



**Nuclear Waste
Services**

**How can messages on the technical reliability
of geological disposal be presented to a wide
range of stakeholders?**

**Professor Neil Hyatt
Chief Scientific Adviser**

Approaching technical communication

Key issue: there is a low level of understanding of geological disposal among stakeholders and sometimes misconception.

Explaining complex concepts

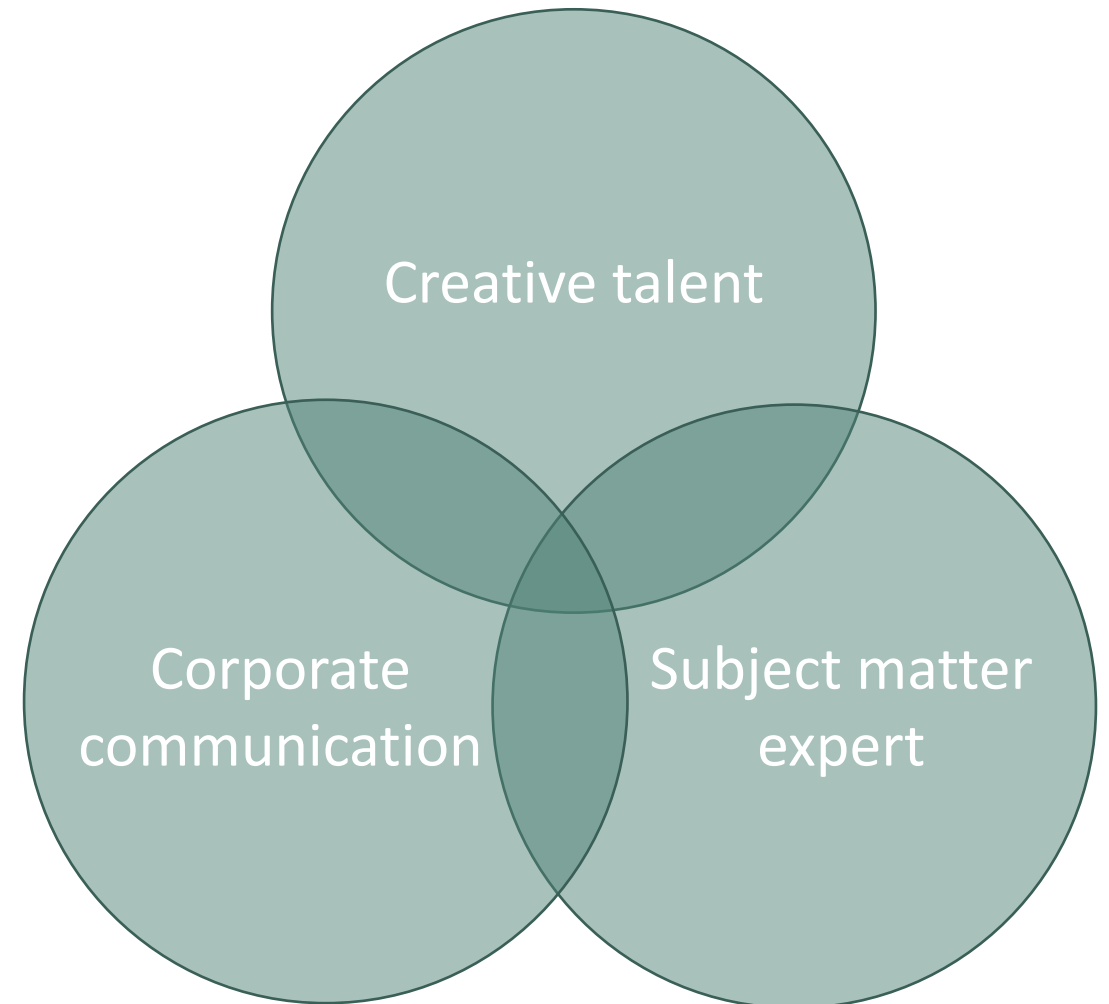
- Identify the very basic concept and communicate it in a relatable way; be open minded!

Building trust

- Focus on authenticity, be honest but reassuring on the challenges of delivering geological disposal.

