



Office for
Nuclear Regulation

International Conference on Effective Nuclear and Radiation Regulatory Systems

UK framework for demonstrating regulatory effectiveness

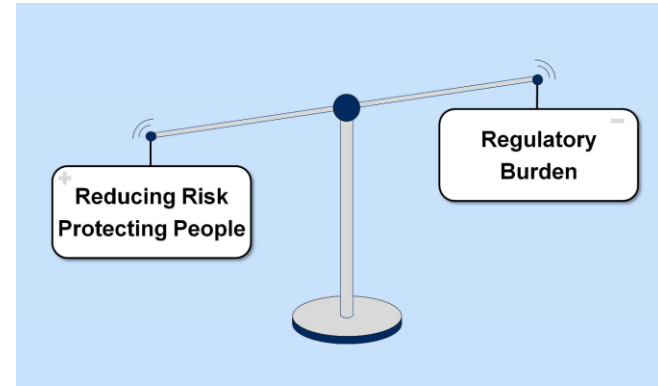
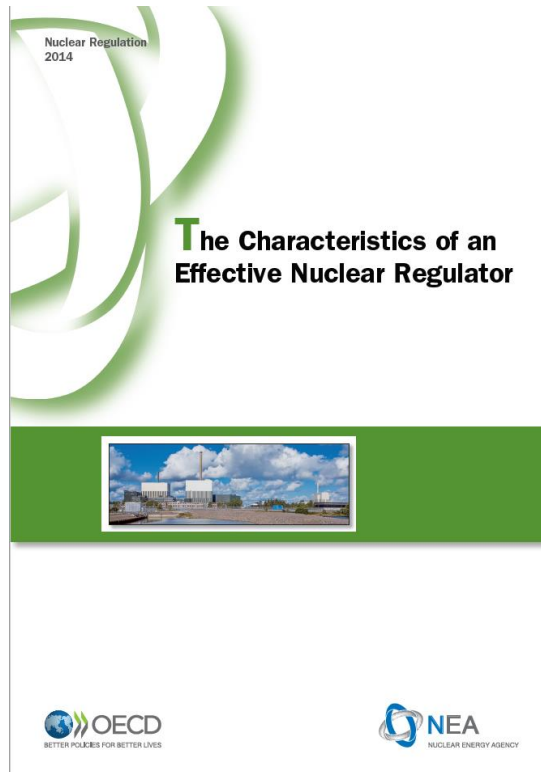
Mark Foy – Chief Nuclear Inspector

Progress since Vienna 2016 conference

- ❖ Continued to work extensively with IAEA and member states in the further evolution of IAEA safety standards, and supported embarking countries.
- ❖ Developed new strategic framework for international cooperation
- ❖ Hosted a full scope IRRS Mission to the UK, one of the most complex mission ever undertaken.
- ❖ Recognised the need to further improve our integrated management system and have a comprehensive programme to improve it; specifically to include safety culture
- ❖ Enhance transparency through much improved engagement with NGOs, webinar events and more recently the publication for the first time ONR's report on the state of the UK's nuclear industry



OECD NEA: Characteristics of an effective nuclear regulator





ONR's Organisational Effectiveness Indicator (OEI) Framework

- 1 Timely and efficient regulation
- 2 Balanced, consistent and proportionate regulatory decisions
- 3 Effective influence to sites receiving enhanced attention
- 4 Open & Transparent regulation
- 5 Stakeholders & dutyholders confident in our regulation

- 6 Technical capability, capacity and resilience
- 7 Getting the best out of and for our people
- 8 Effective business continuity & emergency preparedness
- 9 Strive for continuous improvement and safety culture
- 10 Strong organisational capability



OEI 6 - Monitoring Capacity, Capability & Resilience

1. Ability to meet Current Demand

- Considers technical and behavioural capability

3. Managing Capability & Resilience

- Understanding capability gaps
- Succession Planning
- Resilience

5. Indicator of the overall capacity, capability and resilience of the specialism

Capacity, Capability & Resilience Score For Specialism:	Date Updated:	Period:	02/28/20	03/28/20	04/28/20	05/28/20	Trend
Operational Inspection	07-Jul-09	Overall Rating					

