German experience with a web-based information and cooperation platform for nuclear safety purposes

1st GNSSN Steering Committee Meeting,
02–04 April 2012, IAEA, Vienna, Austria

H. Teske (GRS), Germany
Content

- **Info Server** – Web-based information and cooperation platform
  - Background
  - Objectives
  - Steps of work
- **Improvement of communication and cooperation in groups**
  - National Teams
  - International Expert Community
  - Bilateral and multilateral Projectmanagement
- **Future Tasks**
- **Benefits**
Background to develop a web-based platform for cooperation in NS area

Let remember how we start: With

- Information in different Data Bases
- Documents collected on the own desktops
- NPP-Handbooks, MediaWiki Country Reports, IKARUS-DB, …
- Intranet’s of the BMU and GRS
What are the objective to develop a web-based platform for cooperation?

- Improve the internal cooperation and coverage of national and international activities in the nuclear safety regulatory area by
  - Building a Cooperation platform
  - Sharing and distributing of information
  - Creating of specific portals and topic sites
  - Maintaining and improving knowledge

Aims:
- support in a best possible way all the members by providing easily information which is needed for optimal performance of task
- Establish a platform for cooperation and document management for nuclear safety and security matters
Steps to develop a web-based platform for cooperation in NS area

By now

- Identification of areas where knowledge is represented
  Documentation, Databases, Projects, Organizations, …

- Identification of knowledge holders – Experts

- Building a web-based portal outside of the Intranets
  (As a technological platform the product "Microsoft Office SharePoint Server" (MOSS) for the realization of the new Info Server has been selected – MOSS 2003, MOSS 2007, MOSS 2010)

- Developing a visual Network (homepage)

In the future

- Archiving of explicit knowledge and Exploitation of implicit knowledge

- Identification of knowledge holders – Experts

- Network of Experts
Solution of a web-based platform: Info Server (screenshot)

InfoServer > Sharepoint Server 2010 im Extranet "NEXTRA" - ENG > Sharepoint Server 2010 im Extranet "NEXTRA" - ENG

Common Extranet Platform for Information and Cooperation between Partner Institutions

The "InfoServer" is the core of the extranet "NEXTRA" provided by the GRS in its demilitarized zone. NEXTRA is a consistent and clearly structured web-based platform for inter-institutional information and knowledge management as well as for national and international cooperation of GRS with its partners and diverse teams. The "InfoServer" is based on Sharepoint Server 2010.

In its current state, the InfoServer is structured as four portal areas.

EUROSAFE ETSON Portal (EEP)
EUROSAFE ETSON Portal is currently in preparation.

From the main page, an access is provided to the EUROSAFE and ETSON information and knowledge platform.

The third area of the Portal is provided for the ETSON Junior Staff Programme (JSP).

GRS Cooperation Portal (GCP)

The cooperation portal is an information and cooperation platform of GRS and its partners.

The portal comprises:
- Team pages for specific topics for sharing with external partners
- Project pages for national and international projects with external partners
- Overview pages for cooperation with institutions, organizations and countries.

PORTAL for nuclear Safety (PNS)
The Portal for Nuclear Safety is an information and knowledge platform for nuclear safety and security, including the radiological safety and disposal.

This Portal is used by BMU, BGS and GRS for:
- for providing information
- for knowledge management and
- for cooperation

with nuclear regulators of countries and their experts as well as with other external organizations and users.

RISKAUDIT Portal (RAP)
RISKAUDIT Portal is in planning.

It will serve as an information and cooperation platform of RISKAUDIT and its partners.

The portal will comprises:
- Pages with overviews of the cooperation with specific partners
- Project pages with the central files of specific projects
- Public area for general information
Solution of a web-based platform: Portal for nuclear safety (screenshot)

Management: Basic information, tools, procedures and processes for support in order to achieve the results as targeted.

Emergency Center: The existing websites to support the responsible persons during emergency training and real emergencies.

Networks: Access to global and regional nuclear safety and security networks like, GNSSN, RegNet, ETSON, ANSN, GSAN, FORO.

