



**Technical Meeting on the
Establishment of the International Regulatory Network
J5-TM-34936
24 – 28 November 2008
Vienna, Austria**

Summary Report

Executive Summary

1. The meeting exchanged and discussed current practices and perspectives of national regulatory information resources and regulatory networking in national and international contexts. About 40 Experts from 25 Members States and the IAEA Secretariat took part. The TM used the Working Material prepared by a Consultancy Meeting in October 2008, including related material such as the ToR for and presentations during the Consultancy.
2. The value of operating regulatory information resources and of networking, directly between organisations and people or by electronic means, for regulatory effectiveness has been recognised in each country and international organisations. In this regard, the TM participants agreed to consider the experience feedback gained from the successful operation of mature regional networks such as the Ibero American Forum of Nuclear and Radiation Safety Regulatory Agencies (the FORO) and the Asian Nuclear Safety Network (ANSN). It was noted that further efforts to strengthen networking were endorsed by IAEA GC resolutions, major conferences or high level working groups such as G8 Nuclear Safety and Security Group. International organisations such as the IAEA or the European have foreseen budgets to support the further strengthening the networking activities of regulators.
3. The meeting confirmed the need and the added value of establishing and operating enhanced regulatory networking as envisaged by RegNet. The topics to be considered may include the following: safety, security, radiation, waste, transport, and emergency. Networking issues were mainly discussed for elements of nuclear safety; additional items should be addressed in other fora.

Some countries need external support to properly participate in such a network. The discussions also addressed the need to prevent any duplication of efforts and to take into account limitation in personal and financial resources. Therefore RegNet must be based on the existing resources and networks.

4. The Meeting took note of current developments related to networking of regulators such as the international IRRS workshops in Paris (2007) and Sevilla (2008), activities at the IAEA – NEA to extent and improve networking on operational experience feedback or the IAEA consultancy on Generic Safety Issues (Sep 2008).
5. As supporting information for the TM, a questionnaire was distributed in advance to potential participants to this TM. The objective was a first overview on current networking activities and on future developments in participating Member States to support discussions among the participants. From the results, it was noted that forty percent has neither national networks nor participating in regional or international networks. The ideas, gaps, mechanism, and ways to avoid duplication highlighted in the responses were addressed in the TM.
6. The TM organized its work by forming six working groups with the objectives to formulate and present the proposal on topics listed below:
 - Group 1: Objectives, principles, rules
 - Group 2: Country Profiles and Contributor Areas
 - Group 3: Content of RegNet
 - Group 4: Reviews and Appraisals – IRRS Platform and Regulatory Knowledge Base
 - Group 5: Operational Feedback Systems and Generic Safety Issues
 - Group 6: IT Infrastructure and Services

7. It is important to keep momentum on enhancing international cooperation and the sharing of existing knowledge e.g. by each country contributing to the Global Nuclear Safety Regime and the related Global Nuclear Safety Network (GNSN) hosted by the IAEA. In this context, the development and operation of RegNet as an essential part of the GNSN is a key element. The TM reaffirmed that further strengthening of regulatory networking as intended by RegNet has to be based on current national developments, on existing regional networks and on the established mechanisms of international co-operation as presented for example on the websites of the IAEA or the OECD-NEA.
8. There are differences in type and extent of nuclear and radiation practices between member states that have to be reflected in the design and operation of RegNet. The proposed approach to RegNet provides a framework and flexible platform to both accommodate such differences as well as facilitate exchange and cooperation on regulatory matters.
9. The participants agreed on the approach and on main elements of RegNet. The envisaged approach and its main elements have been integrated into a proposal for a work plan for the stepwise development and implementation of RegNet. The work plan consists of five milestones and more detailed task descriptions, including the objective and the proposed solution for each task. Further details for each task are presented in the annexed presentations that were given by the six working groups during the TM.
10. The TM discussed budget needs and noted that currently there are some budgets available by international organisations or co-operation programmes to organise and start the work as proposed. Optimal use of these budgets needs further programming and planning of implementation by the respective organisations and groups – mainly IAEA – and the Member States involved.

Additional financial and staff resources from Member States are needed to provide and update content of the national profiles and country areas. Some minor resources are expected to adapt information from international co-operation to RegNet structures and means and should not lead to significant extra burden.

11. The participants noted the importance of establishing a Steering Committee that coordinates the efforts of RegNet. This SC should reflect the needs of MS and the different fields to be covered by the network (safety, security, radiation protection, etc.). A first meeting of the RegNet SC shall be convened after a sufficient number of Member States have indicated their interest in participating. Participants agreed to investigate the possibility of nominating experts for this Steering Committee. With respect to planning and budgeting cycles it would be most convenient if the first RegNet SC Meeting could be held in early 2009. Tasks such as the IRRS platform or “Country Nuclear Regulatory Profiles” have already been formally endorsed and can be started immediately.
12. The TM proposes topics and specific documents and reports for the first Meeting of the Steering Committee. The tasks of this Steering Committee include:
 - a. Coordinate decisions regarding RegNet and other related networks
 - b. Resolve development issues
 - c. Establish interfaces with other elements of the GNSN
 - d. Interact with IAEA Safety Standards programme and relevant networks and programmes of international organizations such as OECD/NEA.

The work of the RegNet SC should be based on Terms of Reference as practiced for other high level IAEA Committees. The RegNet SC should agree on the objectives, principles, rules and guidance as outlined by the TM.

