

Nuclear Safeguards Bill

PUBLICATION OF DRAFT REGULATIONS

Introduction

- 1. During the House of Commons Committee Stage of the Nuclear Safeguards Bill ("NS Bill") in November 2017, Richard Harrington, BEIS Minister for Energy and Industry, made a commitment to publish a pre-consultation draft of the Regulations to be made under the NS Bill at the Report stage of the NS Bill. It is proposed, using the new regulatory powers contained in the NS Bill, to make two principal sets of regulations using the affirmative resolution procedure.
- 2. The pre-consultation draft regulations published today comprise:
 - i) The Nuclear Safeguards Regulations 20.., ("NS Regulations") which set out the nuclear safeguards regime for the UK; and
 - ii) The Nuclear Safeguards (Civil Activities, Fissionable Material and Relevant International Agreements) Regulations 20..., which will complete the powers of the Secretary of State to make regulations under the NS Bill, when it is made, by providing three definitions.
- 3. The NS Regulations will create the legal framework for a new domestic nuclear safeguards regime to operate in the United Kingdom following the UK's withdrawal from Euratom. This domestic regime will replace the current legal framework provided principally by the United Kingdom's membership of the European Atomic Energy Community ("Euratom").
- 4. The drafts are initial pre-consultation draft versions of the two sets of regulations, and are provided now, in accordance with the Minister's commitment to demonstrate how the regulations are developing, and to provide an opportunity for early engagement with Parliament, industry and other stakeholders. Although good progress has been made with the two sets of regulations, they are still being developed with the Office for Nuclear Regulation (the "ONR"). Some elements are dependent on external issues, and some require further policy development.



5. As such, the regulations are likely to change in response to this early engagement with Parliament and stakeholders and views received will inform the on-going development of the regulations, prior to formal public consultation, which is currently planned for Spring 2018.

International Atomic Energy Agency and EURATOM Treaty

- 6. The UK has in place two Safeguards Agreements with the International Atomic Energy Agency ("IAEA"): a Voluntary Offer Agreement ("VOA") and an Additional Protocol to the VOA ("AP"). These are trilateral agreements between the IAEA, the UK and Euratom. The UK's current safeguards obligations are primarily fulfilled through the UK's membership of the Euratom Treaty and associated regulations notably the European Commission Regulation (Euratom) No 302/2005 on the application of Euratom safeguards (the "EU Regulation").
- 7. As a result of the UK's intended withdrawal from Euratom the UK's current trilateral agreements with the IAEA, the VOA and the AP, will become ineffective. As a result, the UK will need to conclude new bilateral safeguards agreements with the IAEA in connection with the Treaty on the Non-proliferation of Nuclear Weapons, which detail the UK's future safeguards obligations. The new NS Regulations will enable the UK to give effect to its obligations under new bilateral agreements with the IAEA and under any relevant other international agreements on civil nuclear activities which may be concluded with other states before the NS Regulations are made, including on the subject of nuclear research and development. The NS Regulations will then be amended to list those international agreements which are entered into after the NS Regulations are made.
- 8. The UK has committed to ensuring that domestic nuclear safeguards arrangements can be put in place following withdrawal from Euratom and that those arrangements will be robust and as comprehensive as those of the existing Euratom regime, and go beyond international standards.

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9. The NS Regulations will be made under powers contained in the Energy Act 2013, as amended by the NS Bill, and in the NS Bill itself. The NS Bill also enables the Secretary of State to give the ONR additional powers to take on certain responsibilities in connection with the UK's international safeguards and nuclear non-proliferation obligations including, for example, with the IAEA under the new VOA and AP agreements which are in the process of being negotiated.



The Nuclear Safeguards (Civil Activities, Fissionable Material and Relevant International Agreements) Regulations 20xx

10. A draft of these Regulations accompanies this note. They will provide definitions relied on by powers set out in the NS Bill, in particular by defining the terms "civil activities", "fissionable material" and "relevant international agreements".

Nuclear Safeguards Regulations

- 12. The NS Regulations will set out a domestic safeguards regime. This will primarily involve reporting and verification processes which will enable the UK to demonstrate to the international community that civil nuclear material is not diverted into military or weapons programmes.
- 13.To this end, the NS Regulations will set out a new domestic civil nuclear safeguards regime. The NS Regulations place legal obligations on UK operators of qualifying nuclear facilities and, together with many of its existing enforcement powers in the Energy Act 2013, provide power to the ONR to enforce these obligations.
- 14. A description of the proposed content of the regulations is at Annexes A and B:
 - **A.** Provides a summary of the regulations contained in NS Regulations 20xx;
 - **B.** Sets out the derivation of the forms which are set out in Schedule 1 to those Regulations.
- 15. To note, nuclear safeguards are distinct from nuclear safety (the prevention of nuclear accidents) and nuclear security (physical protection measures), which are the subject of their own regulatory regimes.

Scrutiny and Consultation

16. The Government, supported by the ONR, will continue work to develop the NS Regulations. A full public consultation on the new domestic safeguards regime is currently planned for Spring 2018. Following this the Government currently aims to lay draft regulations before Parliament before the end of this year. Both sets of Regulations will be subject to the affirmative resolution procedure.

