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GEOLOGICAL SERVICE | FOR EUROPE

Introduction to the workshop

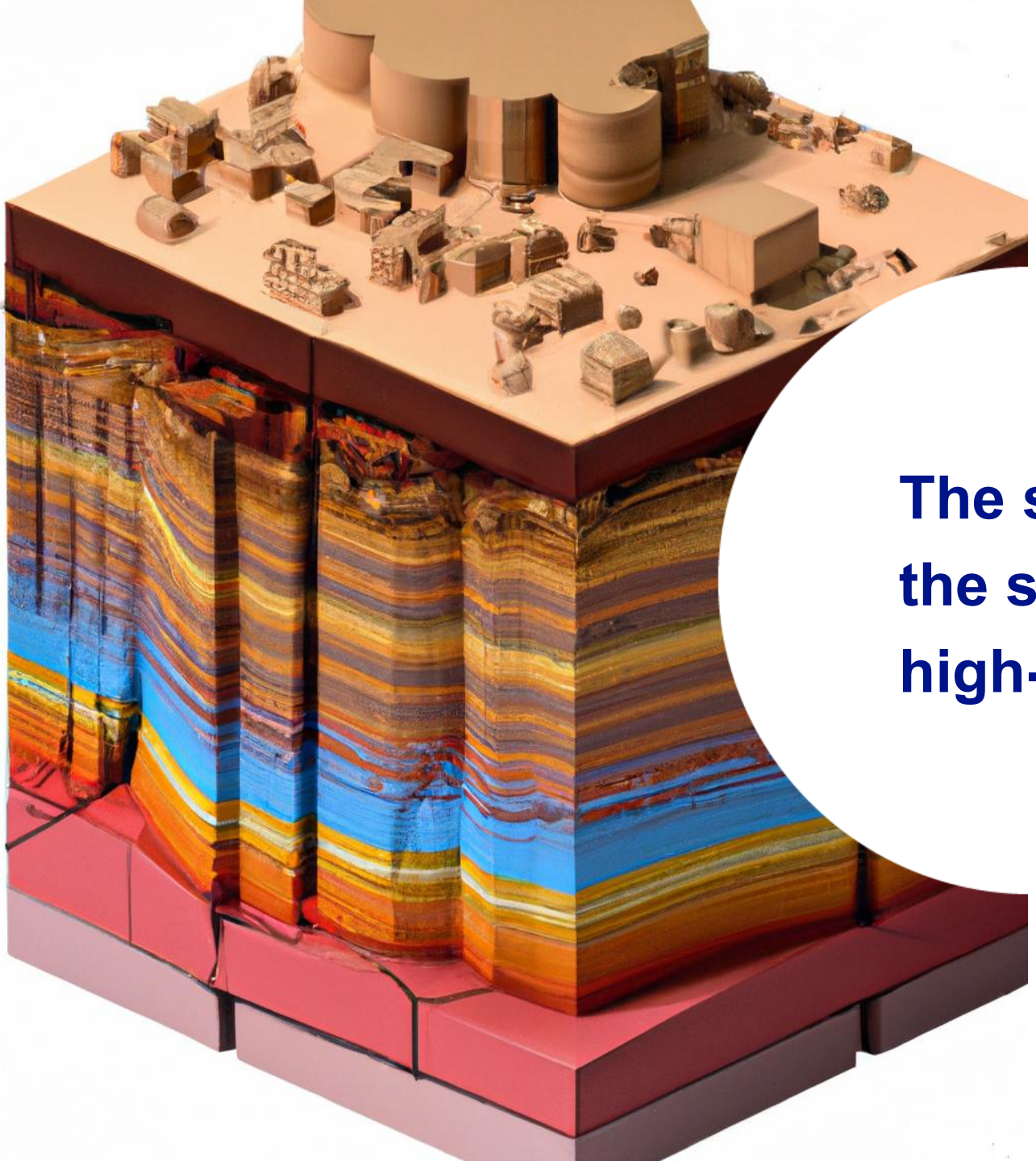
Philippe CALCAGNO, BRGM
Nicolas CLAUSOLLES, BRGM
Chiara D'AMBROGI, ISPRA
Chris HEEREMA, TNO
Timothy KEARSEY, BGS
Simon LOPEZ, BRGM
Jan STAFLEU, TNO
Stephan STEUER, BGR
Ewa SZYNKARUK, PGI
Ricky TERRINGTON, BGS
Marianne WIESE, GEUS

Workshop: Towards a 3D Geomodel of Europe
Online, 12-13 October 2026

Funded by the European Union

EuroGeoSurveys European Geoscience for Society
The Geological Surveys of Europe

Géosciences pour une Terre durable
brgm



The sustainable management of the subsurface requires high-quality geological knowledge

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The GSEU (Geological Service for Europe) Project

The overall objective is to establish a **Geological Service for Europe** as a permanent **collaborative network of European geological survey organisations**.



