

შოთა რუსთაველის საქართველოს
ეროვნული სამეცნიერო ფონდი
SHOTA RUSTAVELI NATIONAL SCIENCE
FOUNDATION OF GEORGIA

PSF Support for Georgia (what & why ?)

**Horizon 2020 Policy Support Facility
Specific support to Georgia**

Kick-off meeting October 5, 2017

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Presentation Outline

1. Georgian STI system - Background information
2. **PMPRD - Major Conclusions & Recommendations (2015)**
3. Overview of progress in STI (2015-2017)
4. Reforms at SRNSFG (2015-2017): **New priorities and Programmes**
5. Progress Report on PMPRD Particular Recommendations by different stakeholders
6. MoES new strategy – RD&I
7. PSF for Georgia – what and why?
8. Questions for consideration

Background information

- Reforms in national STI system initiated in 2004 (Higher Education and Research new bill was adopted).
- National Science Foundation & Foundation for Humanities created in 2006; SRNSFG created in 2010 by merging 2 foundations.



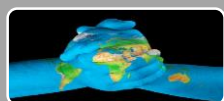
Competitive environment for research funding



Independence for research institutions and affiliation with Universities



Integration of research with education at the Universities



Moving from isolation towards international cooperation

R&D current eco-system:

- 12 State universities/LEPLs (32 Total Research Universities);
- Over 40 research institutions integrated in research universities;
- National Academy of Science, Academy of Agrarian Science, 3 Independent Research Centers.

Reforms in STI 2012-2015

- **State budget for competitive based funding through National Science Foundation programmes increased by approximately 3 times** (comparing SRNSFG funding in 2012 to that of 2016).
- In 2014, MoES provided **evaluation of research institutions and long-term strategic plans / proposals** and increased research funding (Block funds to Res. Institutions). In January 2015 **Salaries of researchers were increased by 2.5 times.**
- In 2014, **Georgia's Innovation and Technology Agency (GITA)** was created in order to support technology transfer and research commercialization; In 2015 **Techno Park was opened by GITA.**
- SRNSFG is no longer the only state agency providing competition based research funding in Georgia.



Reforms at SRNSF since late 2014

- New organisational structure;
- New Statute;
- International Policy Board ;
- New evaluation committees/field panels;
- Revised evaluation criteria and & transparent evaluation procedures;
- Outsourcing of large grant proposals' peer-review (since 2016):
 - ORAU – Collaborative Research
 - CRDF Global – Basic Research, Applied Research, Young Scientists' Research

Reforms at SRNSF 2015 – 2016 (2/2)

- Initiation of grants' efficacy evaluation;
- Analysis & revision of major programs;
- Initiating assessment of scientific infrastructure grants;
- Initiating development of **Unified Grants Management System (GMUS)**;
- Initiating development of **Georgia's Experts National System (GENS) / Georgian Research Portal**;
- *New WEB-page: www.rustaveli.org.ge*
- *Transparent Procedures, interaction with Sc. Community: Forums & Round Tables*
- *Communication with Scientific Community – Annual Conferences*

Increased State Funding & Fundraising

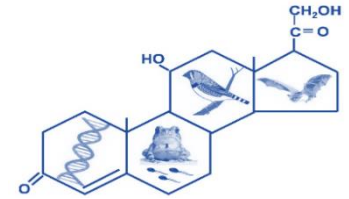
- Progressive **increase in annual budgets**;
- **New Funding Schemes with enhanced international collaboration:**
 - **New bilateral cooperation** (50% or higher funding share by partners);
 - **New multilateral cooperation** - fundraising from EU Research & Innovation Framework Programme “Horizon2020”
- In Basic research and applied research funding programmes max. **budgets per proposal increased by 20-40%; Budget diversification by fields** (STEM / Humanities, Soc.Sc.).
- PI and Key personnel's' **grant released from taxes**;
- **Flexible overhead (7%)** for host institutions expenditures for research management at HEI and RC

Changes towards OECD / EUROSTAT Classification (since 2015)

1. Exact and Natural sciences;
2. Engineering and Technologies;
3. Medical and health sciences;
4. Agrarian sciences;
5. Social sciences;
6. Humanities;

+ Georgian Studies

(up to 10 % of annual budget)



2017 – Revision of SRNSFG Strategy

New Vision:



4 strategic priorities declared by Georgia's Government since 2016.

