



Department for
Business, Energy
& Industrial Strategy

NUCLEAR SAFEGUARDS: DRAFT REGULATIONS

Consultation on the proposed regulations for a new domestic nuclear safeguards regime, following the UK's withdrawal from Euratom

Closing date: 14 September 2018

NUCLEAR SAFEGUARDS: DRAFT REGULATIONS

Consultation on the proposed draft regulations for a new domestic nuclear safeguards regime, following the UK's withdrawal from Euratom

The consultation, draft Nuclear Safeguards Regulations and Impact Assessment can be found at:

<https://www.gov.uk/government/consultations/nuclear-safeguards-regulations>

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Any enquiries regarding this publication should be clearly marked as 'Draft Nuclear Safeguards Regulations' and sent to us at nuclearsafeguardsconsultation@beis.gov.uk

Ministerial Foreword

The United Kingdom has long been a staunch proponent of the international nuclear safeguards that serve as a fundamental component of global nuclear non-proliferation. As a founding member of the International Atomic Energy Agency (IAEA), the United Kingdom has always attached great importance to the implementation of nuclear safeguards, committing to the voluntary application of international safeguards in the UK for nearly four decades.

For much of our time as a member of the IAEA we have also been a member of the European Atomic Energy Community (Euratom), the international organisation that governs the peaceful use of nuclear energy within the EU. While a member of Euratom, we have met and exceeded our international safeguards obligations, alongside our European Partners.

When we notified our intention to leave the European Union on 29 March 2017, we also notified our intention to leave Euratom. Although we will be leaving Euratom, we remain firmly committed to the highest standards of nuclear safeguards and non-proliferation.

The draft Nuclear Safeguards regulations set out in this consultation are a concrete demonstration of this commitment. They will establish a new domestic safeguards regime for the UK that will provide coverage and effectiveness equivalent to that currently provided by Euratom, and are the means by which we will exceed our international obligations.

Our commitment to go beyond what is required by the international community not only demonstrates the importance this Government places on international non-proliferation, but also underlines our commitment to our own civil nuclear sector.

The nuclear industry is of key strategic importance to the United Kingdom and, as we prepare to leave both the European Union and Euratom, we have been clear that our decision to withdraw in no way diminishes our civil nuclear ambitions. The uniqueness and key strategic importance of the civil nuclear sector means that there is a strong mutual interest in ensuring that the United Kingdom and Euratom continue to work closely together in the future. The Government's ambition is to maintain as many benefits as

possible through a close and effective association with Euratom. We will also seek to maintain close and effective arrangements for civil nuclear cooperation, safeguards, security and safety, with the rest of the world.

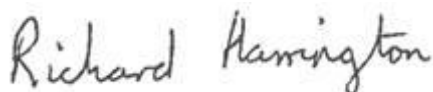
Beyond this, the United Kingdom will remain a strong and active member of the IAEA, as it has been since 1957. On 7 June 2018, the UK and the IAEA signed two new international safeguards agreements (the Voluntary Offer Agreement and Additional Protocol) that will replace the trilateral safeguards agreements between the UK, IAEA and Euratom that have been in place since 1978. This major step ensures that we will continue in our role as a responsible nuclear state after we have left Euratom.

The Nuclear Safeguards Act, under which these draft Nuclear Safeguards Regulations will operate, has recently completed its passage through Parliament and received Royal Assent on the 26 June 2018. This has provided a platform from which to engage with all of our partners to ensure that the regime outlined in these draft Nuclear Safeguards Regulations will meet our needs.

We have worked closely with the Office for Nuclear Regulation, and with stakeholders to develop these draft Nuclear Safeguards Regulations. In January 2018, we published a pre-consultation draft of the Nuclear Safeguards Regulations.

This Consultation represents the next step forward and is part of our continued efforts to engage with our stakeholders. We are now seeking your views on the operability and effectiveness of the proposed draft Nuclear Safeguards Regulations.

We look forward to receiving your responses.

A handwritten signature in black ink that reads "Richard Harrington". The signature is written in a cursive, slightly slanted style.

Richard Harrington MP

Parliamentary Under Secretary of State, Minister for Business and Industry

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Executive Summary

Introduction

The draft Nuclear Safeguards Regulations will enable a new domestic nuclear safeguards regime to operate in the United Kingdom, following the UK's withdrawal from the European Atomic Energy Community ("Euratom") which will occur as a consequence of leaving the European Union. This domestic regime will replace the current arrangements provided by the UK's membership of Euratom, and by the European Commission's role in the trilateral agreements between the International Atomic Energy Agency, the UK and Euratom.

The Government has committed to establishing a new regime which will be equivalent in effectiveness and coverage to that currently provided by Euratom, and which will exceed expected international standards. The Government's approach is to establish a regime that will operate in a similar way to the existing arrangements, meeting the UK's international commitments as applied in the new bi-lateral agreements with the International Atomic Energy Agency. The approach takes account of best practice in UK regulation making and reflects feedback on the practical, regulatory and operational needs of our stakeholders, including the need to minimise disruption to industry. If passed into law, these proposed draft Nuclear Safeguards Regulations will allow the Office for Nuclear Regulation to deliver international standards from day one of exit, and to build, over time, to Euratom equivalence.

A number of changes have been incorporated into the draft Nuclear Safeguards Regulations to ensure they are appropriate for the domestic, legislative and operational landscape in which they operate. They will take account of and align with best practice and reflect the difference between a system regulated by a national regulator and the application of safeguards by a supranational body (e.g. introducing an accountancy and control plan and formalising compliance with international cooperation agreements) or develop upon existing practice (e.g. special provisions for a qualifying nuclear facility with limited operation).

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The draft Nuclear Safeguards Regulations reflect debates on nuclear safeguards in Parliament and incorporate feedback from the nuclear industry and wider stakeholder community obtained through our discussions on safeguards at the Euratom Industry forums in September 2017 and March 2018. The next Euratom Industry Forum is planned for 19 July 2018 and will provide a further opportunity for the industry to provide feedback in addition to the planned consultation workshops outlined in the 'How to Respond' section below.

The draft Nuclear Safeguards Regulations will be made under the powers contained in the Nuclear Safeguards Act 2018 and the Energy Act 2013 (as amended). The Nuclear Safeguards Act 2018 provides for the Office for Nuclear Regulation to take on the role and responsibilities required to ensure compliance with nuclear safeguards obligations contained in a relevant international agreement, whether with the International Atomic Energy Agency or with a third country. The Office for Nuclear Regulation already regulates nuclear safety and security.

Purpose of this consultation

The Secretary of State is required by the Nuclear Safeguards Act 2018 to consult industry, the Office for Nuclear Regulation and other persons who are considered appropriate, when making regulations. This consultation is carried out by the Secretary of State in order to comply with sections 76A(8)(a) and (b) and 112(1D)(a) and (b) of the Energy Act 2013, and seeks views on the operability and effectiveness of the draft Nuclear Safeguards Regulations, which are published as Annex 1.

To facilitate consideration of the proposals, a pre-consultation draft of the Nuclear Safeguards Regulations was published together with an explanatory note¹ on 19 January 2018. We held a technical workshop with key operators in February 2018 and will arrange further general workshops during this Consultation. BEIS officials have also formed a working group with colleagues in Scotland, Wales and Northern Ireland and held workshops in February 2018 to consider other Euratom exit related matters such as the shipment and treatment of radioactive waste. In addition, officials have discussed the draft Nuclear Safeguards Regulations with the Non-Government Organisation community.

¹ <https://www.gov.uk/government/publications/nuclear-safeguards-bill-draft-regulations>

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We look forward to continuing to work closely with industry and other stakeholders during this consultation.

This consultation document describes and explains what we are trying to achieve with the draft Nuclear Safeguards Regulations and sets out our key questions. All questions are then additionally set out in a catalogue at the back of this document.

Responses to this Consultation and associated events will be taken into account when taking the policy forward and the draft Nuclear Safeguards Regulations may be further revised.

It is anticipated that those wishing to respond to this consultation may include the Office for Nuclear Regulation, operators of nuclear facilities and other industry stakeholders, importers and exporters of specific nuclear material, other holders of nuclear material (including some research facilities), Parliamentarians, Non-Government Organisations and other civil society organisations. The consultation may also be of some interest to those with a general interest in nuclear issues.

Territorial extent:

The draft Nuclear Safeguards Regulations will extend to England, Wales, Scotland and Northern Ireland. This consultation covers each of the territories. Accordingly, we welcome the views of the Devolved Administrations.

Exit from the European Union

The UK has benefitted from its membership of the European Atomic Energy Community since joining the EU and Euratom in 1973. The Government's ambition is to maintain as many of these benefits as possible through a close and effective association with Euratom in the future, after the UK withdraws from Euratom, at the same time as withdrawing from the EU, on 29 March 2019. Our plans are designed to be robust so as to be prepared for a number of different scenarios, including the unlikely outcome that there is no agreement at all.

The UK Government has reached political agreement with the EU on an implementation period that will start on our exit from the EU, on 29 March 2019, and last until 31 December 2020, during which Euratom will continue to provide safeguarding arrangements for the UK. The draft Nuclear Safeguards Regulations do not set out a

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proposed commencement date, as whilst we are highly confident the implementation period will be ratified as part of the wider Withdrawal Agreement, until this is complete, like any responsible government we prepare for all potential outcomes, including the unlikely scenario in which no mutually satisfactory agreement can be reached.

How to respond

For ease of reference, questions posed throughout the document are also listed together in a [catalogue of questions](#) at the back of this document.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome. When responding, please state whether you are responding as an individual or representing the views of an organisation. You are encouraged to respond by completing an online survey at:

<https://beisgovuk.citizenspace.com/civil-nuclear-resilience/nuclear-safeguards-regulations>

Alternatively, you can email your responses to

nuclearsafeguardsconsultation@beis.gov.uk

Hard copies can also be submitted to the address below and should be clearly marked 'Nuclear Safeguards Consultation'. A response form is also available on the GOV.UK consultation page:

<https://www.gov.uk/government/consultations/nuclear-safeguards-regulations>

In addition to inviting public responses to the consultation online, at least two consultation workshops will be run for interested parties, including industry. The first will take place on 2 August 2018 at the Department for Business Energy and Industrial Strategy in London, and the second on 15 August 2018 at the Manchester Conference Centre. To register your place at the workshop, please promptly email

nuclearsafeguardsconsultation@beis.gov.uk

Details of any further events will be announced on:

<https://beisgovuk.citizenspace.com/civil-nuclear-resilience/nuclear-safeguards-regulations>

Executive Summary

Issued: 9 July 2018

Respond by: 14 September 2018

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Consultation reference: Consultation on Draft Nuclear Safeguards Regulations

Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at:

<https://www.gov.uk/government/consultations/nuclear-safeguards-regulations>

Hard copies can be provided upon request either from the postal address given above, or by emailing:

nuclearsafeguardsconsultation@beis.gov.uk

A range of accessible format versions of the consultation documents can be provided in response to specific requests – please get in touch so that we can make appropriate arrangements.

We have published a Welsh translation of the Executive Summary only alongside this consultation document. This is after establishing a low need for a full translation of the whole document, in view of it being a technical document, targeted mainly at a small, specialist audience, and because, as a consultation document, it will have short-lived relevance.

Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential, please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable UK and EU data protection laws. See our [privacy policy](#).

We will summarise all responses and publish this summary on [GOV.UK](#). The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

Quality assurance

This consultation has been carried out in accordance with the government's [consultation principles](#).

If you have any complaints about the way this consultation has been conducted, please email: beis.bru@beis.gov.uk.

Context and Background Information

What are Nuclear Safeguards?

1. Nuclear safeguards consist of various reporting and verification processes which assure and demonstrate that civil nuclear material is not diverted unlawfully into military or weapons programmes.
2. Nuclear safeguards measures include:
 - a. reporting on civil nuclear material holdings and development plans;
 - b. inspections of nuclear facilities and materials; and
 - c. monitoring, including by use of safeguards equipment, where appropriate.
3. Nuclear safeguards are distinct from nuclear safety (the prevention of nuclear accidents) and nuclear security (measures to prevent theft of nuclear material or information, or sabotage of nuclear facilities). Nuclear safety and nuclear security are the subject of independent regulatory provisions, with the Office for Nuclear Regulation as regulator.

Global non-proliferation regime

4. The global nuclear non-proliferation regime is underpinned by the Non-Proliferation Treaty of 1970. Under this Treaty, the International Atomic Energy Agency concludes agreements with many nations to apply its internationally agreed safeguards standards and regimes to those states, like the UK, who already have nuclear weapons, and with those who do not.
5. Under the Non-Proliferation Treaty, the UK, as a nuclear weapons state, has undertaken not to assist non-nuclear weapons states in acquiring or developing nuclear weapons - for example, by only supplying nuclear materials or equipment for peaceful purposes under International Atomic Energy Agency safeguards. The application of these measures to the UK's nuclear activities also demonstrates to other states that the UK is capable of operating a successful nuclear industry while

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maintaining a robust safeguards regime. This does not prevent the UK from maintaining its own nuclear weapons programme.

6. Under this system, the UK is currently a party to two major Safeguards Agreements with the International Atomic Energy Agency: a 'Voluntary Offer Agreement', and an 'Additional Protocol' to it.² These are trilateral agreements between the International Atomic Energy Agency, the UK and Euratom. The UK's current safeguards obligations are primarily fulfilled through the UK's membership of the Euratom Treaty³ e.g. through the European Commission Regulation (Euratom) No 302/2005⁴ on the application of Euratom safeguards (the "Euratom Regulation"), although the International Atomic Energy Agency also conducts verification activities at designated UK nuclear facilities, often in conjunction with Euratom.
7. Currently, the UK complies with the Euratom Treaty and the EU Regulation, which places nuclear safeguards obligations on the operators of nuclear facilities and is directly applicable in the UK. The draft Nuclear Safeguards Regulations will underpin the new domestic safeguards regime for the UK and replace the EU system.

European context

UK withdrawal from Euratom

8. Following the EU referendum that took place on 23 June 2016, and subsequent notification to the EU of our intention to leave, the UK will cease to be a member state of the European Union on 29 March 2019. The European Union and Euratom are uniquely legally joined. The UK, therefore, served notice of its intention to withdraw from Euratom at the same time as withdrawing from the European Union.

² Voluntary Offer Agreement (VOA) made on 6 September 1976 between the United Kingdom, the European Atomic Energy Community and the International Atomic Energy Agency (IAEA) for the application of safeguards in the United Kingdom in connection with the Treaty on the Non-Proliferation of Nuclear Weapons; and an Additional Protocol signed at Vienna on 22 September 1998 additional to the VOA. The UK is also party to a third safeguards agreement with the IAEA (INFCIRC/175) which predates the current Voluntary Offer Agreement and the UK's membership of Euratom, and requires IAEA inspection of specified nuclear material in the UK. This agreement will remain in force.

