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OIL SAREX

A GUIDE TO ORGANISING EXERCISES FOR MARITIME SEARCH AND RESCUE AND MARINE ENVIRONMENT RESPONSE

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CONTENT

1 PURPOSE OF THE CONCEPT

Solution planning, also known as conceptualisation, is a solution-based approach to operational development. It is a method for describing the solution to a problem, challenge or objective; in other words, a description of how the desired impact will be achieved, including the estimated ramifications for operations, the organisation, and possibly also training and collaborative capacity.

The maritime safety exercise concept is a guide to organising maritime exercises. Thus this guide is dealing only with the safety component of maritime safety and security, meaning maritime search and rescue (SAR) and marine envronment response (MER). This guide is aimed at the persons responsible for the planning, practical organisation and evaluation of SAR and MER exercises in whole or in part. In addition, the concept describes the long-term planning of exercise operations.

This concept, developed within the OIL-SAREX project, is based on observations of maritime exercises, the practices applied in national and international collaboration, and general development of capabilities. Maritime safety exercises are an operational activity, so the concept is a solution model for operational development. The aim of the solution model is to develop exercise operations and thus maritime safety. The structure of the concept can be used to identify the different components of the exercises and thus ensure that these are comprehensively taken into account. One objective is to improve exercise evaluation and systematically collect findings from the exercises.

DEFINITIONS

The concept applies to maritime safety exercises. These exercises aim to improve the performance of SAR and MER. The exercise concept focuses on the planning, execution and evaluation of exercises.

Development of the components of the actual operational activities does not fall within the concept. Thus, the exercise concept does not focus on the execution of SAR or response activities, development of equipment, the command structure or the development of command systems.

Sources and additional information on maritime exercises can be found in the following materials:

- IAMSAR – manual vol I
- HELCOM – Response manual, Practical Guide for response Exercises
- SÖKÖ II – manual; marine oil spill excercise plan

2 SOLUTION MODEL FOR DEVELOPING EXERCISE OPERATIONS

The purpose of this guide to the maritime safety exercise operations concept is to develop identified processes and to map out the needed changes, to link exercise operations to capability development, to clarify responsibilities and to harmonise operating practices. In addition, the concept allows for structuring and clarification of exercises and their evaluation, as well as taking into account identified triedand tested best practices for exercise operations.

The concept is divided into different components that describe the solution corresponding to each component's challenge or objective as well as how the desired impact is achieved. More specifically, the components in this concept are the management of the exercise as a whole, the planning of the exercise, the execution of the exercise, and the evaluation and reporting of the exercise.

The exercise operations concept is suitable for use in executing running a large international exercise. Scalability is nevertheless a core idea underpinning the concept, meaning that the relevant components of the concept can be used to support the executing running of the exercise in accordance with its scale and type. The size classes in which it is appropriate to use the principles of this concept are defined in more detail in Section 4: Classification of exercises. For the evaluation, however, it is important to take into account the implementation of the basic principles of the concept. This means evaluating the exercise according to the different development areas and/or in smaller exercises filling in the appendix "Exercise report summary" as a minimum requirement. For larger exercises, this summary serves as the cover page for the exercise report.

In addition to the above, this exercise concept can also be used, where applicable, in the evaluation and analysis of exercises organised by other organisations.

3 MANAGING EXERCISE OPERATIONS

3.1 EXERCISE NEEDS

Exercise needs must cover normal operational activities, large-scale maritime disasters, and the nationally identified functions and operating models identified as areas for development for SAR. In addition, exercise needs should give consideration to non-daily activities and to new threats, risks and disruptions such as long-term hazardous and noxious substances (HNS) or oil spill response operations.

The following questions can also be used when considering exercise needs:

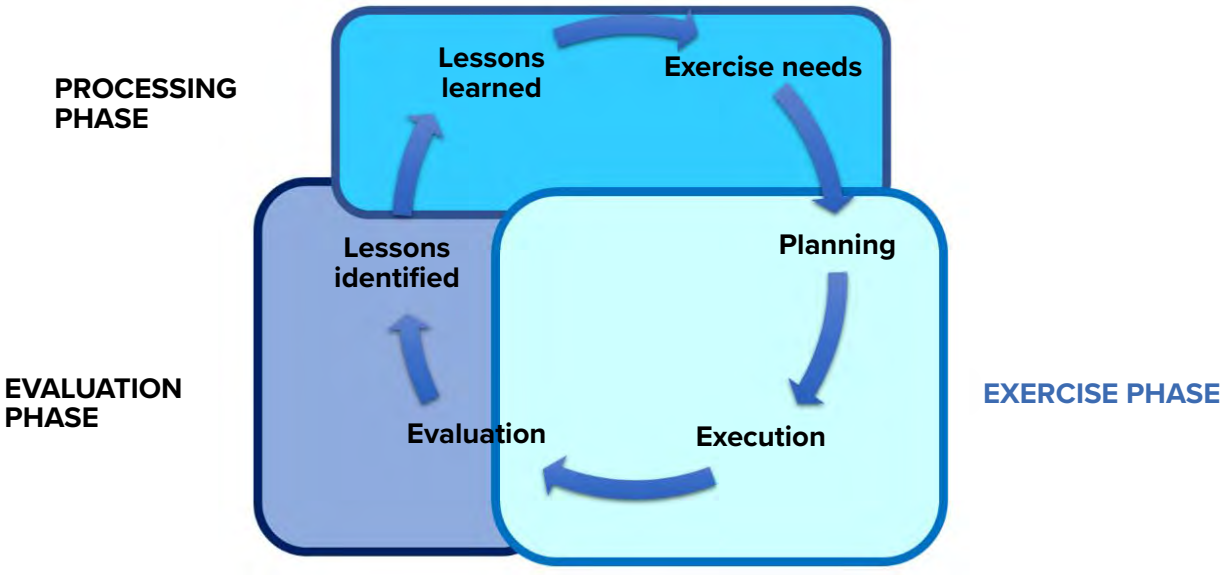
- What issues emerged in the previous exercise? What has been developed?
- Have new systems, equipment and operating procedures operating models been introduced?
- Are the roles clear for SAR and MER?
- In what situations is it challenging to carry out the required tasks?
- Which functions are particularly challenging or particularly vulnerable?

STORING MAINTENANCEAND UPDATING OF EXERCISE DATA BASED ON INTERNATIONAL AGREEMENTS

International agreements, both on SAR and on MER, include certain obligations relating to the organising organisation of exercises.

The section on contracts should contain at least the contract information, related (exercise)manuals, etc, the overall objective for the exercise, other objectives or sub-exercises, the exercise cycle and the countries responsible, the types of exercises, the target groups/participants, costs, side events, planning practices (meetings, document templates), contact information or the information management tools/methods to be used, and the evaluation and reporting practices. In addition, the information should also include matters related to the exercise operations from the previous meetings of the aforementioned forum or cooperation network, as well as the most relevant lessons identified from previous exercises.

The figure shows the basic process for exercise operations as a whole; it is divided into the exercise phase – planning, execution and evaluation. Evaluation phase – evaluation and lessons identified. Processing phase – lessons learned and exercise needs.



PRIORITIZING EXERCISES AND EXERCISE NEEDS

The longer-term exercise plan can be constructed in such a way that separate and different types of exercises are used to practice individual competence areas and competence sub-objectives which are all nevertheless related to a specific, agreed exercise theme. For example, if the prioritised exercise theme for a given year or period were to be HNS response, the exercise cycle for that year could consist of a table-top mapexercise and unit-specific exercises, then culminate with a full-scale exercise involving different exercises types and target groups.

3.2 STAKEHOLDER SITUATION PICTURE

Stakeholders desire for exercise planning to also be an inclusive activity. This ensures common overall objectives and motivation for exercises. Joint planning takes place by examining the planning practices of different organisations, sharing good practices and striving for uniformity in planning processes. It is important to identify possible stakeholder participation in exercises and exercise planning already in the early phases of planning, where possible as part of annual-level planning.

