

NUCLEAR THIRD PARTY LIABILITY

Defining prescribed sites and transport: Government response to consultation

August 2017

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The consultation response and Impact Assessment can be found on the BEIS section of GOV.UK: <u>https://www.gov.uk/government/consultations/consultation-on-defining-nuclear-prescribed-sites-and-transport</u>

Acknowledgements

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Nuclear third party liability

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Any enquiries regarding this publication should be sent to us at parisbrussels@beis.gov.uk

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General information

Purpose of this document

This document sets out the UK Government's response to the consultation on defining prescribed sites and transport under the Nuclear Installations Act 1965. The consultation sought views on proposed definitions for the purposes of nuclear liability for low risk nuclear sites, intermediate sites, relevant disposal sites and the transport of low risk nuclear matter. Views were also sought on proposed replacement of the Nuclear Installations (Insurance Certificate) Regulations 1965 and the Nuclear Installations (Excepted Matter) Regulations 1978.

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Enquiries to: Paris Brussels Conventions – International Nuclear Liability Team Department for Business, Energy & Industrial Strategy, 3rd Floor 1 Victoria Street, London, SW1H 0ET Tel: 0300 068 5645 Email: parisbrussels@beis.gov.uk

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Quality assurance

This consultation was carried out in accordance with the Government's Consultation Principles.

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

Email: enquiries@beis.gov.uk

Executive Summary

Overview

- The UK is a contracting party to the Paris Convention on nuclear third party liability¹ and the Brussels Supplementary Convention². These Conventions establish a largely western European framework for compensating victims of a nuclear incident. Amendments to update the Conventions were agreed by the Paris and Brussels signatory countries in 2004. They upgrade the existing regime and are intended to ensure that, in the event of a nuclear incident, an increased amount of compensation will be available to a larger number of claimants in respect of a broader range of damage.
- To implement these changes the Nuclear Installations (Liability for Damage) Order 2016 (SI 2016/562)³ prospectively amends the Nuclear Installations Act 1965 (the 1965 Act). The Conventions are also implemented through a number of statutory instruments made under the 1965 Act and the consultation sought views on changes to these instruments.

The Nuclear Installations (Prescribed Sites) Regulations 1983 (SI 1983/919)

3. In the consultation we proposed to revoke and replace these Regulations with new regulations that will define categories of prescribed site or transport where lower liability will apply under the amended Act. The proposals also modified the description of the sites to which lower levels of liability already apply to take into account changes in underpinning international requirements.

The Nuclear Installations (Insurance Certificate) Regulations 1965 (SI 1965/1823)

4. The proposed replacement of these Regulations will implement a change in the 1965 Act to require operators of relevant disposal sites (who will be covered by the liability regime for the first time) to provide an insurance certificate where nuclear matter from the site is transported beyond UK territorial limits.

The Nuclear Installations (Excepted Matter) Regulations 1978 (SI 1978/1779)

5. The consultation set out the basis for proposals to replace these Regulations to give effect to changes to the international requirements on which they are based. These changes are unrelated to the 1965 Act.

¹ <u>http://www.oecd-nea.org/law/paris-convention.html</u>

² http://www.oecd-nea.org/law/brussels-supplementary-convention.html

³ <u>http://www.legislation.gov.uk/id/uksi/2016/562</u>. An informal consolidated text of the 1965 Act as amended by this Order is available on the Government website at: <u>https://www.gov.uk/preparing-for-and-responding-to-energy-</u> emergencies.

Consultation feedback

- 6. The consultation ran from 29 June 2016 to 10 August 2016 with the consultation document published on the Government website. A link to the consultation was sent to key stakeholders including nuclear operators, the nuclear industry organisation, nuclear insurance providers, and insurance brokers. We have not been able to publish this response in the normal timeframe because of the need to develop the response to one particular aspect which took longer than expected.
- 7. We received 18 responses: 14 from nuclear operators, two from members of the public, one from the nuclear insurance industry, and one from a non-Governmental organisation. A full list of respondents is shown in Annex 1.
- 8. The most significant comments concerned the definition of low risk sites, inclusion of fissile mass material limits in the definition of low risk sites, and the definition of intermediate sites. The Government's other proposals were broadly welcomed.