International lessons and implications

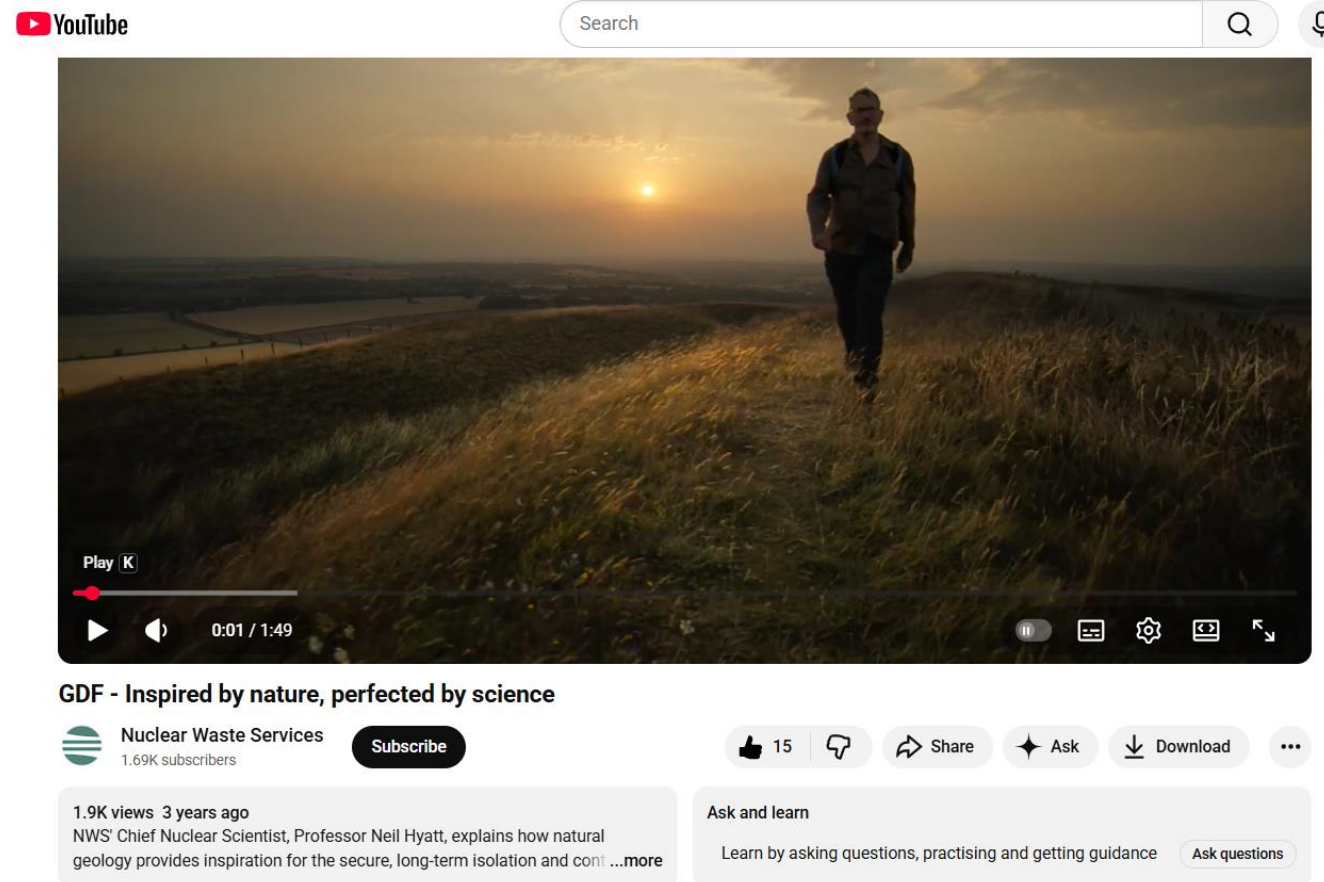
- Work with international partners to provide first hand experience and independent perspectives on geological disposal.



Example: video for broad public audience

NWS produced video for public audience

- Objective: to explain why a geological disposal facility will be safe after closure.
- The video explores the basis of post closure safety by making an analogy with the achievements of nature.
- We use the example of a fossil to prove the stability of suitable rocks and then explain how engineering will add a greater safety margin.
- The key here is to tell the story of GDF safety starting from and continually touching on points of human experience – because a GDF is outside most people's experience.