- Economic reforms
- **Education reforms**
- Optimal space organization for country's development
- Public governance reforms

One of them is Supporting Development of Education and Science in the country

During the next decade, Georgia should establish itself as an **internationally competitive country** in the field of science, technology and innovation in the world's research area, thus contributing to the country's strategic goals – Georgia's **rapid development, welfare and socio-economic freedom**.

SRNSF G New Mission:

Mission
Vision
& Objectives



To Support the development of Georgia's **research Institutions** and **research potential of scientists**, their **integration in international research community** and **preparation of new generation of researchers** through **enhancement of STI system quality, role and competitiveness in the country.**

Overarching Goals



- Supporting **Excellence** in frontier Research in Georgia
- Supporting **young researchers** development (revised, new schemes added)
- Enhancing **International collaboration** in STI (revised, new schemes added)
- **Diversifying Funding** sources in STI (new scheme & targeted activities, widening participation in EU Framework programme H2020)

Priority Directions and Funding Schemes

1. Supporting Excellent Research in Georgia

- Basic research (FR)
- Applied research (AR)
- Collaborative research (DI)
- Georgian Cultural Heritage research
- Geo Studies Research Programmes abroad (Oxford)
- SMART EDM LAB programme (Juelich – TSU)
- Science popularization (Annual awards, young inventors awards, School – HEI cooperation, targeted projects for science communication)



2. Awards for young researchers capability enhancement and international collaboration at HEI & research centers

- Postdocs Scholarship
- PhD Fellowships
- MA students Fellowships
- PhD and Postdocs research internship abroad
- Rustaveli – DAAD joint fellowships (PhDs, Postdocs)
- Structured PhD programmes development (VW – SRNSFG)
- Mobility Grants: Travel Grants, International Conferences / Seasonal Schools Grants

3. Internationalization of science

- Bilateral programmes (CNRS, CNR, TUBTAK, Oxford, DAAD, VW, Juelich)
- Multilateral programmes (STCU, ISTC, BSH Joint call)
- Access to data bases (ELS, CA), Infrastructure (CENR, DUBNA),
- Annual fees for association to H2020

4. Supporting diversification of funding in STI

- Preparatory grants for widening participation in H2020 programmes
- Training and targeted activities for professional research management promotion at universities and res. centers

Revised Programme Portfolio & Revised Terms of Calls (1/4)

1. Large Institutional Research Grants

- Basic Research
- Applied Research with
- Collaborative Research with compatriots
- SMART EDM LAB at TSU co-funded by Juelich Center – targeted, 5 year project *New scheme*

Terms closer to internationally recognized standards

2. Grants for Young Researchers

- Post Docs Research
- Research Internship Grants
- Seasonal Schools for PhD and MA Students
- PhDs Research
- MSc Research *New schemes*

Terms closer to internationally recognized standards

Revised Programme Portfolio & Revised Terms of Calls (2/4)

3. International Cooperation

- Oxford University Georgian Studies Res. Prog.
- DAAD
- VW
- TUBITAK
- Juelich Center
- CNR
- CNRS PICS
- STCU
- ISTC

- Individual Travel Grants
- International Conferences
- International Conference in Georgian Studies



New schemes

SRNSFG became ERC NCP in October 2015!

