

# Evolving Dimensions of the European Research and Innovation Landscape

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## ►► About the VERA Strategic Debates (WP5)

- The VERA project conducted a series of 'Strategic Debates' with key stakeholders in order to:
  - Undertake a comprehensive assessment and renewal of the European Research Area (ERA) priorities.
  - Explore stakeholders' strategies and their impacts in the context of possible European R&I scenarios.
  - Promote stakeholders' discussions on key policy issues of relevance to the current/future European R&I landscape.

## ►► ERA Policy Advice **Alternatives**

L-MEO

Last Minute Expert **Opinion**

?

SEDA

Stakeholders & Experts Debate **Analysis**



## ▶▶ **VERA WP5 activities** engaged 100+ participants from 25 countries

- Task 5.1. **Planning Strategic Debates**
  - shaped by findings in WP3 and WP4
  - validated by external review process
- Task 5.2. **VERA Focus Groups**
  - Strategic Debate – Level 1
- Task 5.3. **VERA Symposium**
  - Strategic Debate – Level 2
- Task 5.4. **Policy Advice / Recommendations**
  - ERA Dimensions & Key Aspects
  - ERA Policy Issues/Features *alla Jägermeister*
  - ERA Implementation insights

Strategic Debates Methodology 15 participants	Jun to Dec 2013
VERA Focus Groups 95 participants	Dec to May 2014
VERA Symposium 44 participants	June to Oct 2014
<b>ERA Strategy Map &amp; Policy Issues =&gt; Recommendations</b>	<b>Oct to Dec 2014</b>



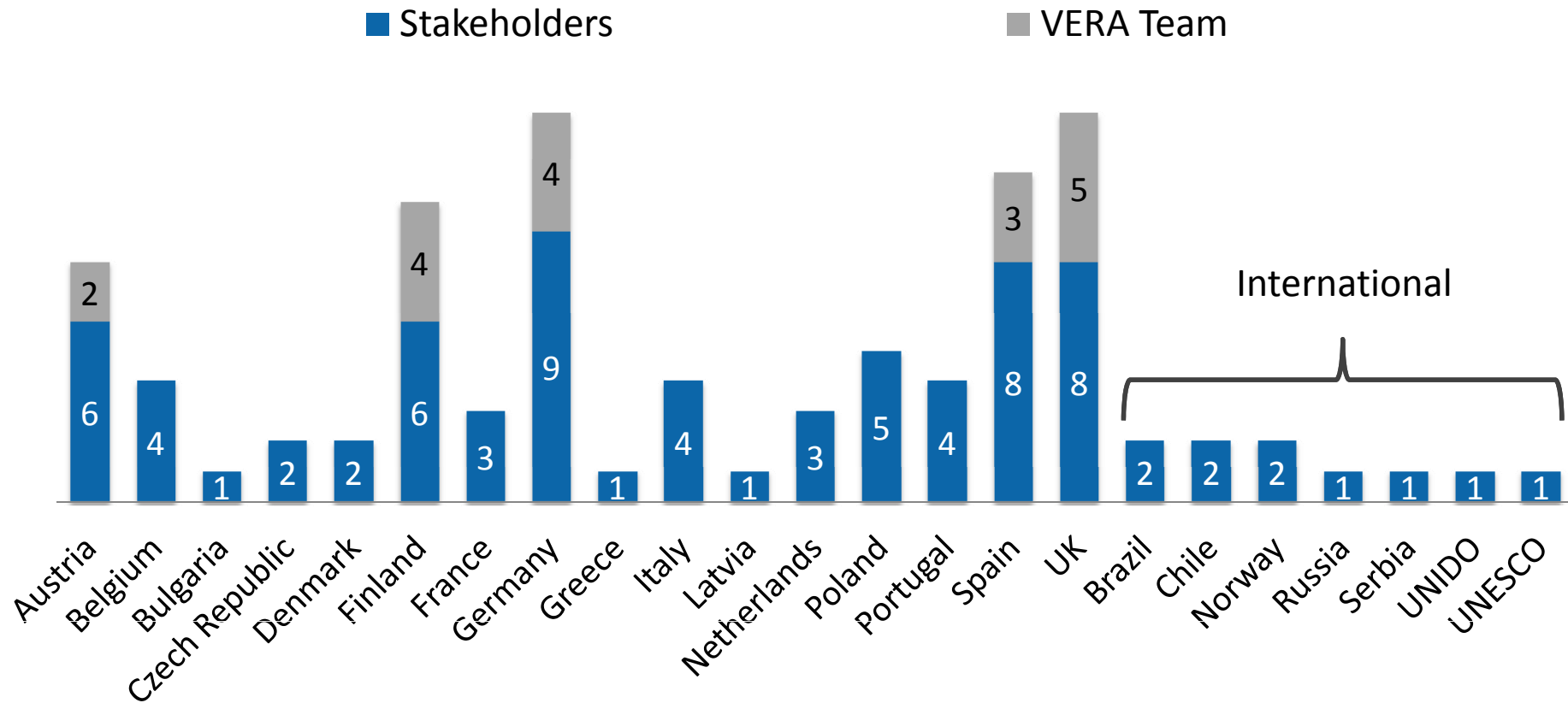
## ►► VERA Focus Groups: Strategic Debate Level 1



