

Multinational Design Evaluation Programme Terms of Reference

Background

The Multinational Design Evaluation Programme (MDEP) is a multinational initiative taken by national safety authorities to develop innovative approaches to leverage the resources and knowledge of the national regulatory authorities involved in the review of new reactor power plant designs.

MDEP incorporates a broad range of activities including:

- Enhancing multilateral co-operation within existing regulatory frameworks, with a view to harmonisation¹ of regulatory requirements and practices;
- Facilitating multinational convergence of international and inter-governmental safety standards and safety goals through interactions with other multinational organisations, and industry;
- Implementing the MDEP products to facilitate licensing of new reactors as well as oversight of their construction and commissioning activities.

A key concept throughout the work of the MDEP is that national regulators retain sovereign authority for all licensing and regulatory decisions.

Objective

The main objective of the MDEP effort is to enhance co-operation among members and establish reference regulatory approaches to improve the safety of new reactor designs. The enhanced co-operation among regulators will strengthen the effectiveness and efficiency of the regulatory design reviews, which are part of each country's licensing process. MDEP should focus on co-operation on regulatory practices that will culminate in harmonisation of regulatory requirements. The international safety standards, which provide a general level of harmonisation, provide input to the work and can benefit from the final results. Progress towards harmonised regulatory approaches and requirements for new reactor designs will be a natural outgrowth of MDEP. It is expected that this will also:

- Contribute and encourage global safety standards;
- Contribute and encourage global harmonisation to improve the safety of reactor designs;
- Facilitate co-operation among regulators on the design reviews of new reactors, including regulators from new entrant countries;
- Facilitate co-operation among regulators, design vendors, and other industry organisations;
- Enhance public understanding of the international progress toward harmonisation of safety principles.

Scope

The focus of the MDEP is on enhanced co-operation, in specific technical areas and within existing regulatory frameworks, on reactor design reviews and regulatory oversight of manufacturing, construction, commissioning and early phase operation, facilitated by establishing common regulatory

¹ Process of bringing the requirements to a certain point where they do not contradict each other and reflect a similar view of safety.

positions. The programme of work will be developed by the Design-Specific Working Groups (DSWGs) and propose to the Management Board (MB) for approval.

Expected outcomes and outputs

The expected results of the MDEP are to:

- Increase knowledge transfer through the exchange of information on regulatory practices used by the regulators in their design reviews including the technical evaluations, codes, standards and safety principles, inspection practices, licensing requirements, safety research, operating experience, etc.;
- Identify similarities and differences in the regulatory practices and obtain insights to better understand the technical basis for the differences;
- Move towards common design reviews, harmonisation of regulatory requirements, including convergence on common regulatory positions in order to facilitate more efficient and effective design reviews;
- Increase stakeholders understanding of regulatory practices on an international basis;
- Enhance public confidence that equivalent safety outcomes are being sought by the different MDEP member countries;
- Enhance the ability of regulators to co-operate in reactor design reviews and regulatory oversight of manufacturing, construction, commissioning and early phase operation leading to more efficient and more safety-focused regulatory decisions.

In completing its work, it is anticipated that the MDEP products would constitute a very useful input to upgrade the international safety standards.

Membership

MDEP members are national regulatory authorities of interested countries that already have commitments for new build or firm plans to have commitments in the near future for new reactor designs. They participate in the MB activities, and working groups addressing the specific design(s) and issue(s) of interest.

MDEP members are listed in Appendix 1.

New members are accepted after review by the MB of the applicant's response to the MDEP membership application questionnaire that addresses MDEP criteria, and consensus from the MB.

The IAEA is invited to participate in issue-specific working groups and the MB meetings in order to maximise the benefit of the harmonisation work carried out by MDEP.

MDEP implementation

MDEP should be implemented under the MB guidance, with the OECD Nuclear Energy Agency (NEA) serving as the technical secretariat. Two lines of activities could be established to carry out the work, each following particular terms of reference.

Design-specific activities

Working groups for each new reactor design share information and co-operate on specific reactor design reviews, construction and commissioning oversight, and early phase operation. Participants in these working groups are members who are interested in a specific reactor design and are willing and capable

of contributing positively to the group's activities. A design-specific working group could be formed if three or more regulators express interest in working together and joining MDEP. The design-specific working groups and members are listed in Appendix 2.

Issue-specific activities

Working groups could be organised for the technical and regulatory process areas identified by the DSWGs and approved by the MB. Participation in such working groups is open to all members based on a desire for active involvement in the topic and a commitment to provide and share up to date information with the MDEP members through meetings and other methods of communication. IAEA is welcomed to participate in the working groups.

Non-disclosure and proprietary information exchange

Appendix 3 contains a non-disclosure and information exchange protocol to support sharing of proprietary design information in order to fully realise the benefits of the information exchange within MDEP, including within its design-specific and issue-specific working groups.