Government response structure

9. Section one of this document sets out the detailed responses to the consultation questions on the proposals to replace the Nuclear Installations (Prescribed Sites) Regulations 1983 and the associated impact assessment. Section two covers responses to the proposed replacement to the Nuclear Installations (Insurance Certificate) Regulations 1965 and section three the forthcoming replacement of the Nuclear Installations (Excepted Matter) Regulations 1983. Section four summarises the Government's conclusions and next steps.

Conclusion and next steps

- 10. Following publication of this response we intend to lay the Nuclear Installations (Insurance Certificate) Regulations and Nuclear Installations (Excepted Matter) Regulations in the near future.
- 11. In light of the comments received, we have decided to publish a further consultation on the criteria for defining intermediate nuclear sites in the Nuclear Installations (Prescribed Sites and Transport) Regulations. This consultation has been published at the same time as this response paper and can be found at https://www.gov.uk/government/consultations/defining-intermediate-risk-prescribed-sites-further-consultation.

1. Replacing the Nuclear Installations (Prescribed Sites) Regulations 1983

Proposals for revising the definitions for the purpose of qualifying for lower limits of liability under the Nuclear Installations Act 1965

- 1.1. The UK exercises the option under the Paris Convention to set a lower level of liability for nuclear sites "having regard to the nature of nuclear installations involved and the likely consequences of a nuclear incident originating therefrom". The operator is only required to provide insurance or other financial security only for the lesser amount of liability. Any claims for damages in excess of the reduced amount would be met from public funds in accordance with the Paris and Brussels Conventions. The purpose of the reduced liability amount is not to make less compensation available but to reduce the burden of insurance costs on the operator to a level in more keeping with the risks.
- 1.2. Under the 1965 Act currently there is just one category with reduced liability low risk nuclear sites and the 1965 Act limits the liability of the operator to £10 million.
- 1.3. The 2016 Order amending the 1965 Act provides for five categories of lower risk sites as well as transportation of nuclear matter see Table 1 below. The Government has set these categories of lower liability levels to be commensurate with the scale of risks represented by these sites or the carriage of most nuclear material.

Section	Category	Site/activity type	Liability limit
16(1)(a)	Licensee of a licensed site that is prescribed- the same category of installation as presently covered by the 1983 Regulations	Low risk nuclear sites	€70m
16(1)(b)	New category - operator of a disposal site that is prescribed	Low risk disposal sites	€70m
16(1)(c)	New category - licensee of a licensed site that is prescribed which does not warrant the maximum liability limit	Intermediate sites	€160m
16(1)(d)	New category - prescribed carriage of nuclear matter that is not excepted matter.	Low risk transport from nuclear sites	€80m
16(1)(e)	New category - prescribed carriage of nuclear matter that is not excepted matter.	Low risk transport from disposal sites	€80m

Table 1: The categories of prescribed sites and transport as set out in the amended1965 Act

1.4. The categories are set taking account of the inventories of radioactive materials and the nature of the operations carried out at the nuclear installations. The term 'risk' is used in describing both the hazard associated with a site as well as the risk of someone or something being adversely affected by a hazard. In using the term 'risk' in this way we have regard to the Paris Convention which refers to the risk of nuclear damage, rather

than hazard, and to Article 7(b)(i) of the Convention which provides for the setting of lower limits (of liability) having regard to the nature of the installation and the likely consequences of an incident.

1.5. The 1983 Regulations did not mention either risk or hazard but set criteria for the lower level of liability cover in terms of limits on radioactivity and on the mass of fissile material. These limitations were used as an indicator of the hazard and, in effect, because there is no specific consideration of the chance of an adverse effect at individual sites, also an indicator of the risk.

