

Post Implementation Review

2019 Nuclear Safeguards Regulations



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Introduction

This document provides an overview of the Post Implementation Review (PIR) undertaken for the Nuclear Safeguards (EU Exit) Regulations 2019 (NSR19)¹ and the Nuclear Safeguards (Fissionable Material and Relevant International Agreements) (EU Exit) Regulations 2019 (FMRIA19)².

NSR19 sets out the nuclear safeguards requirements for the Secretary of State, the Office for Nuclear Regulation (ONR) and civil nuclear industry operators with respect to the accounting for and control of qualifying nuclear material. FMRIA19 provides a definition for "fissionable material" and lists agreements specified as "relevant international agreements".

This PIR marks an important reflection point on how successful the UK's domestic nuclear safeguards regime has been so far in achieving its stated policy objectives. It is also an opportunity to continue the ongoing conversation on how we can improve regulation and where possible, reduce regulatory burdens.

Context

The NSR19 and FMRIA19 (hereafter collectively referred to as the "2019 Nuclear Safeguards Regulations") came into force at the end of the EU Exit transition period, following the UK's departure from the EU and Euratom.

Their purpose was to enable delivery of:

- Safeguards arrangements offering equivalent effectiveness and coverage, to that previously provided by Euratom;
- Commitments made in the bilateral safeguards agreements between the United Kingdom (UK) and International Energy Atomic Agency (IAEA) – the Voluntary Offer Agreement and Additional Protocol – signed by the UK and IAEA on 7 June 2018; and
- Commitments made in other international agreements, such as Nuclear Co-Operation Agreements (NCAs).

This PIR is required by regulation 54 of the NSR19 and regulation 4 of the FMRIA19, which also state that the first PIR Report is required to be published before 1st January 2024. This report and associated PIR evaluate the effectiveness of our actions and decisions, now that the 2019 Nuclear Safeguards Regulations have been operational for a period of time.

¹ https://www.legislation.gov.uk/uksi/2019/196/contents/made

² https://www.legislation.gov.uk/uksi/2019/195/contents

Background

Nuclear safeguards are a fundamental component of global nuclear non-proliferation and consist of various reporting and verification processes which assure and demonstrate that civil nuclear material is not used for non-peaceful purposes.

Nuclear safeguards are vital for the nuclear industry to function, both in terms of operations and trade, which are dependent on the UK acting in line with international obligations on nuclear safeguards and non-proliferation. As an active member of the IAEA, the UK is fully committed to meeting our international obligations for nuclear safeguards.

The 2019 Nuclear Safeguards Regulations are part of the legal framework that allows the UK to establish, implement and maintain a system of accounting for and control of qualifying nuclear material; and ensures the UK meets its international nuclear safeguards and non-proliferation obligations.

The regulations were developed to achieve four key policy objectives:

- Meet the UK's international safeguards obligations as set out in the UK and IAEA bilateral safeguards agreements (the Voluntary Offer Agreement and Additional Protocol) in connection with the Treaty on the Non-proliferation of Nuclear Weapons;
- 2. Establish a new domestic safeguards regime that provided coverage and effectiveness equivalent to that previously provided by the Euratom regime, going beyond international obligations as set out in the UK and IAEA bilateral safeguards agreements;
- 3. 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 makes nuclear electricity generation in the UK possible; and
- 4. Take the opportunity to ensure that the nuclear safeguards regulations align with best practice in UK regulation making i.e. are necessary, fair, effective and enjoy a broad degree of public confidence; and its enforcement meet the five principles of proportionality, accountability, consistency, transparency and targeting.

Scope

Given that the 2019 Nuclear Safeguards Regulations have been in operation for less than three years, having come into force at 23:00 on 31 December 2020, we opted to take a proportionate, light touch approach, in line with best practice guidance.

The review aimed to:

- establish whether the regulations have broadly achieved their objectives;
- identify whether the regulations have had any unintended effects; and
- identify proportionate and balanced changes that improve the effectiveness of the regulations and, where possible, reduce burdens on operators and the UK Nuclear Regulator – the ONR.

