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**Economic Commission for Europe****Committee on Innovation, Competitiveness and Public-Private Partnerships****Team of Specialists on Innovation and Competitiveness Policies****Informal consultations**

27 October 2020

Item 3.b of the provisional agenda

**Findings and policy recommendations of the Innovation for Sustainable Development Review of Georgia****Results and policy recommendations of the Innovation for Sustainable Development Review of Georgia****Note by the secretariat****Summary**

The objective of this paper is to present the findings and policy recommendations of the Innovation for Sustainable Development Review of Georgia, following validation by a peer review process including both national stakeholders and international experts.

**Background**

1. UNECE began a programme of Innovation Performance Reviews in 2010. Armenia, Belarus, Kazakhstan, Tajikistan and Ukraine underwent such reviews, released as official UN publications. These reviews are country-led and participatory, where international experts assess the national innovation system, policies, institutions and propose a set of policy recommendations for further improvements for reforms. Following an international peer review and publication, UNECE works with the country to support subsequent reform efforts. The methodology has been updated to reflect the Sustainable Development Goals (SDGs), and UNECE Innovation for Sustainable Development Reviews have been completed and published for Belarus and Kyrgyzstan.
2. The delegation of Georgia expressed its interest in an Innovation for Sustainable Development Review at the 11<sup>th</sup> session of the UNECE Team of Specialists on Innovation and Competitiveness Policies held in Geneva 1-2 November 2018, which was included in the inter-sessional implementation plan and endorsed by the 13<sup>th</sup> session of the UNECE Committee on Innovation, Competitiveness Policies (Decision 2019 - 4a.5) held in Geneva 25-27 March 2019. Georgia selected two topics for in-depth chapters: “Public procurement and financing as drivers of innovative development” and “Innovation and growth dynamics in Georgian enterprises”.

3. Extrabudgetary support for the implementation of the Innovation for Sustainable Development Review of Georgia was provided by the Swedish International Development Cooperation Agency (Sida).

#### **Status of the Project**

4. The process involved a preparatory mission to the country by UNECE secretariat in May 2019, followed by a fact-finding mission with international experts in November 2019. The planned peer review meeting was, due to COVID-19 travel restrictions, replaced by an extensive, virtual peer review process in April-June 2020 involving national stakeholders and international experts. The Review will be launched in the country and issued as an official UN publication in December 2020. The UNECE secretariat thanks the Government of Georgia and, as national focal point, Georgia's Innovation and Technology Agency (GITA) for its continuous support during the review process.
5. An advance version of the UNECE Innovation for Sustainable Development Review of Georgia will be launched at a high-level webinar that is planned for 9 December 2020.

#### **Central findings**

##### *Economic overview and innovation performance*

6. Georgia is a small, open economy with an impressive recent growth record, although productivity has slowed in recent years which underscores the need for innovation to diversify and upgrade. Georgia became a star performer after the 2003 revolution, but faces vulnerability to external shocks, including through reliance on relatively high levels of remittances. Georgia has opened its borders to trade and investment and become a vibrant trade hub attracting significant inflows of foreign direct investment (FDI). Areas for attention include diversification to reduce reliance on exports of a limited number of commodities and investment in transport infrastructure, where several initiatives are planned.
7. Innovation is emerging as the driving force for long-term sustainable development. This has been strongly supported by a favourable business environment that encourages investment and business creation. As in many peer countries there are low levels of Gross Domestic Expenditure on Research and Development (GERD) as a share of Gross Domestic Product (GDP), fragmented across a large number of areas. Business sector research and development (R&D) capacity and investment is even more marginal. Government plans to double spending on education by 2022 present a unique opportunity to develop critical areas of competence, but it will be crucial to get these decisions right, and to strengthen industry-science linkages. Investment in information and communication technology infrastructure will be critical to bridging the digital divide.
8. The UNECE assessment, "The impact of COVID-19 on Trade and Structural Transformation in Georgia",<sup>1</sup> shows that the Government's measures to mitigate the impact of the COVID-19 pandemic were among the very most successful in the ECE region. The economic fallout is however considerable, representing a threat to previously planned economic reforms and putting significant pressure on SMEs and self-employed workers with limited savings. Other studies show that the informal economy, as well as the service sector more broadly, are all highly dependent on consumer demand and with few options for teleworking are particularly vulnerable. Innovation will be central to help Georgia build back better after the crisis.