Proposed category definitions

Low risk nuclear sites – liability limit €70m

- 1.6. The Government proposals are to amend the definition prescribing low risk licensed nuclear sites as the underpinning international regulations have changed. The current definition is based on criteria set out by the Nuclear Energy Agency (NEA) Steering Committee for excluding the transport of small quantities of nuclear substances from the liability regime. These criteria are in turn based on the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Materials ("the IAEA Regulations") 1973, as amended and published in 1979⁴. The IAEA Regulations have been updated several times, mostly recently in 2012 ("2012 IAEA Regulations").
- 1.7. The existing definition includes two sets of limits: the quantity of radionuclides and the mass of fissile materials. Three options to update the limits on the quantity of radionuclides were put forward two that continue to rely on the values taken from the IAEA Regulations and one which relies on values taken from UK emergency planning legislation.
 - Option 1 (the Government's preferred option) would define low risk licensed nuclear sites based on the type of operation and the radioactivity limits based on a multiple (10,000 times) of the activity limits (set out in Schedule 2 to the Radiation (Emergency Preparedness and Public Information) Regulations 2001⁵ (known as REPPIR).
 - Option 2 would keep the existing approach but with updated A₂ values from the 2012 IAEA Regulations.
 - Option 3 would use an approach based on the latest NEA criteria⁶ for excluding the transport of small quantities of radioactive substances and the 2012 IAEA Regulations.
- 1.8. On fissile material mass limits the Government asked for comments on a proposal to adopt the specified masses for fissile limits set out in Schedule 3 to REPPIR for defining

⁴ Note – the 1979 version is still referred to as the 1973 Regulations

⁵ SI 2001/2975

⁶ The small quantities exclusion that applied at the time of the consultation was the 2007 version. In November 2016 the NEA Steering Committee adopted a revised small quantities exclusion which refers to the 2012 IAEA Regulations. The only difference between the 2007 and 2016 exclusions is to reference the latest IAEA Regulations.

this lowest category of site liability. The alternative options are to remove the fissile limits criteria altogether, on the basis of the very small probability of a criticality accident in this context, and to rely on the inventory of radioactivity as the sole indicator of risk, or to retain using the numerical values from the 1973 IAEA Regulations.

	Consultation Questions – Low risk nuclear sites		
1.	Which of the three options for defining low risk sites do you think is best and why? Can you suggest any other options?		
2.	Under the various options do the prescribed criteria maintain the position of the currently defined prescribed 'low risk' sites?		
	Is there a possibility that existing licensed sites other than the current 'low risk' prescribed sites could qualify?		
3	Should we retain fissile material mass limits? If so, should the limits be based on the limits under REPPIR?		

Summary of responses

Options for defining low risk sites

1.9. Most respondents commented on these proposals. While the majority supported the proposal set out by option 1 there were a number of questions and comments on the detail. Some respondents did not agree with the proposal to use limits based on 10,000 times the activity limits set out in REPPIR, instead suggesting that the activity limits should be set at 100 times the REPPIR limits, which corresponds to the criteria used by ONR for making decisions about whether the sites which store bulk quantities of radioactive material should be licensed. Other respondents argued that using the 10,000 multiplier was arbitrary and that the REPPIR Radiation Emergency Test (i.e. that whether or not a radiation emergency was reasonably foreseeable) should be applied instead. Only one respondent specifically preferred option 3 as it is based on the 2007 version of the NEA small quantities exclusion. One respondent recommended that the level of liability should be higher at €26 billion.

Existing low risk sites

1.10. Fewer than half of respondents commented on this question. Most agreed that the criteria would maintain the position of the current low risk sites. A number of respondents took the opportunity to raise specific issues on the definition for low risk sites more generally, including that the definition be broadened to include sites that receive and treat radioactive waste for disposal, a request for clarity over the difference between this category and the low risk waste disposal category, and concern that sites that process wastes that are not within the scope of the Prescribed Sites Regulations will be brought into the liability regime and therefore affect the ability of waste producers to send waste to the most appropriate facilities.

Fissile material mass limits

1.11. There were opposing sets of responses to this question. The majority of respondents recommended that the fissile material mass limits should be retained. Other respondents preferred that the fissile material mass limits be removed; pointing out that safety case inventory limits, criticality control requirements and site security categorisation would control the mass of fissile material on a licensed site.