In order to find joint times for exercises, dialogue must be maintained between collaborative partners (incl. shipping companies); in this matter also, longer-term planning and a wide perspective can bring better long-term results.

Joint planning of major international exercises must take into account the obligations set by agreements, any applicable planning processes, the positions of the Contracting Parties and commonly agreed and established practices. Regarding the practical arrangements, virtual meeting options, such as video conferences, must also be taken into account. This can reduce the organiser's workload and lower the threshold for participation.

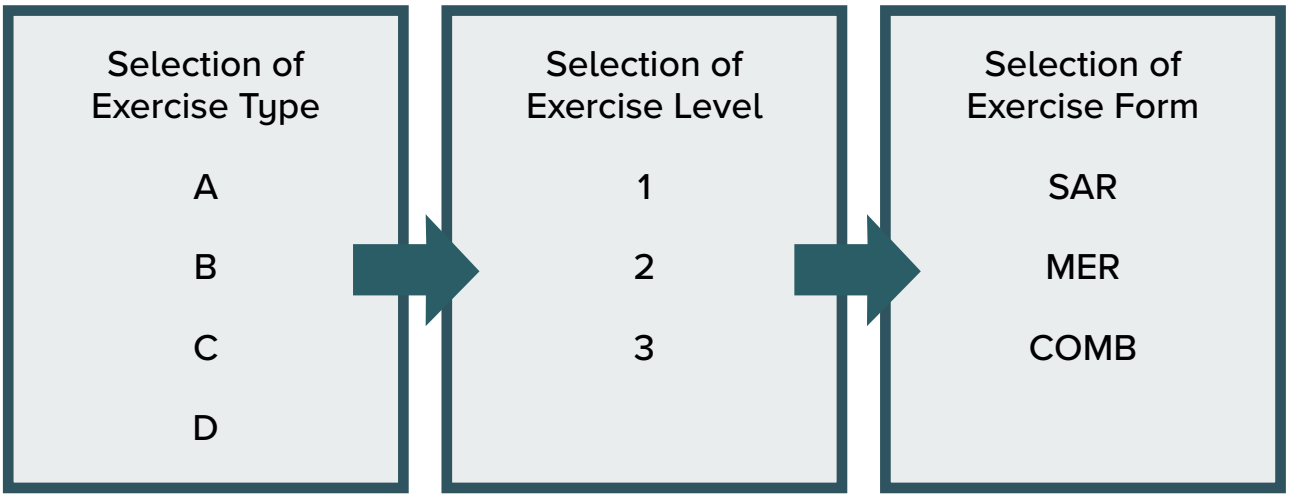
4 CLASSIFICATION OF EXERCISES

EXERCISE LEVEL, FORM AND TYPE, AND DEVELOPMENT AREAS

Maritime safety exercises can be divided into different categories as described below; the type of exercise determines the way the exercise is carried out and is thus also the starting point for exercise planning. The exercise level determines the scope of the exercise and thus also serves as a foundation for mapping out the required resources and the scope of planning work. Similarly, the exercise form determines the general content of the exercise, i.e. the exercise may involve SAR, MER or a combination of the two. Combination exercises include, for example, multimodal accident exercises and place of refuge exercises.

It is appropriate to use the planning, execution and evaluation models contained in this concept for exercises involving at least two (2) SAR units (SRU) or response units or for exercises of an equivalent scope. In smaller exercises, the main focus is on evaluating the exercise and identifying development needs using the appended 'Exercise report summary'.

Based on the above categorisation, the scalability (and content adjustments) of the checklists for planning, execution and evaluation serves as a guiding factor. The checklists operate on the 'checklist principle', meaning that the scope of the exercise determines the relevant and necessary matters for the exercise in question.



4.1 EXERCISE TYPES

A Table top or simulator exercises – assessing the activities and actions in a particular scenario. Participants discuss the measures required for the scenario used in the exercise and the necessary support measures. Command exercises come under this exercise type.

B Alarm exercise/command post exercise – testing of areas such asmeasuring response time, means of communication, alarm systems, processes and contact information.

C Equipment exercise / functional exercise (one or multiple units).

D Full-scale exercise – an operational exercise simulating a real event and practising in a real operating environment using the equipment appropriate to participant's real roles. The participants in the exercise are the persons required to lead the situation in the scenario and carry out SAR and environmental response, including the Command Centre, experts, communication professionals, operational staff and selected stakeholders.

A **Table top or simulator exercises (TTX, SMX)** – assessing the activities and actions in a particular scenario. (TTX, SMX)

B **Alarm exercise/command post exercise (CPX)** – testing areas such as reactive capacity and contact information

C **Eequipment exercise / functional exercise**

D **Full-scale exercise (FSX)** – simulating a real event and practising in a real operating environment using the equipment appropriate to participant's real roles.

The international abbreviations for the exercise types are given after the name.

4.2 EXERCISE LEVELS

1 Small exercise (local, individual and unit-based; min.) units

2 Medium exercise (regional/equiv.)

3 Major exercise (national, international)

1 **Small exercise**

2 **Medium exercise**

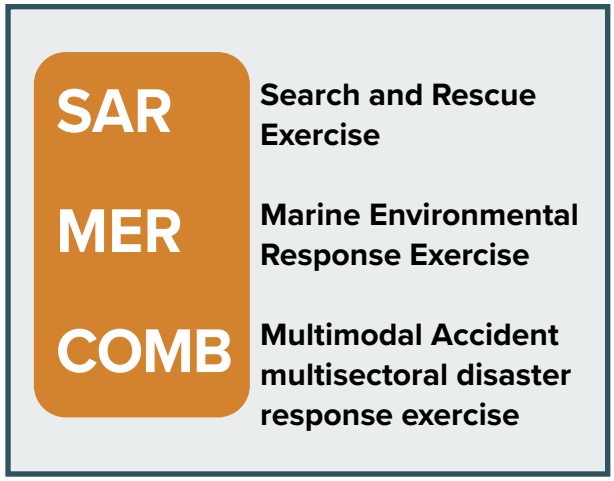
3 **Major exercise**

4.3 EXERCISE FORMS

SAR Search and Rescue Exercise

MER Marine Environment Response Exercise

COMB Multimodal Accident exercise (Combined)



Recording the exercise in the system and searching the system with an identifier, e.g. D2SAR, C1MER. For these, each character also serves as a search term in both planning and evaluation.

4.4 DEVELOPMENT AREAS

The standardization of development areas enables the systematic collection of observations and recognised exercise needs, meaning that observations are collected for each exercise according to the same model. The development areas below are based on a draft for determining Integrated Border Management (IBM) capabilities.

1. PERSONNEL

The development area measures the personnel's ability, readiness and competence in performing the tasks assigned to them. The exercises can also be used to identify further and continuing exercise needs. Competence should be measured on multiple levels, ranging from technical competence to knowledge of the operating environment.

2. TECHNOLOGY (AND INFRASTRUCTURE)

The development area measures the suitability, availability and characteristics of the technology and infrastructure used and identifies shortcomings in order to improve performance and, in particular, the suitability of the vessels, equipment and tools used in the task. In addition, the development area involves evaluation, where appropriate, of vessel equipment, maintenance, repair needs and diagnosis. In addition, the development area can be used to assess infrastructural availability (e.g. coast guard station) and equipment as well as its suitability for the intended use.

3. SITUATIONAL AWARENESS

With regard to exercises, it is also essential to assess situational awareness and to use the exercises to purposefully improve it. In assessing situational awareness, attention is paid to the situational picture; situational understanding; the ability to make use of different information sources, experts and stakeholders; the ability to analyse information, to communicate it and to lead on the basis of it; and forming risk analyses and maintaining the situational picture.

4. EFFECTIVENESS OF OPERATIONAL ACTIVITIES (IMPACT)

Impact and operational activities refer to the ability to achieve the operations' objective. In maritime safety, for example, impact is assessed through the results of SAR (rescuing people in distress at sea) and MER (oil spill response, control of hazardous and noxious substances, recovery or containment of harmful substances in the sea) Within this development area, evaluation is made of the tactics and tactical methods.

