&D and innovation statistics;*
- *Implement an ongoing monitoring and evaluation system, at least for the most important innovation support schemes, which is transparent, coherent and comprehensible. There should be feedback from this evaluation to those designing policy and implementing. As a result, weak programmes should be modified or discontinued;*
- *Develop “strategic intelligence” using foresight and scenario exercises, technological roadmapping and external evaluations.*

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Knowledge generation and support institutions

Armenia's development options are closely linked to the concept of a knowledge-based economy because the country does not possess natural resources and, due to its geographical position, faces higher transportation costs. Armenia's main assets are the skills of its labour force. However, neither the current education system nor the system of vocational training is geared to the challenges posed by a development path that needs to rely on human capital. Despite some good training initiatives, companies encounter difficulties in finding qualified staff.

Recommendation 4.1

The education system requires reforms that ensure the relevance of knowledge and its dissemination through the economy. The authorities could consider:

- *Modernising and evaluating curricula in order to ensure that the skills of its graduates correspond to the needs of technologically-driven growth. This is a medium-term target that should be embedded in a suitable strategy;*
- *Improving teacher training, particularly in the higher education sector, including through a programme of competitive grants to facilitate internationalization and access to foreign good practices;*
- *Differentiating between research and vocational universities, establishing separate objectives and evaluation methods for these two groups. Some R&D institutes could be integrated into research universities. Close linkages between both types of universities and R&D institutes should be established through doctoral and other education programmes;*
- *Strengthening the links of vocational universities with the business sector, including foreign firms.*

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R&D expenditures are very low for supporting innovation-based competitiveness. The lack of data makes difficult to establish a clear picture of the situation regarding R&D spending and innovation activities, particularly in the critical business sector. In addition to low R&D, shortcomings in engineering and innovation management constrain the innovation capacities of firms. Low demand for innovation does not create incentives for technological upgrading among companies.

Recommendation 4.2

The authorities should aim to increase innovation activities in the country through a number of concerted actions that could include:

- *Increasing public R&D spending and, in particular, encouraging higher spending in the business sector;*
- *Harmonizing R&D statistics with international standards and introduce innovation statistics, with appropriate coverage of the business and enterprise sector. Current twinning programs in this area should be extended and Armenia should seek the assistance of Eurostat;*

- *Improving the innovation capacities of firms through support to engineering and innovation management including through quality improvement programmes like those for implementing ISO9001 standards, ISO14000 environment standards and industry specific international standards (such as Capability Maturity Model (CMM) Certificates);*
- *Introducing innovation vouchers for the purchase of a wide range of innovation services to encourage innovation activities in SMEs and facilitate bridging the gap between the research sector and SMEs;*
- *Using public procurement as a mechanism to promote technological upgrading while addressing the needs of government agencies for solutions that meet their needs. The programme should provide early-stage financial support to high-risk innovative technology-based small firms with commercial promise, following the example of the US Small Business Innovation Research (SBIR) programme.*

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There has been some restructuring of the R&D system, including mergers between some research institutes. However, more extensive changes are required to ensure that the necessary increases in innovation investments are absorbed in an effective way.

Recommendation 4.3

The authorities should provide a better basis for the allocation of resources to R&D by considering the following measures:

- *Restructuring the system of R&D institutes, including through the reorientation of some of them to become technical institutes supporting knowledge-intensive SMEs. These institutes should rely on a combination of public and commercial funding and cooperate closely with technoparks;*
- *Evaluating R&D on the basis of multiple criteria, reflecting the diverse functions of different organisations. In addition to international excellence, which should be applied primarily to some selected institutes with links to the education system, local relevance should also be taken into account;*
- *Introducing international evaluation of R&D organisations, which should serve as a basis for the integration of university R&D departments and R&D institutes and the gradual increase of education expenditures.*

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Foreign direct investment (FDI) in Armenia is mainly driven by getting access to the market rather than increasing efficiency. There are some positive experiences where foreign companies have developed a network of local suppliers and contributed to technological upgrading. However, the potential of FDI to contribute to innovation and technological change throughout the economy remains largely untapped.

