

# GeoDH Training

---

25<sup>th</sup> November 2014  
UK Webinar



Co-funded by the Intelligent Energy Europe  
Programme of the European Union



# Promote Geothermal District Heating Systems in Europe

## GeoDH

### Section C – Non technical issues

#### Part 1:

#### Regulations, standards and codes

elaborated by

**Luca Angelino (European Geothermal Energy Council)**

**E. Demollin-Schneiders (Gemeente Heerlen)**

**R. Pasquali (GeoServ)**



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

## Regulations, standards and codes



## Main areas of legal problems and regulatory barriers

### Ownership of the geothermal resource / license for using the resource

- A clear title for exploitation rights over a sufficient period is crucial

### Protection of the geothermal resource against other uses/users

- No licenses for other uses/users that would jeopardize the geothermal resource
- Certain distance (or other protection) must be kept for other uses

### Environmental regulations

- Groundwater protection incl. pressure issues, soil protection
- Seismicity, surface issues

### Work safety, construction, traffic

- Any legislation applicable for similar activities in mining, drilling, construction, etc.



## Main areas of legal problems and regulatory barriers

### Ownership of the resource / license for using the resource

- A clear title for exploitation rights over a sufficient period is crucial

### Protection of the environment / safety

- No licenses
- Certain dis

For a renewable energy source „exploitation“ might not be the best wording; the energy extraction should be seen more as a use of the resource, a temporary exploitation and recovery, or similar.

### Environment

- Groundwater protection incl. pressure issues, soil protection
- Seismicity, surface issues

### Work safety, construction, traffic

- Any legislation applicable for similar activities in mining, drilling, construction, etc.

## Resource licensing

**In case the ownership is with the state, the following items are crucial for geothermal development:**

- Who can apply for a license (non-discriminatory process)
- One- or two-step-process (exploration, exploitation)
- Time period for which a license can be obtained, possible prolongations
- Time for obtaining a license
- Regulatory process is governed by the EA in the UK and will be summarised in later slides



## Environmental regulations

The state has a duty to provide regulations protecting the environment or other human interests from possible negative consequences of geothermal power production.

The following rules should be adhered to:

- A viable equilibrium has to be found between regulations that might have not the necessary protective effect, and those that might kill geothermal development
- Full Environmental Impact Assessment (EIA) procedures only for large projects with considerable risk potential
- Keep environmental regulations focussed on the protection of ground, groundwater, surface from possible harm caused by the geothermal plant, and do not address unrelated issues!