Technical Tasks: Technical tasks: knowledge on regulatory topics; technical information and workshops for professional education and vocational training.

Legal Regulation: Access to actual national and international legal regulation and to the current process and projects for their elaboration.

National: National organizations, bodies and activities for cooperation on nuclear safety and security.

International: International organizations, bodies and activities for efficient cooperation in bodies and processes.

Projects: Programmes of national regulatory research and specific projects with copies of central project maps on current projects.
Solution of a web-based platform: Info Server

- Platform for cooperation and document management for nuclear safety and security

  => Microsoft SharePoint Portal Server (MOSS 2007)
  Information and knowledge portal
  https://info.grs.de
  => now based on Sharepoint 2010

Common Intranet/Extranet-Area of the

- Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)
- Federal Office for Radiation Protection (BfS)
- Gesellschaft für Anlagen- und Reaktorsicherheit mbH (GRS)
- and selected associates (e.g. partners in cooperation)
HW/SW-Basis for the Info Server: Extranet „NEXTRA“
Main results/experience in using the BMU/BfS/GRS - Info Server

- Improve internal communication and cooperation in groups (teams)
- Information on all activities of common interests - information sharing and distribution
- Yellow pages, Calendar and Tasks
- Timeliness of the information presented and data
- Document Management System (DMS) for daily use - no file duplicates on PC (Annotated Agendas)
- Formation of a 'memory of the organization'
- Transition from e-mail based communication to communication by groups
- For the integration process ( 'workflow')
  Workflows as a control mechanism for the business process
- As the only access point for all information accessible through the web browser
Example: Teamsite for G8-NSSG (include information from since 1992)
### G8-Nuclear Safety and Security Group (G8-NSSSG) 2001 - 2010

<table>
<thead>
<tr>
<th>G8-Summit</th>
<th>G7-NSWG</th>
<th>NSA</th>
<th>CSF</th>
<th>Annual View</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 Munakan Summit</td>
<td>2010</td>
<td>2010</td>
<td>2010</td>
<td>2010</td>
</tr>
</tbody>
</table>

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G8 – NSSG Chronology

2009

Chronology

25.-26.02.2009  First G8-NSSG Meeting in Rome
Agenda
Chairs Summary
Documents of the First G8-NSSG Meeting 2009

27.-28.05.2009  Second G8-NSSG Meeting in Rome
Agenda
Chairs Summary
Documents of the 2nd G8-NSSG Meeting 2009

08.-10.07.2009  G8 Summit in L'Aquila, Italy
Documents with Nuclear Safety Relevance
All Summit Documents

06.-07.10.2009  Third G8-NSSG Meeting (Bologna)
Agenda
Chairs Summary
Documents of the 3rd G8-NSSG Meeting 2009

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CHAIR'S SUMMARY OF THE THIRD NSSG MEETING 2009

1. OPENING OF THE MEETING

The Nuclear Safety and Security Group (NSSG) held its third 2009 session on 6 and 7 October in Bologna, under the chairmanship of Mr. Raffaele Di Sapio of Italy. The delegations of Canada, France, Germany, Italy, Japan, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and the European Union (EU) participated in the meeting. The European Bank for Reconstruction and Development (EBRD, hereinafter “the Bank”), the International Atomic Energy Agency (IAEA), and the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD/NEA) attended as observers. The Nuclear Smuggling International Technical Working Group (ITWG) was invited. The list of participants at the meeting is provided in Annex I.

2. ADOPTION OF THE AGENDA

The NSSG considered the draft agenda and the draft annotated agenda previously submitted to the delegations and adopted the following agenda for the session:

1. Opening of the Meeting
Collaboration by using InfoServer with SharePoint (MOSS 2010)

- A new way of working more efficiently in a virtual community
- A new culture of knowledge sharing has come up by using networking techniques – working in portals
- Private, business and public space on the Internet/Intranet/Extranet, where can share information, documents, participate in discussions forums, …
- Wikis, Blogs, Messaging, Communities, …
Example: Restricted “Working Area” for the Review-team

Integrated calendar in SharePoint

Members

Document Library for sharing and cooperating on documents.