Recommendation 4.4

In order to maximise the impact of FDI on technological upgrading, the authorities could consider:

- *Integrating FDI and innovation policy to promote a shift towards FDI in technology, engineering and business support service centres. This would require coordination between the different agencies involved in policy design and delivery in these areas;*
- *Developing a programme to promote subcontracting as part of FDI support, so foreign companies incorporate Armenian suppliers in their value chains. The programme should include medium-sized and large companies (integrators) and SMEs incorporated in Armenia. Integrators should monitor the implementation of the programme and encourage cooperation among participating companies. Funding should be provided on a matching basis to assist potential suppliers in raising their quality and productivity levels.*

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Industry-science relations and collaboration in the innovation process

Linkages between science and industry are rather poor. Successful commercialization of research could bring important benefits for performing organisations and the overall Armenian economy, including an increased ability to retain scientific talent and the upgrading of scientific capacities. Improving industry-science links (ISL) requires the coordination of multiple policies, including those regarding science, innovation, foreign direct investment and industrial development. Transparency in all programmes and calls for tenders are crucial for their success.

Recommendation 5.1

Innovation policy should emphasise the importance of ISL and introduce relevant programmes to improve the current situation. Public initiatives could include:

- *Developing instruments that target links between industry and science, where the provision of public financing depends on the existence of collaboration;*
- *Encouraging higher-education graduates to establish start-ups, so new firms linked to science emerge;*
- *Co-designing FDI policy and science, technology and innovation policy to attract more foreign investors employing Armenian scientific assets;*
- *Promoting cross-border linkages between Armenian science and innovative foreign companies, thus creating a source of income and facilitating access to global networks of knowledge.*

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Despite some progress, the science and innovation management capabilities are still weak in all the relevant organisations (business, research institutes, and public administration). The new intellectual property rights (IPR) legislation provides good opportunities to manage commercialization of research results but technology transfer functions are not well defined and organised in scientific organisations. There is a need to substantially upgrade management capabilities in order to support research commercialization. Building up ISL is a time-consuming, costly and risky process. Public support is necessary to overcome shortages of skills and financial resources and to facilitate the development of appropriate strategies in relevant organisations.

Recommendation 5.2

Substantial public support is required to promote ISL at the initial development stages, because initial public funding is necessary before technology transfer activities can become profit-making. In order to encourage the development of the necessary capacities and facilitate commercialization, the authorities could consider:

- *Facilitating the development of technology transfer functions/offices within scientific organisations, including through training on licencing and research contracts and intellectual property related issues;*
- *Designing a scheme to support patenting which includes advice on whether to seek international protection and grants to partly cover the associated costs;*
- *Strengthen the capacity of the Intellectual Property Agency to offer broader services to its clients.*

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The current legal framework does not support or encourage closer industry-science linkages. Scientific organisations do not have sufficient autonomy to engage in commercial activities. In addition, there are no clear regulations that would facilitate the effective use of the autonomy that has been granted. The absence of guidelines creates a vacuum that puts an additional burden on research organisations when trying to develop these linkages.

Recommendation 5.3

The authorities should extend the economic autonomy of high-education institutions (HEI) and National Academy of Sciences research institutes undertaking the necessary legal reforms while encouraging them to develop internal regulations concerning technology transfer. The legal reforms could include:

- *Harmonising the Law on HEI and the Law on State non-commercial organization in order to remove factors creating legal burdens for ISL;*
- *Providing equal opportunities to different organizations to revise their Charters so they can engage in entrepreneurial activities;*
- *Putting in place an appropriate framework for the creation of spin-off companies emerging from research and education organisations, addressing clearly all the relevant issues;*
- *Developing guidelines on intellectual property issues to be included in employee contracts and guidelines on the management of technology transfer offices.*

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Science-industry linkages are influenced by the level of economic development and the historical and institutional traditions of individual countries. Armenia can learn from advanced countries but also from successful developing economies and, in particular, from other countries with economies in transition. However, these lessons cannot be applied without a deep understanding of the national situation. A systemic review of the current legislation and the existing practices on industry-science linkages (ISLs) is necessary to identify the main barriers and opportunities and assess the impact of policies. Armenia has been gradually introducing the evaluation of research organisations which is a good starting point.

