

ANNEX 3

The Annex to BOMA's response to consultation '*BOMA comments and questions*' raises a number of questions about the study by the Danish Health and Medicines Authority: '*Radiation doses from the transport of radioactive waste to a future repository in Denmark – A model study, 2011*'.

As these questions are related to the preliminary study and not to the plan itself or the SEA report, they are addressed separately below:

Comments on transport	Answer
<i>Why are there no assumptions listed for the application of the RADTRAN transportation risk model:</i>	Sections 3 and 4 describe the basis for the calculations in the RADTRAN model in the form of a discussion of the possible transport methods and scenarios. Section 5 specifically addresses the assumptions behind the use of the model, with reference to further details in Appendix 1, comprehensive information on the chemical and physical properties of the waste, the levels of radioactivity and dose speed, types of container, types and dimensions of vehicles, characteristics of the route, and the number of drivers, crew members and other people on and along the route.
<i>The RADTRAN model treats the worst case scenario by lumping together all of the estimated 10 trips, rather than analysing each event as a separate risk.</i>	Table 6.2 gives the calculated collective doses for accident-free transport of all radioactive waste by sea, incl. handling and transport. The collective dose is thus a calculated upper limit. Table 6.3 gives the calculated doses associated with the one accident-free shipment of radioactive waste by sea that gives rise to the largest estimated doses.
<i>Do you believe that the transport risks are equally weighted across all modes of transport?</i>	The model calculations assign different probabilities of accidents to different forms of transport: by road and by sea, on main and minor roads and major and minor seaways. The classification is based on official Danish statistics for transport on land and sea.
<i>Do you believe that the transport risks by sea are increased in differing weather conditions?</i>	The overall probability of a transport accident is based on statistical analyses of traffic in Denmark. The accident scenarios use input parameters for an average weather situation, although other weather situations than those used could produce a different distribution of doses in an accident scenario. There were thus no further assessments of the risks in different weather situations in this initial study.
<i>Can you point to me in your report where you assess the risk of transportation by sea in high waves, high winds, sudden storms etc.?</i>	See answers to previous questions.

Comments on transport	Answer
<i>If an accident were to take place at sea during transportation would this only affect Bornholm or would other countries be affected by this, for example Sweden, Germany or Poland?</i>	The dispersal and precipitation of possible released nuclides as a result of an accident are calculated at a distance of 120 km from the site of the accident. No actual assessment of potential transboundary effects was undertaken in this initial study.
<i>Are you aware that the Helcom convention says that any country transporting hazardous waste that could affect the rest of the Baltic has to pass this information to the other countries involved?</i>	It is a pre-defined condition for the study that all transport of the Danish radioactive waste should comply with Danish provisions and international guidelines, based on guidelines from the International Atomic Energy Agency (IAEA). It is implicitly assumed that all other obligations concerning transport, such as notification etc., will be met.
<i>If other countries might be affected by an accident of this nature do you legally have to undertake any extra consultation with their governments for this kind of dangerous transportation of materials across international waters?</i>	See answers to previous questions.