EYE OF EUROPE

FORESIGHT CULTURE IN EUROPE

Summary Report on Mutual Learning Event 5

Eye of Europe project

https://www.**futures4europe.eu**

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Abbreviations and acronyms

Acronym	Description
AS	Associated States
BBK	The German Federal Office of Civil Protection and Disaster Relief
BMBF	Federal Ministry of Education and Research (Germany)
EIC	European Innovation Council
ERAC	European Research Area Committee
ERDF	The European Regional Development Fund
FS	Foresight
FLAs	Forward-looking activities
JRC	Joint Research Centre
KRK 2050	The National Development Concept 2050 (Poland)
MS	Member States
MLE5	Fifth Mutual Learning Event
NARD	National Agency for Research and Development of Moldova
NIS	National Innovation System
NRDI	National Research and Development and Innovation
PGS	Policy Governance Sub-system
R&D&I (RDI)	Research and Development and Innovation
TC Prague	Technology Centre Prague, Czechia

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TSI	Technical Support Instrument
WFSF	World Futures Studies Federation

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INTRODUCTION

Eye of Europe is a three-year Coordination and Support Action funded by the EU - Horizon Europe programme which aims to enhance the integration of foresight practices into Research and Innovation (R&I) policymaking across Europe. Ultimately, the project envisions a more cohesive and influential R&I foresight community that contributes significantly, as a collective intelligence, to shaping and guiding policy decisions. To this end, Eye of Europe builds on existing initiatives and experiences to foster knowledge-sharing between foresight practitioners and policy makers, attract domain experts in foresight endeavours, and engage a broader audience in futures-thinking. Nurturing futures4europe.eu as the online home for the community and running various face-to-face events with different stakeholders will underpin these ambitions. The project is conducted from November 2023 to October 2026.

The MLE5 was open by Natalia Bolocan (NARD) and by two distinguish guests Igor Chiosa, the Representatives of the Ministry of Education and Research of Moldova and Daniel Funeriu, the Member of the team of EU High-Level Advisers in Moldova.

Eye of Europe project coordinator Radu Gheorghiu (UEFUSCDI, Romania) introduced the Eye of Europe project. Research and innovation increasingly rely on the ability to anticipate future trends and challenges. Foresight is a systematic, participatory process for exploring medium- and long-term futures. Its typical outcomes are scenarios and visions that guide strategic decision-making. A key element is futures literacy—a skill that can be developed, for example, through reflection. This capability enables individuals and institutions to better understand and use the future as a source of possibilities.

The project aims to strengthen the research and innovation foresight community by fostering greater integration and expanding its reach. This community includes foresight experts, policymakers, domain specialists, and future enthusiasts. Together, they contribute to the institutionalization of foresight, the development of futures literacy, and the engagement of society in dialogue about the future. The Eye of Europe initiative supports this community through conferences, mutual learning exercises, pilot workshops, videos, podcasts, and showcasing results. These activities create spaces for knowledge sharing and joint vision-building. He explained outputs from the Vision workshop Vision for 2040 held in September 2025 in Mamaia, Romania. By 2040, foresight in research and innovation will become a space of disruption and renewal—a dynamic arena where entrenched assumptions are challenged, new aspirations are shaped, and shared visions are co-created. Its role will extend far beyond agenda-setting. Foresight will act as a cross-domain integrator, fostering open and inclusive environments and cultivating futures literacy across all levels of society. This will empower Europe's research and innovation ecosystems to imagine boldly, collaborate widely, and act responsibly toward sustainable and just futures. Finally, he promoted Futures4Europe platform and encouraged the MLE 5 participants to register on the platform and became a part of the foresight community.

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Lenka Hebáková (Technology Centre Prague) introduced insights from Mutual Learning Event 5. The fifth Mutual Learning Event (MLE) on Foresight Culture in Europe, held on October 23–24, 2025, in Chișinău, Moldova, marked a significant step toward embedding foresight practices into European research and innovation (R&I) policymaking. The Mutual Learning Event 5 was organized by the Technology Centre Prague together with the National Agency for Research and Development of Moldova (ANCD/ NARD) as the local organiser. Organized under the Eye of Europe initiative, the event brought together policymakers, national authorities, and foresight practitioners to exchange experiences and strengthen collaborative capacities. Europe faces unprecedented challenges in a rapidly changing global environment. From technological disruptions to socio-economic uncertainties, policymakers must anticipate and adapt to complex dynamics. Foresight offers a structured approach to envisioning multiple futures, enabling informed decisions and strategic resilience.

The MLE platform serves three core purposes:

- Knowledge Sharing: Disseminating experiences and best practices in foresight application for R&I policy.
- Community Building: Strengthening the European foresight ecosystem and fostering collaboration among Member States and Associated Countries.
- Capacity Development: Enhancing institutional ability to integrate foresight into policy cycles.