Recommendation 5.4

Evidence-based policy-making and the development of a strategy for research organisations requires well-developed evaluation initiatives. The authorities should promote both internal and external evaluation of government agencies and research organisations according to the following principles:

- *The results of evaluation should lead to decisions on strategy formulation and policy changes, with clear impact on the allocation of financial support;*
- *Evaluation of scientific organisations should be carried out on a periodic basis, covering scientific performance, scientific assets, physical and human capabilities, governance and management, and linkages with industry;*
- *Technology transfer offices which receive state support should be evaluated after five years of operation to assess whether such assistance should continue.*

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Financing of innovative entrepreneurs

There are multiple initiatives to support, directly or indirectly, innovative entrepreneurship in Armenia. Anecdotal evidence shows that some of them are quite successful. However, there is limited data to assess current trends regarding entrepreneurship in Armenia or the impact of the measures that are being undertaken. Potential beneficiaries are also not fully aware of the different ways in which they can find support. This general lack of information severely constrains the ability to design effective policies to encourage innovative entrepreneurship.

Recommendation 6.1

The authorities should make efforts to develop better information regarding entrepreneurship and support initiatives, which should be widely shared. The following actions could be considered:

- *Drawing lessons from entrepreneurship support initiatives, identifying good practices, the factors that explain their success and the conditions required to scale-up or expand the scope of these initiatives. This would require a strengthening of analytical capacities and the development of robust impact evaluation methodologies;*
- *Joining the Global Entrepreneurship Monitor surveys which would serve as a good base to make comparisons between business activities across time and in relation to other countries. These data would facilitate analytical and evaluation efforts;*
- *Developing information and awareness campaigns, with the support of entrepreneurs associations and other stakeholders, to ensure that potential beneficiaries know about potential forms of support and how to access them.*

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Initiatives to support entrepreneurship have different targets and are implemented by different agencies. This fragmentation partly reflects attempts to address the needs of different clients. However, the dispersion of initiatives and the lack of connection between various programmes fails to provide the necessary strategic direction to the efforts to support entrepreneurship and fails to create synergies in the implementation of programmes.

Recommendation 6.2

The authorities should strengthen their efforts to provide a strategic orientation for entrepreneurship support. The following actions could be considered:

- *Defining strategic targets, which are regularly evaluated and updated. The implementation of the strategy should envisage clear responsibilities, allocation of resources and coordination mechanisms;*
- *Involving beneficiaries and other sources of expertise, such as the diaspora, in the elaboration of the strategic orientation;*
- *Setting up a body which would have clear responsibilities and competencies for implementation and monitoring of the strategy;*
- *Identifying synergies and complementarities among various programmes. Coordinated approaches should introduce schemes that build on previous experiences or seek to complement different programmes.*

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The Armenian diaspora is a potentially important resource for the development of entrepreneurial activities in the country. It provides access to external knowledge networks that can support the internationalization of domestic companies. Members of this diaspora, who have become successful entrepreneurs abroad, can contribute both expertise and financing to the development of new ventures in Armenia, while helping them to overcome the limitations of the domestic market.

Recommendation 6.3

The authorities could explore further ways to tap into the potential of the Armenian diaspora to support innovative entrepreneurship in the country. The initiatives that could be considered include:

- *Awareness and information campaigns targeting the diaspora on existing and planned research programmes as sources of potential business opportunities;*
- *Development of a framework for business angel financing which takes into consideration cross-border aspects, so it can attract resources from the diaspora;*
- *Involving the diaspora in the design and implementation of mentoring and coaching schemes for entrepreneurs and, in particular, those originating from educational and research organizations.*

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The role of innovation in international economic integration

Armenia has limited natural resources and a small domestic market. Opportunities for trade with neighbouring countries are limited by transport and geopolitical factors. Production and export of innovative goods is rather limited. These challenges require focussed efforts to enhance the contribution of trade to the innovation capacities of the country.

