Technical aspects of a European 3D geomodel

Five statements to disagree with

Chris Heerema | Online

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TNO Geologische Dienst Nederland

Where we start

- A European 3D geomodel has not been defined yet
- Every country has its own geology, use cases, priorities, technical capabilities, data types and data quality, etc.
- Ask each of us for a definition and you get as many different models as people in the room

How we work

1. I show 5 statements, one at a time
2. Disagree? Click the raise-hand button in Teams. Lower the hands before the next statement
3. I count the hands; we discuss the most contested, about 5 min each
4. At the end: anything to add?

Statements can contradict each other, on purpose.

Disagreement is useful. It shows where the technical questions really are. Brainstorming is the goal!

Where we start

- A European 3D geomodel has not been defined yet
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- **Ask each of us for a definition and you get as many different models as people in the room**

Practice

Geology of The Netherlands is the most fun and interesting of all of Europe.

Disagree? Click the raise-hand button in Teams.

Statement 1: Assemble

The European model should be assembled from existing national and regional models, not modelled as one piece.

Hands (disagreed):

Group 1	Group 2	Group 3	Group 4
2/5	2/6	1/5	0/7

Notes:

- Start from regional models: keep expertise, easy start. “Canadian model”. Can become messy.
- Start from European coverage: European projects (e.g. GeoER) already take years to start up, imagine doing a full European 3D model
- The polish hexagon method should be considered when exploring a model

Statement 2: Fill the gaps

The European model should cover all of Europe first. Where a country or area has no 3D model yet, filling that gap has priority.

Hands (disagreed):

Group 1	Group 2	Group 3	Group 4
3/5	4/6	0/5	5/7

Notes:

- “It’s good to have gaps. We should show all the models we have in one place, that incentivizes others to see the possibilities and fill the gaps themselves”
- “There should be focus on harmonizing existing models. We then continue from that framework”
- “Adding all models into one central hub will be a complete mess”

Statement 3: Model mismatches

A first European model (MVM) accepts visible mismatches between modelled areas, whether from existing models or newly built.

(A minimum viable model (MVM) is the simplest version that is still useful.)

Hands (disagreed):

Group 1	Group 2	Group 3	Group 4
3/5	4/6	0/5	5/7

Notes:

We didn't specifically discuss this point that much in all the groups. It's still an important point to consider, as it could have significant impact on how the 3D European geomodel would be built.

Statement 4: Public viewer

The European model should not be developed without a sophisticated, publicly viewable online viewer.

Hands (disagreed):

Group 1	Group 2	Group 3	Group 4
0/5	1/6	0/5	2/7

Notes:

Little disagreements. People strongly support the ability to have the ‘model to be’ to be easily accessible

Statement 5: Open source only

The European model should be developed with open source software only.

Hands (disagreed):

Group 1	Group 2	Group 3	Group 4
4/5	4/6	4/5	5/7

Notes:

- Will not work if we build from existing models that are created using closed source
- Open source, no. Open model formats: yes
- AI accelerations offer potentially many opportunities. Not everyone shares the AI revolution view (yet)

Practice

Geology of The Netherlands is the most fun and interesting of all of Europe.

Disagree? Click the raise-hand button in Teams.

Group 1	Group 2	Group 3	Group 4
5/5	6/6	5/5	7/7