# VERA Focus Groups

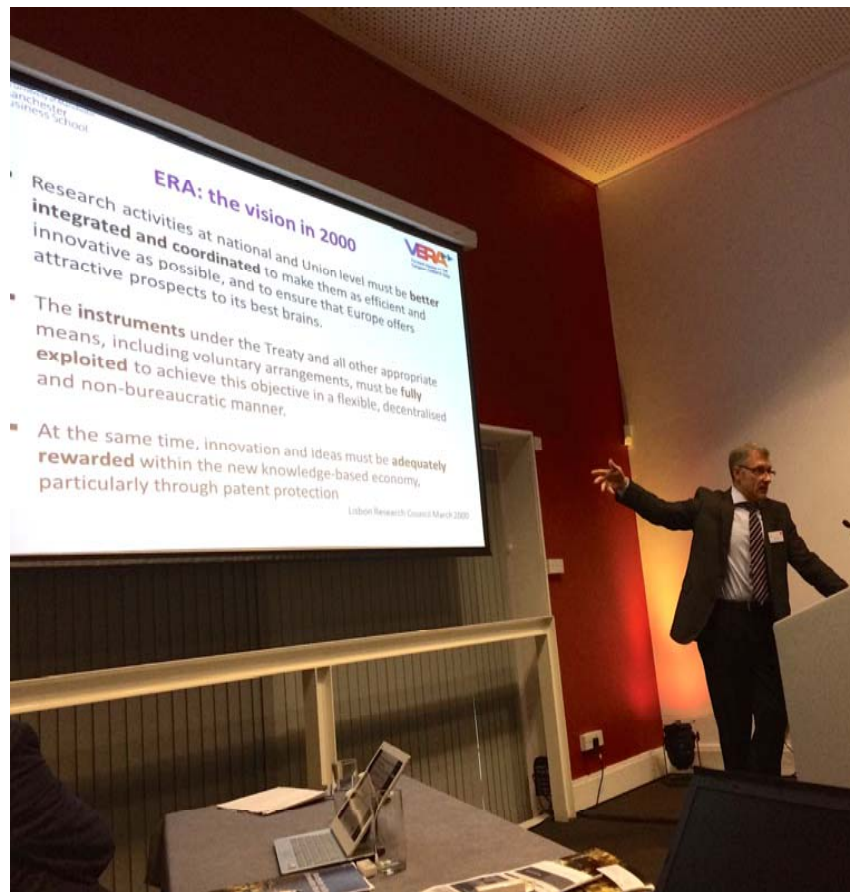
## 95 participants from 21 countries

Strategic