The MLEs concept in Eye of Europe project is based, among others, on the following key events and political decisions:

1. *Workshops on R&I Foresight* under the German (2/2020), Portuguese (1/2021) and Slovenian (2/2021) presidencies which aimed to strengthen the European foresight community.
2. During the Slovenian presidency, on a European Research Area Committee´s (ERAC) meeting, the *Policy Support Facility (PSF) Mutual Learning Exercise on R&I Foresight* was proposed as a tool to facilitate the exchange of information, experiences and lessons learned in the practice of R&I foresight across EU and Associated Countries, and to contribute to the development of an impactful R&I foresight community. The 9 following countries participated in the PSF: Austria, Belgium, Czechia, Estonia, Finland, Norway, Portugal, Romania and Slovenia. Outputs – reports from these 5 PSF MLEs (2022-2023) are available HERE.
3. ERA Action proposal for „*R&I foresight community of practice for the ERA* „with the aim to create national/regional networks of civil servants active or interested in R&I foresight activities and to join the network set up by the Eye of Europe CSA project. (Michal Pazour, TC Prague)

The face-to face MLE5 brought together forty participants from diverse stakeholder groups. European partner organisations and external representatives of ministries, governmental bodies, R&I funding agencies and others. The event focused on the role of building foresight culture in Europe. Group and plenary

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discussions in two rounds of interactive sessions were framed by expert presentations showcasing a wider approach on integrating foresight into the R&I policy making.

1 FORESIGHT CULTURE IN EUROPE

The event aimed at discussions on importance of collaboration among researchers, policymakers, and industry experts in foresight activities and explore ways to break down silos and promote knowledge exchange across disciplines on local or even global level.

1.1 Introduction to foresight for STI policy making.

Kateřina Ciampi Stančová (OECD Trento Centre) introduced foresight for STI policy making from the OECD perspective. Science, technology, and innovation (STI) policies are critical drivers of socio-economic progress. In a world characterized by volatility, uncertainty, complexity, and ambiguity (VUCA), traditional planning approaches fall short. Foresight emerges as a strategic tool to anticipate change, explore alternative futures, and guide transformative policymaking. Global megatrends—such as digitalization, demographic shifts, and climate change—interact with disruptive events, creating systemic challenges. Policymakers must move beyond reactive measures toward anticipatory governance that builds resilience and adaptability. Foresight is a structured, systematic process for thinking about possible futures. It involves:

- Exploration: Identifying trends, drivers, and weak signals.
- Visioning: Developing shared, inspiring future scenarios.
- Action: Translating insights into strategies and policies.

The OECD outlines five key stages of the foresight process: Framing, define scope, time horizon, and key questions: Intelligence gathering, use tools like horizon scanning, Delphi, and environmental analysis; Futuring, apply scenario planning, visioning, and workshops; Acting upon, implement strategies through backcasting, roadmapping, and change management; Monitoring, continuously update and adapt plans. It highlighted foresight´s benefits for STI policy making through delivering value across four dimensions: Strategic Intelligence improves risk management a rapid response; Directionality aligns resources with long-term visions; Stakeholder engagement builds trust and foster co-creation; Transformation drives innovation and systemic change. OECD and EU initiatives showcase foresight's application in regional development and smart specialization strategies. Examples include foresight for mission-oriented smart specialisation in Czechia, roadmapping for strategic innovation in Wallonia, regional strategic foresight for Basque competitiveness in 2040, foresight for identifying smart specialisation priorities in Lithuania. Despite its benefits foresight faces barriers, such as short-term political and economic pressures, limited future literacy

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among leaders and citizens, limited funding for strategic thinking activities. Overcoming these challenges requires institutional capacity, collaborative networks, and embedding foresight into governance frameworks.

1.2 Case 1-Technology foresight on circular economy in Moldova: Informing national strategy for key product value chains.

Tatiana Cherneyavskaya (UNIDO) presented on UNIDO´s exploratory foresight projects on circular economy. The circular economy generates economic, social, and environmental benefits—from reduced greenhouse gas emissions and pollution to improved health, productivity, and new business opportunities. It operates across multiple dimensions, including business and finance, eco-industrial systems, ecosystems and resources, governance, urban infrastructure, technology and innovation, and social-community initiatives. UNIDO's exploratory foresight project in Ukraine aimed to envision future circular economy developments and design long-term pathways for implementation. It involved government officials, businesses, civil society, academia, and media. The process consisted of four stages: scoping, scenario building, visioning, and pathway design. Foresight tools such as online surveys, expert panels, and interviews, were applicated. Ukraine's unique situation—marked by war damage, outdated industries, and the need for recovery—requires short-term rebuilding, medium-term transition, and long-term systemic transformation. Despite the challenges, Ukraine's foresight vision for 10+ years foresees a prosperous and sustainable nation fully embracing the circular economy, aligning with EU frameworks and global value chains.