*Planning to issues grants - ERC
PIs visiting Fellowships from
2018*

*Terms closer to internationally
recognized standards*

New scheme

Revised Programme Portfolio & Revised Terms of Calls (3/4)

4. Access to International Data Bases

- ELSEVIER Scopus, ScienceDirect, SciVal
- 2 Georgian journals published in ELSEVIER
- Starting collaboration with Clarivate Analytics (consortia of 16 institutions)



New Contracts

21 institution in consortia

3/4 volumes per journal per year

5. Multilateral Cooperation Projects

- (Concluded) IncoNet EaP (FP7)– EaP

Evaluation Platform, PMPRD

- Black Sea Horizon (H2020 – since 2015)

- EaP PLUS (H2020, since 2016)

Successful international collaboration with EU member state & EaP countries

New Projects



Revised Programme Portfolio & Revised Terms of Calls (4/4)

6. Science Popularization

➤ Annual Awards Scheme:

New Scheme

1. *Best senior researcher*
2. *Best young researcher*
3. *Best research team*
4. *Best foreign researcher in Georgian Studies*

➤ LEONARDO DA VINCI – Call for Young Inventors & Researchers

➤ Research Projects with participation of School Pupils

*Revised terms,
Connecting with
INTEL ISEF
Communication
with private
sector*

International Cooperation in Science Management

Outsourcing of big grants (FR, AR, DI, STCU YS, DO):

- CRDF Global US
- ORAU – Oak Ridge Associated Universities



Sharing experience in STI management (EU, US):

- ERC (European Research Council) – SRNSF as ERC NCP
- NSF, US (Embassy Science Fellowship Programme)
- ETAG (Estonian Research Council)
- ETIK – (Estonian Intellectual Property & Technology Transfer Center)
- Science Europe (considering membership application submission)
- ESF (European Science Foundation)
- Participation in Global Research Council's EU regional and annual meetings



Background information on PMPRD

Methodology

- Commitment by hosts
- Invitation of peers-international experts
- Kick-off meeting Setting research Methodology
- Background report by hosts (MoES, SRNSI GITA)
- Review Panel visit, Interviews with stakeholders
- Data analysis
- First draft
- Feedback from hosts
- Final report

Hosts: MoES, SRNSF, GITA

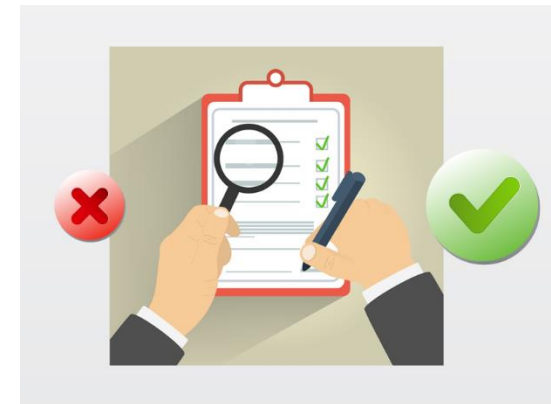
Peers-international experts:

1. **George Bonas**, Centre for Regional & International STI Studies & Support (CeRISS), **Greece** (Team leader)
2. **Adrian Curaj**, Executive Agency for Higher Education, Research, Dev. & Innovation Funding (UEFISCDI), **Romania**
3. **Viktor Nedovic**, MoES & Technological Development, Un. of Belgrade, **Serbia**
4. **Michael Schlicht**, German Federal Ministry of Education & Research, **Germany**
5. **Martin Felix Gajdusek**, Center for Social Innovation (ZSI), **Austria**
6. **Yannis Kechagiaras**, CeRISS, **Greece**



Utilizing Results & Uptake

- **Public Presentation** of Report by peers and hosts
- Spreading PMPRD among stakeholders and scientific community
- **Dialogue** with major stakeholders-broader discussions on particular topics
- **Planning:** what should be done on institutional level, on Governmental level?
- **Monitoring** of progress.



Major Sections of PMPRD Recommendations

1. Georgia's **STI system** as a whole
2. **Funding** of STI
3. Integration of **Research & Education**
4. **Innovation & Business Sector**
5. **Human Resources Development**
6. **International Cooperation & HORIZON2020 Association**



