

Title: Nuclear Security Regulations 2018 PIR No: 408 Lead department or agency: Department for Energy Security and Net Zero (DESNZ) Other departments or agencies: Office for Nuclear Regulation (ONR), Department for Work and Pensions (DWP), Home Office (HO), Department for Environment, Food and Rural Affairs (DEFRA), United Kingdom National Nuclear Laboratory (UK NNL), Nuclear Decommissioning Authority (NDA) Contact for enquiries: Stanley Carnall 07751732624	Post Implementation Review
	Date: 08/03/2024
	Type of regulation: Domestic
	Type of review: Statutory
	Date measure came into force: 01/10/2018
	Recommendation: Keep

1. What were the policy objectives of the measure? (Maximum 5 lines)

The Nuclear Security (Secretary of State Security Directions) Regulations 2018 (SI 2018/408) reestablished a power originally conferred on to the Secretary of State (SoS) by the Anti-terrorism, Crime and Security Act 2001 which was subsequently moved exclusively to the Office of Nuclear Regulation (ONR) by the Energy Act 2013 – namely, the power to issue ‘security directions’ regarding the security regulation of the civil nuclear industry. SI 408/2018 reestablishes this power and seeks to clarify its application, who can issue it and in what circumstances, alongside the penalties arising from failure to comply. Officials recorded their motivation as being the existence of ‘circumstances in which the Secretary of State needs to be empowered to issue directions directly to entities within the civil nuclear industry’.

2. What evidence has informed the PIR? (Maximum 5 lines)

In conducting the review, DESNZ officials have liaised with the ONR, relevant other Government departments and those ‘responsible persons’ who may be subject to a SoS Security Direction – representatives from the UK’s active operational site partner EDF and representative industry bodies such as the Nuclear Decommissioning Authority (NDA) & UK National Nuclear Laboratory (NNL). The consultees represent all ‘responsible persons’ who may be subject to a direction under SI 2018/408. Officials tested the use of these powers in a table-top exercise conducted following the updating of the Standard Operating Procedures in 2023. The above information has been assessed in conjunction with that contained within the relevant legislation and their accompanying explanatory memoranda.

3. To what extent have the policy objectives been achieved? (Maximum 5 lines)

Assessing the degree to which SI 2018/408 has been effective is complicated by the fact that the power it outlines has not been used since being established. This PIR finds that the parties subject to the review are (largely) clear on their obligations in respect of this power, as well as familiar with the process of a security direction being issued and the ramifications of a failure to comply. Additionally, the motivating factors behind the passing of the SI are still mostly relevant and the SI has empowered the SoS in the way considered desirable by officials so, overall, the policy objectives have been achieved.

Sign-off for Post Implementation Review: Chief economist/Head of Analysis and Minister

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

Signed: **Andrew Bowie**

Date: 13/05/2024

Further information sheet

4. What were the original assumptions?(Maximum 5 lines)

According to departmental records from 2018 and officials ongoing understanding, the expectation was that the powers would only be used to react to an 'imminent' security threat, that they would only be used in 'exceptional circumstances', and that the regulations would 'improve Government's ability to provide a timely and effective response to imminent security threats to the civil nuclear sector'.

5. Were there any unintended consequences? (Maximum 5 lines)

The statutory instrument has never been used so it is difficult to determine outcomes, however, the unintended consequences have been assessed in coordination with internal and external stakeholders as minimal and manageable. These are largely focused on exercising and preparedness, with this SI placing requirements on the department, regulator and 'responsible persons'. Ensuring incident management preparedness is a high priority for the department, so any identified lessons from exercising and preparedness related to this SI have wider benefits.

6. Has the evidence identified any opportunities for reducing the burden on business? (Maximum 5 lines)

Feedback from the 'responsible persons' in industry likely to receive security directions suggests that these regulations do not represent a significant additional burden as they are relatively clearly communicated and very similar in operational content to powers held by the ONR. The PIR does not envisage this power being used in many situations, however, it still does have utility in certain circumstances. Additionally, changing or revoking these regulations that are now incorporated into the SOPs of the ONR, Government and industry would present a burden in itself.

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? (Maximum 5 lines)

Comparable EU countries follow the IAEA's guidelines prescriptively (ACPPNM and INCIRC/225/Rev 5) which underline that States should ensure contingency plans are in place and coordinated with the operator, with the operator being ultimately responsible for nuclear facility security. EDF provided commentary on two EU countries as relevant points of comparison, neither of which have legal provision for their government to issue 'security directions' in the way outlined in SI 408/2018. Contrastingly, SI 2018/408 allows the British government to issue a direction in particular circumstances regardless of the operator's security arrangements.

Please provide additional evidence in subsequent sheets, as required.

