



# Horizon 2020 Policy Support Facility

## Specific Support to Georgia

Options for Improving the Effectiveness  
of the R&I System of Georgia through  
Prioritisation, Selectivity and Links to  
Business/Industry

5-8 / 02 / 2018

# Purpose of this meeting

The purpose of this meeting is threefold:

- 1) Report on our preliminary ideas
- 2) Hear your reactions and suggestions on these
- 3) Initiate a focused conversation across organisational, field and domain lines in Georgia

# Contents

- **Remit of our visit**
- **Over-arching issues of the ERI system in Georgia**
- **Performance based research funding:**
  - Situation at present
  - Key assumptions
  - Options

# Remit of the Expert Group

Provide tailored advice and specific recommendations to the Georgian authorities linked to the following three focus areas for Science, Technology and Innovation (STI) policies:

- 1. Support to identify promising research fields (prioritisation)**
- 2. Proposal for performance-based funding of research entities (PBRF)**
- 3. Measures for narrowing the gap between research and industry/business**

# Georgia ERI system/policy achievements

Much has been achieved over the recent years to improve the R&I system, e.g.:

- innovation funding has been introduced via GITA,
- public expenditure on R&D has been raised
- SRNSF has been established as a research funding agency with a diversified portfolio of instruments,
- R&I statistics have been somewhat improved
- ...

# Over-arching issues of the ERI system needing to be addressed

# 1. Fragmented ERI system

## Options

- Integrate research facilities and equipment and facilitate equipment sharing.
- Create 3-4 R&I Centres around the equipment and facilities, establish a joint research agenda.
- Rationalise, based on independent evaluation, research labs and institutes.
- Create ‘platforms’ to enable interactions between organisations, research fields and domains.

## 2. Unclear authority structures regarding research funding, priorities and evaluation

### Options

- Define clearly the roles of the strategic, operational and performance levels, and ensure interactions between coordination/decision bodies at these levels.



# 3. Incomplete reform of the RIs and lack of integration

## Options

- Full integration of RIs in the universities, with possibilities for research and teaching activities.
- Evaluate the work and position of the RIs to enable rationalisation and integration in universities.

# 4. Contradiction between ease of doing business and complications of doing research

## Options

- Rules and administrative hurdles need to be reduced and cut at the levels of ministry, agency and university administration.
- R&I activities have to be made, administratively, as easy as possible.
- The country should also pride itself for the ease of doing research and innovation.
- Introduce impact assessment and measure progress on reducing red tape

# 5. Research infrastructure and facilities in decline

## Options

- Upgrade the equipment and facilities in priority areas to at least medium (international) standard.
- Concentrate research equipment and facilities.
- Work out equipment sharing arrangements across research groups.

# 6. Measures (system level) to achieve high level ERI performance

## Options:

- Training for research managers.
- Further increasing the payment of researchers.
- Incentives to bring emigrated researchers back; collaboration and links
- Strengthening research groups, attracting young people and educating them to address the aging of research personnel.

# 7. Base line funding for research

## Options

- Base-line research funding in the Georgian ERI system open to all public research entities
- Decisions on base-line funding should be performance.
- Research and innovation priorities - to be decided yet - may form an additional basis for the allocation of base-line funding

# 8. Mismatch between low level of funding and size and breadth of the ERI system

## Options

- Rationalisation of the ERI system
- Continue targeted efforts to increase research funding
- A proactive, state-level attraction of international funds is required, e.g. EU European Neighbourhood instrument

# Exercise 1

- Please take 20 minutes to discuss:
  - Are there any issues of the Georgian ERI system that we are missing?
  - Are there any issues you would disagree with?
  - Which are the three issues you'd like to see approached first?
  - Focusing on the three issues you believe are key to approach, go back to the options we have proposed. Are these appropriate? Can they be enacted (done)? What are the conditions for these changes to occur?

# Performance Based Research Funding



# Modalities of funding

- Competitive (research grants)
- Selective/performance based - base line funding for research organisations (universities and institutes)

# Current situation

- Base-line funding in Georgia?
- Base-line funding entails **reporting** to the Georgian Academy of Sciences (GNAS)
- Base line funding not associated with performance
- GNAS is tasked to assess the research institutes reports but this does not stretch to performance evaluation
- Reporting of activity, assessment and funding are disconnected

## Current situation 2

- **Limited performance assessment exists:** Research labs of universities report to the academic council of the university on output: publications, patents, conferences, innovations, etc. On this basis the research board and academic council allocate internal research money.
- Still this is ad hoc and context specific

# Performance-based research funding: assumptions

- Performance based funding usually applies to the allocation of base-line funding to public research organisations
- The size of the block grant (base-line funding) is determined by judgment regarding organisational performance
- Judgment of performance can be based on metrics, peer review or a combination of the two

# Performance-based research funding: assumptions 2

**Small countries** face particular issues regarding PBRF:

- the costs associated with small scale;
- Small size of the local research communities;
- the need to use foreign peers;
- the constraints of ‘small’ languages on peer recruitment and the corresponding need for a quality-assured national current research information system (CRIS);
- national capacity to run a research assessment exercise

# Performance-based research funding: options

- The current **differentiation for allocating base-line funding** to public research entities (institutes versus labs) needs to be lifted as a pre-condition for PBRF.
- Terminate the **reporting requirements** to GNAS
- A **body/agency responsible for organising the PBRF system** ought to be defined. (e.g. collecting data on performance, organising the assessment of data and managing resource distribution).

# Performance-based research funding: options 2

- Develop a **R&I system database for Georgia** (e.g. information about researchers, affiliation, current research projects and findings, and output).
- The **local conditions for doing research** have to be taken into account in performance measurement. E.g. Infrastructure is in many cases so run down, that researchers cannot do proper research. Developing infrastructure for research is therefore a priority.

# Performance-based research funding: options 3

- **Performance measurement: the individual, the group, and research institutes and universities.**
- Agree on the **funding algorithm** (this depends on the goals of the exercise)
- Proportions of **base-line versus competitive R&I funding** suitable for Georgia needs to defined.
- Principles of **transparency and objectivity** have to be applied in the allocation of performance based base-line funding



# Performance-based research funding: options 4

- **International experience** should be studied in detail before a Georgian version of PBRF is established. Recent comparative studies from the EU are available - PSF Mutual Learning Exercise
- **Peer review panels** for assessing the performance of R&I & HEI research should be called. Panels should include foreign experts and emigrated Georgian scientists. The inclusion of foreign experts will help tackling the problem of closed clubs - the evaluation and decision making in small R&I communities among the same actors.

# Performance-based research funding: options 5

## Options for measuring performance via indicators

Metrics can measure via Knowledge and performance indicators (KPIs) the performance.

- **Scientific dimension** can be measured via publications and bibliometric analysis, national projects and budgets acquired.
- **Economic dimension** can be measured via contracts with business and related income.

# Performance-based research funding: options 6

- **Societal dimension** can be measured via dissemination and communication to policy makers and general public, innovations generated with impact for society (addressing societal challenges faced by Georgia).
- **Collaboration dimension** can be measured via international grants acquired, their budgets, and scientific prizes received.
- **Education for research dimension** can be measured via PhD students educated and their career path.

# Exercise 2

Please take 20 minutes to consider:

1. What are the basic conditions for research that will enable you/your research unit to perform to a high standard?
2. The advantages and disadvantages of high base-line funding? How about high competitive funding?
3. The relative advantages of peer review and metrics based PBF system in Georgia?