

Introduction

The Policy Group (PG) of the Multinational Design Evaluation Program (MDEP) approved formalising interactions and cooperative arrangements for specific designs, allowing qualified members to organise design-specific working groups. The following are high level guidelines and expectations for participation in such working groups:

1. Participants of such groups should be MDEP member regulatory authorities (or their technical support organisations) who are interested in a specific reactor design and are willing and capable of contributing positively to the group's activities;
2. A national regulatory authority involved in a design-specific working group should continue its active participation at least through the construction, commission and early operation phases in order to fully realise the benefits of feedback to address design-related issues (taking into account the status of design reviews and construction in the regulator's own country);
3. MDEP members participating in a working group are to maintain appropriate control over proprietary information in accordance with Appendix 3 of the MDEP ToR to ensure commercially sensitive and/or confidential information is not disclosed outside of this working group.

Design-specific working groups would be established for specific reactor designs if there are three or more member regulatory authorities willing to participate and meeting the guideline (1) above.

Function and Objective

While having similar objectives, each of the design-specific working groups may follow different approaches. The details of each working group's approach should be identified early in the process of formation of the working group, and incorporated into a programme plan which will be endorsed by the MDEP Steering Technical Committee (STC). The programme plan will identify participants and leads, delineate specific objectives with schedules for achieving results within a time frame identified by the STC and PG. Each working group should determine resource needs to meet its goal.

The main objective of the MDEP design-specific working groups will be as defined in the MDEP ToR. In addition, regulatory authorities in each of the MDEP design-specific working groups shall share information and cooperate on specific reactor design evaluations with a goal of maximising interactions and cooperation on design reviews among experts to make technical analyses more robust, and to optimise the resources needed to perform national assessments.

The following design-specific working groups have been established under the MDEP:

- EPR working group (EPRWG) consisting of the regulators from China, Finland, France, India, Sweden and the United Kingdom;
- AP1000 working group (AP1000WG) consisting of the regulators from Canada, China, the United Kingdom and the United States;
- APR1400 working group (APR1400WG) consisting of the regulators from Korea, the United Arab Emirates and the United States;
- VVER working group (VVERWG) consisting of the regulators from China, Finland, Hungary, India, Russia and Turkey;
- HPR1000 working group (HPR1000) consisting of the regulators from Argentina, China, South Africa and the United Kingdom.

Working group members should make commitment to actively participate in the work and timely exchange of information. The work performed by the working groups should be documented as much as possible. All relevant information will be uploaded into the MDEP library. NEA will provide the technical secretariat function.

As per the MDEP ToR, national regulatory authorities retain sovereign authority for all licensing and regulatory decisions. The working groups will provide progress reports to the STC.

Programme plans for design-specific 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 and periodic reports.

Key Attributes of programme plans: Listing technical issues that the working group will address and identifying the steps that the working group will take to tackle these issues are very important. As much details as possible including timelines for major milestones should be included in the programme plan. The programme plan should not be too prescriptive to allow the working group some latitude and flexibility. Reasonable details on measurable steps or discrete products are encouraged.

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.

Guidance: Each MDEP working group will have a programme plan that is consistent with the MDEP ToR and, as applicable, the issue-specific and design-specific ToR. 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 should be identified. Each MDEP working group should submit a status of activities based on the previous years' programme of work as well as a programme plan for the next year(s) to the STC for review and approval. 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 should report the status of carrying out the programme plan at all STC meetings.

Interaction between issue-specific and design-specific working groups: Each working group 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 interested groups 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 STC may provide more guidance to working groups when the need arises.

Specific guidance to design-specific working groups: It is expected that each design-specific working group would consider at least the following minimum set of issues (this does not mean that specific technical expert groups need to be formed but that the working group should consider these aspects of the design reviews in producing their programme plans):

- Fukushima Daiichi NPP accident lessons learnt;
- Severe accidents;
- Probabilistic safety assessment;
- Technical specifications;
- Digital instrumentation and control / electrical distribution;
- Design basis accidents or equivalent and transient response;
- Fire protection;
- Human factors engineering issues (control room design);
- Radiation protection;
- Radiological waste management;

- Unique design features affecting safety;
- Accident categorisation / event categorisation;
- Treatment of external / internal events;
- Civil and structural engineering of critical structures;
- Adequacy of heat sinks;
- Shutdown safety;
- Balance of plant systems;
- Commissioning tests (validation of design);
- Early operation phase.

Fukushima Daiichi NPP accident related issues should be discussed at each design-specific working group meetings. Conclusions and significant experience on Fukushima Daiichi NPP accident related and commissioning activities should be reported back to the STC.

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. Significant changes to the programme plan should be communicated to the STC prior to implementation.

Organisation and implementation

The working group will meet once or twice a year usually at the NEA or the OECD facilities in France. The meeting's location may be at a site at which there is design related construction or other related activities of interest to the group. If a meeting is intended to be held at a place other than the OECD or the NEA facilities, the working group's chair will request such a meeting to be approved by the STC and in consultation with the NEA technical secretariat.