Organisation

The programme of work is governed and implemented by the MB, consisting of representatives from each of the MDEP members.

The MB governance functions include:

- Establishing and providing guidance to working groups;
- Approving the closure of the working groups on the recommendation of the DSWGs;
- Monitoring the progress of the programme of work in terms of results and timeliness;
- Providing guidance on the interaction with industry and other stakeholders;
- Establishing financial terms by setting a yearly membership voluntary contribution to cover the MDEP common costs;
- Approving new MDEP members.

The MB implementation functions include:

- Approving and monitoring the programme plan² for each working group, including approving technical experts subgroups;
- Deciding important cross-cutting issues to be addressed by the WG or a subcommittee of the MB; or identifying other appropriate organisations to address the issue;
- Approving technical reports and common positions developed by the working groups³;
- Ensuring co-ordination and interaction of the activities performed by design-specific and issue-specific groups;
- Establishing interfaces with other international organisations to benefit from available work and avoid duplication;

² Guidance on the programme plan for working groups is provided in Appendix 4.

³ MDEP members can, at their convenience, translate technical reports or common positions published on the MDEP website (www.oecd-nea.org/mdep/) provided the translation includes the document cover and references the published English version on the MDEP website as the only official document.

- Approving procedures for the functions of the MB and working groups, including the handling of information to be shared;
- Deciding completion of working groups or transition of the functions of working groups to other organisations, when appropriate;
- Performing periodic assessment of the effectiveness of MDEP.

The chair and any deputy chairs of the MB are elected by consensus of all MB members and generally serve a term between three to five years.

It is expected that the leadership of the MDEP (i.e. the chairs of the MB and working groups) should reflect the MDEP membership.

The present Terms of Reference have been agreed by the MDEP members (see List in Appendix 1).

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**APPENDIX 1
List of Members**

Current MDEP members are the national regulatory authorities of:

- Argentina
- People's Republic of China
- Finland
- Hungary
- Russian Federation
- South Africa
- Turkey
- United Kingdom

**Multinational Design Evaluation Programme (MDEP)
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**APPENDIX 2
List of Working Groups and Members**

Working group		Member Regulators from
Design-Specific	VVER	<ul style="list-style-type: none"> • China • Finland • Hungary • Russia • Turkey
	HPR1000	<ul style="list-style-type: none"> • Argentina • China • South Africa • United Kingdom
Issue-Specific		All interested MDEP members and the IAEA

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**APPENDIX 3
Non-Disclosure and Proprietary Information Exchange Protocol**

This **NON-DISCLOSURE AND PROPRIETARY INFORMATION EXCHANGE PROTOCOL** is made between the members of the Multinational Design Evaluation Programme (“MDEP”).

CONSIDERING that pursuant to the terms of reference, the main objective of the MDEP is to enable increased co-operation among nuclear regulators and establish reference regulatory practices to enhance the safety of new reactor designs, with the aim to strengthen the effectiveness and efficiency of the regulatory design reviews;

CONSIDERING that to fulfil such objective, the members may exchange in the course of their collaboration information which may be of proprietary nature, and which requires an adequate and effective protection;

CONSIDERING that bilateral agreements are the most efficient means to set up the framework for a free exchange of proprietary information, but that some members still do not have such agreements in place;

NOW THEREFORE, the members state as follows:

SECTION 1

PURPOSE OF THE PROTOCOL

1. The protection, use and disclosure of proprietary information that may be provided by one member to another, for the purpose of implementing the MDEP Programme of Work approved by the Management Board (MB) is to be governed by the provisions set forth in this protocol.

SECTION 2

DEFINITION OF PROPRIETARY INFORMATION

2.1 “Proprietary Information” means trade secret information of any kind, including but not limited to trade secret information of a business, planning, marketing, or technical nature, disclosed by a disclosing member to a receiving member for the purpose of implementing the MDEP Programme of Work, regardless of the form in which such information may exist and has been disclosed; provided that such information may have economic value and has been held in confidence. Such information would be explicitly identified as ‘PROPRIETARY INFORMATION’ by the disclosing member.

2.2 For the purposes of this protocol, the following information is not considered to be proprietary information:

- (i) Information which is in the public domain at the time of receipt, or comes into public domain thereafter; or
- (ii) Information which was, and can be shown by credible evidence, to have been, known to the receiving member on an unrestricted basis prior to disclosure by the disclosing member; or

- (iii) Information which was or is lawfully disclosed to the receiving member on an unrestricted basis by a third party having the full right and authority to disclose it; or
- (iv) Information which was or is independently developed by the receiving member without use of the proprietary information, as can be shown by credible evidence.