13. It was noted that the benefit of the RegNet is strongly dependent on contributions from participating organisations with respect to the maintenance of contributor sites and of links to related content on national websites. IAEA as the host of the RegNet will maintain and coordinate the network and its administration.
14. The meeting agreed that some progress can be achieved within a short time by voluntary contributions of participants. The TM took note of some offers from participants to make specific contributions early in 2009. After confirmation by the offering organisations the Secretariat will amend the documentation of the TM respectively.

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1. WORK PLAN AND MILESTONES FOR PROGRAMME IMPLEMENTATION

1.1. Overall Work plan

There are several milestones from the beginning stage up to launching the whole project:

1. **Milestone 1: Support from Member States**
2. **Milestone 2: Regulatory Country Profiles and IRRS Information Platform**
3. **Milestone 3: Development of the other elements of the network**
4. **Milestone 4: Validation and putting into operation of the entire network.**
5. **Milestone 5: Maintenance and implementation of RegNet**

Milestone 1: Support from Member States to start RegNet

The overall objective to strengthen global networking has already found the support of Member States and international organizations through resolutions and other policy papers and budgets.

Now support from Member States is needed for the RegNet concept and approach. To this end, the Agency has drafted proposals and has invited a CS and a TM to develop a work project plan that clarifies intended benefit and resources needed.

- The consultancy meeting from 6 to 10 October 2008 outlined the scope, objectives and elements of RegNet (Working Material, see 3.). It presented an agenda for the TM. Furthermore a questionnaire regarding networking practices and expectations of Member States was prepared to be responded by participants in advance before the TM.
- During the Technical meeting 24-28 November 2008:
 - information on good practices and networks existing among regulators was exchanged;
 - the CS Working Material and the responses to the questionnaire were reviewed;
 - a common understanding was reached by the participating MS;
 - concrete proposals based on the current working material were developed;
 - a work plan was drafted
 - a proposal to invite a Steering Committee was made: draft agenda and outlines for documents and proposals to be discussed at the first meeting of the RegNet Steering Committee as well as a short information notice.

On this basis MS can now officially be contacted to gain support for the proposed organization and operation of RegNet.

Milestone 2: Regulatory Country Profiles and IRRS Information Platform

Independently from the overall development of RegNet first steps can already be launched to establish some information resources/websites that later can serve as important elements of RegNet and as templates for other RegNet elements. Such tasks have been envisaged and endorsed by IAEA and Member States within existing programmes.

These tasks are:

- to establish a prototype for an IRRS platform

- to establish an integrated and uniform approach to regulatory country profiles
- to develop an OEF/OPEX Platform
- to establish a regulatory knowledge base

During the TM for each task outline, objective and proposed solution have elaborated supported by material with additional guidance and items to be addressed:

- Proposal Country Nuclear Regulatory Profiles and Contributor's Areas (Group 2) (see 2.2)
- Proposal IRRS Platform (Group 4) which will be created as a pilot project for the whole RegNet. (see 2.4)
- Proposal for a regulatory knowledge base (see 2.4)
- Proposal OEF/OPEX Platform including Generic Safety Issues (Group 5) (see 2.5)

To assure proper technical development early involvement of MTIT is important.

At the first meeting of the Steering Committee the detailed work plan for each element should be available. Achievements so far should be presented to the RegNet Steering Committee. The assessment of needed resources from all participating organizations shall be up-dated on the experience from these developments.

The work on Country Nuclear Regulatory Profiles should be used for support of those countries that so far have no experience in establishing and operation of IT networks. This support should be continued and extended with respect to the following milestones.

Milestone 3: Development of the other elements of the network

After major progress with the Milestones 1 and 2 and based on an endorsement of the RegNet Steering Committee other essential elements of the network shall be implemented. In this phase only elements that do not need sophisticated IT tools and administration of user rights shall be implemented. Continuous operation shall be extended step by step.

Proposals for an overall framework and additional elements have been developed by the TM (Group 3, see 2.3), including further work on regulatory knowledge portal, generic safety issue platform as well as information on conferences and other appraisals and reviews.

The work on this milestone shall be based on the progress achieved during Milestones 1 and 2. Priority setting should be based on ongoing activities of Member States and international organisations within related programmes.

Milestone 4: Validation and extension of operation of the entire network

Based on the accomplishment of the three steps mentioned above, the whole system can be extended to more sophisticated applications as collaboration on certain documents or projects. The systems should also be systematically extended to protected sites. The TM has outlined a framework and listed items that need to be addressed in this context. (Group 7, see 2.6).

Milestone 5: Maintenance and implementation of the network

After establishment of the network, continuous operation and improvement has to be established. Overall steering and monitoring will be the task of the Steering Committee.