The Technology Foresight for Circular Economy initiative provides evidence-based input for Moldova's long-term industrial and technological strategy. It helps the government prioritize investment sectors, supports innovation, reduces risks, and aligns sustainable development with global trends.by fostering regional cooperation and strategic foresight.

1.3 Case 2–Strategic intelligence for research and innovation in Czechia.

Michal Pazour (Technology Centre Prague) informed on the Czech journey towards building a continuous system of strategic intelligence for research and innovation. Over the past two decades, Czechia has

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developed a robust practice of foresight in the field of research and innovation (R&I). What began as a set of discrete exercises for identifying national research priorities has gradually evolved into a coordinated, institutionalised system of strategic intelligence supporting policy development and decision-making. The presentation outlined the evolution of Czech foresight activities, key lessons learned, and the establishment of the STRATIN+ project, a platform for a continuous, evidence-based, and anticipatory R&I policy system. Czech foresight activities have supported the identification of long-term societal challenges and emerging technology domains. They introduced structured dialogue between government, academia, and industry—shifting discussions from discipline-based approaches toward mission-oriented thinking. Horizon scanning and megatrend analyses were integrated into policymaking and used by the RDI Council and funding providers. Foresight for regional specialisation has proven to be a practical and effective tool for updating innovation strategies within the smart specialisation framework. By analysing how technology and megatrend dynamics influence local economies, regional policymakers have been able to anticipate structural shifts, design more resilient strategies, and enhance regional competitiveness. Sectoral foresight initiatives have informed long-term visions for sustainability, circularity, and decarbonisation—particularly in the chemical industry. They have helped identify opportunities for new Strategic Research and Innovation agendas and demonstrated how futures thinking can support public investment and innovation roadmaps. For example, foresight for the Fire and Rescue Service linked technology trends with public safety and crisis management needs, illustrating how foresight can directly inform sectoral priorities.

The Czech foresight journey demonstrates a significant evolution—from fragmented projects to an integrated strategic intelligence system. Through STRATIN+ project, Czechia has established an adaptive and evidence-based framework for R&I policymaking. STRATIN+ was launched in 2021, approved by the government, and funded by the Ministry of Education. It brings together a consortium of four expert institutions led by the Technology Centre Prague.

1.3 Case 3–Foresight for resilient and inclusive futures.

Jessica Prendergast (Future Impacts) presented several case studies that illustrate different approaches to foresight in public policy, civil security, and climate action. German National Public Sector Foresight. Germany has developed one of the largest and longest-running foresight processes in Europe, initiated in the 1990s by the Federal Ministry of Education and Research (BMBF, now BMFTR). Originally based on Delphi studies, the process evolved into the dialogue with three foresight cycles since 2007. Outputs included reports on 112 trends and signals, scenario studies on topics such as values in Germany, the hybrid age of technology and biology, trust in new worlds, and a lead vision of a “purpose economy.” The process engaged ministries, research institutions, companies, and citizens. Key takeaways were the value of broad exploratory foresight, the importance of diverse expert circles, and the benefits of citizen participation. Following a change in government, the current focus has shifted toward identifying and assessing emerging key technologies using more quantitative, data-driven approaches. In parallel, Future Impacts developed toolkits for connecting science to the public, offering accessible guides on trend analysis and scenario development. Foresight in Civil

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Protection and Disaster Relief. The STRATOS project, led by TU Braunschweig with international foresight analysis by Future Impacts, is a two-year initiative to embed foresight into BBK's work. It maps risks beyond traditional disasters, focusing on hybrid threats and civil defence scenarios. The project draws on international practices such as NATO's Strategic Foresight Analysis and UK Defence Future. Lessons learned include the importance of pragmatic, stepwise implementation, the role of senior foresight experts and internal champions, and the need to broaden stakeholder engagement beyond experts to include local civil protection organizations, volunteers, and citizens. Ethical considerations—resilience and societal unity—remain central to civil security foresight. EU Enlargement Scenarios and Climate Action (European Climate Foundation). The European Climate Foundation commissioned a foresight study on EU enlargement and its implications for climate action, with a particular focus on Moldova. Key outcomes included positive feedback on the scenarios, use of results by NGOs and enlargement countries, and uptake within the European Commission's Intergenerational Fairness Strategy. Engagement reached high levels, including DG CLIMA.

Across these case studies, foresight emerges as a vital tool for navigating uncertainty, engaging diverse stakeholders, and shaping resilient and inclusive futures. Whether in education and research, civil protection, or climate policy, foresight processes provide orientation knowledge, strategic guidance, and participatory engagement that can help Europe prepare for the challenges of the coming decades.