2.3 When a member that provides proprietary information under this protocol informs members that received the information that such information is no longer proprietary, the information is no longer to be considered proprietary.

SECTION 3 CONFIDENTIALITY

3.1 Each of the member regulators, including staff from their technical support organisations, who may receive the proprietary information on a “need to know” basis, is to hold in confidence all information which was identified at the time of disclosure as being proprietary information, and is not to disclose such proprietary information to third parties without the prior consent of the disclosing member. Receiving members are to follow their countries’ laws, regulations and procedures for obtaining authorisation from disclosing members.

3.2 The receiving member is to take reasonable steps to protect such proprietary information against unauthorised disclosure; and ensure that its employees and staff from their technical support organisations, who may receive the proprietary information on a “need to know basis” are advised of the restrictions on disclosure and use of the proprietary information.

3.3 In case the disclosure of proprietary information is required by law or regulation, the receiving member is to inform the disclosing member prior to the effective disclosure of the concerned proprietary information. Receiving members are encouraged to utilise domestic laws and regulations available to preserve the proprietary nature of the information in such circumstances.

3.4 The withdrawal of this protocol does not mean that the proprietary information becomes public or stop being proprietary. Members are to seek to preserve the proprietary nature of proprietary information until informed by the disclosing member that it is no longer proprietary.

SECTION 4 USE OF PROPRIETARY INFORMATION

4. The proprietary information provided by a disclosing member to a receiving member is to be for the sole purpose of implementation of the MDEP Programme of Work. In this regard, proprietary information is to be shared solely within working groups that have a “need to know”, based upon particular working group activities. A receiving member that is unable to comply with such restrictions is to so indicate to the disclosing member, and the disclosing member is to then decide whether to disclose the information. All members are to take appropriate measures to protect proprietary information they may receive from other members against unauthorised use.

SECTION 5
APPLICABILITY

5. The withdrawal from the MDEP by a member or the termination of the MDEP shall not affect the obligations of withdrawing members under this Protocol.

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**APPENDIX 4
Programme Plans for Working Groups**

Definition

A programme plan is a document that clearly describes what the long-term and short-term goals of a working group are as well as the actions that the working group will take to achieve those goals. A list of products and a schedule should also be included. Each working group should have a programme plan with final and interim objectives, clear schedule, periodic reports and a completion strategy identifying when the group will have completed its intended work.

Key Attributes of programme plans

Listing technical issues that the working group will address is important but as important is identifying the steps that the working group will take to tackle these issues. As much details as possible and timelines assignments to achievements should be included in the programme plan, consistent with the need to not make the programme plan too prescriptive and to allow the working group latitude and flexibility. Detailing measurable steps or discrete products are also encouraged to be included in the programme plan.

A programme plan is a living document that is intended to be updated periodically. Short-term goals should include work through at least the following two years.

Identifying key stakeholders with whom the working group will interact is also recommended to be part of the programme plan. If and when appropriate, the programme plan should identify other regulatory groups such as CNRA, CSNI and the IAEA that may be end-users of MDEP products and that may carry on future work in a particular area. The MDEP working group is encouraged to identify these groups early in their work and to communicate with them about potential transition of the work, as appropriate.

A completion strategy must be identified in the programme plan. It should include insight on when the group is supposed to have finalised its intended work and how its activity will be pursued if necessary (transfer to another organisation in form of a permanent working group, periodic ad hoc meetings of experts, etc.).

Guidance

Each MDEP working group will have a programme plan that is consistent with the MDEP ToR, and DSWG and ISWG ToRs, as applicable. The programme plan at a minimum will include the long-term goals of the working group as well as the short-term goals and actions to achieve those goals for at least the next year (preferably two years). Products, deliverables, and significant interactions with stakeholders will be identified. Each MDEP working group will submit a status of accomplishments following the previous years' programme of work as well as a programme plan for the next year(s) to the MB for review and inclusion in the MDEP annual report starting. At each working group meeting, the group should review the programme plan to determine if any changes are needed and to assess how it is performing in meeting its goals and producing its deliverables. The working groups will continue to report the status of carrying out the programme plan at the STC meetings.

Interaction between issue-specific and design-specific working groups

Each working should identify issues that may be cross-cutting or of interest to other working groups and include in their programme plan the particular issue and how they will communicate significant

developments about this issue. Each working group may consider proposing joint or concurrent meetings with other working groups as they work on their programme plans. The MB may provide more guidance to working groups when the need arises.

Maintenance of programme plans

After approval, the NEA technical secretariat will place the working group's programme plan in the MDEP library and on the MDEP public website. The review of the programme plan as well as the evaluation of any necessary changes and updates shall be placed on the agenda of each working group's meeting. Changes to the programme plan should be communicated to the MB prior to effecting any significant change.