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<sup>1</sup> <https://www.unece.org/index.php?id=55225>

***Innovation ecosystem and its governance***

9. There is a need for closer coordination of science, innovation, and private sector development policies and institutions. This could include streamlining the top innovation governance structure at the national level coordinating and monitoring science, technology and innovation (STI) policies across departments to maximise their cumulative effect and strategic coherence. To fill the essential role of policy co-ordination at the political level, the Research and Innovation Council (RIC) could be transformed into an efficient and adequately resourced body supported by a Secretariat mandated to coordinate science, technology, and innovation (STI) policy design and implementation and make decisions regarding the allocation of financial resources. The RIC would also be responsible for innovation foresight exercises.
10. Policy coordination at the operational level is equally important. An initial step in this direction would be the creation of funding instruments jointly operated by GITA and the Shota Rustaveli National Science Foundation, including innovation and technology upgrading project grants covering the full innovation cycle, from R&D to developing new products and services and bringing them to the market. These would be a key policy instrument of a reformed RIC. Such funding instruments should define and target collaborative linkages among innovation stakeholders.
11. There is a need to provide sufficient institutional funding for public research institutes and other R&D-performing organisations to secure continuity of institutional capabilities and readiness. Georgia is advised to channel resources increasingly to project-based funding and target linkages and commercialisation of results more prominently.
12. A leading constraint to innovation in Georgia is access to external finance – especially for inherently risky innovative initiatives. Several programmes aim to mitigate this gap, such as the Georgia National Innovation Ecosystem (GENIE) project at GITA, through direct financial support for innovative start-ups. However, as in many peer economies, there is significant weakness in the availability of venture capital funding, especially for scale-up. There is a need to enable and catalyse the growth of the private and public risk capital eco-system and market, including venture capital and business angel investment, to address the seed and early-stage development gap of innovative start-ups.
13. Despite relatively high levels of educational attainment, shortages of the right skills constitute one of the leading constraints to private sector innovation. The high-level policy commitment to increased public investment in education can be combined with measures to target additional investment to support sustainable development. The financial situation of teachers and researchers should be improved at the same time as pushing for higher quality standards and further alignment with private sector needs.

***Industry-science linkages and collaboration in the innovation process***

14. There is a pressing need to analyse and develop measures to enable and enhance industry-science linkages, which require further development. There should be a series of measures aimed at incentivizing universities and research centres to engage in industry-science cooperation. Legislative reforms have potential to increase the flexibility of employees and students at public universities and research institutes to start their own ventures building on research results. Part of the premises of the Georgian National Academy of Sciences (GNAS) could serve as a joint GNAS-GITA match-making space for industry-science collaboration – a prototype for the future market for knowledge and technologies. Several grants and subsidies could target and reward joint, potentially path-breaking initiatives between the private sector and research institutions. There needs to be better and systematic monitoring and coverage of business-science innovation collaboration in the national statistics to measure the impact of reformed or new policies and support mechanisms.

***Public procurement as a driver of innovation***

15. Low demand for innovation is a central weakness in Georgia’s innovation system. Public procurement provides the most immediate policy lever to increase demand and promote experimentation with potential positive spill-over effects. In the longer term, increasing product and service standards may boost demand for innovation across public and private sectors. Functional procurement should be used to the greatest extent possible or, where not feasible, such as in cases of small-scale procurement, adequate quality and compliance standards will be important to drive innovation into the procurement process.
16. Innovation-enhancing procurement implies mainstreaming a shift in the fundamental approach to government purchasing. Rather than specifying the technical solution and related details, tenders could clarify and quantify the underlying objectives, impact, and related performance indicators. This would allow bidders to come up with innovative solutions to meet and achieve them. This is also important from the perspective of environmental sustainability: including environmental standards and performance indicators, as well as allowing for experimentation with technology and ideas to meet them. Such experimentation will be central for ambitions such as green public procurement, the circular economy transition – and the SDGs overall.
17. Putting this into practice requires small-scale pilot demonstration projects that serve as experiments to be benchmarked against traditional procurement as “control groups” for delivering similar public services. Success stories can then be scaled up, with innovation-enhancing procurement (IEP) applied to a growing number of areas of public procurement – while gradually building the skills, capacities, and institutions needed.