1.2. Tentative schedule

	Oct 08	Nov-08	Dec 08	Jan-09	Feb-09	Mar 09	Apr-08	May 09	Jun-09	Jul-09	Aug-09	Sep-09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10
Milestone 1: Support from the Member States to start RegNet	CM	TM															
Informal Contacts to Member States																	
Contacting the Member States				1st Official Request													
Feedback from Member States			Feedback from Member States														
RegNet Steering Committee					1st Meeting SC							2nd Meeting SC					
Milestone 2: Country Regulatory Profiles / IRRS platform/OEF																	
Setup of template for Country Reg. Profile				CNRP Template													
Completion of Country Reg. Profile by member states																	
Updating of Country Reg. Profiles by member states												IAEA General Conference					
Setup of IRRS template				IRRS Template													
Completion of IRRS template by member states																	
Setup of template for Operation Experience Feedback (OEF)				OEF Template													
Completion of template for Experience Feedback by member states																	
Milestone 3: Development of other Elements																	
Setup of draft layout of RegNet site																	
Review of general setup																	
start of other elements																	
Setup of further elements																	
Milestone 4: Validation; putting into operation																	
Proposal for IT concept, tools, support																	
Validation of the final product																	
Corrections																	
Milestone 5: Maintenance and Implementation																	

2. TASKS FOR REGNET WORKING GROUPS

2.1. Objectives, principles and rules (WG 1)

INTRODUCTION

Existing regulatory information resources and networks have been developed to serve the specific purposes of the respective organisation or process. The systematic access to these existing resources and networks and an co-ordinated further development of the overall system must be based on an overall concept based on objectives and principles. Further planning and implementation of a global nuclear regulators network needs management structure, rules and guidance for design and operation.

OBJECTIVES

The objectives, principles, rules and guidance for the development and operation of RegNet have to ensure that the related information resources and network will effectively support national regulators in their responsibilities and tasks for assuring nuclear safety and security for the respective facilities and activities in their countries. Furthermore they must reflect the needs and challenges of an effective Global Nuclear Safety Regime to establish and maintain nuclear safety and security worldwide.

PROPOSED SOLUTIONS

The main objective for the RegNet is to support national regulators and international organisations to achieve and promote radiation and nuclear safety and security.

The draft objectives and principles shall be used as overall direction for the development and operation of RegNet. They have to be amended to include feedback from Member States.

Management of the RegNet project shall be supervised by a Steering Committee supported by the Secretariat. The detailed rules for RegNet could be developed after establishment of the RegNet Steering Committee. Main categories and items for operation of RegNet to be shall be , as attached, shall be included in such rules.

The Steering Committee shall be invited after a sufficient number of Member States and international organisations have indicated to participate. For respective contacts a information note shall be used. A draft is attached

The agenda for the first meeting shall address the terms of references, objectives and principles as well as rules for the Steering Committee as well as for participation in RegNet. To support the discussions and decisions of the Steering Committee technical documents and the basic IT concept shall be presented to the RegNet SC. Progress of first activities as IRRS platform and country profiles shall be reported. The preparation of the agenda and of documents and reports can be based on the attached proposals and task descriptions. The following steps are suggested:

1st step:

- To get support of MS and main international organizations for the establishment of the management structure, i.e. the establishment of the Steering Committee.
- To finalize a document to be send to the MS including the proposals of the TM. The introduction may include a long term vision of the network as the important tool supporting the Global Nuclear Safety Regime.

2nd step:

To convene a Steering Committee following the IAEA rules, keeping in mind that some specific knowledge in networking is required and the highest level of decision possible.

3rd step:

To provide an organization to the Steering Committee and to prepare discussion and of decision making on key issues.

Further Material and guidance for RegNet objectives, principles and rules (WG 1)

OBJECTIVES

The objective of the Regulatory Network is to achieve and promote radiation and nuclear safety and security¹ by:

- 1) enhancing effectiveness and efficiency of international co-operation in the regulation of nuclear, radiation, transport and waste safety, and nuclear security, as well as preparedness and response to nuclear and radiological emergencies;
- 2) enabling adequate access for regulators to relevant safety and security information;
- 3) promoting dissemination of information on safety and security issues as well as information of good practices for addressing and resolving such issues;
- 4) enabling synergies among different web based networks to strengthen and enhance global nuclear safety regime to serve the specific needs of regulators and international organisations;
- 5) providing additional information to the public on international regulatory cooperation in safety and security matters.

{The RegNet shall enable to provide global overview² to current practices (status³) related to the safety and security.}

Principles

RegNet shall be based on following principles:

1. The RegNet shall be the management tool to provide access to the information in existing networks.
2. The RegNet shall be the tool to manage information developed for the RegNet itself.
3. RegNet shall promote a harmonized approach to regulatory activities compatible with international standards and sound practices and facilitate feedback to revise and improve IAEA safety and security documents.

¹ „Security” in this text includes nuclear security, security of radiation sources, illicit trafficking combat etc.

² To provide „overview” RegNet shall be operational for some time and comprehensiveness and correctness of the information shall be assessed by the experts

³ If “status” – should be defined indicators and methods for the assessment, which need to be agreed by the MS

4. RegNet shall avoid duplication⁴ of information, be built upon existing experience⁵, provide links to existing information and host information which is not covered elsewhere.
5. The defined information/process owner within RegNet shall be responsible for the content and administration of the area under his supervision and keeping it up-to-date.
6. Information/process owner shall identify and assign the different data security levels and establish access rules to that information.
7. Information on RegNet is public⁶ unless shall be protected according the rules of the RegNet and limitations established by information/process owner.

Rules

Detailed rules for RegNet could be developed only after establishment of the RegNet, thus in this stage it is possible to define only main categories and items for operation of RegNet.

Operation of the RegNet:

- 1) Web-based provided by IAEA with the necessary features (content provider areas, in general public, in addition protected areas);
- 2) participation of Member States and international organisations shall be based on statement by contributor based an commitment to comply with the rules;
- 3) rights of participants/content providers should be establish ASAP to provide harmonised approach for operations of RegNet.

