

NII Approach to Leadership and Management for Safety & Safety Culture - NuSAC(2007)P15

Frans Boydon

Scope of Presentation

- **WHY** attitudes, values, behaviours, leadership matter
 - impact on safety, security
- **WHAT** are we currently doing within ND
 - examples of interventions
 - wider HSE & international work
- **WHERE** are we going in the future
 - strategic decisions

WHY ?

- Growing history of events showing that attitudes, values, behaviours, **especially of leaders**, can impact on nuclear/process safety
 - Sellafield Mox fuel records fabrication
 - Wylfa parasol grab failure
 - Thorp feed clarification cell leak
 - Internationally – Davis-Besse, Texas City, Challenger, Tokai-Mura etc
- Therefore legitimate area for regulatory oversight & influence

- Significance recognised by HSE/NII:
 - Tolerability of Risk 1992
 - NII SAPs 1992
 - NII SAPs 2006 now include section on Leadership & management for safety
- But previously lacked tools, processes, expertise to approach systematically - in common with other nuclear regulatory bodies.
- Now in process of defining strategic approach to leadership & management for safety and safety/security culture

Basis of NII Approach

NII Starting Point:

- Safety Culture - values, attitudes, behaviours, leadership
- Can't formally "regulate/enforce" all elements of SSC although surrogates may be used
 - but securing improvements important to achieve our primary goal of no major nuclear accidents
- Focus on *understanding & influencing*, especially leadership & management for safety
- Potential to leverage NII resource by targeting leaders' attitudes, values, behaviours & thereby influencing key decision-makers

Leadership & Management for Safety SAPs

Four high-level and inter-related principles that address:

- Leadership
- Capable Organisation
- Decision Making
- Learning

SAPs Distilled from many sources, including:

- Good practices (e.g. characteristics of high reliability organisations)
- events (organisational factors contributing to major failures world-wide e.g. NASA/Columbia)

Implementation of L & MfS SAPs

1. Foundation for developing corporate intervention leg of integrated intervention strategy
2. Informing design of pilot work on leadership and safety culture with licensees
3. Supporting Assessment Guidance on L& MfS being developed
 - interpreting these principles
 - guidance on what to look for and help inform judgement on findings
 - Build on developing work internationally (eg IAEA) & lessons from HSE cross-cutting projects

HSE/NII Pilot Approach (1)

- **Developed NII safety culture assessment tool based on IAEA approach**
 - Piloted at Sellafield December 2006
 - interviews, focus groups, plant tours
 - Useful information & insights gained
 - discussed with management: responsive & positive, BUT:
 - Resource-intensive for NII & licensee
 - Does not provide basis for continuing oversight & engagement

HSE/NII Pilot Approach (2)

- **Corporate Intervention Strategy piloted at Sellafield**
 - emphasis on engaging & influencing leaders
 - interviews with Directors on safety leadership plus related interventions on organisational design, competence, learning organisation
 - draw upon sources including Leadership & Managing for Safety SAPs, corporate governance literature, NII safety culture tool
 - Approach and style well-received by Directors.
 - Early days – reviewing findings, planning continued engagement

HSE/NII Pilot Approach (3)

- **Piloting safety culture data collection during routine interventions**
 - Simple prompts & checksheet for site inspectors covering:
 - Management visibility
 - Openness & communication
 - Skills, competence
 - Housekeeping
 - Early days. Findings to feed into NII strategic approach

HSE/NII Approach (4)

- Learning from International Experience
 - NII hosted OECD/Nuclear Energy Agency Workshop on Regulatory Approaches to Oversight of Licensee Safety Culture
 - 50 regulators, 20 countries plus IAEA, WANO, NEA, EU
- Conclusions
 - A developing area for all regulators – NII leading
 - Regulators need to build SC data collection into normal regulatory activities
 - Focus on influencing licensee Directors
- HSE cross- cutting work

Conclusion

- NII has piloted a number of approaches & is reviewing their effectiveness
- NII is leading on exchange & development of international regulatory approaches
- NII is informing and building on HSE approaches

NII is now:

- 1) Developing co-ordinated strategy on safety culture & leadership, drawing on experience to date.
- 2) Considering how this can be incorporated within integrated intervention strategies
 - i.e. how to take forward as part of normal business

Specific NuSAC Challenges

- NII Management Commitment ?
 - ND Management Board fully supports development of integrated approach to leadership, management for safety and safety/security culture
- Sufficient specialist awareness within NII ?
 - limited specialist staff. Seeking to recruit. Drawing upon wider HSE support.
- Sufficient awareness at Site Inspector level ?
 - Not at the moment
 - NII recognises a need to train staff in SC and human factors when strategic approach has been formed
 - Safety culture training now identified as core for Inspectors