GeoTwinn

Strengthening research in the Croatian Geological Survey:

Geoscience-Twinning to develop state-of-the-art subsurface modeling capability and scientific impact

Widespread-05-2017-Twinning project

HGI-GEUS-BGS

GeoTwinn

Project presentation

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Call: H2020-WIDESPREAD-05-2017-Twinning
Type of Action: CSA
Number: 809943

HRVATSKI GEOLOŠKI INSTITUT
CROATIAN GEOLOGICAL SURVEY

G E U S

British Geological Survey
Expert | Impartial | Innovative

Project Information

Hrvatski geološki institut (HGI-CGS) - COORDINATOR
Geological Survey of Denmark and Greenland (GEUS)- BENEFICIARY
British Geological Survey (BGS) – BENEFICIARY

- Grant Agreement with: Research Executive Agency delegated by the European Commission
- Project Start Date: 01/10/2018
- Project End Date: 30/09/2021
- Reporting periods:
  - 1, duration 15 months, 01/10/2018 - **31/12/2019**
  - 2, duration 21 months, 01/01/2020 - **30/09/2021**
- Maximum grant: €996,717.50
  - Pre-financing (80%) - Guarantee fund (5%) = transferred budget

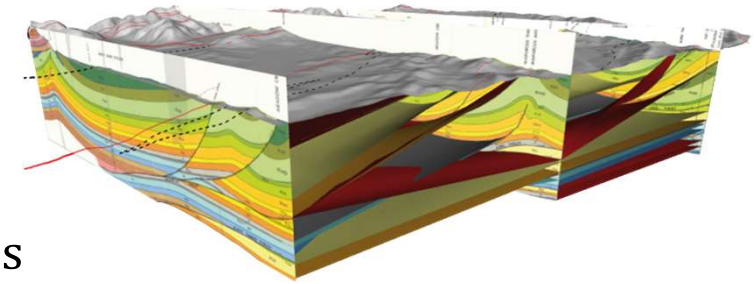
Objectives

- ✓ **Strengthen HGI-CGS's research capabilities**
  - ➢ embed state-of-the-art geological surveying, interpretation and modelling techniques
  - ➢ raise the scientific productivity and excellence
  - ➢ learn to realise the maximum benefit from the new capacity and the new opportunities
- ✓ **Establish a strong geoscientific network**
  - ➢ new ideas and developments
  - ➢ partnerships for new projects
- ✓ **Sustainability!**

- ✓ **How?**
  - involving world-leading Surveys and experts
  - undertake a programme of collaboration and knowledge exchange that advances the capability of HGI-CGS
    - coordinated and targeted programme of training
    - networking, knowledge exchange and collaboration
  - continue to collaborate → "Vision for the Future"

Topics & Tools

- **Geomodelling**
- **Strengthening of research in four important geoscientific areas:**
  1. 3D geological surveying and subsurface modelling;
  2. Groundwater flow and contaminant transport modelling;
  3. Geological hazards: data collecting and analysis;
  4. Geothermal energy: fluid and heat flow



- **Tools**
  - Advanced analytical techniques and methods
    - Deep seismic and borehole data interpretation and integration
    - Numerical modelling and statistics
    - Remote sensing

Expected Outcomes

- **Step-change in impact of the HGI research publications**
  - increase the impact and number of scientific papers
  - Increase the number of highly cited articles
- **Raise the reputation of HGI for novel research**
  - Raise the research profile of HGI scientists
  - Strengthen research in four important geoscience subject areas
  - Career development for early career scientists
  - Raise visibility
  - More efficient operational practices in HGI-CGS
- **Develop, enhance and maintain a strong network of collaborators**
  - Establish active scientific collaborators and partnership
  - Increase HGI level and quality of collaboration agreements with business.
- **Increase successful bids into EU and other research grant schemes**
- **Break institutional barriers**
  - Matrix & flexible organisation
  - Better communication
  - Active staff & Commitment
  - Grant office?
- **Contribute to the Smart Specialisation Strategy for Croatia**

Actions

- **Training**
  - Capacity building Courses
  - On-the-Job training *(external and in-house)*
  - Fieldtrips and Fieldwork
  - Expert exchanges

- **Workshops**
- **Knowledge Dissemination**
  - Scientific publications
  - Updating of Stakeholders

- **Networking**
- **Plans for future actions – following up of new project-ideas**

Strengthening Capabilities

- **Iterative process:**

1. Intensive training and consultation (blue)
   - Short-term training visits
     - master or develop methods and skills
     - practical training
   - Workshops
   - Consultations - verification of HGI-CGS analysis results + field prospection
2. Application of new techniques and methods (light blue)
   - Application of gained knowledge on Croatian examples and data

3. Dissemination and presentation (green).
   - conclusions and achievements of the task
   - publication activities
   - dissemination of results and future projects planning

