



Committee on Radioactive Waste Management

**CoRWM POSITION  
PAPER:**

Policy, Legal and Regulatory  
Issues for a GDF and  
Associated Radioactive  
Waste Management Issues

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# 1 Overview

1.01 The process of delivering a Geological Disposal Facility (GDF), or indeed any facility for radioactive waste management, requires that there be a demonstrably robust and effective regulatory system to underpin it. This would apply throughout its development, operational and post-operational stages, delivering high standards of safety and environmental protection, soundly based on understanding and controlling hazard and risk.

1.02 This was clearly recognised in the 2008 White Paper, *Managing Radioactive Waste Safely: A Framework for Implementing Geological Disposal (MRWS 2008)*<sup>1</sup>, para. 5.3, and remains absolutely the case:

*5.3 Robust, effective and independent regulation is vital for public confidence in a geological disposal facility programme which meets high safety, security and environmental standards based on comprehensive risk assessment and management.*

1.03 A GDF will not be delivered unless the host community and other stakeholders can be assured not only of its safety, but also of a fair and transparent regulatory process (including siting as part of the development consent process). In this regard it is vital, in CoRWM's view, to continue to learn from history and to avoid repeating mistakes in how the planning and regulatory processes are used which may have contributed to negating previous attempts to identify and develop long term facilities for radioactive waste management. One vital part of the process is public and stakeholder trust in the regulators. Another is confidence in the fairness, openness, participative nature and transparency of the regulatory process. One challenge in this regard is the comparative complexity of the UK's regulatory process. Another challenge, particularly stark for a GDF, is the maintenance of institutional learning and capability of the regulatory system over the very long time periods involved.

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<sup>1</sup> The 2008 White Paper, which followed CoRWM advice to Government in 2006, is regarded as the starting point of current Government policy on managing radioactive waste safely. More recent policy documents provide further statements related to regulation, including for a GDF, but the 2008 White Paper remains the most comprehensive statement and has therefore been used as a reference point in this position paper.

1.04 The regulation of a GDF poses some unique challenges in terms of the length of period for which regulation is required. The nature of a GDF makes it different to the typical installation controlled by nuclear site licensing such as a nuclear reactor or other fuel cycle facility.

1.05 There are, in CoRWM's view, two vital aspects of regulation:

1. The regulatory process itself, where there must be clarity as to the roles and inter-relationships of the various regulators, and the rights of communities and the public more generally to input meaningfully into the regulatory process; and
2. The standards being applied in each form of regulation, how they are derived, and the intent behind them. In particular, risk assessment and management are fundamental and must be transparent and capable of being explained to the public.

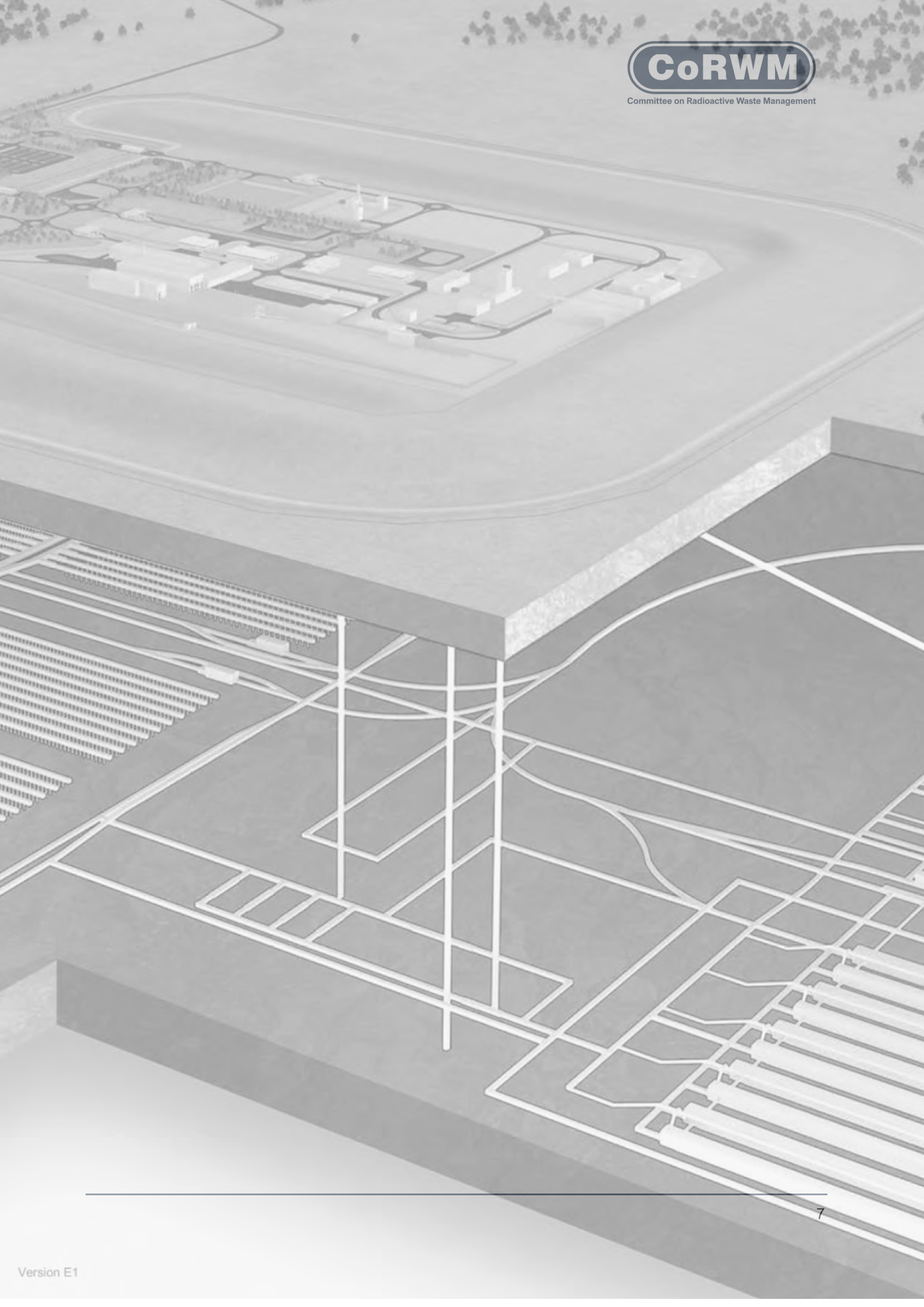
1.06 In this Position Paper we have reconsidered the description provided in the MRWS 2008 White Paper, taking account of the later development of specific policy relating to a GDF, and have provided a commentary on regulatory developments since 2008. Notably, these include:

1. The creation of a new planning system under the Planning Act 2008 for nationally significant infrastructure projects;
2. The creation of The Office for Nuclear Regulation (ONR) as the nuclear regulator dealing with safety, security, transport and safeguards and the creation of Natural Resources Wales (NRW) as the regulator for environmental permitting in Wales;
3. Bringing radioactive waste management within the modern system of environmental permitting, including introduction of a staged approach to the regulation of geological disposal; and
4. The implications of the UK's withdrawal from the EU and Euratom membership.

1.07 This position paper does not seek to be comprehensive in detailing all regulatory developments relating to nuclear installations and radioactive waste management activities falling under the interests of nuclear and environmental regulators and planning authorities and processes but rather to focus on the main relevant aspects and developments as we see them. We make a number of recommendations which we hope will improve the transparency and legal robustness of the ways in which planning and regulatory processes will work together to help deliver a GDF and importantly provide assurance to the public that it will be safely and properly regulated.

## 2 CoRWM Recommendations to Government

No	Recommendation
1	<p>As a matter of urgency, a clear statement of Government policy on matters relevant to a GDF, near surface disposal (NSD) and other issues relevant to radioactive waste management in England and Wales needs to be produced, preferably in a single, accessible document. It should recognise, address and explain any implications of the different policy which applies in Scotland.</p> <p>It should also provide clarity as to the relationship to the UK radioactive waste inventory, including materials not currently classified as waste, but which in one form or another will be disposed of in a GDF.</p> <p>The policy statement should be subjected to rigorous scrutiny and public debate, given the very long term environmental, health and safety implications.</p>
2	<p>We recommend that the term “risk-informed” should not be used as a term of regulation. Where used in the policy context it needs to be more clearly defined and justified.</p>
3	<p>There should be a commitment by Government to continue external (non-UK based) expert reviews of the management of radioactive waste at regular intervals, especially as proposals for a GDF or NSD are developed.</p>
4	<p>Legislation should be revised as a matter of urgency to provide clarity on licensing a GDF as a nuclear licensed site. This should also include consideration of NSD, as to whether that activity will be licensable if undertaken outside an already nuclear-licensed site.</p>
5	<p>A clear summary of relevant regulatory responsibilities as they now stand should be produced reflecting the excellent work done by ONR and the Environment Agency (EA) in terms of co-ordination. It should also make clear the position in Scotland.</p>
6	<p>Clarification is required regarding the implications of the potentially earlier availability of NSD facilities for the future approval and regulation of a GDF.</p>
7	<p>The legal and regulatory implications of including an underground rock laboratory (URL) within proposals for a GDF will need to be considered if this is a real prospect.</p>
8	<p>Careful consideration needs to be given now to the policy, legal and regulatory implications of near shore disposal, including public international law.</p>
9	<p>Careful thought needs to be given to the application of safeguards legislation to a GDF or NSD, and the implications of this.</p>
10	<p>If NSD is an option to be pursued seriously, then consideration needs to be given as to whether it should be brought within the 2008 Planning Act system.</p>





## 3 Introduction

3.01 Our primary focus in this Position Paper is on the GDF, but we are also aware that the Nuclear Decommissioning Authority (NDA) is exploring the feasibility of near surface disposal (NSD) for some intermediate level wastes (ILW)<sup>2</sup> and these are also reflected in this review.

