European Maritime Safety Agency

CMOROC Appendix C – DCoS Models

Identification of Competences for MASS Operators in Remote Operation Centres

V 2.2

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EMSA

About this study:

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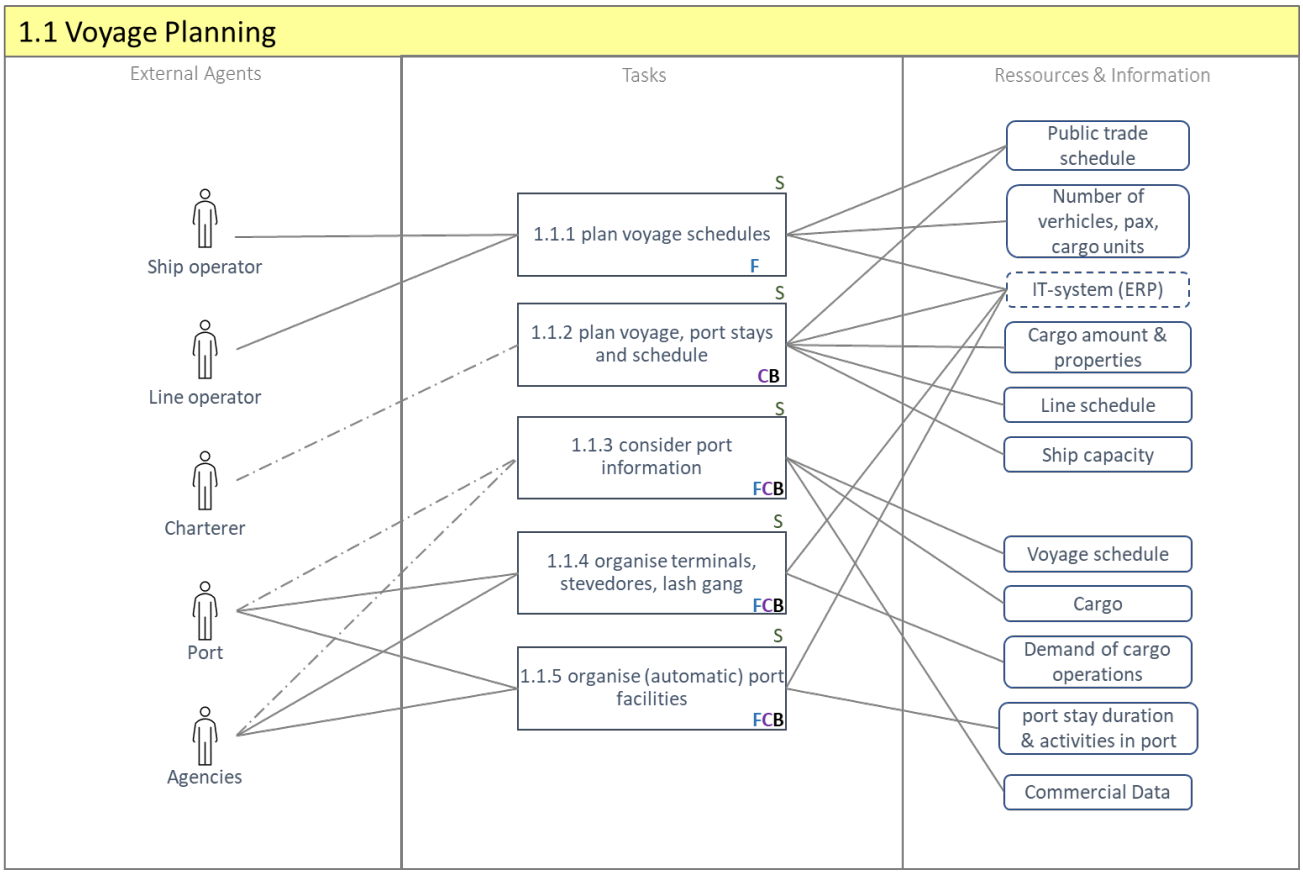
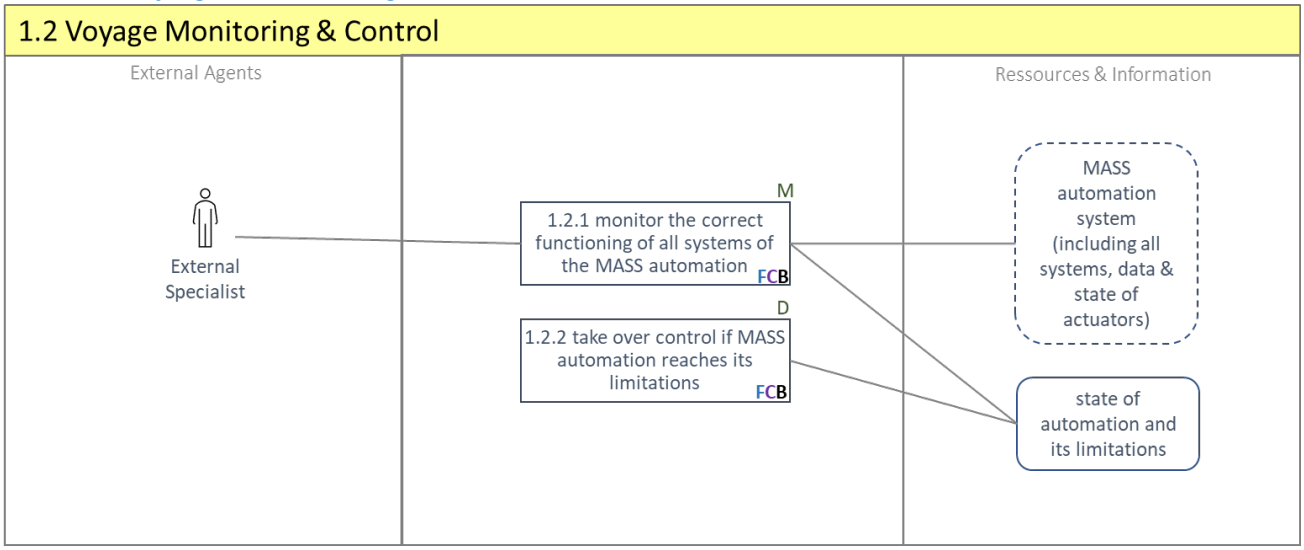
This appendix contains the DCoS models. A detailed description of the models, as well as further details of the tasks, agents and resources described there, can be found in the main report.

