Stakeholder Involvement and Communication in Environmental Remediation and Decommissioning – A Driving Force for Enabling a Successful Implementation

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Risk perception, communication and ethics of exposures to ionising radiation

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  - International Atomic Energy Agency – IAEA, Austria
  - Global research for safety – GRS, Germany
  - ENCO - European Commission Instrument for Nuclear Safety Cooperation in Ukraine Joint Support Office Ukraine
  - Merience – Strategic Thinking for Communicating Risk
  - Belgian Nuclear Research Centre – SCK-CEN, Belgium
  - Regional Environmental Centre – REC, Slovenia

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The IAEA

- Established in 1957 as the world's "Atoms for Peace" organization within the United Nations family
- Independent, intergovernmental, science and technology based
- Global focal point for nuclear cooperation
- 167 Member States
- 2,300 secretariat staff, based mostly in Vienna, Austria

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The IAEA Statute

Functions – Promote peaceful uses of atomic energy

1. Promote research, development, practical application
2. Exchange of scientific and technical information
3. Exchange and training of scientists and experts
4. Establish and administer safeguards
5. Develop safety standards
   and provide for their application

About Environmental Remediation

- A starting point:
  - Cultural backgrounds are surely different worldwide but perception about radiation seems to be very similar

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Some Considerations about Remediation

→ providing a *remedy*?

(pharmaceutical product, cure or treatment)

→ '*cleanup*' (making a place 'clean')?; '*rehabilitate*'?; '*restore*'?

→ measures to:

remove 'contamination' from land areas?, or

reduce radiation exposure?

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Confusing term: ‘*Contamination*’

- from Latin ***contaminat***-, ***contaminare***, ‘make impure’, from ***tangere*** ‘to touch’
- Religious understanding (e.g., no-kosher food)
- Experts’ denotation: presence of radioactivity
- Public’s connotation: radiation dangerousness

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Facts or purely public perception based on incomplete information?

- How does available information affect the views of people to nuclear energy related projects (e.g. uranium mining, NPP's, Research Reactors, etc ?
- How public perception will affect environmental remediation and decommissioning?

