

# SMARTEXPLORATION

new ways to explore the subsurface



## E-Vib is hitting the ground for SCAN Project

*Seismic Mechatronics, a partner of Smart Exploration, is shooting for SCAN Project in Amsterdam*

*Press Release / February 2020*

Seismic Mechatronics has further developed an electromagnetic broadband seismic source “E-Vib” within the Smart Exploration Project for mineral exploration purposes. The system generates acoustic signals like voice speakers for seismic imaging purposes as a result of minimized distortion due to a frictionless design and a broad bandwidth at full force (2-200Hz). This allows lower in force and smaller sized sources to reach greater depths (1500lbs; >3kM) and results in a much improved technic of seismic acquisition. The prototype has been validated in two mine sites in 2019 in underground and at surface level. The prototype passed the test and the results confirmed the excellence of this new state-of-the-art technology.

Seismic Mechatronics is currently testing the E-Vib for geothermal seismic acquisition. The goal is to eventually use new 50kN E-Vib to map areas in the Netherlands, in particular in the urban areas where explosives are not an option. The collected data will be interpreted by SCAN team and further analysis will be made by the team.

Two projects are built on collaboration principle among different organisations and skillsets. So that, the projects can be maximized through collaborative thinking and working. By clustering, which is the desired practice, the projects share their achievements with each other and support one and another where possible. The current survey in Amsterdam is an excellent example of cross project collaboration and usage of project results for cross discipline purposes.

The Smart Exploration project is developing cost-effective, environmentally-friendly tools and methods for geophysical exploration in



highly challenging brownfield and greenfield areas to meet the ever-increasing community (social acceptance) and environmental issues, as well as reduce the return time.

The 'Netherlands Seismic Campaign for Geothermal Energy' (Seismische Campagne Aardwarmte Nederland) or 'SCAN' programme in short has been initiated by the Dutch Government. The purpose of the SCAN is to complete the map of the Dutch deep subsurface by researching the areas that were historically left 'blank' because of their lack of oil and or gas potential. By openly sharing this data SCAN will help support future determination of geothermal potential in these areas. The SCAN programme kicked-off in 2018 and it will take several years to complete. EBN can be contacted on behalf of the implementing parties at +31 (0)30 233 90 00 or [info@scanaardwarmte.nl](mailto:info@scanaardwarmte.nl).

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