Major Conclusions

- The STI system should not be considered to be in a transition period anymore: there is a need to look forward, to develop a **vision and a strategy** that will consolidate and gradually strengthen the **STI system as an integral element for a knowledge based society and for sustainable growth of the country**.
- A **broader consultation process** involving policy makers, the academic and research communities but also the business sector and the civil society, will largely contribute to the **identification of the most suitable policies** and instruments but also to the acceptance and efficient implementation of them.
- By **reducing the fragmentation, removing barriers and improving the planning**, a considerable jump forward could be observed in the system's performance.
- Certainly, and despite recent initiatives, an **increase in the level of funding for STI** is necessary. However, such increase in the funding should **be mainly oriented to carefully selected priorities** where either **strong research capabilities** or promising **economic potential** exist.
- The ongoing process of Association of Georgia to the EU's Framework Programme 'Horizon 2020' renders **the introduction of substantial changes in the STI system** urgently necessary, in order to fully **benefit from the advantages** that such an Association can bring.



TENTATIVE IMPLEMENTATION ROADMAP (1)

Recommendations		Primary Stakeholders to uptake the recommendations						
		Ministry of Edu & Sc.	RIC	Comm. for Ed., Sc. & Culture	SRNSF	GITA	NAS & NAAS	Research Community
	Implementation suitable/feasible at Short-term							
STI System	1. Development of a consultation process to define a clear and documented Vision specifically for the STI sector	✓	✓	✓				In Progress
	2. A well-defined Strategy coherent to the Vision needs to be elaborated and adopted	✓	✓	✓				In Progress
	3. Consolidate and further strengthen the role of the RIC							Need to be revised and consolidated
	5. Define the role of the policy delivery organisations (SRNSF, GITA)	✓	✓					In Progress
	9. Widely promote important STI policy initiatives in the public	✓						In Progress
	11. Highlight/Showcase the short term impacts of a dynamic STI system	✓						In Progress
Univ. / Res. Centers	23. Further improve the Accreditation process for the universities	✓	✓	✓				In Progress
	26. To acknowledge the new landscape of the research system	✓	✓					In Progress
	33. Organise the implementation of the assessment of the existing STI providing organisations							Need to be revised and consolidated

TENTATIVE IMPLEMENTATION ROADMAP (2)

Recommendations		Primary Stakeholders to uptake the recommendations									
		Ministry of Edu & Sc.	RIC	Comm. for Ed., Sc. & Culture	SRNSF	GITA	NAS & NAAS	Research Community	Private Sector		
Inno & Business	35. Involving business sector representatives in Advisory boards of Universities and research centres.									Need to be revised and consolidated	
Int. Coop. & H2020	47. Develop a coherent international cooperation strategy in line with the country's vision and strategy									In Progress	
	49. Devote a particular attention in the cooperation with the national diaspora									In Progress	
	50. Development of a Plan of Action dedicated to the Association to H2020 with realistic expectations and goals									In Progress	
	51. Strengthening of the NCP system in the country in order to cure current weaknesses									In Progress	
	52. Promote the participation of Georgian researchers in COST Actions									In Progress	
	53. Actively participate in Support Actions that stimulate the exchange of good practices and networking										In Progress
	Implementation suitable/feasible at Medium-term										
STI System	4. Improve the visibility of the RIC in terms of its disposition, the principles of transparency and information										Need to be revised and consolidated
	6. Develop sound monitoring processes on financial issues, results/outputs and impact										Need to be revised and consolidated
	7. Define research fields where currently strong research capacity exists										Need to be revised and consolidated

TENTATIVE IMPLEMENTATION ROADMAP (3)