³ <http://www.consilium.europa.eu/en/documents-publications/publications/euratom-treaty/>

⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32005R0302>

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9. The government has been clear that it does not want our departure from the EU to jeopardise the success of our nuclear industry. It is therefore pursuing a twofold strategy for managing our exit from Euratom: through negotiations with the European Commission we will seek a close association with Euratom; and at the same time, we will put in place all the necessary measures to ensure that the UK can operate as an independent and responsible nuclear state from day one, including taking legal responsibility for its own nuclear safeguards regime in the long term.
10. The UK has, therefore, negotiated with the International Atomic Energy Agency bilateral safeguards agreements to replace the UK's current trilateral agreements with the International Atomic Energy Agency. These agreements were approved by the International Atomic Energy Agency Board of Governors on 6 June 2018 and signed by the International Atomic Energy Agency and the UK on 7 June 2018. The agreements are essential to ensure the UK can continue to import and export nuclear material, the exchange of which is largely underpinned by the International Atomic Energy Agency's safeguards agreements.
11. These new safeguards agreements follow the same principles of the existing trilateral agreements in framing the bilateral relationship and the practical arrangements for implementing safeguards in the UK, when the UK withdraws from Euratom. The draft Nuclear Safeguards Regulations, and the existing domestic law, will give effect to the UK's obligations under these new bilateral agreements with the International Atomic Energy Agency and will ensure the UK continues to meet its nuclear safeguards commitments by ensuring that the current level of inspections and monitoring by the International Atomic Energy Agency can continue to take place.
12. The Government has emphasised its continued commitment to the International Atomic Energy Agency and to its international commitments for nuclear safeguards and nuclear non-proliferation. In addition, the Government has prioritised ensuring the appropriate arrangements are in place with those countries which have a domestic legal or policy requirement for them, before civil nuclear trade with another country can be permitted, notably Australia, Canada, Japan and the USA (hereinafter referred to as the 'priority countries'). The Government is on track to have bilateral Nuclear Cooperation Agreements in place with all priority countries when Euratom arrangements cease to apply in the UK. This substantial progress is underlined by the

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signing of a new bilateral UK-US Nuclear Cooperation Agreement on 4 May 2018 and signing new safeguards agreements with the International Atomic Energy Agency on 7 June 2018.

13. As part of the broader legislative scheme, it is proposed that the Euratom Regulation will become part of “retained EU law” as a result of the EU (Withdrawal) Act and will then be repealed by the draft Nuclear Safeguards Regulations. The EU (Withdrawal) Act received Royal Assent on 26 June 2018.

Implementation period

14. Under the terms of the implementation period, on which political agreement between the EU and UK was reached in March 2018, current Euratom arrangements will continue in respect of the UK until 31 December 2020. This means that businesses will be able to continue to trade on the same terms as currently. However, as a responsible government we are preparing for all potential outcomes, therefore in the event that the Withdrawal Agreement between the UK and EU (which contains the agreed terms for the implementation period) is not finalised, it will be essential that the UK has safeguards arrangements in place on the date of exit from Euratom, 29 March 2019.

Delivery of new regime

15. The Nuclear Safeguards Act 2018 provides that the Office for Nuclear Regulation is the regulator for the new nuclear safeguards regime. The Office for Nuclear Regulation is the UK’s existing nuclear regulator which, under the provisions of the Energy Act 2013, already has responsibility for nuclear safety and security and plays a facilitating role in nuclear safeguards.
16. The Office for Nuclear Regulation is currently enhancing its capabilities to take on new responsibilities for a domestic safeguards regime, once the Euratom safeguards arrangements cease to apply in the UK, where appropriate. Discussions are also taking place with the relevant Devolved Administrations.
17. The Nuclear Safeguards Act 2018 was given Royal Assent on 26 June 2018.

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18. The Nuclear Safeguards Act 2018 amends the Energy Act 2013 to replace the Office for Nuclear Regulation's existing nuclear safeguards purposes, which is defined in relation to support for Euratom's safeguards activities in the UK, with new nuclear safeguards purposes that would operate without reference to Euratom; and creates new powers for the Secretary of State, to make regulations containing the detail of the domestic safeguards regime, such as accounting, reporting, control and inspection arrangements.
19. In addition, the Nuclear Safeguards Act 2018 defines certain key terms which also appear in the draft Nuclear Safeguards Regulations including "qualifying nuclear material", "qualifying nuclear facility", "qualifying nuclear equipment" and "civil activities" which are considered further below in the section on definitions.
20. It is anticipated that the Nuclear Safeguards Act 2018 Commencement Regulations 2018 will be made in the autumn before the draft Nuclear Safeguards Regulations are made.
21. The draft Nuclear Safeguards Regulations set out the domestic safeguards regime, which primarily requires reporting and verification processes. These will enable the UK to ensure that civil nuclear material is fully accounted for.

UK approach to new domestic regime

22. The UK Government has committed to ensuring that once Euratom arrangements no longer apply to the UK, the policy objectives for a new domestic nuclear safeguards regime within the UK are to:
 - a. meet the UK's international commitments as applied in new bilateral agreements (the Voluntary Offer Agreement and an Additional Protocol to it) between the UK and the International Atomic Energy Agency in connection with the Treaty on the Non-Proliferation of Nuclear Weapons, which detail the UK's future safeguards obligations;
 - b. demonstrate the UK's stated intention to have domestic safeguards arrangements in place that will be equivalent in effectiveness and coverage to

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that currently provided by Euratom, and which exceed in certain respects the safeguards commitments that the international community would expect and are to be applied in new bilateral safeguards agreements between the UK and the International Atomic Energy Agency.

- c. ensure safeguards arrangements are in place that retain public, industry and international trading partner confidence to engage in civil nuclear trade with the UK. Safeguards arrangements are critical for enabling civil nuclear trade and other parts of the supply chain, which make nuclear electricity generation in the UK possible; and
- d. seek to take account of best practice in UK regulation making – i.e. are necessary, fair, effective and enjoy a broad degree of public confidence – and that they are enforced in a manner that is proportionate, accountable, consistent, transparent, and targeted, in line with the principles set out in the Legislative and Regulatory Reform Act 2006.

23. The draft Nuclear Safeguards Regulations described in this consultation document set out a proposed new domestic civil nuclear safeguards regime. The consultation document sets some context around how the draft Nuclear Safeguards Regulations will operate appropriately within the domestic legislative and operational landscape, for example, the Office for Nuclear Regulation being the UK's independent nuclear regulatory body, as opposed to the European Commission (an EU body).

24. The draft Nuclear Safeguards regulations and the forms, which specify what information an operator must supply to the Office for Nuclear Regulation, broadly reflect the requirements of EU Regulation 302/2005. It is intended that this approach will reduce disruption for nuclear operators.

Pre-consultation Draft of the Nuclear Safeguards Regulations

25. During the passage of the Nuclear Safeguards Act 2018, pre-consultation drafts of "The Nuclear Safeguards Regulations 20--" and of "The Nuclear (Civil Activities, Fissionable Material and Relevant International Agreements) Regulations 20--" were published in January 2018.

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26. The draft Nuclear Safeguards regulations, which are the subject of this consultation, have developed from the pre-consultation draft. For example, we have considered feedback from operators, and as a result of the Parliamentary debates on the Nuclear Safeguards Act 2018, the definition of “civil activities” has been placed on the face of the Act rather than in “The Nuclear Safeguards (Civil Activities, Fissionable Material and Relevant International Agreements) Regulations 20--”.
27. The new definition of “civil activities” is contained in section 76A(6) of the Energy Act 2013, as amended by the Nuclear Safeguards Act 2018.
28. The definitions of “fissionable material” and “relevant international agreements” have been moved to regulations 44 and 45 of the draft Nuclear Safeguards Regulations, but, following this consultation, may once again be set out in a short separate set of regulations to be considered in Parliament at the same time as the draft Nuclear Safeguards Regulations.
29. In addition, the draft Nuclear Safeguards Regulations contain content and text which did not appear in the pre-consultation draft, including regulations 31 and 32 (qualifying nuclear facility with limited operation and exemption) and the consequential amendments in Schedule 3. There is additional content at regulations 46 to 51 covering additional reporting requirements to ensure the UK can comply with obligations in certain relevant international agreements with priority countries. Other changes have been made in various places in the draft Nuclear Safeguards Regulations.
30. The transitional provisions are not set out in Schedule 4 to the draft Nuclear Safeguards Regulations, but are discussed under the heading ‘Schedule 4 – Transitional Provisions’ within this Consultation Document (at the end of the Chapter on ‘The Content of the draft Nuclear Safeguards Regulations’), which also raises questions on them. It is intended to draft Schedule 4 in the light of consultees’ comments.

Consultation questions

31. The draft Nuclear Safeguards Regulations, which are set out in Annex 1 (published alongside this consultation document), develop the pre-consultation draft Nuclear Safeguards Regulations published on 19 January 2018, and reflect engagement with stakeholders through various workshops and other mechanisms. We welcome further feedback on the draft Nuclear Safeguards Regulations in general, and **your responses to the specific questions framed in the consultation document are of particular importance to us.**

Impact Assessment

32. An Impact Assessment for the Nuclear Safeguards Act 2018 was published on 18 December 2017⁵. A further Impact Assessment, specifically for the draft Nuclear Safeguards Regulations, has been produced (published alongside this consultation document at Annex 2). This Impact Assessment considers in more detail the impact of the proposed draft Nuclear Safeguards Regulations and takes into account input received from stakeholders and industry. The Impact Assessment considers one core option (the preferred option) for a new domestic civil nuclear safeguards regime against two counterfactuals. The impact assessment identifies the initial assessment of the impact on individuals, groups and businesses with the aim of understanding the overall impact on society from implementing the proposal.

33. The core option is to provide safeguards arrangements that are equivalent in effectiveness and coverage to that currently provided by Euratom, but which will be appropriate for the UK domestic legislative and operational context. In the Impact Assessment which accompanied the Nuclear Safeguards Act 2018, the Government considered an option where domestic safeguards arrangements met only the UK's obligations to the International Atomic Energy Agency and under its Nuclear Cooperation Agreements. We have now discounted this option, as it does not meet the

⁵ <https://services.parliament.uk/bills/2017-19/nuclearsafeguards/documents.html>

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objectives of the confirmed government intention of a safeguards regime that is equivalent in effectiveness and coverage to that currently provided by Euratom.

34. The two counterfactuals that have been assessed are:

- i. **“Current Euratom regime”**: The headline counterfactual is the existing Euratom safeguards regime. This allows an assessment of the preferred policy option relative to existing safeguards arrangements.
- ii. **“Do nothing”**: For context, we also set out the risks of not introducing legislation. In the absence of amending frameworks and not implementing safeguards measures, the UK would be without an effective nuclear safeguards regime. Were this to occur, the parts of the nuclear industry reliant on trade would no longer be able to operate.

35. We would welcome any comments and evidence on the analysis set out in this impact assessment, to help provide a sound basis for our final assessment of impacts, such as potential costs, benefits and risks arising from the detail of the changes set out in this consultation document on the draft Nuclear Safeguards Regulations.

Q 1. Do you have any comments or evidence to give us on the analysis set out in the impact assessment?

Cost Recovery

36. The nuclear industry does not currently pay for safeguards regulation. The Government pays for safeguards regulation indirectly, via its collective funding to the EU. In addition, the Office for Nuclear Regulation receives a small percentage of its funding from its sponsor department, the Department for Work and Pensions, to cover some existing and very specific safeguards functions.

37. The Government is committed to covering the costs of establishing the new regime, up until March 2019.

38. Under the Energy Act 2013, as amended by the Nuclear Safeguards Act 2018, the Secretary of State will have the power to make fee-charging regulations in respect of activities carried out by the Office for Nuclear Regulation in relation to nuclear

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safeguards. As part of this, we have been exploring whether safeguards should fall in line with safety and security regulations and be funded by industry.

39. The Office for Nuclear Regulation currently gathers approximately 97% of its running costs through cost recovery from industry, wholly recouping its costs for nuclear safety and security regulation from industry.

40. The Secretary of State does not intend to include a fees regime within the draft Nuclear Safeguards Regulations, which are the subject of this consultation, but may revisit the issue of fees in future.

41. We want to understand the position of industry on the potential cost recovery of safeguards before any decisions are made by Ministers and welcome views and evidence on the questions relating to cost recovery. It is anticipated that there would be a further consultation on any future fees regulations.

42. In addition, Euratom Regulation 302/2005 provides for operators to recover certain costs that they incur for special services, such as equipment, associated with particular safeguard provisions from Euratom. The draft Nuclear Safeguards Regulations do not provide for the Office for Nuclear Regulation to reimburse costs to operators for similar provisions. We are seeking views on the potential impact for business of removing this provision. This will help inform a future decision on whether to provide a similar provision, alongside the cost recovery decision.

Q 2a. If the UK safeguards regime were to be funded by a cost recovery scheme, how would this affect your business?

Q 2b. If applicable, please give details in support of your answer to Q 2a.

Q 2c. Please give details on how a provision to enable an operator to recover costs of certain special services to the regulator would affect your business.

Equalities Analysis

43. We have considered the need to carry out an equality impact assessment to ascertain whether the change from a European to a domestic safeguards regime would have a

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disproportionate effect on groups of people with a 'protected characteristic' under the Equality Act. We have considered whether the policy enshrined in these draft Nuclear Safeguards Regulations will have unintended consequences for some groups with 'protected characteristics' as well as thinking about whether the policy will be fully effective for all target groups.

44. Our analysis suggests that the new regime is very unlikely to disproportionately affect those with protected characteristics and will be fully effective for all target groups. We would welcome hearing from anybody in response to this consultation who has evidence which suggests otherwise.

Q 3. Do you have any evidence which suggests that the new regime would disproportionately affect those with protected characteristics or will not be fully effective for all target groups?

Legislative procedure

45. The Energy Act 2013, as amended by the Nuclear Safeguards Act 2018, requires the draft Nuclear Safeguards Regulations to be made using the Parliamentary affirmative resolution procedure.