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Pan-European Challenges

Cross-border Solutions

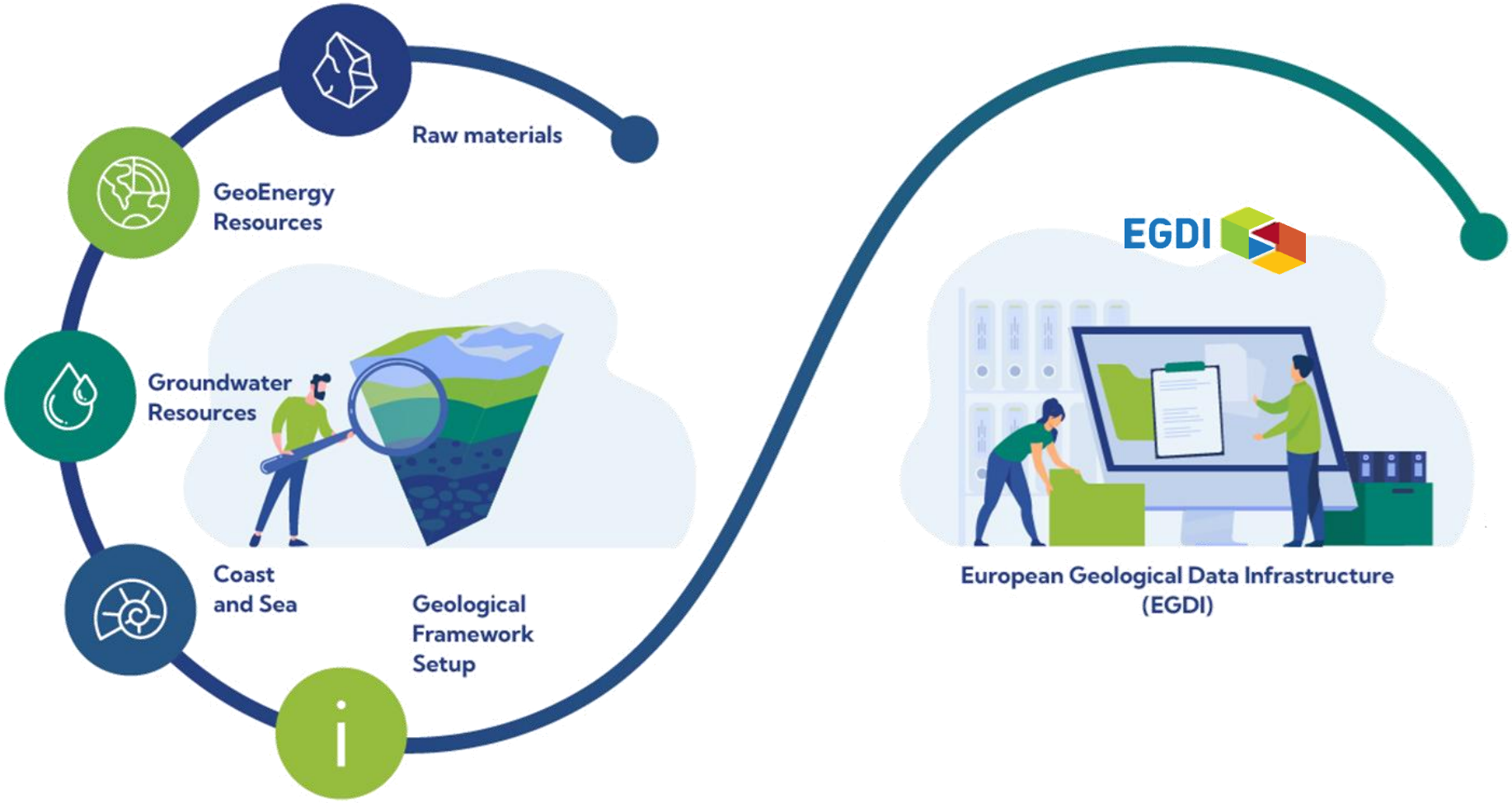
In order to address **transnational** and **continental-scale subsurface problems** we need to be able to zoom out and go beyond national borders.