Methodology

In undertaking this PIR exercise, we sought feedback from key industry representatives, who were subject to NSR19, and the ONR, the UK's Nuclear Regulator.

We held a workshop for industry representatives, providing an opportunity for these stakeholders to engage with DESNZ officials and feedback their views on whether the domestic safeguards regime was meeting the stated policy objectives, and suggestions on potential changes that may improve its functionality and operability. We also held bilateral meetings with those who were unable to make the workshop to enable a varied range of views to be considered.

We held bilateral meetings with ONR, seeking their views and input on whether the domestic safeguards regime was meeting its stated policy objectives, and potential changes to the regulations that may improve its functionality and operability.

In addition, a short questionnaire was sent to both key civil nuclear industry operators and the ONR. The questionnaire sought views about how successful respondents felt the 2019 Nuclear Safeguards Regulations had been in meeting their stated policy objectives; and the reality of the associated costs incurred, compared to the estimates in the Impact Assessment.

Additional evidence was gathered through using existing monitoring data and management information, including the International Atomic Energy Agency's (IAEA) Safeguards Implementation Reports for 2021 and 2022; ONR's Safeguards Annual Reports for 2021 and 2022; attendance at the IAEA-ONR Annual Review of Safeguards Implementation in the UK in November 2022; and regular and ad-hoc engagement touchpoints with operators and ONR.

Much of the feedback received related to NSR19 as it sets out the nuclear safeguards requirements for the ONR and civil nuclear industry operators with respect to the accounting for and control of qualifying nuclear material.

Feedback and findings

We are grateful to all the stakeholders who took the time to provide feedback and respond to our questionnaire. The information received has helped inform our conclusions and recommendations. We look forward to working collaboratively with operators and ONR to implement them.

As part of our evidence gathering, we received feedback covering a range of areas and topics, some of which were out of scope for this PIR but are touched on as part of our conclusions.

The only feedback received relating to FMRIA19 queried whether they could be incorporated into NSR19, however FMRIA19 is required to remain as a separate statutory instrument.

Feedback on NSR19 touched on the successes and challenges of NSR19 in meeting their objectives - Basic Technical Characteristics reporting requirements (the gaps in the process for major modifications/changes to an existing qualifying nuclear facility); usage of the Particular Safeguard Provisions; Accountancy and Control Plans (implementation, interpretation and resource impacts); terminology used; misalignment of reporting timings to enable the adherence to international obligations or other wider related processes. This feedback can be grouped into two broad categories: regulations to remove and those to improve and clarify.

Regulations to Remove

The 'Remove' category mainly relates to NSR19 regulations which were in place to ensure a smooth transition from the Euratom safeguards regime, when the UK formally ended its membership, and are now redundant following completion of the transition; or where removal would allow better flexibility for both operators and the regulator or improve operational alignment with the domestic legislative and operational landscape.

There was consensus on the removal of the transitional provisions and if possible, references to EU Exit or commencement day, as these had served their purpose and were no longer relevant. Other feedback varied, covering removal of regulations where it was felt they were duplicating other requirements or activities; or where they were not required to meet the UK's international obligations. Having considered all the feedback received we are recommending the removal of the regulations set out below - **recommendation #1.**

Recommendation #1: Removal of certain regulations

- Regulation 9(2) (Operation of an accountancy and control plan) -Opportunity to streamline.
- Regulations 25 and 26 (Carriers and temporary storage agents) Not relevant to the operating model of the UK's safeguards regime, as these requirements are covered under different legislation.
- Regulations 27 and 28 (Ores) Not relevant to the UK, as qualifying nuclear facilities in the UK do not deal with ore extraction or exports.
- Regulation 41 (ONR to provide an annual report to the Secretary of State)