Debate Level 1





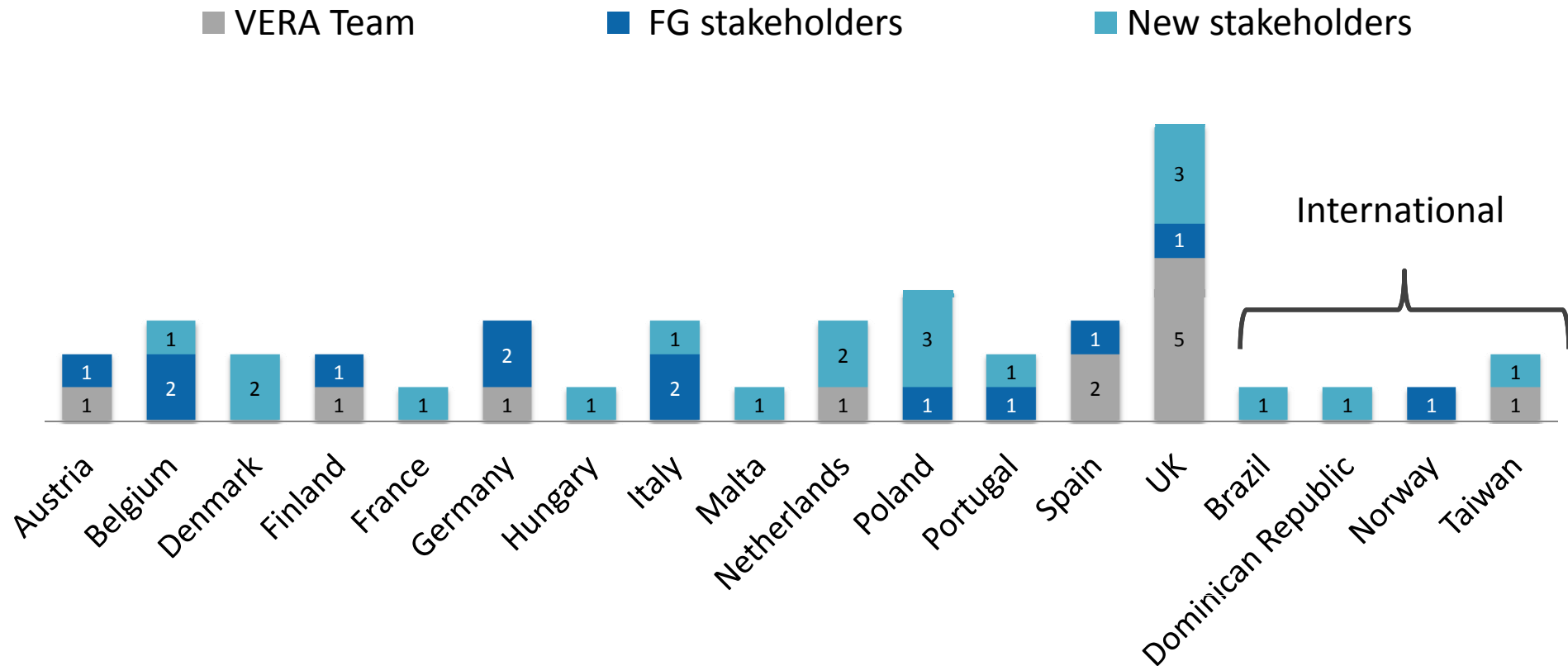
## ►► VERA Symposium: Strategic Debate Level 2