1.5 Case 4–Foresight culture in Poland.

Anna Sacio-Szymańska (4CF) described the National Development Concept until 2050 in Poland. Thinking about the future is not only valuable but necessary. It allows countries to anticipate emerging opportunities, prepare for potential threats, and make decisions that foster resilience, innovation, and sustainable development. Strategic foresight provides public authorities with tools to better understand internal and external factors that shape possible futures, helping them to make informed and long-term strategic decisions. By engaging in foresight, states can seize opportunities, mitigate risks, and strengthen resilience. It helps governments generate innovation, improve decision-making, reduce groupthink, and promote collaboration between administrative departments and other key stakeholders. Ultimately, it supports a government's duty to act responsibly toward its citizens. The National Development Concept 2050 (KRK 2050) fills a gap among Poland's strategic frameworks. While several strategies already exist—covering areas such as the environment, transport, rural development, human capital, and energy policy—none previously defined a comprehensive model for national development management. Hence, KRK 2050 was established as a high-level foresight initiative, offering an analytical foundation for medium-term policies and a long-term vision for Poland's future. The document includes: an analysis of global and European megatrends influencing Poland's development; a vision of Poland in 2050 as a modern, resilient, green, and inclusive state ensuring a high quality of life for its citizens; four development scenarios to help policymakers prepare for different potential futures; four long-term challenges: inclusive social transformation, a sustainable economy, a resilient

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and secure state, and spatial sustainability; conclusions forming a basis for future development programming. The main conclusion was that the Vision 2050 is broadly achievable, provided there is internal determination and social consensus. However, its success will depend on reducing dependence on external factors and securing long-term financial commitments.

Key strategic lessons include:

- The importance of addressing climate change and energy transition.
- Empowering local governments rather than over-centralizing.
- Prioritizing national security and demographic resilience.
- Reforming education and social policy.
- Strengthening social cohesion and the sense of belonging to the European Union.
- Promoting strategic thinking and consensus on core national goals.

1.6 Case 5-Integrating foresight into parliamentary system: the Estonian case.

Uku Varblane (Foresight Centre) presented on the Estonian case of integrating foresight into parliamentary system. Foresight refers to the identification and analysis of long-term developments in Estonian society. It involves preparing development scenarios, distinguishing opportunities and risks, monitoring their realization, and adjusting scenarios when necessary. Foresight is integrated into Estonian legislation, ensuring its role in shaping policy decisions. Estonia established the Foresight Centre in 2016. A small team works under the guidance of the Economic Affairs Committee of Parliament to consolidate proposals, draft action plans, commission studies, and communicate results widely. Its activities are supported by the Foresight Council, a group of experts from research, business, and technology. They approve plans, suggest topics, and evaluate projects—ensuring independence and credibility. Foresight starts with systemizing existing studies, combining qualitative and quantitative analysis, and creating alternative scenarios. These scenarios can serve as external environments for policy design or as strategic options based on trends, finally translating scenarios into actionable strategies. The process uses diverse methods: trend analysis, scenario building, quantitative modelling, focus groups, and data projections. Estonia's experience shows that foresight it is a necessity for resilient governance. It helps to prepare for the future, not fear it. And the question is not whether we can predict the future, but whether we can shape it.

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1.7 Case 6–Foresight culture in Romania.

Radu Gheorghiu (UEFUSCDI) described the foresight culture in Romania, its historical development and current practice. Romania has a long tradition in foresight. The first foresight school appeared in the 1970s, and in 1972 Bucharest hosted a World Conference on Futures Studies, which laid the foundation for the creation of the World Futures Studies Federation (WFSF). This initiative aimed to open discussions about the future to cultural pluralism, especially during times of polarization when it is easier to talk about the future than the present. Since 2005, foresight has been integrated into research and innovation strategies. The first process in 2006 involved seven stakeholder panels and 600 participants in an online Delphi survey. By 2013, the scope expanded to 12 panels and 4,000 participants, using methods such as horizon scanning, Delphi, and citizen workshops. In 2021, these processes became even more sophisticated. Each foresight exercise resulted in strategic documents adopted by government decisions, enabled by leadership, inclusivity, transparency, and expertise. From 2010 onwards, foresight was also applied in other ministries through UEFISCDI. Recent strategic foresight projects have focused on competencies for high-level public servants (2030), fisheries and aquaculture (2035), digital roles in public administration (2030), and mountain area development (2030). Key lessons learned include:

- Process benefits: creating safe spaces for dialogue, fostering new perspectives, and improving futures literacy.
- Champions are essential: credibility, inclusivity, and resource mobilization drive success.
- Practice matters: start by doing, learn from the best, and don't hesitate to innovate.

1.8 Case 7- Redefining Austria´s economic security strategy – combining foresight and economic studies.

Susanne Giesecke (AIT) highlighted process of redefining Austria´s economic security strategy. Austria's economic security strategy focuses on a comprehensive approach, integrating economic and security policy to address new threats like energy and technological dependencies, while also pursuing growth through EU membership and reforms. Key pillars include strengthening resilience, promoting innovation, diversifying supply chains, and ensuring stability through cooperation and a focus on energy security, as part of its commitment to the EU's comprehensive security framework.

