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საქართველოსთვის  
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EU ENI East Twinning project  
Supporting inter-sectoral collaboration possibilities between  
Research and Industry  
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# Identification and setting of scientific priorities in Georgia

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science KNOW



business GROW

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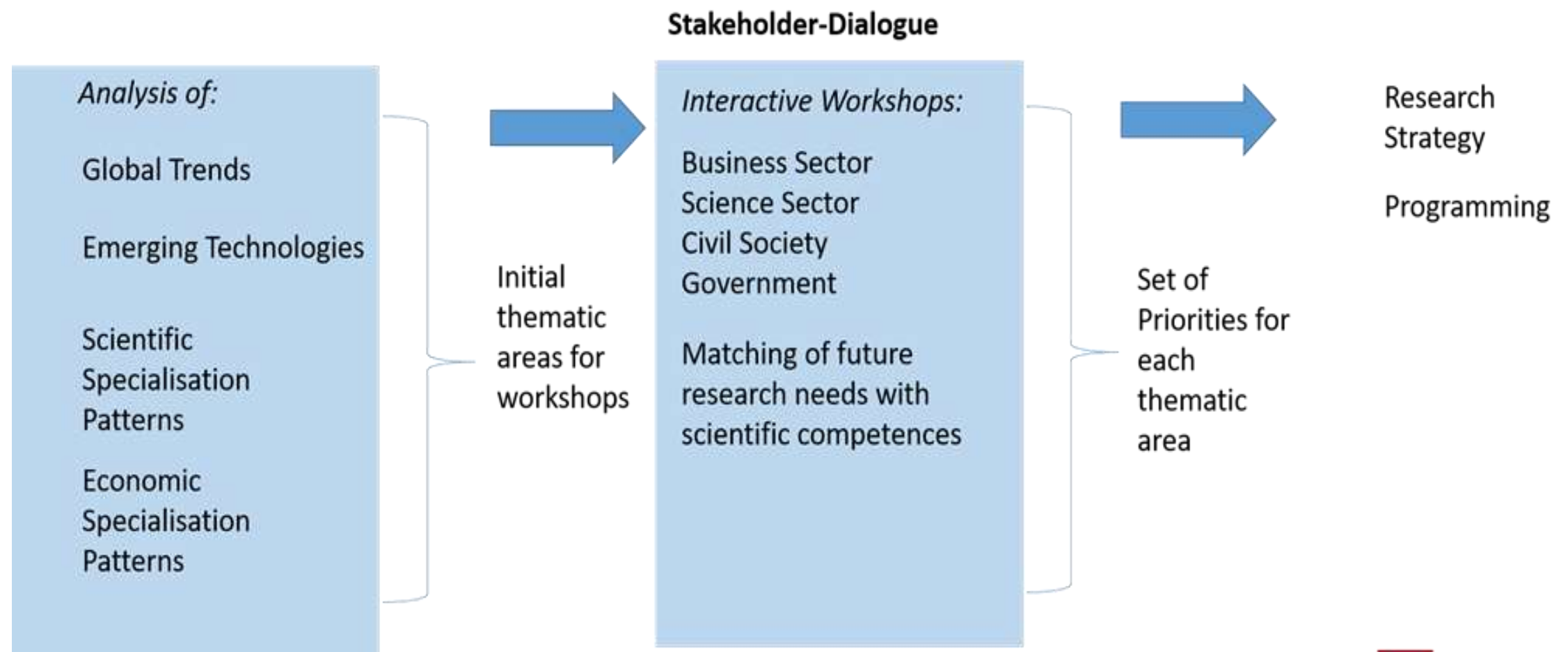
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## The priority setting process



# What are Priorities

## Functional Priorities



- refer to **generic challenges** in a national or regional science and innovation system
- address issues such as **technological diffusion**, start-ups, academia-business linkages, **qualification**, IPRs, etc.
- **complement** thematic priorities and may also have a **cross-cutting** character

## Thematic Priorities



- address **research needs** from Society and/or the Business Sector
- aim at **fostering collaborative actions** of industry and the science sector
- Examples:

## Initial Priority Domains

### Criteria

- **Strong national science base** (i.e. specialisation patterns based on bibliometrics and / or patenting)
- **High national economic relevance** (i.e. high share in employment, high expert shares, strong economic growth, cluster development)
- **Global challenges** and / or **priorities** (e.g. climate change)

### Priority Domains

- Information and Communication Technology (ICT)
- Arts and Humanities/Cultural Heritage
- Innovative Medicine
- Food and Agriculture
- Renewable Energy
- Circular Economy