# VERA Symposium

## 44 participants from 18 countries

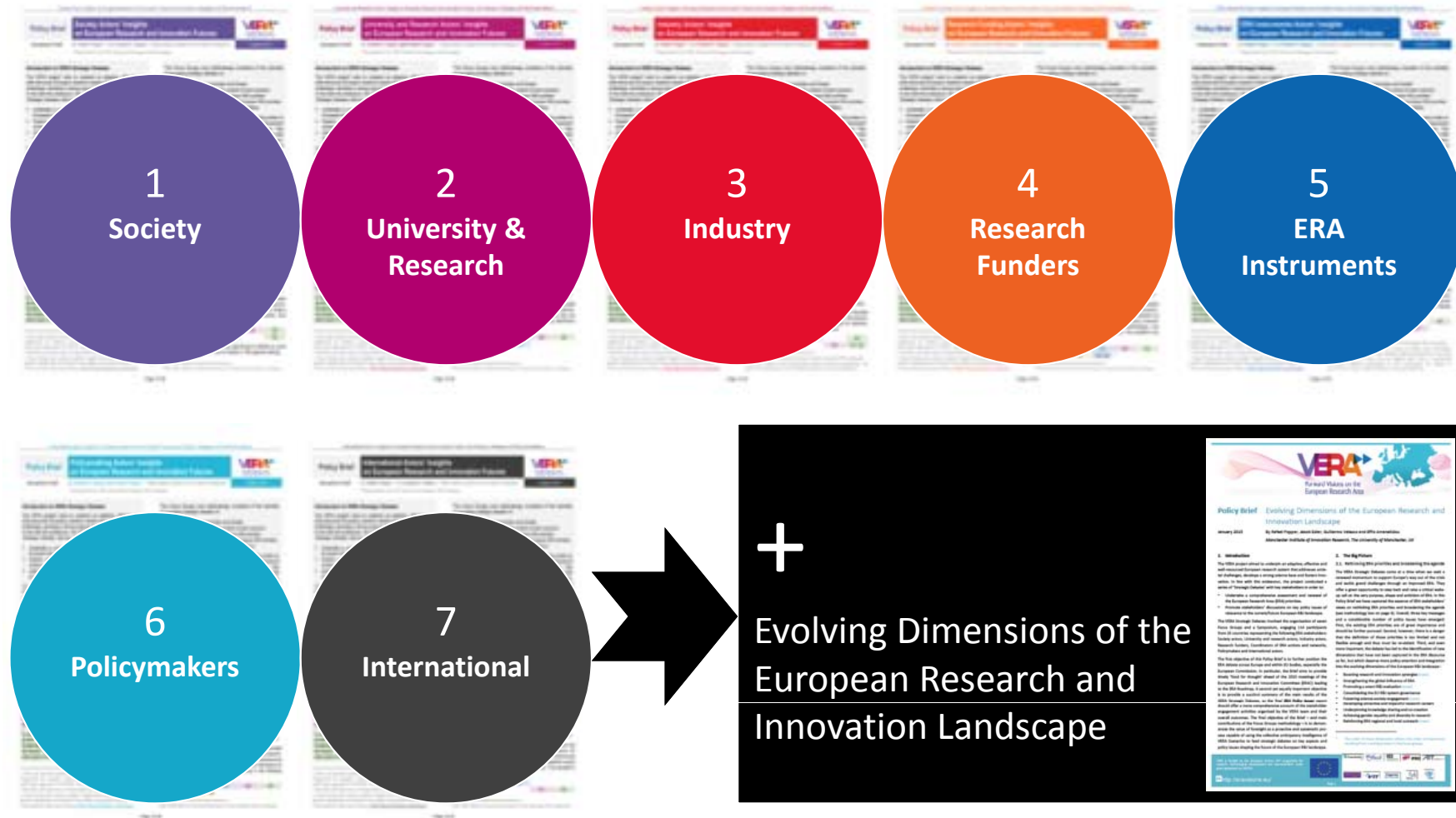
Strategic Debate Level 2





# ERA Stakeholders Debate

## Key outputs in the form of Research/Policy Briefs



## ▶▶ Aims of the VERA Policy Brief on Evolving Dimensions of the European R&I Landscape

1. To further position the ERA debate across Europe and within EU bodies, **especially the European Commission**. In particular, the Brief aims to provide timely 'food for thought' ahead of the 2015 meetings of the European Research and Innovation Committee (ERAC) leading to the ERA Roadmap.
2. To **provide a succinct summary of key results of the VERA Strategic Debates**, as the final ERA Policy Issues report should offer a more comprehensive account of the stakeholder engagement activities organised by the VERA team and their overall outcomes.
3. To demonstrate the value of foresight as a proactive and systematic process capable of using the collective anticipatory intelligence of VERA Scenarios to **feed strategic debates on key aspects and policy issues shaping the future of the European R&I landscape**.

## ERA Dimension 1 Boosting research and innovation synergies

The Europe 2020 strategy recognises the potential of innovation for boosting the economic growth. Not surprisingly, the innovation paradigm has been profoundly embedded in the political discourse at EU level during the last years. However, and **despite the broadly accepted relation between research and innovation, a full and systematic exploitation of their synergies is not integral part of the ERA concept and yet to be achieved.** The numerous initiatives aiming at this synergy reveal not only the potential of such connection but also how much remains to be done.

### Highlights from key ERA aspects

- Strategies for the European R&I Area
- A faster invention-to-innovation process
- Industry-academy R&I cooperation
- Innovation funding instruments
- IP supporting strategies for innovation
- Entrepreneurship

### Highlights from key ERA policy issues

- Need for bridging the gap between research and innovation.
- Need for embedding small-scale innovation into the ERA landscape by, for example, encouraging entrepreneurial researchers to establish start-ups and SMEs.