Key components of the strategy

- Comprehensive security: Austria views security as a multifaceted concept that links internal and external, civilian and military aspects. This means security assessments must include economic

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factors like energy supply, technological dependencies, and supply chain resilience, especially considering geopolitical events like the war in Ukraine.

- EU alignment: As an EU member, Austria's strategy aligns with broader European goals, including the push for energy transition and the securing of critical raw materials. This involves participating in EU-level initiatives for a stronger and more resilient economy.
- Resilience and independence: The strategy emphasizes building greater national resilience and reducing dependencies on single sources for critical supplies, such as energy and raw materials.
- Innovation and growth: A key goal of Austrian economic policy is to foster growth, innovation, and full employment. This is seen to enhance the country's overall economic security and its capacity to meet grand challenges through research and development.
- Cooperation: The strategy relies heavily on cooperation, both domestically between government and non-government actors, and internationally within the European Union and other partner countries.
- Addressing current challenges: Austria is also focusing on strengthening its economy and reducing fiscal deficits, partly due to the energy price shock and the need for policy support. The government is working on reforms to enhance its growth potential and fiscal position.

Redefining Austria's economic security strategy required a forward-looking approach that integrates foresight methodologies with rigorous economic analysis. Traditional strategies often focus on immediate risks such as supply chain disruptions or energy dependencies, but the accelerating pace of technological change, geopolitical volatility, and climate-related challenges demand a more anticipatory framework. By embedding foresight tools—such as scenario planning and horizon scanning—into policy design, Austria can identify emerging vulnerabilities and opportunities before they materialize, ensuring resilience in an increasingly complex global economy. Foresight-driven scenarios could help policymakers prepare for risks such as cyberattacks on financial systems or disruptions in cloud services, while economic modelling could assess the cost-benefit of investing in domestic cloud solutions and AI innovation hubs.

1.9 Case 8–Foresight culture in Europe, for all, with all? Lessons learned from recent European citizens´ panels.

Yves Mathieu (Missions Publiques) invited participants to participative Journeys into Futures explaining how foresight can be understood as a local process. The European Citizens' Panels are a democratic innovation

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initiated by the European Commission following the 2021 Conference on the Future of Europe. These panels bring together 150 randomly selected citizens from all 27 EU Member States three times a year in Brussels. Each panel works on a specific political question over three sessions spanning two months, nine days of deliberation in total. Their mission is to explore complex, forward-looking issues and draft recommendations for the Commission. After six months, participants reconvene to review how their proposals were considered, ensuring transparency and accountability. Recent panels have tackled topics such as intergenerational fairness—how to make the EU fair for current and future generations—and priorities for the long-term EU budget (2027–2034). Citizens were asked to imagine horizons like 2034 or even 2125, stepping into the shoes of future generations. These exercises demonstrated that citizens could engage deeply with foresight, combining rational analysis with emotional perspectives. Discussions often began from personal concerns, such as security or family, and evolved into broader debates on policy priorities. The panels revealed that foresight is not only accessible but also enriches democratic processes by fostering empathy, creativity, and legitimacy.

1.10 Eye of Europe project: Contribution to foresight culture in Europe.

Philine Warnke (Fraunhofer ISI) presented on the Eye of Europe pilot workshops how the Eye of Europe project aims to strengthen foresight culture across Europe by fostering dialogue on future-oriented thinking. Through a series of eleven pilot workshops held in diverse locations—from Thessaloniki and Madrid to Berlin and Paris—the project explored common areas of interest for European research and innovation. These workshops brought together citizens, domain experts, and stakeholders to experiment with innovative foresight methods, such as scenario planning, causal layered analysis, and speculative design. The overarching goal was to nurture the ability to think beyond linear projections, question assumptions, and broaden perspectives by considering signals from the peripheries.

Each pilot addressed a distinct theme, ranging from the long-term future of democracy and industrial decarbonization to sustainable fashion, ageing technologies, and emotional ecosystems. For example, discussions on democracy envisioned pluralistic societies experimenting with new governance models, while the industrial decarbonization workshop highlighted the geopolitical challenges of achieving net-zero goals. Similarly, the fashion foresight sessions revealed that fear of change and entrenched mindsets remain major barriers to sustainability. Across all topics, participants emphasized the need for inclusive, imaginative approaches to anticipate societal transformations and technological disruptions. A key feature of the Eye of Europe approach was diversity—both in methods and participants. Techniques such as futures brainstorming, Delphi surveys, and backcasting were combined with creative exercises like literary quartets and speculative

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design. Stakeholder engagement extended beyond traditional experts to include citizens, artists, spiritual communities, and even conceptual representatives of future generations and nature. This diversity ensured a rich mix of perspectives, fostering dialogues that were open, critical, and sometimes controversial. By mapping stakeholders and their roles, the project also highlighted the importance of balancing power, legitimacy, and urgency in shaping future-oriented decisions.

