



Terminology

Situations

Imminent grounding

Refers to the situation where a vessel grounding is imminent because of a certain course towards a grounding hazard (last phase of grounding course - moments away before grounding occurs, with little time to react).

Developing grounding situation

Refers to the situation where the vessel is in a grounding course due to the existence of a grounding hazard (second phase of grounding course). For instance, where alarms are not correctly set, and the vessel deviates from course, which is set towards shallow waters.

Potential risk of grounding

Refers to the situation where there is a nearby or along the passage grounding hazard which may be a threat to the vessel (first phase of grounding course). For instance, where the waypoints are incorrectly set during passage plan implementation, and the course runs through shallow waters.

VTS

VTS services

VTS includes 3 services:

1. INS - Information Assistance Service : Provides information regarding weather, surrounding environment and traffic constraints.
2. TOS - Traffic Organisation Service : Manages and monitors the traffic in a TSS.
3. NAS - Navigation Assistance Service : Provides suggestions and maybe instructions for routing in emergency situations.

Instructions may be given from all three services in some specific VTS areas. NAS usually intervenes in a close quarter situation (imminent grounding).

Passage planning

Passage planning, according to IMO Resolution A.893(21), includes appraisal, detailed planning of the voyage from berth to berth, execution of the plan and the monitoring of the progress of the vessel in the implementation plan.

Appraisal: it is the gathering of all information relevant to the contemplated voyage that should be considered (e.g., characteristics of cargo, nautical publications, weather forecast, etc.)

Planning: On the basis of the fullest possible appraisal, a detailed voyage or passage plan should be prepared which should cover the entire voyage or passage from berth to berth, including those areas where the services of a pilot will be used.

Execution: Having finalized the voyage or passage plan, as soon as time of departure and estimated time of arrival can be determined with reasonable accuracy, the voyage or passage should be executed in accordance with the plan.

Monitoring: The progress of the vessel in accordance with the voyage and passage plan should be closely and continuously monitored. Any changes made to the plan should be made consistent with these Guidelines and clearly marked and recorded

The 'Appraisal' and 'Planning' are considered within CB3a barrier, while 'Execution' and 'Monitoring' phases are captured within both CB3a and CB2a barriers in the form of continuous monitoring and situational awareness.

ACTORS

The actors in this Risk Model are the following:

Onboard the vessel:

- Master
- Officer of the Watch (OOW)
- Officer in charge of the passage plan

From VTS:

- VTS operator

On board the vessel during navigation in congested waters, the overall responsibility lies with the OOW, who is in charge of the navigational watch. If Master (who is not the OOW at the time) is present, the responsibility lies with him. If not present, in case of a troubling situation, the OOW should call him to the bridge.

Officer in charge of the passage plan is one of the vessel's deck officers and is appointed by the Master and has this role only in the passage planning process, and not during navigation.