3.02 If a GDF is to be delivered, three basic conditions will have to be met:

- A willing community's agreement to host the facility at a site which is suitable in safety and environmental terms;
- Achieving the suite of necessary regulatory consents including robust nuclear and environmental safety cases; and
- Securing government financial support to fund the work necessary.

3.03 These will of course not necessarily be met simultaneously. It is critical, in CoRWM's view, to be aware of the interactions, synergies and possible tensions between these conditions.

## 4 Regulation of radioactive waste management and disposal

### Regulatory Systems, Processes and Standards

4.01 It is a central tenet of the process of delivering a GDF, or indeed any facility for radioactive waste management, that there is demonstrably a robust and effective regulatory system to underpin it throughout both its development, operational and post operational stages, delivering high standards of safety and environmental protection, soundly based on understanding and controlling hazard and risk.

4.02 This was clearly recognised in MRWS 2008<sup>3</sup>, para. 5.3, and remains absolutely the case:

*5.3 Robust, effective and independent regulation is vital for public confidence in a geological disposal facility programme which meets high safety, security*

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<sup>2</sup> References to near surface disposal in this position paper refer to work currently being undertaken by the NDA to assess the feasibility of near surface disposal for some ILW in England and Wales.

<sup>3</sup> See footnote 1



*and environmental standards based on comprehensive risk assessment and management.*

- 4.03 A GDF will not be delivered unless the host community and other stakeholders can be assured not only of its safety, but also of a fair and transparent regulatory process (including siting).
- 4.04 In this regard it is vital, in CoRWM's view, to continue to learn from history and to avoid repeating mistakes which may have contributed to negating previous attempts to identify and develop long term facilities for radioactive waste management.
- 4.05 One vital part of the process is public and stakeholder trust in the regulators. Another is confidence in the fairness, openness, and transparency of the regulatory process. One challenge in this regard is the comparative complexity of the UK's regulatory process.
- 4.06 In that regard, we use "regulation" in the broadest sense so that it would include:
- Planning permission (in Wales) or development consent (in England) for exploratory works (deep boreholes);
  - Environmental permitting for exploratory works (boreholes);
  - Planning permission (in Wales) or development consent (in England) for construction of a GDF;
  - Environmental permitting for a GDF;
  - Nuclear site licensing of a GDF;
  - The application of conventional (non-nuclear) health and safety and environmental protection requirements;
  - Arrangements under the Nuclear Installations Act 1965 for liability and insurance in respect of a GDF;
  - Regulations on transport of waste to a GDF; and
  - Compliance with international obligations and norms.
- 4.07 Another challenge, particularly stark for a GDF, is the maintenance of institutional learning and capability within the regulatory system over the very long time periods involved.
- 4.08 On that basis there are numerous regulators involved, which include:
- ONR on nuclear licensing, security and safeguards, and transport;

- The national environmental regulators (the Environment Agency, Scottish Environment Protection Agency (SEPA)<sup>4</sup>, NRW, Northern Ireland Environment Agency (NIEA));
- The Health and Safety Executive (HSE);
- The Planning Inspectorate and Secretary of State on major infrastructure planning;
- Local planning authorities;
- Local authorities on health and safety and emergency response;
- Nature conservation bodies (Natural England, Scottish Natural Heritage (SNH)/NatureScot, NRW, Department of Agriculture, Environment and Rural Affairs (DAERA), depending on precise location); and
- The Marine Management Organisation (MMO).

4.09 While not regulators as such, account also needs to be taken of persons with legal rights which may be relevant to the development of a GDF. In particular these include:

- The Crown Estate (on behalf of The Crown) as owner of around 50% of the UK foreshore and who hold ownership of oil, gas, gold and silver;
- Other owners of foreshore, for example the Duchies of Cornwall and Lancaster, Local Authorities, Royal Society for the Protection of Birds (RSPB), National Trust, Ministry of Defence (MOD) and some in the control of private individuals;
- The Coal Authority, who own and licence coal and coal mines;
- Owners of mineral rights in land (e.g. major family estates such as The Lonsdale Settled Estates (LSE); and
- Potential representatives from bordering states such as the Irish and the Isle of Man governments, or possibly many other states where a GDF involves the marine environment.

4.10 The regulation of a GDF poses some unique challenges in terms of the length of period for which regulation is required. The nature of a GDF makes it different to the typical installation controlled by nuclear site licensing such as a nuclear reactor or other fuel cycle facility.

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<sup>4</sup> Current Scottish HAW policy does not support geological disposal and SEPA will therefore be responsible for regulation of alternative solutions.

