



International Project on “Decommissioning Risk Management” (DRiMa Project)

Contents

1. First Annual Meeting of the DRiMa Project
2. Recent Working Groups Activities
3. 2012 - 2016 Work Plan
4. Presentation on the Project at International Events
5. Instructions for Participation in the Second Annual Meeting of the DRiMa Project
6. Useful Contacts of the DRiMa Project
7. Participation Form for the Second Annual Meeting of the DRiMa Project



Fig. 1 - 2012 Annual Meeting of the DRiMa Project in Vienna

First Annual Meeting of the DRiMa Project, 17 - 21 December 2012

During the 2011 annual meeting of the IAEA International Decommissioning Network (IDN) IDN members and participants recognised the importance of risk management during decommissioning and agreed to establish a three-year project dealing with aspects of risk management. After one year of preparation the 3-year International Project on “Decommissioning Risk Management” (DRiMa Project) was launched in December 2012 in Vienna, aiming to:

- Identify good practices based on Member States’ experiences;
- Provide recommendations on the application of general risk management methodology and maintenance of a risk management system for decommissioning;
- Illustrate the role of risk management in key decision making during the lifecycle of nuclear facilities (i.e. decisions relating to the planning and execution of decommissioning);
- Illustrate the optimization of risk treatment strategies and how these can minimize threats and maximize opportunities during decommissioning. (These strategies include the development of fallback or contingency plans); and
- Improve the capabilities of Member States in this field and enhance the exchange of information between Member States on lessons learned.

The project output and its recommendations will be summarized in a project report. Supporting information and practical examples drawn from Member States’ national experience will be made available via electronic media. Information on the progress of the project will be shared through regular newsletters, as well as via the Connecting the Network of Networks for Enhanced Communication and Training (CONNECT) system and the IDN web page.

For further information, please visit the public DRiMa project web page.

Contact person:

Mr. Vladan Ljubenov
DRiMa Scientific Secretary
Division of Radiation,
Transport and
Waste Safety
Wagramer Strasse 5
P.O. Box 100
A-1400 Vienna, Austria
Tel.: +43-1-2600-22553
Fax: +43-1-26007
Email: V.Ljubenov@iaea.org

Forty participants from twenty-eight IAEA Member States and organisations participated in the 1st Annual Meeting of the DRiMa project from 17 - 21 December 2012 in Vienna (see Fig. 1). Main purpose was to kick-off the project and to initiate the joint work on preparing advice and illustration on the application of risk management during decommissioning. In detail the meeting served to:

- Introduce into aspects on project risk management;
- Share risk management related experiences from projects in the nuclear field but also from projects in the non-nuclear field, thus not limiting the experience exchange to decommissioning projects only;
- Form and kick-off the two central working groups on Risk Management at Strategic Level (RMSL) and on Risk Management at Operational Level (RMOL);
- Discuss a first draft of a future DRiMa project report;
- Agree on project structure and schedule (Fig. 2 and 3); and
- Establish the exchange and networking on decommissioning issues (e.g. posters and presentations by participants).

The meeting comprised 2.5 days of plenary sessions and 2 days of parallel session of the two working groups on RMSL and RMOL.

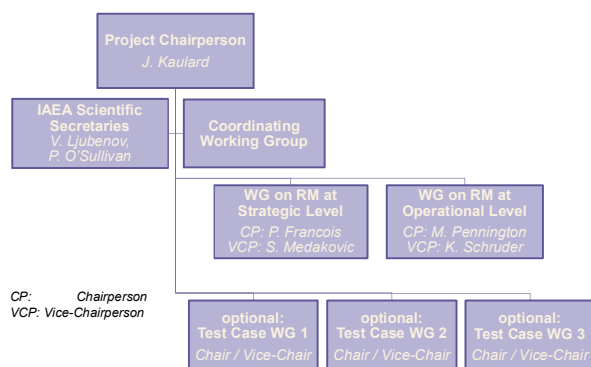


Fig. 2 - Project Structure of the DRiMa Project

The meeting was opened by Mr Magnus Vesterlind, Head of the Waste and Environmental Safety Section of the IAEA, who appreciated the involvement of such a high number of experts from different IAEA Member States. He outlined that the DRiMa project by focussing on risk management does address an important aspect to handle the challenges of decommissioning projects and by that complements past IAEA activities on safety assessment or technology to support a safe and sound decommissioning.

