SOCIETAL CHALLENGES imply different ERA roles: an extreme illustration by the VERA scenarios

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Societal Challenges – Consensus or dissent?

- US: encourage innovation in science
- ERA Expert Group: rationale for the ERA, increasing contributions of public and private research to European social, economic and environmental goals
- Lund Declaration: Challenges must turn into sustainable solutions in areas such as global warming, tightening supplies of energy, water and food, aging society, pandemics and security
- Europe 2020/Innovation Union: support the development of a knowledge-based economy
- Horizon2020: challenge-based approach

The European Approach - Change in focus

o Longer-term sustainability of a society is at stake

o Mission-oriented, looking at solving societal problems and systemic solutions

o Multi-level, multi-stakeholder participation

o Focused on alignment and coordination of strategies

o Linking economic growth to societal benefits

o Combining research, technology and innovation in a multi-disciplinary way

Societal Challenges in VERA

Scope beyond Europe, beyond sectors, beyond economic growth

Identify key drivers for scenario development, SC influence on FS and in-formed policy making

- o Problem-driven
- o Public-policy scope
- o Relevance for ERA and member state(s)
- o Relevant for mid-term and long-term future

We found variation of the degree as to how they affect the ERA, often due to cultural, political and other idiosyncratic differences.

Their scope was broader than usually associated with SC in the common discussion on EU and ERA; they take a more global perspective and consider the mutual interdependence

From Societal Challenges to the VERA Scenarios

o VERA scenarios are not built to present a consensual view of the future but they present profoundly different scenarios – to eventually help us to look for issues we need to prioritize today.

o We cannot take a common definition of Societal Challenges for granted. Instead we need to acknowledge that they vary depending on time, geographical context, culture, etc.

o STI policies have to be formulated according to these differentiations

Times of Crises—Scenario responds to various SC

Driving force: dramatic climate catastrophes with important effects on the environment and eventually our health and way of life. These disruptive forces are levers of deep societal transformation.

- As a consequence, the **growth paradigm is completely replaced by a new sense of "deep sustainability" on which all economic, political and societal activities are based.**

- **Experts** in the field gain substantial power and responsibility in policy processes, as policies rely strongly on scientifically produced evidence.

- Research and innovation landscape becomes more diverse, opening up to **cross-disciplinary collaboration and unconventional initiatives** to collaborate with **societal actors**

Times of Crises—Scenario responds to various SC

- o SC#7: Current non-sustainable economic models come under scrutiny.
- o SC#6: "Risk of financial system failure"
- o SC#10: "The health situation in deprived regions is deteriorating"
- o SC#8: "Migration requires responses"
- o SC#9 "Education is struggling to cope with new demands"