1. Voyage Planning & Control

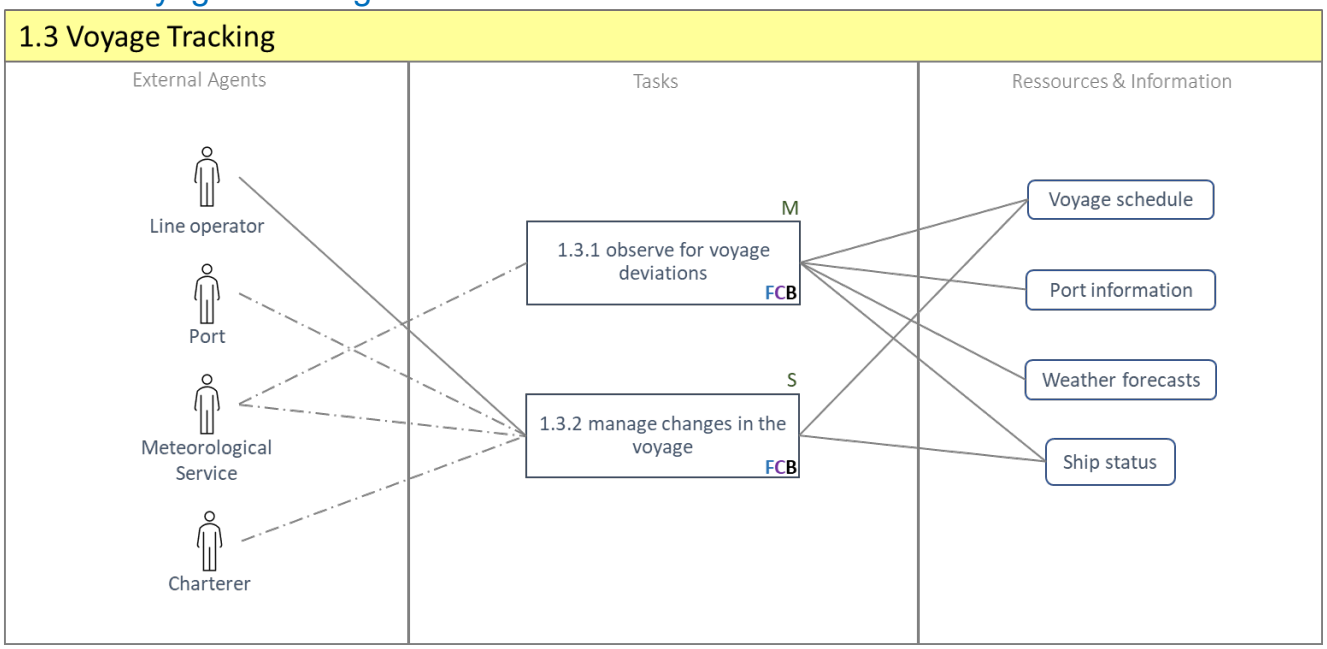
1.1 Voyage Planning



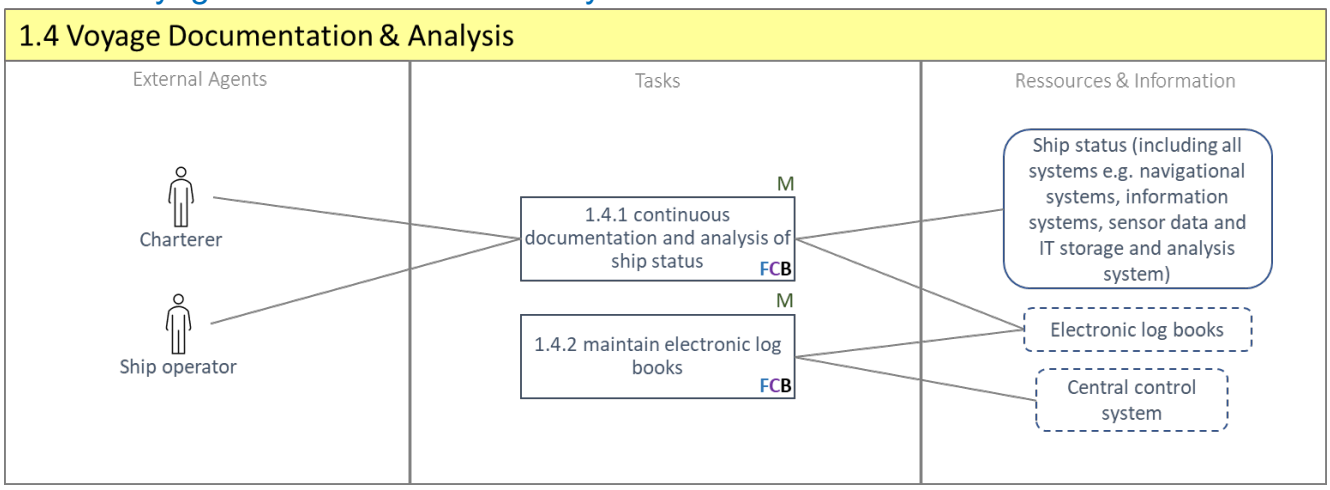
1.2 Voyage Monitoring & Control



1.3 Voyage Tracking

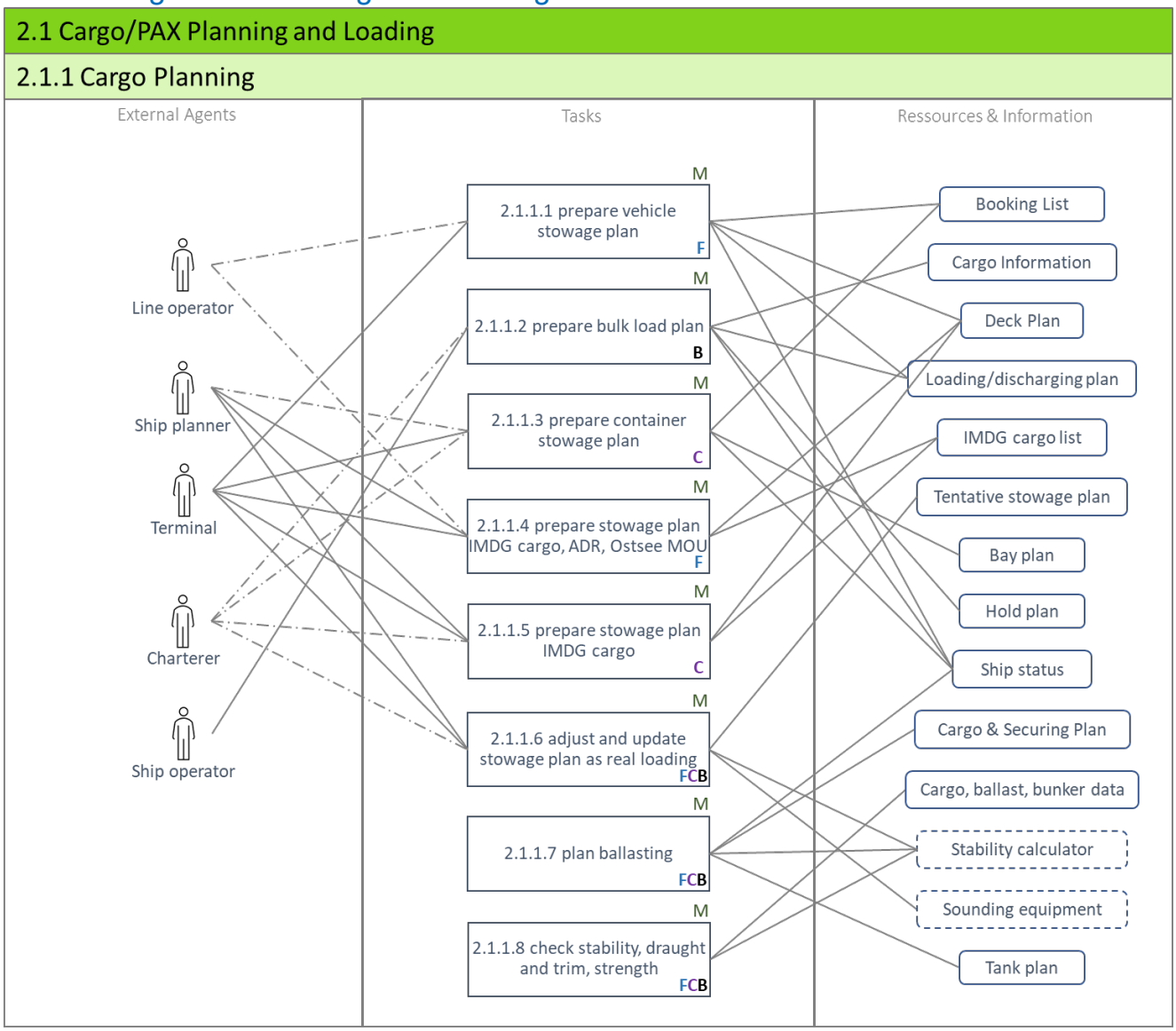


1.4 Voyage Documentation & Analysis



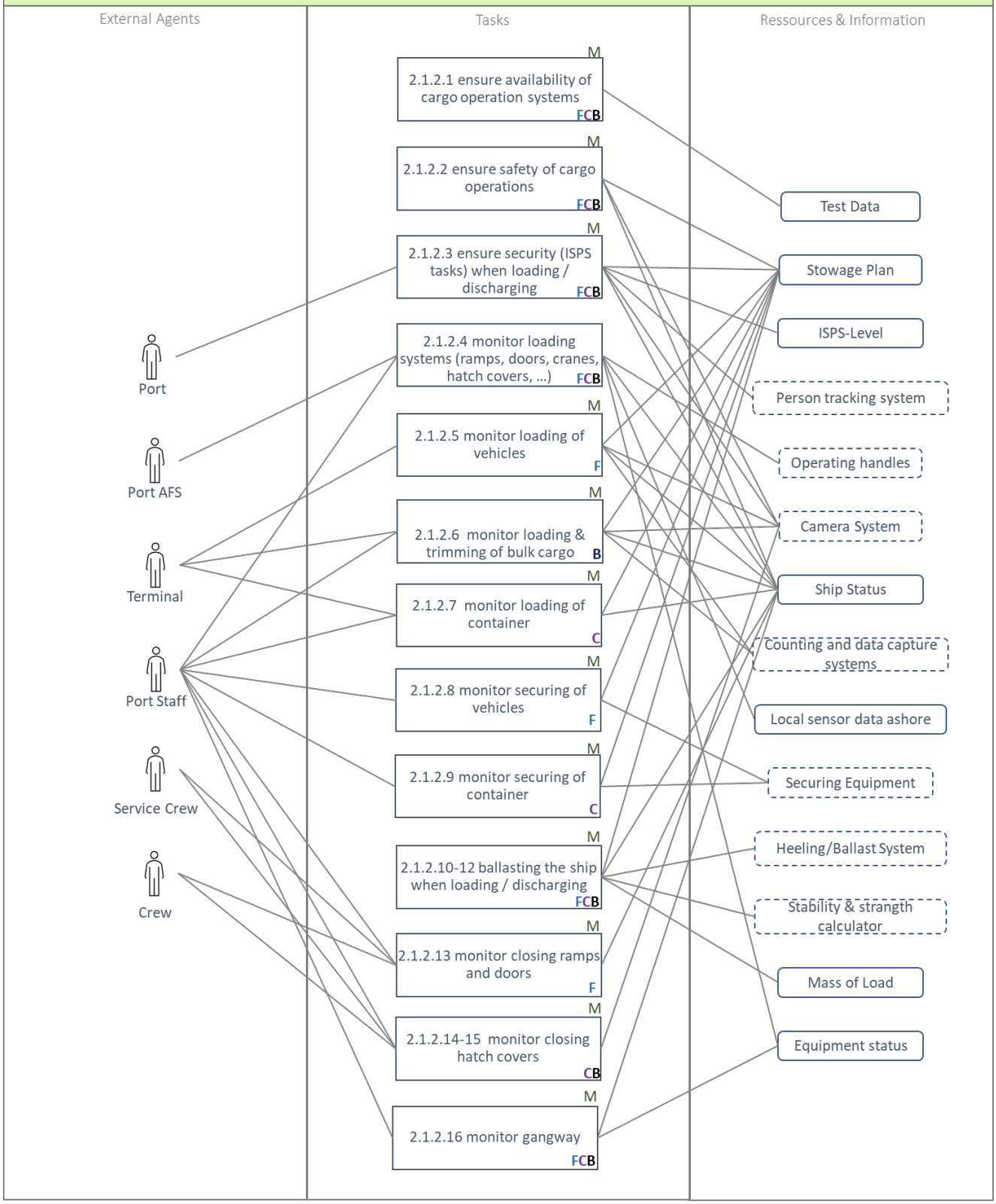
2. Cargo Operations

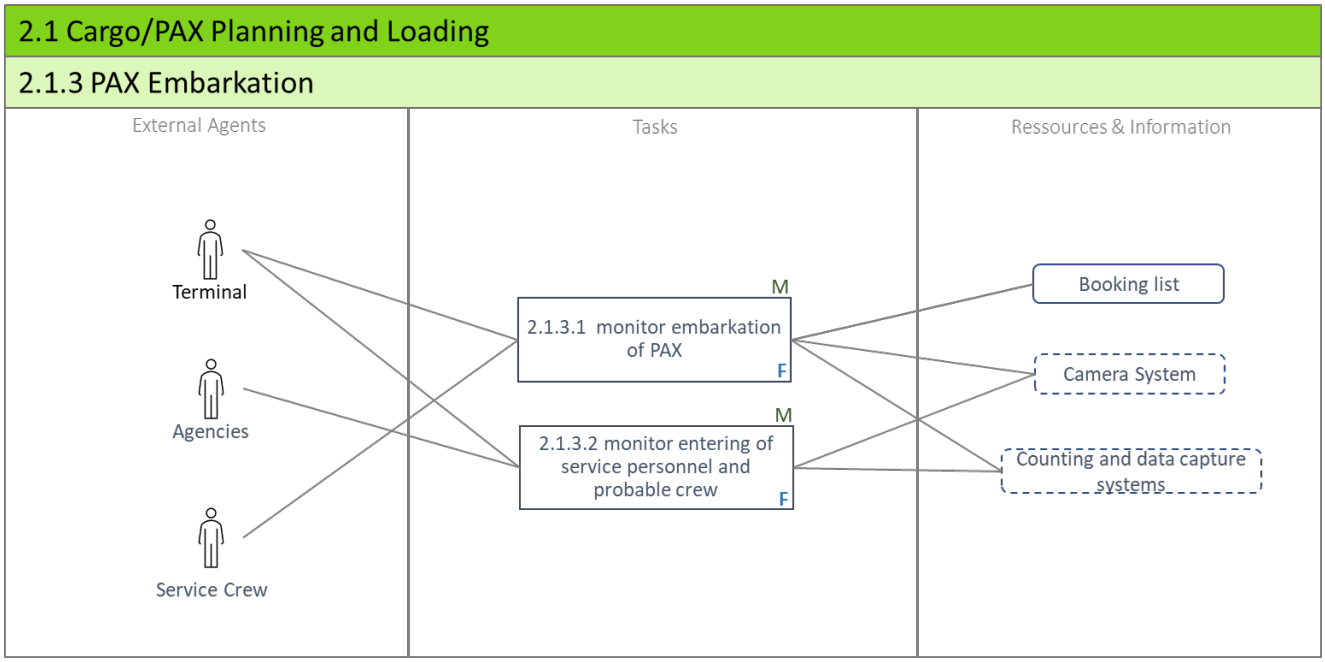
2.1 Cargo/Pax Planning and Loading



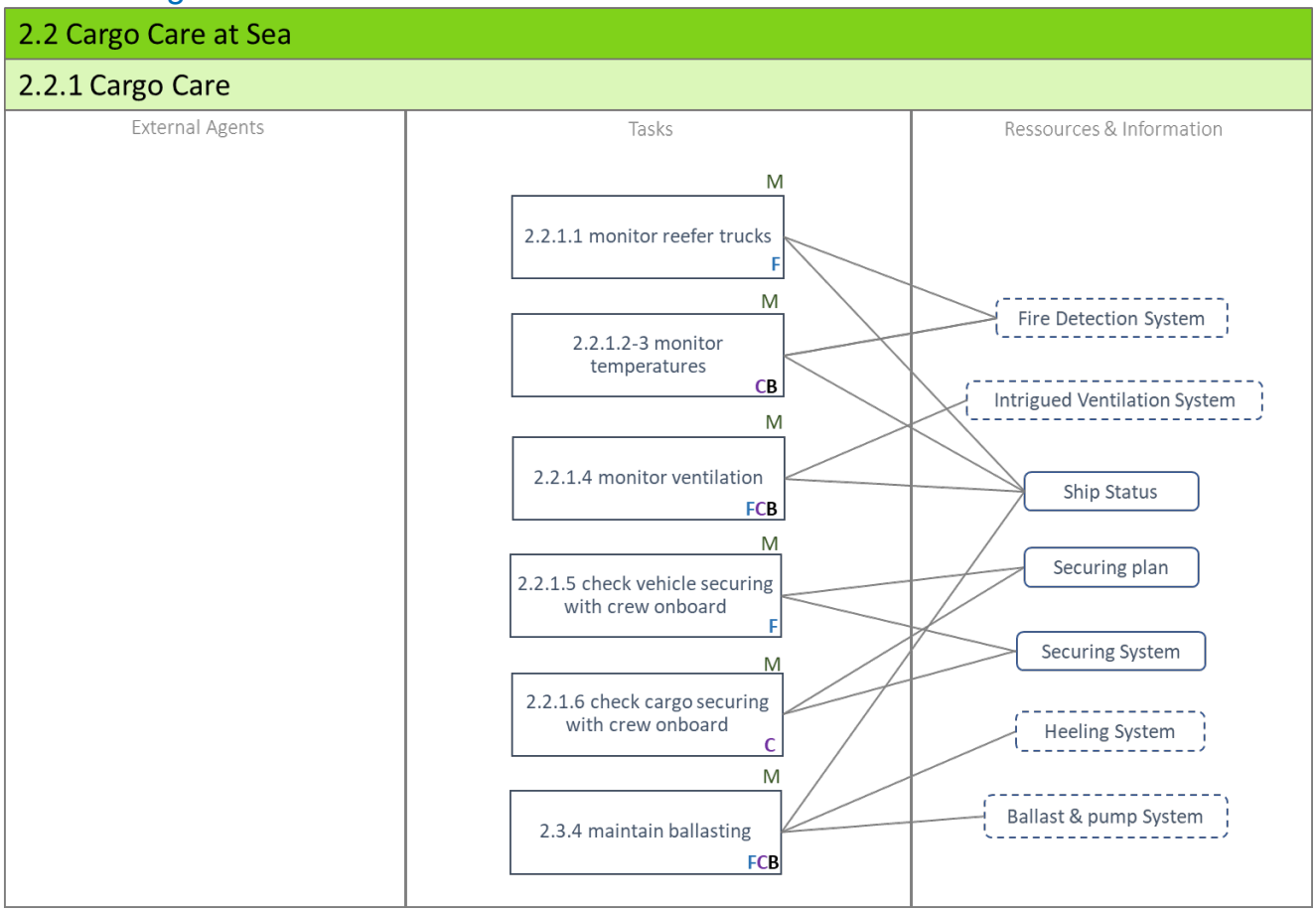
2.1 Cargo/PAX Planning and Loading