***Innovation and growth dynamics in Georgian enterprises***

18. The leading constraint faced by Georgian enterprises expanding their activities and innovating is a lack of capabilities to identify, appraise, use and improve on technologies, production processes, and business models needed to increase efficiency and diversify production. Market support institutions in Georgia comprise a system of business and industry associations, which work alongside the chambers of commerce. The system also features two specialized State agencies, GITA and Enterprise Georgia, with an explicit mandate to support enterprise development. This system of market support institutions could play an important role in helping Georgian enterprises overcome this constraint and bridge the gap between policy and implementation. Current support services are insufficiently adapted to enterprises’ development needs. These needs include clarity on regulatory requirements: local and international demand and growth opportunities in regional and global markets, as well as networking opportunities with national and regional partners. Insufficient support for enterprises to comply with environmental, quality and safety standards is another constraint, and undermines the private sector’s ability to benefit further from trade opportunities, such as those associated with the Deep and Comprehensive Free Trade Area (DCFTA) with the European Union (EU) as elaborated in the UNECE study on regulatory and procedural barriers to trade in Georgia.
19. The recommendations suggest a consolidated and coherent system of support and incentives across the macro-level of policy, the industry level and the meso-level of institutions. In addition, sector-focused interventions would enable companies to experiment with new ideas, technologies, products, services, and business models. This exploration process is the driving force for positive structural transformation and specialisation in the higher value-added activities that will ultimately help Georgia attain its ambitious objectives under the SDGs.
20. Draft policy recommendations are included in the Annex to this document.

## Annex

### Draft policy recommendations of the Innovation for Sustainable Development Review of Georgia

#### Part II Innovation ecosystem and interactions in the innovation process

*Chapters 1 and 2 provide an overview of the economic and innovation performance of Georgia and do not contain detailed policy recommendations.*

#### Chapter 3 Innovation Governance and Policies

**Recommendation 3.1: Turn Hard Choices into Opportunities** – *Adopt a Government strategy articulating how science, technology and innovation will support the country's overall sustainable development priorities through new products, services and production processes that generate the foundation for long-term sustainable and inclusive growth.*

- Adopt a National Innovation Strategy as a comprehensive, cross-ministerial guiding document at Government level and incorporating in a horizontally coordinated manner the related activities of all major national authorities engaged in ST&I policy design, implementation, monitoring and evaluation;
- To inform and, on a regular basis, update the National Innovation Strategy, set up a process of identifying a limited set of realistic national ST&I priorities for the medium- and long-term aligned with Georgia's overarching sustainable development priorities;
- As part of the strategy, align priorities in education, science and innovation, and private sector development with a key role for SME policy;
- Reflect in the strategy the role of social policies to both support innovation and mitigate potential negative, short-term effects resulting from the structural changes of the economy that innovation will bring about – including education policies to support life-long learning and retraining for those whose jobs become redundant; as well as social protection and welfare policies;
- Organise regular foresight exercises to update the Innovation Strategy;
- Request technical assistance from international development partners during the strategy development, as necessary.

**Recommendation 3.2: From Silos to Synergies** – *Streamline the top innovation governance structure at the national level coordinating and monitoring ST&I policies across departments to maximize their cumulative effect in putting the National Innovation Strategy into practice.*

- Reorganize the Research and Innovation Council (RIC) with a view to transforming it into an efficient and adequately resourced body mandated to coordinate the ST&I policy design and implementation.
  - The level of representation at the new RIC would be at the Prime Minister's Office, as well as deputy minister level of line ministries with functional responsibilities in managing ST&I activities;
  - Under this structure, subordinate working level bodies would provide regular and more frequent oversight and guidance on specific remits;
  - A well-resourced secretariat would be needed to support the functioning of the RIC and the operationalization of its coordination and monitoring activities.
- Mandate and authorize the new RIC to
  - Support and drive Government strategic decision and policy making, in particular by developing the draft National Innovation Strategy and other key ST&I policy documents;
  - Perform day-to-day coordination of the implementation of ST&I policy across all public bodies and oversee the allocation of resources earmarked for this purpose in accordance with the respective regulations;
  - Organise foresight and smart specialisation exercises for identifying and updating policy priorities and the strategic directions of ST&I activities in Georgia;

- Hold regular meetings that ensure timely decisions and prepare regular reports on its activity (including problems in policy implementation that it has identified), to be submitted to the Government for decision.
- Develop a comprehensive set of tools and processes to monitor and evaluate the impact of policy interventions on a regular and transparent basis, with the clear aim to identify what is working and what is not and adapt policies and redirect resources accordingly.