Link to organisation area
- Schedule mission week
- Agenda Entrance Meeting
- et cetera

Check out the file, to let the other members know that you are working on the document right now.
What is our experience?
The teamsites, meeting sites or project sites:

- **have high recognition value** (with a distinctive design) and **unified navigation**
- **Are User-friendly** (Wiki principle and working with hyperlinks)
- **Headings, titles, links can and have to be self-explanatory and impressiv**
- **Only a small guideline seems to be needed** (young staff work without handbooks or guidelines)
- **Important are online-help features (SharePoint)**
- **Only few SharePoint-WebParts are needed**
  - content editor webpart
  - hyperlink webpart
  - picture webpart
  - participants webpart
- **Easy structure of shared documents can be used**
Unified Site structure (G8-NSSG, JF, ENSREG, INSC, …)

Navigation, Webpart for the last and next Meeting, Members, Short description and more

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International Project Management (EU-Projects)
INSC Project: BE/RA/06 (BY3.01/08)

With the view on the planning of an Belarusian NPP the INSC project BE-RA-06 represents a new phase of the transfer of European regulatory methodology and practices to the nuclear safety authorities of Belarus ...

Tasks:

<table>
<thead>
<tr>
<th>Task Nr.</th>
<th>Task Name</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 0</td>
<td>Project Inception and Coordination</td>
<td>Lutz Ackermann (GRS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aleksandr Dzikaiev (NIE/ID)</td>
</tr>
<tr>
<td>Task 1</td>
<td>Establishment/development of a national Strategy Plan, an Action Plan and a Cooperation Plan in the field of capacity building for the enhancement of NRA including an overview of the present situation</td>
<td>Lutz Ackermann (GRS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vasili Paliukhovich (GAN)</td>
</tr>
</tbody>
</table>

Subtasks:

- **Task 1.1** Development of the National Strategy Plan and Action Plan
- **Task 1.2** Development of a Cooperation Plan
- **Task 2** Establishment of legislative framework in the field of nuclear safety
  - **Subtask 2.1** Status and further development of the nuclear legislative framework
  - **Subtask 2.2** Regulatory authority infrastructure and its tasks and competencies against the background of European experiences
  - **Subtask 2.3** Common review and discussion between Gosatomnadzor and EU experts of selected legislative/regulatory documents
- **Task 3** Licensing support in the field of nuclear safety for the development of the regulatory body and its functions
  - **Subtask 3.1** Support to establish the licensing process in the field of nuclear and radiation safety of NPP
Example: WWER Cooperation Forum

Co-operation Forum of the Regulatory Bodies in countries operating VVER typ reactors

VVER Regulators Forum

VVER Cooperation Forum was founded by the regulatory authorities of the countries in which VVER-typ reactors are operated. The regulators of the following countries are members: Armenia, Bulgaria, Czech Republic, China, Finland, Hungary, India, Iran, Russia, Slovak Republic and Ukraine. Germany (GRS), France (IRSN), the IAEA and the OECD/NEA are standing observers.

During annual symposia held in turn in the member-states, the regulatory authorities exchange information on the topical progress and relevant operating events and report about joint working groups' activities. Each year joint working groups are established to work on up to four topical issues. There are working groups in the field of licensing legislation for employment of digital I&C, the use of PSA for regulatory activities and feedback of operating experience to improve the safety of NPPs.

The cooperation forum has proven its quality as an interdisciplinary consulting platform for heads of regulatory authorities in the countries with VVER reactors. In 2009 the Bulgarian Nuclear Regulator is the Chair of the Forum. In 2010 the Hungarian authority is leading these activities.