5. COMMAND, CONTROL AND PLANNING

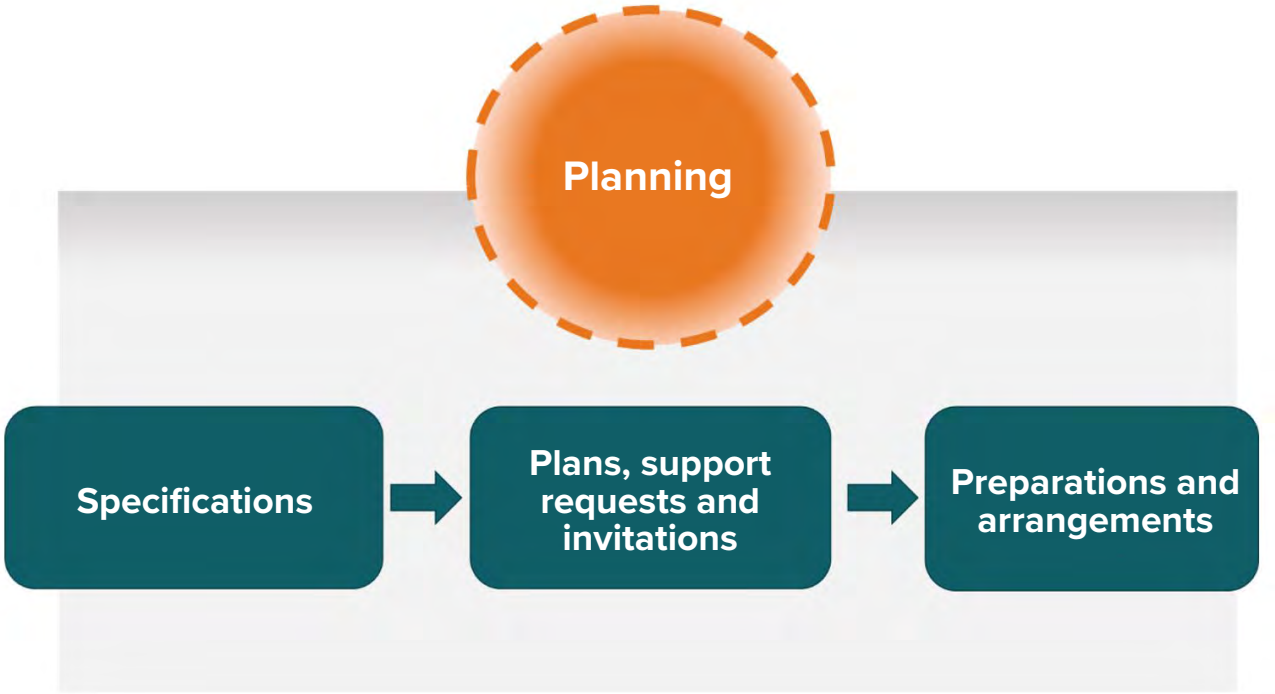
This development area examines the ability of those in command to do the following: promote and support the activities of maritime units; use different resources efficiently; anticipate events; communicate both internally and externally; communicate objectives to operational units; plan the operation in advance; and manage it based on situational understanding. This category also covers matters related to interoperability.

6. LEGISLATION AND POWERS

This development area examines the powers or constraints conferred by legislation from the perspective of the successful performance of the task assigned. These may include, for example, the transition from oil spill response to follow-up, cessation of operations, transfer of command, investigation and sampling process, power to influence the course of a vessel and right to obtain information from other authorities.

5 EXERCISE PLANNING

5.1 PROCESS DESCRIPTION



SPECIFICATIONS – PLANS, SUPPORT REQUESTS AND INVITATIONS – PREPARATIONS AND ARRANGEMENTS

The exercise operations concept includes a checklist for planning an exercise and an exercise plan template (Models for exercise operations). The type and scope of the exercise determines which parts of the checklist are relevant to use.

The planning of full-scale exercises must take into account the exercise needs of all participants and enable participation in the planning process. Sufficient time must also be set aside so that all partnering bodies can make these preparations. In the case of larger exercises, approximately two years should be reserved for the planning phase.

PERSONS/BODIES RESPONSIBLE

The person(s) responsible for planning are in principle determined by the actions and orders of the body responsible for the exercise or entity in question. Planning is initiated by the appointment of the person responsible for the planning work. The planning phase also involves appointing a exercise director and other key roles for the exercise's planning and execution phases.

To support the person responsible for planning the exercises, a planning team is often appointed. This may be either an internal, national or international group consisting of representatives of different organisations or actors. In larger exercises, the functions of the planning team are expanded through joint planning meetings between several different actors and organisations.

In larger exercises, it is essential to consider the responsibility for overall exercise coordination. This requires defining different planning and organisational functions and responsibilities at an early phase of the planning process.

5.2 EXECUTION OF PLANNING PHASE

5.2.1 DEFINITIONS

MAIN PURPOSE AND OBJECTIVE OF THE EXERCISE

Exercise planning can start from the set scenario, although the definition of objectives should be the first task of exercise planning. The main purpose and objective for the exercise can be taken from, for example, a road map document, international agreement, or the exercise needs identified from previous exercises. The main objective guides the course of the exercise from the planning phase right through to post-analysis. In small exercises, the main objective can be defined in accordance with an agreed annual or prioritized exercise theme. It may relate to areas such as maintaining and developing personnel competence, testing the operating model, or developing cooperation between organisations.

The skills to be practised may include command and control skills, decision-making, technical skills (use of systems, equipment and vessels), communication skills, problem-solving skills, information acquisition and utilisation, etc.

EXERCISE TIME AND DURATION

When planning exercises, the utilisation of seasonal variation must be taken into account in order to maximise opportunities for exercise activities. For example, it is often challenging to organise more extensive maritime exercises in the summer because of the busyness of this period. The impact of the seasons must be considered and also utilised; ensuring the functionality of equipment in different conditions, for example, often results in important experiences and observations.

At this stage, it is also necessary to consider how weather conditions may prevent the exercise from being carried out at the planned time, creating a need to either postpone the exercise, move it to an alternate date, or reschedule individual parts of the exercise within the exercise period.

The exercise objectives and the execution of the sub-objectives determine the duration of the exercise. The way an exercise is carried out also sets limits on the duration of the exercise – for example, a serialized exercise can be suspendedinterruptedbetween its different sections before moving on to the next exercise topic or entity.

EXERCISE DIRECTOR

As a rule, exercise planning begins with the appointment of an exercise director who is responsible for the execution of the exercise from planning through to evaluation. Command responsibility must be emphasised throughout the entire exercise process, and thus the exercise commander director must participate and be aware of issues related to exercise planning and any related changes.

EXERCISE SUB-OBJECTIVES AND LEARNING OBJECTIVES (NEW OPERATING MODELS, TACTICAL OR TECHNICAL OBJECTIVES)

The exercise director defines the sub-objectives of the exercise and the indicators for assessing whether the objectives have been achieved. The objectives must be specific, otherwise their evaluation is not possible. The skills to be practised may include command skills, technical skills (use of equipment and vessel), communication skills, problem-solving skills, information acquisition, etc.

The exercise scenario should be written out based on the selected objectives and exercises. The scenario must be as realistic as possible and the location of the event must be real. Increasing the realism of exercises is part of ongoing development work.

INDICATORS FOR OBJECTIVES AND SUB-OBJECTIVES (WHEN HAS THE OBJECTIVE BEEN ACHIEVED)

The indicators are determined as part of objective setting. At the same time, this lays the basis for the evaluation plan. It is important to ensure that the objectives are set in such a way that the objectives can be measured in an objective manner. Particular attention should be paid to ensuring that lessons learned and recommendations for further development are easily verifiable and identifiable.

PLANNING TEAM

A planning team is appointed for the exercise. This team is responsible for the practical planning of exercise functions and for preparing the necessary exercise plans and other plans.

The task of the planning team is to decide on the scope of exercise evaluation, and a representative of the evaluation team is involved in the planning of the exercise and the creation of the evaluation criteria as part of the planning team.