The Content of the draft Nuclear Safeguards Regulations

Chapter I – Introduction

Citation and Commencement

46. Regulation 1 will set out the proposed coming-into-force dates and times for the draft Nuclear Safeguards Regulations. The consultation draft does not set out the exact date because this depends on the final position on transition.
47. It is proposed that regulations 44 and 45 will commence first. These regulations define “fissionable material” and “relevant international agreements” for the purposes of the Nuclear Safeguards Act 2018.
48. In the pre-consultation drafts, these definitions were set out in the draft Nuclear Safeguards (Civil Activities, Fissionable Material and Relevant International Agreements) Regulations 20—and, following this consultation, may once again be set out in a short separate set of regulations to be considered in Parliament at the same time as the draft Nuclear Safeguards Regulations.
49. The bulk of the draft Nuclear Safeguards Regulations will commence on the same date, but at a slightly later time.
50. Regulations 7 to 9, which require an operator to produce an Accountancy and Control Plan, will commence on the first anniversary of the main commencement date.

Q 4. Do you support the staggered approach to commencement, for the reasons set out above? What, if any, changes would you propose, and why?

The Nuclear Safeguards Act and Interpretation

51. The terms “qualifying nuclear material”, “qualifying nuclear facility”, “qualifying nuclear equipment” and “civil activities” are already defined in the Nuclear Safeguards Act 2018, which places the definitions in section 76A(6) of the Energy Act 2013. As a result, those terms are not defined in the draft Nuclear Safeguards Regulations and are not the subject of this consultation.

52. The Nuclear Safeguards Act defines the terms “qualifying nuclear material”, “qualifying nuclear facility”, “qualifying nuclear equipment” and “civil activities”, in the following terms:

“76A(6) In this section –

“civil activities” means –

- (a) production, processing or storage activities which are carried on for peaceful purposes;
- (b) electricity generation carried on for peaceful purposes;
- (c) decommissioning;
- (d) research and development carried on for peaceful purposes;
- (e) any other activity carried on for peaceful purposes;

“equipment” has the meaning given by section 70(3);⁶

“qualifying nuclear equipment” means equipment designed or adapted for use in connection with qualifying nuclear material or a qualifying nuclear facility;

“qualifying nuclear facility” means a facility (including associated buildings) in which qualifying nuclear material is produced, processed, used, handled, stored or disposed of;

⁶ From section 70(3) of the Energy Act 2013: “ ‘equipment’ includes equipment that has not been assembled and its components.”

“qualifying nuclear material” means –

- (a) fissionable material specified in regulations under subsection (7)⁷,
- (b) source material in the form of –
 - (i) uranium metal, alloy or compound, or
 - (ii) thorium metal, alloy or compound, or
- (c) ore containing a substance from which a source material falling within paragraph (b) is capable of being derived.”

53. These definitions already exist and are not the subject of this Consultation, so no questions are being asked in relation to them.

The draft Nuclear Safeguards Regulations and Interpretation

54. Regulation 2 contains an extensive set of definitions some of which are newly generated for the draft Nuclear Safeguards Regulations, for example, “Additional Protocol”, “Agency”, “Agreement with the Agency” and “Nuclear Safeguards Act”.

55. A new definition which may be of particular interest is that proposed for “operator”, as “operator” means a person setting up, operating, closing down or decommissioning a qualifying nuclear facility for the production, processing, storage, handling, disposal or other use of qualifying nuclear material. This is a key definition, since the vast majority of duties in the draft Nuclear Safeguards Regulations are placed on ‘operators’.

56. Some of the definitions are drawn from those set out in the agreement with the International Atomic Energy Agency, for example, “batch”, “batch data”, “book inventory”, “correction”, “effective kilogram”, “key measurement point”, “material balance area”, “material unaccounted for”, “physical inventory”, “shipper/receiver difference”, and “source data”. Many of these definitions also appear in the EU Regulation 302/2005.

⁷ From the Nuclear Safeguards Act 2018: “The Secretary of State may by regulations specify fissile material for the purposes of the definition of ‘qualifying nuclear material’.” This is done in regulation 44 of these draft Nuclear Safeguards Regulations.

In addition, some definitions are drawn from those set out in EU Regulation 302/2005 including “conditioned waste”, “retained waste”, and “waste”. “De-commissioned installation” and “closed-down installation” have become “decommissioned” and “closed down”.

Q 5. How could the definitions set out in Regulation 2 be improved? Please make it clear which definition you are referring to and explain your reasoning. Please state whether you think any additional definitions should be added, and what these are.

Chapter II – Accountancy and Control, Records and Information Provision

57. This chapter sets out the requirements on an operator of a qualifying nuclear facility, in the area of accountancy and control, record keeping and information provision relating to qualifying nuclear material.

58. An operator will be required to produce an ‘Accountancy and Control Plan’ setting out their arrangements in respect of accountancy and control, record keeping and information provision for safeguarded nuclear material. This requirement is not anticipated to commence until the first anniversary of the main commencement date. There is more detail given on the rationale for this below, under the heading ‘Accountancy and Control Plan’. It is felt that these proposals are a sensible way of drawing together existing requirements and practices into a consistent and forward-looking approach which should have the flexibility to deal with a broad range of operators.

Declaration of the basic technical characteristics

59. Regulation 3 requires an operator to declare the basic technical characteristics of an existing qualifying nuclear facility to the Office for Nuclear Regulation using the relevant questionnaire, set out in Part 1 of Schedule 1, within 30 days of the commencement date. Its purpose is to allow the Office for Nuclear Regulation and

the International Atomic Energy Agency to tailor the way in which they verify the information provided to them by the operator.

60. In the case of a new qualifying nuclear facility, which comes into existence after commencement, an operator will be required to declare basic technical characteristics at various stages during the construction process so that the operator must declare to the Office for Nuclear Regulation –

- a) the preliminary basic technical characteristics of the facility as soon as the decision to construct or authorise construction has been taken;
- b) the basic technical characteristics of the facility, based on the final design for the qualifying nuclear facility, using the relevant questionnaire shown in Part 1 of Schedule 1, not later than 180 days prior to the start of construction; and
- c) the basic technical characteristics of the facility, as built using the relevant questionnaire shown in Part 1 of Schedule 1, not later than 180 days before -
 - (i) the first receipt of qualifying nuclear material at the facility;
 - (ii) in the case of a qualifying nuclear facility which only treats or stores conditioned or retained waste, the treatment or storage begins; and
 - (iii) in the case of a qualifying nuclear facility whose principal activity is the extraction of ores in the UK, the start of operations.

61. Paragraph 3(3) places a duty on the operator to inform the Office for Nuclear Regulation of a change concerning basic technical characteristics within 30 days of the change taking place. Paragraph 3(4) provides that these changes include those associated with closing down or decommissioning a qualifying nuclear facility.

62. The declaration of the basic technical characteristics of a qualifying nuclear facility is set out in Part 1 of Schedule 1 and contains 8 alternative forms to be used depending on the circumstances.

63. The forms set out in Part 1 to Schedule 1 are drawn from those set out in Annex I to EU Regulation 302/2005. Regulation 3 is drawn from Article 3 of EU Regulation 302/2005. It builds on what is described in the EU Regulation, reflecting how good

practice in this area has developed. It also, more explicitly, meets the International Atomic Energy Agency requirements for the early provision of such information, which were introduced to strengthen the international safeguards regime, and are applicable under the UK's current and future Voluntary Offer Agreements on safeguards with the International Atomic Energy Agency.

Q 6. How could regulation 3 on declaring to the Office for Nuclear Regulation the basic technical characteristics of a qualifying nuclear facility, or the forms set out in Part 1 of Schedule 1, be improved? Please make it clear specifically what you are referring to and explain your reasoning.

Programme of activities

64. Regulation 4 requires an operator to send to the Office for Nuclear Regulation an annual outline programme of activities covering relevant safeguards information using the form set out in Part 8 of Schedule 1. Its purpose is to allow a forward look, enabling planning of safeguards verification activities by both the International Atomic Energy Agency and the Office for Nuclear Regulation.
65. A copy of the form set out in Part 8 of Schedule 1 is to be sent to the Office for Nuclear Regulation by 30 September of each year covering the activities which are planned for the following calendar year. The sort of information required includes the types of operations (e.g. proposed campaigns), the schedule and details for receipts of qualifying nuclear materials and the dates and durations for taking physical inventories of materials.
66. In addition, there is a requirement to give 40 days' advance notice to the Office for Nuclear Regulation of the taking of a 'physical inventory', which is defined in regulation 2, and regulation 15 sets out the requirements for taking a physical inventory.
67. The operator is required to communicate, without delay, to the Office for Nuclear Regulation any changes which affect, or have the potential to affect, either the outline plan of activities or the taking of physical inventories.

68. The form set out in Part 8 of Schedule 1 to the draft Nuclear Safeguards Regulations contains the outline programme of activities. This form is based on that set out in Annex XI to EU Regulation 302/2005. Regulation 4 is drawn from Article 5 of EU Regulation 302/2005.

Q 7. Is regulation 4, to submit an annual programme of activities to the Office for Nuclear Regulation for the upcoming year - and the form set out in Part 8 of Schedule 1 – adequate? If not, please make it clear precisely what you are referring to and give your reasoning.

Particular safeguard provisions

69. Regulation 5 provides that the Office for Nuclear Regulation may impose particular safeguard provisions on an operator by written notice. The adoption and purpose of any particular safeguard provisions applied by the Office for Nuclear Regulation to an operator is in order to facilitate more effective verification, where necessary, when applying the safeguards requirements to a qualifying nuclear facility. It is anticipated that the Office for Nuclear Regulation will discuss specific circumstances with an operator.

70. If an operator has received a written notice from the Office for Nuclear Regulation, then it must comply with the requirements of the draft Nuclear Safeguards Regulations as modified by the relevant particular safeguard provision.

71. Paragraph (4) of regulation 5 sets out a number of issues which may be dealt with in particular safeguard provisions.

72. Regulation 5 is drawn from and builds on Article 6 of EU Regulation 302/2005.

73. The section of this Consultation document on transitional provisions considers how particular safeguard provisions, that are already in place under Article 6 of EU Regulation 302/2005, may be treated.

Q 8a. Acting on the basis of the technical characteristics, do you agree that regulation 5 on particular safeguard provisions facilitates more effective verification of

a qualifying nuclear facility by the Office for Nuclear Regulation? If not, please give your reasoning.

Q 8b. What specific changes would you make to regulation 5 and why?

Accountancy and control of qualifying nuclear material

74. Accountancy and control of qualifying nuclear material is a core obligation of the UK's Voluntary Offer Agreement with the International Atomic Energy Agency and of the EU Regulation 302/2005. The Voluntary Offer places an obligation on the UK to monitor, control and record the movement and use of nuclear material such that it can provide the information and reports as required by these draft Nuclear Safeguards Regulations.
75. Regulation 6 requires an operator to maintain a system of accountancy and control of qualifying nuclear material in each qualifying nuclear facility, including the operating and accounting records detailed later in the draft Nuclear Safeguards Regulations.
76. The system of accountancy and control must comply with the requirements set out in Regulation 6(2).
77. Regulation 6(3) provides that the components of an accountancy and control system are set out in Schedule 2 and that an operator must implement the relevant components in a manner which is proportionate to and appropriate for the qualifying nuclear facility as described in the basic technical characteristics. Regulation 6(3) makes it clear that these components must be implemented in different ways by different operators, as appropriate, according to the basic technical characteristics of their qualifying nuclear facility.
78. An operator is required to retain records for at least 5 years and to make the operating and accounting records available for inspection as required by the Office for Nuclear Regulation.

79. Paragraph 6(6) requires that the system of measurement, which is used for the records, conforms with relevant international standards which are defined for this purpose in regulation 2.

80. Regulation 6 is based on Article 7 of EU Regulation 302/2005 and Schedule 2 draws upon the European Commission Recommendation (2009/120/Euratom)⁸ on the implementation of a nuclear material accountancy and control system by the operators of nuclear installations, plus existing Office for Nuclear Regulation guidance.

Q 9a. Do you agree that regulation 6, on maintaining a system of accountancy and control, which includes keeping accounting and operating records and providing reports to the Office for Nuclear Regulation, is clear? If not, please give your reasoning.

Q 9b. Will Schedule 2, which sets out the components of a system of accountancy and control plan, enable operators to fulfil the accountancy and control requirements? If not, please detail which aspect you are referring to and explain why.

Accountancy and control plan

81. Regulation 7 requires an operator to develop and submit to the Office for Nuclear Regulation a written accountancy and control plan for the qualifying nuclear material which is held in a qualifying nuclear facility. This requirement is not anticipated to commence until the first anniversary of the main commencement date. The regulation's main purpose is to demonstrate how the operator will establish and maintain a system of accountancy and control of nuclear material within a qualifying nuclear facility. This regulation will facilitate more effective oversight by both the operators and the Office for Nuclear Regulation by ensuring nuclear material accountancy and control systems are brought into a single document. This new requirement builds on European Commission Recommendation (2009/120/Euratom) and is not a specific requirement of EU Regulation 302/2005.

⁸ <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32009H0120>

82. The plan must describe in writing the arrangements and procedures adopted, or to be adopted, by an operator to establish and maintain the system of accountancy and control of qualifying nuclear material.

83. This requirement also aligns the nuclear safeguards regime with regulatory best-practice by allowing the Office for Nuclear Regulations to work with operators to ensure their accountancy and control systems generate accurate and consistent outcomes.

Replacement, amendment and revocation of an accountancy and control plan

84. Regulation 8 deals with responsibilities and procedures for changes to accountancy and control plans. If there is a relevant change in the basic technical characteristics of a qualifying nuclear facility, an operator is required to submit a revised accountancy and control plan or a proposal for amending the existing plan, within 30 days.

85. In addition to the requirements above, an operator may submit a revised plan or a proposal to amend an existing plan. The Office for Nuclear Regulation may approve any plan or proposed amendment to a plan as submitted by an operator or may require the operator to make amendments. The Office for Nuclear Regulation must revoke the former plan for a qualifying nuclear facility when it approves a revised accountancy and control plan.

Operation of an accountancy and control plan

86. Regulation 9 requires an operator to comply with the arrangements and procedures described in their accountancy and control plan which has been approved by the Office for Nuclear Regulation.

87. An operator will not be regarded as having failed to comply with the requirements of their own accountancy and control plan where they have received written notice from the Office for Nuclear Regulation that the relevant issue will not prevent an adequate system of safeguards from being maintained.

Q 10a. Do you agree that regulations 7 to 9 on an accountancy and control plan will help the Office for Nuclear Regulation ensure compliance with the draft Nuclear Safeguards Regulations in a manner that is consistent with good regulatory practice? If not, please give specific reasons.

Q 10b. Do you agree that the timescales for submitting the first accountancy and control plan are reasonable? If not, please give your reasoning.