 opportunity to streamline and remove duplication, as the initial need for a standalone report on safeguards has now elapsed. Reporting on UK safeguards is now included as part of ONR's corporate reports The Chief Nuclear Inspector Report; and ONRs Annual Report and Accounts.
- Schedule 1 (Forms and templates) Allows greater flexibility for the
 regulator and operators, and effectively enables continued alignment with
 IAEA requirements should they change. The forms/templates would either
 be on ONR's website or a similar platform accessible to operators. A
 similar approach (housing templates on ONR's website) is currently being
 used for qualifying nuclear facilities with limited operation.
- Schedule 2 (The components of an Accountancy and Control System) –
 Enables an improved outcome focussed approach to be taken, providing a
 better degree of flexibility in approach for operators. The components of an
 Accountancy and Control System are set out in the ONMACS document
 providing clarity for operators and enabling more effective regulation by
 ONR.
- Transitional Provisions, including Regulations 3(1) and 13 and Schedule 4
 (as referred to in Regulation 53) now redundant following completion of
 the transition to the UK's domestic safeguards regime.

Improve and Clarify

The 'Improve and Clarify' category covers a range of areas within NSR19 where changes would help to improve their operability or provide clarity on expectations and requirements.

Accountancy and Control

There was a significant amount of feedback on the Accountancy and Control area from both operators and ONR. Operators reflected on the resource-intensive nature of implementing and maintaining Accountancy and Control Plans; queried the rationale for them, particularly the importance placed on them by the regulator, and the level of detail required; highlighted the perceived change in scope to what was stated prior to implementation; and the lack of clarity around expectations. ONR feedback focussed on the wish to provide more clarity for operators on the extent of ONR's regulatory scope and expectations in this area, as well as enabling more effective regulation of the aspects of an accountancy and control system.

Based on the feedback around this area we are recommending changes to certain elements of the Accountancy and Control area to help clarify the purpose and expectations, in particular Accountancy and Control Plans - **recommendation #2.**

Recommendation #2: Improve and clarify elements of the Accountancy and Control requirements

- Regulation 6(1) and 6(3) (Accountancy and control of qualifying nuclear material) Minor language change.
- Regulation 6(4) (Accountancy and control of qualifying nuclear material) -Align the records retention requirements with individual site licence requirements.
- Regulation 7(4) (Accountancy and control plan) Change language to include 'equipment relied upon for nuclear material accountancy, control and safeguards'; to make clear that a system of accountancy and control also includes physical aspects e.g. Systems, Structures, Components.
- Regulation 9(1) (Operation of an accountancy and control plan) -Incorporate elsewhere, resulting from amendments made to other elements.

Feedback on accountancy and control plans also covered aspects outside the scope of this PIR, which we touch on as part of our conclusions.

Basic Technical Characteristics

Feedback on the basic technical characteristics (BTC) focussed on amendments to the time given for notification of a change in BTC; and the consistency of BTC requirements for new facilities and modified or repurposed facilities. Attention was also drawn to the absence of a clear process in place for existing facilities wishing to undertake major modifications.

As a result, we are recommending changes to the time given for notification of a change in BTC, to improve the process that enables us to comply with our international obligations. As well as making changes to clarify the expectations for new facilities and modified or repurposed facilities, with clearly defined processes, in particular for major modifications within existing facilities - **recommendation #3**.

Recommendation #3: Improve and clarify elements of the basic technical characteristics provisions

- Regulations 3(2) and 3(3) (Declaration of basic technical characteristics) Change to enable consistent application of BTC requirements for new
 facilities and modified or repurposed facilities, including clarifying the
 process required for major modifications within existing facilities.
- Regulation 3(3) (Declaration of basic technical characteristics) Change in language to make explicit that operators should submit the amended BTC to ONR.
- Regulation 3(3) (Declaration of basic technical characteristics) Reduce the number of days for notification to ONR of changes to BTC (from 30 days to 15 days) to improve compliance with UK international obligations.