Government response

Options for defining low risk sites

- 1.12. In setting the criteria for defining low risk sites the aim is to have neutral effect with respect to the 1983 Regulations and to move away from criteria that are based on definitions intended for the transport of radioactive material. These sites are nuclear licensed sites based on the ONR assessment of the inventory of radioactive material on the sites or are very small nuclear reactors (not exceeding 600kW). In licensing sites for bulk storage of radioactive matter the ONR guidelines are based on radionuclide inventories that exceed 100 times the REPPIR Schedule 2 limits. This sets the 'floor' for defining such sites. The purpose of setting an upper limit of 10,000 times the REPPIR Schedule 2 limit is to set a 'ceiling' which separates these low risk sites from those that have higher bulk storage inventories and/or carry out other nuclear fuel cycle related activities.
- 1.13. The proposed new limits are broadly neutral in effect. A smaller multiple of REPPIR Schedule 2 values (e.g. 1,000) would not result in a neutral effect since the limits for some of the key radionuclides would be lower than at present. However, the multiple of 10,000 would mean that the majority of the proposed limits would be greater than at present, and in many cases the increase is less than an order of magnitude. For example the new limit for caesium-137 would be about five times greater (1,000 TBq compared to 185 TBq) and for plutonium-239 about three times greater (2 TBq compared to 0.74 TBq).
- 1.14. All current and prospective sites under this definition will have carried out hazard identification and risk evaluations (HIRE). Those licensed sites which currently fall under the low risk category do not require an offsite emergency plan under REPPIR therefore the use of the need for an offsite plan as a criterion would not result in a neutral effect.
- 1.15. The Government has considered the responses and has decided to proceed with the preferred option (Option 1) to set the criteria at 10,000 times the activity limits set out in REPPIR Schedule 2. These criteria have always covered the processing and treatment of radioactive material as well as storage; therefore we don't see a need to change the definition.

Fissile material mass limits

1.16. The arguments for retaining or removing fissile material mass limits as part of the criteria for low risk nuclear sites are evenly balanced. On the one hand the nuclear licensing process ensures that the criticality control requirements, safety case inventory limits and site security will control the amount of fissile material on a site means that a criticality accident which may release radioactive substance into the environment is extremely

unlikely if not impossible. On the other hand including fissile mass limits would mean that the criteria for low risk sites were comprehensive and in line with the existing regulations.

1.17. The Government has decided to proceed with its original proposal to set fissile material mass limits duplicating those set out in REPPIR Schedule 3 in the proposed regulations. We have chosen these limits as being broadly neutral in effect, although they are slightly more conservative. Furthermore, they would no longer rely on numerical values derived from the 1973 IAEA Regulations.

Low risk disposal sites – liability limit of €70m

- 1.18. All disposal sites for nuclear matter⁷ will now be covered by the revised liability regime. Some sites will be nuclear licensed sites and therefore already covered by the liability regime, for example because they are within the boundary of a licensed site or because managing the material or the radioactive inventory is such that the ONR consider it to be a licensable activity. The Government's view is that sites taking low-level waste from nuclear licensed sites and defined as "relevant disposal sites" in the revised 1965 Act will not be licensed but will continue to be controlled by the Environmental Permitting Regulations 2016 (EPR16)(SI 2016/1154) or, in Scotland, the Radioactive Substances Act 1993 (RSA93)(1993 c.12).
- 1.19. The Government's proposal is to set criteria to identify relevant disposal sites that will qualify for a lower liability limit of €70 million. The proposed criteria are based on the definition for low level waste set out in Regulation 12(8) of the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008 (SI 2008/3087)(Transfrontier Shipment Regulations 2008), which is the same as the definition in the 2007 Policy for the Long Term Management of Solid Low Level Radioactive Waste in the United Kingdom (2007 LLW Policy).

Consultation Question – low risk disposal sites

4. Do you have any suggestions for a different definition for low-risk disposal sites?

Summary of responses

1.20. About half of respondents commented on this question. Several requested more information as to whether all waste disposal sites would be covered by this definition and put forward the view that a common liability level for all disposal facilities would be imbalanced and not reflective of respective risks. A further query concerned whether the definition would apply to waste treatment plants (e.g. waste incineration sites) and if nuclear liability passes to these sites. Other respondents raised the concern that the application of the regime to certain disposal sites would increase the cost base for the sites, costs which would then be passed back to their customers in increased waste disposal charges. Additional comments recommended that the liability for such sites should be linked to the requirement to have an 'offsite emergency plan' under REPPIR.