Operating records

88. Regulation 10 requires an operator to ensure that the operating records for each material balance area contain the seven elements which are listed in the regulation. This will provide the Office for Nuclear Regulation with a body of operator-generated data on the quantities, composition and movement of qualifying nuclear material provided by operator's subject to Nuclear Safeguards Regulations. This body of data underpins the accounting reports discussed below and is made available to the Office for Nuclear Regulation to help it verify those reports.

89. The operator is required to communicate the relevant data to the Office for Nuclear Regulation on request.

90. This regulation will be in line with the UK's new Voluntary Offer with the International Atomic Energy Agency and reflects Article 8 of EU Regulation 302/2005.

Accounting records

91. Regulation 11 sets out the content of the accounting records for each material balance area that an operator is expected to keep. This will provide a record of the inventory of nuclear material in each material balance area.

92. The operator is required to communicate the relevant data to the Office for Nuclear Regulation on request.

93. This regulation will be in line with the UK's new Voluntary Offer Agreement with the International Atomic Energy Agency and reflects Article 9 of EU Regulation 302/2005.

Accounting reports

94. The purpose of Regulation 12 is to require an operator to provide the Office for Nuclear Regulation with accounting reports for each material balance area in accordance with regulations 13 to 20. The operator is required to ensure that accounting reports contain up-to-date information as at the reporting date. The provision of these reports makes a key contribution to enabling the Office for Nuclear Regulation to fulfil its regulatory responsibilities in the area of nuclear safeguards.
95. Regulation 12(3) requires an operator to respond to a written request from the Office for Nuclear Regulation for further detail or explanations of information in an accounting report within 15 days of the receipt of the request from the Office for Nuclear Regulation.
96. This will be in line with the UK's new Voluntary Offer Agreement and reflects Article 10 of EU Regulation 302/2005 which deals with accounting reports.

Q 11. Are regulations 10 to 12 for keeping and maintaining operating and accounting records and reports by operators clear and practical? If not, please detail how they could be improved.

Initial book inventory

97. Regulation 13 requires an operator to provide the Office for Nuclear Regulation with an 'initial book inventory' with a list of all the qualifying nuclear material in each material balance area of a qualifying nuclear facility or part of such a facility. The initial book inventory is to be provided to the Office for Nuclear Regulation within 15 days of the commencement date providing the information set out in Part 4 of Schedule 1.
98. Subject to further consideration, it is currently anticipated that an operator may fulfil this requirement by submitting a physical inventory listing form (set out in Part 4 of Schedule 1 of the regulations) that will be generated from an operator's nuclear management system (their 'books'). We understand that a physical inventory listing within 15 days of the relevant commencement date will, for all but the most complex material balance areas, be reasonably straightforward.

99. There are various exceptions to the general requirement for an initial book inventory, for example, ores, waste and qualifying nuclear facility with limited operation. The relevant requirements, which are generally for a stock list, are considered under the appropriate regulation.

100. The requirement for an initial book inventory will be in line with the UK's new Voluntary Offer Agreement. Regulation 13 reflects Article 11 of EU Regulation 302/2005 and the form set out in Part 4 of Schedule 1 is drawn from Annex V to EU Regulation 302/2005.

Q 12. Please give us specific comments on practical issues associated with applying regulation 13 and on using the form set out in Part 4 of Schedule 1.

Inventory change report

101. Regulation 14 sets out the requirements for the inventory change report for each material balance area providing the information set out in Part 2 of Schedule 1.

102. Operators are required to report monthly within 15 days of the end of each month all inventory changes which took place that month.

103. Paragraph (4) provides that where no inventory changes occur within a particular month, an operator must still send a report that carries over the ending book inventory of the previous month.

104. Paragraph (5) permits small inventory changes, such as transfers of analysis samples, to be grouped together, unless otherwise stated in the particular provisions of the particular safeguard provisions.

105. Paragraph (6) provides that inventory change reports may include comments explaining the inventory changes.

106. Regulation 14 is in line with the UK's new Voluntary Offer Agreement and reflects Article 12 of EU Regulation 302/2005. The form set out in Part 2 of Schedule 1 is drawn from the form set out in Annex III to EU Regulation 302/2005.

Q 13. Do you agree that regulation 14 and the form set out in Part 2 of Schedule 1 clearly set out the requirements for inventory change reporting? If not, please give your reasoning and suggestions for improvements.

Material balance report and physical inventory listing

107. Regulation 15 requires an operator to send to the Office for Nuclear Regulation a material balance report, providing the information set out in Part 3 of Schedule 1, and a physical inventory listing, in the form set out in Part 4 of Schedule 1, for each material balance area as soon as possible after a physical inventory is taken, and no later than 15 days after the taking of the inventory. This new time limit is to take account of the deadlines that the Office for Nuclear Regulation have to meet in assessing and providing the information to the International Atomic Energy Agency. A physical inventory for each material balance area must be taken every calendar year, and the interval between two successive physical inventories must not exceed 14 months.

108. Regulation 15 is required by the International Atomic Energy Agency and reflects Article 13 of EU Regulation 302/2005. The forms set out in Part 3 and 4 of Schedule 1 are drawn from the forms set out in Annexes IV and V to EU Regulation 302/2005.

Q 14. Do you agree that regulation 15 on material balance report and physical inventory listing and the forms set out in Part 3 and 4 of Schedule 1 are clear? If not, please give your reasons and suggestions for improvements.

Special reports

109. Regulation 16 requires an operator to send a special report to the Office for Nuclear Regulation, if the circumstances referred to in regulations 17 and 23 occur. These circumstances are:

- a) any unusual incident or circumstances (regulation 17(1)(a)), in which an operator believes there has been, or might be, an increase in or loss of qualifying nuclear material;

b) containment of qualifying nuclear material (regulation 17(1)(b)) that has unexpectedly changed to a point where unauthorised removal has become possible; and

c) the operator becomes aware that qualifying nuclear material has been lost or that there has been a considerable delay during transfer (regulation 23).

110. Regulation 17 requires an operator to submit a special report to the Office for Nuclear Regulation as soon as the operator becomes aware of the relevant circumstances.

111. Regulation 16(2) provides that the Office for Nuclear Regulation may request further details or explanations and specify, in a particular safeguard provision, additional requirements concerning the type of information to be supplied.

112. Regulation 16 is in line with the UK's new Voluntary Offer Agreement and reflects Article 14 of EU Regulation 302/2005. Regulation 17 reflects Article 15.

Q 15a. Do you agree that regulation 16, together with regulations 17 and 23, delivers the intended purpose of requiring operators to submit special reports to the Office for Nuclear Regulation in the circumstances described? If not, please give your reasoning.

Q 15b. Are there any other unusual occurrences that you believe should be captured by this regulation?

Reporting of nuclear transformations

113. Regulation 18 requires an operator of a nuclear reactor to provide calculated data on nuclear transformations in the inventory change report when irradiated fuel is removed from the reactor. Its purpose is to describe how reactor operators should describe the transformation of nuclear material in their reactors into other elements and isotopes.

114. Regulation 18(2) provides that the Office for Nuclear Regulation may specify alternative procedures for recording and reporting nuclear transformations in the relevant particular safeguard provisions.

115. Regulation 18 reflects Article 16 of EU Regulation 302/2005.

Q 16. Do you agree that regulation 18 is clear about how operators should describe the transformation of nuclear material in their reactors? If not, please say why and what improvements should be made?

Additional obligations arising from relevant international agreements

116. The effect of Regulation 19 is that an operator must provide additional information to the Office for Nuclear Regulation about qualifying nuclear material, if this is required in a nuclear cooperation agreement which the UK has entered into with a third country and which is included in the definition of “relevant international agreement” set out in regulation 45.

117. Regulation 19 provides that, when the UK enters into a “relevant international agreement”, as defined in regulation 45, the Office for Nuclear Regulation must publish a notice which identifies the obligation codes to be used by an operator, in respect of that agreement, should it be relevant to the particular case, when they submit the relevant forms to the Office for Nuclear Regulation. The relevant forms are the initial book inventory, the inventory change report, a material balance report and physical inventory listing and advance notification of imports or exports.

118. The UK is currently in discussions with those countries which require a nuclear cooperation agreement to be in place before civil nuclear trade can take place. These nuclear cooperation agreements will be included within the definition of relevant international agreement.

119. The Agreement which the UK enters into with the International Atomic Energy Agency, together with its Additional Protocol, will also be included in the definition of relevant international agreement. Regulation 19 does not apply because the draft Nuclear Safeguards Regulations, as a whole, are written with the aim of ensuring that an operator provides the Office for Nuclear Regulation with the information which the

Office for Nuclear Regulation will then pass, on behalf of the UK, to the International Atomic Energy Agency. As a result, further references to the Agreement with the International Atomic Energy Agency and its Additional Protocol in regulation 19 are unnecessary.

120. Once the Office for Nuclear Regulation has published the obligation codes, in respect of a relevant international agreement, an operator is then required to use the obligation codes to identify any qualifying nuclear material that is subject to such an agreement in the initial book inventory, any inventory change reports, material balance reports, physical inventory listings and advance notice of intended imports and exports.

121. Regulation 19 only considers a relevant international agreement in the context of information to be supplied to the Office for Nuclear Regulation concerning qualifying nuclear material. There are further provisions in Chapter XIV of the draft Nuclear Safeguards Regulations which concern the provision of information to the Secretary of State about certain non-nuclear material and other items which may be covered by a relevant international agreement.

122. Regulation 19(3) allows for obligations under a relevant international agreement to be reported through pool accountancy, unless that is specifically prohibited by the agreement.

123. Regulation 19 reflects Article 17 of EU Regulation 302/2005.

Q 17. Do you agree that regulation 19 on relevant international agreements in relation to Nuclear Cooperation Agreements delivers its purpose of requiring the UK to account for qualifying nuclear material covered by these agreements? If not, please state why.

Weight units and categories of qualifying nuclear materials

124. Regulation 20 sets out the method required for expressing weight quantities of qualifying nuclear materials, when information is provided under the draft Nuclear Safeguards Regulations. It also specifies how corresponding accounting records

should be kept. Its purpose is to ensure a consistent approach to measurement, categorisation and reporting of materials across all operators.

125. The total weight of the elements uranium, thorium and plutonium should be included, and in addition, for enriched uranium, the total weight of the fissile isotopes should be specified.

126. Unless otherwise specified in the particular safeguard provisions, separate reports must be provided for each material balance area, and each inventory change report or physical inventory listing must provide separate line entries for the six categories of qualifying nuclear material specified.

127. Regulation 20 reflects Article 18 of EU Regulation 302/2005.

Q 18. Do you agree that regulation 20 on weight units and categories of qualifying nuclear materials ensures a consistent approach to reporting across all operators? If not, please give your reasons and suggestions for improvements.

Chapter III – Exports and Imports

Exports

128. Regulation 21 requires an operator to give advance notice to the Office for Nuclear Regulation if any qualifying nuclear material is exported outside the UK where the consignment exceeds one effective kilogram. The form is set out in Part 5 of Schedule 1 to the draft Nuclear Safeguards Regulations.

129. This requirement also applies to multiple consignments to the same state exceeding one effective kilogram in any consecutive period of twelve months.

130. The advance notification must reach the Office for Nuclear Regulation as far in advance as possible of the expected arrival of the qualifying nuclear material, but at the latest at least 7 days before the material is packed for transfer.

131. Regulation 21(3) provides that, if required for reasons of physical protection, special arrangements may be agreed between the operator and the Office for Nuclear Regulation for the transmission and form of the notification.

132. Regulation 21 does not apply to ores nor to waste, which are dealt with in regulation 28 and 30.

133. Regulation 21 is a requirement of the Voluntary Offer Agreement with the International Atomic Energy Agency and reflects Article 20 of EU Regulation 302/2005. The form set out in Part 5 of Schedule 1 to the draft Nuclear Safeguards Regulations is drawn from Annex VI to EU Regulation 302/2005.

Imports

134. Regulation 22 requires an operator to give advance notification to the Office for Nuclear Regulation if any qualifying nuclear material is imported into the UK where the consignment exceeds one effective kilogram of qualifying nuclear material. The form is set out in Part 6 of Schedule 1 to the draft Nuclear Safeguards Regulations.

135. This requirement also applies to multiple consignments from the same state exceeding one effective kilogram in any consecutive period of twelve months.

136. The advance notification to the Office for Nuclear Regulation must be as far in advance as possible of the expected arrival of the qualifying nuclear material, but at the latest must be received by the Office for Nuclear Regulation at least 4 days before the material is unpacked. If so required for reasons of physical protection, special arrangements concerning the form and transmission of the notification may be agreed upon with the Office for Nuclear Regulation by the operator.

137. This regulation does not apply to ores nor to waste.

138. Regulation 22 is a requirement of the Voluntary Offer Agreement and reflects Article 21 of EU Regulation 302/2005. The form set out in Part 6 of Schedule 1 to the draft Nuclear Safeguards Regulations is drawn from Annex VII to Regulation 302/2005.

Loss or delay during transfer

139. Regulation 23 requires an operator to submit a special report to the Office for Nuclear Regulation, under regulation 16, as soon as the operator becomes aware that qualifying nuclear material has been, or appears to have been, lost, or has been considerably delayed during transfer.

140. Regulation 23 reflects Article 22 of EU Regulation 302/2005.

Communication of change of date

141. Regulation 24 requires an operator to inform the Office for Nuclear Regulation without delay of specific date changes for packing before transfer, transport or unpacking associated with the export or import of qualifying nuclear material already notified, together with revised dates, if known. This is not necessary where a special report has been submitted under regulation 16.

142. Regulation 24 reflects a requirement of the Voluntary Offer Agreement and reflects Article 23 of EU Regulation 302/2005.

Q 19. Do you agree that regulations 21 to 24 on exports, imports, loss or delay during transport and communication of change of date, together with the forms set out in Parts 5 and 6 of Schedule 1, are clear and effective? If not, please be specific about why and about anything else which should be included.

Chapter IV – Carriers and Temporary Storage Agents

Carriers and temporary storage agents

143. Regulation 25 places requirements on a person or undertaking, within the UK who is involved in transporting or temporarily storing during transport, nuclear materials to accept or hand over the material only against an appropriately signed and dated receipt.

144. The receipt must state the names of the parties handing over and receiving the material and indicate the quantities carried as well as the category, form and

composition of the material. These records must be retained by the contracting parties for at least five years.

145. Regulation 25 reflects Article 26 of EU Regulation 302/2005. It is proposed to maintain this requirement.

Intermediaries

146. Regulation 26 places requirements on a person who is an intermediary taking part in the conclusion of a contract for the supply of qualifying nuclear materials, such as authorised agents, brokers or commission agents, to keep all records relating to the transactions performed by them or on their behalf for at least five years after the expiry of the contract.