Recommendations		Primary Stakeholders to uptake the recommendations						
		Ministry of Edu & Sc.	RIC	Comm. for Ed., Sc. & Culture	SRNSF	GITA	NAS & NAAS	Research Community
STISystem	8. Identify research fields centered around promising economic fields (niches) in the country	Need to be revised and consolidated						
	10. Promote an open dialogue and a broad involvement of stakeholders in all the STI related activities	✓	✓	✓	In Progress			
	12. Develop low cost initiatives that could contribute to the positive disposition of the society towards the STI sector	✓			In Progress			
	22. An active participation in the H2020 processes should aim at the promotion of the national priorities in STI	Need to be revised and consolidated						
STIFunding	13. Significant increase of the national expenditure for STI	Need to be revised and consolidated						
	14. Increase both the core and the competitive funding through grants	✓	✓		✓	✓		
	15. Gradually introduce monitoring and evaluation (assessment) systems	Need to be revised and consolidated						
	16. Develop an additional grant scheme with dedicated budget as part of the national vision and strategy to increase the STI funding level	✓	✓		In Progress			
	17. Introduce multiannual planning for the STI grants	✓	✓	✓	In Progress			
	18. Provide incentives to the private sector for investments in STI	✓	✓	✓	✓	✓		✓
	19. Stimulate and activate financial contributions of the private sector for the realization of applied and innovation projects	Need to be revised and consolidated						
Univ./ Res. Centers	24. Secure an adequate level of core funding	Need to be revised and consolidated						
	27. Re-confirm and re-equilibrate the status of researcher and of mainly teaching university professors	✓	✓	✓	In Progress			

TENTATIVE IMPLEMENTATION ROADMAP (4)

Recommendations		Primary Stakeholders to uptake the recommendations							
		Ministry of Edu & Sc.	RIC	Comm. for Ed., Sc. & Culture	SRNSF	GITA	NAS & NAAS	Research Community	Private Sector
Univ. / Res. Centers	28. Promote the osmosis (permeability) between higher education and research spheres	✓	✓						In Progress
	29. Massively 'irrigate' the research centres with students	✓							In Progress
	31. Present successful practices of "role models" organizations								Need to be revised and consolidated
	32. Encourage the participation of most successful research centres (role models") to mutual learning exercises such as international benchmarking								Need to be revised and consolidated
Inno & Business	34. Define priority research fields that have a positive impact on dynamic economic sectors of the country								Need to be revised and consolidated
	37. Development of dedicated support structures to facilitate the utilization of research results								Need to be revised and consolidated
	38. Stimulation of the research demand through incentives to the business sector (tax reductions; bank loans; etc.).								Need to be revised and consolidated
Human Res. in STI	41. Encouragement of the engagement of young researchers in public grants as an obligation	✓							In Progress
	43. Introduce the research activities in the university professor's assignments	✓	✓						In Progress
	44. Research activities as a criterion in the context of the Accreditation process for the universities, as well as in the Evaluation of university performance	✓	✓						In Progress
	45. Removal of all the legal and administrative barriers that still exist for the free staff circulation between universities and the formally integrated research institutes	✓	✓	✓					In Progress
	46. Gradually further equilibrate the salaries between researchers and teaching professors	✓	✓	✓					In Progress

Activities undertaken by MoES, SRNSF & other Stakeholders



Progress on Implementation
of Particular
Recommendations



1 - STI system as a whole

Recommendations:

- Unified Vision & Strategy; long term perspectives
- Fragmentation among stakeholders to be reduced/removal o barriers
- Improved planning to be introduced
- Definition of Priority Fields (with strong poles, outputs, fields centered around promising economic sectors- niches)
- more targeted funding to be implemented



Progress

- **Active involvement of stakeholders** in Governmental **AAWP** preparation (2016-17)
- SRNSF active involvement in **MoES new strategy development (2017)**
- SRNSF – **revision of programme portfolio**, compliance with global trends& requirements
- **Increased collaboration** between **SRNSFG, GITA, IPR National Centre** (MoU, joint participation in scientific events, open discussions, prep. Of joint call)
- **More interaction with major beneficiaries-** Universities, Research Centre and Institution, Targeted research Groups
- SRNSFG is **in the process of mapping strong research groups** throughout various institutions(based on research productivity indicators: c, h indices)
- SRNSF developing **Georgian Research Portal**

2 -Funding STI

Current funding (0.25 %of GDP) is very low

Recommendations:

- To Increase core funding based on Key Performance Indicators
- To Increase Grant funding, but targeted for priority areas (additional ones)
- Introduce multiannual Grant Programmes with perspective of continuation
- To give Incentives For research-private sector cooperation, fundraising from private sector