⁷ Nuclear matter is defined in section 26(1) of the 1965 Act.

A further comment asked what would happen if the definition currently set out in the 2007 LLW Policy was changed. Several respondents also wanted to know if there was progress towards a formal exclusion from the liability regime altogether for sites that take very low level radioactive waste.

Government response

- 1.21. The Government's intention is that 'relevant disposal sites' should include only sites for the final disposal of radioactive waste originating from nuclear licensed sites, that is sites that are permitted under EPR16 or RSA93 but not located within a nuclear licensed site boundary, that is, landfill sites permitted to dispose of radioactive waste at the lower end of the range of radioactivity concentration for low-level waste (including very low level waste). This does not include incineration which, for the purposes of these regulations, is not considered a final disposal solution but rather a waste treatment process. These 'relevant disposal sites' do not require offsite emergency plans under REPPIR.
- 1.22. The Government's position is that the nuclear liability regime should only apply to nuclear waste disposal facilities which present the types of risk the Paris Convention was designed to cover. The Government developed a proposal to define the criteria for excluding such facilities from the Paris Conventions, collaborating with other Paris Convention contracting parties and NEA technical advisory groups. Only the NEA Steering Committee has the power to agree such an exclusion from the Convention and the Steering Committee has adopted the proposal at its November 2016 meeting. Primary legislation is needed to implement this exclusion in the UK, and the timing of this is dependent on inclusion in the Parliamentary legislative programme. Until exclusion is implemented the liability regime will apply to these sites if they continue to take radioactive waste from nuclear sites for disposal once the revised regime comes into force.
- 1.23. The Government therefore intends to go ahead with the proposed definition for low risk disposal sites. If there are any changes to the definitions set out in the 2007 LLW Policy or Regulation 12(8) in the Transfrontier Shipment Regulations 2008 the Government will consider whether this definition should be changed at that time and in light of experience with these regulations.

Intermediate nuclear sites – liability limit of €160m

1.24. In its consultation document the Government proposed a definition for a new category of "intermediate sites". The Government's proposal is that such sites will have a liability and insurance level of €160 million. This is close to the current liability for such sites of £140 million. The proposal is broadly in line with the practice in a number of Paris Convention countries and is considered to be a proportionate approach that recognises certain types of facility represent a lower risk of causing significant damage in the event of an incident. The proposed definitions covered three types of site (fuel fabrication, uranium enrichment, and radioactive isotope production). The consultation paper also indicated that Government may wish to extend the definition in order to apply to other types of sites such as nuclear sites in the process of decommissioning.

Consultation Question – intermediate nuclear sites

5. Have you any comments on the definitions for intermediate sites set out in the draft Regulations?

Summary of responses

1.25. The majority of respondents welcomed the principle of defining a category of intermediate nuclear sites. There was considerable comment on how such site should be defined. A number of respondents agreed with the proposed definition as reasonable and fit for purpose. However a significant number raised points about the definition, arguing that the definition was too narrow, or presented practical difficulties and needed to clearly distinguish between standard risk and intermediate sites. In this context it was suggested that adding a definition for a standard site would be beneficial for clarity. There was considerable support for expanding the definition so as to take account of changing activities on sites, and also to apply the category to nuclear power plants that had reached a certain stage in decommissioning - for example have permanently defueled, or no longer need an offsite emergency plan under REPPIR - or other nuclear sites that would not be covered by the original proposal but still do not represent the level of risk presented by irradiated nuclear fuel reprocessing or an operating nuclear power plant. There was also a request that such a definition also covers a potential future UK Geological Disposal Facility (GDF) for higher activity radioactive waste. Another respondent recommended that the definition should not apply to sites manufacturing nuclear fuel from plutonium or mixed oxides.

