



ევროკავშირი
საქართველოსთვის
Project funded by the European Union



EU Twinning project
Supporting inter-sectoral collaboration possibilities between
Research and Industry

Roadmap: research priority important for science and business collaboration setting process planning

by Christian Hartamann, Joanneum Research, Austria



science KNOW



business GROW

umweltbundesamt^U
ENVIRONMENT AGENCY AUSTRIA



JOANNEUM
RESEARCH

FWF

Der Wissenschaftsfonds.



DLR Projektträger

FFG
Promoting Innovation.





Main Points for Discussion

- Roadmap for priority setting process
 - Agreement on dates and formats
- Priority Topics
 - Agreement on the proposed list of thematic priority areas
- Roles and responsibilities
 - Who does what?
 - Key persons to be involved
- Stakeholders
 - How to identify stakeholders in the business sector
 - How to motivate company representatives to take part in Workshops



Scientific thematic priorities vs scientific disciplines

Scientific thematic priorities

- Address research needs from
 - Society
 - Business Sector
- Inform funding programmes, e.g.
 - Horizon Europe (EU)
- Can help to overcome existing silos in the science sector
- Can help to stimulate private sector R&D investments

Scientific disciplines

- Structure science into branches
- Are codified in classifications such as
 - The OECD Frascati classification of science and technology (FOS)
 - UNESCO nomenclature for fields of science and technology
 - Scientific disciplines in bibliometric databases (Web of Science, Scopus)
- Are a unit of analysis for the assessment of productivity and for benchmarking in science by branches (i.e. bibliometrics)



Examples

Scientific priorities in Austria

- Quantum research and technology
- Smart Cities
- Cybersecurity
- Artificial Intelligence
- Renewable Energy and climate change
- Mobility
- Production Technologies
- Security and Defense

Scientific priorities in Latvia

- Natural sciences, applied mathematics, information and communication technologies for the development of the knowledge economy, smart materials and technologies for increasing the value of products and processes and enhancing cybersecurity.
- Energy independency, energy efficiency and climate change
- Local resources and their sustainable use
- Public health, sports, welfare and demography
- Knowledge society and innovations for economic sustainability
- Open inclusive society and social securitability
- Social security and defence challenges
- Statehood of Latvia, local languages and values

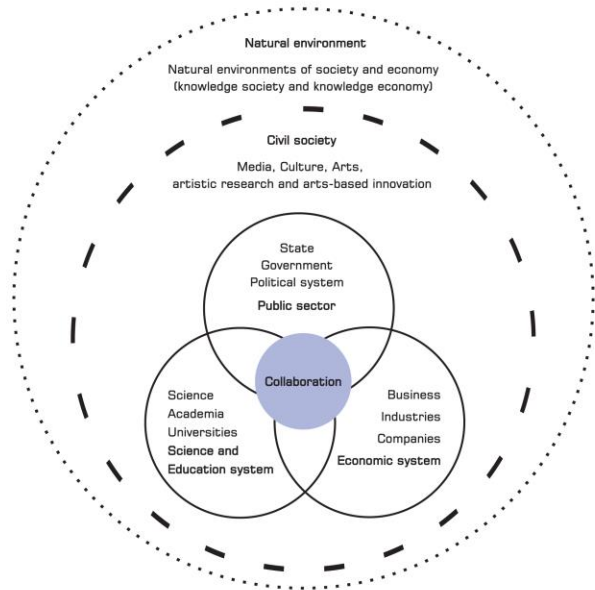
Scientific disciplines OECD

- Natural Sciences
- Engineering and Technology
- Medical and Health Sciences
- Health biotechnology
- Agricultural Sciences
- Social Sciences
- Humanities