**Recommendation 3.3: Turn Intentions into Actions** – *Ensure stable public funding sufficient to effectively implement policies intended to stimulate innovation in line with the innovation strategy.*

- Increase the overall level of funding for science and innovation, both by increasing funding for policy support from public budgets and by strengthening policies that crowd in private investment, including from abroad;
- Increase the efficiency of funding through clear performance objectives and regular, multi-level monitoring and evaluation of outputs, outcomes, and impact, with a view to continuous readjustment of spending and priorities towards the most effective interventions;
- Match budget allocations to overarching strategic priorities;
- Within the overall funding envelope for pursuing the objectives of the National Innovation Strategy, ensure that each implementing entity receives adequate funding in order to prevent implementation gaps and include adequate funding in medium-term multi-year Government budget plans in order to ensure policy continuity and predictability;
- To provide continuity in innovation policy delivery, ensure that the highest impact GITA innovation support instruments and programmes can be sustained and expanded, including once donor-supported projects such as GENIE are completed, following impact evaluation;
- Create room in the budget to adequately fund the additional innovation policy measures recommended in this report to cover the entire innovation cycle;
- Identify areas and programmes where funding can be re-allocated to target more effectively truly innovative activities that would not happen without public support.

**Recommendation 3.4: From Islands of Excellence to Innovation Ecosystems** – *Create a suite of coordinated policies across the entire innovation cycle (from knowledge generation through market commercialization) that nurture an environment in which science, entrepreneurs and established firms can thrive in developing and scaling innovative solutions addressing strategic priorities.*

- Ensure greater alignment between the existing policy instruments of Enterprise Georgia, GITA and SRNSF in line with the innovation strategy;
- Identify priority areas to allocate scarce resources where new policy instruments should be created, or existing ones should be expanded, including:
  - Instruments supporting science-industry collaboration (Chapter 4);
  - Early stage financing instruments for innovative small businesses (such as start-up grants, credit guarantees and equity instruments, among others);
  - More generous tax relief for business R&D expenditures;
  - Recognition instruments (such as, for example, competitions among the industry for best innovative products and services) for motivating the business sector to innovate;
  - Public measures for strengthening the demand for innovation, including through public procurement (Chapter 5);
  - Funding programmes for R&D and innovations, including mission-oriented innovation, addressing so-called grand societal challenges emerging from Georgia's national sustainable development policies.
- Ensure that innovation governance arrangements include a platform for interagency consultations on the design and implementation of the new policy instruments supporting innovation activity.

**Recommendation 3.5: Turn Inventions into Innovation** – *Support entrepreneurs and investors in undertaking high-risk technology-frontier innovation projects through policies that share risks and crowd in private innovation finance.*

- Further strengthen the capacities of the network of incubators, accelerators and science parks;

- Provide targeted support to the development of existing organizations such as Georgian Business Angels Association and the Georgian Venture Capital Association and the expansion of their activities;
- Design and put in place tax incentives (such as exemption from income taxes on investment dividends), for business angels operating in the Georgian market;
- Develop and put in place targeted incentives (such as risk capital guarantees) to attract foreign venture capital investors to operate in Georgia;
- Consider establishing a publicly supported venture finance institution and invite experienced venture capital managers to run it as a private or hybrid venture capital fund, which could be based on the existing GITA venture capital grant scheme.

**Recommendation 3.6: From Subsistence to Competitiveness** – Strengthen business sector capacity, including in SMEs and enterprises in rural areas, to develop, adopt and adapt productivity-enhancing innovations, including those already proven elsewhere, and to move up the value chain.