147. Regulation 26 reflects Article 28 of EU Regulation 302/2005 and again, the Government is proposing to maintain this requirement.

Q 20. Do you agree that regulations 25 and 26 on carriers and temporary storage agents, and intermediaries should be included in the domestic regulations? Please elaborate on the reasons for your answer.

Chapter V – Ores

Ore producers and shipment/exports

148. Regulation 27 sets out the record keeping duties on an operator of a qualifying nuclear facility whose principal activity is the extraction of ores in the UK.

149. Regulation 28 sets out the requirements concerning the dispatch of ores from the qualifying nuclear facility. The form set out in Part 7 of Schedule 1 to the draft Nuclear Safeguards Regulations is to be used.

150. Regulations 27 and 28 reflect Article 24 and 25 of EU Regulation 302/2005. The form set out in Part 7 of Schedule 1 to the draft Nuclear Safeguards Regulations is drawn from Annex VIII to Regulation 302/2005.

151. While it is recognised that the mining of ore does not currently take place in the UK and is it unlikely to do so for the foreseeable future, it is proposed to retain these regulations to maintain broad equivalence with EU Regulation 302/2005 and in case of any change in the current position.

Q 21. Do you agree that regulations 27 and 28 on ores, and the form in part 7 of Schedule 1, should be included in the domestic regulations? Please elaborate on the reasons for your answer.

Chapter VI – Waste

Initial stock list and accounting records for conditioned and retained waste

152. The intention of regulation 29 is to provide a special regime for qualifying nuclear material which is treated or stored by an operator in the form of retained or conditioned waste. This is because qualifying nuclear material in this form is more difficult to recover and therefore misuse.

153. Regulation 29 provides that the basic accounting requirements in regulations 10 to 15 do not apply to qualifying nuclear material in the form of conditioned or retained waste at a qualifying nuclear facility. Instead, regulation 29(1) provides for a reduced number of reporting requirements on an operator.

154. Regulation 29 reflects Articles 30 and 31 of EU Regulation 302/2005.

Transfers of conditioned waste

155. Regulation 30 requires an operator of a qualifying nuclear facility to use the form set out in Part 9 of Schedule 1, to report exports, and the form in set out in Part 10 to report certain imports of conditioned waste.

156. Regulation 30 reflects Article 32 of EU Regulation 302/2005. The forms set out in Part 9 and 10 of Schedule 1 to the draft Nuclear Safeguards Regulations are drawn from the forms set out in Annexes XIII and XIV to EU Regulation 302/2005.

Q 22. Do you agree that regulations 29 and 30 on waste - and the forms in parts 9 and 10 of Schedule 1 – are clear and effective? If not, please give your reasoning.

Chapter VII – Qualifying Nuclear Facility with Limited Operation and an Exemption

Declaration of basic technical characteristics, stock list and accounting records for a qualifying nuclear facility with limited operation

157. Regulation 31 provides that an operator of a qualifying nuclear facility with limited operation may apply to the Office for Nuclear Regulation for special provisions to apply to that qualifying nuclear facility using the form set out in Part 11 of Schedule 1.

158. A qualifying nuclear facility with limited operation is defined in regulation 2 as a qualifying nuclear facility:

- a) in which less than one effective kilogram of qualifying nuclear material is produced, processed, stored, handled, disposed of or otherwise used; and
- b) which is not a reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant, nor a separate storage installation.

159. The terms reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, isotope separation plant and storage installation are not expressly defined in the draft Nuclear Safeguards Regulations. This is because they are technical terms, the meaning of which are generally understood in the industry. We set out a discussion of these terms at the end of this consideration of Regulations 31 and 32, the text of which is drawn from the International Atomic Energy Agency's Safeguards Glossary published in 2001.

160. If the operator of a qualifying nuclear facility with limited operation wishes to apply to the Office for Nuclear Regulation for regulation 31 to apply to it, the operator must send Form 11, the basic technical characteristics of the facility (section I-H), and an initial stock list, to the Office for Nuclear Regulation.

161. The purpose of regulation 31 is to operate a proportionate safeguards regime for those operators who use qualifying nuclear material in a manner that presents low proliferation risks (e.g. as shielding). In the context of Euratom Regulation 302/2005, detailed arrangements have been agreed between the Commission and the Office for Nuclear Regulation concerning the treatment of certain operators.
162. This regulation seeks to formalise and build on this good practice by allowing certain holders of nuclear material to apply to the Office for Nuclear Regulation under regulation 31, which provides the Office for Nuclear Regulation with the power to consider requests and, where appropriate, agree that the operator may comply with the requirements of Article 31, instead of those requirements which are set out in regulations 4, 10 to 15, and 21 to 24.
163. It is anticipated that operators who may be permitted to comply with regulation 31 could be, for example, research establishments, universities, museums, and those who use depleted uranium for shielding purposes. However, each application will be carefully considered on its own merits.
164. Certain qualifying nuclear facilities will not be suitable for consideration in connection with regulation 31. These include a reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant and a separate storage installation.
165. If an operator applies for Regulation 31 to apply to it, the Office for Nuclear Regulation will consider the application. An operator to whom regulation 31 applies will still have to maintain accountancy and control of qualifying nuclear material, and the Office for Nuclear Regulation retains the power to revoke the application of regulation 31 and reapply full safeguards where necessary.
166. The Office for Nuclear Regulation may grant an operator's request and must inform the operator, in writing, of their decision within 60 days of receiving from the operator the documents which are referred to in paragraph 31(2).
167. An operator which is permitted to comply with the limited operation regime must –

1. inform the Office for Nuclear Regulation of a change in the basic technical characteristics of the qualifying nuclear facility within 30 days after the completion of the change;
2. take a physical inventory of the qualifying nuclear material each year and inform the Office for Nuclear Regulation of the results of this inventory within 30 days of it being taken;
3. inform the Office for Nuclear Regulation of any change to the inventory of qualifying nuclear material according to the format and within the timescale specified by the Office for Nuclear Regulation to the operator in writing.

168. The Office for Nuclear Regulation may, by written notice to the operator, impose additional requirements concerning the form and frequency of the reports.

169. Regulation 31(6) provides that the Office for Nuclear Regulation may withdraw their consent granted under paragraph 3. This would follow a review by the Office for Nuclear Regulation of the compliance by the operator with the requirements set out in paragraph 4, or imposed under paragraph 5, and the activities of the operator and of the relevant qualifying nuclear facility.

Exemption

170. As a separate issue, regulation 32 provides a 'de minimis' exemption to the regulations, which recognises that nuclear material can be used to create products from which it is practically impossible to recover the nuclear material. Examples of such end products include decorative glazes in ceramics, colouring in glass, the coating of filaments for fluorescent lamps, pigments for paints, and gas mantles. Regulation 32 reflects Article 1 of EU Regulation 302/2005.

Q 23a. Do you agree that regulations 31 and Form 11 provide an appropriate regime for operators of a qualifying nuclear facility with limited operation? If not, please state your reasons.

Q 23b. Do you agree that the meanings of reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, isotope separation plant and storage

installation, are technical terms which do not need to be defined in the Nuclear Safeguards Regulations? If not, what are your reasons?

Q 23c. Do you agree that the exemption set out in Regulation 32 is appropriate? If not, what are your reasons?

Reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, isotope separation plant and separate storage installation.

171. As mentioned above, it is not proposed to define these terms in the draft Nuclear Safeguards Regulations as they are technical terms, the meaning of which is generally understood in the nuclear industry.

172. The meaning of the terms is considered in the International Atomic Energy Agency Safeguards Glossary 2001 Edition⁹ as set out below. The text of this glossary refers to 'installation' rather than 'qualifying nuclear facility', which is the term used in the Nuclear Safeguards Act.

a. Reactor – any device in which a controlled, self-sustaining fission chain reaction can be maintained. Reactors are the most numerous type of nuclear facility where safeguards are applied. Depending on their power level and purpose, reactors are subdivided into power reactors, research reactors and critical assemblies.

b. Critical facility – an installation used for research and consisting of a configuration of nuclear material which, by means of appropriate controls, can sustain a chain reaction. It is distinguishable from a research reactor or a power reactor in that it normally has no special provision for cooling, is not shielded for high power operation, has a core designed for flexibility of arrangement, and uses fuel in a readily accessible form which is frequently repositioned and varied to investigate various reactor concepts.

⁹ <https://www-pub.iaea.org/books/iaeabooks/6570/IAEA-Safeguards-Glossary>

Please note that this is referred to as a 'critical assembly' in the International Atomic Energy Agency Safeguards Glossary.

- c. Conversion plant** – an installation used for converting the chemical composition of nuclear material so as to facilitate its further use or processing, in particular to provide feed material for isotope separation, natural uranium ore concentrates or uranium oxides from reprocessing are converted into uranium hexafluoride (UF₆). To produce material for fuel fabrication, the following conversions are carried out: U₃O₈ or UF₆ to uranium dioxide (UO₂); U or Pu nitrate to oxide; and U or Pu oxides to metal. Operations to convert UF₆ to UO₂ normally are performed in conversion sections of uranium fuel fabrication plants, while conversions of U or Pu nitrates to oxides are normally performed in conversion sections of reprocessing plants or in mixed oxide (MOX) fuel fabrication plants.
- d. Fabrication plant** – an installation for manufacturing fuel elements or other reactor components containing nuclear material. The associated conversion, storage and analytical sections are usually included as parts of the fabrication plant. For safeguards purposes, fuel fabrication plants are further categorised according to the nuclear material handled: natural uranium, depleted uranium, low enriched uranium (LEU), high enriched uranium (HEU), thorium, mixed plutonium-uranium oxide (MOX) and plutonium.
- e. Reprocessing plant** – an installation for the chemical separation of nuclear material from fission products, following dissolution of spent fuel. The installation may also include the associated storage, head-end (cutting and dissolution) operations, conversion and analytical sections, a waste treatment facility, and liquid and solid waste storage. Reprocessing involves the following steps: fuel receipt and storage, fuel decladding and dissolution, separation of uranium and plutonium and possibly other actinides (e.g. americium and neptunium) from fission products, separation of uranium from plutonium, and purification of uranium and plutonium. Once purified, uranium nitrate and

plutonium nitrate may be converted, respectively, to UO_2 and PuO_2 powder at the reprocessing plant.

f. Isotope separation plant – an installation for the separation of isotopes of uranium to increase the abundance ratio of ^{235}U . The main isotope separation processes used in enrichment plants are gas centrifuge or gaseous diffusion processes operating with uranium hexafluoride (UF_6) (which is also the feed material for aerodynamic and molecular laser processes). Other isotope separation processes include electromagnetic, chemical exchange, ion exchange, and atomic vapour laser and plasma processes.

g. Separate storage installation – An installation designed to store nuclear material.

Chapter VIII – Civil Activities

Withdrawal from civil activities

173. Regulation 33 prohibits an operator from withdrawing qualifying nuclear material from civil activities except with the prior written consent of the Office for Nuclear Regulation. This is a key obligation that the UK has undertaken though its current Voluntary Offer Agreement and will undertake in its future Voluntary Offer Agreement.

174. Regulation 33 requires an operator to provide the Office for Nuclear Regulation with advance notification of any proposed withdrawal from civil activities at least 14 days before the withdrawal occurs.

175. The form for advance notification of intended withdrawal of qualifying nuclear material from civil activities is set out in Part 12 of Schedule 1 to the Regulations.

176. There are only limited circumstances in which operators may be allowed to withdraw qualified nuclear material from civil activities, in accordance with UK policy on this matter. The Office for Nuclear Regulation publishes information on these

withdrawals on its website, demonstrating the UK's policy commitment to make only very limited use of our right to such withdrawals is being met.

Qualifying nuclear facilities which are used partly for civil activities

177. The Regulations do not apply to anything done for defence purposes, within the meaning of Section 70 of the Energy Act 2013.

178. Regulation 34, however, provides that in the case of a qualifying nuclear facility, which is partly used for civil activities and partly for defence purposes, the Regulations apply to the qualifying nuclear material which is used for civil activities.

179. Regulation 33 is a simplified version of Article 34 of EU Regulation 302/2005, which was drafted to accommodate the needs of different Member States.

Q 24. Do you have any comments on regulations 33 and 34 - and the form at Part 12 of Schedule 1?

Chapter IX – Communication

Communication with the Office for Nuclear Regulation

180. Regulation 35 sets out how operators are required to communicate with the Office for Nuclear Regulation by means of the post, electronic communications or as otherwise agreed.

181. The draft Nuclear Safeguards Regulations are drafted on the basis that an operator will submit forms to the Office for Nuclear Regulation either by post or electronically and the forms are broadly based on those attached to the EU Regulation 302/2005.

182. We understand that the Office for Nuclear Regulation is in the process of developing a Safeguards Information Management and Reporting System (SIMRS) to receive and process communications from operators.

183. It may be that the final draft of the Nuclear Safeguards Regulations will make some provision for an operator to supply information to the Office for Nuclear Regulation through SIMRS.

Q 25. Do you have any suggestions about anything that should be added to regulation 35 on communication with the Office for Nuclear Regulation?

Chapter X – Safeguards Equipment

Safeguards equipment

184. Regulation 36 provides that when the Office for Nuclear Regulation makes a written request, an operator must install suitable safeguards equipment in the relevant qualifying nuclear facility.

185. Safeguards equipment is defined in regulation 2 and can include surveillance cameras; seals and remote monitoring equipment.

186. In addition, the particular safeguard provisions for the qualifying nuclear facility may impose particular requirements on an operator in relation to safeguards equipment.

Access to safeguards equipment

187. Regulation 37 provides that an operator must permit the Office for Nuclear Regulation to have access to the safeguards equipment in a qualifying nuclear facility.

Interference with safeguards equipment

188. Regulation 38 prohibits any person, unless permitted by the Office for Nuclear Regulation, from taking action which results in any safeguards equipment in a qualifying nuclear facility providing information on qualifying nuclear material that is significantly different from that which would have been provided if the action had not taken place. A breach of this requirement constitutes an offence under Regulation 43.

Q 26. Do you agree that regulations 36 to 38 on the installation of safeguards equipment for nuclear material accountancy and surveillance provides the Office for Nuclear Regulation with appropriate powers to gain independent confirmation of information generated by an operator through suitable safeguards equipment? If not, please explain why.

Chapter XI – The Office for Nuclear Regulation

Inspections by the Office for Nuclear Regulation

189. Regulation 39 permits the Office for Nuclear Regulation to carry out inspections.

190. Regulation 39 permits a broad range of activities by the Office for Nuclear Regulation, ranging from record examination, through verification of instruments and equipment, surveillance and containment, to sample taking.

