The European Commission’s science and knowledge service

Joint Research Centre
The JRC within the Commission
€ 400 - 500 million budget annually,

6 locations in 5 Member States: Belgium, Germany, Italy, the Netherlands, Spain

56 large scale research facilities, more than 110 online databases

3 000 staff

83% of core research staff PhD's

Over 1,400 scientific publications per year

30% of activities in policy preparation,

70% in implementation

+400 instances of support to the EU policy-maker annually
The need for evidence to inform policy
As the science and knowledge service of the Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle.
(Strategic) foresight
Why anticipatory thinking is needed?

Enhance preparedness of organisations and people to deal with changes
Diversifying inequalities
Climate change and environmental degradation
Increasing significance of migration
Growing consumerism
Aggravating resource scarcity
Increasing demographic imbalances
Expanding influence of east and south
Accelerating technological change and hyperconnectivity
Changing nature of work
Diversifying education and learning
Shifting health challenges
Continuing urbanisation
Increasing influence of new governing systems
Changing security paradigm
Why thinking about the future?

Facts about the past

The future cannot be measured (or predicted), but it can be experienced through immersive learning, scenarios, system thinking.
FORESIGHT

WHAT IS IT?

- Structured, systematic and systemic approach to gain valuable insights into the mid-to-long term future
- Develops anticipatory knowledge, identify opportunities
- Participatory, inclusive, open
- Anticipates and analyses possible future developments
- Qualitative and quantitative methods and tools
- Sheds light on today's strategies and actions to shape the future
- It helps create visions and set an agenda
- It is designed to have influence on policy not as an ivory-tower exercise
- It addresses weaknesses of a policy (or set of policies) by helping to align different stakeholders around shared appraisals of future prospects
- Products include codified reports, presentations, web resources but process benefits are equally important (i.e. linking stakeholders, enabling key actors to understand why particular policies are pursued)
- Networks together different sources of knowledge from different locations and institutions
FORESIGHT FOR POLICY

REQUIREMENTS

• Access to influential decision-makers (engaged to sponsor the work)

• Wide engagement can be important to establish the legitimacy of decisions informed by foresight

• Uses codified methods and tools to capture and bring together the knowledge (Delphi, scenario analysis, vision building, roadmapping, soft systems such as participative workshops)

• Effective integration into policymaking requires knowledge of decision timetable and policy language. This is accomplished through engagement of policymakers and analysis in the foresight process.

• Evaluation on outcomes and benefits of incorporating long-term actions into current policies and decisions may emerge after politicians and actors are long gone

• Good practice requires analysis of contexts of desk research analysis
Horizon Scanning new emerging issues
Trends analysis blind spots and factors of change
Visions and roadmaps desired futures and associated policy agendas
Alternative futures testing policy initiatives, provide alternatives for policies formulation
Technology assessment from maturity to potential impacts
JRC Competence Centre on Foresight

- Strategic and future-oriented input in EU policymaking
- Develop an anticipatory culture
- Experimentation on method and tools
Long tradition
Many reports but focus also on making foresight knowledge practical through developments of new tools, methods and processes
Forward looking exploration of existing, emerging and potential applications of Blockchain and other Distributed Ledger Technologies (DLTs) for industrial / non-financial sectors.
Horizon scanning: what it detects?

What it detects?
- New emerging issues and trends
- New drivers of change
- Weak signals
- Discontinuities

Benefits: systematically and continuous scan from multiple sources
Enables a broader base of future knowledge
Horizon scanning

THE JRC PROCESS

- Continuous scanning of multiple sources
- Identification of weak signals
- Internal JRC sense-making sessions
- Validated signals of change
- Sense-making sessions with policy DGs and experts
- Insights on the future
- Early alerts to upcoming changes
- Focused identification of future insight

Phase 1
Phase 2a
Phase 2b
The Megatrends Hub

... regularly updated through JRC Horizon scanning and literature review
The Megatrends Hub

Publicly available at
https://ec.europa.eu/knowledge4policy/foresight_en
## From scenarios to serious gaming

### Objectives

- Use of existing foresight work, consider the long-term
- Reach a broad public
- Ability to focus on specific issues selected by the participants
- Immediate results

### Method

- Involve role play techniques
- Dynamic interaction between participants
- Imposed forward looking context
- Exploration of contrasting circumstances
What is the SES?

- A simulation tool that allows the systemic and forward-looking exploration of scenarios
- It helps understand the complexity of decision making
- Various roles: business, policy maker, civil society...
What pitfalls to avoid? What is needed?

- Trust, support, and engagement of senior management is essential
- Do not underestimate the skills and resources necessary
- Invest in communication
- Engage with stakeholders that are able to think outside-the-box
# New study: Future of EU Customs

<table>
<thead>
<tr>
<th>Project Title and client DG</th>
<th>The Future of Customs in the EU DG TAXUD</th>
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<tbody>
<tr>
<td><strong>Timeframe</strong></td>
<td>(Looking ahead approximately) plus twenty years (=2038)</td>
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<td><strong>Main Objectives</strong></td>
<td>• Identify major (mega-)trends and drivers affecting customs in the EU</td>
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<td>• Outline &amp; understand possible paths for how customs in the EU could develop (= identify and describe potential alternative, plausible scenarios)</td>
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<td>• Analyse possible opportunities and risks implied by the described potential future change, for customs in the EU</td>
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<td></td>
<td>• Enable reflection around options for action – how could customs in the EU deal with these risks and opportunities? How could the system adapt?</td>
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Thank you

Any questions?

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