Progress

- Education & science declared as **one of 4 Governmental priorities**. Should be reflected in public funds
- Annual budget increased (+7% 2018)
- SRNSF increased **Research Grants funding by 20% in AR programme and by 40% in FR & DI**
- SRNSF changed TOR in major funding schemes: **taxes are not paid** from grants/fellowships. New funding schemes are planned and prepared making focus on **research excellence**, with high level of **international collaboration** and intra-institutional cooperation
- **SRNSF developing new call for Applied Research** in cooperation with IPRNC and GITA

3 - Integration of Research & Education

Recommendations:

- Further improve Accreditation process
- Introduce Key Performance Indicators, assessment acc. International standards
- Secure KPI based adequate core funding, reduce dependence on students' fees
- Ensure compliance of local economic sectors' demand and academic programmes
- Overcome isolation of research centres & institutes from universities
- Provide mobility, better communication & collaboration
- Merged poles: constitute a competitive advantages
- Promote interdisciplinarity
- Irrigate research centres with young researchers



Progress:

- **MoES** initiated Law amendments Law on HE, Law on Sc. Technology dev. Law on dev. Of Quality of Education)
- **NCEQE** supporting HE internationalisation, **new accreditation standards**, Cooperation with European Foundation for Quality Management (EFQM)
- **SRNSFG** implemented in 2016 new call for developing structured PhD programmes (8 programmes supported)
- **SRNSFG – VW** collaborate in funding joint German – Georgian PhD programmes (4 will be supported in 2017)
- New schemes & **increased funding** for **Post Docs, PhD & MA students**
- **SRNSFG – DAAD** cooperation – PhD, Post doc fellowships
- 2016 Law amendment – Scientists from Research centers have **right to supervise MA, PhD students**
- **Kutaisi Technology University project (with TUM)**
- **Instrumentation and Infrastructure dev. Funds MoES**

4 – Human Resources in STI

Problematic age structure, active involvement of young generation needed!

Recommendations:

- Strengthen grants for YS
- Provide return conditions for YS graduated abroad
- Introduce research activities in Accreditation process for universities
- Remove barriers Universities /research cent.
- Enhance social status & prestige, Sc. Popularisation in wider society



Progress

- SRNSF introduced **new grants for YS** on all stages: MA, PhD, PostDocs
- SRNSF requested **young researchers involvement** in all funding schemes
- SRNSF requested **integration of educational component** / training of YS in all funding schemes
- EQE modified Institutional accreditation and Programmes accreditation standards with emphasis on **research and education integration**
- Special trainings, forums, **workshops** are supported for YS capacity building
- MoES new initiated-annual **Sc. fest -broader community involvement**
- **SRNSFG provides 3 programmes for Sc. popularisation**, 2016 awards for scientists

5 - Internationalisation

Statement: well developed 80% co publication rate, more donor driven



Recommendations:

- Improvement of coherence needed, in line with vision, strategy & national priorities
- Promotion of internationalisation of stakeholders/Universities. RCs
- Provide more active collaboration with compatriots

Progress

- SRNSF – MoES negotiating strategic project – **Research in Georgia**
- **Developing internationalization comprehensive strategy**
- SRNSF - ERC NCP, collaborating with NSF, SE, GRC, in research management
- Defining **priority fields for international cooperation, in line with H2020** programmes
- Enhanced **bilateral joint programmes and mobility schemes**
- Involvement in **multilateral** projects (EU framework programmes)
- **Regional evaluation platform (2016)**
- **Outsourcing of evaluation:** ORAU, CRDFG
- EQE cooperating with **European Association for Quality Assurance in Higher Education (ENQA)**. Involving international experts in accreditation, The **Standards and guidelines for quality assurance in the European Higher Education Area (ESG)**
- EQE's participation in **Bologna Follow-up Group**

6 - HORIZON 2020 Association

29/04/2016 association Agreement Signed!
Great Success but a challenge as well!!