Uranium mill tailings in Kyrgyzstan

Trying to Address the Problem

Improving Risk Communication

Stakeholder Involvement

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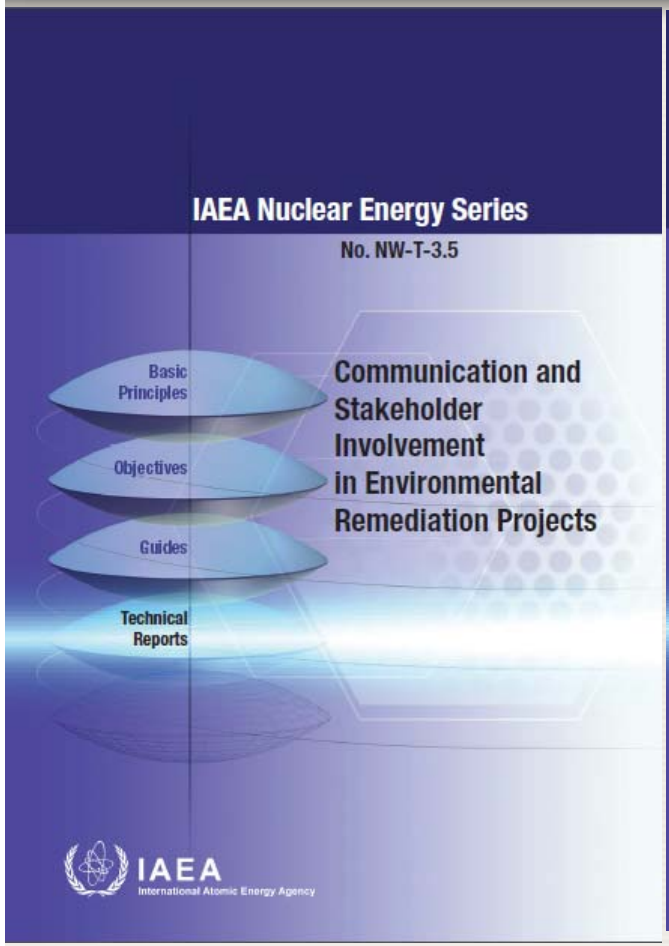
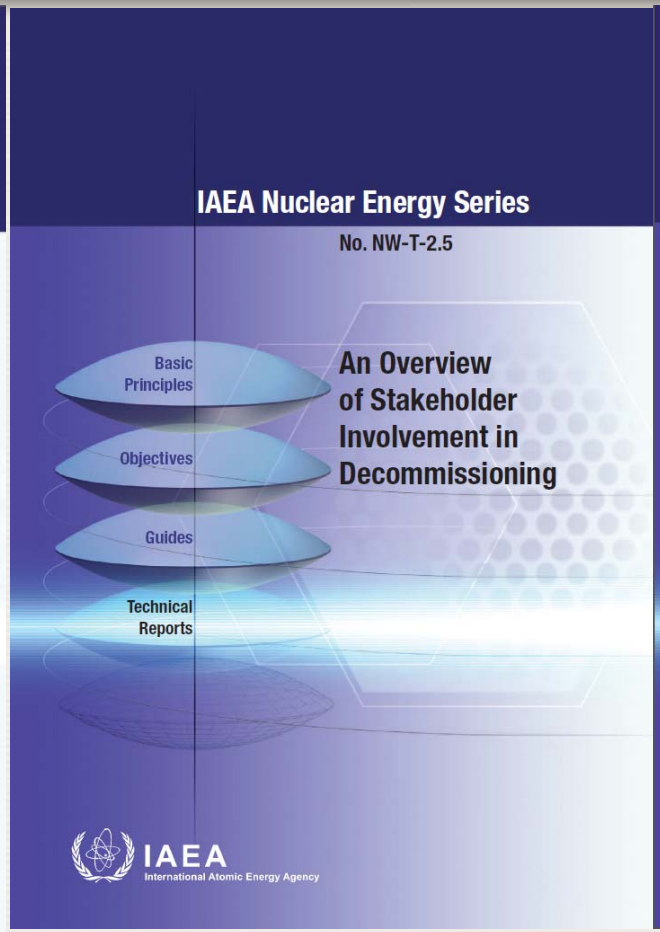
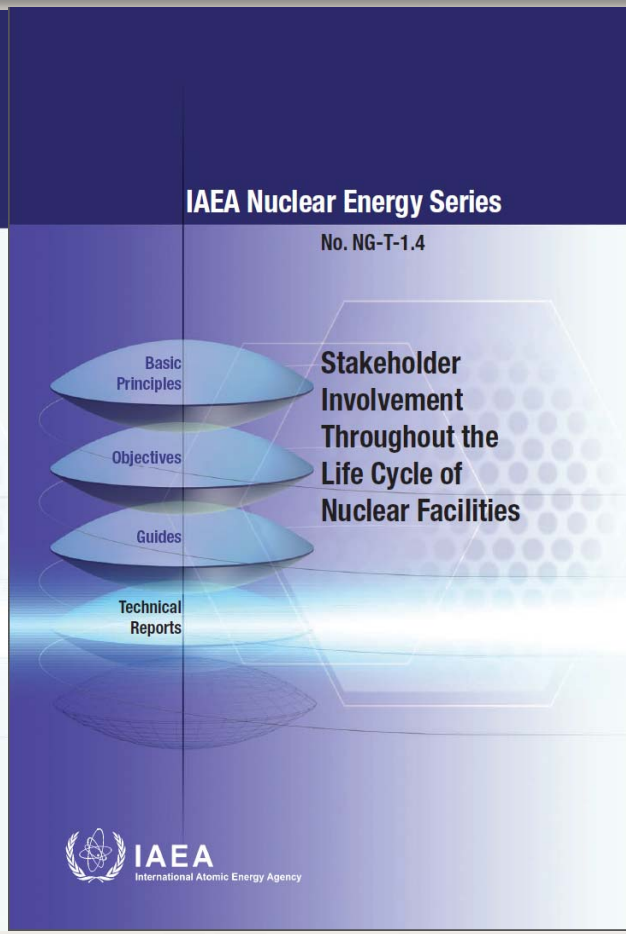
Publications – NE-Series Reports







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Network of Environmental Management and Remediation

ENVIRONET

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"ENVIRONET" : objectives

- **Organise an expanded range of training and demonstration events disseminating proven methodologies, good practices and state-of-the art technologies;**
- **Facilitate information exchange and experience sharing amongst organizations with advanced programmes;**
- **Create a forum in which expert's advice and technical guidance may be provided.**