Particular Safeguard Provisions

Feedback on this area centred on the efficacy and future of Particular Safeguard Provisions (PSP) - as they have not been used to date - and their improved operability. PSP are a useful tool for both operators and the regulator, providing an alternative route in ensuring compliance with international obligations. Therefore, we are recommending some changes to the PSP regulation. We are recommending the ONR is provided the ability to revoke any PSP they may require to be put in place and that some of the language is amended to reflect that the PSP is a useful tool for enabling compliance with nuclear material accountancy and control, but not an enforcement activity - **recommendation #4**.

Recommendation #4: Improve and clarify elements of the particular safeguard provisions

- Regulation 5(1) (Particular safeguard provisions) Change to link the reason for the requirement of particular safeguard provisions to nuclear material accountancy and control rather than the basic technical characteristics of a qualifying nuclear facility.
- Regulation 5(1)(b) and 5(2) (Particular safeguard provisions) Change of language to make clear that the particular safeguard provisions are not enforcement activities.
- Regulation 5 (Particular safeguard provisions) Include the ability for particular safeguard provisions to be revoked.

Operating Records, and Provision of Information by an Operator

Feedback on this area related to consistency around terminology used, improvements to the notification timings required to meet our international obligations and clarity on certain requirements. We are recommending making amendments to regulations 10; 16; 17; 20(1); 21(2); 22(2) and 29 to provide consistency and clarity - **recommendation #5.**

Recommendation #5: Clarify aspects of the operating records and requirements relating to the provision of information by an operator

- Regulations 10 (Operating records) and 29(1)(b) (Stock list and accounting records for conditioned and retained waste) - Change the term 'operating data' to 'source data' to be consistent with terminology used elsewhere in the regulations.
- Regulations 16 (Special report) and 17 (Unusual occurrences) Change the circumstances when a special report is required to better align with our international obligation requirements.
- Regulation 20(1)(a) (Weight units and categories of qualifying nuclear materials) - Change of language to provide clarity and consistency for how quantities of qualifying nuclear material should be expressed.
- Regulation 21(2) (Exports) Change the number of days by which the notification needs to reach the ONR (from 'at least 7 days' to 'at least 15 days') to comply with UK international obligations.

Recommendation #5 continued: Clarify aspects of the operating records and provision of information by an operator

- Regulation 22(2) (Imports) Change the number of days by which the notification needs to reach the ONR (from 'at least 4 days' to 'at least 9 days') to comply with UK international obligations.
- Regulation 29 (Stock list and accounting records for conditioned and retained waste) - Change of language to make clear the requirements of an operator, including periodic submission of waste stocklists, and aligning records retention requirements with individual site licence requirements.

Consequential Amendments

As part of the PIR, we will also take the opportunity to streamline the 2019 Nuclear Safeguards Regulations. We will ensure that an amendment taken in one place, is followed up with the appropriate legal drafting elsewhere, so the 2019 Nuclear Safeguards Regulations continue to work as a whole. In some instances, this may impact other associated legislation such as the Nuclear Safeguards (Fees) Regulations 2021 (Fees Regulations)³ - **recommendation #6.**

Recommendation #6: Streamline 2019 Nuclear Safeguards Regulations and other associated legislation to adequately reflect the updates made to NSR19.

Cost - benefit analysis

The NSR19 have associated fees regulations – the Fees Regulations - which came into force on 1 April 2022. This changed the way regulation of nuclear safeguards was paid for, providing ONR with the ability to recover the majority of costs from operators for the regulation of nuclear safeguards. This followed 15 months of Government funding the costs of the new safeguards regime.

As part of this PIR, we received information from stakeholders about the economic impacts of rollout of the NSR19. For many stakeholders, both the NSR19 and the Fees Regulations will have increased their costs in relation to nuclear safeguards. It is, therefore, difficult to review the cost-impact of the NSR19 regulations alone as some quantified costs could be total costs incurred across both pieces of legislation. The Fees Regulations are due to be reviewed before 1 April 2027, where a clearer picture may emerge.

