

Recommendations for Lithuania: Mission-oriented approach to STI policy formation

Final dissemination event of the project

“Enhancing the efficiency of the cooperation between business and science”

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Why (increase) mission-orientation in research?

- General trend in addressing grand challenges (climate, digitalisation, etc.) with the help of research and innovation – seeking faster & better solutions
- In line with what most other countries / research partners are doing, as well as with EU (Horizon Europe / Next Generation EU - funding, Smart Specialisation Strategies)
- It is easier to engage businesses (and governments) to R&D programmes, when there is a clear statement & anticipation of impact

Recommendation 1:

Apply mission-orientation to the National Science and Technology Programmes

It is recommended to apply a mission-oriented approach to the formation of the Science, Technology and Innovation Policy in Lithuania and in relation to the specific support measures or programmes, as the National Science & Technology Programmes.

It does not mean that all support measures need to be changed but it can be used well in combination with other support measures.

Recommendation 3:

Define missions through a combined top-down and bottom-up approach

It is recommended to use a combination of a top-down approach (i.e. ministries of Economy and Innovation, Education, Science and Sport, various thematic ministries, the Research Council, MITA as the innovation agency deciding on the missions) and a bottom-up approach (i.e. companies, research and education institutions, clusters, user groups, association, science and technology parks suggesting possible missions and/or challenges) in defining the missions.

Recommendation 4: Link missions with Smart Specialisation strategy

It is recommended to clearly link missions with the smart specialisation strategy and priorities.

- Basis for identifying novel combinations of specialisations within an economy that are of a cross-sector and multi-disciplinary nature
- Take into account the needs of groups in society, expanding the triple helix towards a quadruple helix approach
- The bottom-up entrepreneurial discovery process (EDP) can be used to identify potential solutions and coalitions of stakeholders to address the mission or challenge set via the NSTP.

Recommendation 5:

Expand a list of beneficiaries in the NSTPs and other support measures

It is recommended that the new NSTPs and other support measures created around missions take a boarder approach to involving actors from the STI ecosystem when defining the list of eligible beneficiaries of funded programmes.

- Multiple examples in Lithuania (incl. under the current pandemic situation) where support measures are targeting just one or two beneficiary group, thus precluding truly multi-stakeholder and multi-sectorial partnerships

Recommendation 6: Encourage cross-sectoral and cross-disciplinary consortia

It is recommended that incentives are introduced to encourage the involvement of cross-sectoral, cross-actor, and cross-disciplinary teams.

- Introduce motivational aspects for targeted stakeholders to get involved into the evaluation and implementation of NSTPs/measure
- Focus on (a) making particular stakeholder groups interested in joining projects and (b) motivating the lead organisation to include other types of stakeholders.

Recommendation 7:

Make monitoring and evaluation an integral part during design and implementation of the programmes

It is recommended to set a well-structured monitoring and evaluation process already as part of the initial NSTPs design process. Strategic reviews linked to additional round of funding should be performed periodically to provide a basis for a go-no go decision by the programme management.

- The consortia in charge should be subject to periodic strategic reviews (e.g. by an international panel of experts)
- A basis for a go-no go decision leading to additional funding

Recommendation 8:

Reduce fragmentation and lack of strategic orientation on the national level

To address the fragmentation and lack of strategic orientation of the existing collaborative efforts it is recommended that different sectoral ministries:

- combine their funds towards co-funding the NSTPs
- integrate different RDI activities and ensure a stage-based implementation approach
- develop a common language and strategy incentivising ministries and agencies to cooperate in implementing a mission-based approach to STI policy.

Possible scenarios

| | Scenario 1: 'Traditional' Science and Technology Programme with missions | Scenario 2: Strategic umbrella NSTPs based on the current set of instruments | Scenario 3: A new strategic umbrella NSTP | Scenario 4: Bringing existing instruments closer to missions | Scenario 5: Challenge-based Innovation Fund |
|---|--|---|--|---|---|
| Links to S3 | Yes | Yes | Yes | Yes | Not necessarily |
| Links to other support measures | No | Yes (pooling resources) | Not necessarily | | No |
| Programme vs. project size | EUR 5-10m / EUR 0.2-0.5m | EUR 50m / EUR 0.5-3m | EUR 0.5m-1m p.a. released in stages (intensity reduced over years) Project / activity size decided by the consortium | As currently set for various support instruments | EUR 100m / up to EUR 5m (min EUR 1.5m) |
| Governance | Simple | Multi-layer, with long-term STI agendas | | | Simple |
| Duration of programme vs projects | 7-10 years / 1-2 years | 7-10 years / 1-2-5 years (possibility to get funding for continuation) | 5-10 years (possibility to get funding for continuation) | | 1-3 years (for projects) |
| Beneficiaries (in projects) | Min 3 partners (min 1 private sector partner) | Min 3 partners (with conditions related to specific instruments) | 1 or more - core team; no size requirement for whole consortium; broad range, incl. government, users, NGOs | As currently set for various support instruments | Min 3 partners (min 1 from private sector) |
| Implementing institution | Research Council of Lithuania | Innovation agency (MITA) | | | Innovation agency (MITA) |

Recommendation 2: Apply mission-orientation to the sectorial context

It is recommended to apply one or several of five scenarios for mission-oriented STI policy into the sectorial context in Lithuania.

| | Life sciences | ICT | Engineering | Agro- and food |
|---|---------------|-----------------|-------------|----------------|
| Scenario 1: 'Traditional' Science and Technology Programme with missions | * | Not recommended | * | ** |
| Scenario 2: Strategic umbrella NSTPs based on the current set of instruments | ** | ** | | ** |
| Scenario 3: A new strategic umbrella NSTP | *** | * | *** | *** |
| Scenario 4: Bringing existing instruments closer to missions | ** | * | | * |
| Scenario 5: Challenge-based Innovation Fund | * | *** | * | |

Key messages

- This is a great opportunity for Lithuania to
 - reinforce strategic orientation
 - tackle existing disciplinary, sectoral and policy silos and
 - bring collective effort within different stakeholders as well as different policy-makers
 - through this journey also reinforce cooperation – not only between business and science but bringing other stakeholders too
- There are options requiring different efforts, resources and time
- Important is to accept a change of mode if the goal is to take Lithuanian STI to the next level