Section A							
1. Meeting Current Demand (1-5 months)				2. Meeting Future Demand (6 - 5 years)			
Rating	02/28/20	03/28/20	04/28/20	05/28/20	06/28/20	07/28/20	Trend
Rating	3	3	3	3	3	3	
Comments	Over the next 12 months, resources drawn from the Division tasks to be reduced as ST Major Program concludes, from resources expected for base based decommissioning sites and potentially increasing activities at PWR sites.						
1.1	The demand on operations for the next 12 months is clear	Agree					
1.2	Have sufficient resources to meet the known demand	Agree					
1.3	Have sufficient technical & behavioural capability to meet the known demand	Agree					
2.1	The demand on operations for years 1-5 is reasonably predictable	Agree					
2.2	Have resources in place to ensure sufficient resources to meet the known demand	Agree					
2.3	Have resources in place to ensure the capability to meet the technical and behavioural capability to meet the known demand in years 1-5	Agree					

3. Managing Capability & Resilience							
Rating	02/28/20	03/28/20	04/28/20	05/28/20	06/28/20	07/28/20	Trend
Rating	3	3	3	3	3	3	
Comments	Further improvements need to be made in allocating additional development positions for continued inspection of special sites to provide additional resilience and to better manage workloads. Succession plans are acceptable for reactor activities, decommissioning activities and activities at the decommissioning capability shortfalls are known and steps are in place to address them.						
3.1	Understand the capability requirements across an operation and have appropriate plans in place to manage them	Agree					
3.2	Have appropriate succession plans in place to maintain capability over the next 5 years	Partially Agree					
3.3	Have sufficient development plans in place to maintain capability over the next 5 years	Partially Agree					
3.4	Have an sufficient resilience across an operation to maintain known delivery over the next 5 years	Agree					

4. Monitoring Work Loads							
Rating	02/28/20	03/28/20	04/28/20	05/28/20	06/28/20	07/28/20	Trend
Rating	3	3	3	3	3	3	
Comments	The highest working hours relate to field site inspections with a substantial proportion of time spent on travel. I will raise this matter with the CDRs. There are no significant concerns for base and working on special bases.						
4.1	How many of your staff are working in excess of their contracted hours (not including O&M)	15 out of 78					
4.2	How many of your staff are working less than their contracted hours (not including O&M)	2 out of 78					
4.3	What is the average staff utilisation [%]	88					
4.4	What is the maximum utilisation [%]	95					
4.5	Who within your operation is working the most hours?	Site Inspectors					
4.6	Have discussed with the relevant CDRs/DNs and are satisfied that they have put sufficient resources in place to manage work loads	Partially Agree					

5. Overall Capacity, Capability & Resilience							
Rating	02/28/20	03/28/20	04/28/20	05/28/20	06/28/20	07/28/20	Trend
Rating	3	3	3	3	3	3	
Comments	Taking into account the above considerations, the capacity, capability and resilience across an operation is manageable and there are no significant risks in the delivery of O&M services.						
Comments	The capacity, capability and resilience within Operational Inspection are acceptable. One key capability gap remains with investigations, with significant steps underway to address this shortfall. Other areas for consideration are developed opportunities for supporting associated site inspections to provide organisational resilience and manage workload.						

Section B							
1.1 What is your 'get in good' plan?							
1. Investigate capability development already in place. 2. Strategic discussion of EDR on growing site inspection resilience							
1.2	Do you need to raise a ticket at RDR?	If yes...	Inform Meac Biorval prior to RDR				
1.3	Do you need to escalate a risk or issue to the TD Risk Register?	If yes...	Inform Tim Billewark				
1.4	Do you need to raise an O&M?	If yes...	Seek approval from Technical Director/Chief				
Business Request:							
Other reasons for escalation:							
Technical Director's Resilience:	Signature:	Date:					
Comments:							

2. Ability to service future demand (1-5 years)

- Excessive working hours can indicate under-resourced
- Helps us manage individuals' wellbeing

improvement plan, and any recruitment is requested and justified.



