How sustainable are quality control procedures for constructions in Europe?

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Conditions for a ‘sustainable’ regulatory system?

1. 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?
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!)

Norway
Sweden
Ireland
Netherlands
Engeland & Wales
Germany (NRW)
France
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.

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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.
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
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?
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
Thank you

Any questions?