Ends August 2027

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GSEU (Geological Service for Europe) areas of expertise



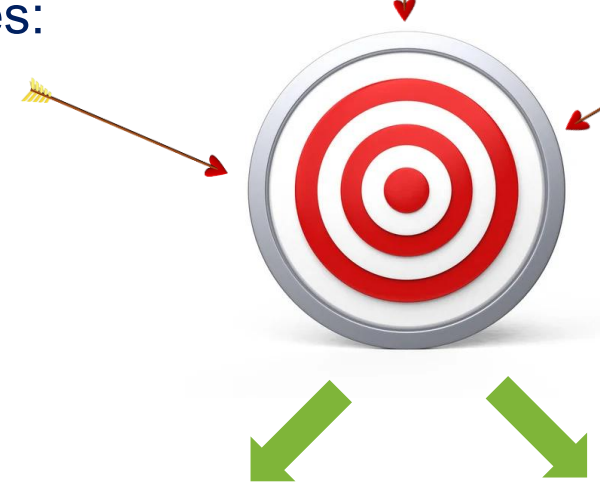
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Shared methods, open tools, workflows, and best practices for 3D geomodelling and visualisation

Build-up and strengthen a network of 3D geological modelling players at the European GSOs level

Share best practices: methodologies, workflows, …

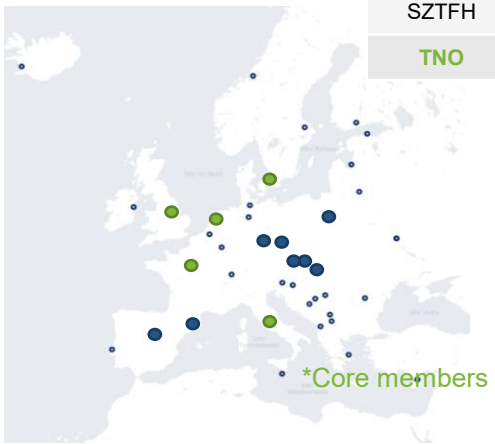
Review, evaluate and promote open-source tools



Report : “Common workflows and open source-based toolboxes in 3D-geomodelling and visualisation”