## ERA Dimension 2 Strengthening the global influence of ERA

An 'optimal transnational cooperation and competition' is the ambition of the **second ERA priority**. Given the horizontal nature of challenge-oriented research, the EC considers trans-EU cooperation a cross-cutting aspect alongside other ERA priorities, as it offers many opportunities for international collaboration. **Although cooperation across MS is at the core of ERA conception, ERA stakeholders suggested a more global approach was needed. A common European R&I position is found essential, particularly in relation with BRIC countries and emerging economies.**

### Highlights from key ERA aspects

- ERA common position for global cooperation
- Dialogue with emerging economies
- Research infrastructures
  - funding sustainability
  - harmonised access
- Transnational ERA learning schemes
  - ERA progress reports
  - ERAWATCH, ERA-LEARN, etc.

### Highlights from key ERA policy issues

- Need for joint funding opportunities to enable cooperation with appropriate partners from outside the EU across all basic drivers of international cooperation (challenges, complementarities).
- Need for an enhanced role of infrastructure not only for reasons of efficiency, but to promote – as platforms – effective cooperation within and beyond Europe.

## ERA Dimension 3 Promoting a smart R&I evaluation

Most ERA stakeholders considered sound evaluation practice as a core element supporting the ERA governance. A smart framework of regulation supports coherence of evaluation and monitoring activities within the EU, and provides principles for standardised application. **Importantly, evaluation in R&I within ERA encompasses a broad spectrum ranging from national strategies and agendas to individual initiatives. The resulting complexity of evaluation is compounded by the need to deal with value-laden aspects and incorporating new social criteria.**

### Highlights from key ERA aspects

- Research and innovation impact assessment
- Excellence criteria in pan-European evaluation
- Social values in R&I evaluation
- Evidence-based R&I policies
  - data reliability
  - standardisation

### Highlights from key ERA policy issues

- Need for sound and transparent evaluations at all levels (ex-ante, mid-term, ex-post and ongoing) with new procedures to include citizens in peer review processes and impact assessments.
- Need for more evidence-based decision-making underpinned by EU-wide evaluation and monitoring standards; where reliable, standardised and comparable data support national and EU legislation and priority-setting, with conscious and explicit use of evaluations.



## ERA Dimension 4 Consolidating the EU R&I system governance

The rationale of the **first ERA priority** is to increase the ‘effectiveness of national research systems’ in Europe. However, ERA stakeholders have predominantly focused their discussions on those aspects that ensure the R&I system coherence at EU level. In this respect, **ERA coordination instruments (e.g. ERA-NETs) were found efficient to facilitate the convergence of national programmes, and potentially reinforce the indispensable system consistency for addressing grand challenges.**

### Highlights from key ERA aspects

- National R&I strategies coordination
- Synergies between research, innovation and other EU funding programmes
- Stability of research and innovation funding
- Rules simplification and rationalisation
- Stakeholders' commitment and dialogue for an European R&I system

### Highlights from key ERA policy issues

- Need for funding stabilisation and balancing. Society actors, coordinators of ERA actions and policy actors stressed the importance of reinforcing fundamental research over the trend to focus on challenges or industrial benefit.
- Need to keep the ‘cooperation momentum’ in research policy and funding, by improving the variable geometry approach, creating “real” hot spots in Europe and encouraging joint funding through EU and national sources.

## ERA Dimension 5 **Fostering science-society engagement**

The relation of society with scientific progress has changed during the last decades. From original assumptions that considered the public a mere beneficiary of scientific results, we have moved into a conception whereby society represents an important actor to be consulted on R&I policy processes. **Now society has become a relevant stakeholder that actively contributes to policy formulation and agenda setting.**

### Highlights from **key ERA aspects**

- Public engagement in R&I activities
- Responsible science and higher levels of integrity in research
- Science- and research-oriented education programmes
- Universities third mission
  - academia-business mutual understanding
  - stakeholders interaction and engagement

### Highlights from **key ERA policy issues**

- Need for more effective participation of society in the definition of priorities and grand challenges.
- Need for more experiments to include citizens more broadly within funded projects at EU and national levels, rolling out “transdisciplinary” science projects.

