

Subject. Re. the FOI Request ref FOI2016/15549

Date. Sunday. 18 Sep 2016 11:07:50 +0100

To: FOI Requests <FOI.Requests@bis.gsi.gov.uk>

C.C. mb-soofs@dh.gsi.gov.uk

Dear Sir,

I am now in a position to reply to your letter of 21st. July 2016 for which I thank you. The longer than usual delay in replying has been due to accomodating the holiday period.

The Department of Health are also in receipt of the request in case they are able to supply information sought. In the meantime, in line with your request, I reduce the time span for searches to the last 4 years and specify that any internal dialogues with DECC resulting from Ministerial correspondence with the World Health Organisation (WHO), and that of Ministers directly to WHO officials, is provided. Of particular relevance are matters involving ETSU-R-97.

At the moment until Brexit is made official, we are still obliged to be in compliance with the EU Machinery Directive (2006) + all Annexes. This Directive has clear relevance to the subject of wind turbines and the detailed requirements to EU member states to inform the EU about how they have implemented/changed the EU MD. As information received has expanded the need for related questions to be answered, I should like to add the following information and questions to the request relating to the WHO enquiry:

1. May I please have evidence on how the UK is currently in compliance with the EU Machinery Directive in respect of wind power developments?
2. In the absence of clear evidence, I should be grateful to know if plans are being considered to comply with all of the Directive's requirements in respect of the installation and operation of wind turbines throughout the U.K. relating to human and animal impacts. If this is not being considered, please give reasons why not.
3. It is perhaps important to remember that the UK has been found in breach of Article 7 of the Aarhus Convention and that the Committee's report on the UK's 2nd. progress report on compliance with the Convention is due soon. Matters involving the Aarhus Convention are unaffected by Brexit.

For your convenience, supplementary comments and highlighted passages are included in the attachment. In Article 2, 4, 11 and in other places note the term “person”, which specifically covers “neighbours” and “passers-by.” Article 4.1 stipulates matters relating to endangering health, and noise generated is therefore certainly applicable. Articles 5, 7, 9, 10, 11, and 16 are essential and Annex I – where several more points have relevance.

4. In addition to the evidence sent to the WHO relating to noise issues caused by wind turbines, the rising number of accidents, ‘component liberation’ events, and fires - all involving wind turbines, are of particular relevance to the EU Machinery Directive. E.g. In respect of nacelle fires. I believe that there is currently no compulsion for turbine manufacturers to install fire escapes. There have already been deaths due to the lack of such escape routes for engineers. As highlighted sections of the attached show, if this is not another instance whereby there is a breach of articles of this Directive, please give reasons why not and whether the provision of fire escapes will become a requirement.

5. I should like to know please, in respect of implementation of SEA and EIA directives, at what stage the UK is in relation to these EU Directives and whether the UK (including Scotland) is fully in compliance? As you will know, they describe why a nationwide energy plan must first be developed and, when it is thoroughly debated via consultations with the whole population and accepted by law makers, then local IEA plans must be established to fit in the framework of the national SEA plan. According to discussion, this apparently has never taken place in any EU state, although there is now IEA planning, totally uncoordinated with neighbour “park” planning and relations to other energy producing plants, and the basic electricity grid system.

6. As the EIA & SEA Directives relationship attached is not recent, the EU’s New Approach as received from a professional colleague, is also attached. All this can be judged to be extremely relevant for such matters in today’s political climate and our future negotiations. Not least as it is very clear that the New Approach product legislation is a sharp tightening of the fundamental (essential) health and safety requirements for people and, where appropriate, property and domestic animals.

What may also be revealed is that, according to Claes-Erik Simonsbacka, no wind turbines in use within the EU and the EEA, and therefore the UK, meet legally binding requirements of the Machinery Directive Annex 1, with the support of relevant requirements of harmonized standards in order to achieve with the ‘State of the Art’ requirements. Harmonised standards never replace legally binding essential requirements.

Furthermore, it is important that all UK authorities are aware that the Swedish Work Environment Authority (SWEA) has, after inspection of several wind turbines, established shortcomings in the documentation, design and construction of the CE-marked machine which does not fulfil the essential health and safety requirements of the Machinery Directive 2006/42/EC required for placing on the market.

