



Workshop „Scientific priorities: setting the scene”

Twinning - Component 1

Ice-Breaking

Icebreaking session

Megatrends for Georgia!

1. Take a look at the “14 Global Megatrends relevant for the future of Europe” developed by JRC



2. Choose one megatrend which you consider as the most relevant for Georgia in the future



3. Introduce yourself (name, organisation, position) and explain your megatrend choice





JRC 14 Global Megatrends

Source:

https://knowledge4policy.ec.europa.eu/sites/default/files/megatrend_icons.pdf

Priority Setting Germany

Priorities setting of the Federal Ministry for Education and Research (BMBF) - the Foresight Process

Foresight vs Forecasting

Strategic foresight does **not attempt to offer definitive answers** about what the future will hold. Foresight understands the future as **an emerging entity** that's only partially visible in the present, not a predetermined destiny that can be fully known in advance (predicted). There are **no hard facts** about the future and the evidence base is always incomplete. The objective is not to 'get the future right', but to expand and reframe the range of **plausible developments** that need to be taken into consideration.

Strategic Foresight vs Strategic Planning

Doing strategic foresight alone will not produce a strategy or plan. The task of developing strategies and plans is enhanced and supported, but not replaced, by the process of considering multiple alternative futures and their implications.

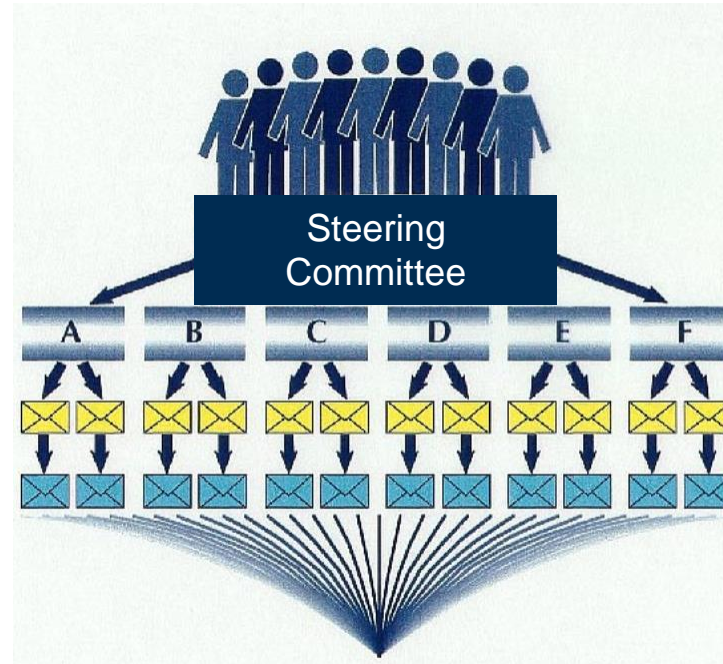
Strategic foresight instead aims to pose **key questions** that might have gone unasked in developing a strategy, and to reveal and challenge potentially fatal assumptions and expectations built into current policies and plans.

Source: OECD

Priorities setting of the Federal Ministry for Education and Research (BMBF) - the Foresight Process

Since 1992: Delphi-Studies

Which are the mega trends and innovation fields in the next 30 years?



Commissions with >100 experts
12 questionnaires, ca. 7.000 participants
1 Round, ca. 2.400 participants
2 Round, ca. 1.900 participants

Priorities setting of the Federal Ministry for Education and Research (BMBF) - the Foresight Process

Since 1992: Delphi-Studies

- Information and communication
- Services and consumption
- Management and production
- Chemistry and materials
- Health and life processes
- Agriculture and food
- Environment and nature
- Building and dwelling
- Mobility and transport
- Space
- Large-scale experiments



Priorities setting of the Federal Ministry for Education and Research (BMBF) - the Foresight Process

Since 2000: Research Dialogue Future

- 1.500 experts from research, innovation and industry as well as the society
-> workshops, events, digital exchange
- Guiding criteria: social needs, interdisciplinarity, new research fields, potential for focusing on guiding visions
-> *25 topics -> 12 topics with a high potential*
- Working groups: priority setting within the 12 topics
-> *Top 5 topics*
- Preparation of scenarios and 4 guiding visions
-> *A healthy and long life with help of prevention*
-> *Understanding thinking (brain research)*
-> *A life in a networking world*
-> *Ensuring access to learning worlds in the future*



Priorities setting of the Federal Ministry for Education and Research (BMBF) - the Foresight Process