Publication of information by the Office for Nuclear Regulation

191. Regulation 40 places a duty on the Office for Nuclear Regulation to publish on its website, and to update as necessary, information relating to:

- (a) withdrawals of qualifying nuclear material from safeguards during the preceding calendar year; and
- (b) inventories of civil plutonium and uranium in the UK as at the end of each calendar year.

Office for Nuclear Regulation to provide an annual report to the Secretary of State

192. Regulation 41 requires the Office for Nuclear Regulation to report annually on how the Nuclear Safeguards Regulations have been applied in the previous twelve months.

Provision of information to the Agency

193. Regulation 42 details what information the Office for Nuclear Regulation must submit to the International Atomic Energy Agency and also requires that requests for clarification or further information be responded to.

194. The purpose of this regulation is to ensure that the UK complies with its obligations to the International Atomic Energy Agency under its new Agreement.

Q 27. Do you have any comments on regulations 39 to 42 on the activities of the Office for Nuclear Regulation as the UK's safeguards regulator?

Chapter XII – Offences

195. The Euratom regime is currently operated in the UK to allow for graduated sanctions to be imposed in relation to non-compliance. These sanctions range from a warning, through the withdrawal of benefits or appointing an administrator for up to 4 months, to partial or total withdrawal of source or special fissile material. The ultimate sanction is possible prosecution.

196. The draft Nuclear Safeguards Regulations adopt a similar graduated and proportionate approach.

Enforcement

197. The Energy Act provides that a failure to comply with regulations, or with a written requirement issued by the Office for Nuclear Regulation under regulations, may result in the Office for Nuclear Regulation issuing an enforcement notice under Part 2 of Schedule 8 of the Energy Act 2013.

198. As the nuclear regulator, the Office for Nuclear Regulation will take enforcement action when operators are found to be failing to meet the nuclear safeguards standards as well as the standards for safety and security they enforce. To do this they have been provided with a range of enforcement powers which range from providing advice to instigating court proceedings.

199. The purpose of the Office for Nuclear Regulation enforcement is to:

- a. ensure that operators take action to deal immediately with serious risks;
- b. promote, achieve and sustain compliance with the law;
- c. ensure that operators who breach regulatory requirements, and directors or managers who fail in their responsibilities, may be held to account, which may include bringing alleged offenders before the courts in England and Wales, or recommending prosecution to the Procurator Fiscal Service in Scotland and the Public Prosecution Service in Northern Ireland.

200. In this context, enforcement can range from advice by inspectors, warnings, letters, notices, use of powers under nuclear legislation, to prosecutions. The Office for Nuclear Regulation will make use of the wide range of tools at its disposal to secure compliance with the law and to ensure a proportionate response to criminal offences.

Offences

201. Regulation 43 deals with serious breaches and provides that failure to comply with certain of the draft Nuclear Safeguards Regulations constitutes an offence. Failure to comply with the regulations below would have a significant impact on the ability of the Office for Nuclear Regulation, or the Secretary of State, to fulfil the UK's international obligations under relevant international agreements. It would also prevent the Office for Nuclear Regulation from gaining assurance and verification from operators that the information it provides to the International Atomic Energy Agency is correct and complete.

202. The relevant regulations, which apply to an operator, are:

- (1) 3 (requirement to declare basic technical characteristics);
- (2) 4 (requirement to submit a programme of activities);
- (3) 6 (requirement to maintain a system of accountancy and control);
- (4) 7(1) (requirement to submit an accountancy and control plan);

- (5) 9(1) (requirement to operate an approved accountancy and control plan);
- (6) 10 (requirement to keep operating records);
- (7) 11 (requirement to keep accounting records);
- (8) 12 (requirement to provide accounting reports to the Office for Nuclear Regulation in accordance with regulations 13 to 20);
- (9) 33(1) (withdrawal from civil activities); and
- (10) 47 (notification of the Secretary of State).

203. In addition, under regulation 38, if any person interferes with safeguards equipment, unless permitted by the Office for Nuclear Regulation, that is an offence. In this regulation, we wish to capture ‘persons’ (as distinct from an operator) who may potentially interfere with safeguards equipment.

204. An offence under regulation 43(1) may be triable either summarily or on indictment. An offence is punishable –

- a. On conviction on indictment with imprisonment for a term not exceeding 2 years or a fine (or both), and
- b. On summary conviction with imprisonment for a term not exceeding six months or, in England and Wales, a fine or, in Scotland or Northern Ireland, a fine not exceeding £20,000, or both.

Q 28a. Do you agree that regulation 43 delivers our aim of proportionality on offences? If not, please state what your reasons for this are.

Q 28b. What suggestions do you have to improve regulation 43 and what is your reasoning for this?

Chapter XIII – Definitions for the purpose of the Nuclear Safeguards Act

Fissionable Material

205. In regulation 44 the Secretary of State specifies what constitutes “fissionable material” for the purposes of the definition of “qualifying nuclear material”, which is contained in section 76A(6) of the Nuclear Safeguards Act, as

- (a) plutonium-239,
- (b) uranium-233,
- (c) uranium containing the isotopes 235 or 233 or both, in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature, and
- (d) any material containing one or more of the materials described in paragraphs (a) to (c).

206. This definition of ‘fissionable material’ is based on the definition of “special fissile material” which is set out in paragraphs 1 and 2 of Article XX of the International Atomic Energy Agency Statute, which is in the following form:

“ARTICLE XX: Definitions

As used in this Statute:

207. (1) The term "special fissionable material" means plutonium-239; uranium- 233; uranium enriched in the isotopes 235 or 233; any material containing one or more of the foregoing; and such other fissionable material as the Board of Governors shall from time to time determine; but the term "special fissionable material" does not include source material.

208. (2) The term "uranium enriched in the isotopes 235 or 233" means uranium containing the isotopes 235 or 233 or both in an amount such that the abundance

ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature.”

Q 29. Do you agree with the proposed definition of “fissionable material” set out in regulation 44? If not, what suggestions do you have to improve it?

Relevant international agreements

209. In regulation 45, the Secretary of State specifies six agreements as a “relevant international agreement” for the purposes of section 112(1A) of the Nuclear Safeguards Act.

210. The six agreements are:

- (1) The agreement made on 7 June 2018 between the United Kingdom and the International Atomic Energy Agency for the application of safeguards in the United Kingdom in connection with the Treaty on the Non-Proliferation of Nuclear Weapons;
- (2) The Additional Protocol signed at Vienna on 7 June 2018 additional to the agreement mentioned in paragraph (a);
- (3) The agreement made on 4 May 2018 between the United States of America and the United Kingdom for cooperation in peaceful uses of nuclear energy;
- (4) The agreement made on [] between the United Kingdom and Canada for cooperation in peaceful uses of nuclear energy;
- (5) The agreement made on [] between the United Kingdom and Australia for cooperation in peaceful uses of nuclear energy; and
- (6) The agreement dated 25 February 1998 between the Government of Japan and the United Kingdom for co-operation in the peaceful uses of nuclear energy.

211. The reason why the Secretary of State defines these agreements is twofold. First, so that Regulation 19 (Additional requirements arising from relevant international agreements) can refer to them. Second, so that regulations 46 to 51, which are considered below, can require the supply of certain information to the Secretary of State.

212. Some of these agreements have been concluded and some are subject to ongoing discussions, however significant progress has been made and it is anticipated that the wording will be agreed before the Nuclear Safeguards Regulations are made.

213. The first two agreements which are referred to are the Agreement and Additional Protocol with the International Atomic Energy Agency.

214. As a member of Euratom, the UK currently has in place two Safeguards Agreements: a Voluntary Offer Agreement and an Additional Protocol to the Voluntary Offer Agreement.

215. The current agreements are trilateral between the International Atomic Energy Agency, the UK and Euratom. The Voluntary Offer Agreement was made in 1978 and the Additional Protocol in 2005.

216. As a result of the UK's intended withdrawal from Euratom, the UK's current trilateral agreements with the International Atomic Energy Agency, will cease to be appropriate.

217. The UK has entered into new bilateral safeguards agreements with the International Atomic Energy Agency in connection with the Treaty on the Non-proliferation of Nuclear Weapons, which detail the UK's future safeguards obligations. These were signed by the UK and the International Atomic Energy Agency on 7 June 2018.

218. The new Voluntary Offer Agreement and Additional Protocol are in substantially the same form as the trilateral agreements entered into in 1978 and 2005. The proposed amendments are minor. They are briefly considered in the context of Part I of Schedule 3.

219. The last four agreements refer to Nuclear Cooperation Agreements. A Nuclear Cooperation Agreement is a legally binding, bilateral Agreement negotiated between two States setting out their intention to, and framework for, cooperating in the civil nuclear sector. Every Nuclear Cooperation Agreement is different and is negotiated on a case-by-case basis. Nuclear Cooperation Agreements place a range of

obligations on the use of nuclear material, non-nuclear material, equipment, components, technology and other items as agreed by the parties.

220. Nuclear Cooperation Agreements are only a legal requirement for civil nuclear trade when a country has a domestic legal or policy requirement for Nuclear Cooperation Agreements to be in place before such trade with other countries can be permitted. Although most countries do not require Nuclear Cooperation Agreements (including the UK and Euratom), four of the UK's major trading partners do (the priority countries).

Q 30. Is the proposed definition of “relevant international agreement” set out in regulation 45 clear? If not, what suggestions do you have to improve it?

Chapter XIV – Notification to the Secretary of State

221. In general, the draft Nuclear Safeguards Regulations require an operator of a qualifying nuclear facility to provide safeguards information to the Office for Nuclear Regulation, in respect of qualifying nuclear material. These aspects will be essential to ensure that the UK can comply with international safeguards obligations on qualifying nuclear material contained in agreements with the International Atomic Energy Agency and with the priority countries in the area of qualifying nuclear material.

222. In addition to these obligations, the relevant international agreements listed in regulation 45 (c) to (f) contain obligations which extend to certain materials, which are not qualifying nuclear material and other items. Chapter XIV requires information on non-nuclear material and certain items of equipment to be sent to the Secretary of State (rather than to the Office for Nuclear Regulation) to ensure reporting and safeguards obligations in these agreements can be complied with.

223. These relevant international agreements also contain obligations which extend beyond nuclear safeguards and cover areas such as nuclear security. The draft Nuclear Safeguards Regulations implement the safeguards and reporting aspects but

do not address the other obligations, which are implemented through other domestic legislation.

The Secretary of State may issue a written notice

224. Regulation 46 permits the Secretary of State to provide an operator with a written notice confirming that a relevant international agreement, described in regulation 45(c) to (f), will apply to a proposed import.

225. It is anticipated that there will be correspondence between the UK and the other party to a relevant international agreement prior to an import which is subject to such an agreement. The Secretary of State may then issue a written notice to the proposed recipient of the imported item confirming that it will become subject to a relevant international agreement.

Notification of holding, receipt, production and transfer

226. Regulation 47 requires an operator of a qualifying nuclear facility or other person to notify the Secretary of State of –

- a. a holding, by that operator or person, of a particular item on the commencement date;
- b. the receipt, by that operator or person, on or after the commencement date, of a particular item from the territory of a Party to a relevant international agreement, in respect of which the Secretary of State has issued a written notice;
- c. the production, processing, derivation or fabrication, by the operator or other person, of a particular item from another particular item or from qualifying nuclear material; and
- d. the proposed transfer, by the operator of a qualifying nuclear facility or other person, of the particular item within or outside the United Kingdom together with details of the transferee and their location.

227. The above reporting provisions are intended to ensure that the UK is able to comply with the safeguards obligations included within the relevant international agreements listed in regulation 45 (c) to (f) and will allow the UK to provide an annual inventory of obligated items to relevant third countries.

Time period for and content of notification and confirmation

228. Regulation 48 provides that a notification under regulation 47 must be in writing and, in the case of –

- a. paragraph 47(a), sent to the Secretary of State within 60 days of the commencement date;
- b. paragraphs 47(b) and (c), sent to the Secretary of State within 5 days of the occurrence of the event described in the relevant paragraph; and
- c. paragraph 47(d), sent to the Secretary of State at least 10 days before the proposed date of transfer.

229. The notification must set out the particulars of the person's name and proper address, a description of the matter described in the relevant paragraph and be sent by post or delivered to BEIS at its Headquarters address or sent by means of an electronic communications network to the designated BEIS email address.

230. The Secretary of State may request an operator or other person, in writing, to supply further details, explanations or clarifications of the matters set out in a notice required by this regulation, within 15 days of the receipt of the request from the Secretary of State.

Notification of change

231. Regulation 49 provides that an operator or other person, who has sent a notification to the Secretary of State under regulation 47 or 48(3), must inform the Secretary of State within 15 days of any change in the information notified.

Continued application

232. Regulation 50 provides that regulations 47 to 49 continue to apply to a particular item in the United Kingdom until the particular item is –

- a. no longer usable for any nuclear activity relevant for nuclear safeguards;
- b. irrecoverable for processing into a form in which it is usable for nuclear activity;
or
- c. the subject of a written confirmation from the Secretary of State to the person holding the particular item that regulation 47 no longer applies to the particular item, with effect from a specified date, following an agreement between the UK and the Party to the relevant international agreement.

233. This reflects the provisions and requirements within the relevant international agreements.

Interpretation

234. Regulation 51 sets out various definitions for the purposes of Chapter XIV. Some of these definitions may be subject to variation in the final version of the Nuclear Safeguards Regulations, both as to form and content.

235. “By product material” and “equipment” are defined.

236. “Particular item” is defined as meaning:

- a. By product material, non-nuclear material, equipment and technology, which -
 - i. is the subject of a relevant international agreement described in regulation 45 (c) – (f); or
 - ii. on the day before X date, was the subject of an agreement, between a Party to a relevant international agreement, described in regulation 45 (c) – (f), and either EURATOM or the United Kingdom; and

- b. tritium and tritium related technology if the relevant international agreement is with Canada.

237. “Non-nuclear material” is defined as meaning deuterium, heavy water and nuclear grade graphite. “Technology” and “tritium” are also defined.

Q 31a. Do you agree with the proposed method of implementing the provisions of “relevant international agreements” contained within Chapter XIV? If not, what suggestions do you have to improve it?

Q 31b. Do you have any comments on the proposed regulations 46 to 51?

Chapter XV – General

Extent

238. Regulation 52 provides that the draft Nuclear Safeguards Regulations apply to England and Wales, Scotland and Northern Ireland.

Questionnaire and forms

239. Regulation 53 gives effect to Schedule 1, which contains the Questionnaire in Part 1 and the Forms in Parts 2 to 12. For more detail, see text on Schedule 1 below.

