

The Shipping Industry and Marine Spatial Planning

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Why Shipping?

- ▶ Major impact on world economy
- ▶ Major impact on Safety and the Environment
- ▶ Do we take our Ocean role for granted?
- ▶ Shipping is flexible – right?
- ▶ The storm is safety out to sea...
- ▶ High tech and precision navigation!
- ▶ Why would you need so much room?
- ▶ Etc...



Empathy for Society

- ▶ Shipping serves society
- ▶ Society needs goods, food, energy, raw materials – and a healthy planet.
- ▶ Shipping professionals need to work with all stakeholders to specify achievable goals that can be Monitored, Evaluated, Enforced, and when necessary, Improved.
- ▶ Each instance of MSP is unique and needs to be on a case by case basis.
- ▶ Lots of shipping professionals needed!

Management Process

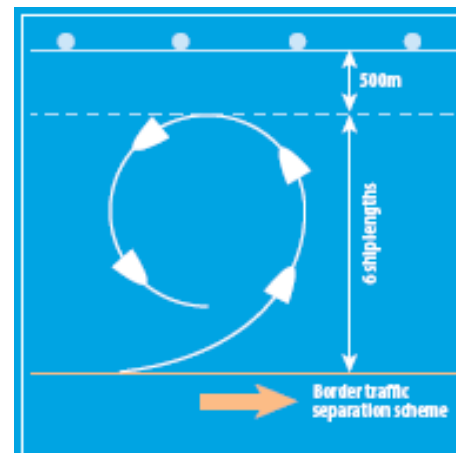
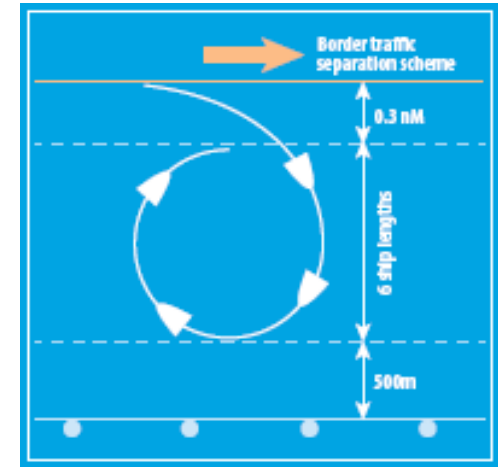
- ▶ Existing condition
- ▶ Future condition
- ▶ Prepare and approve MSP
- ▶ Implement and enforce
- ▶ Monitor and evaluate
- ▶ Adapt



STEP	MANAGEMENT PROCESS AND OUTCOME (UNESCO)	SHIPPING CONTRIBUTION
1	Identifying need and establishing authority	These planning steps are critical to involve stakeholders from the shipping industry
2	Obtaining financial support	
3	Organising the process through pre-planning	
4	Organising stakeholder participation The output is expected to be a plan indicating who, when and how to involve stakeholders throughout the marine spatial planning process	There are a number of maritime shipping stakeholders who might be consulted within the process. These include but are not limited to port authorities, Maritime Services (VTS), lighthouse authorities, pilots, local/national maritime administrations, shipowners/managers, local mariners, local shipping organisations, maritime academies and NGOs/branches
5	Defining and analysing existing conditions Outputs are expected to include: • Inventory and stage of important biological and ecological areas of the marine management area • Inventory and stage of current human activities (and pressures) in the marine management area • Assessment of possible conflicts and compatibilities among existing human uses • Assessment of possible conflicts and compatibilities between existing human uses and the environment	In addition to the local stakeholders, data to define and analyse the existing conditions should include Automatic Identification and Tracking (AIS) data and may also include data from ship reporting schemes, satellite tracking, meteorological offices and data held by such bodies as local ports, VTS and pilots
6	Defining and analysing future conditions Outputs are expected to include: • Alternative scenarios illustrating how the MSP area will look if present conditions continue without new management interventions; • Alternative spatial use scenarios illustrating how the management area might look when human activities are redistributed based on new goals and objectives • A predicted scenario that provides the basis for identifying and selecting management measures in the spatial management plan (Step 7)	In order to define future conditions, in particular port authorities, ship operators and mariners should be consulted. Potential changes to shipping without any MSP changes or with the help of MSP systems available should be taken into consideration
7	Preparing and approving the MSP Outputs are expected to include: • Identification and evaluation of alternative management measures for the spatial management plan • Identification of criteria for selecting alternative management measures • A comprehensive management plan, including if needed, a zoning plan	The plan should identify desired outcomes or observable behavioural changes that represent the achievement of a goal. Terms of shipping there should be Specific, Measurable, Achievable, Relevant and Time Bound
8	Implementing and enforcing the MSP The output is expected to be a clear identification of actions required to implement, ensure compliance with, and enforce the spatial management plan	Outcome of the MSP should be clearly communicated to all shipping interests both locally and internationally as appropriate, and comply with relevant IMO, ICAO and ILO recommendations for best practices. Such communication should also identify any new responsibilities for ships or shore-based operators
9	Monitoring and evaluating performance Outputs are expected to include: • A monitoring system designed to measure indicators of the performance of marine spatial management measures • Information on the performance of marine spatial management measures that will be used for evaluation • Periodic reports to decision makers, stakeholders, and the public about the performance of the marine spatial management plan	The effects of MSP implementation on shipping should be monitored in terms of ship tracking (AIS), safety issues (accidents / near misses), and any impact on local or regional commercial shipping concerns
10	Adapting to a spatial management process Outputs are expected to include: • Proposals for adapting management goals, objectives, outcomes and strategies for the next round of planning • Identification of applied research needs	Once a plan has been implemented, maritime shipping interests should use the monitoring system to identify the need for future change/review. Consideration may be given to proposals for adapting management goals, objectives, outcomes and strategies for the next round of planning

