

Abstract

Marine Coordination and supervising health and safety issues is required and implemented worldwide. It ensures a long-term operation of the wind turbines while mitigating risks and investments.

Relevant information like certificates, approvals related to personnel and equipment needs to be documented and stored. Directives must be distributed, safety guidelines to be instructed, hazards to be identified and remedied. Through the permanent change of the harsh environment on site they must be constantly levelled and in occurrence of emergencies the entire documentation needs to be prompt on hand.

Besides people tracking, the coordination of ships and vessels play a decisive role during transport and installation of an offshore wind farm.

Therefore the process of permit-to-work is a key factor for a fast and safe marine coordination and time critical for the wind farm itself. All offshore assignments need to be checked, approved and documented.

Interfaces between the construction phases should be identified and aligned.

All these workflows require a proper quality in a fast and 24/7 approach. Vessel charters and downtimes for high-qualified personnel have a huge impact in the installation time and overall investments.

Hence it is important to know and to take the processes and requirements for a fast and safe approach in to the field. Teams with experiences and proper education, like nautical science and logistics are required to fulfil this significant task.

Objectives

- Fulfil authority restraints
- Support in case of emergency
- Minimize collision risks
- Warranty of safety & ease of the maritime traffic



Marine Coordination combines legal requirements and construction / operation demands

