

MNA IN EUROPE

SAPIERR and ERDO-WG

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Steps to Sharing, ERDO symposium
25-26 September 2019, IAEA Vienna

MNA: GEOLOGICAL DISPOSAL

In some European countries it is difficult or impossible to develop national solutions for the radioactive waste:

- financial and technical resources,
- research capacity,
- suitable geological formations

Others are interested in economic optimisation:

- economies of scale
- more productive uses for public funds

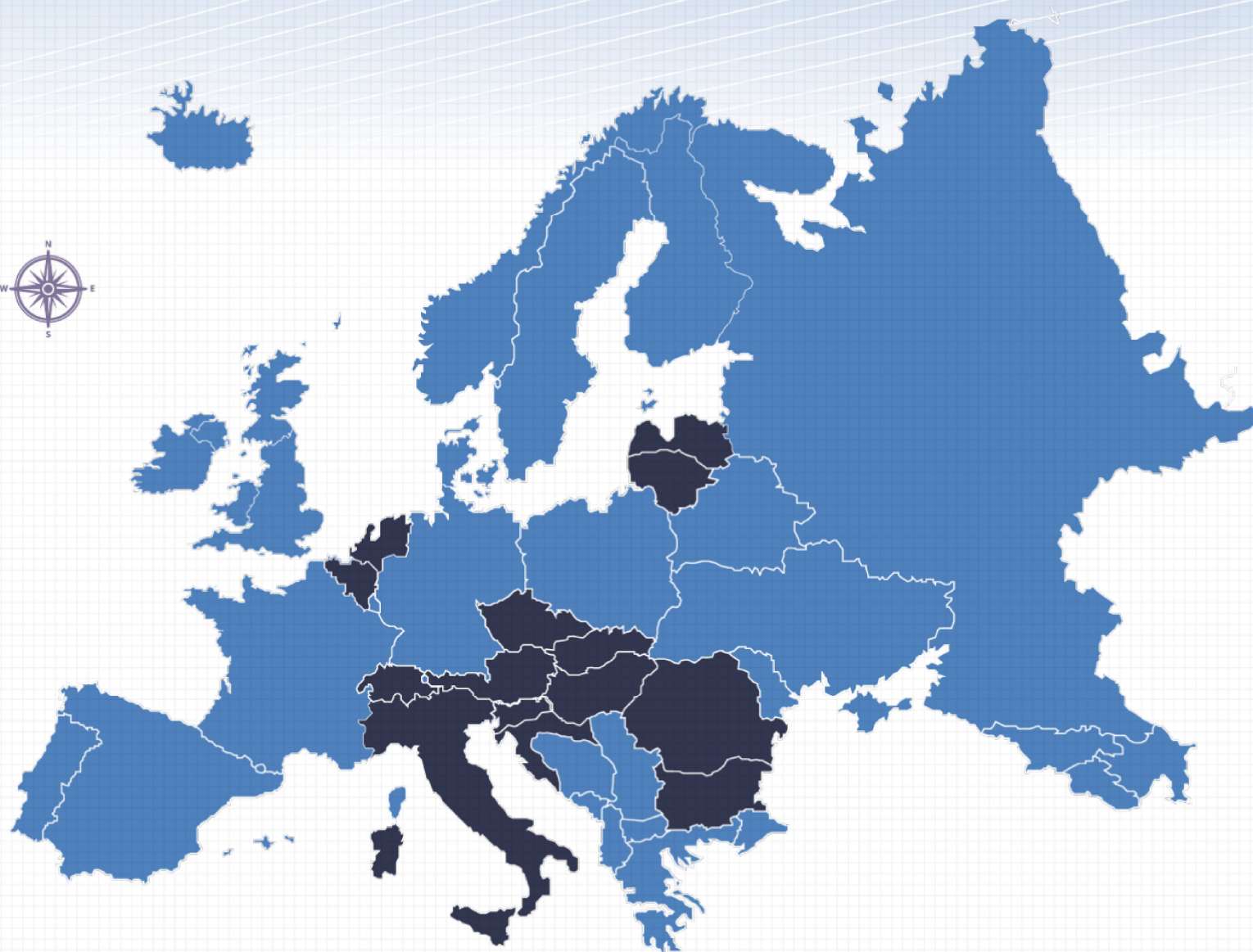
Development of **shared** solutions for disposal