Advantages and Disadvantages of the Approaches

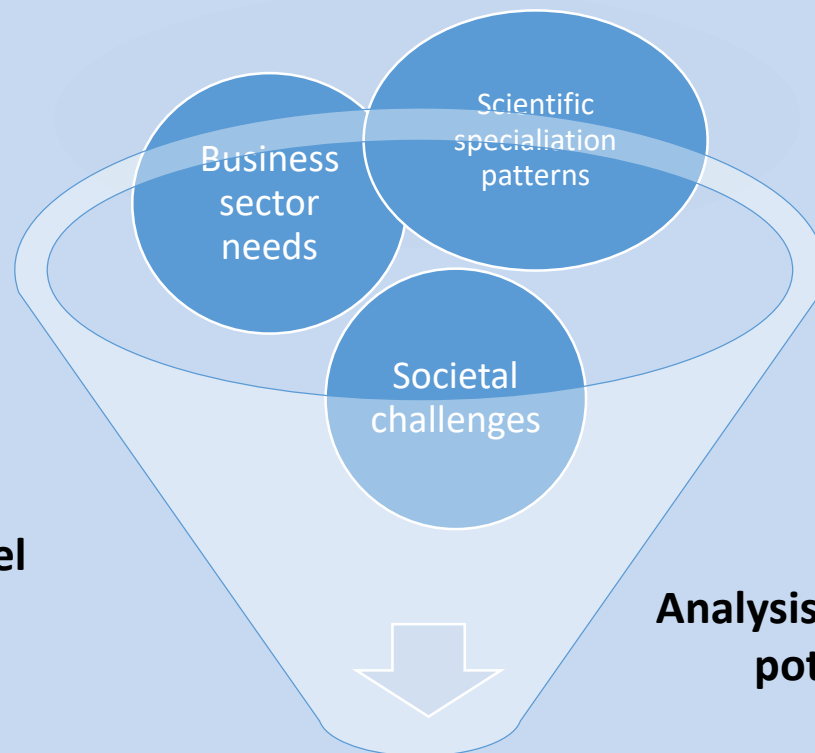
	Funding by Thematic Priorities	Funding by Science Fields
Advantages	<ul style="list-style-type: none"> • Very good ability to adopt to emerging trends • Strong potential to adress challenges from society and / or the business sector • Strong potential to promote private sector investments in R&D 	<ul style="list-style-type: none"> • (Relatively) stable framework • No initial consultative effort needed
Disadvantages	<ul style="list-style-type: none"> • Big initial effort needed to identify relevant priorities • Need of periodic adjustments (every 7 to 10 years) 	<ul style="list-style-type: none"> • No involvement of the business sector • No possibility to fund interdisciplinary projects • No possibility to address societal needs properly • Difficulty to adopt to emerging trends

The quintuple helix of innovation model



Dialogue in the quadrupel helix

Scientific priorities



Analysis of existing potential

Scientific priorities



Research priorities: Thematic and Functional

Thematic Priorities

- Address research needs from
 - Society
 - Business Sector
- Inform funding programmes, e.g.
 - Horizon Europe (EU)
- Can help to overcome existing silos in the science sector
- Can help to stimulate private sector R&D investments