Indicative monthly Scorecards

Composite performance across all 10 characteristics

		Tier 1												Exception commentary
Characteristic	Lead	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	
1	We regulate in a timely and efficient manner													
1.a	Inspection delivery and reporting													
1.b	Management of Regulatory Issues													
1.c	Follow-up to Compliance shortfalls													In period, 5 of 8 ongoing investigations have exceed the 6 month target resulting in an overall failure of 62% against a target of 80%. The investigation was completed after 7 months.
1.d	Follow-up to Incidents													In the July period the 10 overall failures were 11 below the target. This was due to a failure to complete a case for 40% of 100 investigations created. 40% Refused to SI, OBI, IFA.
2	We make clear, balanced and unbiased regulatory decisions													
3	Safety and Security performance of sites receiving enhanced levels of regulatory attention													
4	We are open and transparent in our regulation and decisions													
5	Stakeholders and dutyholders are confident in our regulation of the industry													
6	We have the necessary regulatory and wider technical competence to exercise our statutory functions													OBI review of several applications will be completed by end of July
7	We get the best out of our people													
8	We have the necessary business continuity and emergency response capability													To be developed for 01
9	We adopt a continuous improvement and self-learning culture													
10	We have a strong organisational capability (people and systems) to equip ONR													
10.a	Management System													To be developed for 01
10.b	Efficient IT Service performance													
10.c	Organisational efficiency													
10.d	Efficient recruitment													

Detailed performance for OEI 1 – Efficiency of regulation

OEI 1. We regulate in a timely and efficient manner															
(a) Inspection delivery and reporting															
OEI Ref	OEI Description	Target	Frequency	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
I	Inspections completed as planned	90%	Monthly	84%	96%	97%									
II	System based inspections completed as planned	95%	Monthly	100%	100%	100%									
III	Intervention & Contact Records completed in a timely manner	90%	Monthly	97%	97%	96%									
IV	OSAC to deliver reports to enable the UK to meet its international Obligations	100%	Monthly												
Further details available under 2019/71133 (IC Baseline table). This document shows baseline vs. actual inspections v compliance all divisional data. Data completed one month in arrears.															
Further details available under 2019/71133 (System Based table). This document shows baseline vs. actual inspections v compliance all divisional data. Data completed one month in arrears.															
Further details available under 2019/71134 (This document completes all divisional data. Individual divisional sheets available under footer 1.1.2.999)															
Not reporting until September															
(b) Management of Regulatory Issues															
OEI Ref	OEI Description	Target	Frequency	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
I	Regulatory issues are up to date	90%	Quarterly			90%									
II	Planned DL reviews of regulatory issues undertaken	100%	Quarterly			100%									
III	LI issues considered by RL T	100%	6 monthly												
Value calculated by summing report of all issues in Remedial Plan, 40% down to date data and divide number of issues (to date) by full number of OIRs issues.															
Confirmed from OIR Leads.															
Not reporting until September															
(c) Follow-up to Compliance shortfalls															
OEI Ref	OEI Description	Target	Frequency	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
I	Duration of formal investigations	80% < 6 months	6 monthly			67%									
II	Ambic, Red rated and OBI Not Met ratings supported by regulatory issues	90%	Quarterly			100%									
III	Average time to issue IN or EL following inspection or incident	< 42 days	Quarterly			96%									
In period, 1 of 2 ongoing investigations has exceed the 6 month target resulting in an overall failure of 50% against a target of 80%. The investigation was completed after 7 months.															
Report generated in OIRView for all completed investigations.															
Any rated red/amber or OBI Not Met are cross checked with corresponding OI (found under 2019/71246) to identify if issue has been raised.															
In period, the average time to issue IN or EL following inspection or incident has exceed the target of 42 days by 64 days (average time being 86 days).															
Further details available under 2019/71136.															