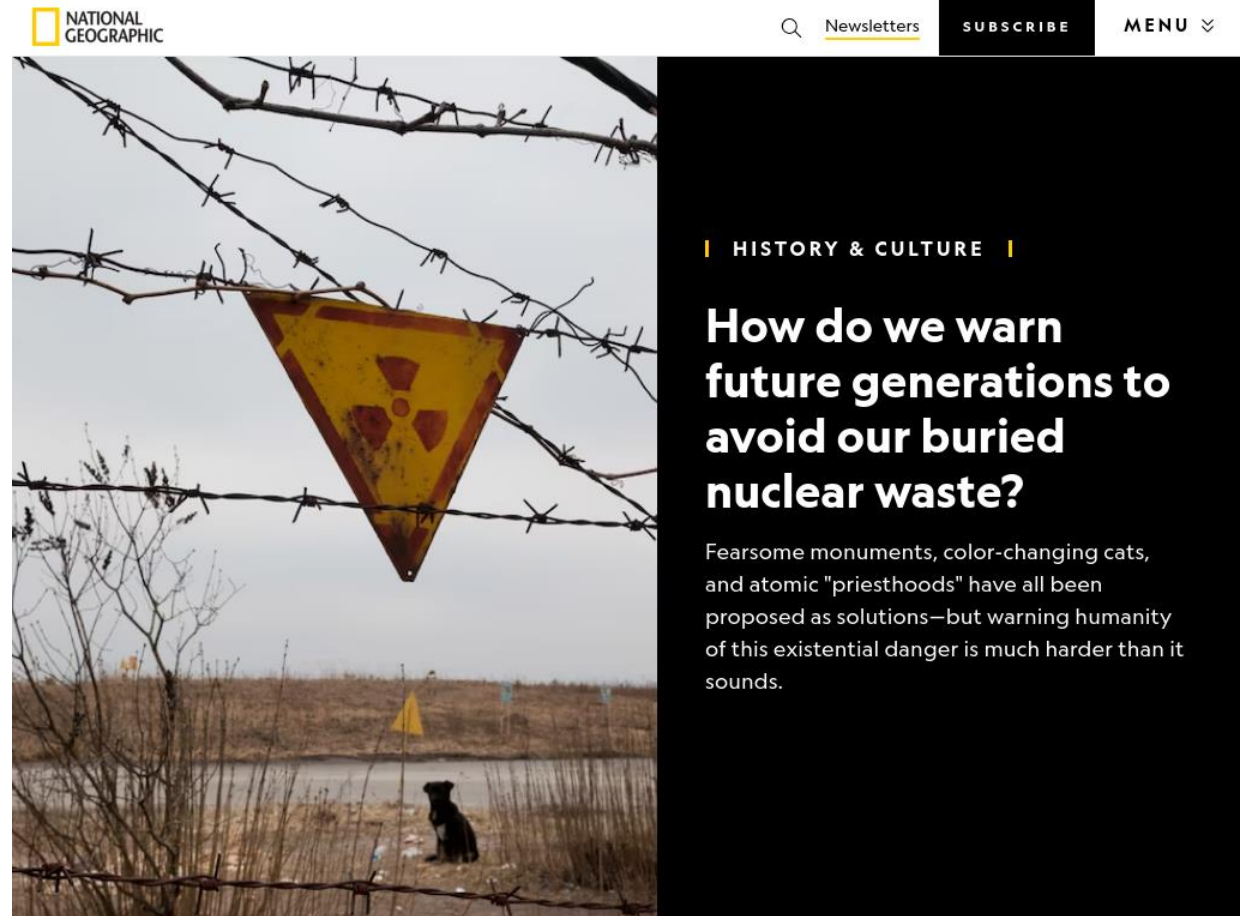


[GDF - Inspired by nature, perfected by science](#)

Example: media article for public audience

Article in National Geographic magazine by independent writer – Mark Pleiser.

- Objective: to facilitate access by journalists to the Bure URL and experience of an environment approximating a geological disposal facility.
- Two substantial online articles published by BBC and National Geographic.
- National Geographic article focused on the question of how do we warn future generations of where the waste is buried?
- By exploring this question the purpose and long term safety of a geological disposal facility were explained.



<https://www.nationalgeographic.com/premium/article/nuclear-waste-repository-ray-cat-wipp-hitf-fabbri>

Example: visit to Onkalo GDF for UK Parliament

Field trip to Onkalo GDF for UK Parliament.

- Objective: to develop the awareness of key Parliamentarians of geological disposal.
- Visits to Onkalo and URLs help our stakeholders to conceptualise the scale of a geological disposal project and demonstrate that it is implementable.
- NWS recently supported such a visit for the All Parliamentary Group on Nuclear Energy.
- The visit allowed NWS to explain the delivery of the UK GDF Programme in the context of a real GDF environment.
- Parliamentarians gained first hand knowledge from Posiva and the elected Mayor.



Example: podcast for professional audience

Podcast produced by industry partner WSP.

- Objective: to explain why geological disposal will have a positive impact on humanity.
- Format of a conversation allows the need for and safety of a geological disposal facility to be explored through conversation.
- An experienced host and science communicators allow the conversation to flow and key points to emerge naturally.
- Working with an industry partner enables wider reach of communication through combined professional networks.



[Designing the UK's long-term solution for nuclear waste | Positive Impact Podcast](#)

Example: video shorts for public outreach

Video to explain spent nuclear fuel disposal.

- Objective: to explain spent nuclear disposal to a younger demographic.
- Portrait style video for optimal viewing on mobile device.
- Very short “bite sized” narrative to get across one point.
- Use authentic setting and artefacts to explain and illustrate a key element of safety case.
- Very effective in reaching a wide external audience.



[Reporting from inside a copper canister in Finland](#)