How sustainable are quality control procedures for constructions in Europe?



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Conditions for a 'sustainable' regulatory system?

 To what extent is there certainty that a construction on completion meets the technical requirements?(organisation of the control & inspection process)

2. To what extent is the inspection of sustainable requirements regulated?

3. What are the quality demands on builders/installers?

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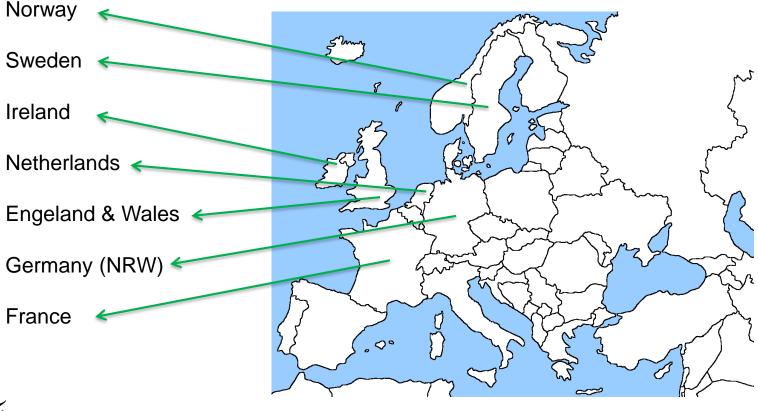


Comparative Research Project

(NL government)

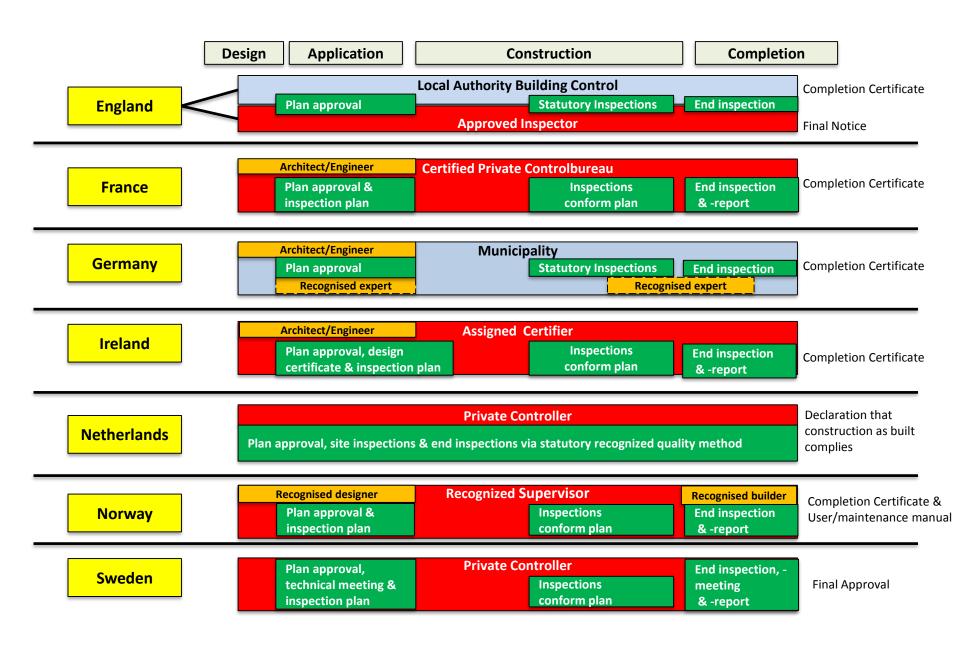
NL: introduction of new regulatory system:

Focus division of tasks and responsibilities of parties involved in quality control for construction (technical requirements only!)



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1) Certainty that construction meets demands?



2) To what extent is the inspection of sustainable requirements regulated?

One of the Pillars of the Building Regulations

Focus on:

- Inspection of structural & fire safety
- Inspection of complex constructions •

Far less statutory demands:

- On the nature, contents & depth of the control of sustainable' requirements
- On the inspection & supervision of dwellings









A few 'good statutory examples'



Design phase:

GM: Architect/engineer are responsible for compliance with (i.a.) thermal insulation& energy conservation requirements

FR: Architect must certify that construction plan meets (i.a.) energy performance demands

Construction phase:

- **GM**: During construction the inspection of (i.a.) thermal insulation of the structure/shell is obligatory.
- NW: Independent private control of building physical requirements (energy efficiency, ventilation, insulation demands) is obligatory.

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3) Demands on quality of builders & installers?

Only in general terms:

- "Builder/installer must ensure that the work complies with all applicable requirements"
- Reference to demands on buildings defects insurances & professional liability

Role as private controller:

- **Norway:** Voluntary registration as Recognised Building Enterprise
- Sweden: Voluntary registration as Recognised Private Controller

Role as builder:

- **France:** Statutory registration builders because of insurance system
- Ireland: Voluntary registration as Competent Builder

England & Wales: Competent Persons Scheme



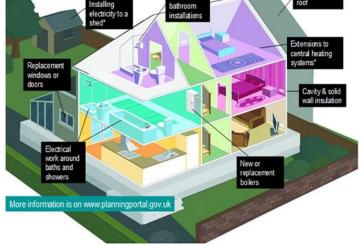
Replacemen roof

England & Wales: Competent persons scheme

Interesting features:

- Focus on construction elements that are relevant for energy performance (glazing, installations, insulation)
- Incorporated in quality control system
- Sets demands on education, experience & capabilities
- Is it effective?

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Conclusions & recommendations



Current regulatory framework:

- Focus on as built situation
- Emphasis on safety requirements & complex constructions (risk-based approach)
- Hardly any demands on builders and installers

Wider perspective :

- More balance in demands on control procedures
- More emphasis on the quality of builders and installers
- Don't forget the existing building stock

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Thank you

Any questions?