Co-operation Forum of the State Nuclear Authorities of the Countries Operating VVER Reactors

Documents

- Documents on the WG-Topics
- GRS-Reports from Annual Meetings and WG's
- GRS-Reports from the annual meetings over the years and documents from working groups

Meetings

- Annual Meetings
- Annual Meetings from 1994 till now
### WWER Cooperation Forum

**Co-operation Forum of the State Nuclear Authorities of the Countries Operating WWER Reactors**

<table>
<thead>
<tr>
<th>Year</th>
<th>Meeting All Folders and Documents</th>
<th>Meeting Minutes</th>
<th>WG Working Groups on PSA Documents</th>
<th>PSA Working Group on PSA and PSR</th>
<th>OEF WG on Operating Experience Exchange</th>
<th>HOF WG on Organizational, Management and Related Issues</th>
<th>Others WG on Accident Management, Spent Fuel Storage, Radiation, others</th>
<th>AM WG on Accident Management</th>
<th>I&amp;C WG on Digital I &amp; C</th>
</tr>
</thead>
</table>
What are the Principles for development of cooperation and teamsites of the Info Server?

- Ultimate responsibility for the content and quality remains with the respective providers of the information and operators (process owners)
- Process owners recognize that they are part of a broader community of Info Server platform
- Continuous efforts are made by process owners to make the platform visible and conducive to international cooperation
- There is a striving for common solutions, using best practices and advanced technologies, and for optimal use of resources

⇒ the same principle are used for GNSSN and RegNet
Example: Screenshot of the Project Teamsite: Review of the ISAR NPP Belene

Review of the Interim Safety Analysis Report for Belene NPP

COMMERCIAL IN CONFIDENCE

Basic Documents
- Updated Interim Safety Analysis Report (ISAR, Rev. 2) (Revision 2, in English)
- Topical Reports
- Russian Response to RA comments
- Response to recommendations in Report 1280 and in working materials per chapter
- Table of compliance
- Table for the compliance of the issues raised by the NRA experts with the issues and the agreed positions of NED and ASE

Interim Safety Analysis Report (ISAR) (Revision 0, in English)

Agreement BRRA-RISKAUDIT-626 on the assessment of ISAR, Rev. 2

Belene II - Technical Reports Task 1 and Task 2
- Review and Assessment of the ISAR of Belene NPP - Executive Summary Report
- Technical Report Riskaudit Report No. 1512
- Task 2 Reports
- Reports on in-depth analyses

Results of the ISAR, Rev. 0, Review
- Review and Assessment of the ISAR for ...
- Riskaudit Report no. 1280 (revision 24.05.09)
- Task 2 Reports
- In-depth analyses results
- Executive Summary Report
- Riskaudit Report no. 1321
- ISAR Belene Review Recommendations
- All Recommendations of the Review of ISAR, Rev. 0
- More Results of the Review of ISAR, Rev. 0
- Previous Homepage of the first Review

Calendar
- There are currently no upcoming events. To add a new event, click "Add new event".
- Add new event

External Links
- Belene NPP Construction Project
- Bulgarian Nuclear Regulatory Agency

Neuen Hyperlink hinzufügen
Info Server is embedded into the prospective overall Global Nuclear Safety and Security Network (GNSSN/RegNet)

- Support national regulators and international organisations to achieve and promote nuclear safety and security
  - enhancing effectiveness and efficiency of national and international cooperation
  - enabling adequate access for regulators to relevant safety and security information
  - promoting dissemination of information on safety and security issues as well as information of good practices for addressing and resolving such issues
- Enabling synergies among different web based networks to strengthen and enhance global nuclear safety regime to serve the specific needs of regulators and international organizations
Benefits

- Simplification of cooperation
  - teamwork areas (workspaces), document libraries (DB), yellow pages, notifications, Wiki-page library, picture library, blogs, uniform handling (search, navigation)

- Better benefit from the information
  - central, throughout-the-enterprise search, metadata system

- Better organisation of business processes
  - workflows, web standards for document forms, project management, email imports, calendar function, task function

- Simple display and administration
  - uniform platform, central administration
Benefits – Info Server and Nuclear Safety

- Support to regulatory authorities or other state authorities with regard to international missions and activities
- Transfer of knowledge and experience in the areas of nuclear legislation and classification and storage of documentation
- Contribution to maintaining of the competence
- Establishment of good premises for further cooperation in this field
- Better exchange of operational experience
- Optimal cooperation while harmonizing safety concepts
- Support to the efficiency of the national regulatory authorities and to their cooperation in international panels