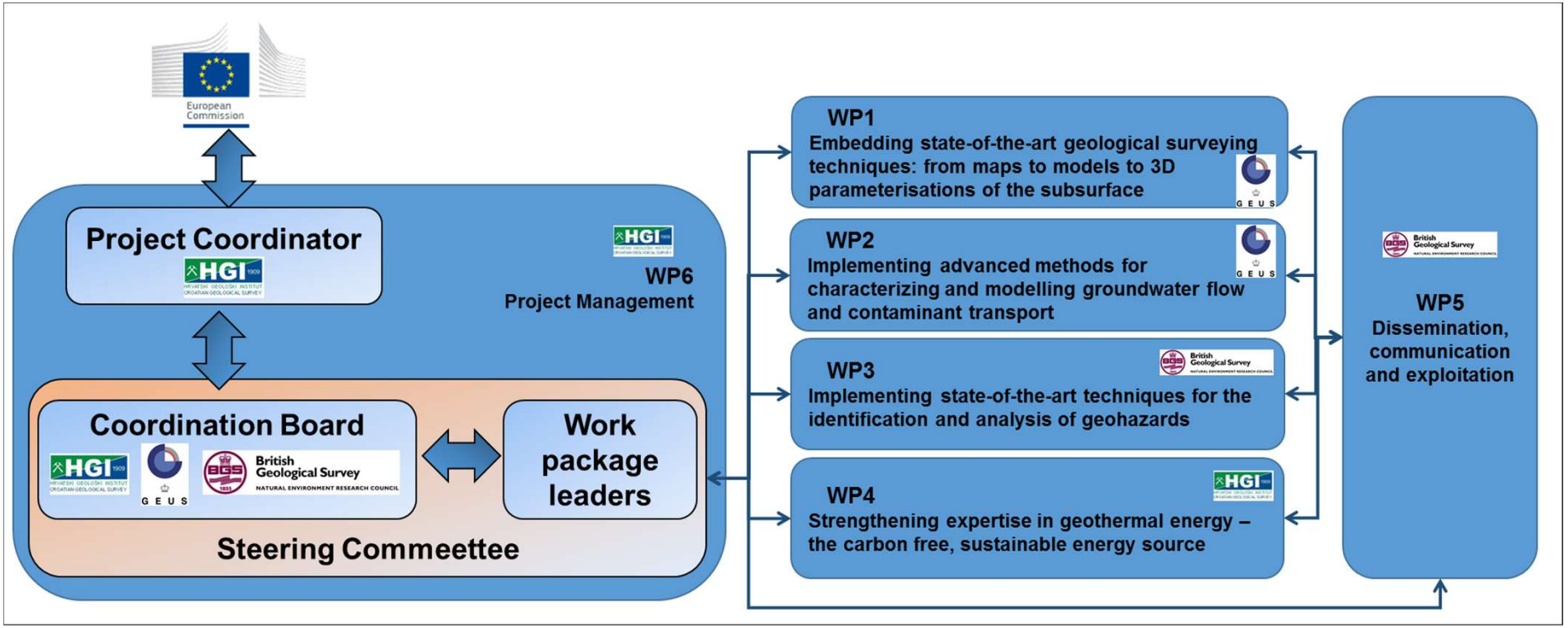
GeoTwinn in numbers

up to 2020

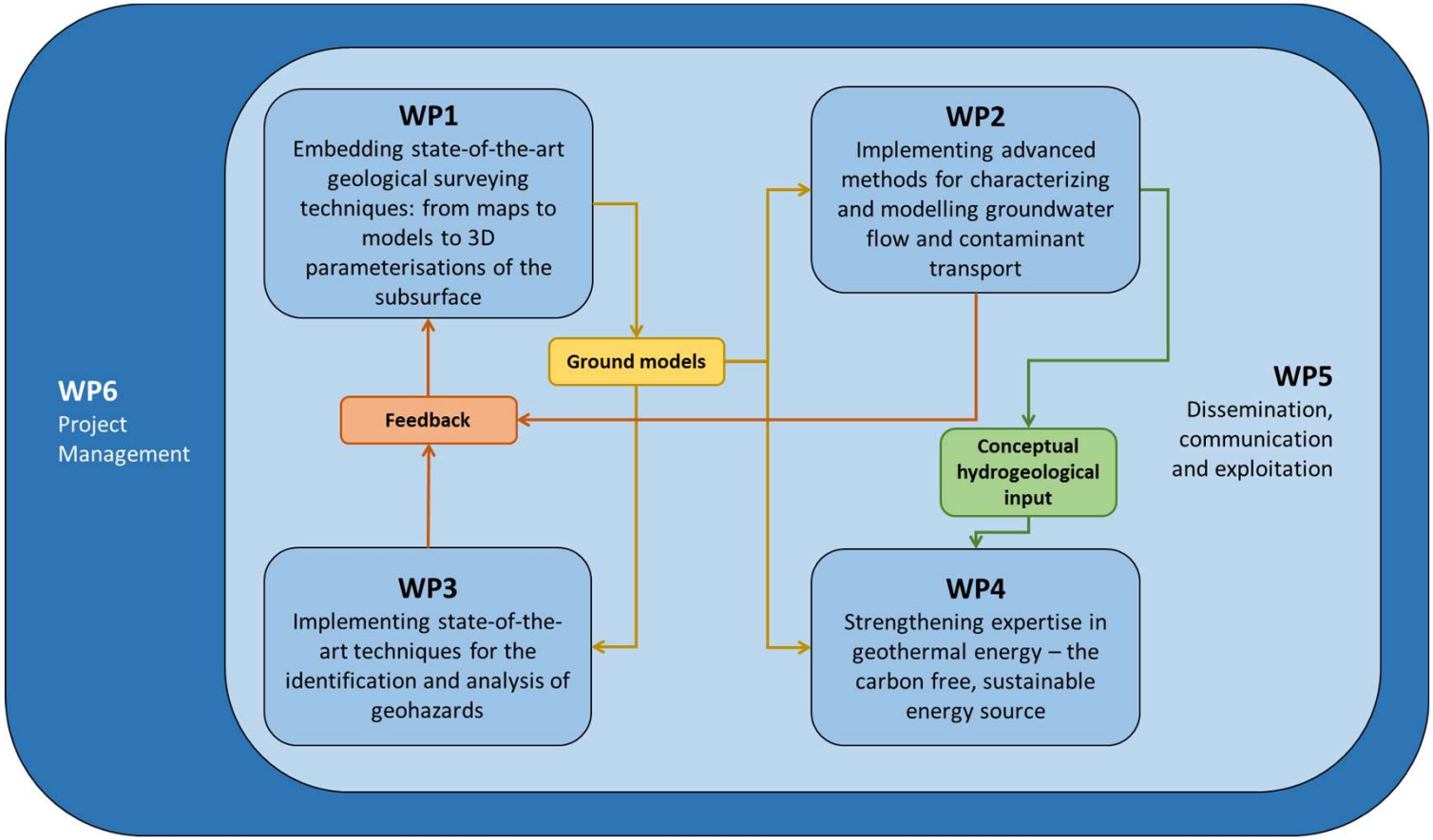
- **Trainees**: 31 HGI-CGS employees - almost 30% total staff number
  - 7 early career scientist trained
- **Trainers**:
  - ~16 GEUS
  - ~ 22 BGS
  - 1 external contractor

- 15 short term **staff exchanges**
- 16 **expert visits**
- 7 short term **on-site training**
- 4 **workshops**
- Numerous **discussions & meetings**

Project Setup



Work-Package Interactions



Communication & Dissemminaiton Activities

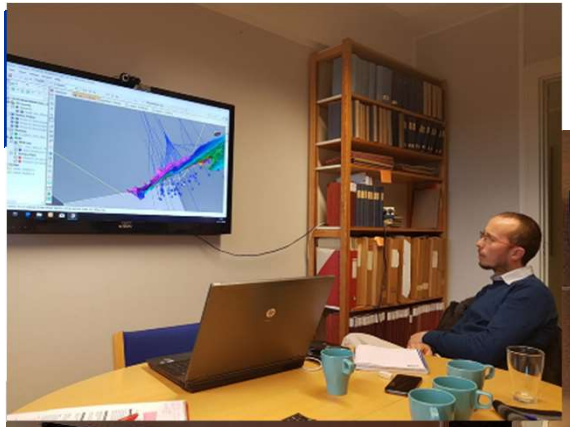
- **Communication**
  - Project Website
  - Online Social Media Presence