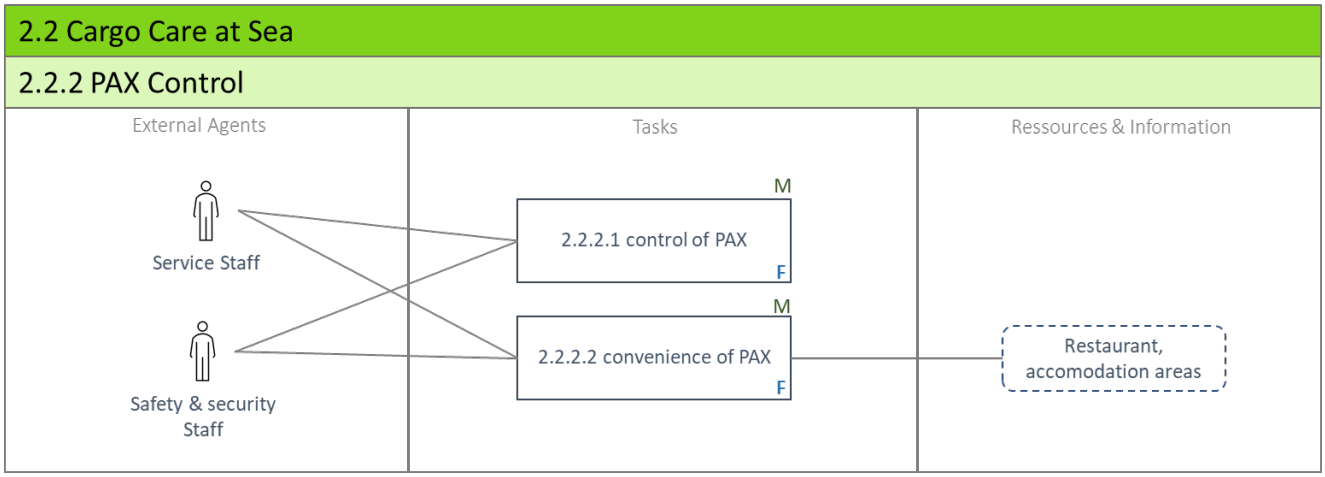
2.1.2 Cargo Loading Operations



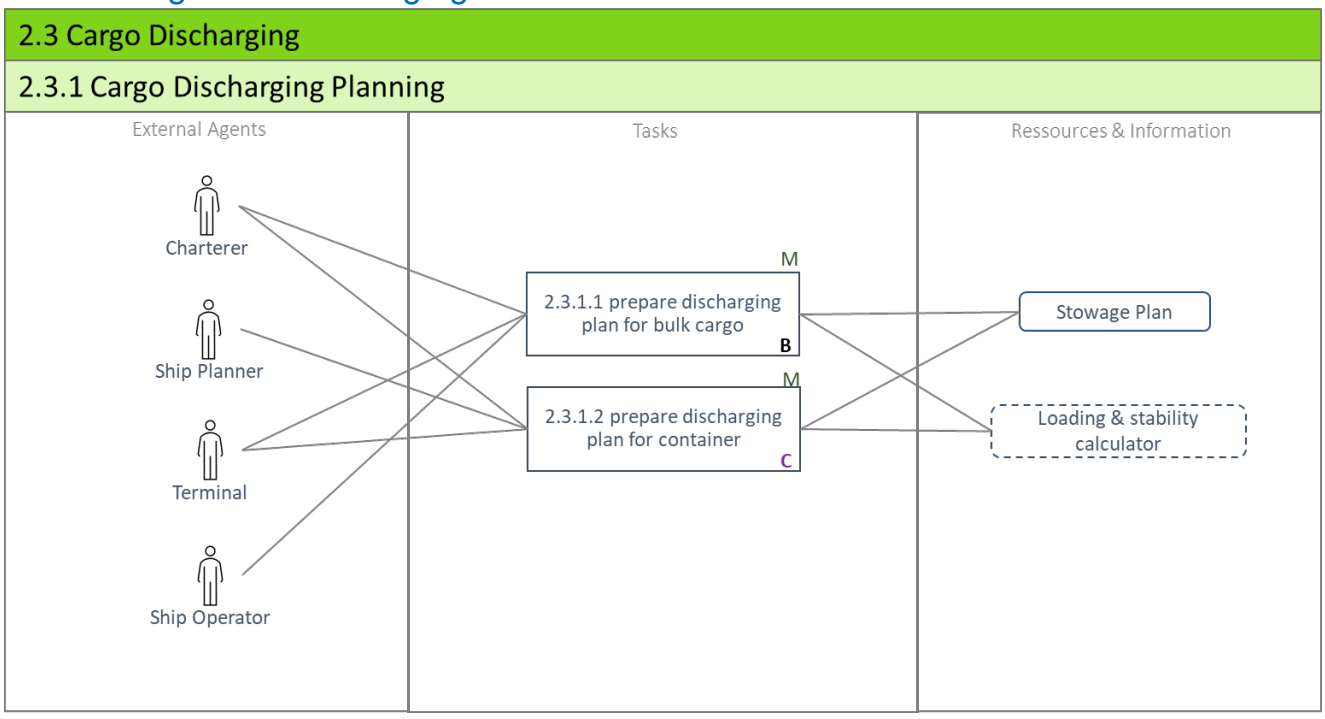


2.2 Cargo Care at Sea



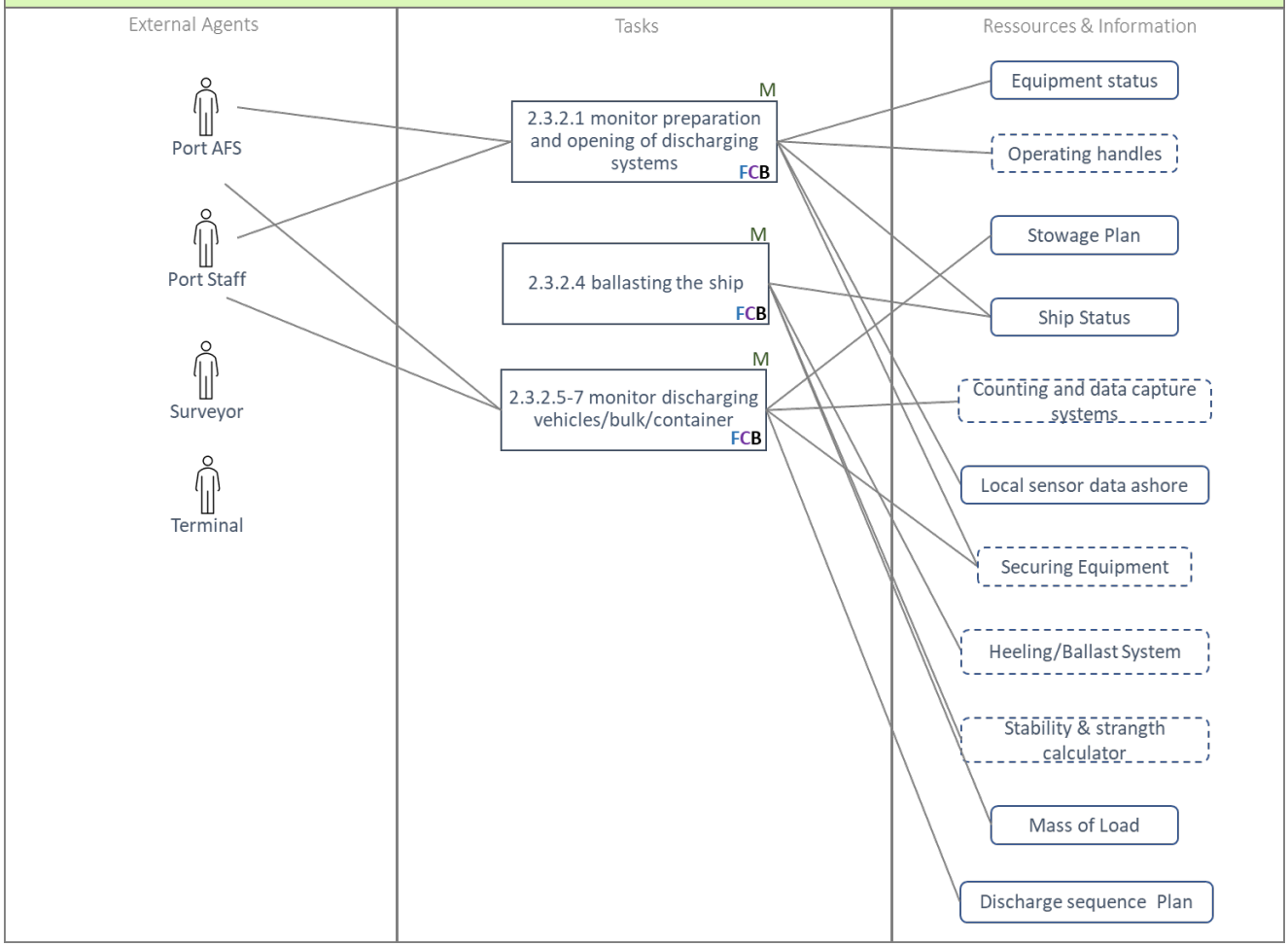


2.3 Cargo/Pax Discharging



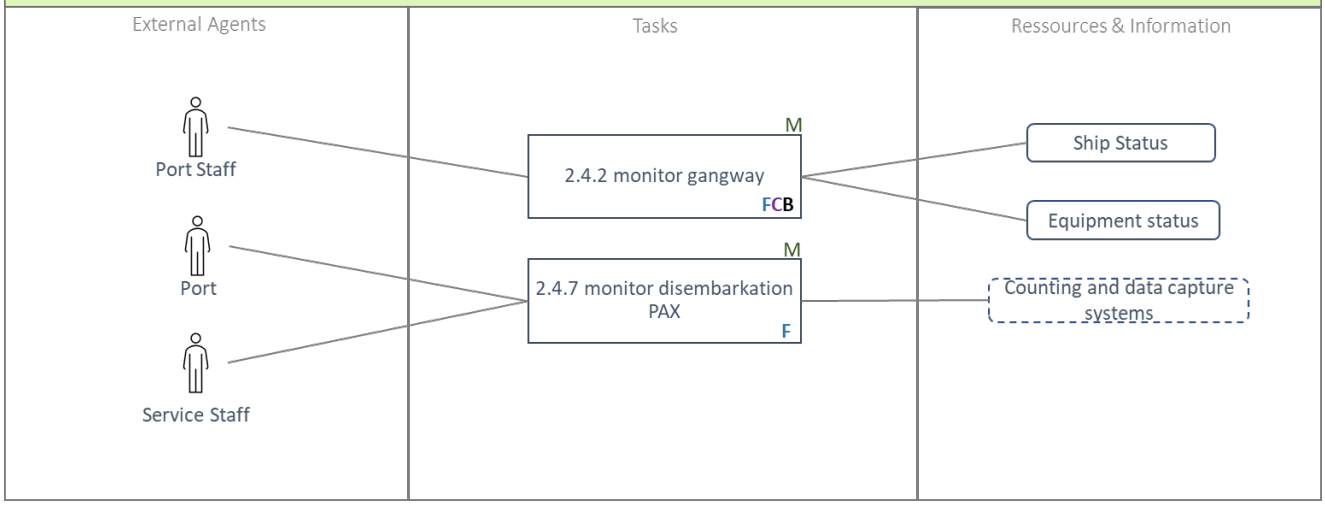
2.3 Cargo Discharging

2.3.2 Cargo Discharging



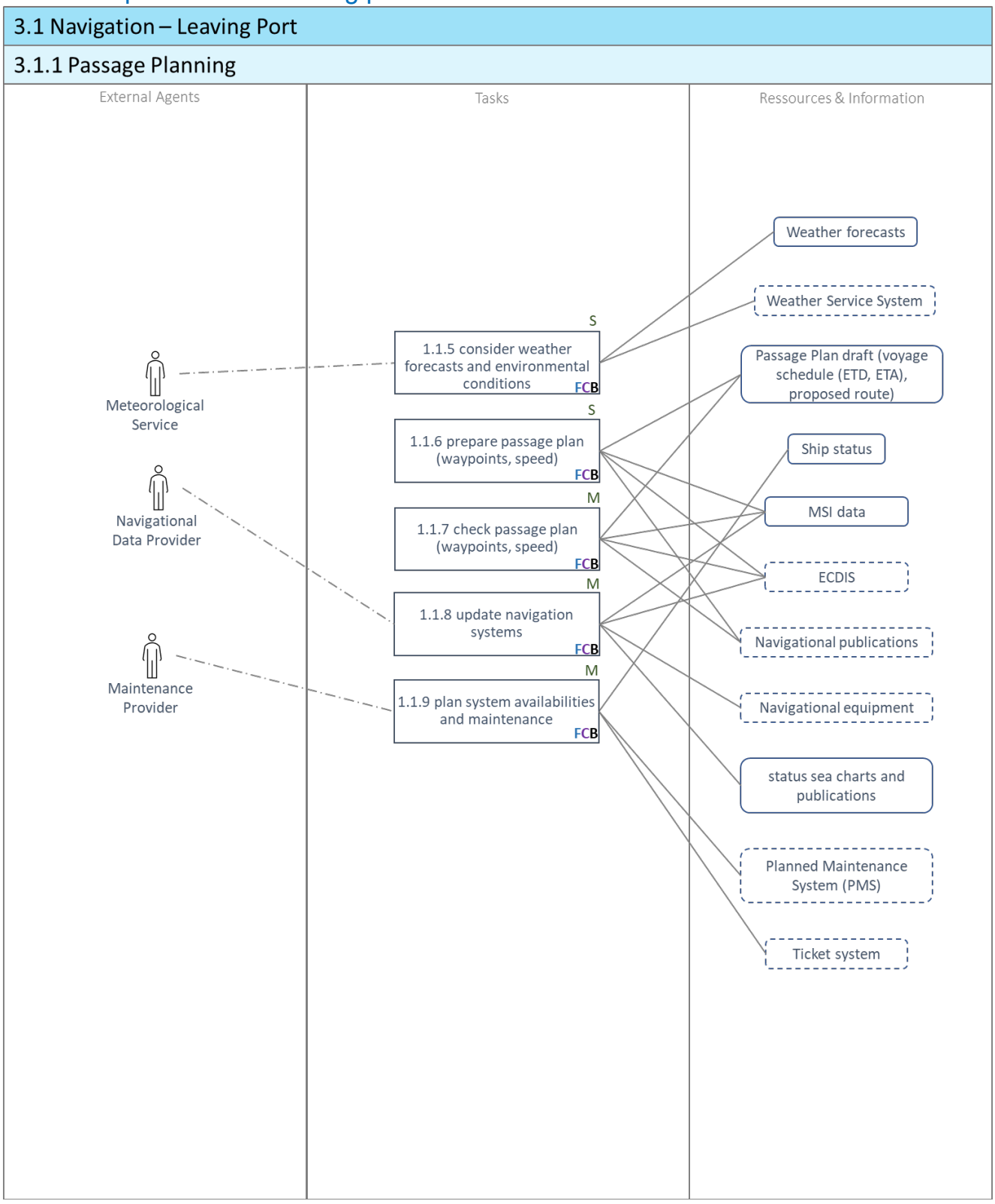
2.3 Cargo Discharging

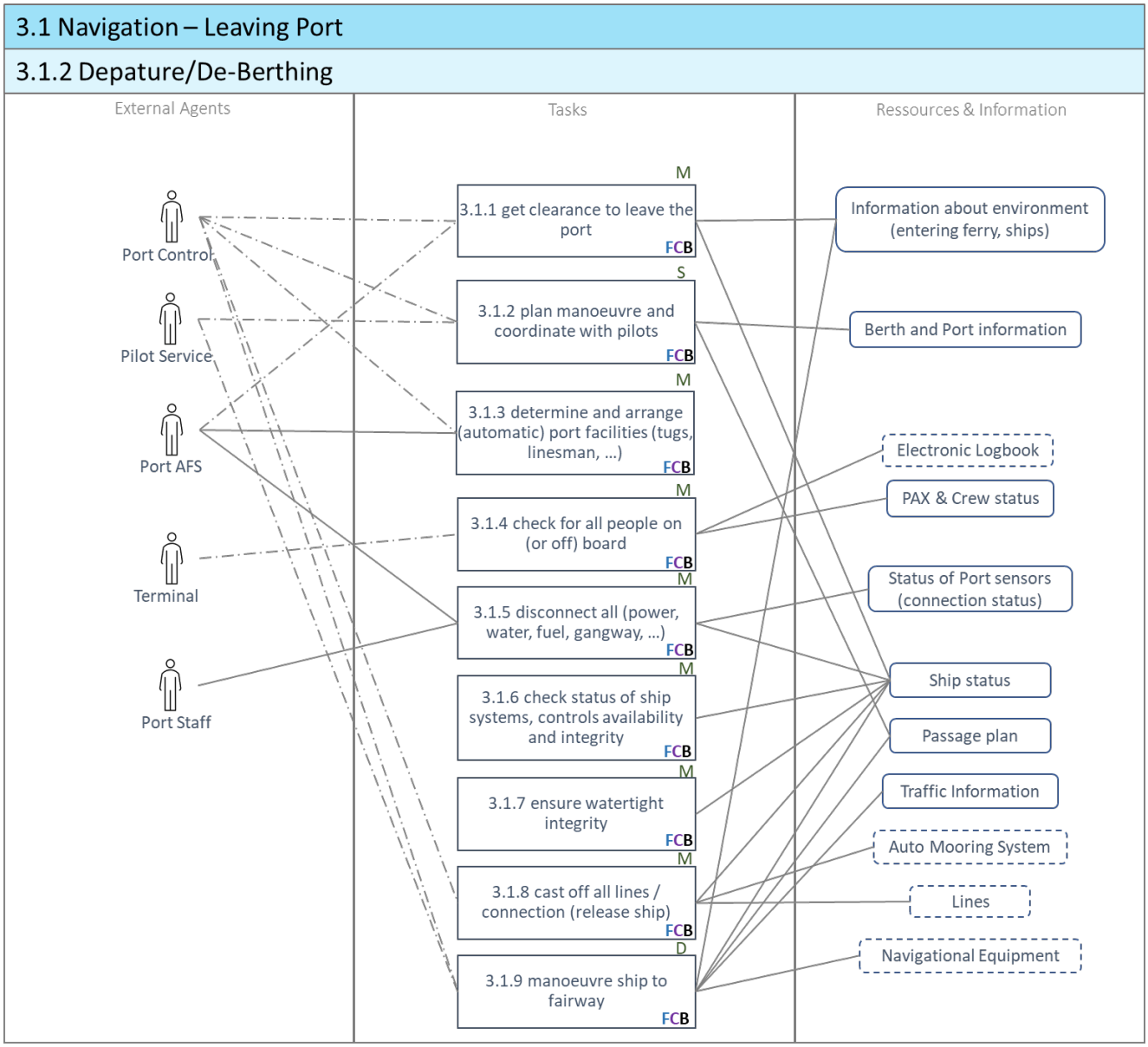
2.3.3 PAX Disembarkation



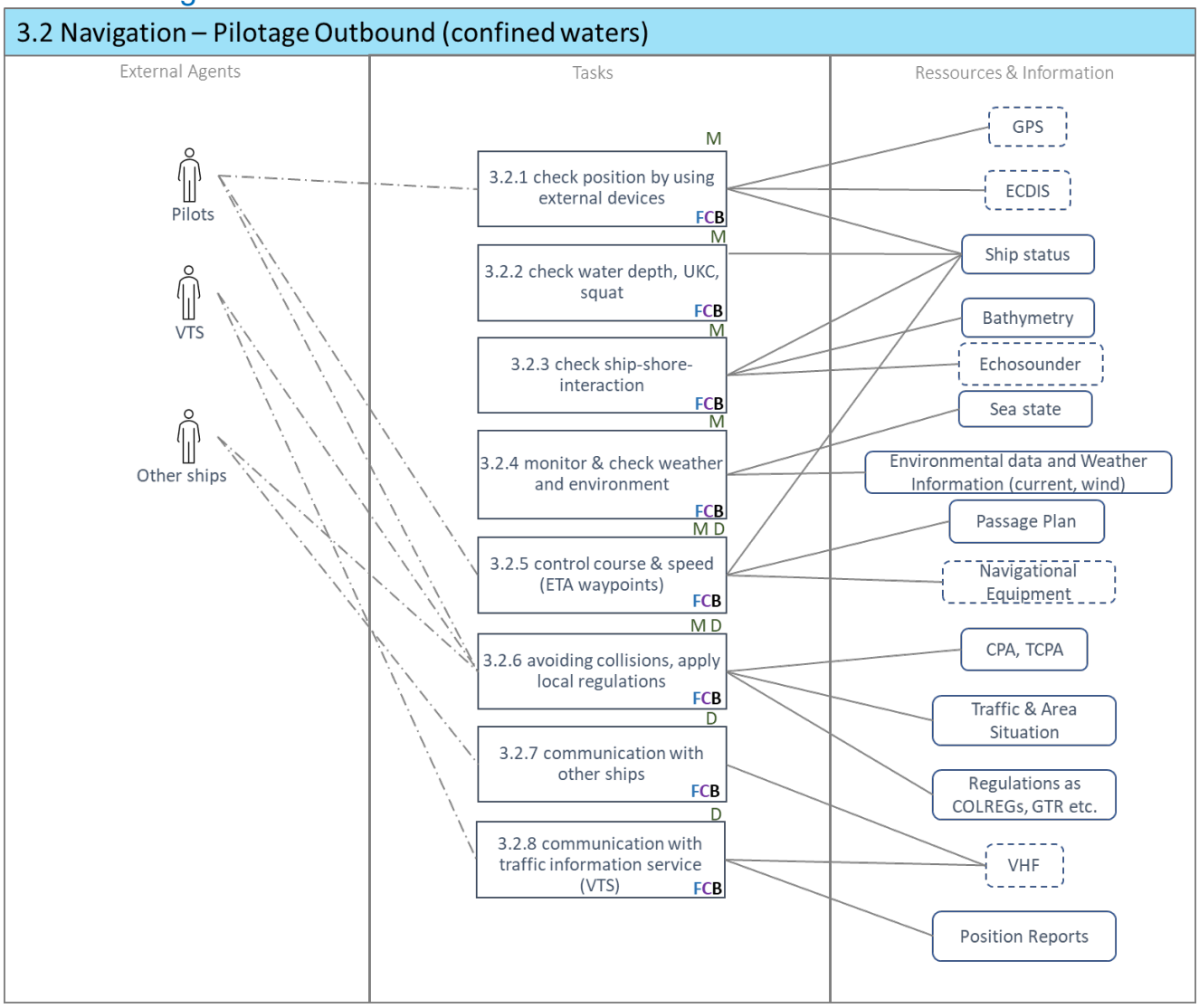
3. Navigation

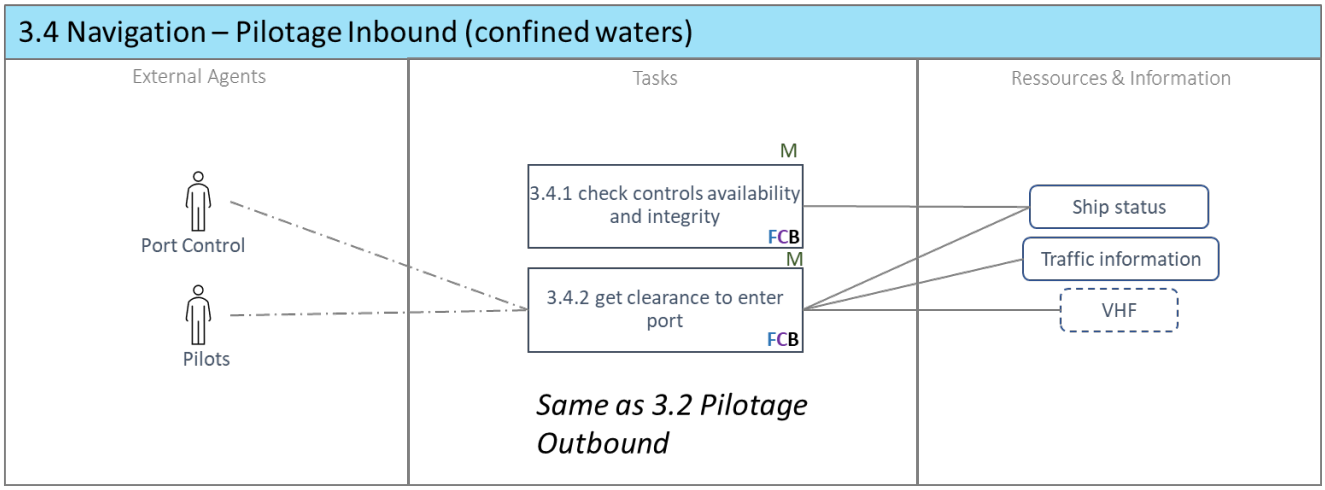