Adequate Sea Room

- ▶ To conform with COLREGS!
- ▶ Traffic avoidance
- ▶ Under Keel Clearance
- ▶ Round turns
- ▶ Heavy Weather Operations
 - Heaving to
 - Deck ops
 - Safe anchorages
- ▶ MoB & SAR



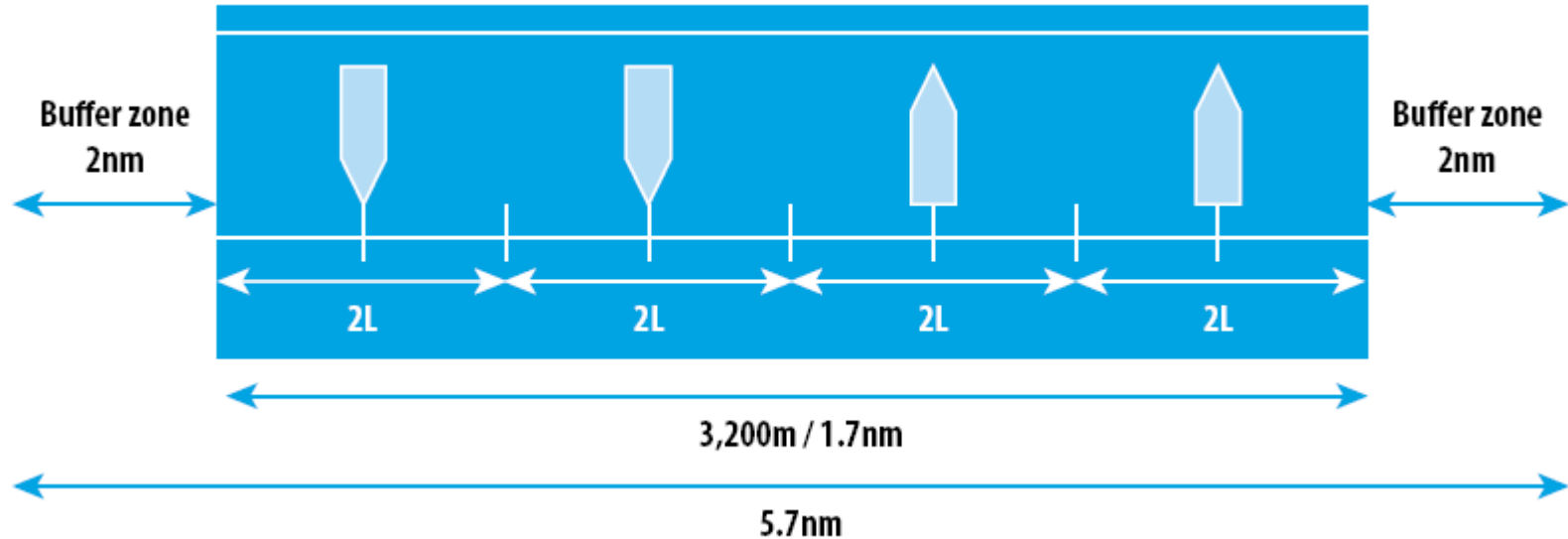
CALCULATION FOR A ROUND TURN TO PORT IN A SHIPPING LANE (SEE COLREGS 8, P13)

A round turn may also be made to port if, for instance, the starboard aft quarter is blocked due to an overtaking vessel. In this case, the vessel will not first deviate to port, but start a round turn right away.

Points to note:

1. Quite often it happens that after making a round turn a Not Under Command situation occurs, due to mechanical problems (e.g. low oil level alarm).
2. On many vessels the officer on watch will hesitate to use hard rudder – that is, to make a full round turn – at once. Passenger ships and container vessels in particular will be very cautious about starting such a turn as it can result in a lot of damage to passengers, crew and cargo.
3. Round turns are also made in case of a Man Over Board situation.

Corridor Width



Based upon PIANC recommendations for 400m ships and a 2nm buffer zone to navigation hazard.

All MSPs are
unique!

Navigation Issues

- ▶ Harmonised dissemination and portrayal of information in accordance with IMO & IHO.
- ▶ Marking in accordance with IALA (0-139)
- ▶ Visual and Radar conspicuity
- ▶ Risk assessment for traffic flows and density
- ▶ Provision of Aids to Navigation
- ▶ Traffic management
 - Issues of authority and liability...
- ▶ Traffic segregation?



Re-routing Issues

- ▶ The IMO process
- ▶ Increased sea-miles impacts the environment
- ▶ Increased miles impacts commercial trade and JIT models.
- ▶ Re-routing may impact port competitiveness and intermodal logistics.
- ▶ Temporal / dynamic re-routing can cause confusion

Concusion

- ▶ The seas are a world resource that need to be managed by society, sustainably.
- ▶ Shipping is a major waterways user and should engage productively and professionally.
- ▶ Working within an MSP framework offers shipping an opportunity to ensure commercial effectiveness along with sustainable safety and environmental protection.
- ▶ The NI will continue to support a professional approach for individuals and our industry.

- ▶ Visit www.nautinst.org/msp
- ▶ Free download
- ▶ Promote within your community
- ▶ Solicit feedback
- ▶ Embrace Corporate (and individual) Ocean Responsibility!



Support of The Nautical Institute
through membership and
participation is very much
appreciated!

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Thank You

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