Recommendations:

- Plan of action how to benefit from association should be developed: (sharing of information, co-funding/rewarding, participation in H2020 governance, setting up Liaison Office in Brussels, etc.)
- NCP system should be strengthened
- More participation in COST networking & capacity building activities



Progress

- H2020 info days, web page
- SRNSF -ERC NCP in Georgia
- **Contact points** in major universities
- **SRNSFG Special preparatory grants and targeted activities (planned from end of 2017) for widening participation in H2020 – will be funded through payback (EU delegation in Georgia) from H2020 fee.**
- using in EU framework programme funded projects: **Black Sea Horizon, Inco PLUS - supportive instruments for Georgian Scientists active involvement in H2020 programmes.**
- Supporting Georgian researchers' participation in **Brokerage Events, Twinning Programmes** (TG, IG, CG, SS, Multilateral projects)
- Strengthening cooperation with **Scientific Diaspora** (DI)

Planned by MoES: Creation of H2020 Support Department at SRNSF

1. **Raising public awareness, providing regular updates about Horizon 2020 and other International Framework Programmes;**
2. **Fundraising: Capacity Building/Training;**
3. **Supporting Research Management offices at Universities & Research centers;**
4. **Administering additional, special call - Preparatory Grants - Targeted activities for Supporting collaboration and capacity Building.**



H2020 participation support center – Draft Budget (1 year)

#	Budget Item	Cost	Quantity	Total (GEL)	
1	Horizon 2020 Preparatory Grants		72	1,284,000	73.96%
1.1	Publishing articles in high IF journals	5000	30	150,000	8.64%
1.2	Applying to H2020 as a Coordinator	10000	5	50,000	2.88%
1.3	Applying to H2020 as a WP Leader	4000	5	20,000	1.15%
1.4	Applying to H2020 as a Task Leader	2000	10	20,000	1.15%
1.5	Grant for consortia preparation and project writing for H2020 (BE, Twinning, Grant writing prep.)	25000	10	250,000	14.40%
1.6	Large-scale brokerage events programme (Grants, Targeted thematic events)	60000	4	240,000	13.82%
1.7	Targeted institutional grants for State Universities: Implementation of a professional system of Research Management on the basis of the universities (Office of Sponsored Research, Research Integrity Unit, Office of Translational Research/Technology Transfer, NCURA, EARMA membership fees, capacity building, supporting the development of regulations)	45000	5	225,000	12.96%
1.8	Encouraging Grants for Multilateral cooperation of EaP * BSH countries (Research grant, mobility, joint conference/seasonal school) (9.6%)	84000	2	168,000	9.68%
1.9	Target Grant for implementation and activation of MSCA programs founded on the bases of Tempus National Office of (a) a Uni.ge (www.uni.org.ge), executor of EU Erasmus + program in Georgia. (9.27%)	161000	1	161,000	9.27%
2	Horizon 2020 Preparatory Events and Trainings (14%)		20	240,000	13.82%
2.1	Grants for seasonal schools, events, trainings (project writing, financial, legal issues, issues regarding to tech. transfer and etc. concerning to H 2020 programme)	12000	20	240,000	13.82%
3	Horizon 2020 Center Administration (12.5 %)			212,000	12.21%
3.1	Salaries of Center' Employees	2550	5	153,000	8.81%
3.2	Preparatory Materials	2050	5	10,250	0.59%
3.3	Business trips for Center' Employees	3250	15	48,750	2.81%
-	Sum:			1,736,000	100.00%

*To be Funded in addition to SRNSFG common programme through EU delegation payback from H2020 2016 annual fee.

7 – Innovation & Business Sector

Very low involvement & investment of private sector in research; Stagnant patenting activity; More focus is made on low-tech innovation rather than to knowledge-intensive.

Innovation high in political agenda with positive initiatives (GITA, Tech.Park etc.)

Recommendations:

- Interaction among Priority fields of research and dynamic economic sectors is urgent!
- Involvement of business representatives in Advisory Boards
- To improve framework conditions (TTOs, start-up support, incentives to stimulate research demand, etc.)