The DRiMa project meeting was chaired by Mr. Jorg Kaulard (Germany), who welcomed all participants before launching a fruitful meeting.

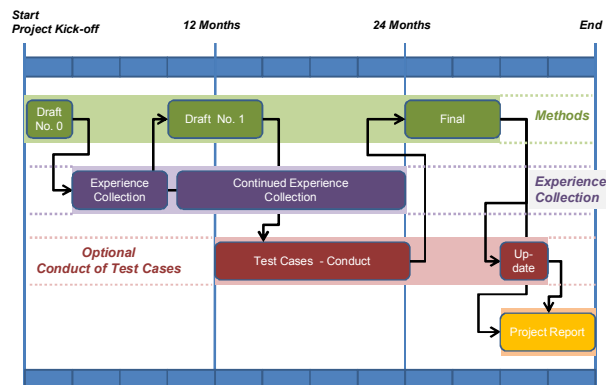


Fig. 3 - Schematic Schedule of the DRiMa Project

As part of the plenary sessions fourteen presentations from twelve IAEA Member States on risk management, experiences with risk management and on decommissioning challenges were held, among them one presentation on risk management for the relocation of a university. In addition, six posters from 6 IAEA Member States were presented to share further experiences.

In preparation of the meeting participants were requested to provide some feedback on own experiences with risk management. Nineteen questionnaires were submitted in advance of the meeting to form one of the starting points for the discussions in the two working groups. The working group sessions were chaired by Mr Patrice Francois (France), working group on RMSL, and by Mr Mark Pennington (UK), working group on RMOL.

As part of the DRiMa project test cases can be established to verify and illustrate the DRiMa methodology. Although at this early stage of the DRiMa project still an option already during the 1st annual meeting a nuclear power plant offered to volunteer as a test case. This offer was highly appreciated by all participants and indicates the high relevance of the project for real decommissioning projects.

Discussions during the plenary sessions and in the working groups showed, that the definition of risk management at strategic level required a further elaboration. Significant progress was made during the meeting, but during the working groups' interim meeting in May 2013 (refer to section *Recent Working Group Activities*) showed a still existing need for elaboration. The result is shown in Fig. 4: in general risk management at strategic level deals with the monitoring and review of key assumptions and strategic decisions; risk

management at operational level deals with monitoring and review of risks related to work plans. Both types of risk management are linked and the DRiMa project will elaborate the details within the next 2.5 years.

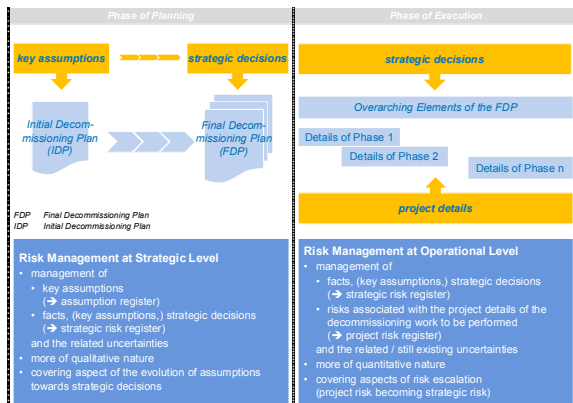


Fig. 4 - Risk Management at Strategic / Operational Level

During the closing session of the 1st annual meeting the project structure and project schedule were agreed and the updated work plan 2013 - 2015 was confirmed (see section “Project Work Plan”). In addition, the new vice-chairpersons for the working groups, Mr Sasa Medakovic (Croatia) for the working group on RSL and Mr Kristan Schruder (Canada) for the working group on RMOL, were welcomed and appointed. During his closing remarks the chairperson of the DRiMa project, Mr Jorg Kaulard (Germany), highlighted the large number of participants and their outstanding commitment to the project: neither the number of participants nor the number of contributions nor the intensity of discussions had been expected by those who prepared the DRiMa project. He concluded, that the DRiMa project obviously meets some needs from the practice and there is good reason to continue with the development of advice on risk management during decommissioning.