The Eye of Europe initiative demonstrated that foresight is not merely about predicting trends but about creating spaces for collective imagination and strategic reflection. The conversations revealed emerging narratives around resilience, sustainability, and inclusivity, underscoring the need for collaborative governance and innovative thinking to navigate uncertainty.

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2 INTERACTIVE SESSIONS

2.1 Building foresight capacities for future-oriented R&I policy.

Guiding questions:

- What are your personal takeaways / lessons learned from the presentations and what were the principal suggestions for improving the policy relevance and impact of foresight?
- What are your recommendations for your institution / relevant government bodies to sustain foresight beyond single projects? Which institutional / policy / strategic arrangements, methods, processes or engagement practices have proven particularly effective?

The aim of the session was to build on the experiences presented earlier in the plenary - showcasing how foresight has been used to inform and shape R&I policy in different European countries and international organisations - and to jointly identify transferable lessons, enabling conditions, and potential collaborative actions that can strengthen the strategic use of foresight in R&I policy across Europe. Participants worked in four groups to: reflect on key success factors and challenges in applying foresight in policy context, to identify practical mechanism that enhance foresight´s policy relevance and uptake, to suggest collaborative initiatives or capacity building activities that could reinforce foresight communities at both European and national levels.

Participants commented on the issues from the different perspectives of their professional focus and highlighted the following issues. Foresight processes should actively include citizens—not only as supporters of policy decisions but as key participants who help shape awareness and drive cultural change. Meaningful involvement requires genuine co-creation rather than token participation. For foresight to be effective, it must be more than a series of isolated initiatives. It should become structurally embedded within institutions and decision-making systems, supported by long-term commitment and flexible strategies. Currently, foresight activities are often fragmented and susceptible to changing priorities. Improved coordination across different regions and levels of governance is necessary, while still respecting diversity in approaches and contexts.

Foresight should be understood as an ongoing process rather than a simple outcome. Measuring its impact is challenging, but indicators such as personal and cultural transformation—especially through education and training—can demonstrate real progress. Its foundation should rest on democratic values, inclusion, and fairness. Activities must avoid reinforcing entrenched systems and should offer a balanced voice among policymakers, experts, and citizens. Transparent communication and clear explanation of the social benefits of foresight are essential to developing public trust and credibility.

To move forward, foresight needs firm institutional anchoring. This includes integrating it culturally and structurally into organizations and establishing foresight academies that promote capacity-building and

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accountability. Training opportunities should be expanded through the development of foresight ambassadors, networks for collaboration, and the sharing of successful practices. Increasing accessibility also means using clear language and reducing excessive jargon or overuse of the term "foresight."

Participation must go beyond formal procedures to ensure that citizens—including dissenting perspectives—are fully engaged. Co-creation techniques and practical tools such as scenario planning, red teaming, or “What if” exercises can support this aim. Governance structures should include steering committees and transparent communication channels to connect foresight insights to policymaking. Collaboration across sectors and borders—both at national and EU levels—should be actively strengthened.

Furthermore, foresight processes should embrace innovation and be open to methods from other disciplines. Achieving a balance between technological and social innovation will lead to more holistic outcomes. Importantly, foresight should function as a tool for accountability by tracking cultural and behavioural change. Its impact should be reflected in everyday decisions and societal habits, rather than being confined to short-term policy cycles. Ultimately, foresight is about shaping the future through shared vision, active participation, and sustained institutional commitment.

2.2 From vision to action – strengthening the future role of R&I foresight in Europe.

The aim of the session was to comment on the shared vision of the future role of R&I foresight, formulated during the Visioning Workshop in Romania in September 2025 (R&I Foresight in 2040, A vision for Europe and its Member States). Group discussions focused on the common understanding of the document and on the objectives of the material. Outputs from discussions in four groups.

Group 1. The overarching vision is to shorten the disconnection between emerging scientific, technological, and innovation (STI) foresight and real-world transformation. This requires not only imagining future scenarios but actively working toward shaping them through inclusive and collaborative efforts. The vision emphasizes moving beyond abstract foresight to ensure that potential futures are understandable, actionable, and closely aligned with societal needs. It seeks to inspire transformation through shared understanding and proactive involvement of all relevant stakeholders.

The purpose of STI foresight is not merely to support policymaking but to engage communities and stakeholders in exploring possible futures together. Rather than treating foresight as a technical exercise, it should serve as a bridge between knowledge and action—helping people make sense of uncertain futures and empowering them to participate meaningfully in shaping what is to come. Foresight should democratize

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strategic thinking, allowing diverse voices to contribute to discussions about the future and building a foundation for informed decision-making.

To fulfil this purpose, several objectives are outlined. First, ethical principles must be integrated into foresight practices to ensure fairness, responsibility, and transparency. Second, equitable access to data, insights, and tools for foresight must be provided so that communities and stakeholders can engage fully and confidently. Third, collaboration among all involved actors should be actively promoted, cultivating shared learning and trust. Finally, foresight processes should be designed to create safe and open spaces where stakeholders can express ideas, experiment with strategies, and collectively envision viable pathways forward.