3.1 Preparation and leaving port



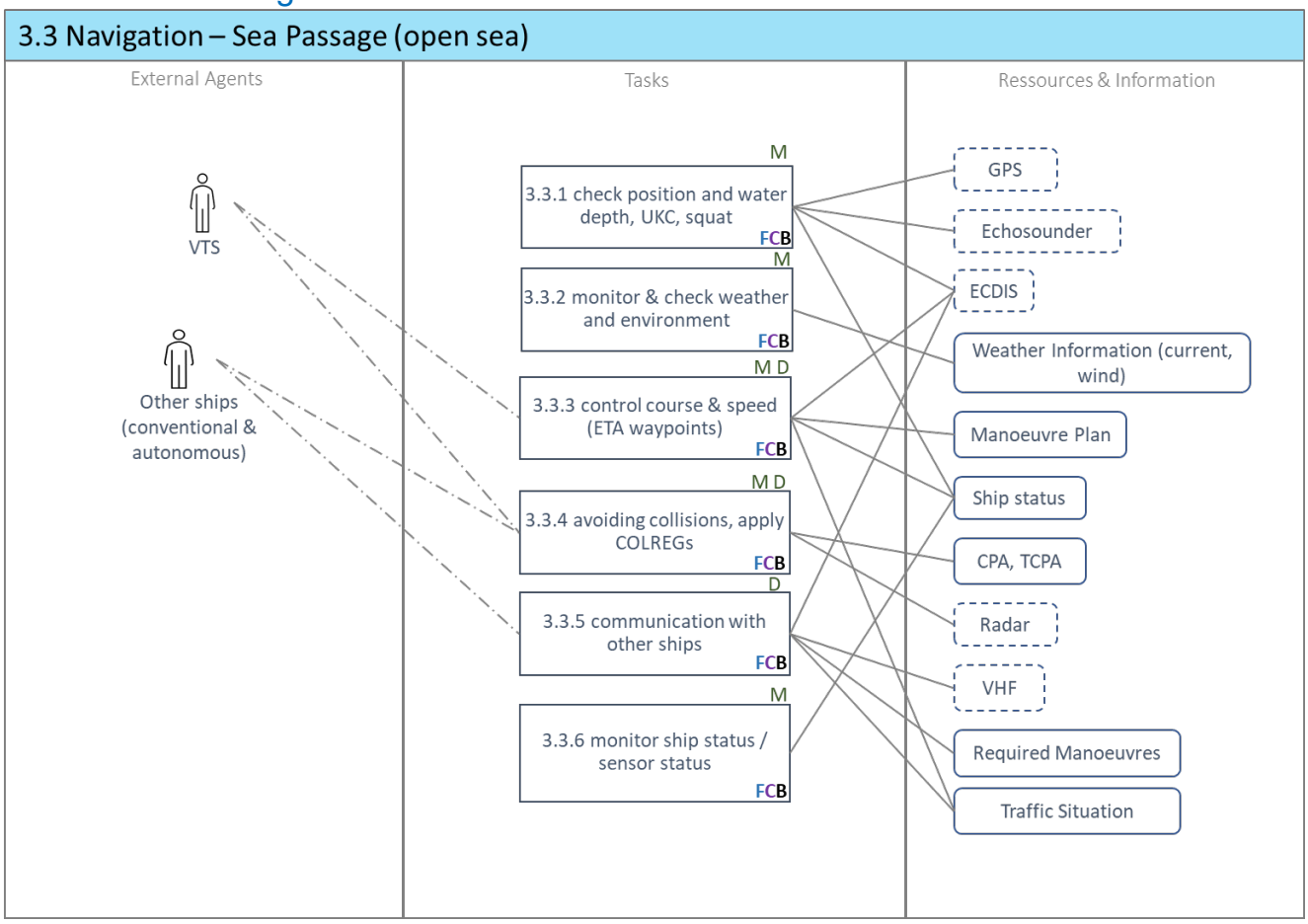

3.1 Navigation – Leaving Port
3.1.2 Depature/De-Berthing
External Agents
Tasks
Ressources & Information
Port Control
Pilot Service
Port AFS
Terminal
Port Staff
M
3.1.1 get clearance to leave the port
FCB
S
3.1.2 plan manoeuvre and coordinate with pilots
FCB
M
3.1.3 determine and arrange (automatic) port facilities (tugs, linesman, ...)
FCB
M
3.1.4 check for all people on (or off) board
FCB
M
3.1.5 disconnect all (power, water, fuel, gangway, ...)
FCB
M
3.1.6 check status of ship systems, controls availability and integrity
FCB
M
3.1.7 ensure watertight integrity
FCB
M
3.1.8 cast off all lines / connection (release ship)
FCB
D
3.1.9 manoeuvre ship to fairway
FCB
Information about environment (entering ferry, ships)
Berth and Port information
Electronic Logbook
PAX & Crew status
Status of Port sensors (connection status)
Ship status
Passage plan
Traffic Information
Auto Mooring System
Lines
Navigational Equipment