# Initial Priority Domains and Subfields

Priority Domain	Subfields
ICT	<ul style="list-style-type: none"> <li>Research to support the development of Innovative Health Systems</li> <li>Cybersecurity</li> <li>Artificial Intelligence</li> </ul>
Arts and Humanities/Cultural Heritage	<ul style="list-style-type: none"> <li>No subfields</li> </ul>
Innovative Medicine	<ul style="list-style-type: none"> <li>Research to support the development of Innovative Health Systems</li> <li>Bacteriophages</li> <li>Herbal Medicine</li> </ul>

## Initial Priority Domains and Subfields

Priority Domain	Subfields
Food and Agriculture	<ul style="list-style-type: none"> <li>• Research to support Food Quality and Safety</li> <li>• Future Farming and Agricultural Technologies</li> </ul>
Renewable Energy	<ul style="list-style-type: none"> <li>• Research to support the development of Circular Economy</li> <li>• Green Hydrogen</li> <li>• Solar Energy</li> </ul>
Circular Economy	<ul style="list-style-type: none"> <li>• Research to support the development of Circular Economy</li> <li>• Circular Economy for Construction and Demolition Waste</li> </ul>



## IT - Cybersecurity



## Functional Priorities



- Development of a national technological knowledge base:
  - Education and Training of Cybersurity Specialists
  - Programming skills and advanced knowledge in mathematics (Students, with soldiers)
- Creation of awareness of IT issues (e.g. Cybersecurity) among companies
- Integration of cybersecurity policies into standards and guidelines

## IT - Cybersecurity



- Programs minimizing the risk of economic damage due to malfunctions or manipulation of sensitive data
- Security by design
- Software solutions for critical infrastructures

Thematic  
Priorities





## Arts and Humanities/Cultural Heritage



### Functional Priorities

- Legislative support: Protection of Copyright and other IPR
- Human resources: promotion of academic training; education at school
- Provision of creative (multifunctional) spaces including technological infrastructure for prototyping (e.g. furniture)

## Arts and Humanities/Cultural Heritage



### Thematic Priorities

- Digitisation: Digital Storage and preservation; combining needs of cultural heritage and new digital methods
- Statistical data on culture, and economics of culture; Survey of creative industry/cultural heritage
- Interdisciplinary projects combining science/technology with Arts & Humanities

## Innovative Medicine- support the development of Innovative Health Systems



- Adoption of EU regulatory frameworks; e.g. EC Directive 10/63 (on the protection of animals used for scientific purposes), Regulation on biomedicine
- Development of a national knowledge base: long term development of capacities for education and training of young scientists
- Provision of shared laboratory spaces for companies
- Make existing research capacities visible for business

**Functional  
Priorities**



## Innovative Medicine- support the development of Innovative Health Systems



- Creation of new types of analgesic drugs

Thematic Priorities 



## Agriculture and Food - Research to support Food Quality and Safety



### Functional Priorities

- Provision of safe and reliable testing and diagnostic laboratories operating across the country
- Filling the gap on Legal and political regulations / to fulfill the European requirements on regulations (accreditation requirements)
- Development of a national knowledge base for Food safety and quality

## Agriculture and Food - Research to support Food Quality and Safety



- Overall risk assessment and analysis for emerging risks in food safety and quality
- Digitalization of agriculture system, monitoring and analysis of big data to identify challenges

Thematic Priorities 



## Renewable Energy - Development / Research Capacities and Infrastructure



### Functional Priorities

- Capabilities and training: Need for courses for renewable energies, in-depth training both for researchers and professionals
- Research infrastructures and Demonstrators for Renewables (e.g. solar, wind)
- Creation of public awareness to the benefits of renewable energy

## Renewable Energy - Development / Research Capacities and Infrastructure



### Thematic Priorities

- Weather forecasts with high Geo resolution
- Data on (local) energy demand and supply;  
Data on resources and potentials for renewables with high Geo resolution
- Impact of climate change on the potential future yield of water power plants
- Smart Grids and Micro grids

## Circular Economy - Research to support the development of Circular Economy



- Development of research infrastructures
- Development of academic training courses on circular economy
- Development of a national monitoring and information system on waste streams


Functional  
Priorities



## Circular Economy - Research to support the development of Circular Economy



- Mapping of Circularity for different products in Georgia's Economy
- Recycling of food waste

Thematic Priorities 





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The European Union for Georgia



EU Twinning in Science-Business links

მადლობა ყურადღებისთვის  
**Thank You!**



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