

## **Round Table Discussion & Resolution on the “Future of the ARGONET Test-Site, Scientific Perspectives & Possible French-Greek Collaboration”**

*(moderators: N. Theodoulidis, F. Hollender)*

### Future of the ARGONET test-site and new instrumentation

- Keep ARGONET in its present configuration & perform first level maintenance
- Perform some in-situ non-linear tests (e.g. Vibroseis)
- Perform some CPTU measurements
- Add 1 or 2 Dynamic piezometers in boreholes
- Perform some ERT geophysics measurements and relief/topography study
- Participation of ARGONET in HELPOS (Hellenic EPOS)
- Technical IT support by ITSAK
- 3D array as an extension of ARGONET within the Koutavos Park
- Add strain gauges based on fabric optics technology

### Scientific perspectives & possible French-Greek collaboration

All participants agreed towards a future scientific collaboration according to their expertise. To this direction it was proposed to contribute to certain scientific efforts/topics by “attracting” human resources (e.g. PhD students, Post-docs, etc.).

#### Proposed research topics:

- 3D modeling and validation/benchmark can start today since 3D geophysical & geological model is almost ready and ground motion data is available.
- Advanced site effect estimation methods
- Seasonal variation of Vs<sub>z</sub> with depth and simulations to understand/capture its seasonal variation
- Rotational ground motion study
- Non-linearity studies based on recorded data as well as on in-situ experiments (e.g. using vibroseis)
- Improvement of our understanding of Kefalonia seismic faults
- Extended fault near field ground motion simulation (3D holistic approach)
- Study of liquefaction phenomena
- Evaluate worldwide inter-vertical arrays scientific experience and set path forward

#### Funding issues:

- EDF and CEA possibly could contribute to aforementioned topics by limited funding as well as to ARGONET infrastructure sustainability
- HELPOS could possibly contribute to ARGONET sustainability during its first level maintenance

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