SAPIERR AND ERDO-WG

- SAPIERR I:
 - Support Action on a Pilot Initiative for European Regional Repositories 2003 - 2005
- SAPIERR II:
 - Strategic Action Plan for Implementation of European Regional Repositories 2006 - 2009
- ERDO working group
 - European Repository Development Organisation working group 2009 - now

SAPIERR I

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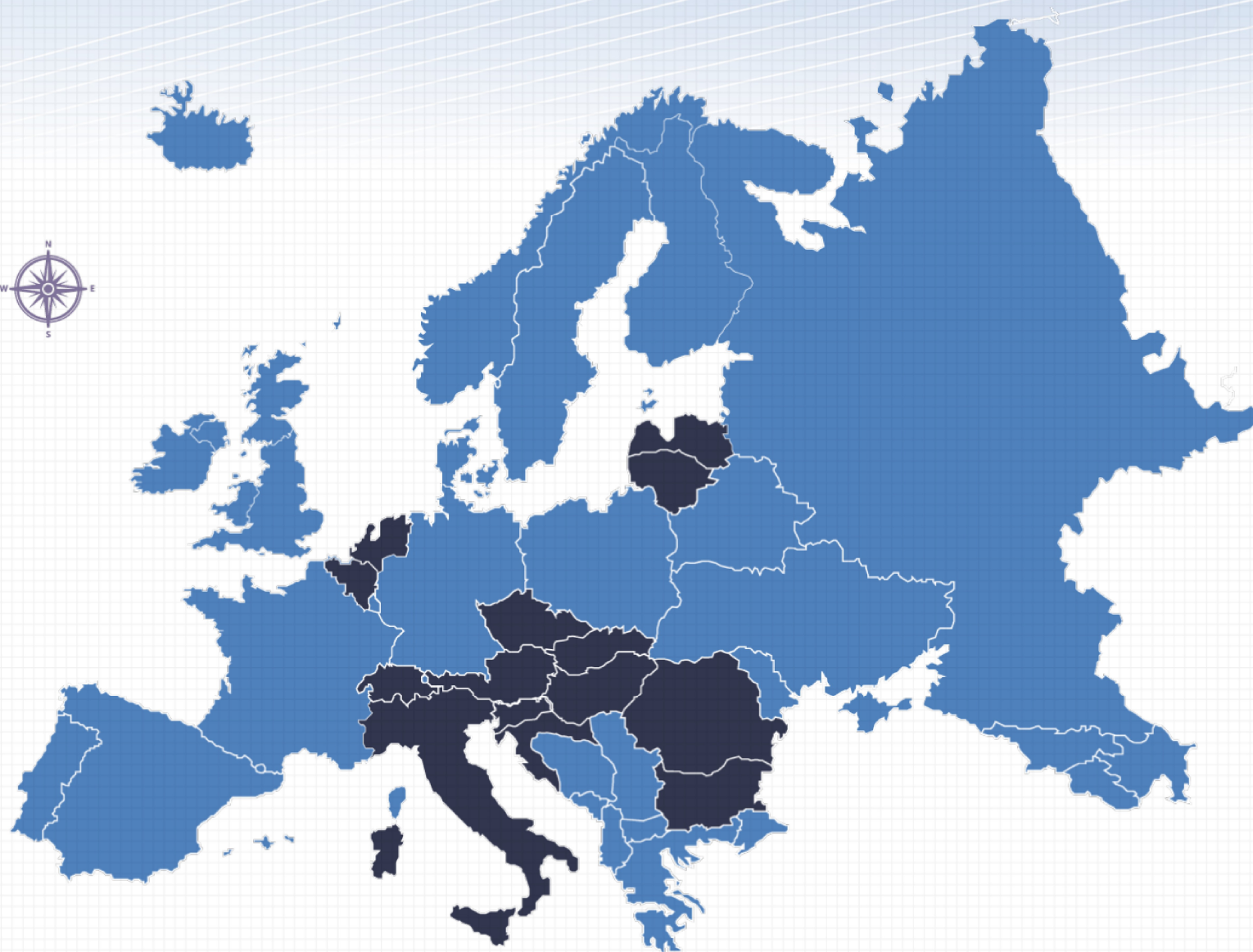