Commitments of participants/content providers:

- 1) to provide of information (contributor pages linkages to other websites of the provider, etc.);
- 2) to establish and maintain quality assurance and responsibility systems;
- 3) regularly update information as necessary as needed;
- 4) shall seek for information on the RegNet before ask⁷ information from content providers;
- 5) to grant IAEA and RegNet copyrights or non-exclusive, royalty-free licence as applicable.

Management of the RegNet:

- 1) the RegNet shall have Steering Committee;
- 2) any modifications and operational changes of RegNet should be agreed (preferable by consensus) by Steering Committee;
- 3) the Steering Committee should resolve development issues;

⁴ To avoid duplication is one of key word to ensure motivation for MS to join it

⁵ To use already validated and useable for majority of MS technologies and systems

⁶ All information on the RegNet shall be public if no specific restrictions due to content or stage of its development

⁷ As MS should be asked to prepare supplementary materials or at least to restructure existing documents for RegNet, then such approach could motivate MS – it provides possibilities to reduce efforts to prepare information in future

- 4) any RegNet member shall follow generic principles, rules and guidelines established for RegNet as a whole.
- 5) the owner decision about data security cannot override by Steering Committee.

Guidelines for the design of RegNet

1. RegNet should have a “dynamic” structure enabling it to adequately and quickly respond to the diversity of existing and evolving needs and issues.
2. RegNet should implement “modular management model” which defines the information/process owner for every area of the information.
3. To ensure adequate protection of confidential or sensitive information RegNet should provide means to define different levels of data security.
4. RegNet should be able to assign different “access roles/privileges/rights” to RegNet users including the right to read, edit, add, validate and publish information.
5. RegNet should offer secure connection if needed for specific areas.
6. RegNet should enable authorized up to date information on national legal and governmental infrastructure and on the national regulation of safety and security matters.

Guidelines for operation of RegNet

RegNet should:

1. promote sharing of regulatory knowledge;
2. promote the application of IAEA standards and the feedback of experience of their application;
3. obtain and use feedback to revise and improve IAEA safety and security documents for establishing and maintaining regulatory knowledge;
4. facilitate the preparation and implementation of reviews and appraisals such as IRRS missions;
5. facilitate regulatory assistance;
6. support exchange, bilaterally and/or multilaterally, information regarding regulatory actions, initiatives, good practices and experiences;
7. strengthen the experience feedback and exchange of lessons learned from safety and security related events in Member States;
8. provide a platform to address specific regulatory technical and policy issues and trends concerning regulatory challenges;
9. support and enhance the exchange of information among contracting parties of safety conventions to ensure continuity between review meetings;
10. facilitate harmonized regulatory approaches and activities;
11. support {and enhance⁸} international, inter-regional and regional regulatory forums;

⁸ Enhancement could be by synergy or RegNet could assist other forums

12. inform the public on international regulatory co-operation in safety and security matters;
13. provide for a platform for trainings and dissemination of teaching materials.

2.2. Country Regulatory Profile and Contributor's Area (WG2)

INTRODUCTION

In RegNet all participants should be presented by their specific profile following an agreed format. Such profiles and additional information nuclear safety security matters important for the respective country or organizations shall be presented within RegNet.

To support international co-operation access shall be given to additional more specific information from the participant shall be made available.

For this the concept of a “Contributors Area” was considered:

The content of such “contributor areas” can be read by everybody or by authorized participants respectively. Modifications and administration of rights shall only be possible by authorized representatives from the Member States or international organizations.

Special access can be given to respective information, documents and developments at Member States and international organizations. For this purpose the entry pages could include guidance on what should be made available in what form from other contributors within the RegNet publicly or protected. The access to the resources from the different contributors should be organized by “contributor pages”. Contributor pages should enable a structured approach to existing network resources of the contributor. The responsibility for the contributor pages would remain with the respective contributors.

OBJECTIVE

The Country Regulatory Profile shall describe the Legal Framework and Regulatory Infrastructure. Basic functions as regulating, licensing, inspection and assessment organizations, including those Technical Support organizations, that bear specific authorizations for technical or safety assessment, and listing those institutions which may provide services as expert organizations shall be addressed. Profiles shall also inform about respective nuclear and radiation practices and facilities.

The Contributor Areas should address safety and security matters of interest for the contributor in the context of international co-operation.

Responsibility for the information shall stay with the respective country. Content and updating shall be ensured by the respective participant. Duplication of efforts have to be prevented. Access to more detailed information shall mainly be by links to respective websites already operated and maintained under the responsibility of the participant.

PROPOSED SOLUTIONS

- Country Regulatory Profile

The profiles shall have an agreed common structure deduced from established instruments and mechanisms of international cooperation such as nuclear conventions, codes of conduct, IAEA safety standards, appraisals and reviews such as IRRS, information management systems such as IRS or PRIS.

The respective is posted on the contributors' area for the participant and can only be changed by authorized representatives from the participant.

- Contributors Area

RegNet shall offer for all participants a contributor's area that contains the country profiles as well as further country specific information on items of interest. The contributor's areas should contain mainly short but comprehensive overviews with links to more detailed information that can be found on websites of the participant.

Further Material and guidance for Country Nuclear Regulatory Profiles and Contributors Areas (WG 2)

The description of the Regulatory Framework should convey information beyond the General Introduction about the

- Organizational structure(s) and allocation of resources;
- Coordination of regulatory responsibilities;
- Management system;
- Staffing and competence of the regulatory body;
- Advisory bodies and support organizations;
- Regulatory stability and consistency
- Effective independence

The above information should make the user understand the interactions within the regulatory body (or bodies) and the organizations, management or personnel responsible for any facilities and activities.

