

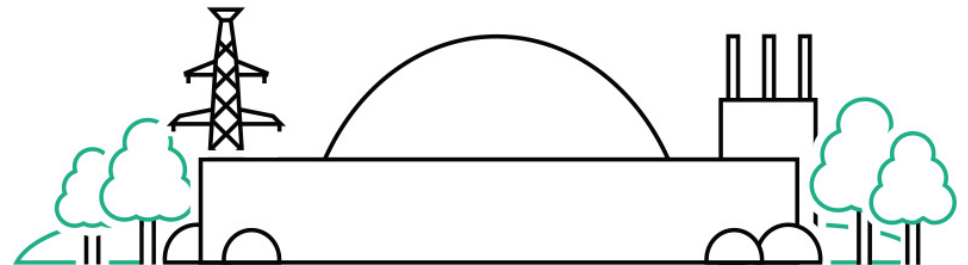


Office for  
Nuclear Regulation

# Adapting nuclear regulation to the new context

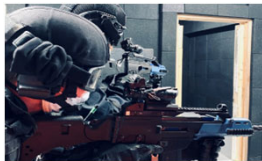
ENSREG Conference – 24 June 2024

**Mark Foy**  
**Chief Executive/Chief Nuclear Inspector**  
**UK Office for Nuclear Regulation**

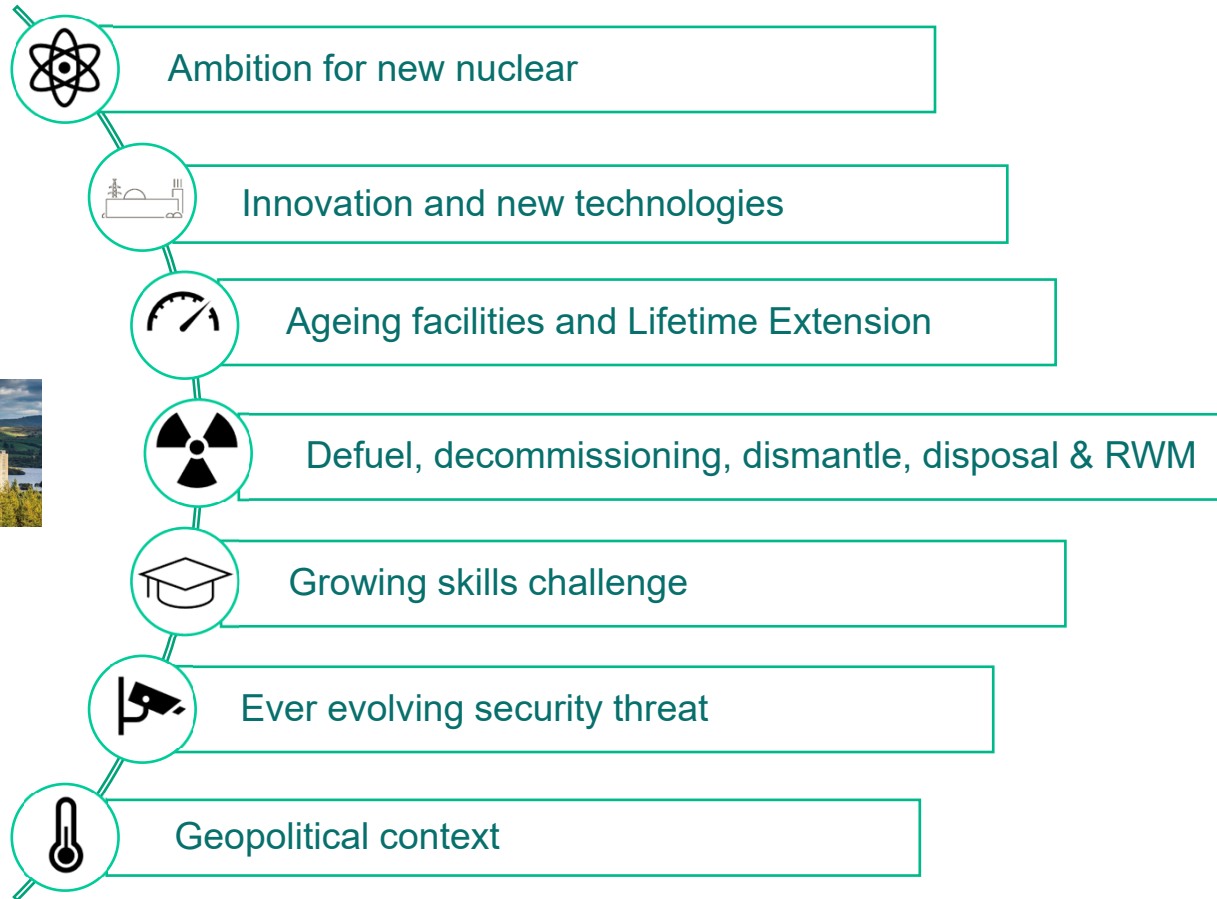


# Environment

Globalisation

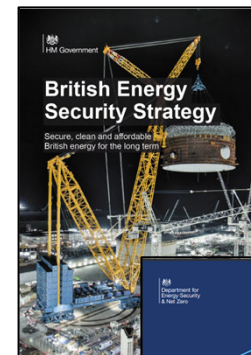


Climate change



## Major factors

- Dynamic environment
- Energy Strategy Nuclear Roadmap - energy security and net zero
- Great British Nuclear (GBN)
- Major investment in defence nuclear
- Vendor appetite – GW, SMR, ANT etc
- Reactor lifetime extensions
- Waste management and disposal
- Increasing adoption of innovation
- Nuclear Skills
- General Election
- Geopolitical context



# ONRs experience

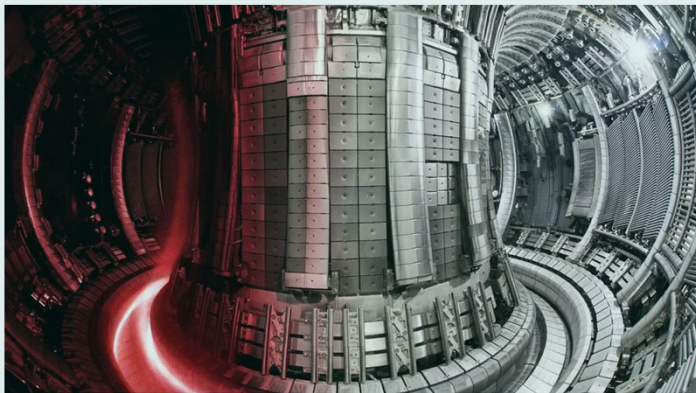
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## Challenges and opportunities

- UK Goal setting regime – technology neutral
- Broad portfolio of regulation
- Uncertainty – requires agility and flexibility
- The need to be open-minded
- Accelerated licensing and deployment
- Review of processes, procedures and guidance
- Collaboration/harmonisation/joint reviews
- We must be **efficient and effective**
- Potential need to review legal frameworks
- Maintaining skills capability and knowledge base
- Proactive stakeholder engagement and consultation is a must



# Fusion



## UK fusion ambition

- Joint European Torus (JET) facility – Experimental fusion reactor constructed in 1970s, operated for 40 years, recently shutdown
- UK pursuing a fusion power plant, operations planned for 2040s - Spherical Tokamak for Energy Production (STEP)

## UK fusion regulation

- Regulatory Horizons Council: Report on fusion energy regulation, 2021
- Disproportionate and unnecessary to incorporate fusion energy facilities into nuclear fission regulations
- Confident that existing regulations will be able to uphold safety standards in a proportionate way – HSE And EA relevant regulatory bodies
- Aim to enable the safe and rapid deployment of fusion energy power plants, promoting innovation while maintaining human and environmental protections

# Summary

- Regulators are key in enabling nuclear's role in energy security and net zero
- We are faced with a dynamic environment that brings uncertainty
- Regulators and frameworks must be ready and fit for purpose
- Collaboration is essential – It will drive consistency and safety improvements
- We must maintain focus on existing nuclear and radiation facilities
- Instilling trust in what we do and the decisions we take requires proactive stakeholder engagement

**Safety and protection of society will always remain our top priority**





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**Thank you!**