3.2 Pilotage inbound / outbound

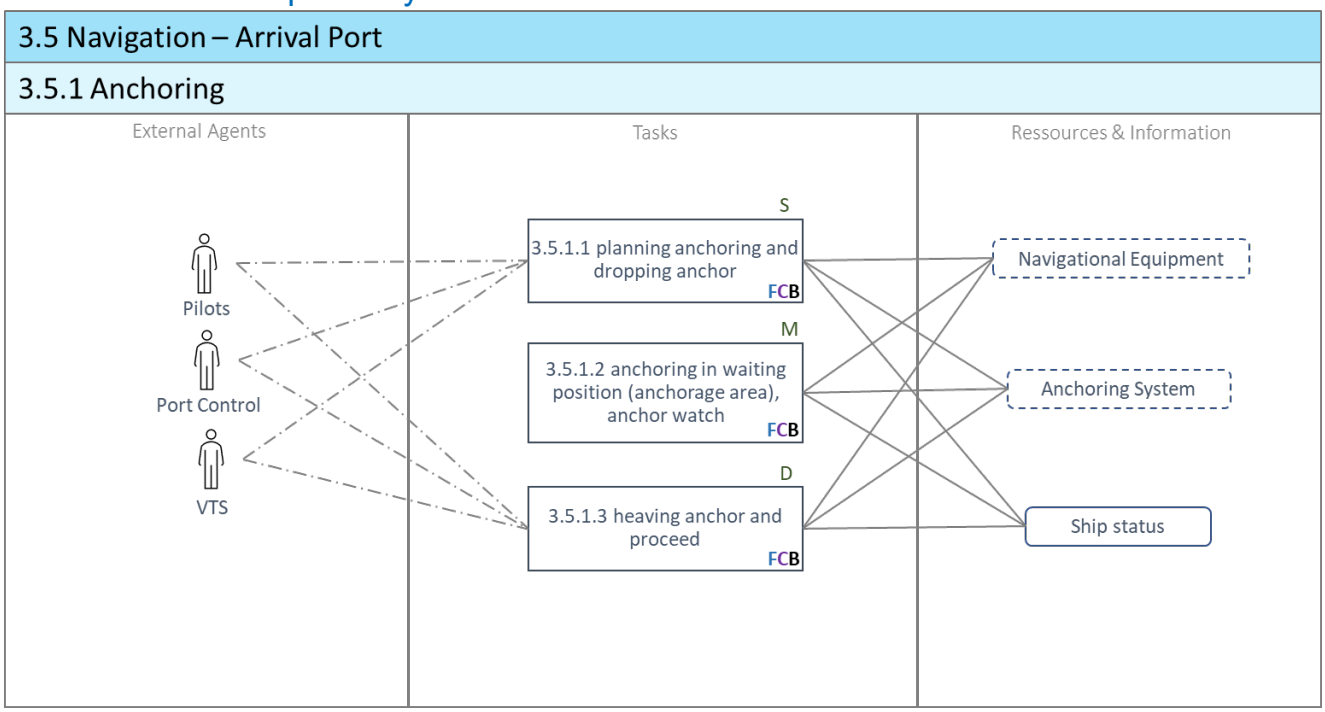




3.3 Sea Passage

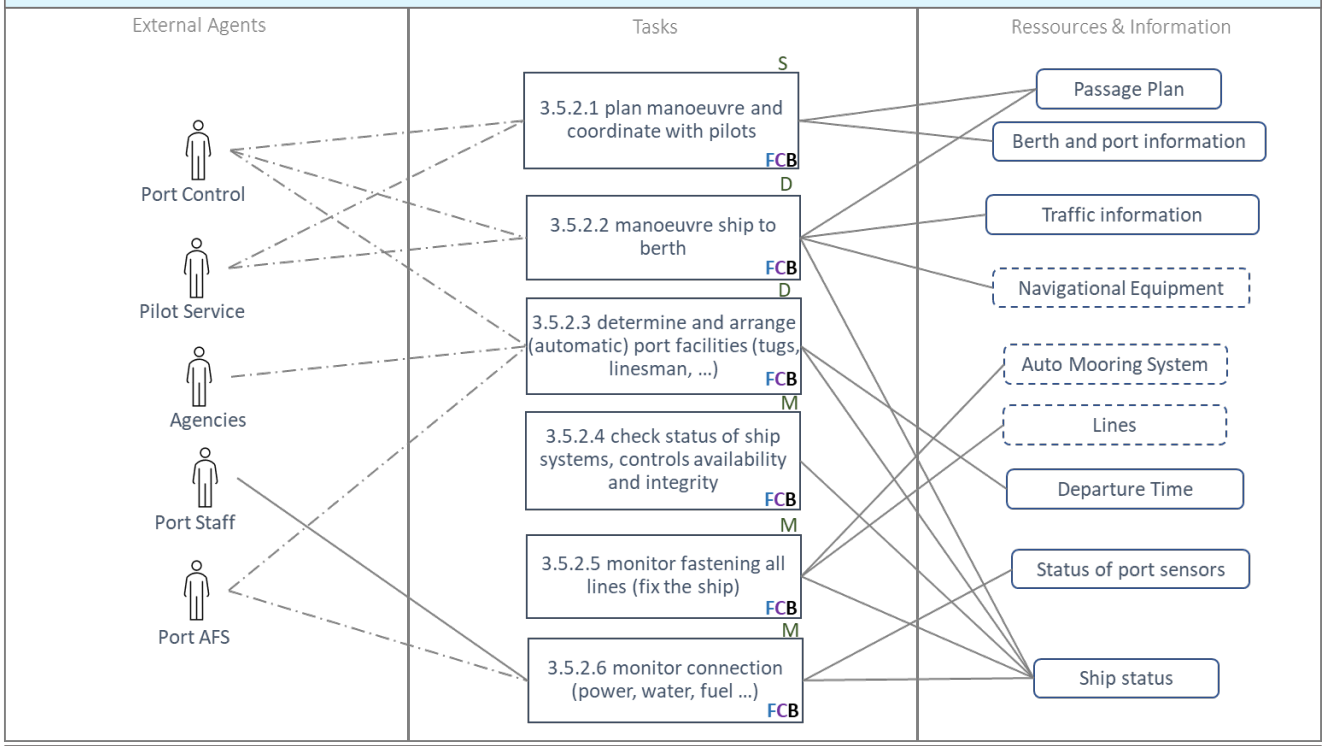


3.4 Arrival and port stay

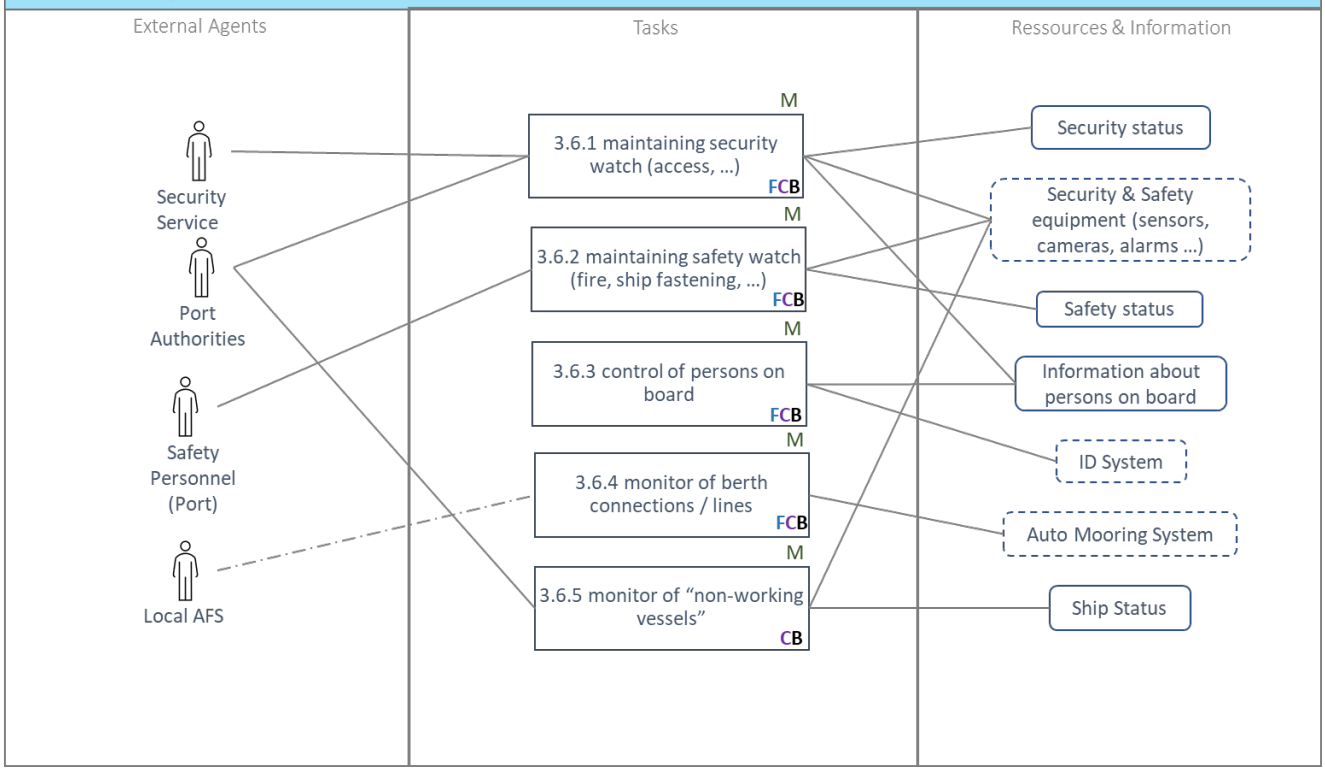


3.5 Navigation – Arrival Port

3.5.2 Arrival/Berthing