- Raise awareness about, and support training for Georgian companies to acquire international quality certifications;
- Develop and strengthen the network of independent testing laboratories that can certify that Georgian exports meet international quality standards;
- Expand efforts to attract innovative, diversifying, and efficiency-seeking FDI, with a focus on creating supply opportunities for Georgian companies as well as other positive spillover effects;
- Strengthen the incentives and capacities of Georgian companies to absorb more advanced technology, including through
  - Expanded matchmaking services to help Georgian companies in finding international partners for technology upgrading;
  - Expanded training for entrepreneurs and SMEs in innovation management and technology;
- Provide policy support to young people, women, and entrepreneurs from disadvantaged groups;
- Localise policy support by creating or strengthening outposts of implementing agencies (including Enterprise Georgia), catering to local needs; support local entrepreneurs in identifying their local development niches; entrepreneurship in agriculture and food processing can be a specific target of this support scheme, given both the strong potential of this sector and the current low levels of productivity.

## Chapter 4 Industry-Science Linkages

**Recommendation 4.1: From Science Push to Science Industry Partnerships** – Mainstream industry-science linkages as a strategic priority for ministries and agencies responsible for scientific research and education and for private sector development, respectively, in line with the national innovation strategy and governance structure.

- Engage the business sector in defining national ST&I priorities in the proposed National Innovation Strategy, focusing on setting up a system that systematically explores and supports areas where both the business and science sector can join forces to reach a higher level of development;
- Support cluster development, with strong elements of science-industry cooperation, as part of instruments for supporting these ST&I priorities, built around promising industries or locations, such as the Anaklia Free Zone;
- Identify pilot projects for business-science collaboration in promising niches building on potential competitive advantage and sustainable development priorities, and launch them with coordinated public support to create demonstration effects;
- Allocate adequate public resources in the state budget, either by adapting existing or creating new instruments, for stimulating industry-science collaboration through relevant policy instruments;
- Specify concrete and measurable objectives for industry-science links in future strategic policy documents such as the Socio-Economic Development Strategy, the Education & Science Strategy, the proposed National Innovation Strategy, the Smart Specialization Strategy and other relevant documents;
- Complement the current National Innovation Survey with indicators explicitly addressing science-business linkages, covering different modes of cooperation and constraints faced;
- Establish a monitoring system for universities and research centres representing the supply and focusing on the output-side of innovation and the respective contribution of the institutes;

- Select output indicators for GITA and SRNSF current and future grants and other schemes as statistical information that beneficiaries would be required to submit during and after project implementation to be used for evaluating the results/outcomes of the different funding projects based on overall, measurable performance metrics at the programme level, as well as qualitative evaluation elements (for example, case studies of research-business collaborative projects, interviews);
- Compile annual Innovation Performance Reports of Georgia with analytical results complemented by selected successful case studies of joint research to be shown to the broader public and used as role models;
- Undertake a targeted awareness raising campaign among Georgian businesses and researchers using success stories of business-science cooperation to illustrate the potential for mutually beneficial cooperation with the science sector.

***Recommendation 4.2: Learning to Work and Working to Learn*** – Include innovative entrepreneurship and skills sought after by innovative companies into curricula and enable two-way knowledge flows between scientific institutions and industry through occupational mobility and life-long learning opportunities.

- Provide incentives for professors and academic scientists to cooperate with the business sector, for example, by incorporating successful cooperation as a criterion into hiring, promotion and tenure decisions and removing or mitigating regulatory or legal obstacles or disincentives for doing so;
- Support the temporary or part-time exchange of R&D staff between business and science institutions (“embedded scientists”); publicise and regularly exchange good practices from the experience made with such instruments;
- Promote and enable broader and systematic use of internships and student work programmes at innovative companies and integrate this into university curricula;
- Provide financial support to kick-start the involvement of industry scientists and entrepreneurs in teaching at scientific institutions;
- Extend the above support also to knowledge and staff exchanges with foreign companies and scientific institutions;
- Align existing and develop new measures aiming to further mobilise the potential of women in science, technology and innovation, including:
  - Promote science, technology, engineering, and mathematics (STEM) among women (through scholarships, apprenticeships, career development);
  - Strengthen policies to improve access and representation for women among senior research and management positions;
  - Improve gender-disaggregated statistics to inform policies aimed at supporting women in science, technology and innovation.

