

Nuclear safeguards regulations

Department for Business, Energy and Industrial Strategy

RPC rating: **fit for purpose**

Description of proposal

'Nuclear safeguards' is the term for the reporting and verification processes by which nation states demonstrate to the international community that civil nuclear material is not diverted into military or weapons programmes. They are essential to enable the UK to engage in civil nuclear trade, allowing nuclear power generation, and to fulfil international standards as a responsible nuclear state. The safeguards are an important part of the international non-proliferation regime to prevent the spread of nuclear weapons.

The impact assessment (IA) states that "*Leaving Euratom is the result of the decision to leave the EU as Euratom and the EU are uniquely legally joined. There are no precedents for a non-EU Member State being a Member State of Euratom, so when the UK formally notified our intention to leave the EU, the UK also commenced the process for leaving Euratom.*" (paragraph 1.12, page 5). The existing Euratom safeguards arrangements will continue to operate in the UK during the proposed implementation period after the UK leaves the EU, ending on 31 December 2020. The Nuclear Safeguards Act 2018 created a legal framework for a domestic nuclear safeguards regime to commence after this date. The RPC issued a fit for purpose opinion on the final stage impact assessment for the Bill.¹ The present impact assessment is on proposed nuclear safeguards regulations made under the provisions of the Act. These will establish new domestic safeguards arrangements providing coverage and effectiveness no lower than those provided currently under Euratom.

The regulations impose reporting requirements on holders of qualifying nuclear material² and empowers the Office for Nuclear Regulation (ONR) to regulate and ensure the UK's compliance with its international safeguards obligations, as agreed in the voluntary offer agreement and additional protocol with the International Atomic Energy Agency (IAEA). The ONR already regulates to ensure compliance with

¹ 'Nuclear Safeguards Bill', RPC-4180(1)-BEIS, 30 October 2017.

² Includes fissionable material as defined in the Nuclear Safeguards (Fissionable Material and Relevant International Agreements) Regulations.

security and safety regulations within the nuclear industry and has some limited involvement with nuclear safeguards. This provides a supporting role to Euratom and the IAEA, and in fulfilling those obligations to the IAEA that are not the responsibility of Euratom. The IA assesses the likely costs that will be incurred by the ONR in regulating the domestic civil nuclear safeguards regime in the UK. It also provides estimates of the likely costs of compliance with the new domestic regime for the holders of qualifying nuclear material, including any additional responsibilities that operators will be required to undertake. The main additional requirement is for operators to submit to the ONR an accountancy and control plan (ACP) and to carry out their operations at a qualifying nuclear facility in accordance with the terms of this ACP.

Impacts of proposal

The IA states that there are around 100 facilities that hold qualifying nuclear material and fall under the scope of the current safeguard regime operated by Euratom (paragraph 3.41, page 15). These duty-holders include sites involved in activity throughout the nuclear industry, covering fuel enrichment and fabrication, active generating plant, decommissioned sites, waste facilities and research facilities.

The IA considers the impacts of the policy against two counterfactuals: a 'current Euratom regime' and a 'do nothing'. The Department states that the current Euratom regime is not a feasible option, but is a reference point that allows for an assessment of the proposed option relative to existing arrangements - this is the counterfactual against which the proposal is primarily assessed. The Department explains that the 'do nothing' counterfactual sets out the risks of not introducing legislation. Impacts have been assessed over the ten years 2017 to 2026 (inclusive). Transitional costs are incurred during the first four years, 2017 to 2020 inclusive (i.e. from when costs are first incurred to the end of the implementation period). Ongoing (annual) costs and benefits are incurred from 2021 (paragraph 3.21, page 11).

Costs

The Department has consulted industry stakeholders and reports that it has received input and cost data from those representing approximately 80 per cent of all safeguards activity. Monetised costs are derived from internal 'bottom-up' ONR estimates. Overall transition costs are estimated at between £29.2 million and £31.0 million. Nearly all of these costs are incurred by the ONR and include a new IT system and the recruitment and training of new inspectors. Transitional costs to nuclear site operators are £0.5 million to £0.8 million, consisting mainly of

familiarisation with the ACP requirement. There are also transitional costs to schools and hospitals, which hold very small amounts of nuclear material for educational and medical purposes. The one-off costs to private schools and private hospitals are treated as costs to business and are estimated at between £0.05 million and £0.4 million.

Overall ongoing costs are estimated at £9.5 million to £11.5 million each year. These estimates are higher than current Euratom costs (see below) partly because of lower economies of scale (paragraph 3.36, page 14). Again, nearly all of the overall costs are incurred by the ONR and cover inspections and other staff costs. Ongoing costs to nuclear operators are £0.06 million to £0.1 million each year and cover the cost of monitoring and reporting under the ACP requirement. There is also an ongoing reporting cost for private hospitals of up to £0.02 million each year.

Benefits

Benefits consist of the savings from the UK no longer making budgetary contributions to Euratom and are estimated at between £3.3 million and £4.9 million each year, based upon an average of the UK's contribution over the last four years. These savings are significantly lower than the estimated £8.1 million currently spent by Euratom each year on inspecting UK nuclear sites (paragraph 3.33, page 14).