4.11 There are in CoRWM's view two vital aspects of regulation:

1. The regulatory process itself, where there must be clarity as to the roles and inter-relationships of the various regulators, and the rights of communities and the public more generally to input meaningfully into the regulatory process.
2. The standards being applied in each form of regulation, how they are derived, and the intent behind them. In particular, risk assessment and management are fundamental and must be transparent and capable of being explained to the public.

4.12 We are concerned that Government policy on radioactive waste management in England and Wales is currently not clearly set out in a way which is easily accessible to the public in a comprehensive form, while recognising the fact that there have been helpful policy statements specifically on the topic of a GDF .

4.13 The Review of Radioactive Waste Management Policy: Final Conclusions, July 1995 (referred to as Cm 2919<sup>5</sup>) has been subject to piecemeal modification and has, since its publication, become superseded in many areas by later developments, making it challenging to assimilate and understand.

4.14 It is vital that the public understands what Government policy is, and also how regulation works and the standards which regulators will apply.

4.15 CoRWM welcomes discussions between the UK Government and the devolved administrations about the potential for consulting on updating and revising UK radioactive substances policy, including radioactive waste, and the opportunity which that presents for open debate and clarification. It is important that this is progressed as a priority in order to underpin the processes of engagement with communities, site investigation and selection. Any revision needs to be holistic in nature and to re-state and confirm the policy on a GDF within the context of radioactive waste management policy more generally, including any further policy development, for example if NSD for some types of ILW were to be taken forward.

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<sup>5</sup> Her Majesty's Stationary Office, "Review of Radioactive Management Policy: Final Conclusions", (Cm 2919) July 1995

- 4.16 It should also provide clarity as to the relationship to the UK radioactive waste inventory, including materials not currently classified as waste, but which in one form or another will be disposed of in a GDF.
- 4.17 CoRWM recognises that radioactive waste management policy in the UK is a devolved matter and that Scottish policy differs significantly from that for England and Wales and Northern Ireland. It remains CoRWM's view that disposal in a GDF remains the right option for the relevant wastes. CoRWM suggests however that any updating or future revision of policy for England and Wales needs to address any implications of national policy differences for implementing policy in England and Wales. In particular, given the interest in near surface disposal of suitable ILW waste streams in England and Wales, it is necessary to avoid confusion with the different policy in Scotland, which is for near site, near surface long term management of such radioactive wastes rather than disposal in a GDF.

### **Recommendation 1**

As a matter of urgency, a clear statement of Government policy on matters relevant to a GDF, near-surface disposal (NSD) and other issues relevant to radioactive waste management in England and Wales needs to be produced, preferably in a single, accessible document. It should recognise, address and explain any implications of the different policy which applies in Scotland.

It should also provide clarity as to the relationship to the UK radioactive waste inventory, including materials not currently classified as waste, but which in one form or another will be disposed of in a GDF.

The policy statement should be subjected to rigorous scrutiny and public debate, given the very long term environmental, health and safety implications.

## Risk in a Regulatory Context

- 4.18 The helpful developments in regulatory coordination, for example between the Environment Agency (EA) and ONR will need to be consolidated and sustained. In particular, care will be needed to ensure that initiatives or policy developments in one area (e.g. so-called “risk informed decision-making”) do not unintentionally undermine well-understood regulatory norms in other areas.
- 4.19 We have some concerns about what appears to be the growing use of the term “risk-informed” which in our view may give rise to undesirable and unnecessary confusion. We think that logically it may be necessary to separate out two distinct issues.
- 4.20 One is the formulation of NDA strategy as to waste management options, where the term could be appropriate to denote a risk-benefit balancing approach to management decisions (though we believe there may be better terms than “risk-informed”).
- 4.21 The other context is regulatory decisions on what is an acceptable level of risk. There is already clarity on this issue, provided by established and well-understood legal obligations such as “So Far As Is Reasonably Practicable” (SFAIRP) and regulatory concepts such as “As Low As Reasonably Practicable” (ALARP) and “As Low As Reasonably Achievable” (ALARA), and by requirements such as justification and optimisation.
- 4.22 Following discussions with the relevant regulators it is clear that the existing approach to radiological harm based on hazard assessment and risk management approaches and standards, applying SFAIRP, ALARA and ALARP already provide perfectly adequate and robust arrangements for the assessment and management of radioactive wastes, which are well-understood. The approach is based on the assessment and management of risk, not simply “informed” by it.
- 4.23 We are concerned that bringing the imprecise idea of “risk-informed” into that regulatory context may cloud the issue and give an unfortunate perception of a relaxation or change of standards, which we do not understand to be the case, and would not support.

## Recommendation 2

We recommend that the term “risk-informed” should not be used as a term of regulation. Where used in the policy context it needs to be more clearly defined and justified.