Department for Business, Energy and Industrial Strategy 19 January 2018



Annex A – Overview of the draft NS Regulations

Citation and Commencement

The majority of the NS Regulations will come into force on the same date. However, it is currently anticipated that the commencement date for certain regulations may be later to allow operators and the ONR to develop suitable approaches to delivering and enforcing new requirements that go beyond the safeguards obligations currently in operation. The policy on this is being developed.

Definitions

The key definitions of "qualifying nuclear equipment", "qualifying nuclear facility" and "qualifying nuclear material" will be inserted into the Energy Act 2013 by the NS Bill. In addition, the NS Regulations will contain further definitions, which will be mainly technical. Many of the defined terms will be used in the forms which are set out in Schedule 1 to the NS Regulations.

Questionnaire and declaration of the basic technical characteristics

An operator will be required to declare the basic technical characteristics to the ONR using the Questionnaire set out in Part 1 of Schedule 1 to the NS Regulations.

Programme of activities

An operator will be required to provide the ONR with an annual outline of its programme of safeguards-relevant activities for the upcoming year by way of a form in Part 10 of Schedule 1.

Particular safeguards provisions

Acting on the basis of the technical characteristics, the ONR may impose particular safeguards provisions on an operator in relation to a qualifying nuclear facility.

Accountancy and controls

An operator will be required to maintain a system of accountancy and control of qualifying nuclear material, which includes keeping accounting and operating records and providing reports to the ONR.



Accountancy and control plan

An operator will be required to submit an accountancy and control plan to the ONR and to carry out its operations at a qualifying nuclear facility in accordance with the terms of the accountancy and control plan. The plan is required to describe the arrangements and procedures that will deliver the system of accountancy and control described above. In submitting an accountancy and control plan, an operator will need to show such a plan includes the components of an accountancy and control system set out in Schedule 2. That Schedule draws upon, but will not totally replicate, European Commission Recommendation, of 11th February 2009, on the implementation of a nuclear material accountancy and control system by the operators of nuclear installations.

Reports to ONR

The NS Regulations require an operator to send accounting reports to the ONR, including an initial book inventory, in the form set out in Part 4 of Schedule 1, and an inventory change report in the form set out in Part 2 to Schedule 1.

In the case of a qualifying nuclear facility, which includes a reactor, the inventory change report must include information on nuclear transformations.

In addition, an operator will be required to provide the ONR with a material balance report in respect of each material balance area, in the form set out in Part 4 of Schedule 1. It will also need to provide a physical inventory listing, in the form set out in Part 5 of Schedule 1.

Special reports

An operator will be required to submit a special report to the ONR in the event of an unusual incident or a change in containment or where, following exceptional circumstances or an incident, an operator has been informed that qualifying nuclear material may have been lost.

Relevant international agreements

It is anticipated that, in addition to new Safeguards Agreements with the IAEA, the UK will also enter into new bilateral nuclear co-operation agreements with other States, which will include nuclear safeguards obligations, including, for example, with the United States, Canada, Australia and Japan. It is intended that the Nuclear



Safeguards (Civil Activities, Fissionable Material and Relevant International Agreements) Regulations 20-- will list those international agreements, which have already been entered into before those regulations are made and that those regulations will be amended, as appropriate, to include any relevant international agreements which are entered into by the UK in the future.

These international agreements may impose safeguards obligations on the UK in relation to the supply of qualifying nuclear material. As a result the ONR may need to share certain information, which it receives from operators, not just with the IAEA, but also with certain other States. It is anticipated that the NS Regulations will enable the ONR to do this by requiring operators to provide information relevant to these additional obligations alongside the information already required by the NS Regulations to be provided, in respect of qualifying nuclear material, in the initial book inventory, inventory change report, material balance report and physical inventory listing and in respect of intended imports and exports.

Weight units and categories

The NS Regulations will set out the weight units and categories of qualifying nuclear material to be used in the notifications which are required under the regulations.

Derogations

It is anticipated that the UK's new safeguards agreement with the IAEA will, like the current agreement, provide for certain exemptions and derogations.

In certain cases, the NS Regulations will permit the ONR to grant written derogations concerning the form and frequency of notifications provided for in the NS Regulations.

The detail of exemptions and derogations is being developed.

Re-application of safeguards

The NS Regulations provide for the removal of any derogation applied to any qualifying nuclear material when it is stored with any qualifying nuclear material which does not benefit from a derogation.



Exports and Shipments

The NS Regulations will require an operator to provide the ONR with advance notification of exports and shipments using the forms set out in Schedule 1. The NS Regulations also require an operator to inform the ONR of any change in the dates of packing before transfer, transport and unpacking.

Ores

The NS Regulations will require an operator which is an ore producer to comply with certain reduced safeguards requirements and to inform the ONR of ore exports using the form set out in Schedule 1.

Carriers and temporary storage agents

The NS Regulations require carriers and temporary storage agents of qualifying nuclear material to keep records.