Overall Impact

The proposal is currently estimated to have a net cost of £63 million over ten years in present value terms and an equivalent annual net direct cost to business (EANDCB) of £0.1 million.

Comparison against consultation stage estimates

Overall transitional costs are markedly higher than the £12.6 million estimate at consultation stage, although the estimated cost to business is largely unchanged. The Department explains that the consultation stage impact assessment had not considered the full cost during the implementation period (transition costs for 2019-20 and 2020-21 are estimated at £10 million and £7.5 million, respectively). Ongoing costs are higher than the £9.1 million estimated at the consultation stage. This is a result of the inclusion of IAEA inspection costs and that the ONR no longer expects the ACP (which aligns the regulatory framework with ONR's current practices on safety and security) to reduce its costs. The IA also now includes costs to schools

and hospitals, as noted above. (The former are expected to be exempt from requirements because the quantities of nuclear material they hold are so small, but are assumed to incur familiarisation costs).

Annual savings from no longer making budgetary contributions to Euratom are lower than the £5 million previously assumed. Consultation stage estimates of transition and ongoing costs to nuclear operators have been tested with industry and are unchanged at £0.65 million and £0.08 million, respectively. The (rounded) EANDCB is, therefore, unchanged from the consultation stage.

Quality of submission

The IA provides a comparison of the policy options against both the *status quo* and do nothing. This is appropriate and consistent with government guidance on appraisal of EU exit measures. The *status quo* is the appropriate baseline for the assessment of business impacts for better regulation framework purposes; the comparison against do nothing is important in demonstrating the case for the policy option.

The Department has strengthened its assessment significantly since the consultation stage. It has received input and cost data from those representing around 80 per cent of all safeguards activity and the ONR appears to have provided more-detailed 'bottom-up' estimates of costs. The Department has expanded its monetised analysis to include other affected organisations and businesses, such as private hospitals. The Department has also addressed the RPC's comments (on the consultation stage IA for the proposed regulations) regarding areas for improvement. In particular, the Department provides:

- an expanded small and micro business assessment, addressing the proportionality of the impact on smaller establishments, such as research bodies and private schools. As noted above, schools are expected to be exempt from requirements and, therefore, incur only familiarisation costs (page 22);
- a clear commitment that any proposal for a cost recovery regime for nuclear safeguards would be comprehensively assessed in a further IA, together with a public consultation (page 6); and
- a new section on monitoring and evaluation (page 23).

The IA would benefit further from the addressing the following:

Option of meeting IAEA requirements only. The Department explains why this option has been ruled out, including the reference to the Government's commitment to demonstrate the highest non-proliferation standards (paragraph 3.15, page 11). However, as indicated in the RPC's opinion on the Bill IA, the Department's analysis could be improved by specifically assessing the relative costs and benefits of the additional reporting and inspections of nuclear sites that are required under an Euratom-equivalent regime.

Going beyond the Euratom requirements. As noted above, the proposal goes beyond the existing Euratom arrangements by introducing a requirement for a nuclear operator to develop and submit an accountancy and control plan to the ONR for approval. The IA lists the benefits of this approach at paragraph 3.10 (page 10) but would benefit from providing a clearer assessment of the relative costs and benefits of this requirement, particularly since the ONR no longer expects the ACP to reduce its costs (paragraph 3.38, page 15), and the impact on business.

UK counterfactual contribution to Euratom. As noted above, the current UK budgetary contribution to Euratom is significantly lower than currently estimated to be spent by Euratom on inspecting UK nuclear sites. The IA would benefit from a clearer explanation as to how this difference arises, and why it is reasonable to assume that it will continue. It would also be helpful to illustrate how benefits would increase should the UK contribution increase in the counterfactual.

ONR transition costs. The IA would benefit from providing further disaggregation of these costs, for example how they are apportioned against the six elements listed at paragraph 3.25 (pages 12-13).

Comparison against the Bill's final stage IA. The IA explains how the estimated costs have changed compared to the consultation stage IA. The present IA would benefit from additionally explaining how the estimates have changed significantly since the final stage IA for the Bill, in particular the transition costs to the ONR.

Monitoring and evaluation plan. The section would benefit significantly from setting out how the cost effectiveness of the measure will be monitored and evaluated, in particular a first assessment of the data that would be required.

ONR cost recovery. The IA would benefit from providing further discussion and some illustration of the impacts on business should cost recovery be subsequently proposed and introduced.

Proportion of hospitals affected. The IA would benefit from explaining how the assumption of between 25 per cent and 75 per cent of hospitals needing a derogation was produced and why this is a conservative assumption.

Departmental assessment

Classification	Non-qualifying regulatory provision (EU withdrawal)
Equivalent annual net direct cost to business (EANDCB)	£0.1 million (2014 prices; 2015 present value base year)
Business net present value	-£1.3 million
Societal net present value	-£63 million

RPC assessment

Classification	Non-qualifying regulatory provision (EU withdrawal) and <i>de minimis</i>
EANDCB – RPC validated	£0.1 million (2014 prices; 2015 present value base year)
Small and micro business assessment	Not required (<i>de minimis</i>)

Regulatory Policy Committee