The original impact assessment provided a discounted net present value of -£63 million (at 2017 prices) over a 10-year appraisal period. This means the estimated costs outweighed the

³ https://www.legislation.gov.uk/uksi/2021/1406/contents/made

benefits by £63 million. This figure took into account all aspects of operation, including transitional, new operational and delivery costs, across all users. The possibility of future cost recovery from industry was not included as part of the impact assessment.

Specifically for businesses, the net direct costs were estimated at around £0.1 million per year, with the total discounted amount estimated at £1.3 million (at 2014 prices). However, the original impact assessment also identified uncertainties and costs which could not be quantified or were based on a limited sample and therefore required extrapolation. It is therefore possible that the actual costs will differ against the initial estimates.

All key stakeholders who were sent our questionnaire responded, although not all of them specified an amount when asked about the costs they had incurred in the implementation of the NSR19. For those that did, the majority estimated costs between £400k and £900k over the two and half years since implementation. There were no specific economic benefits identified by respondents when asked about the economic benefit produced for their organisation due to the implementation of the 2019 Nuclear Safeguards Regulations.

Non-quantified costs and challenges were mentioned, such as extra administrative burdens and funding being removed from other programmes to pay the extra costs associated with adhering to the new duties. However, with limited evidence and the questionnaire responses and feedback from the workshop only providing snapshots at one given time, it is difficult to predict what sort of implications these non-quantified costs could have.

Overall, it is possible that costs to businesses may end up being higher than the £1.3 million anticipated in the original impact assessment. However, it is difficult to know the extent to which, if at all, any of the other factors outlined above – including the Fees Regulations – has either generated costs which may have been included when responding to this PIR, and/or had other implications.

Conclusions and recommendations

Based on the evidence gathered, we have concluded the 2019 Nuclear Safeguards Regulations were broadly successful in meeting their four key policy objectives.

The regulations were developed to achieve four key policy objectives:

- Meet the UK's international safeguards obligations as set out in the UK and IAEA bilateral safeguards agreements (the Voluntary Offer Agreement and Additional Protocol) in connection with the Treaty on the Non-proliferation of Nuclear Weapons;
- Establish a new domestic safeguards regime that provided coverage and
 effectiveness equivalent to that previously provided by the Euratom regime, going
 beyond international obligations as set out in the UK and IAEA bilateral
 safeguards agreements;
- 3. 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 makes nuclear electricity generation in the UK possible; and
- 4. Take the opportunity to ensure that the nuclear safeguards regulations align with best practice in UK regulation making i.e. are necessary, fair, effective and enjoy a broad degree of public confidence; and its enforcement meet the five principles of proportionality, accountability, consistency, transparency and targeting.

The UK has and continues to successfully meet its international safeguards obligations. This is evidenced by the IAEA continuing to be able to reach safeguards conclusions for the UK, as detailed in the IAEA Safeguards Implementation Reports for 2021⁴ and 2022⁵ (**policy objective 1**).

Based on responses to our stakeholder questionnaire

 55% of respondents stated that the 2019 Nuclear Safeguards Regulations had been 'moderately successful' in providing coverage and effectiveness equivalent to that previously provided by the existing Euratom regime (policy objective 2).

⁴ https://www.iaea.org/sites/default/files/22/06/statement-sir-2021.pdf

⁵ https://www.iaea.org/sites/default/files/23/06/20230612 sir 2022 part ab.pdf

It should be noted for **policy objective 2**, **33**% of respondents stated the regulations had been 'very successful' in providing coverage and effectiveness equivalent to that previously provided by the existing Euratom regime.

- 66% of respondents stated that the 2019 Nuclear Safeguards Regulations had been 'very successful' in retaining public, industry and international trading partner confidence to engage in civil nuclear trade with the UK (policy objective 3).
- 44% of respondents stated that the 2019 Nuclear Safeguards Regulations had been 'very successful' in aligning with best practice in UK regulation making (policy objective 4).