<u>Waste</u>

The NS Regulations will require an operator to submit an initial stock list and accounting records for waste and to inform the ONR of transfers of conditioned waste using the form set out in Schedule 1.

Civil Activities

The NS Regulations will prohibit an operator from withdrawing qualifying nuclear material from civil activities except with the previous written consent of the ONR.

Communication

The NS Regulations set out how information and the forms are to be sent to the ONR.

Role of the ONR

The NS Regulations provide for the regulatory role of the ONR in the area of nuclear safeguards. In general, their activities are governed by the Energy Act 2013 but the NS Regulations set out some additional provisions including inspections, publication of information, provision of information to the IAEA, communication with the IAEA on the issue of derogations, and the characterisation of material, for example, as waste.



<u>Offences</u>

It is anticipated that a failure to comply with certain regulations will be treated as an offence.

Extent

It is proposed that the NS regulations will apply to England and Wales, Scotland and Northern Ireland.

Channel Islands and the Isle of Man

It is anticipated that certain provisions, including certain amendments made to the Nuclear Safeguards and Electricity (Finance) Act 1978, the Nuclear Safeguards Act 2000 and the Nuclear Safeguards (Notification) Regulations 2004 may need to be adapted to apply to the Isle of Man and to the Channel Islands.

Schedule 1

Schedule 1 contains the forms to be supplied to the ONR.

Schedule 2

Schedule 2 sets out the components of a system of qualifying nuclear material accountancy and control.

Schedule 3

Schedule 3 will set out the general consequential amendments, made under the power contained in section 113 of the Energy Act 2013, as amended. The relevant amendments cannot be finalised at this stage but it is anticipated that they may include the repeal of that part of retained EU law (within the meaning of the European Union (Withdrawal) Bill), which comprises EU Regulation 302/2005. This means that it is anticipated that EU Regulation 302/2005 will become retained EU force, when the European Union (Withdrawal) Bill comes into law, and that the NS Regulations will then repeal it and replace it with the new domestic regime set out in the rest of the NS Regulations.

Schedule 4

Schedule 4 will set out the consequential amendments to the Nuclear Safeguards and Electricity (Finance) Act 1978, the Nuclear Safeguards Act 2000 and the Nuclear Safeguards (Notification) Regulations 2004. These amendments will be made under



the power contained in clause 2 of the NS Bill. Consequential amendments will be required because those existing domestic pieces of legislation gave effect in the UK to the requirements of the Voluntary Offer Agreement, together with its Additional Protocol, concerning additional information and inspections by the IAEA.

Schedule 5

It is anticipated that Schedule 5 will set out Transitional Provisions, designed to smooth the impact of the change from a nuclear safeguards regime governed by the EU Regulation to that set out in the NS Regulations. A transitional provision might, for example, enable an operator, who has already supplied a technical description of an existing qualifying nuclear facility to the Commission under Annex 1 of the EU Regulation, to obtain credit for that and not to have to resupply the same information again to the ONR. However, this issue may require further exploration with the ONR and the Agency, which will be the ultimate recipient of the information and may wish a fresh set of information to be supplied.



Annex B – Forms to be provided to the ONR as set out in Schedule 1 to the NS Regulations

The forms are derived from those which are currently required by Euratom Regulation 302/2005 and, in a similar way, certain forms relate to ores and waste. There are however differences, for example, in aspects of the regulation and its forms that do not apply to Nuclear Weapons states by virtue of Article 34(3)(d) of Euratom Regulation 302/2005.

- **Part 1:** Questionnaire for the declaration of the basic technical characteristics based on Annex 1 to Regulation 302/2005.
- Part 2: Inventory change report based on Annex III to Regulation 302/2005.
- **Part 3:** Material balance report based on Annex IV to Regulation 302/2005.
- Part 4: Physical Inventory Listing based on Annex V to Regulation 302/2005.
- **Part 5:** Advance notification of exports of qualifying nuclear material based on Annex VI to Regulation 302/2005.
- **Part 6:** Advance notification of imports/receipts of qualifying nuclear material based on Annex VII to Regulation 302/2005.
- **Part 8:** Request for derogation of a qualifying nuclear facility from the rules governing the form and frequency of notifications based on Annex IX to Regulation 302/2005.
- **Part 9:** Annual Report or export report for derogated qualifying nuclear material based on Annex X to Regulation 302/2005.
- **Part 10:** Outline programme of activities based on Annex XI to Regulation 302/2005.
- **Part 13:** Advance notification of intended withdrawal of qualifying nuclear material from civil activities this does not appear in EU Regulation 302/2005 but it is anticipated that under the bilateral agreements with the IAEA, the UK will be required to provide the IAEA with information about this.



Three forms relate to ores or waste:

Part 7: Report of ore exports/shipments – based on Annex VIII to Regulation 302/2005:

Part 11: Annual report on exports/shipments of conditioned waste – based on Annex XIII to EU Regulation 302/2005.

Part 12: Annual report on imports/receipts of conditioned waste – based on Annex XIV to EU Regulation 302/2005.