What is GeoSuite?

- Develops geotechnical software and data management system
- Also name of the commercial products
- GeoSuite phase1:
  - Project period 2003-2006
  - Collaboration Sweden – Norway
  - Eureka project, sponsored by the Norwegian Research Council and seven partners
  - Goal: merge Norwegian and Swedish programs and knowledge into common solutions
What is GeoSuite?

- developed a toolbox of software for daily geotechnical consulting practice
- based on existing methods and codes
- Today the GeoSuite Toolbox comprises five modules; four more or less stand-alone calculation modules and one presentation module integrated with Novapoint civil design software

GeoSuite Toolbox modules

Stability:

Settlement:

Excavations:

Presentation:
GeoSuite2. Purpose

- Include a standardised system for management and presentation of geotechnical data
- Improve and further develop the geotechnical solutions to solve geotechnical design problems
- The R&D focus is twopronged, the first on the Information Communication Technology, the second on the Geotechnical front

GeoSuite2. Goal

The ultimate goal is:

- Provide safer and more cost-efficient solutions to the public
- Integrate infrastructure design based on standardised and accepted solutions
- Provide reliable data from geographical retrieval databases
Project organisation

- Consortium of eight Norwegian and two Swedish partners
- Project period 2006 – 2009
- Client / user driven project. Assembles:
  - private organisations
  - research organisations
  - universities
  - one public organisation

Project organisation

- Divided into five subprojects, reflecting the modules developed
- Subproject managers are from client / user organisations
- All partners represented in reference groups
- Common programming team serving all subprojects
Partners

- GeoVita
- Multiconsult
- SINTEF Byggforsk
- Norwegina Geotechnical Institute (NGI)
- Norwegian University of Science and Technology (NTNU)
- University of Oslo (UiO)
- Norwegian Public Roads Administration (Vegdirektoratet)
- ViaNova Systems
- ViaNova GeoSuite AB, Sweden
- AGEF, Sweden

Funding

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<tr>
<th>Acronym</th>
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<td>NFR</td>
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Total: kNOK 24 700
Achievements

Research-based innovation project for the benefit of geotechnical engineering practice. Includes:

- Unique management of data
- Multidisciplinary infrastructure integration
- Flexible and interoperable model for data exchange, based on ISO standards
- Improved and new solutions for calculation

Unique data management

Exchange of soil parameters between modules

Database
ISO std
Multidisciplinary integration

- Achieve multidisciplinary integration by using Novapoint software
- Novapoint is a module-based Civil Engineering software using Autodesk CAD platform
- Retrieve data directly from Novapoint Terrain, Road and other infrastructure modules of interest
- Store geotechnical data in Novapoint database for easy access to other modules
- A comparable product is not commercially available today
Fully integrated data exchange

Today:
One-to-one mapping

Standardised data exchange

Interoperability
based on ISO std
(SOSI / XML)

User1
Internal database

User2
Internal database

User...
Internal database

GeoSuite Toolbox

Ultimate goal

- Safer and more cost efficient solutions
- Retrieval of reliable data using GIS
- Efficient management and storage of geotechnical info
- Improved risk management