Marine Coordination Center

Keeping the full Overview of the Offshore Wind Farm

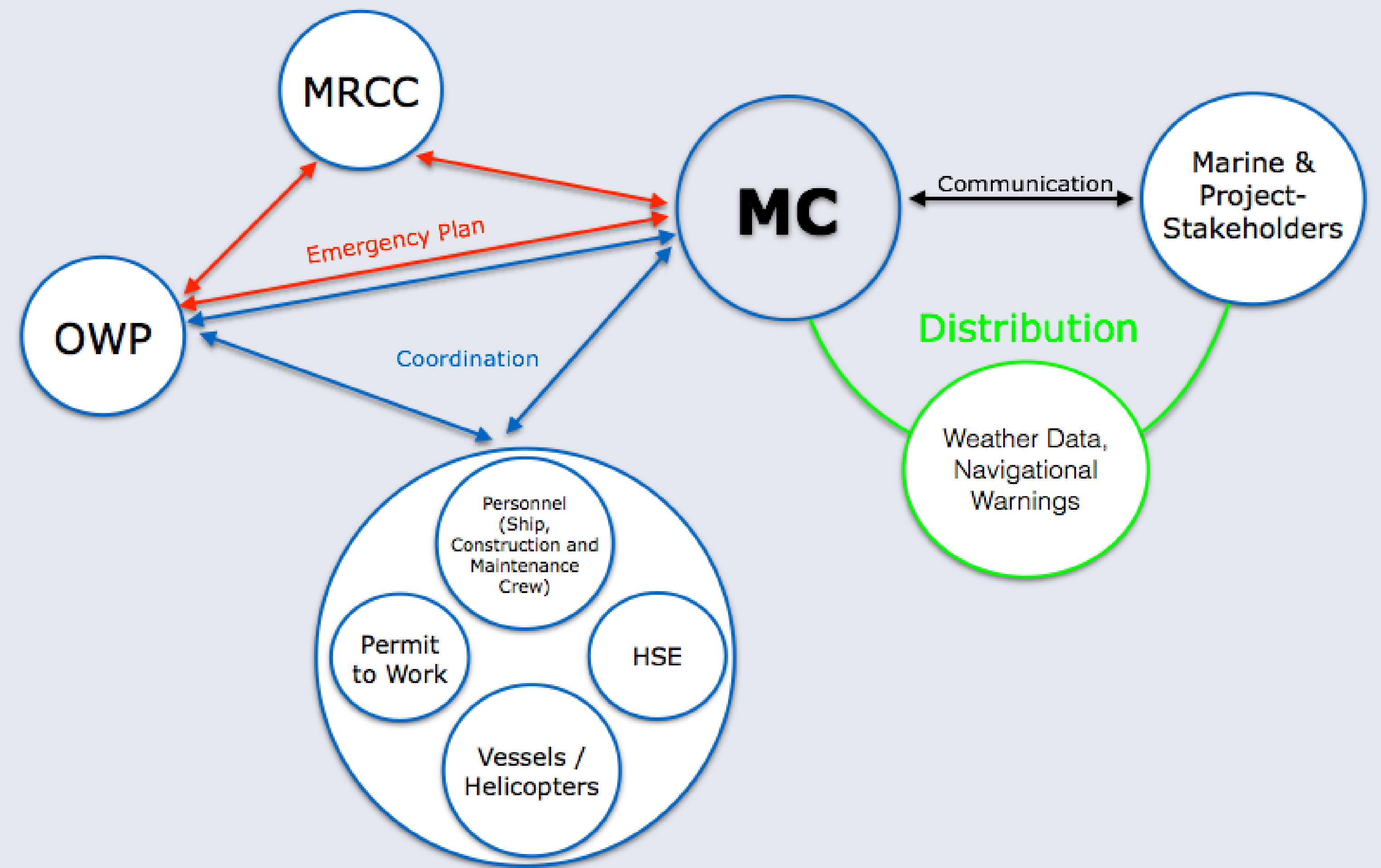


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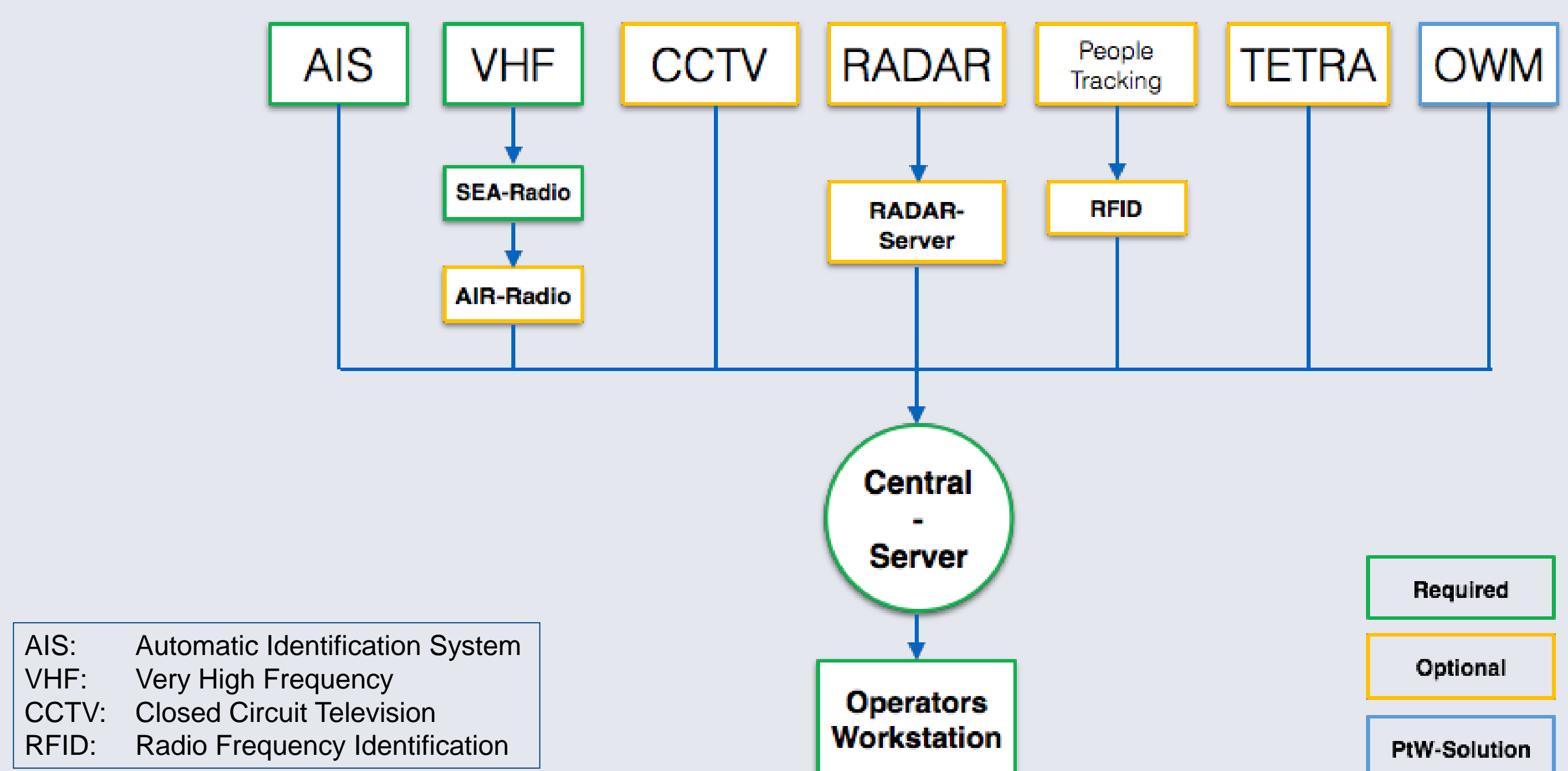
MC Working Structure



MC: Marine Coordination
OWF: Offshore Wind Farm
MRCC: Maritime Rescue Coordination Center
HSE: Health, Safety and Environmental

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Technical Structure



AIS: Automatic Identification System
VHF: Very High Frequency
CCTV: Closed Circuit Television
RFID: Radio Frequency Identification

Conclusions

The Marine Coordination ensures safe and controlled execution from start of installation up to the operation & maintenance. A high level of education and nautical skills of the marine coordination staff is essential and subsequently results in benefits in terms of time and investment as well as a significant increase of safety deployment of all on site activities. Marine Coordination is a key factor for the safe implementation of an Offshore Windpark and will prevent accidents offshore.