Introduction and Background

1. The Nuclear Security (Secretary of State Security Directions) Regulations 2008 (SI 2018/408) re-established a power originally conferred on the SoS by the Anti-terrorism, Crime and Security Act 2001 but subsequently moved exclusively to the Office of Nuclear Regulation (ONR) by The Energy Act 2013. Namely, the power to issue legally binding 'security directions' to 'responsible persons', obliging action to maintain the security of the civil nuclear industry. SI 2018/408 reasserts the authority of the SoS to issue such a direction, alongside not instead of the ONR, and seeks to clarify their application; who can issue them to whom & in what circumstances, and the penalties arising from failure to comply.
2. The stated rationale for SI 2018/408 was that 'there are circumstances in which the Secretary of State needs to be empowered to issue directions directly to entities within the civil nuclear industry' when presented with an imminent threat necessitating the implementation of SI 2018/408.
3. Regulation 15 of SI 2018/408 requires the SoS to conduct a comprehensive Post Implementation Review (PIR) of the measures outlined within five years of the coming into force of the SI, and publish this review, setting out the conclusions. The PIR is to;
 - Set out the objectives intended to be achieved by the SI
 - Assess the extent to which those objectives are achieved
 - Assess whether those objectives remain appropriate and, if so, assess the extent to which they could be achieved in another way which is less onerous
4. This document sets out the approach and methodology taken during the PIR, the range of evidence and data sources drawn upon, and its findings and conclusions.

Regulation of UK Civil Nuclear Security

5. The UK utilises an outcome focussed regulatory framework. The Department for Energy Security and Net Zero (DESNZ) provides the Design Basis Threat (DBT), designating the threat level for duty holders to mitigate against. This combines with the - outcome-focussed, ONR-authored - Security Assessment Principles (SyAPs) to determine the appropriate operational security approach. The Office of Nuclear Regulation was established as a non-statutory agency of the Health and Safety Executive (HSE). It subsequently adopted all regulatory responsibility for the civil nuclear industry per the 2013 Energy Act.
6. The UK is a signatory to the IAEA's Convention for the Physical Protection of Nuclear Material (CPPNM) and therefore follows the associated Implementing Guide (INFCIRC/225/Rev 5). Although not legally binding, members of the IAEA implement the IAEA's safety standards into their national regulations. IAEA regulations designate that the member State and operator's contingency plans and response to threats should corroborate.

Comparative Approaches

8. EU states use IAEA's guidelines to prescriptively inform their civil nuclear security arrangements. French law results in the nuclear operator being held accountable for safety on nuclear sites; the French government can give recommendations such as shutting down a reactor, but there is no provision for them to give 'security directions' in the same way. In Czechia, the operator is also the only entity responsible for nuclear safety; there is no law giving the Czech government the authority to order the shutdown of a nuclear plant. As EU regulators specify the security arrangements at their sites, they own the security risks and directly instruct their sites when the security environment changes.

9. The UK differs as nuclear security follows domestic procedures from the Nuclear Industries Security Regulations 2003 and the ONR's SyAps, while integrating IAEA guidelines from the CPPNM and INFCIRC/225/Rev 5 into the DBT. The ONR as the regulator makes sure operators have adequate arrangements in place (via site security plans) and achieve outcomes without specifying the measures to implement.

Approach to the PIR

Scope of this Review

10. The UK's civil nuclear security regime is comprehensive, encompassing the regulatory role of the ONR and the responsibilities of the various bodies and organisation who undertake or regulate the safe operation of nuclear sites and the transport of nuclear materials with the intention of preventing negative outcomes – whether through malicious intent or accident.

11. The scope of this PIR is to assess the implementation and potential effectiveness of the powers granted to the SoS by SI 2018/408 and the established protocols that the effective exercise of this power would require. The broader effectiveness of the UK's civil nuclear regulatory regime is only in scope to the degree that it is impacted by the power detailed in SI 2018/408, whether positively or negatively.

12. As discussed below (in line with the UK's outcome focussed approach to civil nuclear security regulation) officials have undertaken to seek the perspective of relevant stakeholders on the effectiveness of SI 2018/408 in furthering the UK's civil nuclear security goals.

13. Officials have also undertaken the evaluation of international approaches through the sought perspectives of industry bodies and organisation. Partner countries such as France and Czechia are relevant points of comparison and have been cited as relevant by stakeholders.

15. The scope of this PIR interacts with other legislation in that SI 2018/408 was made in exercise of the powers conferred upon the SoS by section 77 of the Anti-terrorism, Crime and Security Act 2001, subsequently amended by the Energy Act 2004 [Section 77 and Schedule 14, paragraph 10(1)] and the Energy Act 2011 [section 105]. The ability to give 'security directions' also interacts with the statutory footing of the ONR, who are also enabled to do so by existing legislation.

16. As will be outlined further below, in assessing the effectiveness of the powers outlined in SI 2018/408 this PIR considers input from the companies or industry bodies who are or represent the 'responsible persons' who could receive security directions by SI 2018/408. The PIR of SI 2018/408's effectiveness draws upon the feedback thus received, internal modelling designed to test SOPs in the event of emergency by officials assessed against the stated aims of the SI as laid out in the SI itself and by officials. The broader effectiveness of the UK's civil nuclear security framework is considered relevant by this PIR only to the extent that it is impacted by the SI it discusses.