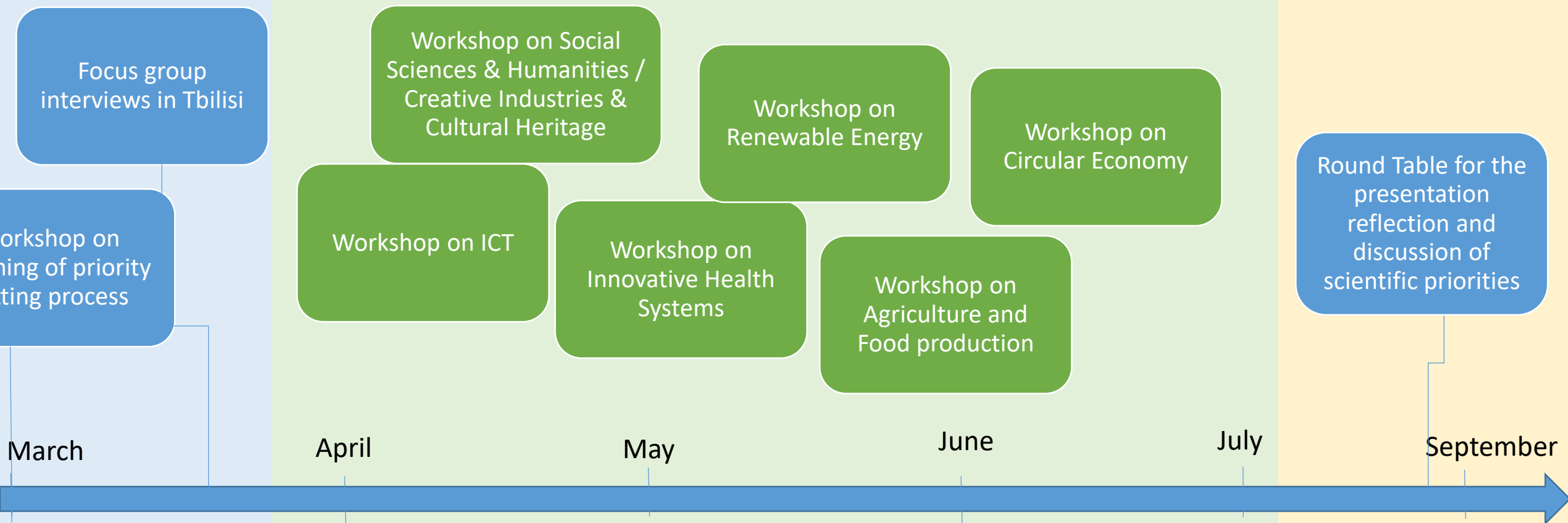
Functional Priorities

- Address functional deficits of a science system, e.g.
 - Lack of research infrastructure
 - Lack of properly trained personnel
 - Poor industry science links
- Can help to improve performance of national science system
- Can help to path the way from science to innovation

Preparation & Planning

***Identification of Scientific Priorities
important for science and business collaboration***

Synthesis





Elements of Priority Setting Process

Preparation

- Scoping Meetings in Tbilisi
- Selection and invitation of stakeholders

Workshop

- Online Workshops with plenary and subgroups
- Interactive work

Follow up

- Distribution of workshop report to stakeholders
- Reflexion and provision of feedback

Identification of thematic priorities in Science

Participants

(max. 30):

Twinning experts C1,
business community, science
sector, government

Aims

- To identify and collect research needs from the business sector
- To define future scientific priorities addressing the identified needs
- To foster dialogue between actors in the triple helix of the Georgian national innovation system

Main agenda points

Intro, icebreaking

Explaining the methodology

Interactive breakout sessions:
Problems and needs

Presentation and discussion of results

Interactive breakout sessions:
scientific priorities

Presentation and discussion of results

Wrap up and concluding remarks

Guiding Questions

- What are the main problems and needs in the business sector?
- What framework conditions need to improve?
- How can science help to address these problems and needs?

Round Table for the presentation reflection and discussion of scientific priorities

Participants

Ministry of Education and
Science
Ministry of Regional
Development and Infrastructure
Georgian Nationale Academy of
Sciences
SRNSFG

Main agenda points

Intro, icebreaking

Presentation

Round Table Talk

Wrap up and concluding remarks

Aims

- To reflect upon the outcomes S&T priority setting workshops
- To discuss ways to take up the identified priorities in Georgia at institutional level/policy level
- To discuss ways to take up the methodologies for the identification of science priorities in Georgia

Guiding Questions

- What are the outcomes of the six scientific priority setting workshops?
- How can these outcomes best transformed into future actions?
- How can the priority setting process made sustainable?



Roles and responsibilities

- Twinning Experts / RTA
 - Management of the priority setting process
 - Preparation, moderation and follow up of the online workshops
 - Preparation and moderation of the final event
- Roles of key stakeholders
 - Ministry of Education and Science
 - Ministry of Regional Development and Infrastructure
 - Georgian National Academy of Sciences
 - Shota Rustaveli National Science Foundation of Georgia
- Main Contact persons



ევროკავშირი
საქართველოსთვის
Project funded by the European Union



[EU Twinning in Science-Business links](#)

მადლობა ყურადღებისთვის
Thank You!



science KNOW

umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA



JOANNEUM
RESEARCH

FWF

Der Wissenschaftsfonds.



DLR Projektträger



FFG

Promoting Innovation



business GROW