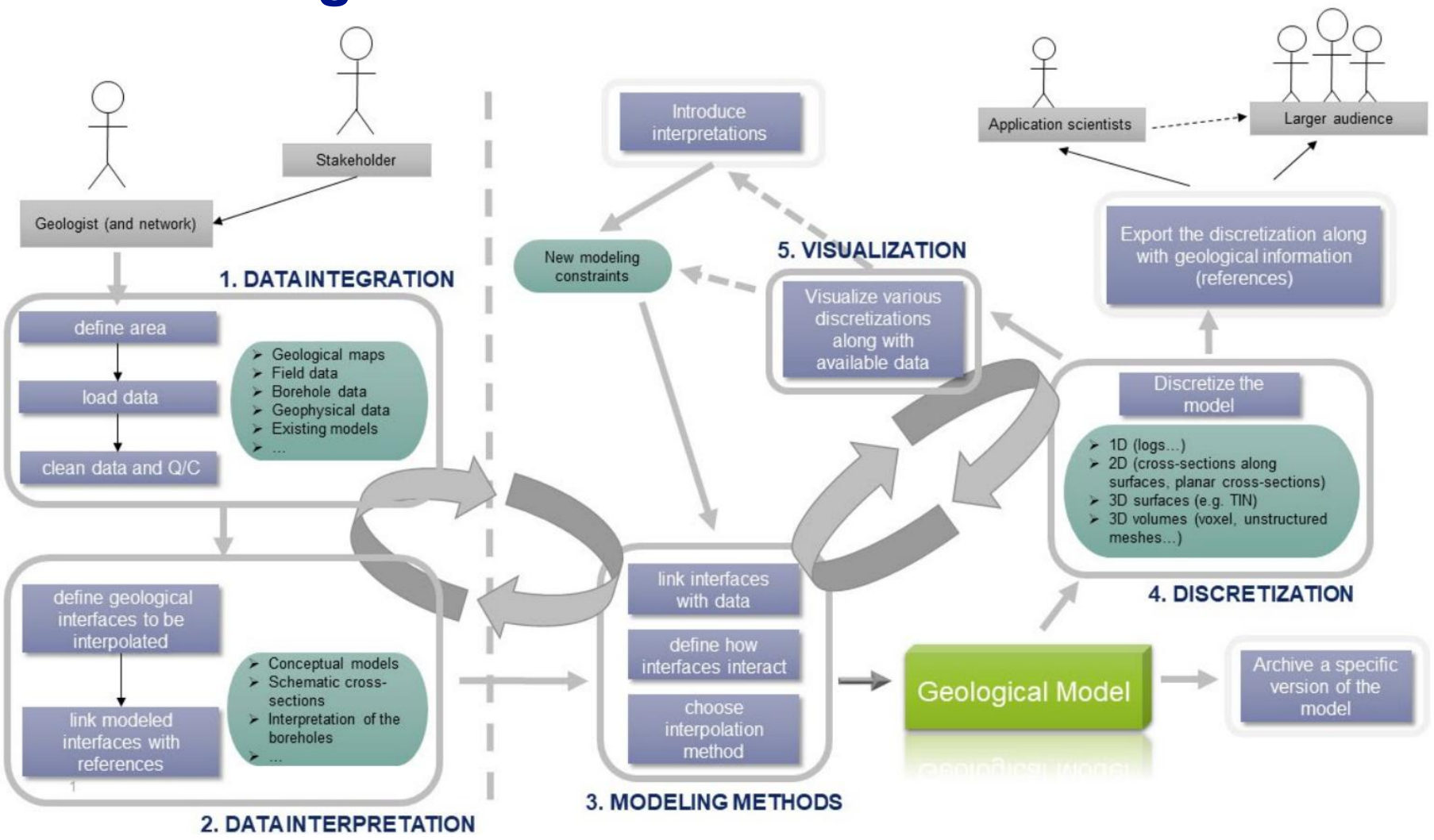
Workshops

Survey
CGS
BGS
BRGM
GEUS
GeoSphere
ICGC
IGME
ISPRA
LFU
PGI
SGUDS
SZTFH
TNO



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3D Geomodelling & Visualisation



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Workshops and webinars

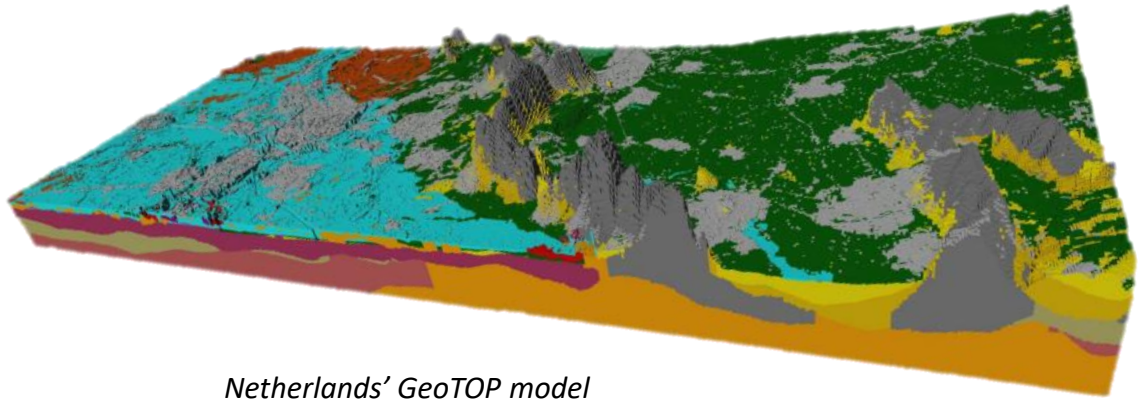
Workshop #4 100-170 participants

From modelling methods to visualisation

Workshop #6 100-200 participants

Uncertainties in Geological Models

➔ Special issue open in Solid Earth



Netherlands' GeoTOP model

EuroGeoSurveys' Expert Group
Geological Mapping and Modelling
Webinars, see replays

