

# **Incremental Virtual Prototyping for Performance Based Design and Life Management of Infrastructure**

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# Vision

- Replicate infrastructures using virtual models
- Virtual rapid prototypes will be used for conceptual and detailed designs supported with advanced geotechnical and structural computational mechanics and performance assessment techniques
- Virtual models will be incrementally built and updated to maintain parity with the as-built during its whole life cycle
- Virtual models will be used as the experimental test-bed (e.g. to assess resilience, performance against new situations and change of use)

**Thank you for listening**