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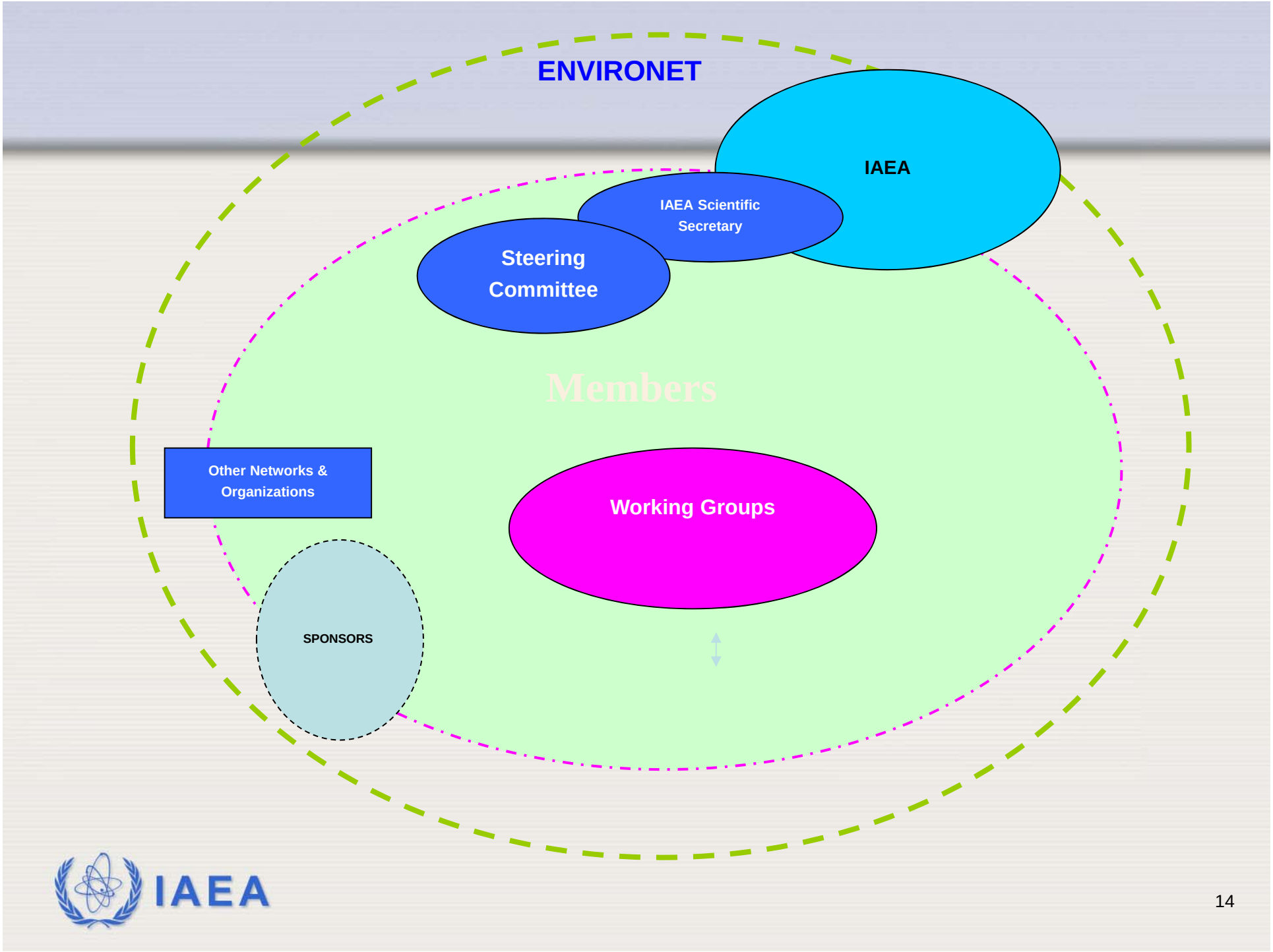
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IAEA Scientific Secretary
Steering Committee