Visual KARSYS

GemPy/GemGIS

Geo3D

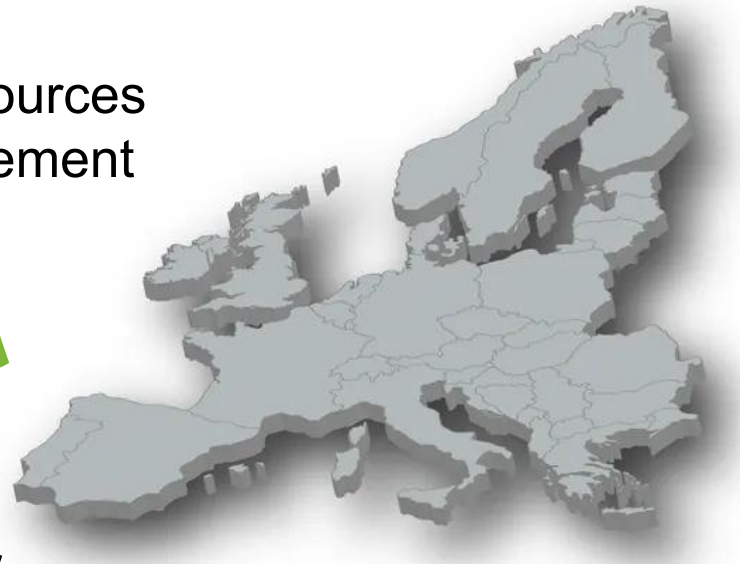
Loop3D

ForGEO/QGIS

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Towards a 3D Geomodel of Europe

Harmonised resources
and risk management



European policies
and decision-makers

Harmonised understanding of the subsurface in 3 dimensions



Goal - **Understanding the Subsurface – Geological Knowledge**
Priority USG2 – **Towards a European-scale 3D geological model**
Priority USG3 – **New technologies for subsurface investigation and geomodelling**

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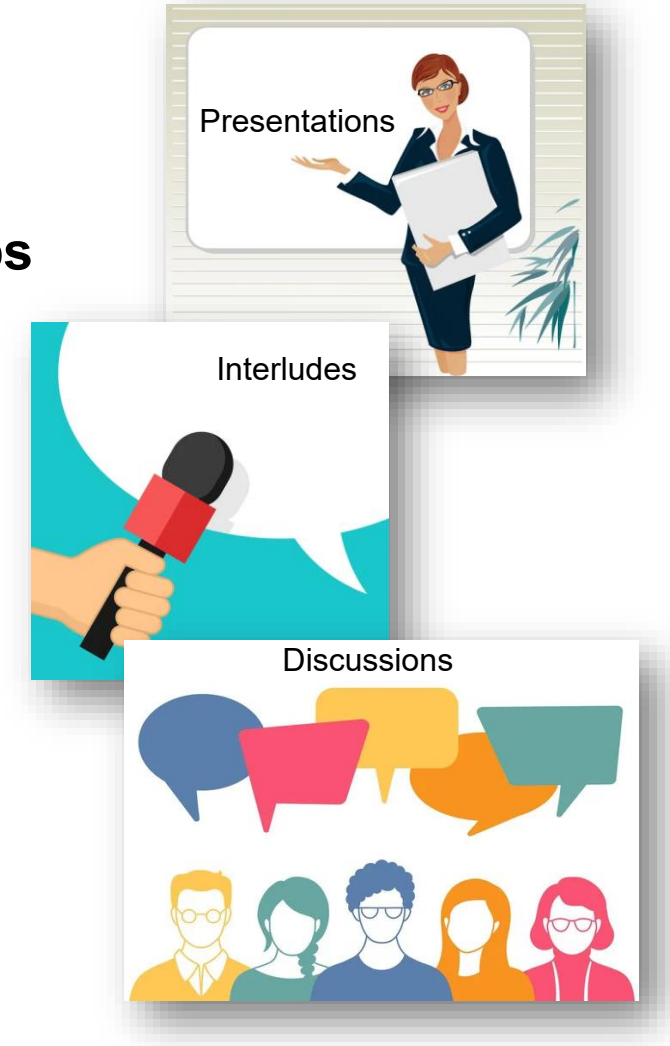
Programme

Session 1: Impact and Applications, Outreach and Target Groups
Monday, 12 October 2026 | 09:00 - 11:40 CEST

Session 2: Experiences from National Models
Monday, 12 October 2026 | 14:00 - 17:00 CEST

Session 3: Transboundary and Large-Scale Models
Tuesday, 13 October 2026 | 09:00 - 12:00 CEST

Session 4: Brainstorming on a European 3D Geological Model
+ Canadian presentation
Tuesday, 13 October 2026 | 14:00 - 17:00 CEST



Workshop web page
https://www.geologicalservice.eu/events/workshop-towards-a-3d-geomodel-of-europe

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