



The United Kingdom's Experience in Developing and Delivering Physical Protection Workshops



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Introduction

- Focus of this presentation is on UK efforts to develop and deliver physical protection workshops for an international audience
- Supported by UK's Global Threat Reduction Programme (GTRP)
- Workshop originally developed to complement on-going in-country nuclear security upgrade work:
 - Initially Russia => FSU countries => Wider international audience
- Currently managed by the UK Department for Business, Energy and Industrial Strategy:
 - Implemented by King's College London in a university-industry consortium

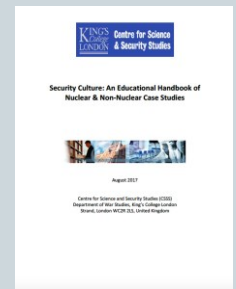
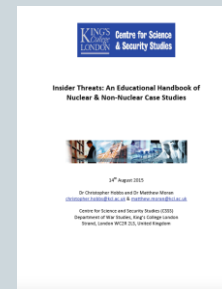
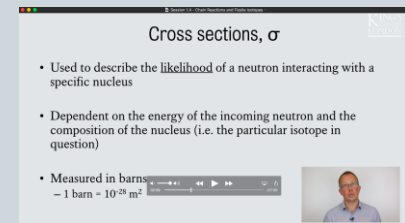
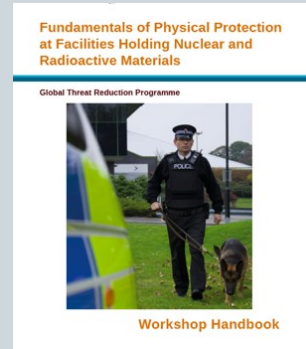


Workshop Overview

- ‘Fundamentals of Physical Protection’ Workshop:
 - Running for more than a decade, continuously evolving
 - 6-day workshop in London, including one day site visit
 - Provides a broad overview of key physical protection issues
- Audience:
 - Typically 14-16 international participants:
 - Operators, regulators, government officials & academics
 - Focus on those directly responsible for nuclear security:
 - Offer a separate Radiological Source Security Workshop

Approach

- Introduce key physical protection concepts and explore their application:
 - Use of real-life case studies & a detailed table-top exercise involving a hypothetical facility
 - Presenters from industry, the regulator and academia:
 - ~ 12 SME per workshop including current practitioners
 - Site visit to Dungeness B Nuclear Power Station
- Prolonged engagement via accompanying resources:
 - Pre-reading & introductory video lectures
 - Course handbook (summaries, learning objectives & further reading)
 - Case study handbooks (insider threats & security culture)
- Materials reviewed by IAEA to ensure consistency with international guidance



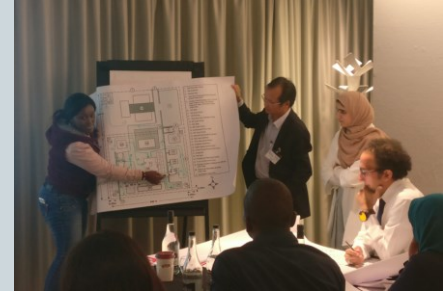
Challenges

- Catering to the learning needs of participants with a broad range of professional experience, technical backgrounds and from different national contexts:
 - Mitigate this through use of pre-reading and video lectures
 - Anonymous electronic voting used to clarify areas of misunderstanding
 - Formal content reduced to ensure time for Q&A and sharing of experiences
- Ensuring longer term impact:
 - Follow-up in country activities under broader UK Nuclear Security Culture Programme, developed & delivered with local partners
 - KCL Nuclear Security Fellowship Programme



Lessons learnt

- Table-top exercises using hypothetical facility & case studies help ground concepts in practice
- Stimulating active learning is key:
 - Interactive elements make up ~ 30-40% of the workshop
 - Participant numbers limited to a maximum of 16
 - Small group presentations by participants every day
- Site visit consistently viewed as a course highlight by participants
- Parallel radiological source security programme enabled focus of this workshop to be placed on needs of practitioners at nuclear related facilities



Summary

- UK have been offering physical protection workshop internationally for more than 20 years
- Evolution over time into an highly interactive workshop employing a range of teaching techniques focused on promoting participant centric learning
- Has proved a useful vehicle for building relationships and launching further activities with partners
- For more information please see <https://www.kcl.ac.uk/sspp/departments/warstudies/research/groups/csss/csss-practitioner-engagement.aspx>

Questions?
