

**EXPLANATORY MEMORANDUM TO**  
**THE RADIATION (EMERGENCY PREPAREDNESS AND PUBLIC**  
**INFORMATION) REGULATIONS (NORTHERN IRELAND) 2019**

**S.R. 2019 No. 185**

**1. Introduction**

- 1.1. This Explanatory Memorandum has been prepared by the Department for the Economy (“DfE”) to accompany the Statutory Rule (details above) which is laid before the Northern Ireland Assembly.
- 1.2. The Regulations are made under Articles 17(1) to (5), 20(2), 40(2) and (4), 54(1) and 55(2) of, and paragraphs 12, 14, 15, 17 and 19 of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978 and are subject to the negative resolution procedure.
- 1.3. The Rule is due to come into operation on 1 November 2019.

**2. Purpose**

- 2.1. The Statutory Rule will transpose, in Northern Ireland, the emergency preparedness and response elements of the Euratom Basic Safety Standards Directive (2013/59/Euratom) (the “Directive”) in relation to premises in which work with ionising radiation takes place by revoking and replacing the Radiation (Emergency Preparedness and Public Information) Regulations (Northern Ireland) 2001 (REPPiR).

**3. Background**

- 3.1. The Rule is made principally to transpose new requirements set out in the Directive. The Directive consolidates and updates five Directives and a European Commission Recommendation, including the 1996 Basic Safety Standards Directive (Council Directive 96/29/Euratom).<sup>1</sup> The Directive incorporates subsequent publications from the International Commission on Radiological Protection, which were published in 2007,<sup>2</sup> and increases harmonisation between the Euratom regime and the International Basic Safety Standards issued by the International Atomic Energy Agency (IAEA).<sup>3</sup>
- 3.2. The Directive sets out standards in respect of radiation protection in different areas, including in relation to workers (“occupational exposures”), the public (“public exposures”), and medical and dental patients (“medical exposures”), as well as for nuclear emergency preparedness and response. Much of the Directive has already been implemented into NI legislation, including by means of the Ionising Radiations Regulations (Northern Ireland) 2017,<sup>4</sup> and

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<sup>1</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1502202246211&uri=CELEX:31996L0029>

<sup>2</sup> <http://www.icrp.org/publication.asp?id=ICRP%20Publication%20103>

<sup>3</sup> [http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578\\_web-57265295.pdf](http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578_web-57265295.pdf)

<sup>4</sup> <http://www.legislation.gov.uk/nisr/2017/229/made>

the Ionising Radiation (Medical Exposures) Regulations (Northern Ireland) 2017.<sup>5</sup>

- 3.3 This Rule only transposes the emergency preparedness and response elements of the Directive in relation to premises in which work with ionising radiation takes place. The Carriage of Dangerous Goods (Amendment) Regulations (Northern Ireland) 2019, were made on 21 May 2019, and amend the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations (Northern Ireland) 2010<sup>6</sup> in order to transpose the radiological emergency preparedness and response requirements of the Directive in relation to the transport of radioactive materials in Northern Ireland by road, rail and inland waterway.
- 3.4 Although the Euratom Treaty does not apply to defence activities, the Ministry of Defence (MOD) has taken a policy decision to apply, where practicable, the Directive to defence activities. In general the MOD is bound by health, safety and environmental protection requirements; however, in certain circumstances, including under this Rule, exemptions may apply. Where an exemption or derogation does apply, MOD policy is to produce outcomes that are, so far as reasonably practicable, at least as good as those required by UK legislation. As such, this Rule applies to defence premises in which work with ionising radiation takes place, subject to the modifications in regulation 24.
- 3.5 The Rule introduces a new definition of radiation emergency to reflect both the definition in the Directive and the latest International Atomic Energy Agency (IAEA) definition. This broadens the definition of radiation emergency to include serious adverse consequences to quality of life, property and the environment; the aim of expanding the definition to include non-health impacts is to shift the focus of planning from medical protective actions to a wider spread of protective actions. It also introduces the need to consider perceived risk.
- 3.6 The Rule introduces a definition of emergency worker. This will include anyone identified in a plan with a role in providing direct assistance in an emergency. The Instrument will introduce a requirement for emergency workers who could be involved in an emergency response and exposed to radiation to receive appropriate information and training.
- 3.7 The Rule introduces a consistent approach to assessing the full range of risks and their consequences. Operators will be required to identify all hazards that have the potential to cause a radiation emergency, and then evaluate the range of possible on- and offsite consequences for a reflective range of all hazards identified. This Rule also sets out a consistent approach to the means and outcomes required for assessing the on- and offsite consequences — the key outcomes from this would then be provided in a simple consequences report to the Executive, with a recommended technical distance for the detailed emergency planning zone.