## Clarity and Consistency of Policy and Regulation

- 4.24 Further, the regulatory and policy background between the different nations of the UK has diverged since 2008 and is only likely to diverge further as common EU/Euratom standards cease to provide a binding framework. Integration and consistency at the national level need to be kept under careful review.
- 4.25 A related issue which requires clarity is the disposal of higher activity waste (HAW) of Scottish provenance in a GDF, where such material is unsuitable for NSD in accordance with Scottish Government policy. It is foreseeable that Scottish standards and requirements on radioactive waste management may diverge increasingly from those in other parts of the UK, particularly if the Scottish Government pursues a stronger policy of equivalence with EU law than the rest of the UK, pursuant to the UK Withdrawal from the European Union (Continuity) (Scotland) Bill.
- 4.26 CoRWM understands and accepts that regulation on an extremely long-term project such as a GDF must inevitably be iterative and retain sufficient flexibility.
- 4.27 However, we are concerned that while the process has arrived at a critically sensitive stage of engagement with local communities, all is not as clear as would be desirable. In particular, clarity is needed as to:
1. The regulatory requirements which will apply to Radioactive Waste Management (RWM) as the delivery organisation at each stage, including in the present, in terms of preparedness as a developer and operator, and the required milestones in that transition;
  2. RWM's coordinated strategy for seeking the necessary development consent and regulatory approvals, with roles, responsibilities and any 'hold-points' clearly identified;
  3. How and to whom the public will be able to provide input to the regulatory process and what information they can expect to be provided to them at each stage, and by whom; and
  4. What the public should expect in terms of regulatory reviews and how the decision-making processes will be open and transparent.
- 4.28 CoRWM welcomes the fact that government action since 2008 has established ONR as a demonstrably independent and expert regulator with a wider range of relevant regulatory responsibilities. The challenge we perceive is that the focus of ONR's work is on nuclear installations of a quite



different type to a GDF, which presents different issues and challenges. Plainly, there is much to be learned and applied to a GDF from ONR's rigorous approach to nuclear and radiological safety in other areas, but there may also be a need to adapt those approaches to achieve the optimal solutions in regulatory terms for a GDF at its various stages of development.

4.29 The main regulatory impact on UK practice as a consequence of Euratom membership, European Directives on nuclear safety and waste, was the obligation to invite International Atomic Energy Agency (IAEA) peer review missions on a periodic basis (Integrated Regulatory Review Service (IRRS) missions under the Nuclear Safety Directive) and ARTEMIS (Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation) missions under the Waste Directive.

4.30 The first of these full scope missions, conducted in 2019, provided recommendations and suggestions related to radioactive waste management. This provided an opportunity for the UK to learn from international practice.

4.31 With the departure of the UK from Euratom this will no longer be an obligation and the UK invitation of such peer reviews will become optional. CoRWM believes that there are clear benefits associated with external (non-UK based) expert reviews, not least because exchange of ideas from other settings (organisations, cultures, facilities and practices) can be an effective driver of innovation. We recommend there should be an on-going commitment to hold such reviews periodically.

### **Recommendation 3**

There should be a commitment by Government to continue external (non-UK based) expert reviews of the management of radioactive waste at regular intervals, especially as proposals for a GDF or NSD are developed.

## Legal Basis for Regulation of a GDF

- 4.32 CoRWM is of the view, on the basis of what is currently proposed, that there is no need for bespoke legislation for a GDF. In our view it can be adequately and effectively regulated through the two systems of nuclear site licensing and environmental permitting, together with the other types of regulation referred to above, where relevant. In the event that a GDF is sited under the seabed, there will be a need for careful review of the implications for operation of these systems and their relationship to, for example, marine licensing.
- 4.33 What must be clear is how those systems will work together to deliver a safe, secure and transparent process in which the public can have confidence. In that regard we welcome the fact that the Environment Agency and the ONR have published a joint position statement on how they will work together to regulate a GDF. We generally applaud the progress which has been made by the regulators in working in co-ordination and making clear public statements of their joint working arrangements.
- 4.34 In particular it is now becoming pressing for clarity to be provided on the legal definition of a GDF as a licensable nuclear site under the Nuclear Installations Act 1965. CoRWM notes that in its 2019 Report to the UK, the IRRS of the IAEA, at page 22, Recommendation R2, made a clear recommendation that the government should now revise the relevant legislation so that a GDF is defined as a nuclear licensed site and we endorse that recommendation. At the same time, CoRWM is of the view that consideration needs to be given to NSD as a possible route for disposal of some ILW, as to whether that activity will be licensable if undertaken outside an already nuclear-licensed site.

### Recommendation 4

Legislation should be revised as a matter of urgency to provide clarity on licensing a GDF as a nuclear licensed site. This should also include consideration of NSD, as to whether that activity will be licensable if undertaken outside an already nuclear-licensed site.