In order to support further the user to conceive the regulatory regime, the information provider should indicate the functions of the regulatory body (or bodies) or other legal entities listed. Generally the functions used to be the next:

- Authorization;
- Review and assessment;
- Inspection and enforcement;
- National registers and inventories;
- Development of regulations and guides;
- Information and communication with public.

The second important field of Country Regulatory Profile description is the report about interactions of this regulatory regime within the Global Safety Regime. The most simple resolution of this task to list:

- International Organizations in which the organizations maintain membership
- International and Bilateral Agreements countersigned
- International Commitments and Co-operations

More detailed description of the past and current activities could provide valuable contribution to the list of administrative facts.

The first column in the matrix (below) presents topical content list that identifies the chapters containing the relevant information

- General Information
- Regulatory organization(s)
- Legal Framework
- Strategy and Policy
- Technical Infrastructure
- Provision of Tech. Services
- Human Resources
- Research & Development

In order to represent the high number of internal links inside the potentially provided information pile, beyond the topical content list we provide a second dimension, recommending apply them as sub-chapters. These subchapters are repetitive along the chapters, we represent the structure with a topical matrix. The matrix form is serving also as a suggestion of a user interface on your computer screen.

	Nuclear	Radiation	Waste	Transport	Em Prep. & Response	Security
General Information	▶	▶	▶	▶	▶	▶
Regulatory organization	▶	▶	▶	▶	▶	▶
Legal Framework	▶	▶	▶	▶	▶	▶
Strategy and Policy	▶	▶	▶	▶	▶	▶
Technical Infrastructure	▶	▶	▶	▶	▶	▶
Provision of Tech. Services	▶	▶	▶	▶	▶	▶
Human Resources	▶	▶	▶	▶	▶	▶
R & D	▶	▶	▶	▶	▶	▶

The matrix representation could give the technical possibility to put links and hyperlinks into the cells, which conduct the user to such textual parts of the content, which are relevant in the context of a row and a column.

For existing example provided in the annex a country profile content description. This template is used to build the radiation protection and waste safety regulatory profile (Annex to WG-2 Work Plan contribution).

- Contributors Area

This Contributor Area shall identify topics in accordance with existing documentation, general nuclear activities and present time existing international organizations.

It is up to the participating country to provide the document, the article, the publication, etc. or only references or internet links are provided on the user interface for the users.

It is suggested to use the Matrix described above (for referencing the information about *Country Regulatory Profile*). This matrix may contain links to the different topics of the Contributors Area.

It is necessary to maintain the possibility of internet forum communication to exchange ideas, opinion or giving feed-back among the community members under one or several topics. The IT solution designers and providers should choose such server toolset which makes it possible from the aspect of internet technology or product applied.

International References:

- IAEA Guides, Codes and Standards
- OECD/NEA Documents
- Other Related Documents

Thematic field according to nuclear activities

- Nuclear Safety
- Radiation Safety
- Security
- Emergency Preparedness and Response
- Nuclear Damage Liability
- Education and Training
- Decommissioning of Nuclear Facility

International/Regional Networks

- | | |
|--------------------------|---------------------------|
| - ANSN | - IRSRR |
| - CANDU Regulators Forum | - IRS |
| - CNRA | - LWR Regulators Forum |
| - FORO | - Research Reactors Forum |
| - FNCA | - VVER Regulators Forum |
| - IRRS | - WENRA |

2.3. Content of RegNet (WG 3)

INTRODUCTION:

To design and establish RegNet the overall scope and structure and depth of information to be made accessible by RegNet needs to be defined.

The International Regulatory Knowledge Network will address the regulatory part of the Global Nuclear Safety Regime named as REGNET. RegNet is the Network of the current existing regulatory networks and international regulatory practices.

OBJECTIVE:

The objectives of REGNET are to:

- enable a comprehensive and structured approach to information important for international co-operation of regulators.
- focus search tools to such information resources that contain authorized up-to-date information on regulatory matters such as national legal and governmental infrastructure and on the national regulation of safety and security matters
- facilitate the preparation and implementation of reviews and appraisals such as IRRS missions
- ease exchange, bilaterally and/or multilaterally, of information regarding regulatory activities
- share experience feedback and the exchange of lessons learned from safety and security related events in Member States
- promote convergence of regulatory approaches and practices
- foster application of IAEA standards and the feedback of experience of their application
- obtain and use feedback to revise and improve national as well as international safety and security documents

PROPOSED SOLUTION:

The REGNET shall establish and maintain the top page which includes the RegNet objective and rules. Specific entry pages for each selected topic shall be established with link to the top page.

The top page should allow access to all topics that currently are major issues for international co-operation. The structure shall be flexible enough to be adapted to changing issues and priorities. The structure of current Websites of international organisations especially from the IAEA shall be together established mechanisms for international regulatory co-operation shall be used for the design of structure and content.

The access to the resources from the different contributors should be organized by “contributor pages”. They should enable a structured approach to existing network of the contributor. The responsibility for the contributor pages would remain with the respective contributors.