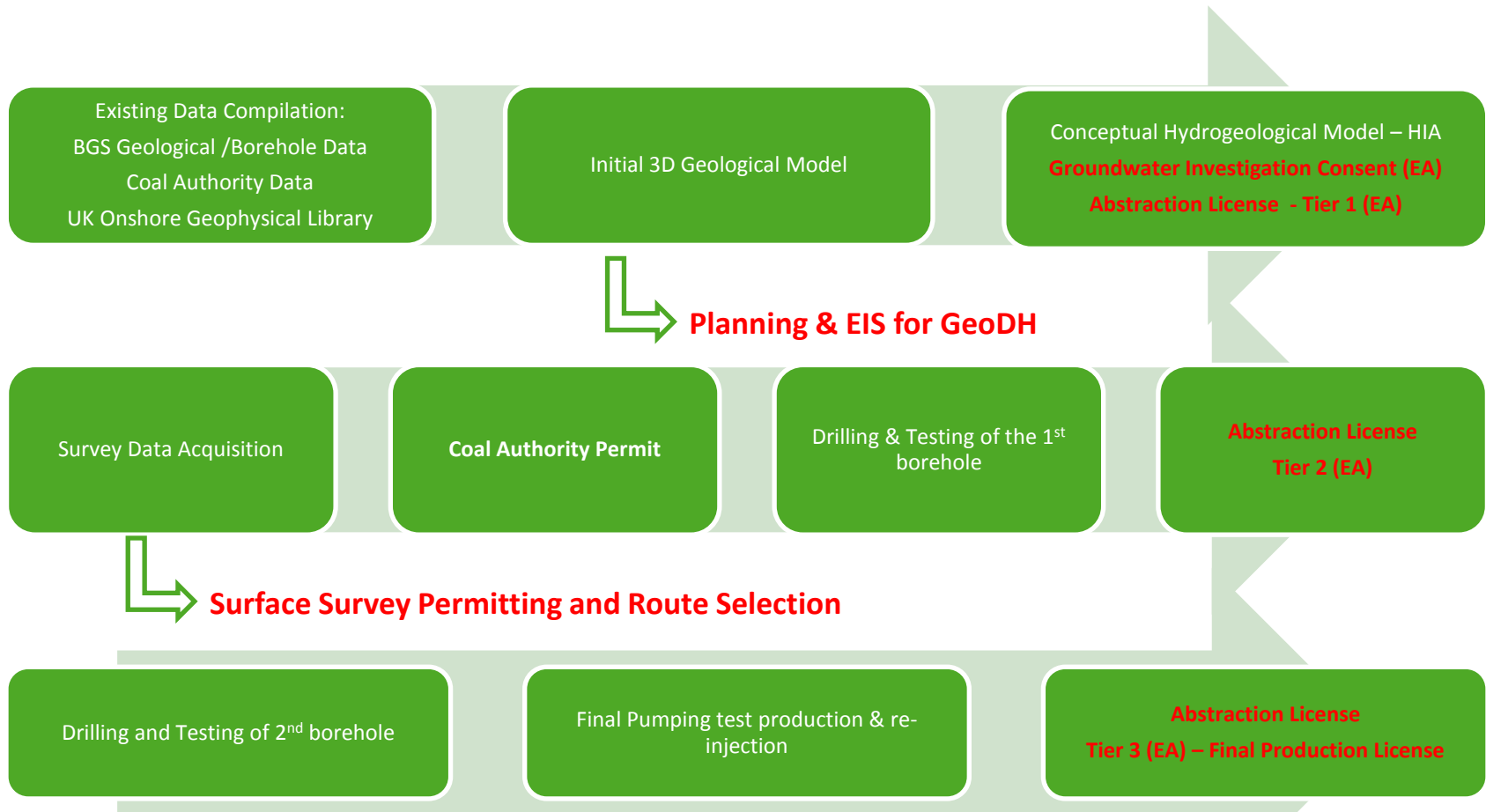
## Key recommendations

- National and local rules must include a definition of geothermal energy resources and related terms, in line with Directive 2009/28/EC;
- Ownership rights should be guaranteed ;
- Administrative procedures for geothermal licensing have to be fit to purpose - they should be streamlined wherever possible and the burden on the applicant should reflect the complexity, cost and potential impacts of the proposed geothermal energy development;
- The rules concerning the authorisation and licensing procedures must be proportionate and simplified, and transferred to regional (or local if appropriate) administration level. The administrative process must be reduced;
- Rules for district heating (DH) should be as decentralised as possible in order to be adaptable to the local context, and stipulate a mandatory minimum level of energy from renewable sources, in line with Article 13 §3 of Directive 2009/28/EC
- A unique geothermal licensing authority should be set up;
- Information on geothermal resources suitable for GeoDH systems should be available and easily accessible;
- GeoDH should be included in national, regional and local energy planning and strategies;
- Policy-makers and civil servants should be well informed about geothermal;
- Technicians and Energy Service Companies should be trained in geothermal technologies;
- The public should be informed and consulted about Geothermal DH project development in order to support public acceptance;
- Legislation should aim to protect the environment and set priorities for the use of underground: geothermal energy should be given priority over other uses such as for unconventional fossil fuels, CCS, and nuclear waste deposits.





# Legislative and Regulatory Summary - UK



## Recommendations

- Owner and Tenant notification under the current planning legislation for **above and below ground works** - The Department for Communities and Local Government (DCLG) decision on “Revised requirements relating to planning applications for onshore oil and gas” - remove this requirement for GeoDH projects.
- Local Development Orders (LDO) give flexibility to the for a change of route or for future extension of the network once the works are carried out in the pre defined area.
- Funding similar to HNDU (DECC) for technology feasibilities for geothermal schemes should be available to Local Authorities.
- Dedicated Geothermal Licensing Regime

