

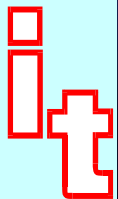


Planning issues: UK, France, Netherlands

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Power

Presentation plan

- The main planning constraints
 - UK
 - France
 - Netherlands
- Similarities and differences
- What seems to be most urgent?

The main Planning issues

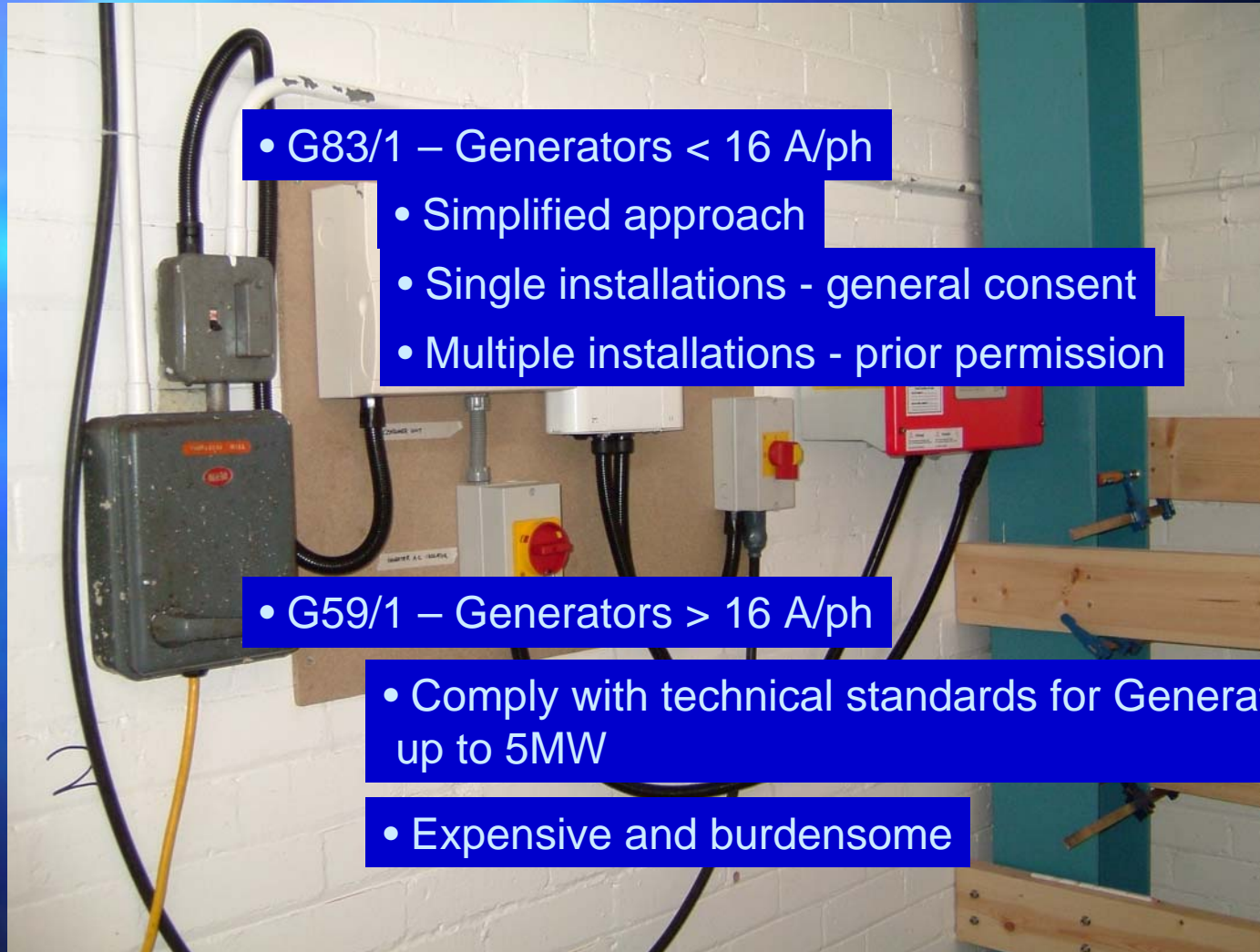
Wind turbines

- Most prominent issue = problems with gaining planning permission
- Areas identified as problems included:
 - Visual issues
 - Noise
 - Structural concerns
 - Cost
 - Impacts on birds
 - Reliability of wind and therefore energy
 - Public perception
 - Energy storage

UK main issues

- Planning permission
 - Visual appearance / impact
 - Land use
 - Noise: background or absolute?
 - Flicker
 - Vibration and structural issues
- Grid connection
- Health and Safety

Grid connection: G83 & G59



- G83/1 – Generators < 16 A/ph
 - Simplified approach
 - Single installations - general consent
 - Multiple installations - prior permission

- G59/1 – Generators > 16 A/ph
 - Comply with technical standards for Generators up to 5MW
 - Expensive and burdensome

UK Planning Issues

- 37% of installations experienced problems in the planning stage
- Planning guidelines are needed for small wind turbines
- Stronger messages are needed in policy and planning documents highlighting the environmental benefits

France

- Noise pollution
 - Laws on noise pollution state that urban noise is defined by difference to background noise
 - Day time (7AM to 10PM): the emergence permitted is +5 dB(A)
 - Night time (10PM to 7 AM): the emergence permitted is +3dB(A)
 - French legislation appears inadequate
- Flicker
 - Very Infrequent but still a question
 - Currently, no regulation is applied concerning stroboscopic flicker in France.

France

- Grid connection
 - Complex
 - Time-consuming
- Property issues:
 - Wind turbines can not overhang any neighbouring property without the authorisation of the owner. The overhanging of the public domain is submitted to an authorisation of public domain occupation.

The Netherlands

- The permit procedure is at this moment too complex
- Different regulations are contradictory
- Also need environmental permit
- Local authorities:
 - do not know how to use existing legislation
 - give different interpretations to the legal framework. This leads to different requirements regarding the permit procedures per municipality = confusion

Netherlands

- Safety
- Noise and vibrations
- BUT
- At this moment there are no official criteria, no standards, no measuring and control systems for these issues in the Netherlands.
- No independent testing
- Visual attractiveness also depends on a personal experience, it can not be measured

Conclusions

- Largely similar issues:
 - Inadequate / unclear / complex legislation
 - Confusion / inaction at local level
- Noise, vibration, flicker
- Safety
- Grid connection

Needed

- Independent testing and standards
- Guidelines for local authorities
- Clearer / simplified legislation on permits and grid connection