Measuring our regulatory impact

Assessment of trajectory of safety improvements at one of the UK's Defence sites

Assessment Criteria	RAG Rating Mar 18 ⁽¹⁾	RAG Rating Jun 19
1. Safety performance and compliance	Meets regulatory expectation	No change
2. Leadership and management commitment to drive and deliver safety performance	Meets regulatory expectation	No change
3. Control and supervision of operations	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls	Improving
4. Organisational capability to secure and maintain safety	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls	Improving
5. Delivery of risk reductions across site against an agreed plan	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls	No change
6. Effective learning from experience to drive continual improvements to safety performance	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls	Improving
7. Management of incidents	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls	Improving
8. Management of matters arising from enforcement	Meets regulatory expectation	No change
9. Timely delivery of adequate safety submissions	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls	No change
10. Informed decision making on matters which may affect safety	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls	Improving

RAG Rating Key:

	Meets regulatory expectation		Improving
	Broadly meets regulatory expectation with agreed improvement activities in progress and on track to address identified shortfalls		No change
	Does not meet regulatory expectation: Improvement activities yet to be agreed or to demonstrate effectiveness in addressing identified shortfalls		Deteriorating

Measuring our regulatory impact

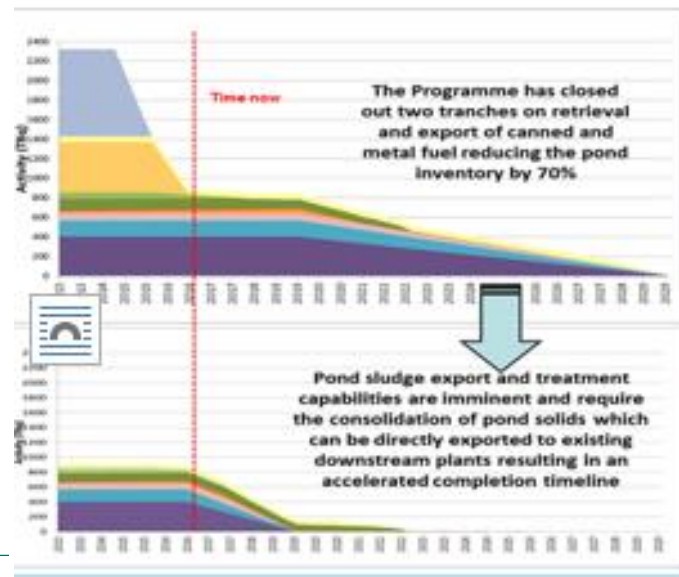
Indicative dashboard showing hazard and risk reduction progress across Sellafield estate - extract

Facilities within Significantly Enhanced Attention

Assessment Criteria	MSSS		PFCS		FGMSP		SNM	
	RAG Rating May 2019	RAG Rating Nov 2019	RAG Rating May 2019	RAG Rating Nov 2019	RAG Rating May 2019	RAG Rating Nov 2019	RAG Rating May 2019	RAG Rating Nov 2019
Progress of HRR against schedule	A		G		G		A	
Timely delivery of adequate safety submissions	A		G		G		A	
Readiness of enabling facilities and improvements	A		A		G		A	
Health of regulatory issues	G		n/a		n/a		G	A

Rest of SL Site

Assessment Criteria	RAG Rating May 2019	RAG Rating Nov 2019
Performance and compliance	A	
Leadership sufficient to drive performance and delivery	A	
Organisational capability	G	
Health of regulatory issues	G	
Management of events	G	
Management of matters arising from enforcement	G	
Health of Internal Challenge	A	



Insights and future focus

- ❖ Renewed focus on efficiency of what we do and how we regulate
- ❖ Better focus on whether we are making the right impact
- ❖ Bringing to fore insight on our non-regulatory overhead which will inform future workforce planning
- ❖ Honest appraisals from industry that are causing us to reflect and revise our approach

Future Focus

- ❖ Introduce meaningful measures to reflect health of our integrated management system and ONR's safety culture
- ❖ Further refinement in how we measure our regulatory impact
- ❖ Hopefully some international collaboration



Thank you!