Recent Working Groups Activities

Working Group on Risk Management at Strategic Level (RSL) - chaired by Mr Patrice Francois (France)

The working group met during 13 - 16 May for its 1st interim meeting. The members discussed and reviewed in detail the proposed scope of the chapter on risk management at strategic level and captured the following issues:

- Assumptions management from initial decommissioning plan to final decommissioning plan
- Decision making at high level following a “Top/bottom” process to select of the overarching elements of the Final Decommissioning Plan (risk register)
- Implementation of the overarching elements of the Final decommissioning plan including an iterative process for in depth risk management process (bottom/Top/bottom)

On this basis, risk families have been further developed considering participant’s knowledge and lessons learnt from past and current projects. Further contributions from participants are expected to continue the work to provide more examples, especially for initial decommissioning plan aspects.



Fig. 5 -Members of the RSL Working Group in Cologne, May 2013

Working Group on Risk Management at Operational Level (RMOL) - chaired by Mr Mark Pennington (UK)

The working group met during 13 - 16 May for its 1st interim meeting. The working group have carried out a number of activities including:

- Review of the working group scope and objectives.
- Structure of the chapter defined.
- Sub-sections of the chapter populated.

To further enhance the working group participant’s knowledge and understanding of risk management, a risk workshop was undertaken. The out of which will be included in the report in the member states experiences section.



Figure 6 - RMOL Working Group in Cologne, May 2013.

Coordinating Working Group (CWG) - chaired by Mr Jorg Kaulard (Germany)

The CWG met regularly during the 1st annual meeting to reflect the results of the plenary session and to exchange information on the parallel sessions. While at the beginning the CWG comprise the chairperson of the DRiMa project (Jorg Kaulard, Germany), the chairpersons of the two working groups (Patrice Francois, France, and Mark Pennington, UK) and the scientific secretariats of IAEA involved in the DRiMa project (Vladan Ljubenov, Patrick O'Sullivan), the CWG was extended by end of the week by the new vice-chairpersons of the two working groups (Sasa Medakovic, Croatia, and Kristan Schruder, Canada).

The CWG met again from 16 - 17 May 2013 at Gesellschaft fuer Anlagen- und Reaktorsicherheit (GRS) mbH in Cologne, after the interim meeting of the two working groups on RMSL and RMOL. Main objectives were to

- Discuss the outcomes of the 1st annual meeting and of the interim meetings of the two working groups;
- To form an opinion on potential test cases;
- Elaborate the CWG's midterm work plan to prepare the 2nd annual meeting;

The main outcomes of the 1.5 days meeting were:

- The CWG recognized the need to adapt the objectives of the risk management at strategic level. Fig. 4 summarizes the result of the discussion within the CWG.
- It was agreed to further develop the terms of reference - the proposed modification will be presented at the 2nd annual meeting.
- In addition, it was agreed to incorporate that modification into the draft DRiMa project report.

- It was agreed to collect more working group specific information to meet their specific needs. Accordingly, specific guidance will be prepared to help DRiMa project members to send such information in advance of the 2nd annual meeting.
- The further development of generic questionnaires is postponed until the 2nd annual meeting.
- During its interim meeting the working group on RMOL performed a risk management work shop, in which a real decommissioning project was analysed. Based on the good experiences the CWG believes that such a risk management workshop offers good opportunity to verify and illustrate the DRiMa methodology, to help participants in familiarizing with risk management and to provide some feedback to real decommissioning project. As such, a risk management workshop could adequately substitute the option of a test case working groups.
- The CWG will prepare a proposal for discussion during the 2nd annual meeting. IAEA and the DRiMa project chairperson will clarify, whether the volunteer nuclear power plant will support such a risk management workshop instead of a test case.