Since 2007: 3 Foresight Cycles

- 2007 – 2009: „Future fields“ -> Human-Technology-Cooperation; Decrypt aging; Future habits; Production and consumption 2.0; Time research; Future energy technologies
- 2012 – 2014: "Technology Push,, + "Demand Pull"
-> 12 scientific fields: biotechnology, services, energy, health and food, ICT, mobility, nanotechnology, photonics, produktion, civil security, materials
-> potential use 2030 & long-term research and technology perspectives
- 9 „Innovation germs“: do it yourself in Germany, citizen science in the field HEALTH, authomatisation and robotics, digital and virtual education, global innovation landscape, innovative governance, infrastructues for social-technical innovation, collaborative added value forms, private life in change

Methods used:



Interviews



Consulting experts



Brainstorming



Group discussion



Desk research

Priorities setting of the Federal Ministry for Education and Research (BMBF) - the Foresight Process

Since 2019: VORAUS:schau

- 50 future topics, e.g. green hydrogen, AI, data trust, new space economy, limits of aging (in German only)
- “The future of values held by people in our country” – video (in English)
https://www.vorausschau.de/vorausschau/de/home/home_node.html#zukuenfte
- Future of CORONA (in German only)
https://www.vorausschau.de/SharedDocs/Downloads/vorausschau/de/2020_Corona_Delphi_Chancen_und_Herausforderungen.pdf;jsessionid=724B82CB1DA27B6BF22C2AD808808048.live382?__blob=publicationFile&v=1
- Untill 2022: each 6 months identification of 50 – 60 relevant topics



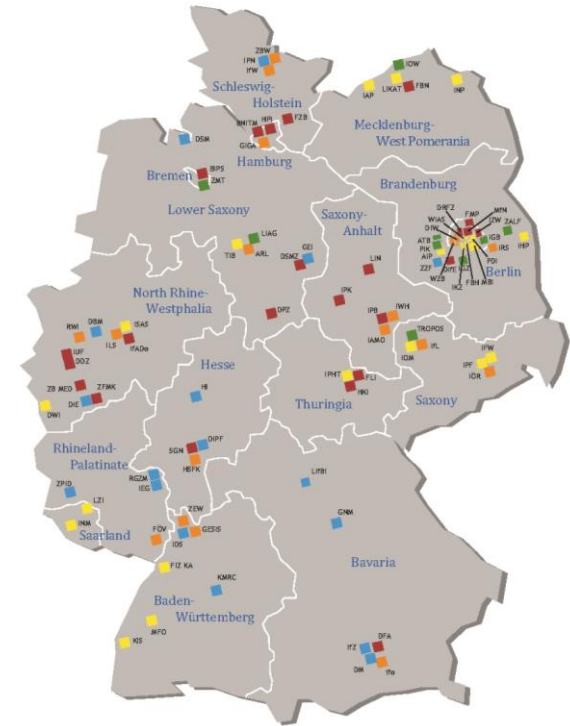
Source:

https://www.vorausschau.de/vorausschau/de/home/home_node.html

Example: Leibniz Association

Leibniz Association at a glance

- Founded in 1995
- 96 independent research institutions
 - ranging in focus from natural, engineering and environmental sciences to economics, spatial and social sciences and the humanities.
- 20,500 employees; 11,500 researchers
- Financial volume of 2 billion EUR



<https://www.leibniz-gemeinschaft.de/en>

Leibniz Association – Scientific profile and research sections

The Leibniz institutions are divided up into **five sections** with differing focus areas.

- Excellent basic and applied research with social, ecological and economic impact
- Interdisciplinary research within and across institutes
- Closely collaborate with universities
- Provide wide range of research infrastructures

<https://www.leibniz-gemeinschaft.de/en/research/scientific-profile>

Cultural Heritage and Education

Section „Humanities and Educational Research“

Economic and Spatial Development, Democratic Participation and Social Integration

Section "Economics, Social Sciences, Spatial Research"

Biodiversity and Health

Section "Life Sciences"

Light, Matter, Information

Section "Mathematics, Natural Sciences, Engineering"

Environment and Sustainable Development

Section "Environmental Research"

Leibniz Research Alliances

Leibniz institutions work together in interdisciplinary and transdisciplinary teams within Leibniz Research Alliances to investigate topical issues of great relevance to science and society.

- Act as internal networking platforms with the aim of pooling complementary expertise from different institutes
- Central points of contact for policymakers, industry representatives, supporters, the media and the general public
- Open to collaboration with universities, non-university research and infrastructure facilities, international research groups and industry partners.

<https://www.leibniz-gemeinschaft.de/en/forschung/leibniz-research-alliances>

[Bioactive Compounds and Biotechnology](#)

[Crises in a Globalised World](#)

[Energy Transition](#)

[Health Technologies](#)

[Historical Authenticity](#)

[INFECTIONS in an Urbanizing World - Humans, Animals, Environments](#)

[Resilient Ageing](#)



THANK
YOU