EXERCISE LOCATION

The choice of the exercise location must take into account the impact of the season, time of year and weather conditions. During the early planning phase, provision must be made for possible backup areas for the exercise location.

SCRIPTED, FREE-PLAY, OR COMBINED EXERCISE

When choosing the exercise method, particular attention must be paid to how the method supports the achievement of the objectives set; these objectives has a significant impact on what method should be chosen. A scripted exercise proceeds according to a predefined plan, and any deviations from the expected action during the exercise are addressed by the exercise direction staff so that the planned action can be implemented.

In a free-play exercise, the situation is initiated with a scenario-based function, for example, after which the exercise proceeds according to the participants' actions through various inputs, communications, etc. The exercise direction staff intervenes in the course of the exercise if there are safety-related issues or if is a danger that the objectives set for the exercise may not be achieved.

As part of the execution of these exercises, one of the exercise components can be practiced as a separate table-top exercise, which is then expanded into an operational exercise at a later stage.

SCENARIO; BACKGROUND, EVENT, ACCIDENT DESCRIPTION, OTHER FACTS

The exercise scenario is a situational description that introduces the participants to the exercise, specifies the problems to be solved in the exercise and also guides the problem solving process.

Factors that shape the writing of an exercise scenario include the previously defined objective and purpose, the type of exercise, and the exercise area, level and form. The scenario describes the basic information of the event (what, where, when) and other information needed for defining the starting point. The scenario is further supplemented with situation updates as the exercise progresses.

5.2.2 PLANS, INVITATIONS, SUPPORT REQUESTS, AND PERMITS

EXERCISE EXECUTION PLAN (INCL. NECESSARY COMMANDS/RESPONSIBILITIES)

The preliminary plan for executing the exercise lays the foundation for the other exercise plans. Based on this, the commands/responsibilities related to the exercise are set and the objectives determined, thus enabling the required resources to be defined.

Utilisation of the expertise of business experts (e.g. From chemical-related industries) should be increased in SAR exercises and in accident situations, for example as a command centre resource.

Any training that participants need for the exercise should be considered when drawing up the preliminary exercise plan.

EXERCISE PLAN

The essential components of the exercise plan include background information on the grounds for the exercise, a possible scenario, information about the place and time of the exercise, and the exercise objectives and sub-objectives. The exercise plan also includes information on the planning, execution, evaluation and schedules for the exercise. Command structure, safety plans and communications (including contact persons) can be separated into separate plans or kept as part of the exercise plan – depending on the scope of the exercise.

SAFETY PLAN

The safety plan for the exercise can be drawn up as one single document, for example by combining the safety and security sections for the exercise. The safety plan must particularly give consideration to operations in real hazardous situations or when there is otherwise a need to interrupt the exercise. The safety plan also involves drafting an evaluation of the risks associated with the exercise and making preparations for dealing with these risks. The safety plan must clarify that master of each participating vessel is responsible for activities onboard. Master of each vessel is also responsible for organizing safety briefings onboard before exercise activities can be started.

EVALUATION PLAN

The evaluation of the exercise must be included as an integral part of exercise planning right from the beginning of the planning process. The evaluation plan for the exercise is discussed in more detail in the section “Exercise evaluation and reporting”.

EXERCISE CONTROL (EXERCISE DIRECTING STAFF/TEAM)

In addition to the arrangements for exercise commandcontrol, the functions and resources related to directing the exercise are also among its most important components. This includes, for example, the team in charge of controling the exercise and the scheduled exercise plan with the actions of the game group also added (the ‘playbook’, which contains all the relevant activities and tasks that together enable the achievement of the objectives set for the exercise). The above also includes a plan for resources use and monitoring.

One of the most important tasks in exercise guidance is to schedule and organise the exercise and objective activities in such a way that coordination of what is happening now and what will happen next is sufficiently clear to the exercise participants.

The objective of exercise control is to direct the exercise in the desired direction in order to achieve the desired objectives and prevent undesired events from occurring. Such events would include, in particular, hazardous situations and situations which would compromise the conditions for fulfilling the exercise objectives.

THE ROLE OF THE EXERCISE CONTROL TEAM IN EXERCISE PLANNING

A representative of the exercise control team is involved in the exercise planning process and implements the group's plan together with those responsible for planning the exercise. The end result must be a plan for the activities of the exercise control team that is used alongside the exercise plan and possibly also scheduled.

EXERCISE INJECTS AND TIMELINE

The injects are information which determine how the exercise proceeds. The participants receive the injectsinputs from the exercise direction staff through some communication channel, which is determined according to the exercise type. The injects can be given orally or by radio, but can also be an email, a weather forecast, a photo, a call, a news article, a social media post, a physical finding, a file, or any other thing that describes the events of the scenario as realistically as possible.

In practice, the inject is an information package that informs the participants about a scenario-based event or updates them on the situation. You can use a table to list your inputs so that they can be easily arranged in chronological order. This table can then be used to track the progress of the game. Injects should be arranged hierarchilly so that the inputs associated with one event are collected under the same heading. This clarifies the planning of the exercise and helps in discerning the pattern of events.

The injects are prepared and the game group/centre follow the inject table throughout the exercise, sending the inject messages a certain time after the exercise starts or in response to a particular action. The course of the exercise should not be too precisely scheduled by the clock, but instead in relation to the exercise start time (e.g +1 hour from the start, +2 hours, etc.)

EXERCISE DISTRESSED VESSEL, EXERCISE ROLE PLAYER AND EXERCISE EQUIPMENT REQUIREMENTS (INCL. VEHICLES)

It is important assess the requirements for role players acting as passengers etc. equipment and vessels. In addition to these, the equipment and units needed (aircraft and surface aircraft) for the role players and exercise steering must be taken into account. Any internal support requests for the resources needed for the role players must also be made in good time. The availability of the role players must be verified and the related tasks coordinated with, for example, voluntary actors.

CONTENT AND TASKS OF THE PLAYBOOK USED BY THE EXERCISE CONTROL TEAMG ROLES OF THE EXRCISE CONTROL TEAM MEMBERS

The essential task of the playbook is to support the framework within which the exercise objectives can be achieved. This involves giving consideration to timetables, exercise safety, and predefined thresholds for intervention and guidance when steering the course of the game. The roles and responsibilities of the members of these groups must be clear, and the functions and tasks must be updated in joint planning meetings.

OTHER GUIDANCE PLANS REQUIRED

The necessary background descriptions (e.g. prevailing weather conditions – exercise weather or other information used in the exercise) must be prepared as part of the exercise planning phase and in line with the planned scenario or the prerequisites for achieving the objectives of the exercise.

MODERATOR

The role of the moderator (the instructor for the exercise) is particularly important in table-top and simulator exercises. In operational exercises, this task is most commonly

performed by the exercise control team or, in smaller exercises, by the exercise commander.

OTHER AUTHORISATIONS – INSTRUCTING PARTICIPANTS TO OBTAIN AUTHORISATION

State vessels of foreign states (in addition to warships, these include coast guard vessels, icebreakers, state training ships, etc.) and state aircraft require permission to enter Finland. Also, when a foreign state agency or institution leases or otherwise obtains a vessel/aircraft listed in the civil register for their own use, such use is, as a rule, also subject to authorisation.

The need for, and arrangements for, authorisations relating to photography, RPAS, access, etc. must be dealt with well in advance of the exercise.

COST ESTIMATION AND COST ALLOCATION

Budgeting is part of exercise planning. The costs mainly consist of working hours and travel costs. In particular, working hours are spent on planning, preparing the exercise and actual participation in the exercise. Allocations for the exercise budget should be taken into account in operational and economic planning. When budgeting for exercises, the preparation for costs incurred must be sufficiently long-term – this must also be taken into account in long-term planning.