## Regulatory Responsibilities

- 4.35 We applaud the joint publication in 2019 of *Regulating Geological Disposal: An Overview by ONR and the EA*, as the basis for ongoing and more detailed work. ONR and the EA will need to build on and consolidate the excellent work they have done to date in order to maintain public confidence.
- 4.36 There needs to be a clear and comprehensive Government statement of the regulatory responsibilities for a GDF and radioactive waste management. Cm 2919 and the MRWS 2008 White Paper provided a summary of the regulatory arrangements as they were in 1995 and 2008. However there have been a number of significant developments since then both in terms of legislation and the arrangements between regulators. These include the creation of the ONR, with its expanded role, the creation of NRW, a new system of environmental permitting for disposal of radioactive wastes and in particular introduction of a staged approach to the permitting of geological disposal, and the introduction of a new system of development consents for major infrastructure projects, which applies to a GDF.
- 4.37 In CoRWM's view, it is important for this summary to be updated and to be kept updated regularly as developments in regulation occur. There have been later iterations of policy for a GDF specifically, and these should be brought within the context of that updated general policy statement. The relationship of nuclear and environmental controls with the system of development consent orders under the Planning Act 2008 should also be explained, to make clear to the public what can properly be expected from each system of control.

### Recommendation 5

A clear summary of relevant regulatory responsibilities as they now stand should be produced reflecting the excellent work done by ONR and the Environment Agency (EA) in terms of co-ordination. It should also make clear the position in Scotland.

## Implications of the Availability of a Near Surface Disposal Facility for ILW

- 4.38 Should NDA's exploration of the feasibility of near surface disposal for some types of ILW progress further CoRWM believes it would also be helpful to address how the requirements for regulation of NSD for disposal of ILW would differ from those for a GDF.
- 4.39 In addition, clarification is needed regarding the implications of the potentially earlier availability of NSD facilities for ILW for the future approval and regulation of a GDF.
- 4.40 This should include not only the potential cost/benefit trade-off in relation to managing ILW risks under ALARA, but also the potential impact upon regulatory capacity to deal with both disposal routes. The clarification would also need to recognise the different policy background applying in Scotland, as explained above, and it would also be helpful to highlight any significant differences in the regulatory framework applying in different parts of the UK.

### Recommendation 6

Clarification is required regarding the implications of the potentially earlier availability of NSD facilities for the future approval and regulation of a GDF.

## **Implications of the Inclusion of an Underground Rock Laboratory within GDF Proposals**

- 4.41 It is possible that proposals for GDF site investigation may involve not only boreholes but construction of an underground rock laboratory (URL). While there are no proposals for a URL at present, if such proposals do emerge, then the regulatory implications will need to be carefully addressed at an early stage.
- 4.42 The scope of the Planning Act 2008 extends to deep boreholes and the GDF itself, but not to an URL.
- 4.43 To seek to operate a two-tier system, with borehole development permitted under the Planning Act 2008 and a URL under the normal planning system, would not in our view be a viable or sensible option, making integration necessary.

### **Recommendation 7**

The legal and regulatory implications of including an underground rock laboratory (URL) within proposals for a GDF will need to be considered if this is a real prospect.

## Implications of the selection of a near shore GDF

- 4.44 Near shore disposal (i.e. a GDF under the seabed, but accessed from land, sometimes referred to as “inshore”) may be among the options to be considered, though it would present different challenges in terms of site investigation. Such an option will have a wider international dimension with interests from, for example, The Republic of Ireland, Northern Ireland, the Isle of Man, Scotland and Wales, France, Scandinavian states, and the EU needing to be considered as well as other nations and interest groups which may have a view on a facility in the marine environment.
- 4.45 If near shore disposal is a real prospect, attention needs to be given now to the regulatory implications of this, including public international law aspects as well as regulatory implications within the UK. CoRWM is considering this topic as a discrete issue.
- 4.46 CoRWM is working separately to develop its position on sub-seabed disposal.

### Recommendation 8

Careful consideration needs to be given now to the policy, legal and regulatory implications of near shore disposal, including public international law.

## Implications of withdrawal from the EU and Euratom

- 4.47 CoRWM welcomes the fact that environmental regulation under the Environmental Permitting Regulations has been updated to reflect the withdrawal of the UK from the EU and Euratom. The implications of this change, in particular in terms of the nature of control and public participation, should be explained to stakeholders.
- 4.48 The implications of withdrawal from the EU and Euratom also need to be thoroughly addressed: including any effect on basic nuclear and radiological safety standards; liaison with the EU on possible effects on EU countries; assessment of transboundary effects; the implications of cessation of binding EU rules on matters such as groundwater protection, environmental impact assessment (EIA), and public participation; and the approach to these issues in a post-Brexit environment.
- 4.49 Clearer discussion is needed of the radiological and non-radiological environmental control and their relationship – bearing in mind that the latter may be equally if not more important than the former to community groups and non-governmental organisations (NGOs) considering a proposal for a GDF or for the prior borehole investigations.
- 4.50 It is also important, following the UK’s withdrawal from Euratom, to keep carefully in mind the implications of international safeguards obligations and how these may apply to fissile material placed in a GDF and possibly wastes considered for NSD depending on their nature. These obligations may present serious questions of regulation and material accounting over extremely long timescales. It will be necessary to follow closely developments in international law, guidance and practice on this complex and important subject – and respond accordingly.