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Other Networks & Organizations
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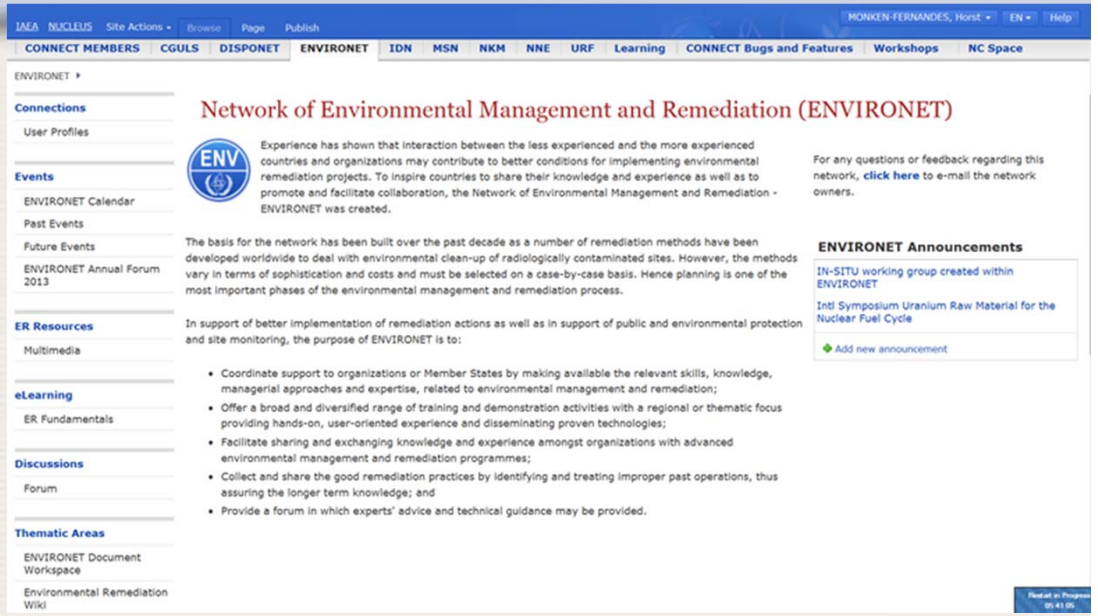
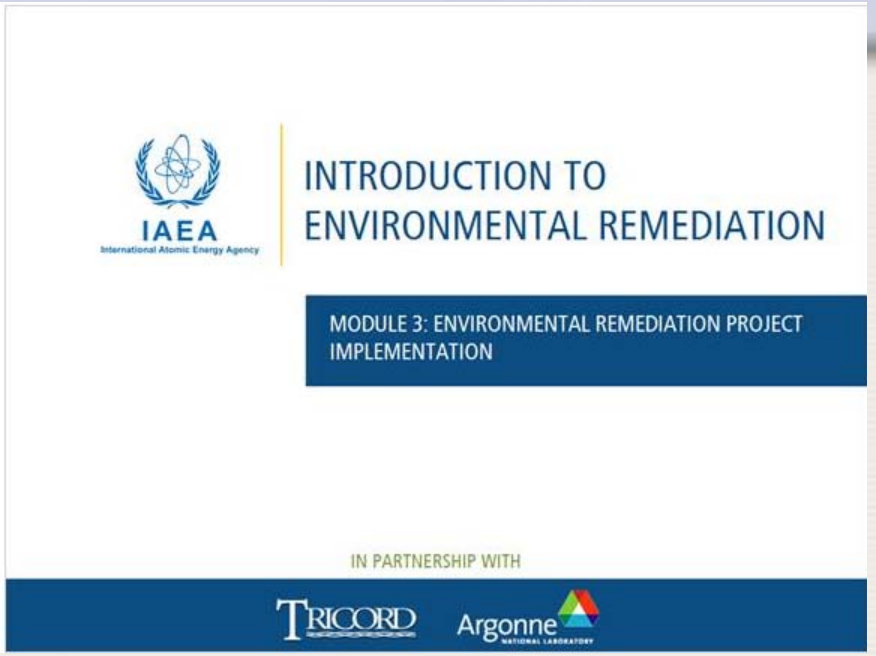
ENVIRONET in CONNECT – A Platform for:

- sharing information and lessons learned
- transferring knowledge
- comparing approaches implemented by different organisations
- maintaining sustainable relationships amongst participants



Projects of Environet



- E-learning material in cooperation with the Argonne National Laboratory (USA).
- Sponsored by the US Department of State and EPPUNE (Japanese Initiative on Expanded Programme on Public Understanding of Nuclear Energy)
- Duration – 6 hours
- Target Audience: Public or Stakeholder Groups, Regulators, Educational Institutions, Junior Engineers and Scientists, Executive Managers and Funding Entities
- Already uploaded in IAEA CONNECT Platform

Training Material Consists of Five Modules:

1. Introduction to ER;
2. The ER Planning Process;
3. ER Implementation;
4. Post-Remediation Management; and
5. Implementation examples

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Projects of Environet in CONNECT

- Environmental Remediation Wiki Homepage

1. This wiki is intended to allow easy collaboration among experts on environmental remediation of radioactively-contaminated sites

Recent Articles

Name	Modified	Rating (0-5)	Created By	Modified By	Content Type
West Valley PTW Case History	12/02/2014 08:58	★★★★☆	John Morse	Marko Kokol	ENVIRONET Case Study
Windscale Trenches Case Study	12/02/2014 08:59	★★★★★	John Morse	Marko Kokol	ENVIRONET Case Study
Top soil and turf removal (mechanical)	12/02/2014 11:34	☆☆☆☆☆	Valerii Kashparov	Marko Kokol	ENVIRONET Technology Profile
Alternative drinking water supply	07/07/2014 12:07	☆☆☆☆☆	Andressa Santos Junger	Andressa Santos Junger	ENVIRONET Technology Profile
Remediation of WISMUT uranium mining waste dumps	12/02/2014 08:58	★★★★★	Andressa Santos Junger	Marko Kokol	ENVIRONET Case Study
Chernobyl Agricultural Case Study	12/02/2014 11:29	☆☆☆☆☆	Valerii Kashparov	Marko Kokol	ENVIRONET Case Study
Permeable Treatment Wall	12/02/2014 11:41	☆☆☆☆☆	John Morse	Marko Kokol	ENVIRONET Technology Profile
Goiania Accident	12/02/2014 08:57	☆☆☆☆☆	Elaine Rochedo	Marko Kokol	ENVIRONET Case Study
Combination of Field and Lab Measurements at WISMUT	12/02/2014 11:07	☆☆☆☆☆	Peter Schmidt	Marko Kokol	ENVIRONET Case Study

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The CIDER Project

- Objective: to improve current levels of performance on decommissioning and environmental remediation projects, by:
  - **Raising awareness at a policy level** and promote greater cooperation amongst Member States dealing with disused facilities and sites;
  - Developing a **baseline report** for use by policy makers that provides a global overview of liabilities, discusses constraints and provides recommendations on how these may be overcome (Phase 1); and
  - Proposing **specific actions** (at national, regional or international levels) to address constraints to progress

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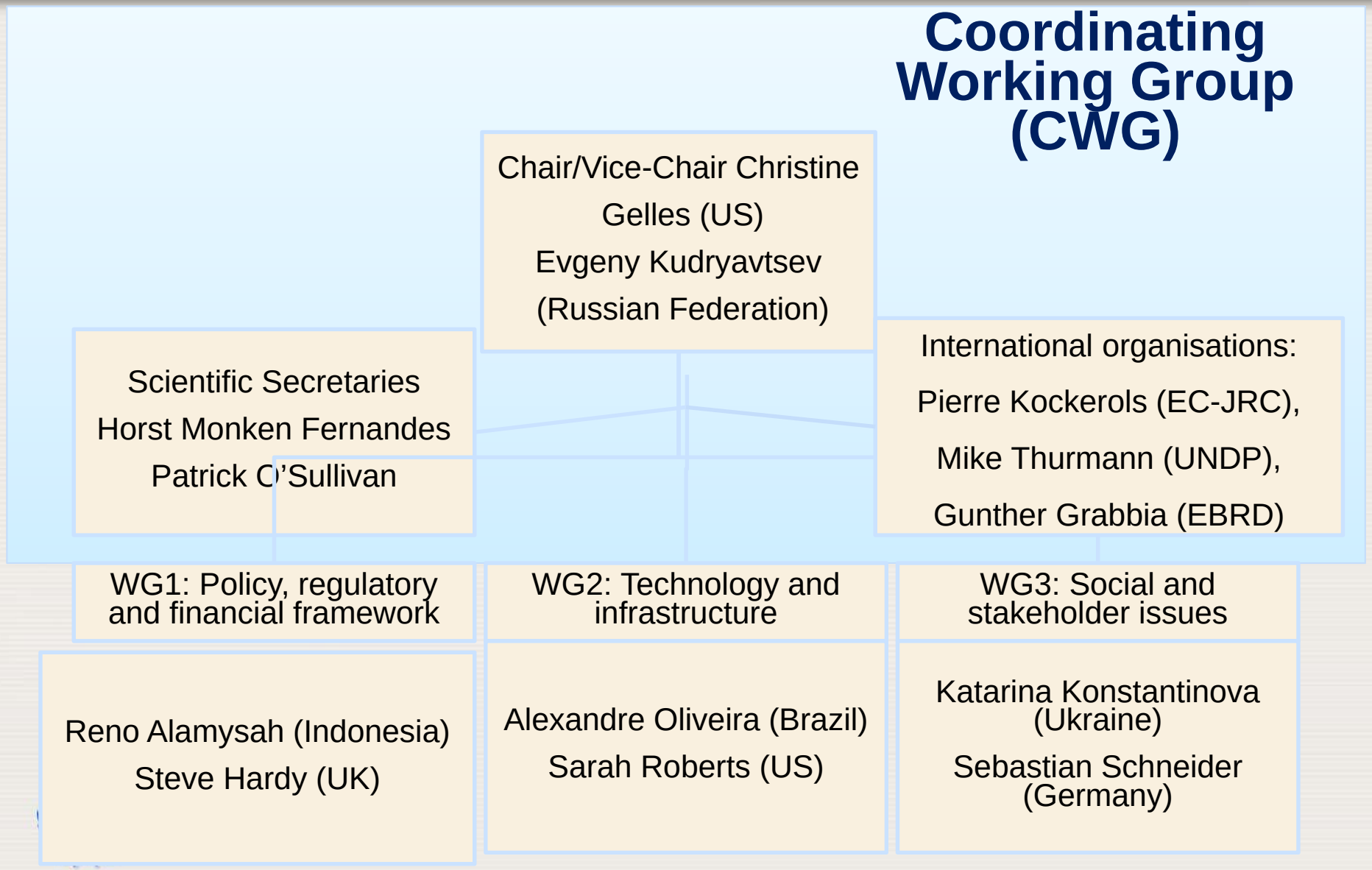
CIDER Project objectives and organization (3/3)



