# **TECHNOLOGY TRANSFER in** GEORGIA 2019-2020 A Report from the JRC TT Expert Group

## Good supportive environment for new business entities

#### **Strengths and Opportunities**

- ✓ Liberal economic regime with supportive framework for company formation and low taxation
- ✓ Developed IPR regulatory framework and IP management processes
- ✓ Developed support system for ICT start-up companies
- ✓ High human potential
- TT processes and distribution of profits are allowed by current legislation

#### **Weakness and Threats**

- TT resources with advanced skills at PROs are not available
- No support for a full cycle of technology development from ideation to manufacturing scale up
- The culture is not encouraging cohesion or cooperation between PROs, inventors, industry and investors or diaspora
- Low variety of financial instruments available to bolster innovation



- ✓ Liberal economic regime offers supportive framework conditions to do business, with real growth rates in GDP and low corruption
  - ➤ Current IPR framework is still in development
- ✓ Current reforms creating innovation infrastructure (FabLabs, Technoparks, Innovation Centres) in the regions
  - ➤ The official statistics on R&D&I activities are not collected
- ✓ National innovation strategy puts an emphasis on knowledge-based economy and innovation-led growth
  - **×** TT as a process is not well understood by the government actors
- ✓ Legislation framework is being harmonised with the EU / WIPO
  - ➤ Imbalance between the IPR/TT related laws, complying with international standards, and the efficiency of their practical application

The government is working on the reform plan which includes tax reforms, the development of further financial incentives for start-ups, and on improving the quality and availability of higher education.

## Research Organisations

- ✓ Georgian Innovation and Technology Agency (GITA) regulates and supports innovation activities including TT from the PROs
  - The processes have not yet been fully adopted by the NAS and the majority of PROs
- ✓ Most PROs have internal funds to maintain domestic patents
  - International patenting is rarely supported
- ✓ Current legislation allows TT and the distribution of profits from technology commercialisation
  - ➤ TTOs are not common; TT skilled staff is rare
- ✓ Most PROs have funds for filing patents within the domestic systems.
  - International patenting is rare
- ✓ Successful PROs form 'service' companies focused on manufacturing and selling their products
  - ➤ TT to a larger industrial partner is very rare

In most PROs the grasp of the requirements of the national industry and its capability to absorb new technologies remain low.



- ✓ Innovation policies are widely adopted in the private sector
  - ➤ But not in the PROs or public sector
- ✓ State programmes support high risk, early stage, low TRL technologies, which are several years away from the market
  - ➤ Industrial PoC or 'manufacturing readiness' programmes are not available
- ✓ Government has introduced some tax reliefs for innovative companies
  - ➤ The financial infrastructure is still largely under development and only a few start-ups have access to state financing
- ✓ Start-ups are efficiently incubated, and acceleration support can be obtained and works well
  - Start-ups very rarely progress to SMEs due to lack of growth capital available
  - ➤ Little involvement of universities in start-up formation
- ✓ Smart specialisation strategy is under development
  - But no clear direction for industrial development yet

The ease of doing business, preferential market access, tax incentives, the availability of low-cost energy are encouraging the proliferation of early stage privately owned companies; while the TT to the public sector from PROs is lagging behind.

## Support Organisations

- ✓ Established state-run support infrastructure with regional representation
  - × TT professionals require upskilling
- ✓ Support for the IPR protection is available.
  - ➤ Low uptake in the PROs
- ✓ Good support to start-ups resulted in many formed in the private sector
  - ➤ No licensing or spin-off formation apart from 'service' companies
- ✓ Some financial support and training in corporate finance is available to innovative companies
  - ➤ Debt financing mostly offered is not the best tool for early-stage companies
- ✓ Active business angels
  - ➤ No structured, professionally run business angel or diaspora network
- ✓ Many innovation hubs, techno-parks and innovation centres.
  - ➤ These organisations are commercial entities and charge fees for services

Georgia has introduced several successful initiatives aimed at supporting early-stage innovative projects and managed by GITA, and achieved rapid progress at innovation infrastructure development. It is too early to say whether the initiatives have been effective.

## Status of TT (2019-2020)

#### Main Strengths

- > Open market, liberal regime favourable to private sector development
- > Government's strong dedication to the cause of innovation
- Significant investment in infrastructure development and upgrading
- New TT support infrastructure in place
- Enthusiasm and dedication of the TT support personal at state agencies
- High potential of human capital
- ➤ Higher education reforms and new universities with high-tech focus
- Continuing investment in development of digital and electronic literacy skills or capabilities for entrepreneurs in wider community
- Community educational programmes aimed at increasing access to the internet for socially unprotected families and small businesses

## Status of TT (2019-2020)

#### Main Challenges

- > Insufficient human resources and small domestic market
- > Skills mismatch in the labour market and ageing researcher base
- Low overall investment in R&D&I
- Lack of TT expertise in market research, technology brokerage, and lack of the available funding
- > Lack of legal personnel trained in IP law
- > Limited understanding of commercialisation process in PROs
- ➤ Little involvement of PROs and universities in start-up and spinoff formation
- > Low number of high-tech companies on the demand side
- Financing channels is not available outside of initiatives supported by the state of the banking sector
- Lack of official statistics collected on TT metrics and KPIs for PROs

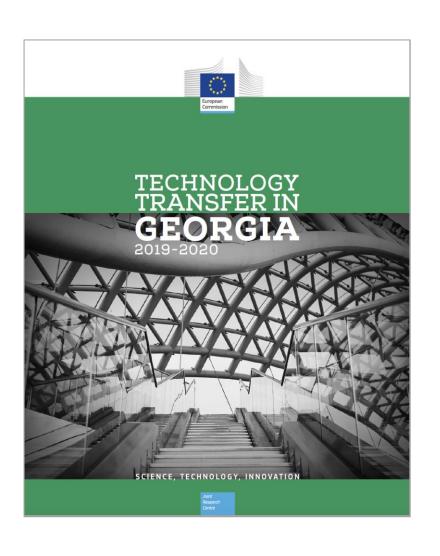
### Recommendations (2019-20)

- Official evaluation of TT impact: statistics
- Education and wider engagement
- Unified IP management policy
- Benchmarking of PROs by TT activity
- PRO-to-industry technology transfer
- Increase in regional funding allocation
- PoC grant financing
- Innovation-oriented public procurement programmes
- Tax incentives for investment
- Voucher schemes to support knowledge exchange
- Develop diaspora network
- Forster international collaboration

## **Questions and Comments**



## Thank you



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