SAPIERR I CONCLUSIONS

- Potential advantages widely acknowledged in the EU
- Clearest advantages in the field of economy
- Most of the problems comparable with that of national programmes (in particular siting)
- Increased efforts needed now
- For further work a structured framework must be established

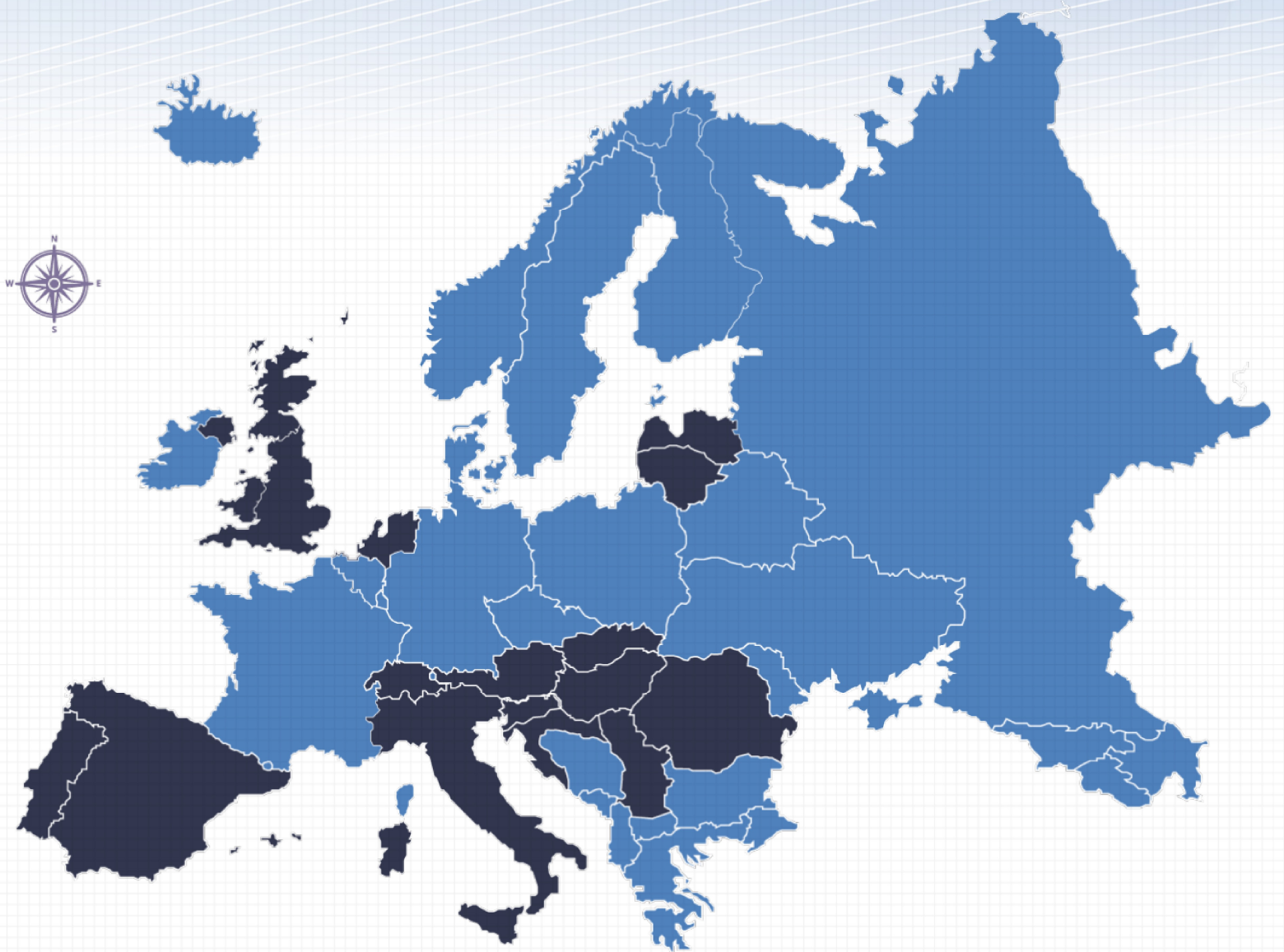
SAPIERR I

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SAPIERR II

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SAPIERR II OBJECTIVES

- Define options for organisational frameworks and project plans for a modestly sized, self-sufficient European Repository Development Organisation (ERDO)
- Clarify legal, economic, safety and security, and societal aspects of shared regional solutions
- Present the results and recommendations at a seminar for interested countries

SAPIERR II CONCLUSIONS

- **WP 1:** possible organisational forms (cooperative, nfp consortium)
- **WP2:** changes in legislative framework is required for actual implementation
- **WP3:** Cost of repository can be a severe limitation for use of nuclear power.
 - Without access to safe and secure disposal options for all EU MS, nuclear power will only be available for the big programmes
- **WP4:** Safety and security and the importance pooling of resources
- **WP5:** Communication strategy necessary from the start

PRACTICAL STRATEGY

- Political, strategical issues rather than technical research
- START SMALL- move forward in adaptive, staged manner

PRACTICAL STRATEGY

feasibility

SAPIERR I

implementation
strategy

SAPIERR II

research



policy

the ERDO-WG produced two milestone reports that summarise the advantages of the dual track approach, present a roadmap for a jointly owned ERDO and provide starting models for the structure, programme and financing. The new documents have been distributed to relevant decision makers in Member States of the European Union.

ERDO working group

ad-hoc working group of interested countries to the ground-work: agree organisational framework and project plan and allocate funds



implementation
repository

PRACTICAL STRATEGY

- Political, strategical issues rather than technical research
- START SMALL- move forward in adaptive, staged manner
- First step: ad-hoc working group of interested countries to agree organisational framework and project plan and allocate funds
- Many decisions have to be taken before formal establishment of an ERDO – organisational, technical and political
- **Potential ERDO partners should get to know and trust one another, define a common need, develop joint projects**

ERDO-WG

feasibility

SAPIERR I

implementation
strategy

research



policy

SAPIERR II

ERDO working
group

mission evolved beyond the
eventual goal of a shared MNR to
include activities in the pre-
disposal phase that could
benefit from sharing
knowledge,
technologies or facilities