The components of the accountancy and control system

240. Regulation 54 gives effect to Schedule 2, which sets out the components of the accountancy and control system. The content of Schedule 2 is considered in more detail below.

General consequential and supplementary amendments of the Nuclear Safeguards Act 2000 and related legislation

241. Regulation 55 gives effect to Schedule 3 Part 1, which sets out the general consequential and supplementary amendments of the Nuclear Safeguards and Electricity (Finance) Act 1978, the Nuclear Safeguards Act 2000 and the Nuclear

Safeguards (Notification) Regulations 2004. The content of Schedule 3 Part I is considered in more detail below.

General consequential and supplementary amendments

242. Regulation 56 gives effect to Part II of Schedule 3, which will set out any consequential and supplementary amendments which are identified.

Q 32. Do you have any comments on the proposed regulations 52 to 56 and amendments set out in Part I of Schedule 3?

Transitional provisions

243. Regulation 57 gives effect to Schedule 4, which will set out the transitional provisions, which are currently being developed and are considered in more detail below.

Q 33a. Do you have any comments on the proposed transitional arrangements?

Q 33b. How could the proposed transitional provisions for Schedule 4 be improved, with particular reference to practical examples?

Q 33c. Do you consider that transitional arrangements could impose burdens on industry? If so, please provide further information in support of your answer.

Review

244. Regulation 58 sets out the review arrangements for the draft Nuclear Safeguards Regulations. The requirement for a review tends to take a standard form, and the first review must be carried out so that the first report is published within the five years from the commencement date.

Q 34. Do you have any comments on the review arrangements, set out in regulation 58?

General Description of the Schedules

Schedule 1 – Forms

245. Schedule 1 sets out the detail of the questionnaire and forms which an operator is required to submit to the Office for Nuclear Regulation at different stages.

246. The forms are derived from and are broadly similar to those included in EU Regulation 302/2005, as set out below, with some small adaptations to reflect the change from European to domestic implementation.

247. The forms set out in Parts 11 and 12 of Schedule 1 are new. The form in Part 11 is the request for qualifying nuclear facility with limited operation. The form in Part 12 of Schedule 1 is the advance notification of intended withdrawal of qualifying nuclear material from civil activities.

248. For ease of reference, each form in the draft Nuclear Safeguards Regulations indicates at the top which regulation requires it to be sent to the Office for Nuclear Regulation, and we have identified the relevant form in our discussion of the regulations.

Part 1 – Questionnaire for the declaration of the basic technical characteristics of a qualifying nuclear facility – based on Annex I to EU Regulation 302/2005;

Part 2 – Inventory Change Report – based on Annex III to EU Regulation 302/2005;

Part 3 – Material Balance Report – based on Annex IV to EU Regulation 302/2005;

Part 4 – Physical Inventory Listing – based on Annex V to EU Regulation 302/2005;

Part 5 – Advance notification of exports/shipments of qualifying nuclear material – based on Annex VI to EU Regulation 302/2005;

Part 6 – Advance notification of imports/receipts of qualifying nuclear material – based on Annex VII to EU Regulation 302/2005;

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

Part 8 – Outline programme of activities – based on Annex XI to EU Regulation 302/2005;

Part 9 – Annual report on exports/shipments of conditioned waste – based on Annex XIII to Regulation 302/2005;

Part 10 – Annual report on imports/receipts of conditioned waste – based on Annex XIV to EU Regulation 302/2005;

Part 11 – Application for an operator of a qualifying nuclear facility with limited operation – this form is influenced by the form provided in Annex IX of EU Regulation 302/2005;

Part 12 – 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 International Atomic Energy Agency, the UK will be required to provide the Agency with information about this.

Schedule 2 – Components of an Accountancy and Control System

249. Schedule 2 sets out the components of an accountancy and control system:

- A structure of material balance areas;
- Defined roles and responsibilities;
- Quality assurance and quality control measures;
- A programme of measurements;
- A measurement control programme;

- Tracking and documentation of the movement of qualifying nuclear material;
- Unambiguous identification of batches of qualifying nuclear material;
- An inventory control system;
- Anomalies management;
- Data processing procedures;
- Reporting and processing procedures;
- Receipt and shipment procedures;
- Physical inventory taking timing and procedures;
- Procedures for physical inventory taking; and
- A list of inventory items from a physical inventory taking.

Schedule 3 – Consequential Amendments

Part I - Consequential Amendments to the Nuclear Safeguards Act 2000 and Related Legislation

250. As previously mentioned, the UK has in place two major Safeguards Agreements with the International Atomic Energy Agency: A Voluntary Offer Agreement and an Additional Protocol to the Voluntary Offer Agreement. These are trilateral agreements between the International Atomic Energy Agency, the UK and Euratom. The Voluntary Offer Agreement was concluded in 1978 and the Additional Protocol in 2005.

251. 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.

252. As a result of the UK's intended withdrawal from Euratom, the UK's current trilateral agreements with the International Atomic Energy Agency, will cease to have effect.

253. The UK has now agreed, on 7 June, new bilateral safeguards agreements with the International Atomic Energy Agency in connection with the Treaty on the Non-

proliferation of Nuclear Weapons, which detail the UK's future safeguards obligations.

254. In the case of the Voluntary Offer Agreement:

(1) The definition of "Community" is removed together with the short Protocol which was attached to the back of the Agreement;

(2) Article 3 is deleted;

(3) There are various minor drafting amendments which do not constitute significant substantive amendments.

255. In the case of the Additional Protocol:

(1) Annex I, which contains the list of activities referred to in Article 2.a.(iii) of the Protocol, remains unchanged;

(2) Annex II, which contains the list of specified equipment and non-nuclear material for the reporting of exports and imports according to Article 2.a. (viii) remains unchanged;

(3) The reference to Annex III, which specified how the measures in the Protocol would be implemented by the Community and the UK, has been deleted;

(4) The definition of the "Community" has been removed from Article 18 together with references to "outside of the Community".

256. The draft Nuclear Safeguards Regulations will give effect to most of the provisions, which relate to the supply of information by an operator, set out in the new bilateral agreements with the International Atomic Energy Agency.

257. However, the Voluntary Offer Agreement and Additional Protocol contain additional requirements, concerning inspections by the International Atomic Energy Agency and additional information, which were not given effect in the UK by EU Regulation 302/2005 but were instead given effect by three pieces of UK domestic legislation: the Nuclear Safeguards and Electricity (Finance) Act 1978, the Nuclear Safeguards Act 2000 and the Nuclear Safeguards (Notification) Regulations 2004.

258. Part I of Schedule 3 identifies those provisions of the Nuclear Safeguards and Electricity (Finance) Act 1978, the Nuclear Safeguards Act 2000 and the Nuclear Safeguards (Notification) Regulations 2004 which will require minor consequential amendment to give effect to the new bilateral agreements between the UK and the International Atomic Energy Agency and, where available, sets out the text of the proposed amendments.

259. The consequential amendments set out in Part I of Schedule 3 will be made under an express power contained in the Nuclear Safeguards Act 2018.

Schedule 3 Part II

260. Schedule 3 Part II sets out the general consequential amendments to be made under the power contained in section 113 of the Energy Act 2013, as amended.

261. So far, none have been identified, apart from the fact that it is anticipated that this will repeal that part of retained EU law (within the meaning of the European Union (Withdrawal) Act), which comprises EU Regulation 302/2005. It is anticipated that EU Regulation 302/2005 will become retained EU law under the terms of the European Union (Withdrawal) Act 2018. The Nuclear Safeguards Regulations will then repeal EU Regulation 302/2005 and replace it with the new domestic regime.

Schedule 4 – Transitional Provisions

Introduction

262. In general, the new requirements as to forms and timing, which are set out in the draft Nuclear Safeguards Regulations, will apply from the commencement date. Although most of the regulations set out requirements to be complied with during the years following commencement, certain of them, such as regulation 3 (declaration of basic technical characteristics) and regulation 13 (initial book inventory) will require operators to provide material to the Office for Nuclear Regulation within 30 or 15 days of the commencement date.

263. It is intended that the transition from the requirements of EU Regulation 302/2005 to those of the Nuclear Safeguards Regulations will be smoothed by various factors including:

- (1) the majority of the forms to be submitted by an operator under the Nuclear Safeguards Regulations will be broadly similar to those required by EU Regulation 302/2005;
- (2) historically, operators have sent reports simultaneously to the Commission and the Office for Nuclear Regulation, or via the Office for Nuclear Regulation to the Commission.;
- (3) continuity of regulatory treatment, including the exemption set out in regulation 32 and the lighter regime for facilities with limited operation set out in regulation 31;
- (4) the later commencement, on the first anniversary of the general commencement date, of regulations 7 to 9 which require an accountancy and control plan; and
- (5) the limited use of transitional provisions.

264. As considered in greater detail below, it is anticipated that the circumstances in which it may be appropriate to have transitional provisions may include:

- (1) notifications provided under EU Regulation 302/2005 before the commencement date in respect of events which may occur or continue on or after the commencement date;
- (2) forms submitted after the commencement date which relate, at least in part, to events which occurred before the commencement date;
- (3) the retention of records by an operator which were required to be kept under EU Regulation 302/2005; and
- (4) continuity of treatment of certain operators eg the treatment of the particular safeguard provisions.

Context in which the transitional provisions are being developed

265. Schedule 4 will set out Transitional Provisions, designed to smooth the impact of the change from a nuclear safeguards regime governed by EU Regulation 302/2005 to that set out in the Nuclear Safeguards Regulations.

266. Formulating the transitional provisions in the current circumstances is slightly unusual for a variety of reasons, and therefore, we refer to periods of time running from “X date” without specifying the proposed date.

267. EU Regulation 302/2005 is structured on the basis that an operator generates and supplies information to the Commission, some of which is then passed on either to the International Atomic Energy Agency or to a third country with whom Euratom has a relevant treaty. The UK will enter into relevant international agreements to replace those which are currently in place between Euratom and the four priority countries.

268. In addition to provisions about the generation and supply of information, EU Regulation 302/2005 also contains various provisions which govern how the Regulation applies to a particular operator including, for example, provisions about particular safeguard provisions, exemption and derogation.

269. The transitional provisions may require some further modification in future in light of the ongoing negotiations between the UK and the European Commission as part of the UK’s withdrawal from Euratom. We are not aware of any directly relevant provisions in the Euratom negotiations at the time of the publication of this Consultation Document, but it is possible that a future decision by the European Commission, as the existing regulator, might have an impact on how the Office for Nuclear Regulation as the new regulator will be able to start regulating from the commencement date of the Nuclear Safeguards Regulations.

The Regulations to which transitional provisions may be relevant

270. Our initial consideration of the draft Nuclear Safeguards Regulations has led us to think that transitional provisions may have some relevance to one or more aspects of the regulations detailed in the paragraph which follows.

271. These are regulations 3 (declaration of basic technical characteristics); 4 (programme of activities); 5 (particular safeguard provisions); 6 (accountancy and control); 10 (operating records); 11 (accounting records); 12 (accounting reports); 13 (initial book inventory); 14 (inventory change report); 15 (material balance report and physical inventory listing); 16 (special report); 17 (unusual occurrences); 18 (reporting of nuclear transformations); 19 (additional requirements arising from relevant international agreements); 21 (exports), 22 (imports); 23 (loss or delay during transport); 24 (communication of change of date); 25 (carriers and temporary storage agents); 26 (intermediaries); 27 (accounting records for ores); 28 (ore shipment/exports); 29 (initial stock list and accounting records for conditioned and retained waste); 30 (transfers of conditioned waste); 31 (limited operation); and 32 (exemption).

272. Our initial view is that transitional provisions will have only a very minor or no relevance to the following regulations: 1(citation and commencement); 2(definitions); 7 to 9 (accountancy and control plan); 20 (weight units); 33 (withdrawal from civil activities); 34 (use partly for civil activities); 35 (communication with the Office for Nuclear Regulation); 36 to 38 (safeguards equipment); 39 to 42 (Office for Nuclear Regulation); 43 (offences); 44 and 45 (definitions for Nuclear Safeguards Act); and 46 to 51 (information to the Secretary of State) and 52 to 58 (general). In most cases this is because the relevant regulations are either time neutral, in that they contain definitions, or set out new provisions which will simply begin on the commencement date like those relating to the accountancy plan, safeguards equipment and the Office for Nuclear Regulation.

Notifications sent to the Commission before the commencement date

273. The move from EU Regulation 302/2005, to the Nuclear Safeguards Regulations gives rise to various issues which may be relevant to transitionals.

274. An operator may have sent information on new qualifying nuclear facilities, a programme of activities, an advance notification, a special report or a request for derogation to the European Commission under a provision of EU Regulation 302/2005. These are summarised in column 1 of the table set out below.

275. It is currently proposed that a transition provision will provide that, to the extent that that notification, report or request relates to an event or situation which will occur or arise on or after the commencement date, the advance notification, special report or request for derogation, which was sent to the Commission, will be treated as having been sent by the operator to the Office for Nuclear Regulation under the Nuclear Safeguards Regulations.

Relevant provision of EU Regulation 302/2005	Relevant provision of the NS Regulations
1. Information on new qualifying nuclear facilities (Article 4 and 24)	Regulations 3(2),
2. Advance notice of changes to the basic technical characteristics of a qualifying nuclear facility Article 4	Regulation 3(3),
3. Programme of activities Article 5	Regulation 4
4. Special Report Article 14	Regulation 16(1)
5. Request for derogation of qualifying nuclear material Article 19 and Annex IX	Regulation 31(2) and the form set out in Part 11 of Schedule 1
6. Advance notification of exports of qualifying nuclear material Article 20 and Annex VI	Regulation 21(1) and (2) and the form set out in Part 5 of Schedule 1
7. Advance notification of imports of qualifying nuclear material Article 21 and Annex VII	Regulation 22(1)-(3) and the form set out in Part 6 of Schedule 1
8. Advance notice of waste processing Article 31	Possibly regulation 29.

Avoidance, where possible, of the re-submission of information provided by an existing operator before the commencement date

276. The questionnaire under paragraph 3(1), which requires an operator of an existing qualifying nuclear facility to declare the basic technical characteristics to the Office for Nuclear Regulation, using the questionnaire set out in Part 1 of Schedule 1, within

30 days of the commencement date. Regulation 3(1) will also apply in the case of waste and ores.

277. We understand that arrangements are being discussed with the International Atomic Energy Agency to avoid the wholesale re-submission of the existing declarations of basic technical characteristics, which have already been provided by an existing operator under EU Regulation 302/2005.