2.4. Reviews & Appraisals (WG 4: IRRS platform & Reg. Knowledge Base)

INTRODUCTION

The need to better harness IRRS mission in order to improve regulatory performance on international level has been recognised, including during International IRRS workshops held in Paris (2007) and Sevilla (2008). For this purpose, it is necessary to create a tool to facilitate the mutual learning IRRS process, which should include sharing information and discussing issues raised during the conduction of these missions. IRRS plat-form is considered to be an efficient tool to address this need.

OBJECTIVE

The objective is to set up an IRRS platform that shall provide information to Member States interested in IRRS missions and support sharing and exchanging experiences and lessons learned from these missions among Member States.

Principles followed to propose the IRRS platform

The basic principles borne in mind having an IRRS platform are to:

- provide an easy and ergonomic access to all IAEA documents related to Regulatory bodies. The WG 4 has noted that these documents are scattered in different locations on the IAEA website. It will be helpful if these documents can be readily accessible from a single location;
- be efficient by maintaining and updating information;
- be cost effective, for instance by using links to existing databases or other websites;
- provide public information;
- give a place for Regulatory Bodies to discuss any IRRS issues or any other regulatory issues.

This proposal is about IRRS but it can be applied to any other Reviews & Appraisals services.

PROPOSED SOLUTIONS

In order to achieve the above objectives, the proposal is to structure the platform around 7 subpages directly available from the IRRS platform front-page. The description and the contents of each page are given in the following table.

Front Page	- News (latest press releases, mission, etc.) - Direct access to IRRS schedule - Overall description of IRRS and process - Searching box - Direct access to subpages
History	- History and background about IRRS, including rationales
IAEA reference material	- IRRS guideline, including procedure - Guidance for self assessment - IAEA documents related to IRRS (standards, guidance, etc.)
Other reference materials	- Safety conventions (joint, nuclear safety, etc.) - References to policy documents
Support	- IRRS schedule, including past missions - List of Experts - Questionnaires and other tools for self assessment
Previous missions	- IRRS schedule, including past missions - Executive summary of the reports - Public information (press releases, etc.)

	<i>For the following information of this subpage, it is up to the countries to decide to provide it</i> - National references (laws and regulations, management system manual, etc.) - RB Background papers and presentations (advanced reference material) - Self assessment results - Regulatory Body action plans related to IRRS and follow-ups results
Lessons learned	- Workshop outcomes (minutes, report, etc.) - IAEA consultancy and technical meeting reports - Lessons learned regarding IAEA standards and guides - Databases
IRRS Forum for Regulatory Bodies	- This is the only restricted area in order to offer to IAEA and the Regulatory Bodies to discuss issues privately and exchange information, including feedbacks from IRRS missions.

Regulatory knowledge base (WG 4)

1. Introduction

The existing IAEA webpage contents a lot of documents related to the regulatory knowledge in difference locations. Some of the documents are not directly related to regulatory bodies but they include regulatory information.

Therefore, it is not easy for regulator staff members to get and maintain up to date all the needed information from the existing IAEA website regarding their activities.

2. Objective

The objective of having a regulatory knowledge base is to provide a plat-form dedicated to the Regulatory knowledge, from where all available documents can be downloaded and therefore be easily used for regulatory work.

3. Principles

The basic principles borne in mind are to:

- be efficient by maintaining and updating information;
- be cost effective, for instance by using links to existing databases or other websites.

4. Proposed solutions

To create on either IAEA or REGNET websites, a single location that contents all formal knowledge dealing with the regulatory activities.

This knowledge includes:

- all IAEA documents such as those given below;
- all other IAEA related documents such as United Nation resolutions, treaties and conventions;

- Lessons learned from previous activities such as IRRS mission.

To get readily access to these documents, this location should be structured to present documents according to the respective series (IAEA Safety Standards, INSAG, TECDOC) using established numbering systems. Furthermore the documents should be assigned to categories (standards, guides, etc.), regulatory aspects (licensing, inspections, enforcement, etc.), and types of facility (NPPs, research reactors, nuclear medical facilities, etc.) or activity applications (transport, waste management, etc.).

In addition to these arrangements, searching tools should be available to retrieve any information included in any of these documents and to easily copy parts of these documents for quotations or other regulatory uses.

Examples of IAEA documents or documents managed by the IAEA

Nuclear Conventions

Codes of Conduct

- The Code of Conduct for Radiation Safety and the Security of Radioactive Sources 2004 and Guidance on the Import and Export of Radioactive Sources 2005
- The Code of Conduct on the Safety of Research Reactors 2005.

Resolutions and other IAEA policy documents

Safety Standards such as

- GS-R-1: Legal & Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety
- GS-R-3: Management System for Facilities and Activities
- Safety Series 115: International Basic Safety Standards
- NS-R-1: Safety Requirements of Nuclear Power Plants: Design
- NS-R-2: Safety Requirements of Nuclear Power Plants: Operation
- NS-R-3: Safety Requirements of Research Reactors
- NS-R-4: Safety Requirements of and Fuel Cycle Facilities
- TS-R-1: Regulations for the Safe Transport of Radioactive Material TS-R-1
- WS-R-1: Near Surface Disposal of Radioactive Waste Safety Requirements;
- WS-R-2: Predisposal Management of Radioactive Waste, including Decommissioning;
- WS-R-3: Remediation of Areas Contaminated by Past Activities and Accidents;
- WS-R-4: Geological Disposal of Radioactive Waste;
- GS-R-2: Preparedness and Response for Nuclear and Radiological Emergencies Requirements

INSAG Reports

TECDOCs and Safety Series Reports

2.5. OEF/OPEX Platform (WG 5)

INTRODUCTION

Operating experience is a valuable source of information for learning about and improving the safety and reliability of nuclear and/or radiation practices. It is essential to collect such information in a systematic way that conforms to agreed reporting thresholds for events occurring during commissioning, operation, surveillance and maintenance activities and decommissioning, and on deviations from normal performance by systems and by personnel, which could be precursors of events.