All NEA or OECD meeting rooms are equipped with video conference devices that allow members to connect remotely if they are unable to travel to attend the meeting in person. Such arrangement can also be offered in other meetings' location, subject to meeting rooms equipment.

At each meeting, the working groups will identify (through consensus) a number of key issues to be evaluated based on, but not limited to, exchange of information in the following areas:

- Current construction/design status;
- Inspection experience (since last meeting);
- Construction experience (since last meeting);
- Commissioning experience (since last meeting);
- Operation experience since last meeting.

After each meeting, the NEA technical secretariat drafts a record summary and submits it to the participants for approval.

The working group may at its discretion set-up smaller working groups (technical expert subgroups, permanent or ad hoc) to perform in-depth evaluations and develop appropriate resolutions to issues identified by the members. These subgroups will normally work through electronic transmittals, but may also call special meetings as necessary. In addition, subgroups evaluating topics similar to those being addressed by the issue-specific working groups need to coordinate their work with the related issue-specific working groups to exchange information and to minimise duplication of work.

Technical expert subgroups or any group of delegates can request any time the assistance of the secretariat to organise telephone/video conference to progress their work and facilitate exchanges.

Information management and third party-requests

The maintenance and retrieval of information and documents derived from the working group (including subgroups) meetings and discussions will be kept in the MDEP library. Access to these documents will be maximised to MDEP members while assuring the protection of proprietary information. The management and maintenance of the library is handled by the NEA.

After the closure of a working group, information and documents derived from the working group (including subgroups) will be held within the library.

- Any member participating in the group on its closure will have access to the information by connecting to the library¹.
- Any member that withdrew from the group prior to its closure will have the right to access the information that was available until its withdrawal through NEA.
- Any request of information or document from a third-party regulator will be cleared by the STC before the NEA can hand it over to the requesting third-party regulator. In the event of the withdrawal from MDEP of one of the former working group members, clearance from this former member will be sought as well.

Relations with industry stakeholders

It is recommended that each DSWG establishes and maintains a list of contact points of its main industry stakeholders: vendor(s) and applicants or licensees.

¹ The STC members are responsible to communicate to NEA and update the list of delegates from their organisation that should access the dedicated library sections.

They can be invited to DSWGs meetings or workshops, when needed, to discuss technical issues. They can also be requested to communicate technical information to their relevant DSWG.

The DSWGs must consult their industry stakeholders prior to the publication of common positions or technical reports that might contain confidential or proprietary information and also to check on technical accuracy. When several vendors are involved, attention should be paid not to transmit any proprietary information to other vendor(s) at the occasion of such consultation. Letter templates for consulting industry stakeholders are available.

Once issued, it is recommended to inform the industry stakeholders that common positions or technical reports previously discussed are publicly available.

Generally, it is recommended to keep the industry stakeholders aware of the activities of the DSWG and not only to solicit them when necessary.

Information recording

The process is designed to allow for the continuous exchange of information amongst member countries. For the purpose of maintaining records of all activities and to assure that all records become part of the electronic library, the following guidelines should be adhered to by all members:

1. All meetings will be organised through the NEA technical secretariat;
2. All telephone/video conferences will be arranged in a manner that will afford the opportunity for participation by all members and the NEA technical secretariat. If the NEA technical secretariat cannot participate in such communications, a participating member will be designated to develop a summary with copies to the NEA technical secretariat and each participant;
3. The maintenance and retrieval of information and documents derived from the working groups (including subgroups) meetings and discussions will be kept in the MDEP library. Access to these documents will be made available to working group members and their staffs based on the different access levels assigned.

Advanced notification protocol

The aim of the protocol is to establish an agreed practice for MDEP members to provide advanced notification of any unilateral or joint regulatory position statement, related to one of the designs considered within MDEP DSWGs, to relevant stakeholders prior its issuance into the public domain.

Advance notification provides stakeholders with time to prepare for any questions or queries from external stakeholders like the press, NGOs, etc.

MDEP members of each of the DSWGs agree to proceed as follows:

1. To provide the other members of the DSWG with advanced notice (subject to embargo condition) on unilateral or joint design regulatory position statements prior to their publication. To that extend, the regulator issuing the notice will send it to the NEA technical secretariat for distribution to the relevant other members.
2. The advanced notice should provide details of the regulatory issue and likely timing of publication. This could be a copy of the draft position statement itself, or some other form of notification. The originating regulatory authority may be able to provide further clarification/briefing on the issue.
3. The notification should be provided to the NEA technical secretariat at least 10 working days prior to publication (under embargo), which will then send it to the relevant other DSWG members at least 7 working days prior to publication, to allow them to prepare press statements and responses. It is for the regulatory body issuing the decision to decide whether or not to make a manufacturer and/or operator (potential operator) directly involved with the specific topic area aware of the issue prior to release into the public domain.
4. Other DSWG members to be sent notification once the regulatory position statement has been issued.