Separate cost estimates should be made especially for the level three exercises specified in this manual – the large-scale and/or international exercises – as well as exercises that use simulators, external services such as training equipments and vessels, a communication or training platform, or a objective platform/group that incurs costs. For some larger international exercises, the use of external funding should be considered, and cost estimates for these exercises should make use of data from previous exercises. Budgeting must leave space for unexpected cost items, but it is possible to identify in advance costs in areas such as objective group activities, pilotage, catering and other maintenance, berths, equipment and vessel rentals, side seminars and related catering, and electricity and waste management. The costs also depend to a large extent on what services the host country provides to participants in international exercises.

COMMUNICATION ARRANGEMENTS

With regard to exercise communications, the communication plan – which is either a separate plan or a part of the exercise plan – must indicate the communication tools, channels and groups. Backup channels and equipment must also be arranged in good time and recorded in the plan.

5.2.3 PREPARATION AND ARRANGEMENTS

PARTICIPANTS AND ROLES

The exercise invitation, exercise plan or other exercise document must state the objectives of the exercise and the participants. In this respect, the participant roles and units objectives must also be taken into account.

PORT SERVICES AND BERTHS

The reservation of berths and any requirements for port services for ships, together with the costs of these, should be clarified and arranged in good time, especially in the case of larger exercises in which public port services will be used. For aircraft, it is important to establish in good time matters such as which airport will be used, when it is open, parking arrangements, and how the crew will access the aircraft.

PILOTAGE AND POSSIBLE EXCEPTIONAL PERMITS

If pilotage is required for the exercise, it must be ordered from the area's pilotage service. The cost of pilotage should be taken into account in the exercise budget.

MAINTENANCE AND PROCUREMENTS

- Contact person
- Budgeting and funding arrangements
- Meals and catering, incl. objective group, vessels
- Leased equipment (vehicles, toilets, fences etc.)
- Purchasing services and acquisitions
- Waste management

POSSIBLE OBSERVERS AND INVITED GUESTS/VISITORS

The task of the exercise observers is to record their observations of the defined exercise components. In addition, observers' development proposals and detected safety deficiencies or dangerous incidents are collected and compiled.

e.g.

- Decision-making at different stages of the operation
- Technical game changes
- Task prioritization
- Functionality of the equipment and vessels for performing a particular task

VESSELS TRANSPORT AND OTHER EQUIPMENT

An assessmentevaluationmust be made of what transport equipment is needed for the exercise. If necessary, arrangements must be made, for example, for rental cars and boats for the objective grouprole players and transport for evaluators and the media. In terms of small-scale equipment, this could include radios, maps, and other materials. Any needs for rental equipment and vessels must also be clarified.

EXERCISE PROGRAM (PRACTICAL INFORMATION)

Particularly in the case of larger international exercises, the exercise program contains essential information about the exercise area, the harbour locations, the exercise schedules, the observer programs, etc.

EXERCISE INVITATION, INTERNATIONAL SUPPORT REQUESTS

- Matters to be communicated to participants
- Operating models to be used
- General instructions for the exercise

RESERVATIONS OF MEETING ROOMS AND ACCOMMODATION, WITH CONSIDERATION FOR PREMISE SAFETY

Time and resources are needed for surveying and arranging suitable premises for the exercise activities, including the briefing meeting for participants, debriefing after the exercise, meals and support functions during the exercise (command, communication, maintenance, evaluation). In the same way, accommodation must be booked in good time at hotels or other places of accommodation. All activities that use such premises must give consideration to their security and any factors that would influence this.

PUBLIC INFORMATION

- Main message and support messages
- Timing and scheduling of communications
- Required resources
- Target groups
- Communication channels to be used
- Media program and media invitation
- Live tracking / social media
- Recording and authorisations (video, photo)
- Internal communications

REGISTRATION OF PARTICIPANTS AND APPLICATION FOR ACCESS PERMITS

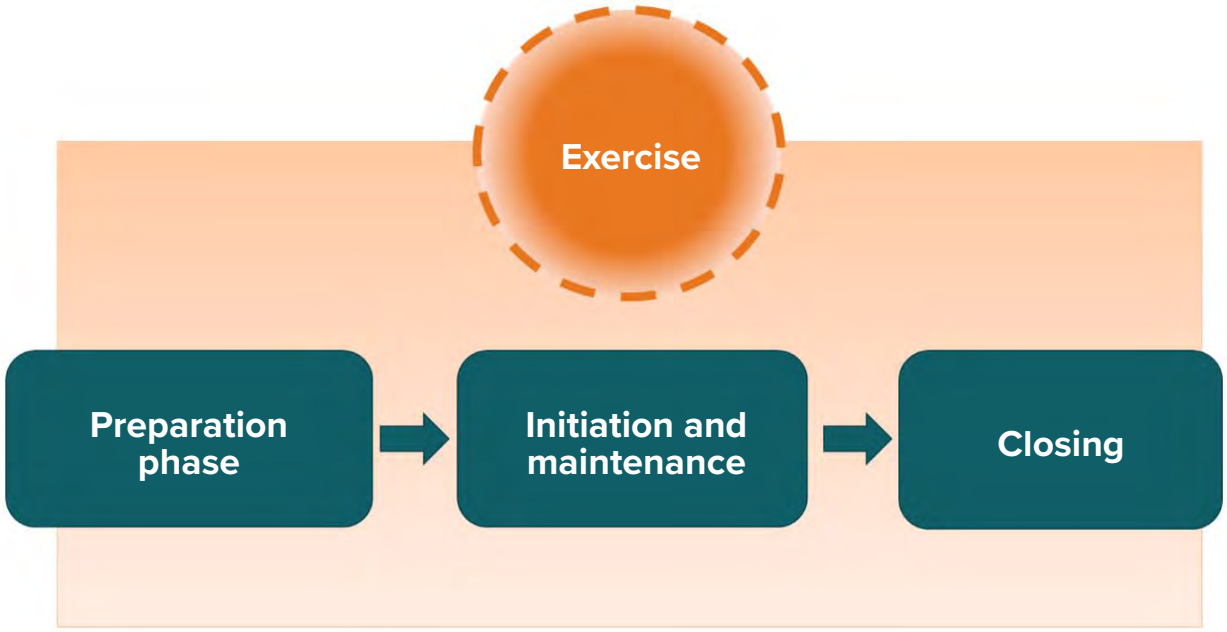
Arrangements for the planning phase must take into account monitoring of participant numbers and, in the case of evaluators, registration for the exercise in relation to facilities, vehicles etc. The exercise invitation must indicate any deadline for signing up for the exercise, and on this basis applications are then made for any needed access permits. It is also important to clarify the process for registering exercise participants during the execution phase.

5.3 EXERCISE PLANNING CHECKLIST

1. Define the starting points for the exercise
2. Determine the exercise objectives
3. Invite the planning team
4. Prepare the command for exercise planning and name the exercise
5. Specify the reasons for the exercise and the exercise participants
6. Name the moderator and/or person responsible for the exercise process
7. Specify the exercise directing team, the exercise objective personnel, the objective group and the equipment and vessels that these require.
8. Order any necessary port services and other services
9. Specify the evaluators and observers
10. Make a cost estimate and determine cost allocation
11. Specify the exercise inputs, tasks and roles for the game group
12. Plan the course of the exercise as a whole and make the separate plans involved
13. Book premises and accommodations
14. Reserve maps and other required materials/supplies
15. Order maintenance services, rental equipment and any catering-related items
16. Plan the communication flow for the exercise
17. External communications and their coordination
18. Carry out participant registration and apply for any needed access permits

6 EXERCISE EXECUTION

6.1 PROCESS DESCRIPTION



PREPARATION PHASE, EXECUTING AND MAINTAINING THE EXERCIS, ENNDING PHASE

During the execution phase, the exercise is initiated, maintained and then ended.

PERSONS/BODIES RESPONSIBLE

The main responsibility for the practical execution of the exercise lies with the exercise director. The director is assisted in the execution of the exercise by the exercise control team as well as other support organisations required for the exercise. The persons involved in planning and leading the exercise are not, as a rule, persons that take part in the operational phase of the exercise, but serve instead in exercise management, in the exercise control organization and in other tasks related to the guidance and execution of the exercise.