OBJECTIVE

The objective of this part of the RegNet is to provide information about operational experience feedback system at a national and international level to assist member states in developing, implementing and managing operational experience programmes. It brings together common elements that typically constitute an effective and efficiency system such as:

- Legislative and Regulatory framework
 - Nuclear Act
 - Regulation
- Regulatory processes
 - Licensing (Authorizations)
 - Compliance (Inspection and Enforcements)
 - Development of Regulatory Documents
- Regulatory Documents
 - Requirements (Standard Documents)
 - Expectations (Guidelines)
- Operating Experience
 - Event Reporting, Screening and Analyzes
 - Generic Safety Issues

It should be noted that the process of feedback of operational experience is undertaken by many different organizations throughout the world (licensees, regulators, designers, international organizations). International cooperation and information exchange will enhance the existing processes and it will make them more consistent and effective.

PROPOSED SOLUTION

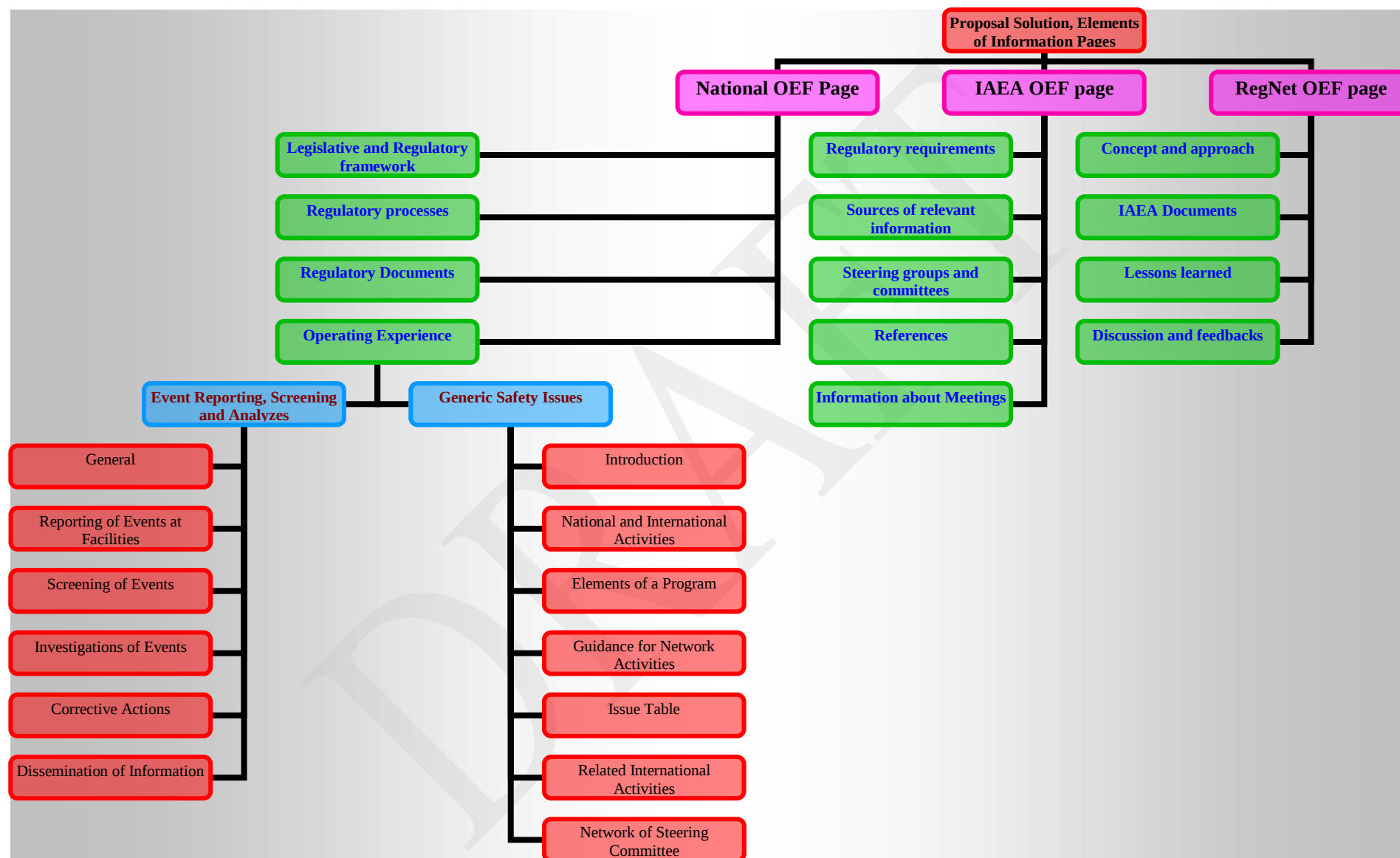
The proposed approach of this part of the RegNet is to provide a comprehensive summary, including main processes and assessment elements currently utilized at national and international levels, as shown for Operational Events and Generic Safety Issues in a table below (T No. 1).

