

Workshop Overview



R²D²Project: Characterisation Survey
PNRI, Manila; 03-07 December 2007



Background

- Research Reactor Decommissioning **Demonstration** Project (R²D²P)
- Decommissioning + dismantling (D+D) of the Philippine Research Reactor-1 (PRR-1)
 - Start in 2006 and duration of about 6 years
 - IAEA supports the decommissioning of PRR-1
 - Workshop (WS) schedule established
 - WS schedule and D+D progress to be co-ordinated
- Demonstration project established for other countries to “learn on the job”



Original Workshop Schedule

- | | | | |
|---------------------------|--------------|--|-------|
| • Legal / regulatory | 06/06 | • Dismantl. exercise | 10/09 |
| • Basics of D+D | 10/06 | • Dismantl. exercise | 02/10 |
| • <u>Characterisation</u> | <u>02/07</u> | • Dismantl. exercise | 06/10 |
| • D+D plan | 05/07 | • Decont. exercise | 10/10 |
| • D+D technologies | 09/07 | • Final survey / bldg. | 05/11 |
| • Cost estimates | 02/08 | • Final survey / envir. | 05/11 |
| • Review D+D plan | 05/08 | • Final D+D report | 10/11 |
| • Prepar. for D+D | 09/08 | • Careful implementation! | |
| • Decont. exercise | 05/09 | • Check: What to do next?
What is needed? | |
| | | • Complementary activities! | |



Implementation of the R²D² Project

- Role of IAEA
 - Provide support by workshops, training, expert missions, equipment, fellowships, scientific visits etc.
- Role of the host country
 - Plan, regulate and execute D+D
 - Manage materials generated during D+D
- Participating countries
 - Active involvement: Learning on the job
 - Compare international approaches to national ones
 - Draw conclusions / improve national situations
 - Initiate / take necessary steps
 - Report on initiatives and implementation of actions



Revisit of Earlier Workshops / Reporting

- Legal / regulatory workshop (June 06, Manila)
- Workshop 'Basics of D+D' (Oct. 06, Manila)
- Transition phase (Nov. 07, Sydney)
- National reporting
 - Is national situation complying with international recommendations?
 - Have deficits been identified?
 - Has action been taken to improve the situation?
 - Is help / assistance necessary, e.g. from IAEA?
- Such progress reports are expected to be given in future workshops



Purpose of 'Characterisation' WS (I)

- Characterisation for decommissioning
 - Affirm estimated / calculated data
 - Establish an overview over radionuclide distribution
 - Contamination / activation levels
 - type of radionuclide
- Important 'characterisation' issues
 - Integrate characterisation in decommissioning plan
 - Plan characterisation well(!), incl. non-nuclear toxics
 - Plan on existing knowledge and calculations
 - Measurements and sampling for confirmation of RNI



Purpose of 'Characterisation' WS (II)

- Important 'characterisation' issues (cont.)
 - Develop systematic sampling plan, incl. 'surprises'
 - Work on a systematic sampling grid + targeted spots
 - Identify equipment needs (sampling, analysis etc.)
 - Plan early
 - Prepare licensing documents incl. safety assessment
 - Apply for a characterisation licence
 - Allow time for assessment of application / approval



Expectations from WS on 'Characterisation'

- Understand key elements of 'characterisation'
- Characterisation planning
- Execution of characterisation
- Practical demonstration
- Equipment and tools
- Analytical efforts

Participating countries

- Check / improve the national situation
- Transfer experience to national projects
- Report on progress (2008 R²D²P workshop)



Practicalities (I)

- Agenda
 - Add discussion / approval of conclusion of transition workshop
 - Wednesday, 05 December, 15:30 (after 'site tour')
- Practical information (Host)
- Presentations
 - Presentation by a lecturer (2/3 of allocated time)
 - Discussion (1/3 of time)
 - Please try to be 'user friendly'
 - Do not limit your presentation to 'that is how we do it'
 - Try to address / summarise needs of the participating experts for planning / implementing national activities
 - Ease practical implementation of lectures which is a challenge



Practicalities (II)

- **National workshop on 'characterisation, Manila, 19-23 September 2005'**
 - Lectures were provided on IAEA website (download)
 - This workshop is an example for the practical implementation of workshop lectures!
- **Concluding discussion (on Friday)**
 - Review of the workshop (improvements? ...)
 - Drawing of conclusions with your contributions!
 - Relate the workshop to national situations
 - Help easing the implementation of theoretical information
 - How to proceed with the implementation of the R²D²Project?
 - Decommissioning plan: Philippine and national plans / April 08

R²D²P website <http://www-ns.iaea.org/projects/r2d2project/default.htm>



New information

- China agreed to include its HWR into R²D²P
- Complementary aspects
 - Heavy water → Tritium
 - Immediate dismantling → Radionuclide inventory
 - Radiation protection
 - Dismantling technology
 - Size of reactor
 - Different reactor design
- Considerations on how to integrate the Chinese HWR into the R²D² Project?



THANK YOU