Government response

- 1.26. The aim of this category is to reflect that the level of risk for some nuclear sites is much lower than in operating nuclear power plants and certain other sites. However these sites, although of lower risk, would not meet the criteria for low risk sites.
- 1.27. In the light of the consultation responses Government intends to amend the proposed definition. This amended definition will also make the position of the Low Level Waste Repository clear as a nuclear licensed site it cannot be a "relevant disposal site" but it does not represent the level of risk of a "standard site" such as an operating nuclear power station or a spent fuel reprocessing plant.
- 1.28. The Government wishes to take the opportunity to extend the scope of the proposed definition to include certain nuclear power plants undergoing decommissioning activities. These will be sites where the fuel has been permanently removed from the reactors and stored in accordance with relevant good practice. As a result of permanent defueling the level of risk at these sites drops significantly so including such sites in the intermediate category is proportionate to the risk such sites represent. Where a nuclear power plant has ceased operation but has not been permanently defueled, such sites will remain as standard sites with a liability level of €1200m until they are defueled.
- 1.29. However, as this proposal is different to the original proposal we consulted on Government has decided to carry out a further consultation on the revised proposal. This consultation can be found at <u>https://www.gov.uk/government/consultations/definingintermediate-risk-prescribed-sites-further-consultation</u>.

- 1.30. With regards to the suggestion that an intermediate site could be one where an offsite emergency plan under REPPIR is no longer needed, the majority of sites that will be covered by this category do not require an offsite emergency plan and therefore there would not be sufficient clarity on which sites were covered in this category compared to the low risk category.
- 1.31. The NEA has set up a working party to address how the liability regime should apply to deep geological disposal. The mandate of the working party is to consider the issues for applying the nuclear liability regime to deep geological repositories such as the GDF both pre and post closure. The working party is due to report at the end of 2019. The Government will consider the results when they are available and take them into account before making a decision on the liability level that may apply to the GDF.

Transport of low risk nuclear matter – liability limit of €80m

1.32. The revised Paris Convention sets a minimum liability of €80m specifically for transport of low risk nuclear matter. It is for individual Convention Parties to define low risk transport. In the UK liability for transport is currently set at the same level as for the nuclear site operator (either £140m or £10m depending on the site). The Government proposal is to change to a risk-based approach which draws a distinction between the transport of nuclear matter that represents a low risk of significant third party damage in the event of an incident and nuclear matter that carries a higher risk (e.g. such as irradiated spent fuel). The proposed definition of low risk transport is based on criteria from the 2012 IAEA Regulations.

Consultation Questions – low risk transport

6.	Have you any comments on the proposed criteria to define low risk transport? Are there alternative criteria that could be used to identify low-risk transport?
7.	For nuclear operators - What proportion of transport of nuclear matter from your installation(s) will be covered by these criteria?

Summary of responses

- 1.33. More than half of respondents commented on these questions and most supported the proposal, agreeing that the proposed criteria were logical and consistent with the IAEA Regulations. The only alternative criteria suggested were that transportation of nuclear matter should be assessed on the basis of individual radionuclides because radioactive matter transports differ in size/amount/level of activity. Other comments suggested that where the package did not meet the low risk criteria the level of nuclear liability insurance required should be equivalent to the level of cover from where the consignment is despatched. Finally, one respondent queried whether these criteria applied to the transportation of "excepted matter" and if not the regulations should make this clear.
- 1.34. On the question of the proportion of nuclear matter transport covered by the proposed low risk transport criteria most of the nuclear operators responded. Depending on the type of material consigned for some operators all of their shipments would fall into the low

risk category. For other operators between 1% and 15% of shipments would be covered by the high risk category.

Government response

- 1.35. The Government has decided it will proceed with the risk-based approach to the liability for the carriage of nuclear matter and set criteria which will define low risk transport based on the 2012 IAEA Regulations. It considers that this provides a proportionate approach to managing the liability for the risk of third party damage arising from an incident involving such transport and taking account of the material in the consignments. If consignments do not meet these criteria then the higher liability level of €1200 million will apply. This change in approach, rather than linking transport liability to site liability, is why an intermediate level transport liability has not been set.
- 1.36. A further update to the IAEA Regulations is currently being discussed by the relevant authorities⁸ and the proposed timing for publication of updated regulations is at some time during 2018. The Government will consider and consult in due course on any further amendments to the Nuclear Installations (Prescribed Sites and Transport) Regulations to take account, if necessary, of any changes.