278. We understand that one possibility which is being considered is:

(1) an operator of an existing qualifying nuclear facility will provide to the Office for Nuclear Regulation written confirmation that the latest version of the BTC information provided to the Commission is up to date; and

(2) the Office for Nuclear Regulation then sends a letter to the International Atomic Energy Agency to confirm the list of up to date BTC declarations for the new Agreement with the International Atomic Energy Agency.

279. A similar issue may arise in relation to declarations to be made in respect of operations with limited operation under regulation 31.

Regulation 13 initial book inventory

280. Regulation 13 requires an operator to send an initial book inventory to the Office for Nuclear Regulation using the form set out in Part 4 of Schedule 1 within 15 days of the commencement date.

281. It may be possible for operators to fulfil this requirement by submitting a physical inventory listing (set out in Part 4 of Schedule 1 of the regulations) that has been generated from their nuclear management system (their 'books').

282. We understand that producing a book inventory physical inventory listing within 15 days of the relevant commencement date will, for all but the most complex material balance areas, be reasonably straightforward.

283. It is further understood that, for those facilities that are designated for inspection by the International Atomic Energy Agency, there will be further discussion with the International Atomic Energy Agency on what will be required to underpin the inventory information provided by these facilities. Any transitional arrangements for these facilities will have to take account of the International Atomic Energy Agency's requirements in this regard.

Inventory change report

284. In general, under regulation 14(3), an operator must send an inventory change report to the Office for Nuclear Regulation within 15 days after the end of each month. With regard to transitional provisions, consideration is being given to what should be reported in the first reports after the Nuclear Safeguards Regulations commence.

Material balance report and physical inventory listing

285. In general, an operator must:

- (1) send a material balance report and physical inventory listing to the Office for Nuclear Regulation within 15 days of the date on which the physical inventory was taken (R15(2)); and
- (2) a physical inventory must be taken every calendar year with the period between the two successive physical inventory takings not exceeding 14 months (R15(3)).

286. With regard to transitional provisions, consideration is being given to what should be reported in the first reports after the Nuclear Safeguards Regulations commence.

Special report

287. It is proposed that, to the extent that an operator has sent a special report to the Commission, within 6 months before the commencement date, then the operator must comply with R16(3) and 17(3) in respect of that special report.

Additional requirements arising from relevant international agreements

288. After the commencement date, the relevant international agreements, as defined in regulation 45, will be with the US, Canada, Japan and Australia. It is anticipated that on commencement the Office for Nuclear Regulation will identify the obligation codes for each of these agreements as provided for in R19(2).

Continuation of existing treatment for certain operators until further consideration by the Office for Nuclear Regulation

289. Particular Safeguard Provisions: To the extent that the European Commission has made a decision under Article 6 of EU Regulation 302/2005, which applies particular safeguard provisions to an operator in respect of a facility (which may comprise a single material balance area or a group of such areas). Our initial view is that the European Commission Decision will remain in place after the commencement date.

290. It is proposed that, in due course, the Office for Nuclear Regulation will consider the circumstances of the qualifying nuclear facility, discuss the relevant technical characteristics with the operator, and decide whether the existing particular safeguard provisions should simply be repealed or repealed and replaced with new particular safeguard provisions imposed under Regulation 5.

291. As the existing particular safeguard provisions take the form of a decision by the Commission, it is anticipated that, as a result of the EU (Withdrawal) Act, the decisions will become retained EU Law. Therefore, in the future and as appropriate, there may be a need to repeal some of them without replacement. Others may be repealed and replaced with the new particular safeguard provisions made by the Office for Nuclear Regulation.

292. We understand that some of the particular safeguard provisions were made under Regulation (EURATOM) No 3227/76 (which preceded EU Regulation 302/2005), and were preserved post 2005. A Commission Recommendation of 15th December 2005 - on guidelines for the application of Regulation (EURATOM) No 302/2005 - stated that Particular Safeguard Provisions, which were adopted remained in force when Regulation 3227/76 was replaced by EU Regulation 302/2005.

293. We understand that existing particular safeguard provisions range considerably both in terms of their age and extent and are aware of examples dating back to 1981 and of some which are 150 pages.

294. While particular safeguard provisions exist for many of the 200 or so UK material balance areas for which Euratom were provided with nuclear management reports in 2014, a number of those particular safeguard provisions are out-of-date to the point of being no longer entirely appropriate.

295. Derogations – Limited operation: To the extent that the Commission has granted a derogation to an operator in respect of a particular qualifying nuclear facility or qualifying nuclear material, under Article 19 of EU Regulation 302/2005, our initial view is that the operator may continue to benefit from the derogation for a period of twelve months from the commencement date.

296. We understand that there are also a very limited number of non-fuel cycle operators/duty holders for which Commission agreement to the provision of Inventory Change Reports (ICRs) at a reduced frequency (e.g. quarterly instead of monthly) predates Euratom Regulation 302/2005. Our initial view is that the operators involved may continue to comply with the reduced requirements granted by the Commission for a period of twelve months from the commencement date.

297. It is anticipated that during the 12 month period from the commencement date, any operator who wishes to continue to provide reduced information to the Office for Nuclear Regulation, and who satisfies the relevant criteria, will make an application to the Office for Nuclear Regulation under Regulation 31.

Characterisation of qualifying nuclear material

298. To the extent that qualifying nuclear material has been reported or classified in a certain way, for example as waste in a physical inventory report, it is proposed that that characterisation shall continue unless the Office for Nuclear Regulation becomes aware of any information which mean that they need to review the characterisation.

Records produced by a person in accordance with EU Regulation 302/2005

299. It is proposed that up to the commencement date, an operator will comply with Articles 9 and 10 of EU Regulation 302/2005 in respect of operating and accounting records and, from the commencement date, will comply with the requirements of regulations 10 and 11 of the Nuclear Safeguards Regulations.

300. In addition it is proposed that a transitional provision will provide that, to the extent that a person has been required to produce and retain records under EU Regulation 302/2005, that person will be required to retain them for five years from the commencement date of the Nuclear Safeguards Regulations.

301. The relevant Articles of EU Regulation 302/2005 are:

- (1) Articles 8 and 9 operating and accounting records;
- (2) Article 24(2) and 30(2) accounting records to be kept re extraction of ores and waste; and
- (3) Articles 25 and 26 information and records, required to be generated and retained by carriers, temporary storage agents and intermediaries.

302. An operator will also be required to make the records available to the Office for Nuclear Regulation for inspection at the relevant qualifying nuclear facility on request and to provide the Office for Nuclear Regulation with copies on request.

Post commencement correction of accounting reports submitted pre-commencement

303. It is proposed that the requirement set out in Regulation 12(2) on an operator to correct the information which was contained in an accounting report will extend to information contained in an accounting report which was sent to the European Commission in a period of twelve months ending on the commencement date.

Forms or information sent to the Commission after the commencement date but relating, wholly or in part, to issues which arose before the commencement date

304. One example of this is regulation 28 which requires an operator to inform the Office for Nuclear Regulation of the amount of material dispatched from each extraction facility by 31 January of each calendar year in respect of the previous year. In the case of the calendar year in which commencement occurs, it is proposed that in practice a transitional may not be necessary since we are not aware of an extraction facility in the UK.

Offences

305. Clearly the Nuclear Safeguards Regulations cannot impose offences in respect of requirements which were set out in EU Regulation 302/2005. In principle, it might be appropriate to impose an offence on an operator for the failure to comply with a transitional provision but, at the moment, we are not aware of any of the proposed transitionals being likely to lead to a breach which could give rise to a specific offence, although they would be subject to enforcement by the Office for Nuclear Regulation. We may, however, need to review this as the work on transitionals develops further.

Catalogue of consultation questions

Q 1. Do you have any comments or evidence to give us on the analysis set out in the impact assessment?

Q 2a. If the UK safeguards regime were to be funded by a cost recovery scheme, how would this affect your business?

Q 2b. If applicable, please give details in support of your answer to Q 2a.

Q 2c. Please give details on how a provision to enable an operator to recover costs of certain special services to the regulator would affect your business.

Q 3. Do you have any evidence which suggests that the new regime would disproportionately affect those with protected characteristics or will not be fully effective for all target groups?

Q 4. Do you support the staggered approach to commencement, for the reasons set out above? What, if any, changes would you propose, and why?

Q 5. How could the definitions set out in Regulation 2 be improved? Please make it clear which definition you are referring to and explain your reasoning. Please state whether you think any additional definitions should be added, and what these are.

Q 6. How could regulation 3 on declaring to the Office for Nuclear Regulation the basic technical characteristics of a qualifying nuclear facility, or the forms set out in Part 1 of Schedule 1, be improved? Please make it clear specifically what you are referring to and explain your reasoning.

Q 7. Is regulation 4, to submit an annual programme of activities to the Office for Nuclear Regulation for the upcoming year- and the form set out in Part 8 of Schedule 1 - adequate? If not, please make it clear precisely what you are referring to and give your reasoning.

Q 8a. Acting on the basis of the technical characteristics, do you agree that regulation 5 on particular safeguard provisions facilitates more effective verification of a qualifying nuclear facility by the Office for Nuclear Regulation? If not, please give your reasoning.

Q 8b. What specific changes would you make to regulation 5 and why?

Q 9a. Do you agree that regulation 6, on maintaining a system of accountancy and control, which includes keeping accounting and operating records and providing reports to the Office for Nuclear Regulation, is clear? If not, please give your reasoning.

Q 9b. Will Schedule 2, which sets out the components of a system of accountancy and control plan, enable operators to fulfil the accountancy and control requirements? If not, please detail which aspect you are referring to and explain why.

Q 10a. Do you agree that regulations 7 to 9 on an accountancy and control plan will help the Office for Nuclear Regulation ensure compliance with the regulations in a manner that is consistent with good regulatory practice? If not, please give specific reasons.

Q 10b. Do you agree that the timescales for submitting the first accountancy and control plan are reasonable? If not, please give your reasoning.

Q 11. Are regulations 10 to 12 for keeping and maintaining operating and accounting records and reports by operators clear and practical? If not, please detail how they could be improved.

Q 12. Please give us specific comments on practical issues associated with applying regulation 13 and on using the form set out in Part 4 of Schedule 1.

Q 13. Do you agree that regulation 14 and the form set out in Part 2 of Schedule 1 clearly set out the requirements for inventory change reporting? If not, please give your reasoning and suggestions for improvements.

Q 14. Do you agree that regulation 15 on material balance report and physical inventory listing and the forms set out in Part 3 and 4 of Schedule 1 are clear? If not, please give your reasons and suggestions for improvements.

Q 15a. Do you agree that regulation 16, together with regulations 17 and 23, delivers the intended purpose of requiring operators to submit special reports to the Office for Nuclear Regulation in the circumstances described? If not, please give your reasoning.

Q 15b. Are there any other unusual occurrences that you believe should be captured by this regulation?

Q 16. Do you agree that regulation 18 is clear about how operators should describe the transformation of nuclear material in their reactors? If not, please say why and what improvements should be made?

Q 17. Do you agree that regulation 19 on relevant international agreements in relation to Nuclear Cooperation Agreements delivers its purpose of requiring the UK to account for qualifying nuclear material covered by these agreements? If not, please state why.

Q 18. Do you agree that regulation 20 on weight units and categories of qualifying nuclear materials ensures a consistent approach to reporting across all operators? If not, please give your reasons and suggestions for improvements.

Q 19. Do you agree that regulations 21 to 24 on exports, imports, loss or delay during transport and communication of change of date, together with the forms set out in Parts 5 and 6 of Schedule 1, are clear and effective? If not, please be specific about why and anything else which should be included.

Q 20. Do you agree that regulations 25 and 26 on carriers and temporary storage agents, and intermediaries should be included in the domestic regulations? Please elaborate on the reasons for your answer.

Q 21. Do you agree that regulations 27 and 28 on ores and the form in part 7 of Schedule 1 should be included in the domestic regulations? Please elaborate on the reasons for your answer.

Q 22. Do you agree that regulations 29 and 30 on waste - and the forms in parts 9 and 10 of Schedule 1 – are clear and effective? If not, please give your reasoning.

Q 23a. Do you agree that regulations 31 and Form 11 provide an appropriate regime for operators of a qualifying nuclear facility with limited operation? If not, please state your reasons.

Q 23b. Do you agree that the meanings of reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, isotope separation plant and storage installation, are technical terms which do not need to be defined in the Nuclear Safeguards Regulations? If not, what are your reasons?

Q 23c. Do you agree that the exemption set out in Regulation 32 is appropriate? If not, what are your reasons?

Q 24. Do you have any comments on regulations 33 and 34 - and the form at Part 12 of Schedule 1?

Q 25. Do you have any suggestions about anything that should be added to regulation 35 on communication with the Office for Nuclear Regulation?

Q 26. Do you agree that regulations 36 to 38 on installation of safeguards equipment for nuclear material accountancy and surveillance provides the Office for Nuclear Regulation with appropriate powers to gain independent confirmation of information generated by an operator through suitable safeguards equipment? If not, please explain why.

Q 27. Do you have any comments on regulations 39 to 42 on the activities of the Office for Nuclear Regulation as the UK's safeguards regulator?

Q 28a. Do you agree that regulation 43 delivers our aim of proportionality on offences? If not, please state what your reasons for this are.

Q 28b. What suggestions do you have to improve regulation 43 and what is your reasoning for this?

Q29. Do you agree with the proposed definition of "fissionable material" set out in regulation 44? If not, what suggestions do you have to improve it?

Q 30. Is the proposed definition of “relevant international agreement” set out in regulation 45 clear? If not, what suggestions do you have to improve it?

Q 31a. Do you agree with the proposed method of implementing the provisions of “relevant international agreements” contained within Chapter XIV? If not, what suggestions do you have to improve it?

Q 31b. Do you have any comments on the proposed regulations 46 to 51?

Q 32. Do you have any comments on the proposed regulations 52 to 56 and amendments set out in Part I of Schedule 3?

Q 33a. Do you have any comments on the proposed transitional arrangements?

Q 33b. How could the proposed transitional provisions for Schedule 4 be improved, with particular reference to practical examples?

Q 33c. Do you consider that transitional arrangements could impose burdens on industry? If so, please provide further information in support of your answer.

Q 34. Do you have any comments on the review arrangements, set out in regulation 58?

Q 35. Do you have any further comments to make on the regulations, which have not been covered anywhere above?

These Annexes are published as separate documents alongside this consultation

Annex 1: Text of Draft Nuclear Safeguards Regulations

Annex 2: Impact Assessment

Annex 3: Welsh Version of Executive Summary

This consultation is available from:

<https://www.gov.uk/government/consultations/nuclear-safeguards-regulations>

If you need a version of this document in a more accessible format, please email enquiries@beis.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.