6.2 EXERCISE EXECUTION

Exercise execution can be divided into three phases. These phases are the preparation phase, the maintenance phase and the ending phase.

6.2.1 EXERCISE PREPARATION PHASE

PARTICIPANT BRIEFING FOR THE EXERCISE AND EXERCISE ROLES

Preparations for the exercise must involve providing participants with information about the exercise objectives and plans. This can be done, for example, by sending out the exercise plan well in advance. The plan and its appendices must describe the roles of the exercise participants/units, and these are further clarified later if needed.

It is the responsibility of the exercise commander to brief all participants on the exercise. This briefing must cover the objectives of the exercise, the participants and roles, communication procedures, and safety matters. This briefing / introductory talk for the participants provided by the exercise commander restates the essential elements of the exercise in a joint event where all are present. The exercise commander shall emphasize that master of each participating vessel is responsible for safety onboard and arrangement of necessary safety briefings prior to starting any activities onboard participating assets. If necessary, the participants are trained and given guidance for their tasks before the exercise begins.

Consideration must also be given to training and guidance needed for the tasks of the objective group, as well as the safety of the group members during the exercise. Particular attention should be paid to areas such as safe practices for helicopter hoist operations and any guidance needed for this.

BRIEFING OF EVALUATORS

The evaluators of the exercise must have a clear understanding of the purpose and procedures for the evaluation and any separate system that will be used for the evaluation. These are part of the exercise evaluation plan, on the basis of which it is possible to assess the achievement of the exercise objectives and to observe the actions of the exercise participants.

6.2.2 EXERCISE EXECUTION AND MAINTENANCE

EXERCISE EXECUTION

Taking command of the exercise requires clear starting information about the initiation of the exercise. In addition to the information given in advance in the plans and the initial briefing, this also includes a clear notification of the start of the exercise in the exercise situation itself (e.g. an alert message from the Maritime Rescue Coordination Centre). In this context, the participants must have a clear understanding of matters such as the organisation of the exercise and command relationships.

NOTIFICATIONS AND ALERTS

Reports made during the exercise must be based on the exercise plan and take into account matters contained in the safety plan, such as how to act if the exercise has to be stopped.

EXERCISE TASKS AND INPUTS (DRIFT CALCULATION, WEATHER DATA, RADAR IMAGES, PASSENGER LISTS, SHIPOWNER DATA, SUBSTANCE DATA)

Exercise command works in cooperation with the directing team in such a way that the activities enable the realisation of the exercise objectives. The inputs include, for example, drift calculation, weather data, radar images, passenger lists, substance data, etc., in accordance with the exercise format and method of execution.

When selecting the accident site commanders/persons-in-charge based on the exercise plan, the actual resources available for the tasks must be taken into account.

EXERCISE RESOURCES, ADDITIONAL RESOURCES (REINFORCEMENT)

It is essential for the effective running of the exercise to take into account, in cooperation with the exercise control team, the operation and use of resources that may arrive later in the exercise.

MAINTAINING THE EVENT LOG

The actions taken and the decision-making criteria used can be recorded in the situation and event log.

INSTRUCTIONS FOR PROCEDURES

Use of procedures and operating models must be in accordance with the exercise plan and their use must be mutually agreed upon.

ESSENTIAL FUNCTIONS RELATED TO INTERNAL COMMUNICATION DURING THE EXERCISE

Communication of information, situation reports, etc.

- Monitoring the number of persons to be rescued/evacuated
- Monitoring quantities of recovered substances
- Transmitting visual images and video

TRACKING AND RECORDING THE EXERCISE

The exercise should be monitored as a whole and, where needed, steered by the exercise command and the exercise control team so as to ensure that the exercise objectives can be realised.

SUSPENDING THE EXERCISE

An essential part of maintaining the exercise is continuous situational awareness of the course of the exercise and the possibility of acchieve the planned activities. If necessary, the exercise must be stopped, such as in the event of a dangerous situation, changes in external conditions which mean that the exercise cannot be continued, or some other critical factor that emerges either before the exercise or during its execution.

EXECUTION AND MONITORING OF THE EXTERNAL COMMUNICATIONS PLAN

Visits by media representatives (programme, host, location, transport, possible catering) should also be taken into account as part of the objectives of the exercise communications or communications plan.

ADMINISTRATION AND HOSTING FOR OBSERVERS

The activities of the observers invited to the exercise must be clearly coordinated (responsible persons appointed) and it must be ensured that the evaluators have an real opportunity to monitor the exercise activities. If it is not possible to get sufficiently close to the exercise site, consideration must be given to the option of transmitting live video to the evaluators from the exercise site.

6.2.3 ENDING THE EXERCISE

NOTIFYING UNITS OF THEIR RELEASE

All participants in the exercise must be notified of the end of the exercise using the agreed means of communication, in accordance with the exercise plan or other instructions for the exercise. As part of this, it must be stated if the participants/vessels can leave the exercise and what the place and time will be for any debriefing that will take place. Remember to inform all participants, even if they have not participated in the exercise on site but only from their own premises.

IMMEDIATE EXERCISE FEEDBACK (HOT WASH UP) AND DEBRIEFING

After the end of the exercise, the participants are often asked to provide immediate feedback on the exercise in a shared space or online environment. This includes their first impressions and experiences of the exercise or their part of the exercise. The timing of the actual debriefing session is often already indicated in the exercise plan.

COLLECTION OF PARTICIPANT FEEDBACK

Instructions for collecting feedback from the participants are often provided in the exercise plan, and the exercise evaluation group is responsible for collecting this feedback.

REQUIRED MAINTENANCE AND REPAIRS

The participating units are asked about any personal injuries or damage to equipment and vessels that may have occurred during the exercise; these must be recorded for possible further measures.

RETURNING RENTED EQUIPMENT AND VESSELS

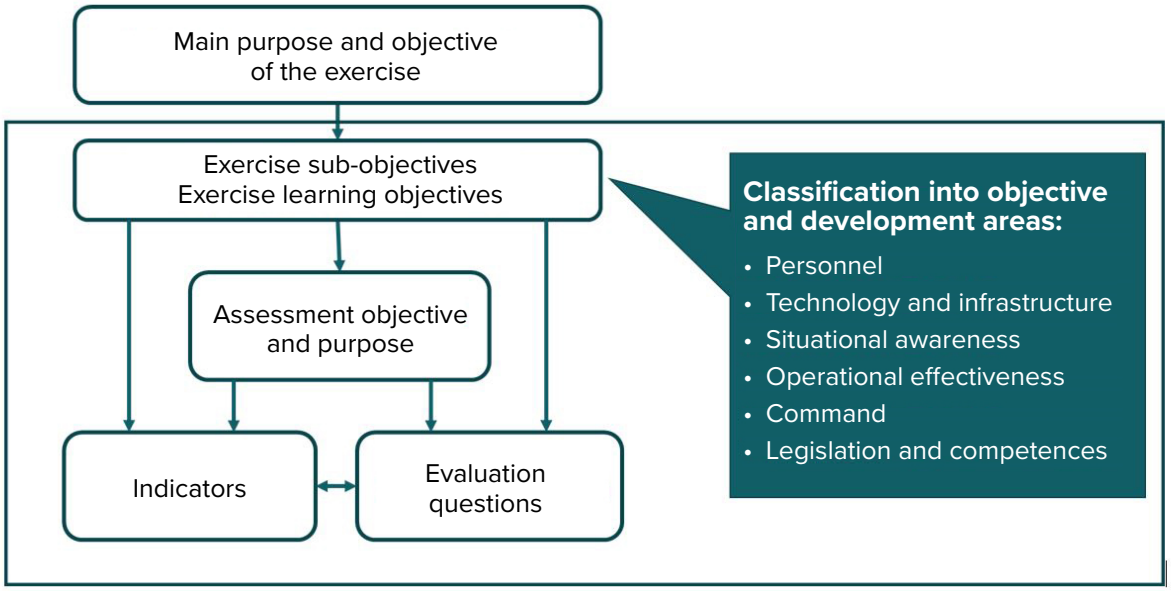
Leased and/or loaned equipment and vessels must be collected, serviced and returned according to the instructions provided, then this must be reported to the person responsible or exercise command.