## ERA Dimension 6

# Developing attractive and impactful research careers

This dimension is linked to the **third ERA priority** on creating ‘an open labour market for researchers: Facilitating mobility, supporting training and ensuring attractive careers.’ **Overall, Europe has significant achievements here, however, substantial differences remain across MS where the lack of open, flexible and merit-based career development processes hampers research integration and performance.**

### Highlights from key ERA aspects

- Mobility facilitation
- Open and cohesive labour market
- Harmonised careers and training programmes
- Family- and environmental-friendly mobility
- Cross-sectoral collaboration
  - Public
  - Private
  - Academic

### Highlights from key ERA policy issues

- Need for better conditions for European and international mobility.
- Need for financial support for individuals and organisations on all aspects of mobility:
  - acknowledging qualifications across the EU
  - harmonising post doctoral mobility rights across MS
  - aligning recruitment practices with ERA principles

## ERA Dimension 7

# Underpinning knowledge sharing and co-creation

This dimension is aligned with the **fifth ERA priority** on ‘optimal circulation, access to and transfer of scientific knowledge, including via digital ERA’. The overall idea is to make publications, data and results of EU funded R&I projects available across MS, as part of standard Horizon 2020 guidelines. **Two emerging aspects concerning this dimension were the growing role of the European knowledge co-creation ecosystem (particularly in the context of open innovation) and efforts to promote transdisciplinarity and creativity (especially for addressing grand challenges).**

### Highlights from key ERA aspects

- Knowledge sharing and transfer
- Knowledge co-creation ecosystem
- Digital research services and e-infrastructures
- Open access and research integrity
- Transdisciplinarity and creativity

### Highlights from key ERA policy issues

- Need for more and improved open access, both as regards published articles and books and the underlying raw data.
- Need for more mobility between academia and industry as well as enhanced mobility between academia and non-university research as the major means for knowledge transfer.

## ERA Dimension 8 Achieving gender equality and diversity in research

This dimension has been in the ERA landscape since 2002 and the EC Communication (2012) relaunched it as the **fourth ERA Priority** with a focus on ‘gender equality and gender mainstreaming in research’. Despite these efforts the 2014 ERA Progress Report shows 11 EU countries are still lacking specific policies on gender equality in public research. However, **ERA stakeholders would like to see the equality debate moving beyond gender issues – and the coordination of progress – by including equally important aspects such as empathy to vulnerability and consideration of multiculturalism.**

### Highlights from key ERA aspects

- Promoting gender equality
- Empathy to vulnerability
- Consideration of multiculturalism
- Coordination of actions and rigorous monitoring of progress towards a broad equality agenda

### Highlights from key ERA policy issues

- Need for more effective monitoring and pushing for progress on gender issues.
- Need to include a more serious agenda on ethnic, religious and cultural diversity.
- Need to incorporate more physical/mental disability issues in R&I policy.



## ERA Dimension 9 Reinforcing ERA regional and local outreach

This dimension has been somehow implicit in the ERA strategy and mainly addressed by the first ERA Priority concerned with the optimisation of research programmes and priorities. In that sense, regional issues have been discussed in the context of the Smart Specialisation Strategy (S3), ERA-NETs, regional research infrastructures (RIs), among others. However, there was **a general consensus among ERA stakeholders about the need for a more explicit and dedicated regional dimension in ERA.**

### Highlights from key ERA aspects

- Regional inclusion
  - Smart Specialisation Strategy (S3)
- ERA cohesion and permeability
  - Structural and Investment Funds
- Regional cooperation
  - Interreg

### Highlights from key ERA policy issues

- Need to support the ability to define and contribute to challenge-oriented approaches in conjunction with other regions or governance levels, and even engage in cooperative funding horizontally and vertically (region, MS, EU).
- (Despite S3) Need to encourage regions to find their own role in the EU and global R&I arenas.

## ►► Conclusions

- The current ERA priorities, while widely endorsed, can be regarded as a limitation. It seems that the operationalisation of the existing ERA priorities and the monitoring of progress within those priorities has also limited the understanding of the richness of those priorities. **Europe needs a renewed debate about the shape of ERA and the dimensions that drive the development of ERA.**
- **ERA** is not only about harmonising the structures, procedures and policies we have in Europe, but **should represent a general broader leap forward in the way we organise research and its embeddedness in society across Europe.** This speaks to a much wider challenge of European integration.
- The ERA Stakeholders Debate in VERA confirms that the **scenario-based approach** is a useful 'stepping stone' for gathering **future-oriented strategic intelligence**, as well as for delivering **policy advice and recommendations** of relevance for today's decision-making, especially in the context of the ERAC meetings and the ERA Roadmap.