

CERN - 14/01/2025

### **Defining subsoil conditions**

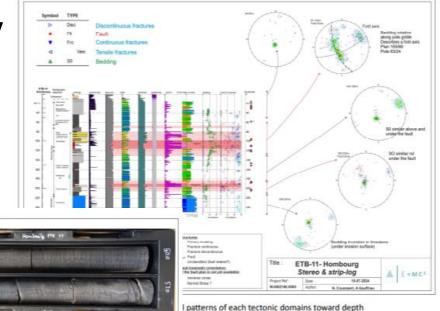
△ First drilling campaign: Geotechnical core logging, still ongoing (7 from 11 reports ready)

△ Establish geotechnical criteria methodology

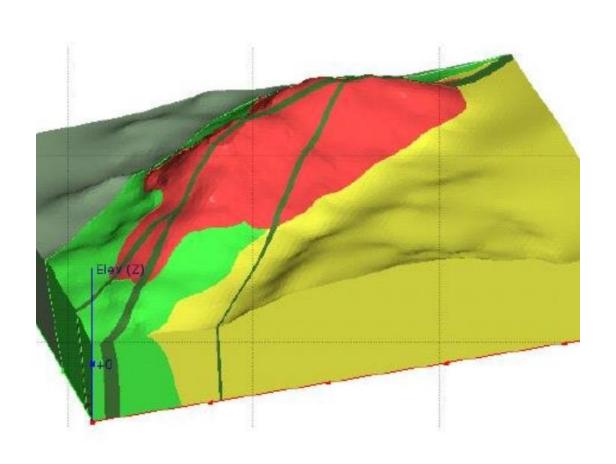
△ Launching seismic/noise campaign

△ Launching second drilling campaign





# Evaluating subsoil conditions = basis for civil



△ Converting data into a geotechnical model, data from first boreholes used = ongoing

△ Starting with a comprehensive 3D model in LEAPFROG, incorporating data from hydro-geological, geological and studies on noise



# First steps – Facility Infrastructure & civil eng.

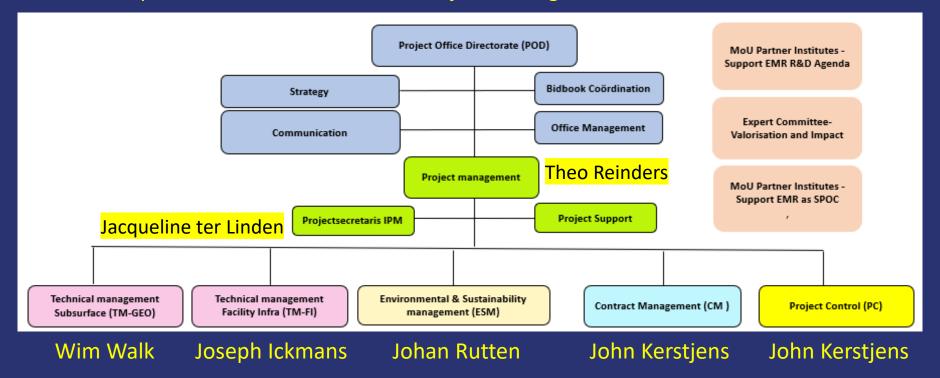
- △ Defining activities necessary for feasibility & bid book
- △ Establish risk management / mitigation approach and introduction into systems engineering
- A Review of the available geological and geotechnical data
- △ Preliminary survey on construction logistics and impact on the region
- △ Identifying aspects having potential impact on civil engineering
- △ Establish contacts with stakeholders and coordinating alignment with ETO → basis of design



#### September 2024

△ Full IPM project organization established → addition of manager environment, manager Facility Infrastructure (civil engineering) and office manager

Theo Reinders replaces Guid Bartholomée as Project Manager





## Approach Facility Infrastructure (civil eng.)

#### ▲ Focus on:

- Alignment with ETO/ETC and stakeholders fixation starting points & criteria (alignment with detector specialists & minimize rework)
- Organize feasibility studies & necessary input for bid book

#### △ 3 phases:

- Concept phase: Currently in finalization: establish roadmap (showstoppers/cost drivers/risks → priorities) & mobilizing full team on all relevant disciplines
- Assessment phase: 2 parallel actions resulting in a basis for bid book
  - Design concept scenarios (expert judgement) for the relevant disciplines → modular approach
  - Converging design criteria together with ETO/ETC and other stakeholders (local)
- Concept design phase: after fixation of main starting points (ETO & stakeholders), finalize concept design and provide input on bid book



# Timing Facility Infrastructure (only triangle)