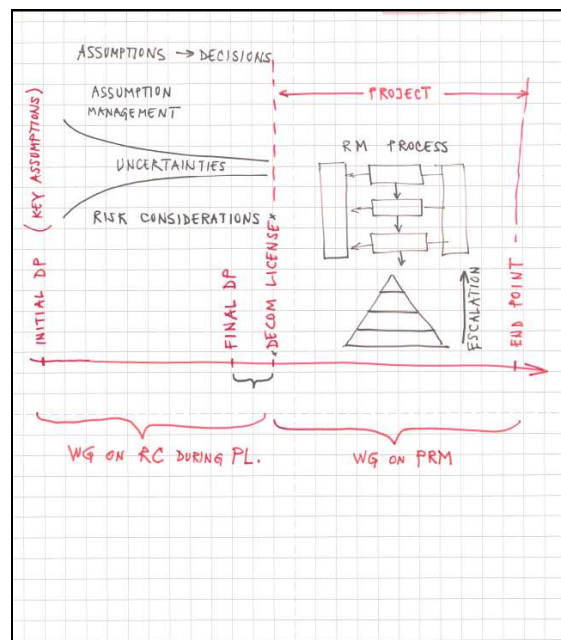


Figure 7 - Difference between risk management at strategic level and at operational level
Chart from the CWG meeting in Cologne, May 2013

2012 - 2015 Work Plan

What?	When?	Where?
1st Annual Meeting	December 17 - 21, 2012	IAEA, Vienna
Interims Meeting of - WG RMSL, - WG RMOL	May 13 - 16, 2013	GRS, Cologne
Interim Meeting of CWG	May 16 - 17, 2013	GRS, Cologne
Update of - draft report - questionnaires	August 2013	per email
Collection of experiences on risk management	September 2013	per email
2nd Annual Meeting	October 7 - 11, 2013	IAEA, Vienna
Interim Meeting of - WG RMSL, - WG RMOL	to be determined	to be determined
Interim Meeting of CWG	to be determined	to be determined
3rd Annual Meeting	October 2014	IAEA, Vienna
Interim Meeting of - WG RMSL, - WG RMOL	to be determined	to be determined
Interim Meeting of CWG	to be determined	to be determined
Risk Management Workshop	to be determined	to be determined
4th / Final Annual Meeting	October 2015	IAEA, Vienna
Publication of Project Report	2016	---

**Risk Management During Decommissioning –
The New DRiMa Project at IAEA**

Patrice François, Institut de Radioprotection et de Sécurité Nucléaire (IRSN)¹⁾ –
Joerg Kaudard, Gesellschaft fuer Anlagen- und Reaktorsicherheit (GRS) mbH – Mark Pennington, Sellafield Ltd –
Vladan Ljubenov, International Atomic Energy Agency (IAEA) – Patrick O'Sullivan, International Atomic Energy Agency (IAEA)
¹⁾Patrice François, B.P. 17, F-92262 Fontenay-aux-Roses, France, patrice.francois@irsn.fr, www.irsn.fr
Further information: www.iaea.org/OurWork/ST/NEEP/WITS-Networks/IDN/overview.html

1. Introduction

IAEA's International Decommissioning Network (IDN)

- helps Member States' to develop capacities & plans to undertake decommissioning activities
- recognizes in 2011
 - the importance for risk management during decommission
 - the need for further experiences based advice and feedback on risk management during decommissioning

and proposes a new three-year project on risk management (DRiMa Project)

DRiMa Project launched during kick-off meeting in December 2012

- 44 participants from 29 Member States
- contributions on participants' experiences
 - 17 presentation and 6 posters
 - 19 experience feedback questionnaires
 - already one volunteer test case facility

3. Objective, Outcomes, Project Concept

- Objective:** provide recommendations and illustrations on the application of (existing) risk management (RM) methods at planning and conduct of decommissioning projects
- Outcomes:** summarizing project report on
 - good practice on RM for decommissioning
 - recommendations on the use of RM
 - role of RM during facility lifecycle
 - minimizing threats / maximizing opportunities of projects by use of RM
- Project concept based on
 - 2 parallel working groups (WGs) activities on recommendations on RMSL and RMOL
 - continuous collection of RM experiences (optional: conduct of test cases to gain experiences and to illustrate methods)
 - joint activities on report development
 - continuous interaction between WGs

2. Risk Definition

- General: risk is the effect of uncertainties on objectives resulting in threats & opportunities
- DRiMa: all risks for decommissioning projects
 - at an early / strategic decision making level → RM at the strategic level (RMSL)
 - risks at a detailed / operational level → RM at operational level (RMOL)

4. Next Steps

- 1st Interim WGs Meeting: 13 – 17 May 2013 @ GRS, Cologne, Germany
- 2nd Annual DRiMa Meeting: 7 – 11 October 2013 @ IAEA, Vienna, Austria

You are interested in a participation: please contact the authors or IAEA directly

Fig. 8 - Poster at the Avignon Conference April 2013

Presentation on the Project at International Events

Participation in the FaSa Project as well as the outcomes of the DRiMa Project should be subject to promotion to ensure that all relevant experiences from IAEA Member States are considered in the project.