ERDO

implementation
repository

ERDO
working group

ERDO-WG MISSION

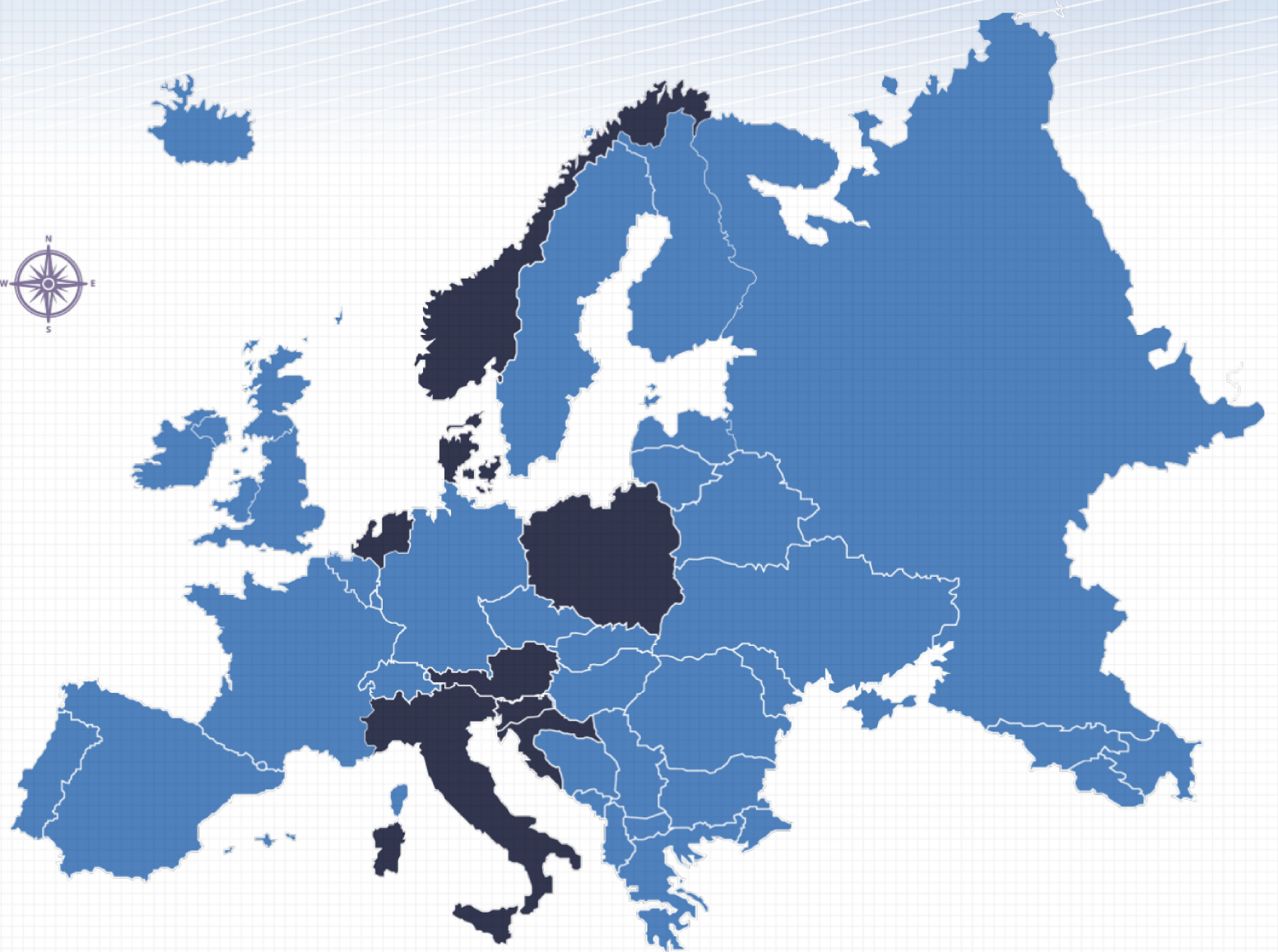
“The ERDO-WG comprises European countries with a potential interest in developing shared radioactive waste management facilities. **Our aim is to work together to address the common challenges of safely managing the long-lived radioactive wastes in our countries.**

The ERDO-WG will encourage cooperation in all relevant areas; these include maintaining national radioactive waste inventories, dealing with legacy wastes, developing safety cases for disposal facilities, communicating with stakeholders and developing joint projects.

The ultimate objective of the Working Group is to carry out all the necessary groundwork to enable the establishment of a **European Repository Development Organisation (ERDO)** as a working entity.”

ERDO-WG

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STRUCTURE

- Established in 2009
- **Multinational working group:** practical, strategy & policy rather than R&D
- Comprised of 11 organisations **nominated** by the **appropriate Government level organisations**
- Self-funded by the 11 organisations
- Ewoud Verhoef from COVRA currently Chairs the Working Group and Charles McCombie and Neil Chapman (Arius) form the Secretariat

ACTIVITIES

- Working group (WG) meetings twice a year
- Members cooperate & exchange knowledge
- WG organises symposia, workshops, meetings with EC
- WG & Members participate projects/activities on MNR (IAEA, IFNEC, INPRO, EURAD (routes), ...)