    - Facebook
    - Twitter
    - Instagram
  - Workshops (4)
- **Dissemination**
  - Journal Articles
  - Conference Presentations
  - Newsletters
  - Stakeholder Consultations
  - General meetings

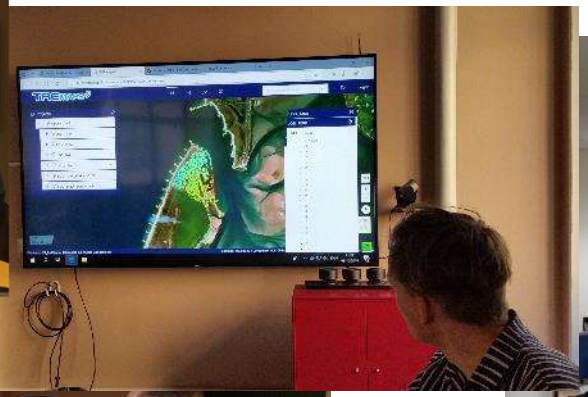
Conclusions

- Institutional Strengthening
- Capacity Building
- Training
- Collaboration
- Networking

Scientific Excellence

Implementation





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- Project Website
  - http://geotwinn.eu
- Online Social Media Presence
  - Facebook
    - https://www.facebook.com/GeoTwinn/
  - Instagram
    - https://www.instagram.com/geotwinn/

Thank You