Further details, including the main topic proposed for national contributor page and for others pages such as the IAEA or RegNet pages are outline in the attach presentation. This approach is directly applicable to operating events and generic

safety issues, but the general concept can be used to improve all elements of the regulatory oversight system listed in the objective statement above.

Table No. 1 Proposal Solution, Elements of Information Pages

National OEF Page		IAEA OEF page	RegNet OEF page
Legislative and Regulatory framework		Regulatory requirements	Concept and approach
Regulatory processes		Sources of relevant information	IAEA Documents
Regulatory Documents		Steering groups and committees	Lessons learned
Operating Experience		References	Discussion and feedbacks
Event Reporting, Screening and Analyzes	Generic Safety Issues	Information about Meetings	
General	Introduction		
Reporting of Events at Facilities	National and International Activities		
Screening of Events	Elements of a programme		
Investigations of Events	Guidance for Network Activities		
Corrective Actions	Issue Table		
Dissemination of Information	Related International Activities		
	Network of Steering Committee		



2.6. *IT Infrastructure and Services (WG 6)*

INTRODUCTION

The technical solution of the web based platform is important for the effectiveness and efficiency of the work of the RegNet community under the lead of IAEA.

OBJECTIVE

It is intended to create an effective network knowledge center which can be accessed and share by people worldwide. Handling and maintaining should be user friendly. The main purpose of the RegNet platform is to exchange and share information on good practices and networks existing in the international community. Therefore well established and low cost products should be considered. Countries with few technical and organizational infrastructures should be included in the process by specific support.

SOLUTIONS

For the implementation phase a stepwise approach is intended to start with existing and easily accessible products, contents and platforms. First the front page of RegNet should be established and afterwards step by step subpages like IRRS or experience feedback are to be implemented (see WG 4 and WG 5). Technically it's preferred to implement links to existing information sources due to reduce additional efforts and to ensure up to date information. Experience gained by this approach could be applied for further development of RegNet. This results in reasonable costs.

The following selected solutions should be discussed and agreed during the 1st Steering Committee meeting. A more detailed listing is annexed and should be addressed in the action plan.

- Overall Agreements
 - Responsibilities for contents
 - Access and security principles
- Definition of the roles of moderation, maintenance and editorial Services and Items
 - Country Regulatory Profile and its responsibilities
 - Main contents (as discussed in WG 3)
- Technical Items: Definition of responsibilities for design and build up process.
- Financial details could not be fixed at this stage.

Further Material and guidance for IT Infra-Structure and Services (WG 6)

Main issues to be addressed for introducing and building the RegNet IT Infrastructure and Services. To be decided by the Steering Committee

I. Services and Items

- Main contents of the RegNet site (outcome of WG 3)

Related to infrastructure and services the following points have to be considered (see also: outcomes of WG 2 and 3):

- *Country Regulatory Profile:*
 - Member States specific areas under their responsibility
 - Templates and unified structures for countries with the need for technical and organizational support to provide requested information
- Specification of *Forums, Dissemination, Announcements*

- Temporary and permanent discussion forums
- Notice Board / Announcements / Broadcast Mechanisms...
- Experts Area
- News

Remark: Forums have need for moderation (e.g. cleaning up)

- “Yellow Pages”
- Search Functionality
- Sitemap
- Contact/Support (technical and content related)

II. Overall Agreements, policy

1. Responsibilities for contents:

- a) *Provider to be responsible for information and documents*
- b) *Contents should be made available preferably by links*
- c) *Confidentiality should be agreed and classified*
- d) *Guidance and support for countries with the need for technical and organizational support should be provided*

2) Access and security principles to be applied:

- a) *IT security model*
- b) *Access rights, access model*
- c) *Functional role*
- d) *Administration*

3) Data formats

- a) *Preferably non-proprietary (e.g. pdf, html)*
- b) *Databases to be linked on HTML-format, not to be provided*

4) Language

- a) *English as default*
- b) *Documents in other languages to be provided with English summaries and meta data*

5) The roles of moderation, maintenance and editorial staff should be defined

III. Technical Items

1) Choice of web based suitable IT-platform

2) Design of Web Pages to be in line with IAEA

3) Hosting of contents (incl. the national organizations and service providers)

4) Universal browser compatibility

5) Data formats should have the following characteristics:

- a) *non-prioritary (e.g. pdf, html)*
- b) *small data amounts*
- c) *externally hosted database interfaces to be provided in HTML-format*

- d) *Character sets as unicode only*
- 6) Data classification schemes to be agreed (preferably use of IAEA-standards)
- 7) Data security to be assured

IV. Budgetary Issues

An estimation of budget could not be fixed at this stage. It's highly depending on the following points which are not decided yet:

- 1) Development:
 - a) *Structure*
 - b) *Web design*
 - c) *Data structure*
- 2) System of the IT-platform (hardware, software incl. security tools, license fees)
- 3) Human Resources for :
 - a) *Development*
 - b) *Hosting*
 - c) *Maintenance*
 - d) *Editorial work*

3. CONTENT OF CD MATERIAL ATTACHED TO REPORT

- a) Working Material for the TM;*
- b) Provisional Agenda for the TM;*
- c) Participants list of TM;*
- d) Presentations of TM;*
- e) Members of Working Groups;*
- f) Presentations from Working Groups;*
- g) Format of Regulatory Infrastructure;*
- h) Draft Agenda for the 1st Steering Committee Meeting;*
- i) Draft Information Note for MS*