6.3 CHECKLIST FOR EXERCISE EXECUTION

1. Brief participant on the exercise and their own role (objectives, safety)
2. Brief the evaluators
3. Train the objective group (e.g. winching)
4. Start the exercise
5. Notify/alert units
6. Issue the tasks for the exercise (game group)
7. Give the inputs (drift calculations, weather data, radar images, passenger lists, shipping company data, substance data)
8. Call in the (additional) resources for the game (reinforcements)
9. Maintain the event log
10. Provide operational instructions
11. Monitor the number of rescued/evacuated
12. Monitor the amount of substance collected
13. Communicate image and video material
14. Carry out external communications as planned and monitor this process
15. Monitor and record the exercise
16. Host media representatives (Programme, host, venue, transportation, catering)
17. Manage and host evaluators
18. Notify participants of the close of the exercise – also any remote participants
19. Notify units when they are released from the exercise
20. Give units feedback on their own actions
21. Indicate how participant feedback will be collected (provide forms or send a link to the feedback questionnaire)
22. Have the necessary maintenance and repairs carried out
23. Return rented equipment and vessels

7 EXERCISE EVALUATION AND REPORTING

7.1 PROCESS DESCRIPTION



Exercises are a tool for developing operations. The development of competence, performance or the actual exercise activities requires effective evaluation. Using the results of the evaluation, it is possible to determine the success or development of different areas of competence such as decision-making or command as well as new operating models and training needs and the number of exercises or repetition of exercises.

RESPONSIBLE PERSONS / BODIES

To support the person responsible for assessing the exercise, an evaluation group is often appointed. This may be either an internal, national or international group consisting of representatives of different organisations or actors.

7.2 EVALUATION

The exercises themselves should be evaluated. When doing so, the key question is whether the exercise succeeds in developing and creating the conditions for developing performance and capabilities. In the same way, the evaluation can also be evaluated.

The evaluation of the exercise and the collection of feedback should be systematic. Similar exercises should be evaluated in the same way, making it possible to compare the results. The results should be stored in the same common system as the exercise plan and other documents. A common storage location also contributes to the formation of a uniform exercise culture.

However, the evaluation process should be as light as possible. As a rule, it is important to ensure that comments and development proposals are collected from the planning phase onwards. The participants' feedback and comments, as well as the feedback given to the participants, should be reviewed immediately after the exercise. In addition, an online feedback questionnaire can be prepared with standard questions and then sent to participants after the exercise.

The exercise operations concept includes a checklist of models used to evaluate the exercise and support the evaluation (models related to exercise activities). The parts of the checklist to be used depend on the type and scope of the exercise.

7.3 EVALUATION IMPLEMENTATION

The process of evaluating and reporting on the exercise is described in the following steps. Depending on the type and size of exercise, only the necessary parts of these need be carried out. However, for all maritime safety exercises, the objective and purpose of the evaluation should be considered and the observations made should be recorded.

External observers should be used as evaluators, where possible, so that there are no role-less participants in the exercise and participation is thus meaningful for everyone. The external observers can assess areas such as communication or decision-making, thus avoiding the need for any extensive orientation on SAR or MER processes. In this respect also, feedback should be collected in summary form, using for example a simplified FIR form (First Impression Report)

7.3.1 OBJECTIVE AND PURPOSE OF THE EVALUATION

The exercise evaluation should be planned in conjunction with the setting of other objectives. The definition of the exercise objectives, the indicators for these, and the obtainment of these indicators are all intrinsically linked.

The objective and purpose of exercise evaluation may include the following:

- how the specific functions of the exercise were performed (result: what is the level of competence, level of development, continuity management)
  - command and control skills
  - planning structure and command
  - decision-making
  - rescue and response operations (e.g. search or emergency towing)
  - coordinating and cooperation group team work
  - use of outside expertise, such as a hazardous and noxious substances expert
- the use of a particular operating model or technical tool in the exercise (result: how well the operating model or technical tool suits the activities, how it should be developed)
  - ChemSAR operating model
  - Vessel Triage method
  - a rescue or response tool
  - command system
  - incident communication process
- how the exercise (planning, execution, evaluation) succeeded in developing or creating the conditions for developing the activities being practised (result: how the exercises or process should be developed)
  - planning structure and command
  - coordination
  - resourcing
  - support services

In exercise operations that develop maritime safety, the factors that develop performance can be identified and organised

within the framework of the above-mentioned objective and development areas.

Objective setting becomes more concrete when a clear and concrete objective is identified for each component. Setting of objectives must be done in a way that takes into account the nature and purpose of the exercise. Some categories may be omitted; for example, it is not necessary to practice command skills in equipment and vessel exercises.

Goal-oriented exercises also facilitate effective evaluation. A separate indicator must be set for each objective and for each of the six areas and for each objective. In this way, the evaluation of the objective is carried out by identifying clear matching pairs.

7.3.2 EVALUATION QUESTIONS BASED ON THE EXERCISE OBJECTIVES AND INDICATORS

The evaluation can be carried out either with ready-made questions from the evaluation tool or using questions that are tailored to the individual case. Below is an example table where the evaluation questions are set using the objectives and indicators.

The objectives and indicators for the exercise should be drawn up using the six development areas presented above. The development areas enable a comprehensive evaluation of the exercise activities.

EXERCISE OBJECTIVE	SUB-OBJECTIVES	INDICATORS	EVALUATION QUESTIONS
Test and evaluate the ChemSAR operating model		The operating model is regularly used in pro-cedures	
	Test decision making that is based on the operating model	Action options are discussed and analysed, risks and threats considered	Was the decision-making process clear? Were there any prob-lems in the decision-making process? If so, what? Were the different action options dis-cussed? Was the ChemSAR operating model used to support decision-making? Were there any prob-lems with the inter-pretation/use of the operating model?
	Test cooperation	Command responsi-bil-ity is clear The division of tasks within the group is clear Actors understand their roles External experts are used	Was the command responsibility clear and clearly communi-cated? Were there any co-operation issues? How would you assess the flow of infor-mation?

7.3.3 EVALUATION TEAM

The number of evaluators, or the use of a possible evaluation team, depends on the scope of the exercise. In a small exercise, the evaluation can be carried out by the exercise planner or a specifically designated person external to the exercise activities. In unit exercises or similar small exercises, the evaluation is often carried out by the exercise commander or an official specifically assigned to the task.

Large exercises, however, must have their own evaluation team. It is also recommended that an evaluation team be set up for medium-sized exercises. The leader of the evaluation team must be present in the early stages of the exercise planning. The tasks of the evaluation group include:

- Clarification of the objectives and purpose of the evaluation;
- Drafting/selection of evaluation questions;
- Data collection
- Analysis of collected data
- Ensuring that the evaluation meets its purpose
- Ensuring the results are reported

An international evaluation group is usually put together for large international exercises, and either a manual or contract-based forms and methodologies must be used for the evaluation.

ROLES AND PLACEMENT OF EVALUATORS

As part of evaluation planning, it should be defined where, how and what each evaluator is to evaluate. The evaluator must be briefed on the area to be assessed and be aware of the objectives of the evaluation for the exercise and/or activity in question. As a rule, one person per participating unit or function is sufficient.

BRIEFING OF EVALUATORS FOR THE EXERCISE AND EVALUATION

As part of the briefing, either the exercise commander or the evaluation team briefs the evaluators on the exercise, ensuring that they know in advance the purpose of the exercise, the scenario, the exercises, the purpose of the evaluation, the evaluation system, and the questions to be used. It should be noted that the evaluation team leader must brief all the evaluators

As part of the briefing, the participants must be informed about how feedback will be collected and how feedback will be distributed to the participants. Options for this include different forms, a link to a feedback survey, feedback discussions, etc.

7.3.4 COLLECTING DATA ABOUT THE EXERCISE

The task of the evaluation team is to gather information and observations during both the planning and execution of the exercise.