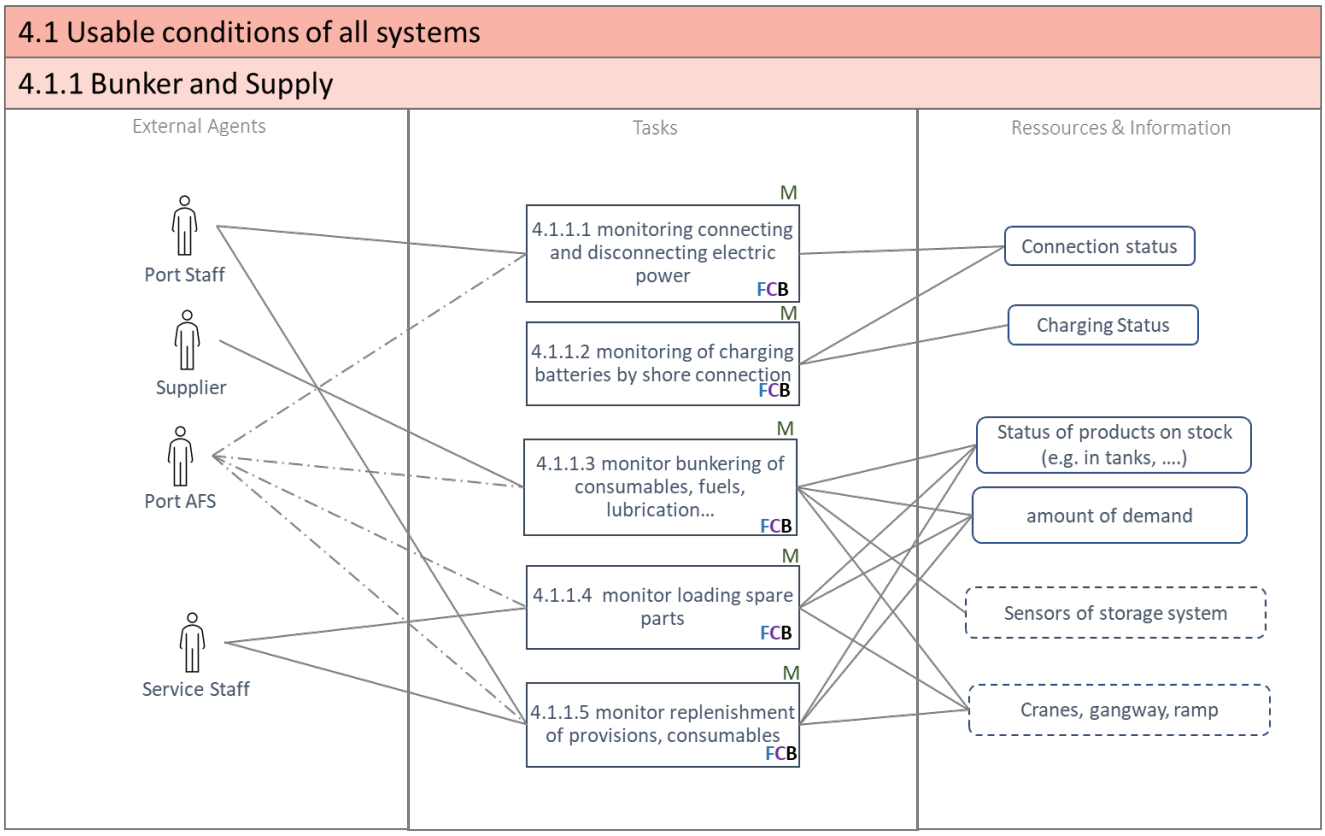


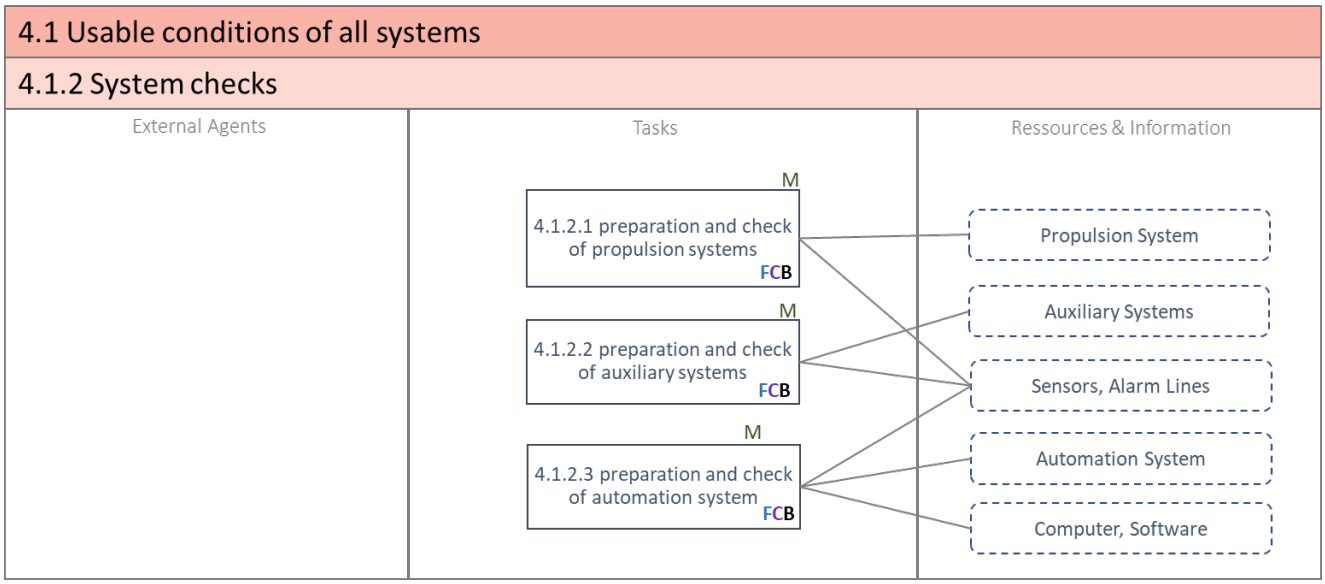
3.6 Port Stay



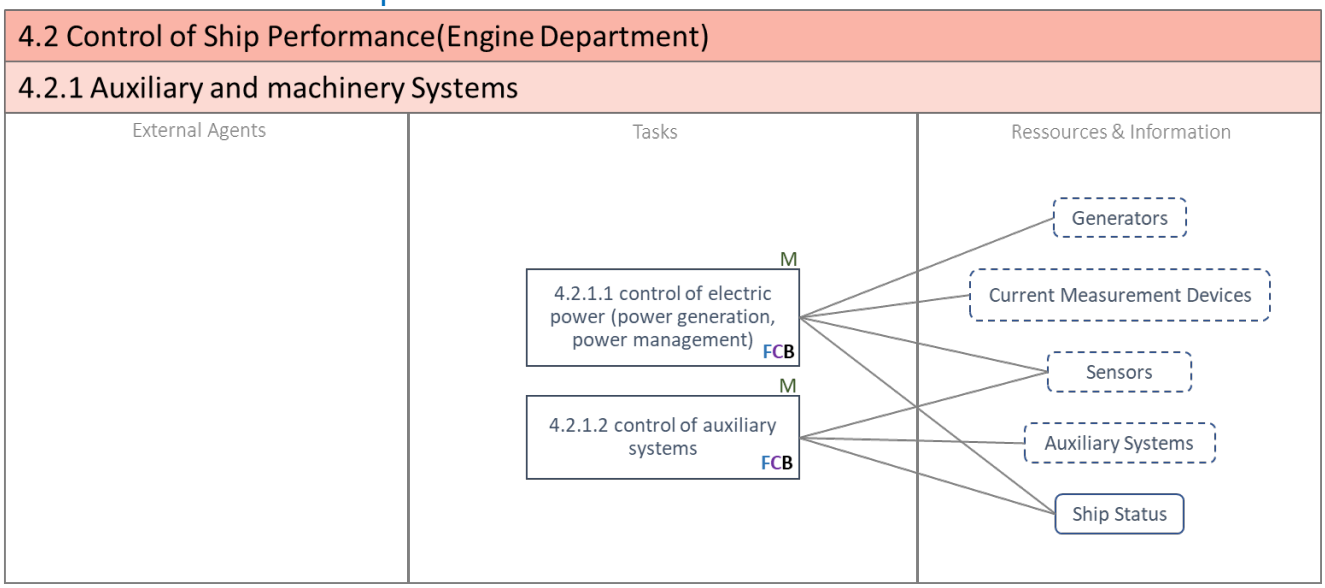
4. Engineering Operations

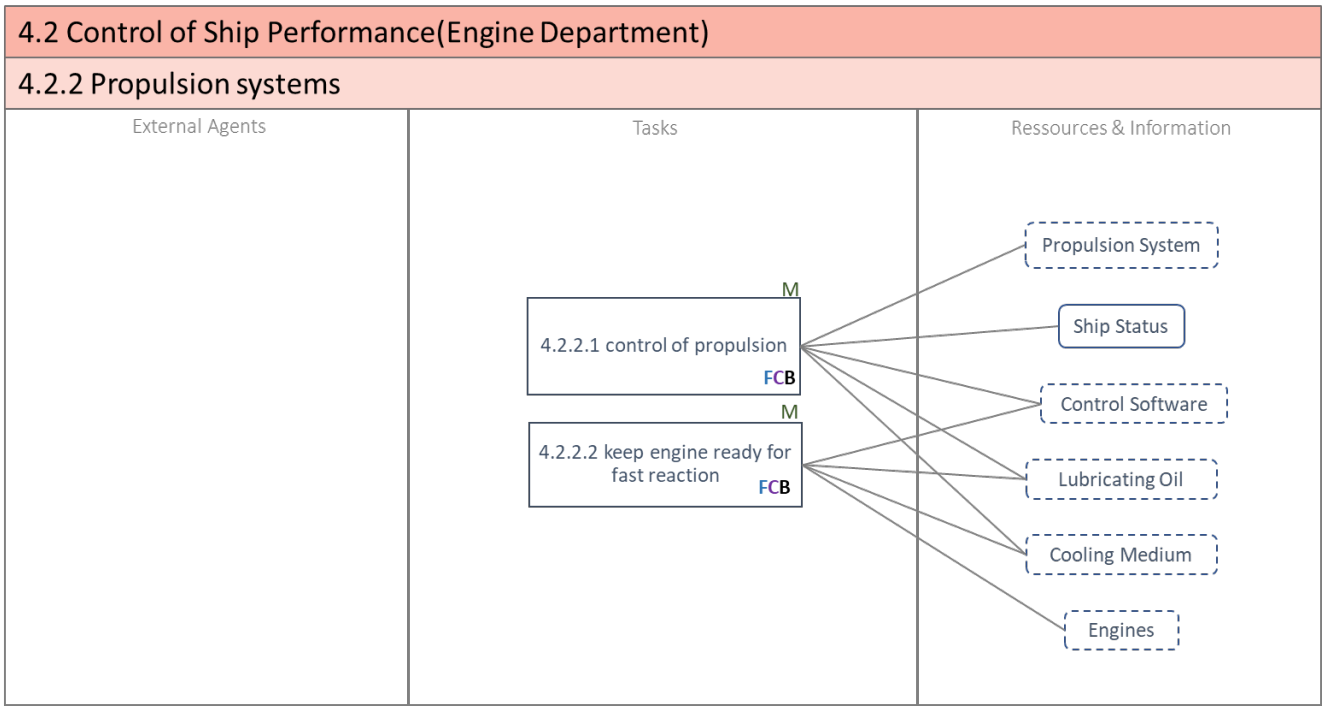
4.1 Usable conditions of MASS system





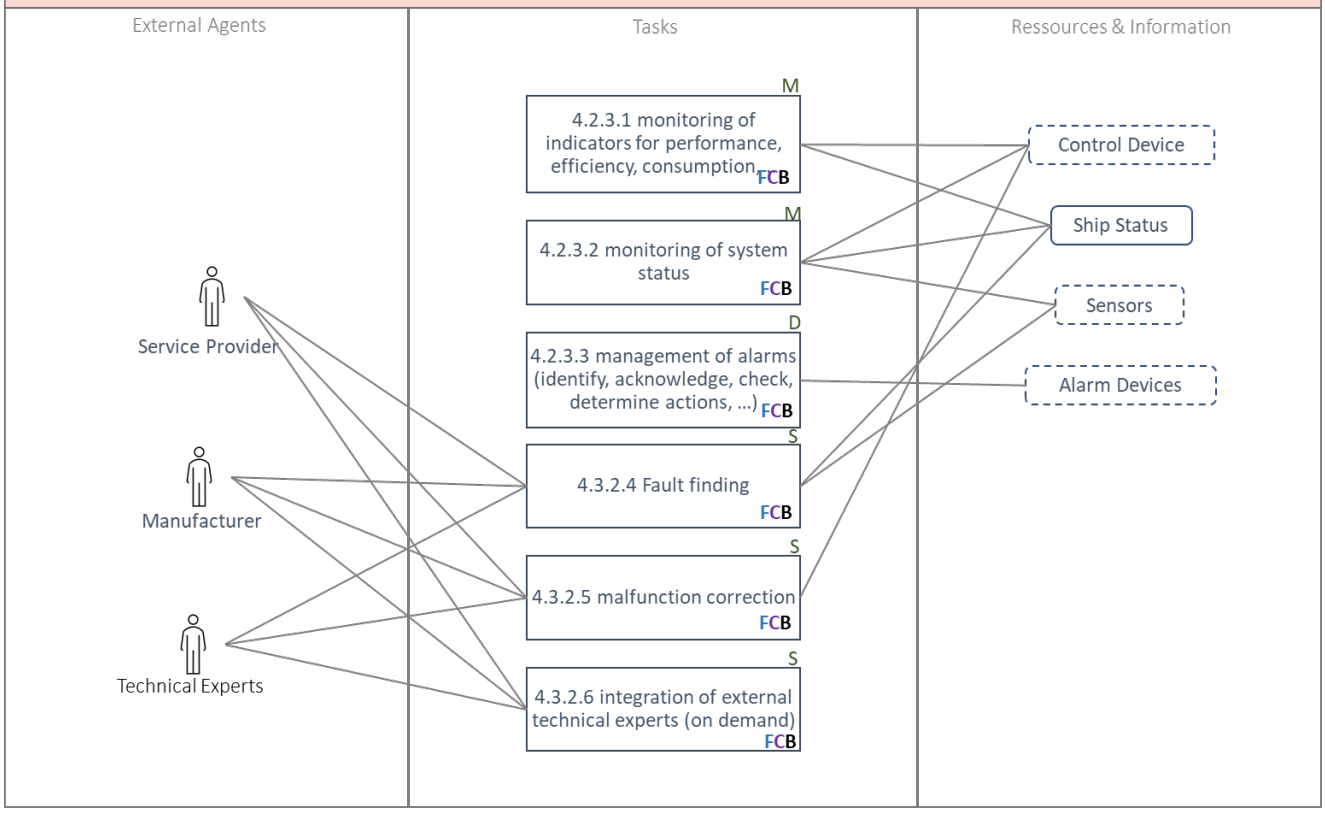