Group 2. The feedback received highlights that the current vision appears ambitious and optimistic but lacks sufficient detail and clarity. While the minimum standards for 2026 are mentioned, they are not ambitious enough, and it remains unclear how these plans will integrate into political decision-making, which is essential by 2040. The proposed timeline, particularly the 2040 target, seems unrealistic and does not align well with existing priorities—perhaps only relevant for infrastructure. Trust is a critical element and should be emphasized in the initial phase, ensuring high-quality political decisions.

There is also concern about disruption: what exactly is being disrupted and why? Terminology needs to be specific to the framework and adapted to existing systems while creating new ones. Basic assumptions of the vision or model should be clearly stated, including their relevance and implications. Multiple dates have been suggested (2028, 2040, or none), but this requires clarification. The amplitude of change—whether it is a "page-turn" or a renewal—must be defined. The vision risks sounding self-referential and overly optimistic, making it difficult for policymakers to connect with it. There is a danger of losing stakeholders unless roles and responsibilities are clearly specified.

The main objectives are to support processes in Member States (MS) and Associated States (AS) where the foresight (FS) is not yet established, including neighbouring states. Coordination should occur at both EU and national levels to ensure alignment and effectiveness. Another key goal is to increase diversity within the system—not only in terms of the number of members but also through disciplinary diversity. This diversity should extend across institutions, structures, and processes to strengthen resilience and adaptability.

Group 3. The discussion highlights key gaps and clarifications regarding the integration of foresight practices. Missing elements include clear values to prevent misuse or manipulation, ensuring democratic principles, and promoting inclusivity, openness, and just futures. There is also a need to emphasize impact through stakeholder buy-in and to establish cross-domain integration rather than limiting foresight to isolated forecasts.

On the other hand, the explained aspects stress deliberate engagement by actors and intentional embedding of foresight within institutional and cultural contexts. This involves experimental approaches that incorporate existing methods from other disciplines, fostering a more holistic and adaptive framework.

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To achieve these goals, proposed actions include appointing ambassadors to drive both push and pull factors, for example using EIA as an institutional anchor, and defining roles and responsibilities through a clear roadmap. Additionally, managing representative input is crucial, as it can either support progress or risk preserving the status quo due to internal politics.

Group 4. Foresight processes should actively include citizens—not only as supporters of policy decisions but as key participants who help shape awareness and drive cultural change. Meaningful involvement requires genuine co-creation rather than token participation. For foresight to be effective, it must be more than a series of isolated initiatives. It should become structurally embedded within institutions and decision-making systems, supported by long-term commitment and flexible strategies. Currently, foresight activities are often fragmented and susceptible to changing priorities. Improved coordination across different regions and levels of governance is necessary, while still respecting diversity in approaches and contexts.

Foresight should be understood as an ongoing process rather than a simple outcome. Measuring its impact is challenging, but indicators such as personal and cultural transformation—especially through education and training—can demonstrate real progress. Its foundation should rest on democratic values, inclusion, and fairness. Activities must avoid reinforcing entrenched systems and should offer a balanced voice among policymakers, experts, and citizens. Transparent communication and clear explanation of the social benefits of foresight are essential to developing public trust and credibility.

To move forward, foresight needs firm institutional anchoring. This includes integrating it culturally and structurally into organizations and establishing foresight academies that promote capacity-building and accountability. Training opportunities should be expanded through the development of foresight ambassadors, networks for collaboration, and the sharing of successful practices. Increasing accessibility also means using clear language and reducing excessive jargon or overuse of the term "foresight."

Participation must go beyond formal procedures to ensure that citizens—including dissenting perspectives—are fully engaged. Co-creation techniques and practical tools such as scenario planning can support this aim. Governance structures should include steering committees and transparent communication channels to connect foresight insights to policymaking. Collaboration across sectors and borders—both at national and EU levels—should be actively strengthened.

Furthermore, foresight processes should embrace innovation and be open to methods from other disciplines. Achieving a balance between technological and social innovation will lead to more holistic outcomes. Importantly, foresight should function as a tool for accountability by tracking cultural and behavioural change. Its impact should be reflected in everyday decisions and societal habits, rather than being confined to short-term policy cycles. Ultimately, foresight is about shaping the future through shared vision, active participation, and sustained institutional commitment.

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2.3 Summary of group discussions

The sessions focused on strengthening foresight capacities for future-oriented Research and Innovation (R&I) policy across Europe. Discussions built on prior experiences and aimed to identify lessons, enabling conditions, and collaborative actions to enhance foresight's strategic role.