***Recommendation 4.3: From the Lab to the Market*** – Enable, catalyse, and support commercialization of research results (through, inter alia, start-ups, spinoffs, and licensing contracts based on applied research).

- Consider legislative changes aimed at increasing the flexibility of public universities and research institutes as well as their employees to start their own ventures or act as stakeholders in ventures aiming to exploit the potential of their research;
- Facilitate the establishment and development of FabLabs and ILabs at Georgian universities by providing support to management assistance and entrepreneurship training; support the exchange of experiences and good practices in operating the Labs;
- Provide public support for research-business collaboration in joint projects; establish or strengthen technology transfer offices at Georgian universities and research centres; develop a culture of “innovation scouting” as an integral part of the capacity of technology transfer offices; technical assistance could be requested from international development partners to build capacity for innovation scouting;
- Consider the establishment of a national technology transfer office that would coordinate and support the activities of the decentralised system of technology transfer offices at universities and research centres.

***Recommendation 4.4: Collaboration for Competitiveness*** – Support contract research and joint applied research projects between existing companies and scientific institutions to harness synergies – with outside funding and industrial expertise making science stronger, and scientific expertise making industry more competitive.



- Set aside dedicated public funds (possibly managed by GITA), for the support of networking and matchmaking events between universities and applied research centres and the business sector – such as technology days, road shows, Makeathons, Demodays and Hackathons; these events could be organized by the technology transfer offices;
- Introduce competitive calls for innovation and technology-upgrading project grants open to consortia of scientific institutions and businesses; such calls could be jointly operated by GITA and SRNSF;
- Further strengthen support for Georgian scientific institutions and businesses to participate in international calls for proposals;
- Introduce an innovation voucher scheme to support contract research to help the private sector improve productivity and develop new products and services and business models.

## Chapter 5: Public procurement and financing as drivers of innovative development

**Recommendation 5.1: Public Procurement as a Policy Lever** – *Strengthen the legal basis for public procurement as a driver of innovation and align public procurement practices and procedures with strategic national innovation and sustainable development priorities.*

- Create a policy framework that fully integrates IEP;
- Coordinate and bundle existing demand among procuring entities;
- Define support of national innovation and sustainable development priorities as one of the strategic objectives of the country’s procurement policy; and integrate IEP as a cross-cutting policy instrument in the proposed national innovation strategy;
- Define criteria for when to use functional and when to use traditional procurement specifications, and when to use centralized versus de-centralized procurement;
- Create the legal basis for pre-commercial procurement;
- Support IEP rules through a comprehensive programme of awareness raising, capacity building and training;
- Introduce a systematic process of monitoring, evaluation and policy learning on IEP, drawing on data from the existing e-procurement platform and other sources.

**Recommendation 5.2: Making the Best of Traditional Procurement** – *Use traditional procurement to encourage broad-based deployment and diffusion of existing best-in-class solutions and support sustainable development priorities.*

- Expand the use of most economically advantageous tender (MEAT) and lifecycle cost criteria to evaluate bids, where appropriate;
- In all tenders, ensure that winning bids comply with relevant quality, safety, environmental and social standards;
- Do a comprehensive risk and impact assessment as part of the design of tenders, identifying not only financial risks, but also expected environmental and social impacts, defining measures for mitigating negative impacts, and setting forth plans for monitoring implementation of these mitigation measures;
- Draw lessons learned from best practices such as the environmental and social management framework for the GENIE project and consider which may be applied to regular procurement to support environmental and social outcomes.

**Recommendation 5.3: Innovation-Enhancing Procurement as a Change Maker** – *Introduce Innovation-Enhancing Procurement to increase market demand for innovation and increase competition.*

- Develop the required capabilities to effectively manage IEP among the staff of procuring organizations;
- Use innovation foresight exercises (as recommended in Chapter 3) to identify needs, potential, opportunities, and constraints for IEP in Georgia;
- Use IEP as a targeted instrument to advance broader sustainable development objectives (“catalytic procurement”), including through pilot and demonstration projects; linking IEP to the Green Growth Strategy 2030 would be one potential place to start;