It should be noted that for **policy objective 4, 33**% of respondents felt the regulations had only been 'slightly successful' in aligning with best practice in UK regulation making. Further analysis of the detailed feedback provided, identified that this response was driven mainly by experiences with the implementation of the accountancy and control plan requirements. Some respondents felt ONR's regulation in this area was not in line with two of the five regulatory principles - proportionality and consistency – as set out in <u>ONR's Enforcement Policy</u> Statement⁶.

Transitioning to a new way of working will often create new challenges. The introduction of accountancy and control plans was a new requirement that also brought a change in approach to safeguards regulation. The move to an outcome focussed approach, rather than the familiar prescriptive approach used for other areas of safeguards regulation, will take time to fully embed.

As such we recognise that there is further work required in this area to enable the benefits of accountancy and control plans - for both the regulator and those being regulated - to be understood and realised in an effective and efficient way. We will continue to engage with both ONR and those being regulated on the best way to achieve this.

Concerns around the consistency and proportionality of ONR's regulation had also previously been highlighted as part of the Office for Nuclear Regulation Post Implementation Review conducted in 2022⁷ (the 'ONR PIR'). This looked at whether the objectives of Part 3 of the Energy Act 2013, which established the ONR, were being met and continued to be appropriate.

The report from the ONR PIR identified a specific recommendation to address the area of consistency and proportionality of ONR's regulation (ONR PIR Recommendation 2). The report also referenced ONR's recognition of "a particular proportionality issue associated with newer inspectors sometimes approaching ONR guidance as akin to a checklist, rather than a set of principles to be applied to the unique circumstance....". ONR continue to work on addressing

⁶ https://www.onr.org.uk/regulation-and-licensing.htm (Enforcement section)

⁷ https://www.gov.uk/government/publications/office-for-nuclear-regulation-onr-post-implementation-review

these areas of concern - the proportionality and consistency of its regulation, and has set out a strong commitment to improve this, in its <u>Stakeholder Engagement Strategy 2020-25</u>8.

We have observed that there were unintended effects, some related to the implementation of the regulations, rather than the regulations themselves. These included the misalignment between the timescales for certain domestic and international reporting obligations; the differing expectations and understanding of the scope and purpose of accountancy and control plans, and their drain on operator resources; the limited flexibility and ability to keep aligned with revised international guidance and templates; and the gap in the availability of common training for the safeguards community.

We have taken onboard the feedback about some of the unintended effects and hope the six recommendations we have identified will go some way in addressing some of them. We believe they will improve the effectiveness of the regulations, and in some circumstances reduce burdens on operators and ONR.

For those unintended effects that fell outside the scope of this PIR, such as the operator resource burden of accountancy and control plans, and common training for the safeguards community, we will consider alternative ways to address them.

We also received feedback on a range of other topics that also fell outside the scope of this PIR. These were potential changes that could have significant impacts on operators and/or ONR; or needed substantial work to be undertaken to ensure the desired outcome would be achieved such as in the matter of regulation of pool accountancy. Therefore, we will continue to work with ONR and operators in the development of these proposals, with the intention to consider them as part of the next statutory PIR in 5 years' time.

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⁸ https://www.onr.org.uk/corporate-publications.htm (Strategies and plans section – Stakeholder Engagement Strategy 2020-25)

Annex I - Post Implementation Review Summary Sheet

Title: Post Implementation Review 2019 Nuclear

Safeguards Regulations

PIR No: DESNZ036(PIR)-23-NPD

Original IA/RPC No: BEIS036(F)-18-CNRD

Lead department or agency: Department for Energy

Security and Net Zero

Other departments or agencies:

N/A

Contact for enquiries: Ifediba Egwuatu

Post Implementation Review

Date: 13/10/2023

Type of regulation: Domestic

Type of review: Statutory

Date measure came into force:

31/12/2020

Recommendation: Amend

RPC Opinion: Choose an item.