Key Insights and Takeaways

- Foresight must be institutionalised, and continuous Foresight should not exist as isolated projects; it must become structurally embedded within institutions and decision-making systems. Calls were made for long-term commitment, flexible strategies, and coordination across governance levels while allowing diversity in approaches. There is strong support for foresight academies, ambassadors, and capacity-building networks.
- Citizen engagement and co-creation. Citizens must be active participants, not just supporters of policy decisions, participation should move to a co-creation.
- Embedding democratic values and accountability. Foresight should operate on principles of fairness, transparency, openness, and democratic inclusion.
- Measuring impact. Impact is difficult to quantify, but indicators should reflect personal and cultural transformation, especially via education and training.
- Clearer governance and structures. Steering committees, clear roles, and communication channels are essential to connect foresight to policymaking.

Conclusion

Across all groups, a shared understanding emerged. Foresight must evolve from vision to embedded practice. It should empower citizens, guide policy with democratic values, and build long-term institutional capacity. To be impactful, foresight must become actionable, inclusive, accountable, and sustained beyond individual projects. The future role of foresight depends on connecting imagination to real transformation through collaboration, trust, and strategic integration. Foresight should serve as a bridge between knowledge and action, shaping the future through shared vision, active participation, and sustained institutional commitment. Its success depends on inclusivity, transparency, and continuous collaboration.

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3 SUMMARY OF MLE 5 HIGHLIGHTS

Mutual Learning Event 5 showed progress toward embedding foresight culture in European R&I policymaking. The event highlighted that foresight must evolve from isolated exercises into a systemic, institutionalised, participatory practice—anchored in governance, supported by capacity-building, and driven by citizens, experts, and policymakers together.

Themes & Takeaways

- Institutionalisation of foresight. Long-term funding, governance mechanism and flexible strategies are essential.
- Citizen engagement and co-creation. Co-creation and participatory approaches might increase legitimacy, aligning with societal needs, and resilience.
- Governance, trust and accountability. Foresight should be value-based-grounded in transparency, fairness, inclusion, and democratic principles.
- Capacity building and networks. Strengthening foresight capacities requires:
    - Training and foresight education.
    - Cross-sector and cross-border cooperation.
    - Communities of practice and national focal points. Project STRATIN+ in Czechia and parliamentary foresight in Estonia are strong examples.
- Measuring Impact. It must capture cultural and behavioural change, future literacy, and internal transformation.

Forward Outlook

- The Eye of Europe project can serve as a central platform for community-building and foresight institutionalisation.
- Foresight should act as a bridge between knowledge and action, shaping futures through shared vision and sustained collaboration.
- Foresight embedded into everyday policy decisions across Europe, connecting imagination with real world transformation.

Participants shared a strong vision for the future role of R&I foresight in Europe.

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ANNEX 1 – LIST OF PARTICIPANTS

Surname	Name	Institution	Country
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Ciampi Stancova	Katerina	OECD	EU
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Dragomir	Bianca	Institutul de Prospectiva	Romania
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Giesecke	Susanne	Austrian Institute of Technology	Austria
Havas	Attila	Centre for Economic and Regional Studies	Hungary
Hebakova	Lenka	TC Prague	Czechia
Husarčíková	Nina	The Deputy Prime Minister´s Office for the Recovery Plan and the knowledge economy	Slovakia
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Klaming	Gabriele	Austrian Research Promotion Agency (FFG)	Austria
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Mazari Villanova	Luigi	CNR - National Research Council of Italy	Italy
Melnicov	Viktoria	SUMPh Nicolae Testemitanu	Moldova
Mihalache	Sveatoslav	Ministry of Energy	Moldova
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Moretti	Pier Francesco	National Research Council of Italy	Italy
Nicorici	Irina	ANCD	Moldova
Paladiciuc	Oxana	Horizon Europe Office Moldova	Moldova
Pazour	Michal	TC Prague	Czechia
Polák	Martin	Research & Innovation Authority of Slovakia	Slovakia
Porcescu	Sergiu	Policy Advisory Fund project, GIZ Moldova	Moldova
Prendergast	Jessica	Future Impacts	Germany
Sacio-Szymańska	Anna	4CF	Poland
Scola	Dona	UNIDO	Moldova
Schultz	Etienne	INRAE	France
Šottník	Ľubomír	Research and Innovation Authority / Government Office of Slovakia	Slovakia
Vančurová	Iva	TC Prague	Czechia
Varblane	Uku	Foresight Centre of the Estonian Parliament	Estonia
Vrabie	Nicu	National Agency for Research and Development, Horizon Europe Office	Moldova
Warnke	Philine	Fraunhofer ISI	Germany

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ANNEX 2 – FEEDBACK QUESTIONNAIRE

Number of questionnaires distributed: 40

Number of responses: 13

Response rate: 32.50%

Table of responses

Category	Very good	Good	Rather good	Poor	Skip/ I cannot remember
Quality of the event venue	5	5	3	0	0
Quality of meals during the MLE	4	7	2	0	0
Clarity of the event objectives and approach	9	4	0	0	0
Quality of presentations	8	5	0	0	0
Quality of group facilitations	7	5	1	0	0
Overall quality of the MLE5 event	7	6	0	0	0

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