PARTICIPANTS' FIRST IMPRESSIONS

First impressions of the exercise are collected from all participants using tools such as a pre-prepared form or an electronic survey (First Impression Report) either straight after the close of the exercise or within a stated time frame. This is used to evaluate the achievement of the objectives from the participants' perspective as well as to obtain general feedback on the exercise.

Upon completion of the exercise component or entire exercise, the units participating in the exercise are asked for immediate feedback on the exercise either at a joint event or via an online environment. This initial feedback is known as the 'Hot Wash Up'. This event is intended to be a short, conversational event that covers the most important issues. It is led by the exercise commander and the number of participants is generally limited.

EVALUATORS' FINDINGS

The evaluation team compiles the first impressions of the exercise and presents a preliminary review of the exercise at the final debriefing session. A separate exercise evaluation report is compiled from the participants' exercise feedback and the evaluators' observations. The exercise evaluation team is also responsible for giving first impressions of the exercise evaluation through their participation in the debriefing.

DEBRIEFING

At the end of the exercise, there is a separate debriefing session which brings together the observations made during the exercise and the initial evaluations of the exercise.

COLLECTING AND COMPILING FEEDBACK

Feedback on the exercise consists of first impressions, summaries of debriefing sessions and any feedback that may be received/sent later. The task of the evaluation team is to collect and compile the above feedback into a coherent whole as a resource for the evaluation report.

7.4 ANALYSIS AND REPORTING

EVALUATION OF FEEDBACK, OBSERVATIONS, ACTIONS TAKEN AND EVENTS

The evaluation is drafted based on the feedback collected from the exercise participants and the observations made by the evaluation team members. Through the work of the evaluation team, a common position is formed on the realisation of the exercise objectives as well as development proposals and further measures. This process seeks to identify the main observations and areas within or through which the exercise objectives were realised (Best Practicies) and well as those where further development is needed (Lessons Identified).

EVALUATION REPORT

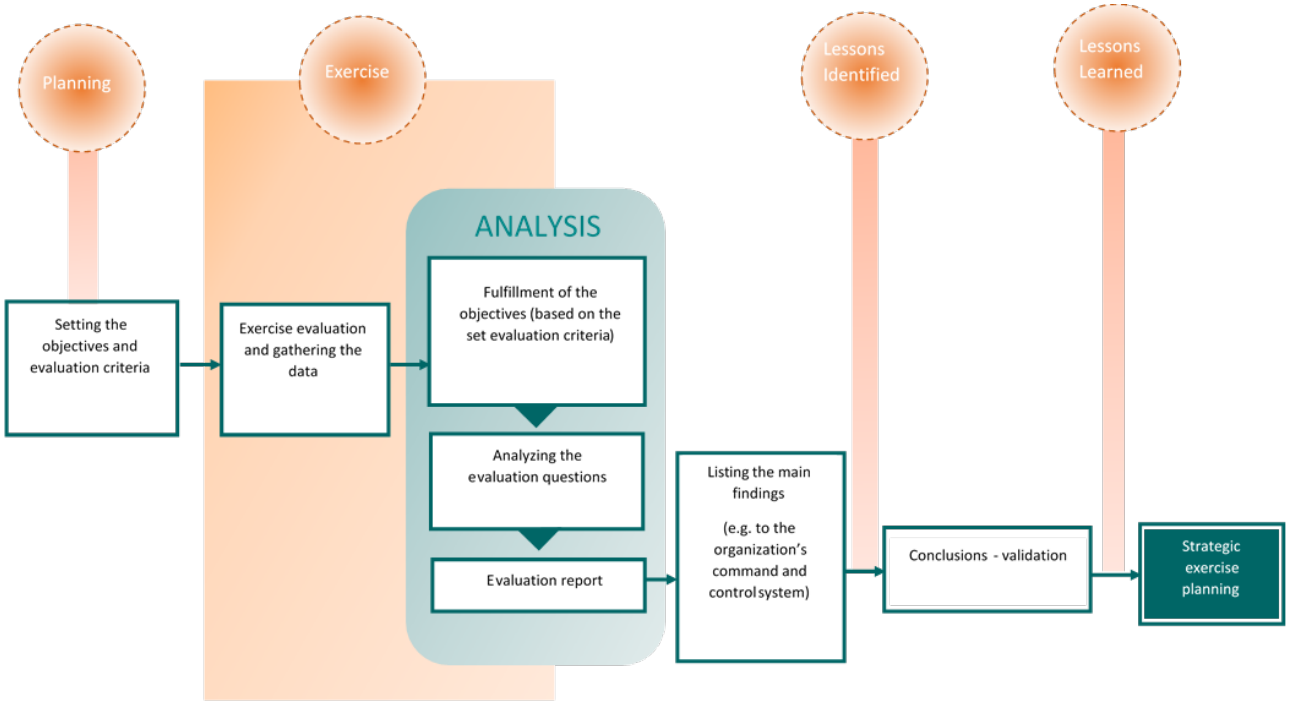
Based on the collected and analysed exercise feedback, the exercise evaluation team compiles an exercise evaluation report. The evaluation report may be part of the exercise report or a separate document on the results of the exercise. The main points of the evaluation report are the exercise findings (what was observed), what areas for development emerged, and what issues that do not require a great deal of effort or attention in the future. The evaluation report is of greater use if the matters are covered in sufficient detail and clearly evaluated. This requires, however, that attention is paid to evaluation already in the exercise planning phase. The reporting of exercise findings can be supported by using a method which sets indicators for objective achievement as part of the definition of exercise objectives. This is essential for exercise monitoring and for simplifying comparisons between exercises.

FOLLOW-UP MEASURES BASED ON THE EXERCISE EVALUATION REPORT

A key part of the evaluation process is the Lessons Learned. These involve thinking about how the identified exercise needs can be practiced. This means that the exercise needs recorded in the system feed into long-term exercise planning work. Strategic exercise planning involves thematic exercises and defining the focus areas in the exercise calendar.

- Recording main observations (incl. Best Practices), Lessons Identified and Lessons Learned
- Recording of inputs and recommendations for the development of capabilities, exercises or operational activities
- Recording of exercise needs (lessons identified) and marking identified needs as achieved (lessons learned)
- Implementation of measures for drafting the long-term maritime safety exercises plan described in section “Possible Lessons Learned process”, in which the evaluation process monitoring team regularly review the exercise needs entered into the system
- In the following exercises, the exercise needs are practised in a objective-oriented manner based on the exercise needs bank and the strategic guidelines

The evaluation and validation process is described below:



7.5 CHECKLIST FOR EXERCISE EVALUATION

1. Define the objective and purpose of the evaluation
2. Assemble the Evaluation Team
3. Define the evaluation questions based on the exercise objectives and indicators
4. Define the role and location of each evaluator
5. Brief the evaluators on the exercise and evaluation
6. Collect data about the exercise
7. Arrange the debriefing(s)
8. Collect and save participants' first impressions (FIR)
9. Collect and record evaluators' observations
10. Analyse feedback, observations, actions taken, events, and other evaluation material
11. Draw up the evaluation report
12. Record in the system the main observations
13. Record inputs and recommendations for capabilities, exercise activities or operational development
14. Record the exercise needs and identify the objective achieved (Lessons Identified and Lessons Learned)
15. The evaluation process monitoring group review the exercise needs entered into the system at regular intervals

8 MODELS AND EXAMPLES FOR EXERCISE ACTIVITIES

8.1 DOCUMENT TEMPLATES FOR HELPING WITH EXERCISE ORGANISATION

- Exercixe report summary
- Exercise evaluation plan form

8.2 EXAMPLES OF INTERNATIONAL EXERCISE DOCUMENTS (BALEX DELTA 2021)

- Balex 2021 Exercise Plan
- Balex 2021 Practical Information for Participants
- FIR Delta Form
- Balex Delta 2021 Evaluation Document

Above mentioned documents and examples are available on the Finnish Border Guard's website **raja.fi**

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