### Recommendation 9

Careful thought needs to be given to the application of safeguards legislation to a GDF or NSD, and the implications of this.



## Maintaining Public Confidence in Regulation

- 4.51 CoRWM agrees that a staged approach to regulation of a GDF is appropriate, indeed necessary. It is now important to flesh out in more detail how the staged approach is going to work in practice, what the clear hold points are, what information the public may expect at each stage, and how the public can participate effectively at each stage.
- 4.52 Further, bearing in mind that regulation of construction of a GDF and emplacement of waste will be over a period of 150 years or more, and that there are numerous social and economic considerations which could intervene in that period, consideration needs to be given as to how regulatory conditions will ensure the maintenance of minimum pre-determined levels of safety and environmental protection throughout that period.
- 4.53 This form of regulation is unprecedented in terms of longevity, being significantly longer than most industrial or extractive projects being permitted or authorised currently. An example is arrangements for financial provision to cover unforeseen problems or contingencies which may arise.
- 4.54 Consideration is also needed as to the possible need for regulation over very much longer timescales, not simply on safety grounds, but also for the purpose of safeguards in respect of fissile material placed within a GDF.
- 4.55 Staged authorisation should not mean a “stop-start” process. Consideration should be given to how best to retain programme momentum through a long-running, multi-stage authorisation process.
- 4.56 It needs to be recognised that the two main strands of regulation, through nuclear site licences by ONR and through environmental permitting by the EA, NRW and SEPA derive from very different regulatory and legislative backgrounds. Nuclear site licensing is a non-prescriptive process largely between the ONR and the site licensee, with generally little public input. Environmental permitting is also non-prescriptive but involves much more detailed and directive regulatory conditions with a high degree of public information and participation. It may be that the public’s interest in GDF proposals will move site licensing more in the direction of environmental permitting in that regard. It also means that great attention will have to be paid to communicating issues of safety, security and risk to the public in more accessible terms than previously.

- 4.57 The assessments of Safety Cases are a case in point. We acknowledge that the Safety Case will inevitably be a complex document if it is to provide the necessary technical underpinning. However, the regulatory assessment of Safety Cases will also need to be accessible and understandable for the wider community. We recommend the regulators continue to work to develop this aspect of Safety Cases by liaising with all parties to explore more innovative ways of communicating their assessments more effectively. We also recommend that ONR also considers what approach should be adopted to the public interface in licensing a GDF.
- 4.58 Policy responses to climate change and the net zero carbon initiative demonstrate that societal changes in environmental priorities do occur through time. They will inevitably become more important. These need to be anticipated, but not pre-determined by the environmental regulators. This may be the inherent value of the staged approach to authorisation of the GDF, that there is the opportunity to adapt to changing societal expectations. However, we would caution against piecemeal decision-making where a comprehensive overview of “the long game” must be maintained.
- 4.59 Perceived near-term opportunities, for instance the possibility of diverting some ILW in England and Wales to NSD, need to be assessed against the bigger picture of maintaining public trust and confidence in an effectively regulated industry, with a clear view of the long-term objective of societal support for managing radioactive wastes safely.
- 4.60 Nuclear security now falls to ONR as regulator, and CoRWM appreciates the stringency of ONR’s oversight of that important issue. We would make the point that oversight and scrutiny of security can and should start very early, since so much turns on corporate culture and embedded systems within the organisation. It is therefore in CoRWM’s view not too soon for ONR to be scrutinising RWM in that respect.
- 4.61 We would also point out that there is an important balance to be struck between security of sensitive nuclear information and openness in terms of public access to information and public participation in decision making. The EA will undoubtedly be pressed to make as much information as possible available. It would be helpful to have some joint guidance from ONR and EA on the considerations applying in this area and how the balance is to be struck.