Recommendation 7.1

The authorities should develop initiatives to increase and support the potential of trade to improve innovation performance in the country, building on existing efforts. They could consider:

- *Extending the existing strategy for export-led growth to include other knowledge intensive sectors beyond information and communication technologies (ICT). Promising sectors should be identified systematically through appropriate screening, the assessment of potential niches and foresight studies. Specific sector strategies should be elaborated and implemented;*
- *Identifying and prioritising sectors where the procurement of innovative goods and services from abroad is more needed in order to facilitate access to these goods and services;*
- *Improving the linkages between companies from promising export sectors and research organisations, including through support to joint projects that serve to better use the research potential and encourage collaboration.*

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The Armenian diaspora is a strong asset for the development of the country, being a source of financing, expertise and contacts. There are multiple initiatives in the country which enjoy the support of members of the Armenian diaspora, including in areas relevant for innovation such as the relatively knowledge-intensive ICT sector, education and research. Further initiatives should be developed to build on existing achievements.

Recommendation 7.2

The authorities should continue the promising efforts to involve the diaspora in innovation-related initiatives in line with national priorities. In particular, the following measures could be considered:

- *Developing mobility schemes for temporary stays of diaspora researchers in Armenia and establish international research groups between diaspora researchers and colleagues in Armenia;*
- *Targeting, in particular, cooperation with diaspora researchers who are active in applied research and have good experience with innovation;*
- *Attracting students from the diaspora communities to study in Armenia through enhanced information and promotion measures.*

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The university sector can attract foreign students. Competitive advantages include moderate living costs, affordable student fees and well established teaching reputations in some areas like medicine. Good efforts have been made to make degrees comparable and recognised internationally through links to US and Russian universities, and by joining the Bologna process. In a competitive landscape, developing existing potential and preserving current strengths requires further efforts.

Recommendation 7.3

In order to tap into the potential offered by the internationalization of education, the authorities could consider the following initiatives:

- *Improving the quality of education, through upgrading of equipment, investment in infrastructure, and curricula development, including through cooperation with international partners or companies;*
- *Addressing the educational needs of particular industry branches, in cooperation with industry representatives, building on the experiences of the ICT sector;*
- *Broadening the efforts to attract foreign students beyond medicine to include other promising areas such as natural sciences.*

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Armenia embraces and encourages international R&D cooperation. There have been efforts to internationalise evaluation, including the establishment of a database of diaspora scientists. Instruments to support bilateral R&D so far concern mainly small-scale mobility of researchers. Some international grant programmes have been discontinued or reduced, with the main source of international funding being the EU Seventh Framework Programme (FP7). Association to the EU's Horizon 2020 programme has been envisaged. The experiences of CIS countries can be a source of valuable lessons when designing and implementing innovation instruments. The Commonwealth of Independent States (CIS) Innovation Programme would provide new cooperation opportunities with countries that share common problems and enjoy strong cultural and scientific links. However, specific skills need to be developed to take advantage of the opportunities created by international cooperation.

Recommendation 7.4

In order to reap the benefits of international cooperation in research and innovation, the authorities could contemplate undertaking the following initiatives:

- *Prioritising research and innovation in Armenia's cooperation with the EU, leading to more intensive use of instruments such as the European Neighbourhood and Partnership instrument, the Technical Assistance and Information Exchange instrument (TAIEX) and twinning;*
- *Developing skills and mechanisms to make good use of the opportunities opened by a possible association to the EU's Horizon 2020, including information and training for researchers and innovators, matchmaking and networking and use of mobility programmes to prepare Horizon 2020 projects;*
- *Joining EUREKA and EUROSTARS and participating in selected European Research Area Net (ERA-NET) projects and other EU instruments;*
- *Building closer links with the innovation agencies of the countries of the Customs Union (Belarus, Kazakhstan and the Russian Federation), including the possibility of developing bilateral funding instruments with these agencies;*
- *Studying the experience of other CIS countries in innovation support, in particular in areas such as start-up funding, attracting remittances for public-private co-funding schemes, technology transfer and innovation vouchers.*
- *Screening the participation in international programmes and informal research cooperation in order to identify niches of excellence and the existence of competitive teams in certain areas. This screening should be the basis of a strategy to nurture and develop these niches;*
- *Upgrading infrastructure and equipment to make domestic research institutions more attractive for international research cooperation.*