Impact Assessment

1.37. A consultation stage impact assessment was included in the consultation package, setting out the Government's initial assessment of the effect of the proposals for setting an intermediate level of liability of €160m for certain nuclear sites. The impact of changes to the liability regime for low risk sites, relevant disposal sites, and low risk transport were included as part of the overall impact assessment for the 2016 Order which was published alongside the Order⁹.

Consultation Question – impact assessment

8. Do you have any comments or data to provide to improve the impact assessment?

Summary of responses

1.38. There were few comments on the draft impact assessment and no additional data was provided. Most comments referred to the principle of defining intermediate sites. One respondent made the point that while the liability level for intermediate sites would not change significantly, the cost of insurance cover would increase because the types of damage will be expanded to cover additional heads of damage.

⁸ The IAEA Transport Safety Standards Committee (TRANSSC) which consists of experts nominated by the IAEA Member States. IAEA Member States may also comment on proposed standards. More detail on the background and development of the safety standards is in the introduction to the IAEA Regulations.

⁹ http://www.legislation.gov.uk/uksi/2016/562/impacts

Government response

1.39. The impact assessment has been updated to take account of the proposed increase in the number of sites that will be covered by the proposed intermediate site definition and to change the counterfactual used for assessing the costs and benefits of this change. This updated Impact Assessment can be found with the consultation on the revised definition of intermediate sites and will be reviewed following that consultation. The final impact assessment will be published when the Regulations are laid.

2. The Nuclear Installations (Insurance Certificate) Regulations 1965

Extension of the requirement for insurance certificates to relevant disposal sites

- 2.1 The 1965 Act requires that nuclear licensees provide a Certificate of Financial Security (COFS) to the carrier of nuclear matter which is being transported on their behalf. The COFS confirms that funds will be available to pay compensation in the event of damage being caused following a nuclear incident involving the matter being transported and where the nuclear licensee is liable under the Act or corresponding foreign law. The certificates are only required where nuclear matter is being transported beyond UK territorial limits.
- 2.2 The 2016 Order amendments to the 1965 Act extend the requirement to provide a COFS to also apply to the operators of relevant disposal sites. Government's proposal is to revoke and replace the 1965 Regulations to provide for this. In practice it is considered to be only in exceptional circumstances that nuclear matter would be transported from a relevant disposal site beyond UK territorial limits. However, we are obligated by the Paris Convention to cover such an eventuality, however remote it may be.

Consultation Question

9. Any comments on these proposed changes to the 1965 Regulations would be welcome.

Summary of responses

2.3 Only a third of respondents commented specifically on this question. Overall, the proposals were accepted as appropriate and reasonable. Specific comments were that it was helpful clarification that certificates were only required for transports beyond UK territorial limits. Another respondent was concerned that requirements for relevant disposal site operators to provide a certificate may lead to increased costs, increased administrative burden and barriers to entry and possible withdrawal from the market for these operators. There was also a question about whether incineration sites and other waste treatment sites were relevant disposal sites for these purposes.

Government response

2.4 The Government welcomes the support for these proposals. In relation to the likely additional costs and administrative burden in providing such certificates for relevant disposal sites, it is very unlikely that nuclear matter would be removed from such a site and transported to a destination requiring a COFS. Therefore it is highly unlikely there will be any impact on the operators concerned. Nuclear matter is sent to relevant disposal sites for permanent disposal. The question of the definition of incineration facilities etc. is covered in para 1.21. The Government therefore intends to proceed with

laying the proposed replacement of the Nuclear Installations (Insurance Certificate) Regulations.