- 4.62 Nuclear safeguards are an area which may be very important for certain parts of the inventory to be disposed of within a GDF and is an area significantly affected by the UK's withdrawal from Euratom. In preparation for withdrawal the UK government worked with the IAEA to replace the trilateral safeguards agreement (UK IAEA EU) with a bilateral safeguards agreement (UK IAEA) and the UK government and ONR strengthened national arrangements for safeguarding nuclear material in the UK.
- 4.63 Notwithstanding these new arrangements the area of safeguards as it relates to a GDF will require complete reconsideration and explanation to reflect the withdrawal of the UK from Euratom and the cessation of Euratom safeguards inspections as applied to the UK.
- 4.64 At the time of preparing this Position Paper, the planning system in England is subject to further, radical, proposals for reform. As these are currently only proposals, we have not at this stage attempted to comment on their possible implications for radioactive waste management. This is however an issue which needs to be carefully kept under review, and CoRWM will monitor relevant changes.
- 4.65 For example, we have noted reports that new policy on housing may result in significant new housing numbers in local authority areas which may potentially be host communities. How to deal with what may be a very significantly changing demographic over the period leading up to a test of public support (and indeed afterwards) needs more careful consideration than has been given hitherto.
- 4.66 So far as a GDF, and the exploratory deep boreholes to investigate sites are concerned, the provisions of the Planning Act 2008 are intended to provide a stable and efficient framework for considering applications for development consent for designated major projects.
- 4.67 As CoRWM sees it, the three main features of the system are:
1. Decision making at national rather than local level;
  2. A clear policy framework provided by national policy statements, which should deal with considerations such as the policy support and need for the infrastructure and should make clear what issues will be important for consideration when an application for development consent is being considered; and

3. A procedural framework of consultation, application and examination leading to a decision within a clear timeframe. The procedure is heavily front-loaded, requiring heavy investment in developing the project, consulting upon it, and assessing its potential impacts before any application is submitted.

4.68 These are, in CoRWM's view, significant advantages and are likely to assist greatly the planning process for a GDF.

4.69 CoRWM notes the potential difficulties which would arise from seeking to promote a major NSD facility for some ILW outside the 2008 Planning Act regime.

4.70 In our view, if NSD for some ILW is an option to be pursued seriously, then consideration needs to be given as to whether it should be within the 2008 Act system: this would give much greater transparency in CoRWM's view and would ensure that the government and ultimately Parliament considers properly and formulates the policy case underpinning such an option.

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If NSD is an option to be pursued seriously, then consideration needs to be given as to whether it should be brought within the 2008 Planning Act system.

4.71 Despite the UK's withdrawal from the EU, pre-existing EU legislation will remain relevant to applications and may present constraints on some sites.

4.72 A key example is the legislation on the protection of species and habitats. In CoRWM's view it will be important, as the process of working with communities develops, to have and to provide to communities (and the wider public) a clear understanding of the status and effect of such constraints, and how they will be addressed as part of the process.

4.73 Another very important part of the Development Consent Order (DCO) process will, in CoRWM's view, be to set out very clearly for the public and the examining authority the other relevant aspects of regulation, the protection they will provide, and the standards they will ensure. This reinforces the importance of our earlier recommendations on clarity as to the regulatory process.

- 4.74 A further important aspect is that of examining alternatives, so as to explain why they have not been pursued and why the ultimate choice of site has been made. This is in CoRWM's view likely to be a critical and probably controversial aspect of the proposal for a GDF. It will require a clear audit trail, and may be subject to challenge if for example it is perceived that a decision on siting has been dictated simply by the existence of a willing host community and without sufficient regard to other important considerations such as habitats, or environmental protection. It is not too early for RWM to be addressing this aspect of its work, so that it will be in a strong position to justify the ultimate choice of site. RWM's work on site selection factors needs to be taken forward and refined to provide a clear framework.
- 4.75 The other main development which CoRWM notes in the area of planning since 2008 is the surge in opposition by communities and interest groups to environmentally controversial applications.
- 4.76 The Civil Procedure Rules, as required by the UNECE Aarhus Convention on public information and participation, are now much more favourable from a costs point of view to legal challenge, and social media has made it very easy to raise the sums required to bring a legal challenge to decisions.
- 4.77 RWM needs to be aware of these issues and take them into account when considering matters such as the stage to seek a test of community support. The point is that securing community support is only one aspect of the process: it will not in any way guarantee lack of serious opposition at the later stage of applying for development consent.

## 5 Conclusion

- 5.01 CoRWM welcomes much of the detailed work that has taken place in the field of radioactive waste regulation, management and policy development since the publication of Cm 2919 in 1995 and of MRWS in 2008.
- 5.02 Having provided an overview and commentary on some of the main developments above, CoRWM makes several important recommendations. Given the renewed drive towards establishing a GDF for HAW and possibly enabling NSD for some ILW, CoRWM believes that there is a need for a comprehensive statement of the policies of UK Government and the devolved

administrations that captures the essence of all these developments within a single accessible document.

5.03 Public confidence in the ability of those responsible to deliver safe, secure and environmentally sound radioactive waste management facilities that will affect generations to come is key to the successful implementation of that policy. Of central importance to that delivery is properly resourced, effective, and transparent regulation.

5.04 The above recommendations on policy and regulation are made with a view to securing further clarity and thence public confidence in the regulation and implementation of radioactive waste management policy.