Methodology & Evidence

17. This PIR has been conducted in accordance with DESNZ best practice guidance for a de minimis PIR, appropriate for use in reviewing statute with an equivalent annual net direct cost to business of below ±£5. This designation has been approved by analysts and the DESNZ Better Regulation Unit allowing a 'proportionate' approach to be taken to this PIR.

18. In this case, a proportionate approach will involve gathering input from stakeholders and conducting an analysis of the effectiveness of the measures implemented by the SI in relation to the civil nuclear security core mission and its stated objectives, keeping the regulatory burden on

business to a minimum as well as conducting a comparative analysis of relevant international systems. This approach in line with the best practice of the DESNZ Better Regulation Unit and has been well-received in feedback received from contacted stakeholders.

19. The level of evidence required to conduct this PIR has been evaluated based on the proportionality guidelines set out in Figure 1 of the Magenta Book supplementary guidance for conducting PIRs. SI 2018/408 is a narrow regulatory instrument with a very specific and unlikely use and with a small number of stakeholders potentially impacted by it.

20. Considered in this PIR is the gathered evidence of stakeholders including regulatory partners such as the ONR & the National Nuclear Laboratory, and operational bodies and their representative organisations including the Nuclear Decommissioning Authority & EDF Energy. The operational bodies listed are, or represent, those bodies who may be considered 'responsible persons' and therefore could receive security directions under the SI. This evidence has been collated by officials within the Department and factored into the recommendation contained within this PIR.

21. Assessing the degree to which SI 2018/408 has been effective is complicated by the fact that the power it outlines has not been used since being established. In lieu of a real-world application to assess, this PIR will consider whether the (potentially) affected parties are clear on their obligations in respect of this power, as well as their familiarity with the process of a security direction being issued and the ramifications of a failure to comply. It will also assess whether the power is still considered necessary by officials.

22. In assessing the SI against the original assumptions that informed it, this PIR has taken into account the stated aims of SI 2018/408 – namely, the expectations that the powers would only be used to react to an 'imminent' security threat, that they would only be used in exceptional circumstances relating to 'terrorism, espionage, sabotage, theft of nuclear material, or the unauthorised theft or disclosure of sensitive nuclear information (SNI) or of equipment or software relating to uranium enrichment', and that the regulations 'are necessary in order to ensure that the Secretary of State can respond quickly and effectively' to such eventualities.

Findings and recommendations

24. This analysis of the PIR suggests two key findings:

1. The power granted to the SoS by SI 2018/408 is fit for purpose and the regulation serves its intended purpose and achieves its intended goals.

2. The 'responsible persons' who could be subject to a security direction are aware of the power granted to the SoS, of what the power can be used to accomplish and why. Additionally, the powers are not overly burdensome.

1. The power granted to the SoS by SI 2018/408 is fit for purpose and the regulation serves its purpose and achieves its goals.

25. While the circumstances in which the power granted to the SoS by the SI would be used are rare, there is still a point to the regulation in the pursuit of HMG's civil nuclear security priorities.

26. The ONR, the primary regulator of the civil nuclear industry, has matured as an organisation since the implementation of SI 2018/408 and therefore is better placed than previously to take full responsibility for the issuing of security directions through more rehearsed channels, even in times of crisis. The SoS also the ability to compel the ONR to take actions including their issuing security directions.

27. However, there may be circumstances in which the ONR is incapacitated or the SoS is privy to information necessitating action as quick as possible. Additionally, as the ultimate responsibility holder for the maintenance of civil nuclear security in the UK, it makes sense for the SoS to have the power to take direct action to protect and maintain it.

2. The 'responsible persons' likely to be subject to a security direction are aware of the power granted to the SoS, of what the power can be used to accomplish and why. Additionally, they are not overly burdensome.

28. Stakeholders did not indicate any significant discomfort with any element of the regulation as detailed in SI 2018/408. Overall, stakeholders considered it to be proportionate, clearly explained and not overly burdensome. SI 2018/408 is essentially a minor addendum to the existing regulatory framework as administered by the ONR – enabling the SoS with very similar powers and using very similar mechanisms of effect to the security directions the ONR could issue.

29. Importantly, the power as detailed in the legislation does not actively complicate or confuse existing systems vital to the UK's civil nuclear security. Officials have already undertaken work to clarify minor operational issues raised by this consultation in collaboration with relevant bodies.

30. Changing regulations that are now incorporated into the Standard Operation Procedures of the ONR, Government and industry would present a more significant burden than their removal would potentially alleviate.

Unintended Consequences and Amelioratory Actions

31. During the course of the consultation phase that informed this PIR, some minor items of feedback about how to better integrate this power into existing classified Nuclear Site Security Plans (NSSPs) and Site Security Plans (SSPs) were received from stakeholders. These items have been actioned by officials at the time of publication.

Conclusion

33. The UK's framework for ensuring civil nuclear security goals are met is, correctly, primarily held, developed and operated by the ONR. In light of this, the power granted to the SoS by SI 2018/408 is unlikely to be used except in specific circumstances. However, there are some circumstances in which the power could have utility and the SoS, as the ultimate responsibility holder for maintaining the UK's civil nuclear security, should therefore retain the power.