ERDO
working group
workshop

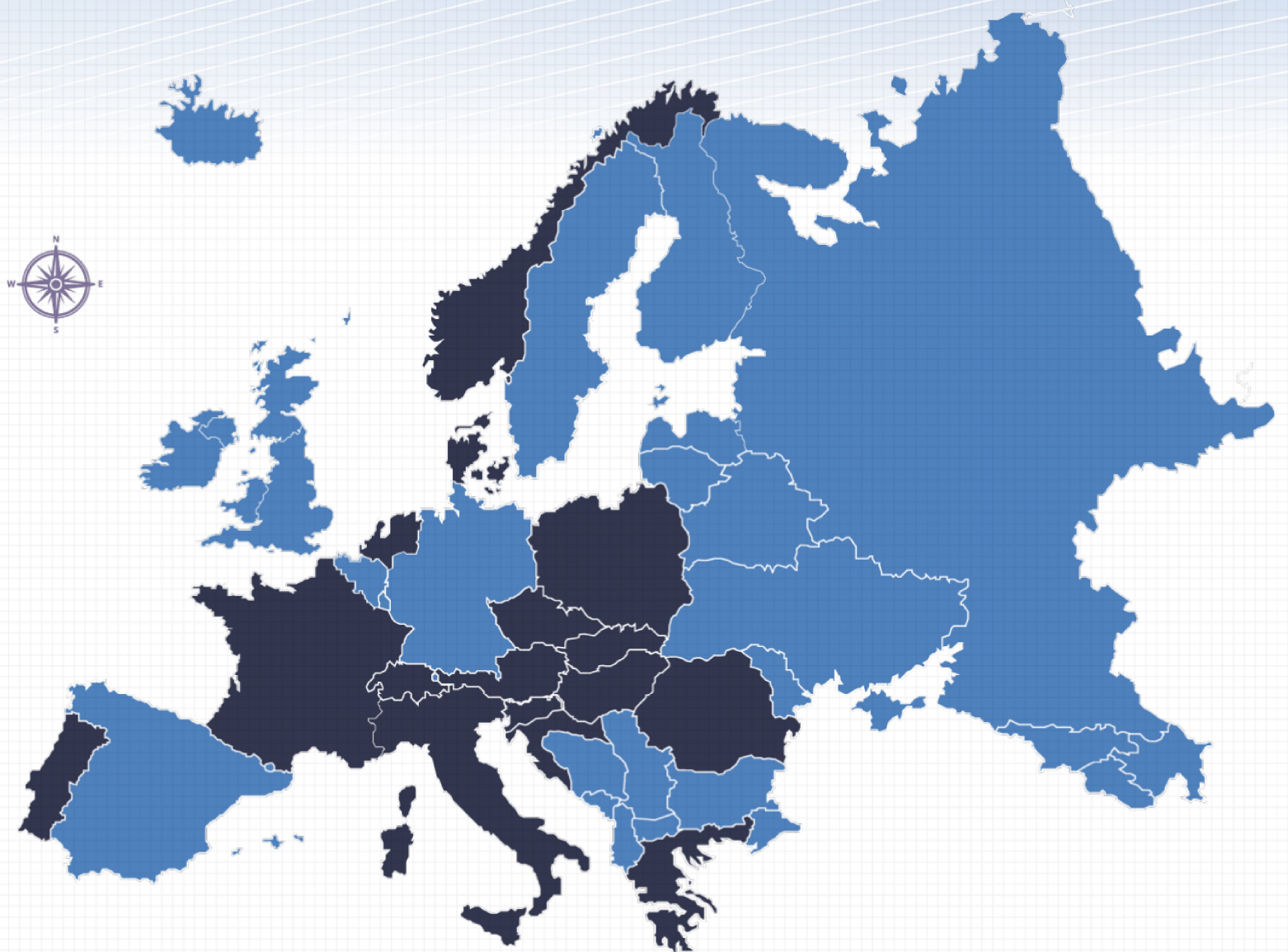
Steps to Sharing

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STEPS TO SHARING

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More information on
the ERDO-wg activities:
www.erdo-wg.com