CIDER Phase I – Survey to identify main common barriers for D&ER

- Finance
- Lack of infrastructure for waste management
- Lack of technology
- Lack of regulatory framework
- Lack of national policy
- Lack of qualified personnel
- **Stakeholder opinion / resistance**
- Uncertainty over the end state (environmental remediation)

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The Baseline Report

- Executive Summary

1. Introduction
2. Overarching principles and constraints related to programme implementation
3. Technological Issues
4. Resource constraints
5. Societal issues
6. Summary
7. General conclusions
8. References

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Baseline Report - Societal issues

- **Societal constraints and approaches to overcome them**

1. Limited technical knowledge and understanding of the issues and process
2. Groups and individuals opposed to the programme
3. Concerns related to the waste disposal on site
4. Different demands and concerns between stakeholders
5. Limited budget to cover stakeholders demands
6. Negative experience with the D&ER programmes
7. Lack of support by the governmental authorities to implement D&ER
8. Changing the administrative procedure and legal framework related to D&ER programmes
9. Lack of trust between stakeholders
10. Lack of recognition of links between environmental, economic and social concerns
11. Constraints that hinder progress in stakeholder involvement in D&ER programmes

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Proposal for CIDER Phase 2

Sub-project:

‘Developing and implementing a communication and stakeholder involvement strategy in the framework of D&ER programmes’

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Objectives - Phase II

- Pilot study to implement a communication and stakeholder involvement strategy in:
  1. One site focusing on environmental remediation
  2. One site focusing on decommissioning
  3. Estimated duration: 2 - 3 years
- Identify the key stakeholders for the given project;
- Identify the most relevant societal constraints for each site;
- Develop an effective communication and stakeholder involvement strategy especially designed for the selected site(s) with a view to overcome the identified constraints;
- Implement the strategy and assess its effectiveness;
- Develop a lessons learned document reporting on the effectiveness of the implemented strategy; analyzing any deviations between the initial 'theoretical' strategy and the implemented 'in reality' and proposing further adjustments (if necessary).

Summary

- The IAEA provides coordination with the hosting organizations of the project and monitors progress, involving IAEA staff and IAEA experts.
- Commitment from Member States and relevant authorities is required.
- Problem holders at candidate sites will need to undertake several actions and assess effectiveness of the communication and stakeholder involvement plan on a regular basis, with IAEA support.
- Social sciences experts at national level and the local community need to be involved.
- Depending on the project duration (estimated 2- 3 years), at least 2 expert meetings and one visit to the site are foreseen.
- Output: a lessons learned report highlighting how communication and stakeholder involvement is applied *in practice* in D/ER projects to overcome societal constraints.

Thank you