Especially for the latter, every participant is invited to prepare - in coordination with the IAEA and the chairperson of the DRiMa Project - contributions to national and international conferences.

Recently, contributions to the following international conferences were prepared / are foreseen:

- Conference “Decommissioning Challenges > Industrial Reality and Prospects”, April 7-11, 2013, Avignon (France)
Poster: “Risk Management During Decommissioning - The New DRiMa Project at IAEA”

Whoever is interested in preparation of any contribution is welcome to contact the IAEA (V.Ljubenov@iaea.org) or the chairperson of the

DRiMa project (joerg.kaulard@de.tuv.com). All national and international presentations and contributions will be uploaded to the DRiMa project web page.

Instructions for the Participation in the 2013 Annual Meeting of the DRiMa Project

All persons wishing to participate in the Annual Meeting of the DRiMa Project must be officially nominated in order to attend.

The nomination request letters have been sent to the appropriate national authorities of the Member States (Ministry of Foreign Affairs or National Atomic Energy Authority) in February and the deadline for nominations was 6 May 2013. However, efforts will be made to consider late nominations.

New participants in the Annual Meeting of the DRiMa Project should complete the attached Form (attached below) and send it to the appropriate national authority (in most countries: Ministry of Foreign Affairs or National Atomic Energy Authority) for subsequent transmission to the IAEA, not later than **2 September 2013**, with a copy to the IAEA Scientific Secretary, Mr Vladan Ljubenov (V.Ljubenov@iaea.org).

For further information please contact Ms. Sarah Pulimood (S.Pulimood@iaea.org) or Mr. Vladan Ljubenov (V.Ljubenov@iaea.org), Division of Radiation, Transport and Waste Safety, Decommissioning and Remediation Unit, Vienna International Centre, PO Box 100, 1400 Vienna, Austria.

Useful contacts of the DRiMa project

IAEA Scientific secretary:

V.Ljubenov@iaea.org
P.OSullivan@iaea.org

Chairperson of the DRiMa Project:

Joerg.Kaulard@de.tuv.com

WG on Risk Management at Strategic Level
chairperson

patrice.francois@irsn.fr

vice-chairperson

sasa.medakovic@dzrns.hr

WG on Risk Management at Operational Level:
chairperson

mark.pennington@sellafieldsites.com

vice-chairperson

schruderk@aecl.ca

International Decommissioning Network
web page

IAEA CONNECT web page

<http://nucleus.iaea.org/sites/CONNECT/Pages/default.aspx>

Public DRiMa project web page

<http://www-ns.iaea.org/projects/drima/default.asp>

Public FaSa project web page:

<http://www-ns.iaea.org/tech-areas/waste-safety/fasa/>

DeSa project report (published in the IAEA Safety Report Series):

<http://www-pub.iaea.org/books/IAEABooks/8891/Safety-Assessment-for-Decommissioning>

Form A
TM-44972

Participation Form

Annual Meeting of the International Project on Decommissioning Risk Management (DRiMa)

07-11 October 2013

Vienna, Austria

To be completed by the participant and sent to the competent official authority (e.g. Ministry of Foreign Affairs or National Atomic Energy Authority) of his/her Member State of the IAEA for subsequent transmission to the International Atomic Energy Agency (IAEA), Vienna International Centre, PO Box 100, 1400 Vienna, Austria either electronically via email to official.mail@iaea.org or via Fax to: +43 1 26007 (no hard copies needed).

Participants from organizations invited to participate can submit this form to their organization for subsequent transmission to the IAEA.

Family name:	Given name(s):	Mr/Ms
Institution:		
Full address:		
	For urgent communications please indicate: Telephone no.: Telefax no.: Email address:	
Nationality:	Designating government or organization:	
Mailing address (if different from address indicated above):		
DO YOU INTEND TO SUBMIT A PAPER? YES <input type="checkbox"/> NO <input type="checkbox"/>		
TITLE:		