3. Proposed changes to the "excepted matter" definitions

Information on the updating of the Nuclear Installations (Excepted Matter) Regulations 1978

- 3.1 The Government proposes to revoke and replace the Nuclear Installations (Excepted Matter) Regulations 1978 ("Excepted Matter Regulations"). The Excepted Matter Regulations implement exclusions from the Paris Convention adopted by the NEA Steering Committee which cover reprocessed uranium and small quantities of nuclear substances outside a nuclear installation (i.e. being transported), known as the small quantities exclusion. The activity limits in the 1978 Regulations are based on the 1973 edition of the IAEA Regulations.
- 3.2 The small quantities exclusion has been updated to take account of the publication of the 2012 IAEA Regulations (SSR-6). As a result the UK regulations will incorporate changes including:
 - i) changing the units used from (non-SI) curies to Becquerels
 - ii) updating the cross references to the relevant paragraphs in the 2012 IAEA Regulations for consignments with single or mixtures of radionuclides
 - iii) revisions to the exemptions for consignments of fissile materials.

Consultation Question

^{10.} Any comments on the proposed update to the 1978 Regulations would be welcome.

Summary of responses

3.3 The respondents that commented on this section broadly welcomed the proposed updating of the 1978 Regulations. Specific comments concerned interpretation of the regulations, for example whether radioactive waste could be considered excepted matter, whether shipments pursuant to paragraphs 674-5 (of the 2012 IAEA Regulations) will also be excepted matter, and a request to review and discuss the changes further to understand the impact on international transports as the new limit on U235 would limit the size of transports. A further comment was a suggestion than the definition of fissile exempt material should be linked to the definition in SSR-6 paragraphs 417(a) to (f) rather than stating specific values.

Government response

- 3.4 The NEA Steering Committee adopted the revised small quantities exclusion at its meeting in November 2016¹⁰. The Government has decided to use this opportunity to revoke and replace the 1978 Regulations and the substantive changes made are in accordance with the matters consulted on.
- 3.5 On the specific questions raised:
 - The small quantities exclusion (both IAEA and NEA versions) defines the fissile material limits by the activity limits as defined in paragraph 417 (a) to (f) only and therefore we cannot include a reference to paragraphs 674-675.
 - The small quantities exclusion is clear that waste matter consigned for disposal cannot be excepted matter therefore the revised regulations will continue to exclude waste.
 - The definition for fissile exempt material in the revised Regulations will explicitly refer to the relevant paragraphs in the 2012 IAEA Regulations.
- 3.6 A further update to the IAEA Regulations is currently being discussed by the relevant authorities¹¹ and the proposed timing for publication of updated regulations is at some time during 2018. The IAEA Board of Governors and NEA Steering Committee will then take advice on whether there needs to be a further amendment to the respective small quantities exclusions under the Vienna and Paris Conventions on nuclear third party liability. The Government will consider and consult on any further amendments to the Excepted Matter Regulations to take account, if necessary, of any changes at that time.

¹⁰ http://www.oecd-nea.org/cen/docs/2016/ne2016-8-final.pdf

¹¹ The IAEA Transport Safety Standards Committee (TRANSSC) which consists of experts nominated by the IAEA Member States. IAEA Member States may also comment on proposed standards. More detail on the background and development of the safety standards is in the introduction to the IAEA Regulations.

4. Next steps

- 4.1 We will lay the Nuclear Installations (Insurance Certificate) Regulations and Nuclear Installations (Excepted Matter) Regulations in the near future.
- 4.2 At the same time as publication of this response Government is publishing a further consultation on the criteria of defining intermediate nuclear sites in the Nuclear Installations (Prescribed Sites and Transport) Regulations.

Annex 1: List of respondents

- 1 AWE plc
- 2 Augean plc
- 3 Cyclife UK Ltd
- 4 R. Ebley
- 5 EDF Energy Nuclear Generation Ltd
- 6 GE Healthcare Ltd
- 7 Imperial College of Science, Technology and Medicine
- 8 LLW Repository Ltd
- 9 D. Lowry
- 10 Magnox Ltd
- 11 Nuclear Decommissioning Authority
- 12 Nuclear Risk Insurers Ltd
- 13 RWM Ltd
- 14 Springfields Fuels Ltd
- 15 Suez Recycling and Recovery UK Ltd
- 16 Tradebe Inutec
- 17 URENCO Ltd
- 18 UK and Ireland Nuclear Free Local Authorities



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