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<sup>5</sup> <http://www.legislation.gov.uk/nisr/2018/17/contents/made>

<sup>6</sup> <http://www.legislation.gov.uk/nisr/2010/160/contents/made>

- 3.8 The Rule introduces a graded approach to planning that is site-appropriate, proportionate and flexible to the risks identified in the hazard evaluation process. As part of identifying all hazards, sites will have to consider more likely, less severe emergencies, but also less likely, more severe emergencies. The Directive requires planning for unforeseen emergencies: those emergencies of extremely low likelihood but high impact. The Rule introduces outline planning zones, where appropriate, to plan for these unforeseen emergencies and reflects a commensurate approach to planning. A more complex site with more potential hazard would therefore have more planning proportionate to its potential risk, and a simpler site with less potential hazard would have less planning proportionate to its potential risk.
- 3.9 This Rule requires the review of hazard evaluation and consequences assessments at least every three years, and for a review to be undertaken where there is a material change to the work with ionising radiation at the site. It also sets out a requirement to review and test emergency plans at least every three years. These provisions are comparable to those previously set out in REPPiR, but this Rule also introduces a specific requirement to take account of lessons learned, e.g. from those tests or reviews, from an emergency, or from best-practice developments. This Rule further allows for the Executive (and those participating in emergency exercises) to recover reasonable costs from an operator incurred fulfilling an emergency planning function under this Rule.
- 3.10 This Rule introduces a reference level of 100mSv. Reference levels are guidance tools to support emergency response efforts by optimising protection strategies to limit exposure and organising treatment of those subject to exposure of radiation. They complement existing planning tools such as emergency reference levels and maximum permitted levels. The reference level is a target to keep below for an annual dose a person receives in a 12-month period following an emergency and the implementation of protective actions. The Executive and a Northern Ireland Department may arrange for the determination of specific reference levels.
- 3.11 This Rule provides that where employees with specific roles in an emergency plan may exceed occupational exposure limits set out in the Ionising Radiation Regulations (Northern Ireland) 2017, the dose limits for emergency workers may be disapplied in order to prevent the imminent occurrence of a radiation emergency, or mitigating the consequences where one has occurred.
- 3.12 A Transposition Note is submitted with this Explanatory Memorandum.

#### **4. Consultation**

- 4.1 A consultation exercise ran in Northern Ireland from 29 March 2018 to 25 May 2018. There were approximately 450 consultees, including individuals, bodies representative of section 75 of the Northern Ireland Act 1998, and other organisations with an interest in equality and related issues (including each member of the Northern Ireland Assembly).

- 4.2 One response was received, which contained no adverse comments in relation to the proposals. The consultation document was also downloaded 85 times.

## **5. Equality Impact**

- 5.1 The Statutory Rule has been screened for any possible impact on equality of opportunity affecting the groups listed in section 75 of the Northern Ireland Act 1998. No practical implications are anticipated.

## **6. Regulatory Impact**

- 6.1 An Impact Assessment was not carried out in respect of the corresponding GB Statutory Instrument because of the low level of impact per business. However, a *de minimis* assessment has been prepared and is available from the Department for Business, Energy and Industrial Strategy Better Regulation Unit.
- 6.2 DfE is of the opinion that the analysis and considerations set out in the GB *de minimis* assessment apply generally and on a proportionate basis, to Northern Ireland. The impact to Northern Ireland industry would be mainly restricted to one-off familiarisation with the revised provisions and costs to individual duty-holders would be negligible. In the circumstances a full Regulatory Impact Assessment is not considered necessary.
- 6.3 Industry will have a 12-month transitional period to familiarise itself with the amendments and become compliant.

## **7. Financial Implications**

- 7.1 Familiarisation costs will include reading and understanding the legislative changes; providing advice to others in the organisation where necessary; assessing compliance against new arrangements; and making necessary revisions to emergency arrangements. The familiarisation process will allow businesses to revise their emergency plans to include the new National Reference Level. The duty to provide prior information is being placed on the Northern Ireland competent authority and therefore will not impact businesses at all. These regulatory changes will be in line with existing emergency arrangements guidance. It is assumed that businesses already comply with this guidance because failure to do so may result in regulatory action that could damage their ability to trade and operate. Therefore, any associated cost of complying with these regulatory changes, beyond familiarisation, will be negligible. There is no significant impact on charities or voluntary bodies.

## **8. Section 24 of the NI Act 1998**

- 8.1 The Department has considered the matter of Convention rights and is satisfied that there are no matters of concern.

## **9. EU Implications**

- 9.1 The Statutory Rule implements EU Directive 2013/59/EURATOM.

## **10. Parity or Replicatory Measure**

10.1 In Great Britain the corresponding Regulations are the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (S.I. 2019 No. 703), which were made on 26<sup>th</sup> March 2019 with a coming-into-force date of 22<sup>nd</sup> May 2019.

## **11. Additional Information**

11.1 N/A.

Department for the Economy

September 2019