DEFENCE SAFETY AUTHORITY
ANNUAL REPORT 2015/16
Defence Nuclear Safety Regulator

SECTION 1 – EXECUTIVE SUMMARY

Regulatory Health

1. DNSR has implemented resilience modelling to assess its organisational health. While DNSR currently has sufficient resource (internally and on contract) to undertake the majority of identified essential tasks, this has only been achieved by secondments from the Office for Nuclear Regulation (ONR) and Development postings; a significant and increasing volume of work is being deferred. There are also significant succession planning issues to manage. Projected increase in programme related loading presents a challenge for the next few years, exacerbated by the increased regulatory attention required to take assurance and where internal challenge and assurance is weaker than hitherto.

2. DNSR has an appropriate regulatory framework, however the continual expansion of the programme and associated requirements for regulatory interventions are now increasingly affecting outputs. In part this has been mitigated by DNSR implementing a number of improvements to its processes, particularly relating to strategic planning and consistency of approach across the team, as a result of the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) type inspection of DNSR that was undertaken in 2013. In addition, following a competitive tender exercise, a ne cw contract commencing 1 April 15 has been awarded for regulatory support to DNSR, thus enabling continued independent, enduring, coherent and competent long term support. The demonstrable robustness of the contractor independence was fundamental to their successful application to become a Technical Safety Organisation (TSO) within the European Technical Safety Organisation Network (ETSON), the only UK organisation to achieve this. Continued contracted support from DSTL is also being progressed.

3. Over the financial year (FY) 2015/16, DNSR has undertaken 47 planned inspections, reviewed 152 documented safety submissions, approved 4 transport packages for the transport of Defence nuclear materials, permissioned 35 significant nuclear activities and assessed 10 Nuclear Emergency Response demonstration exercises. DNSR supported the achievement of the Initial Operating Capability (IOC) of the Defence Safety Authority, formed through the merger of the Defence Safety & Environment Authority and the Military Aviation Authority on 1 April 15, and continued to do so in support of Full Operating Capability (FOC), due 1 April 16, through the Defence Safety Regulatory Review (DSR) and the follow-on Programme for Regulation and Investigation of Safety by the MOD (PRISM).

4. The formation of the Defence Safety Authority (DSA) and its associated DSR has had, to date, no direct impact on DNSR's 'modus operandi'. Indeed, its formation has enhanced the independence of DNSR from the DNP with a direct reporting line to the Secretary of State for Defence (SoS). The need for continued close working relationships between DNSR and ONR are recognised in the findings and recommendations of the DSR to be presented to the Defence Board in April 16. The DSR is being implemented through PRISM, a set of projects aimed at achieving FOC and beyond for the DSA and enhancing organisational performance and integration. One area for DNSR to watch is the development of DSA wide policies, such as the joint Enforcement Management Model. As a result, DNSR is appropriately influencing PRISM to identify beneficial opportunities for integration on

common areas whilst ensuring our core requirement of continued alignment and coherence with all DNP associated Statutory Regulators is maintained. The internal DNSR resource required to support these work streams leading to FOC has been significant.

5. One of the key challenges to DNSR, as it is to the wider DNP, is the continued availability of suitably qualified and experienced personnel to regulate all aspects of a DNP, which currently has a very high level of programme activity. As of 31 March 16, DNSR's professional complement is at approximately 95%. However, DNSR has recently had a high turnover of personnel either joining other organisations or retiring. Additionally, the Nuclear Weapon Regulator (NWR) and a number of NWR inspectors either have or are moving to part-time employment. This presents DNSR with a short term risk in reduced SQEP until new entrants are fully trained and have achieved a necessary level of experience. For some areas, the retention of the experienced personnel on a part-time basis will enable effective knowledge-transfer and mitigate the risk to some extent. However, there remains a significant, age related demographic risk within DNSR, identified in the inaugural high level 2014-15 DSA Annual Assurance Report, that will require careful management. It could be exacerbated by the continued risk of attrition of staff to ONR given the continued gap in salaries and the growing programme ONR has to regulate. Positively, DNSR has 1 MOD nuclear development person on return from an ONR secondment. A further MOD nuclear development person, a graduate trainee, has recently left DNSR as part of the NSQEP development (graduate training) programme. In addition, an inspector from ONR commenced a 12 month placement into DNSR in April 15, which has subsequently been extended to September 16. This will enhance the understanding and coherence at the inspector level between DNSR and ONR. It is planned to continue seconding an ONR inspector after September 16. This additional resource is assisting with the challenge of regulating the current DNP. Recently, DNSR NPR has had a good response to a single JOB advert, but concern remains for the future across DNSR as a result of the career management freedoms available within the DE&S's matrix organisational structure. The longer term replacement in the unique NWR Inspector Transport post has been identified and will join DNSR in May 16.