Questions

1. What were the policy objectives of the measure?

Meet the UK's international safeguards obligations as set out in the UK and IAEA bilateral safeguards agreements (the Voluntary Offer Agreement and Additional Protocol) in connection with the Treaty on the Non-proliferation of Nuclear Weapons;

Establish a new domestic safeguards regime that provided coverage and effectiveness equivalent to that previously provided by the Euratom regime;

Ensure safeguards arrangements are in place that retain public, industry and international trading partner confidence to engage in civil nuclear trade with the UK; and

Ensure that the nuclear safeguards regulations align with best practice in UK regulation making i.e. are necessary, fair, effective and enjoy a broad degree of public confidence; and its enforcement meet the five principles of proportionality, accountability, consistency, transparency and targeting.

2. What evidence has informed the PIR?

The PIR was based on information and data gathered from Stakeholders (the Office for Nuclear Regulation (ONR), key Nuclear Operators and teams from within the Department for Energy Security and Net Zero) affected by the regulations, to understand their experience and discuss any recommendations they may have to improve the effectiveness of the regulations. Data was also gathered through a workshop with key Nuclear Operators; bilateral meetings with relevant

internal departmental teams, ONR and Nuclear Operators; and responses to our stakeholder questionnaire.

3. To what extent have the policy objectives been achieved?

Claire Coutinho, Secretary of State

Based on the evidence gathered, we have concluded the 2019 nuclear safeguards regulations were broadly successfully in meeting their four key policy objectives as detailed in section 1.

The UK has successfully met, and continues to meet, its international safeguards obligations as evidenced in the International Atomic Energy Agency's Safeguards Implementation Reports for 2021 and 2022 (objective 1).

Over 50% of respondents to our questionnaire stated that the 2019 nuclear safeguards regulations had been 'moderately successful' in providing coverage and effectiveness equivalent to that previously provided by the Euratom regime; and had been 'very successful' in retaining public, industry and international trading partner confidence to engage in civil nuclear trade with the UK (objectives 2 & 3).

Over 40% of respondents to our questionnaire stated that the 2019 nuclear safeguards regulations had been 'very successful' in aligning with best practice in UK regulation making (objective 4). To note: over 30% felt they had only been 'slightly successful', citing concerns about ONR's regulation of them not being in line with two of the five regulatory principles - proportionality and consistency.

Sign-off for Post Implementation Review: Secretary of State for Energy Security and Net Zero

I have read the PIR and I am satisfied that it represents a fair and proportionate assessment of the impact of the measure.

Signed:

Date: 13/12/2023

Further information sheet

Please provide additional evidence in subsequent sheets, as required.

Questions

4. What were the original assumptions?

Overall, it was assumed that establishing new domestic safeguards arrangements that would provide coverage and effectiveness equivalent to that previously provided by Euratom (but appropriate for the domestic context in which they would operate), would best achieve the stated policy objectives. These arrangements would also demonstrate to the public, industry and our international partners that we are a responsible nuclear state; provide assurance and confidence that civil nuclear material is not diverted into military or weapons programmes; and minimise disruption to industry and nuclear electricity generation in the UK.

5. Were there any unintended consequences?

There were some unintended consequences identified, including some related to the implementation of the regulations, rather than the regulations themselves. The main unintended consequences identified included the misalignment between the timescales for certain domestic and international reporting obligations; the differing expectations and understanding of the scope and purpose of accountancy and control plans, and their drain on operator resources; the limited flexibility and ability to keep aligned with revised international guidance and templates; and the gap in the availability of common training for the safeguards community.

6. Has the evidence identified any opportunities for reducing the burden on business?

The evidence gathered identified some opportunities for reducing the burden on business, such as making processes and operator requirements clearer; removing unnecessary regulations and templates to allow better flexibility for both operators and the regulator and to improve operational alignment with the domestic legislative and operational landscape.

7. How does the UK approach compare with the implementation of similar measures internationally, including how EU member states implemented EU requirements that are comparable or now form part of retained EU law, or how other countries have implemented international agreements?

The UK approach remains similar to how these measures are implemented internationally and, in some respects, goes beyond how other EU member states or countries have implemented them to meet requirements under similar international agreements.