Progress

- Identification of **excellent clusters** is in progress, in **compliance with promising economic sectors**
- Prominent **Business Sector's** representatives included in SRNSF AR evaluation **committee** (II phase)
- **SRNSF – SAKPATENTI – GITA cooperation (AR new TOR)**
- **GITA's activities:**
 1. formation of **legal framework** for the development of innovational activities; **The law on innovation has been prepared with the intensive consultations with public/private sector** and international community's expertise-approved by the Government Cabinet, ratified by the Parliament and signed by the President of Georgia.
 2. **provision of infrastructure for innovations** (Technological Park, Fabrication Laboratories (FabLab), Innovation Laboratories (iLab), Business Incubators, BroadBand for All – High Speed Fiber optic internet, Accelerators etc.);
 3. **capacity building on entrepreneurship and innovational skills** (trainings, seminars, workshops, hackathons etc.);
 4. **promotion of entrepreneurship and development of innovative ideas by improving access to finance.**
- the Government of Georgia has introduced 4 Point Plan of Economic reforms, significant part of which is '**Startup Venture Finance**'. One of the co-implementers of the plan is GITA.

Remaining Challenges

- **Unified vision, strategy and action plan - on National level (Research and Innovation Council should be more active), not only MoES.** More integrated & comprehensive dialogue is needed
- Thinking in terms of long-term perspectives, **connection to economic impact**
- Consolidation & diversification of finances, **stable annual growth in RD&I!!**
- **Still 84 priorities?!**
- **Infrastructure and HR development!**
- Identification of strong spots & clusters
- Widening H2020 participation
- Promoting research – Industry collaboration, administrative support for tech. transfer, research commercialization and entrepreneurial skills in scientific community
- **incentives for business to invest in research.**
- **Professional Research Management at universities!!!**
- Enhancing international collaboration
- More inter-institutional & inter-sectoral cooperation in RD&I
- Focus on inter disciplinarily
- More integration of research and education



Why Georgia needs support from PSF

An instrument that gives Member States and countries associated to Horizon 2020 **practical support to design, implement and evaluate reforms that enhance the quality of their research and innovation investments, policies and systems**

Support of the PSF is important for SRNSFG and Georgian STI system, since PSF offers:

customer-oriented services

assistance from EU STI policy experts

concrete recommendations on how to tackle a specific R&I policy challenge

PSF Support for Georgia (what, why?)

Role of industry in STI

How can SRNSFG and the Georgian Government better foster **collaboration between academia and industry**?

How can we encourage the development of **knowledge-intensive scientific products and their commercialization**?

How can transfer the **industry into a sound funding source of Georgian science**?

Performance in H2020

What are best practices to **foster H2020 participation on national level**?

How can EU experts support in introduction of **professional research management system** at Georgian Research Universities and Centers

How can SRNSFG administer the **mapping of research resources and scientific potential**? How should it be linked with **prioritization in funding schemes**?

National STI Strategy

How should the Georgian government identify most **promising research fields**, link them with H2020 goals?

How can MoES introduce **Key Performance Indicators system** at HEIs and RCs (national monitoring system/data base)?

What is an appropriate model, procedures for the implementation **performance-based funding of research organizations**?

PSF Specific Objectives:

- 1) Support in identification of promising research fields
- 2) Measures for narrowing the gap between research and industry/business
- 3) Proposal for the performance-based funding of research entities

- Enhancing & refining role of RIC in setting priorities and strategic goals for RD&I at national level.
- Mapping available strong resources, and clusters (involvement of all stakeholders).
- Searching for additional funding schemes (positive discrimination) in fields important for sustainable development

- Attracting business sector representatives in Boards of Universities, research centers and involve them in strategic planning process.
- Developing IPR and tech. transfer policies and procedures at universities and research centers, Supporting entrepreneurial skills, translational research.
- Promoting Professional Research management at HEI and Research centers (structures, ethics, sponsored research unified systems)

- Introducing Performance based Quality enhancement and providing RD&I monitoring on institutional and national level (data collection, revision, analysis and integration in strategic dev.plans)
- Sharing best practices for PBF, linking with national priorities



Thank you for your attention!

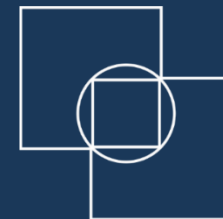
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