6. In summary, this reporting period has seen significant change within DNSR. Of the current 27 Technical staff (of which 2 are on secondment to DNSR), 7 will have left or be due to leave with a further 4 from the NWR team moving to a part time working pattern.

SECTION 4 – REGULATORY ACTIVITY

7. The purpose of this Section is to provide details of the regulatory activity conducted by DNSR to support its assessment of safety performance across the DNP. It includes: the main activities undertaken; the status of DNSR's organisation and resources; and an update on engagement with other regulatory bodies.

8. Activity Summary. In regulating the DNP during this reporting period (1 April 2015 - 31 March 2016, DNSR has:

   a. Permissioned 35 significant nuclear activities.

   b. Reviewed 152 documented safety submissions.

   c. Conducted 47 planned inspections (many in conjunction with ONR).

   d. Approved (as Competent Authority) 4 transport packages for the transport of Defence Nuclear Materials.

   e. Assessed 10 Nuclear Emergency Response demonstration exercises.

f. Applied capability mapping across all DNP sites.

9. DNSR received directly and responded to formal information requests in the reporting year. We have also worked effectively with DE&S and other areas of the MOD to respond to DNP related requests handled elsewhere in the MOD in which DNSR input has been required. However, the management of nuclear information requests remains a challenge, noting the tension between being open and transparent to inform the public about the regulatory approach, whilst needing to protect DNP related information, which if released could be detrimental to the defence of the UK.

10. Joined-Up Regulation. There have been a number of developments in joining up regulation of the DNP:

a. The standing-up of the DSA will further drive this initiative across the DSA and Duty Holder arena as the PRISM Programme matures in terms of internal, integrated Defence (MOD) regulation and assurance. The Defence Nuclear Programme Regulatory Forum (DNPRF) led by DNSR continues to support a coherent regulatory approach in the DNP; members include DNSR, the Defence Maritime Regulator (DMR) and the Defence Ordnance, Munitions and Explosives Safety Regulator (DOSR). DNSR will continue to identify future opportunities for joint inspections with other DSA regulators on appropriate MoD sites. In support, DNSR has embarked upon its own work stream on 'Seamless Regulation' as part of its internal Cohesion Programme, which will support regulatory coherence within and without the DSA.

b. The joined-up regulatory approach with ONR is fundamental to coherent, complete and seamless regulation of the DNP. The approach has been successfully maintained throughout the reporting period and DNSR's focus on through-life safety of the DNP continues to complement ONR's regulation. Joint inspections have taken place between DNSR and ONR across the DNP sites. A revised Letter of Understanding between ONR and DNSR was expanded to include the respective roles and responsibilities for transport of radioactive materials for the DNP. Additionally, the Agreement identifies an enhanced level of senior management engagement between ONR and the MOD.

c. DNSR has worked with the EA and undertaken internal reviews at Devonport, to ensure compliance with the various environmental permissions and permits which they have issued. DNSR has also had a Level 0 meeting with SEPA and engaged on a number of occasions with Scottish Government officials to better understand any potential changes to environmental legislation in Scotland.

d. Following the review of defence nuclear security the newly created Defence Nuclear Security Regulator was established within Defence Business Resilience in May 15, with the recent appointment of the Chief Inspector to start in April 16. Opportunities will be considered with the expectation of an increased level of engagement, interventions and inspections to be carried out by DNSR together with the appropriate MOD security assurance organisations (currently through the DE&S Principal Security Advisor [PSyA] independent security assurance responsibilities) as Security Informed Nuclear Safety (SINS) continues to mature across the Defence Nuclear Programme.

e. Whilst not achieved in this reporting year it has been agreed with the SWPT Assurance team that joined up inspections with DNSR to be led by the appropriate organisation will be planned, starting in April 16 at AWE.

11. IRRS review and DNSR Cohesion Programme.

a. Throughout the report period Independent audits of the application of DNSR's extant internal processes (Local work Instructions (LWI's)) has continued.

b. 95% of the LWI's have been updated.

c. DNSR Technical Assessment Guides (TAGs) have undergone review and update where required and a number of new TAGs are under development.

d. When appropriate DNSR will use ONR Nuclear Safety TAG's and Technical Inspection Guides (TIG's). Throughout the reporting period DNSR has contributed to the review and update of ONR TIG's and TAG's prior to their publication by ONR (including the Nuclear Safety Inspection Guide: Regulation of GB's Defence Nuclear Programme).

e. Initial work undertaken on the rejuvenation of the internal DNSR Cohesion Programme, aimed at increasing regulatory efficiency & effectiveness and to enhance regulatory nfluence, with the scoping of a number of work streams to be taken forward during 2016. This will include a review of progress against the internal 2013 IRRS-type review findings.