- Introduce functional performance specifications in areas where feasible and where there is potential for innovation and spill-over effects, piloting this approach at first in selected areas and then gradually expanding;
- Ensure that selection criteria and the evaluation process for procurement in general, and IEP in particular, are transparent;
- Simplify, where possible, administrative procedures, especially in the pilot phase of IEP;
- Pilot and gradually expand a systematic process of competitive dialogue with potential suppliers in order to clarify technological possibilities as a basis for developing functional specifications; the national intellectual property office Sakpatenti could support the State Procurement Agency with information on the state-of-the-art;
- Ensure that IEP tenders are open to foreign bidders and align it with policies promoting foreign direct investment, and in particular policies and rules enabling and promoting technology and other spill-overs from such investments.

**Recommendation 5.4: Pre-Commercial Procurement to Connect with SMEs** – Introduce Pre-Commercial Procurement to facilitate the participation of SMEs in Innovation Enhancing Procurement and to stimulate R&D.

- Publish pre-commercial procurement calls in preparation for planned innovation enhancing procurement calls in order to support SMEs in doing the R&D necessary to participate in IEP calls;
- Use the proposed innovation foresight exercises and competitive dialogues to identify possible topics for pre-commercial procurement calls;
- Develop a phased approach where PCP calls can be issued for different stages of the process from research to prototyping, and decisions which projects to take to the next stage can be made along the way;
- Ensure that additional bidders can enter at different stages, and that the knowledge created at prior stages can be shared with new entrants;
- Align pre-commercial procurement tools with complementary policies supporting R&D, technology transfer and commercialisation, including those currently managed by SRNSF and GITA, as well as SME support policies through Enterprise Georgia.

## Chapter 6 Innovation and growth dynamics in Georgian enterprises

**Recommendation 6.1: Going Beyond Targeting Macroeconomic Disequilibria** – Address constraints that are undermining the consolidation of a coherent system of incentives at the macro level to enable and promote enterprise innovation.

**Recommendation 6.2: Setting Industries on a High Road Growth Path** – Establish sector-oriented strategies for enabling and promoting inter- and intra-industry collaboration to enhance flexible specialization and collective efficiency. These strategies could be incorporated as annexes to the SME Development Strategy, and include a combination of several meso-level measures including the following:

- Consider establishing credit schemes that involve microfinance institutions and non-banking financial institutions (NBFIs) to further facilitate enterprises' access to finance;
- Develop training programmes on standards implementation and industry-focused R&D activities, potentially in co-operation with higher education institutions (HEI) and technical and vocational education and training (TVET) institutions;
- Encourage a new generation of networking programmes by industry and business associations as well as by the Chamber of Commerce and Industry;
- Establish a dedicated programme for linking Georgian enterprises with transnational corporations;
- In parallel to networking efforts, support business and industrial associations to promote inter- and intra-industrial networking among Georgian enterprises and enable the emergence of voluntary clusters of enterprises that can collaborate and work jointly to achieve flexible specialization and move towards technology-intensive activities with high value-added;
- Build partnerships with specialised training and R&D institutions and disseminate information on opportunities and best practices to bridge the gap between R&D and the enterprises;

- Strengthen conformity assessment through involving the private sector within the context of public-private partnerships, in establishing the much-needed conformity assessment bodies, especially in the area of product testing, drawing on international best practices and recommendations, including those of the UNECE;
- Assist line Ministries responsible for the authorisation and licensing of the manufacture and sale of food and beverages, cosmetics, pharmaceutical products, dietary supplements and medical devices to establish the required guidelines, systems and expertise knowledge for issuing Good Manufacturing Practice (GMP) certificates.

***Recommendation 6.3: A Coherent System for Monitoring Private Sector Innovation*** – *Develop a national system for generating the required data to track technology diffusion and different kinds of innovation at the enterprise level. This could be achieved by developing a new generation of surveys for collecting data against a clear set of indicators that capture growth dynamics at the macro-, meso- and micro-levels including the following measures:*

- Support GeoStat, Enterprise Georgia and GITA in expanding the scope and coverage of the enterprise survey according to international standards and good practices, repeated regularly and allowing for panel data to track enterprise performance across time. The survey results can be used for establishing clear benchmarks and indicators for measuring progress;
- In addition, the government could consider using big data techniques to consolidate information from different sources.