The report by technical college graduated Electrical and Automation Engineer Claes Erik Simonsbacka "Wind turbines can be built, but not put into operation" with the following preface by Rune Björnström is highly relevant:

Translation from Swedish to English:

"The writer Claes Erik Simonsbacka, Electrical and Automation Engineer with solid theoretical and practical background, including as head of commissioning of everything from complete mining, steel, paper, solid fuel and CHP-plants to sub-project and project manager of large national and international industrial plants, accident investigator, quality manager and personal advisor to management clients. Claes-Erik has detailed full knowledge of the EU's "New Approach" legislation technology and machinery related technical devices and systems. In addition to safety security expert he also held positions as a service engineer, electrical manager and branch office manager of a leading Swedish technical consulting company. Claes-Erik has also, inter alia, participated in the development of security systems, power electronics/frequency converters and Motor Control Centers (MCC)." / Rune Björnström former Regional Director for leading Swedish technical consulting companies."

During the last 22 years Claes-Erik Simonsbacka, has also dealt with several certification tasks, verification and validation of machine installations including all safety related parts and technical systems in industrial and process plants, for Swedish and International companies. He wrote a handbook on the application of the European Union's New Method legislative procedure on technical harmonization for a Swedish Industry Association.

The Swedish Arbetsmiljöverkets (Work Environment Authority) Market Surveillance is still ongoing. The shortcomings in the safety requirements are apparently so serious that it is considering a ban on these wind turbines.

Examples of formal deficiencies:

- "EC Declaration on Conformity is missing."
- "EC declaration is not written in Swedish"
- "EC declaration of conformity lacks a signature"
- "EC declaration lacks explicit declaration"
- "The user instruction is not written in Swedish"
- "The user instruction lacks description of how the machine is put in service mode"
- "The user instruction lacks description of the machine's various operating modes"
- "The instruction manual lacks description of the work especially fall arresters"
- "The instruction manual lacks description of how to act during emergency"
- "The instruction manual lacks correct declaration of noise data."

Examples of technical deficiencies:

- "The main egress door is not equipped with an anti-panic opening"
- "The lift is not equipped with visual or audio warning to indicate when the lift is in operation."
- "The gates at landings are not interlocked."
- "The escape hatch is unmarked."
- "The guardrail at the escape hatch is inadequate."
- "The guard to the moving parts at the rotor is inadequate."
- "The ancor points are inadequate."

- “The wind turbine is not equipped with an internal lift.”
- “There is no rest platforms at the ladder.”
- “The smoke detector lacks a warning signal.”

N.B. - Of all visited wind turbines in the market surveillance (23 wind turbines, 12 manufacturers) is it only Enercon that does not have evacuation equipment in the nacelle.

- **SWEA wants to get from Vestas, for model V122, an explanation of how Vestas will ensure that the wind turbine is made stable enough to prevent it falling over again.**

Before the Swedish Work Environment Authority (SWEA) make decisions each manufacturer will be given the opportunity to give comments.

SWEA can prohibit the sale of machines in Sweden if they do not fulfil the essential health and safety requirements. Such a decision will be reported to the EU Commission according to the safeguard clause (article 11 of Machinery Directive 2006/42/EC). **The sale of the manufacturers concerned wind turbine model/models may then be prohibited in all EU and EEA countries.** In addition, the following manufacturers wind turbine models do not fulfil the essential health and safety requirements of the Machinery Directive 2006/42/EC to be placed on the market, according to the Swedish Work Environment Authority (SWEA): **Vestas, models V-90/2, V-90/3, V-100/2 and V-112/3; Enercon model E82; EWT model DW54; Eno model Eno100; Gamesa model G114; GE models 1.5–100 and 2.75–103; Nordex models N100 and N117; Senvion model MM92; Siemens models SWT-2.3-Fallåsberget, SWT-2.2- 113, SWT-2.3- 101 and SWT-3.0- 113; Sinovel model SL 3000-113.**

7. If the BEIS does not agree that this information will affect the UK’s position regarding the above, under the same FoI rules, please explain why and provide proof that the whole of the UK does meet the mandatory requirements of the Machinery Directive Annex 1, in respect of wind turbines as described.

Yours sincerely,

Mrs. V.C.K. Metcalfe.