4.2 Control of MASS performance





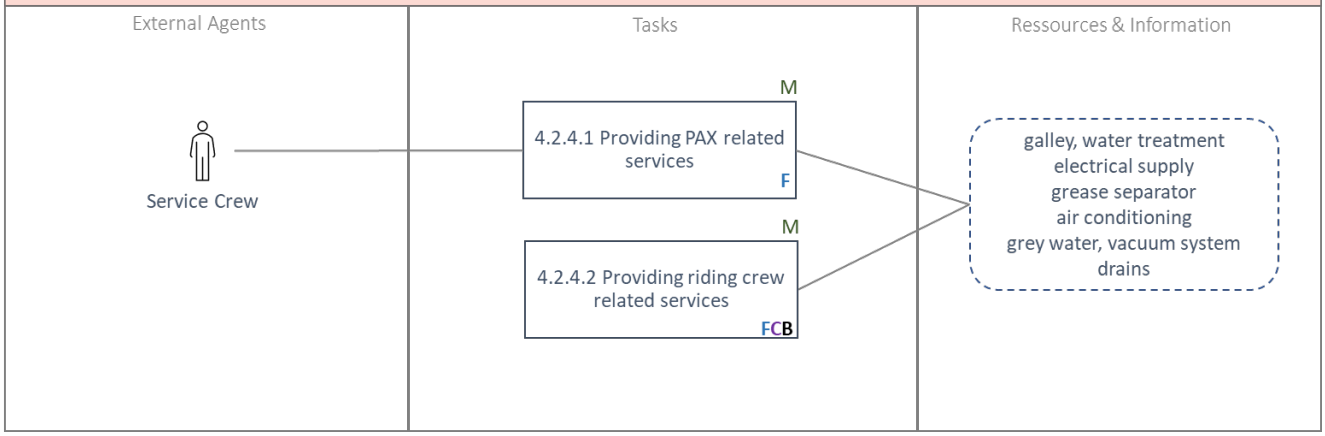
4.2 Control of Ship Performance(Engine Department)

4.2.3 Performance

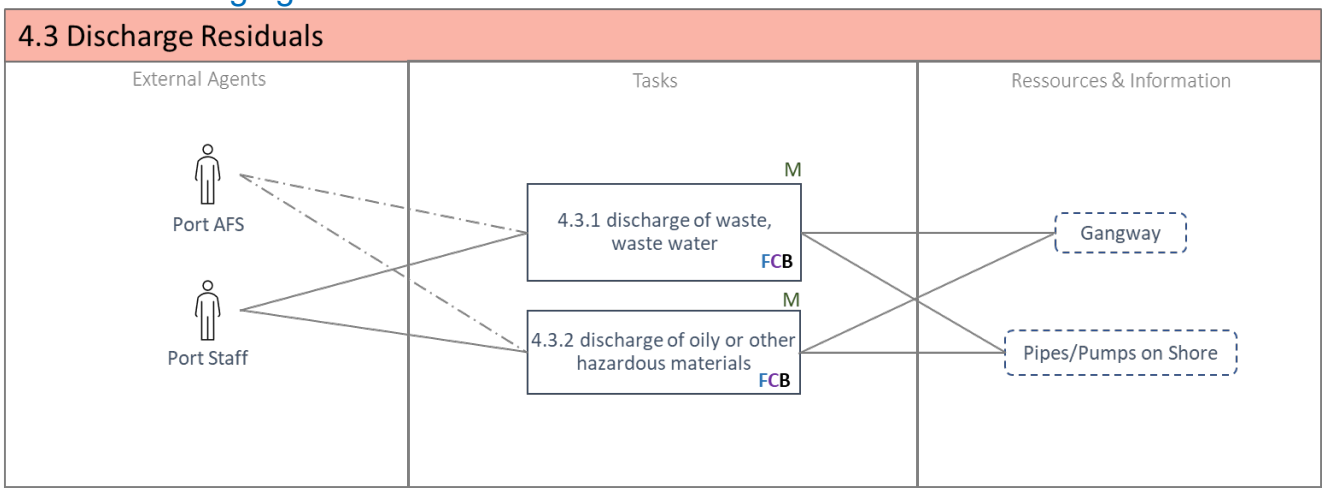


4.2 Control of Ship Performance(Engine Department)

4.2.4 Hotelling

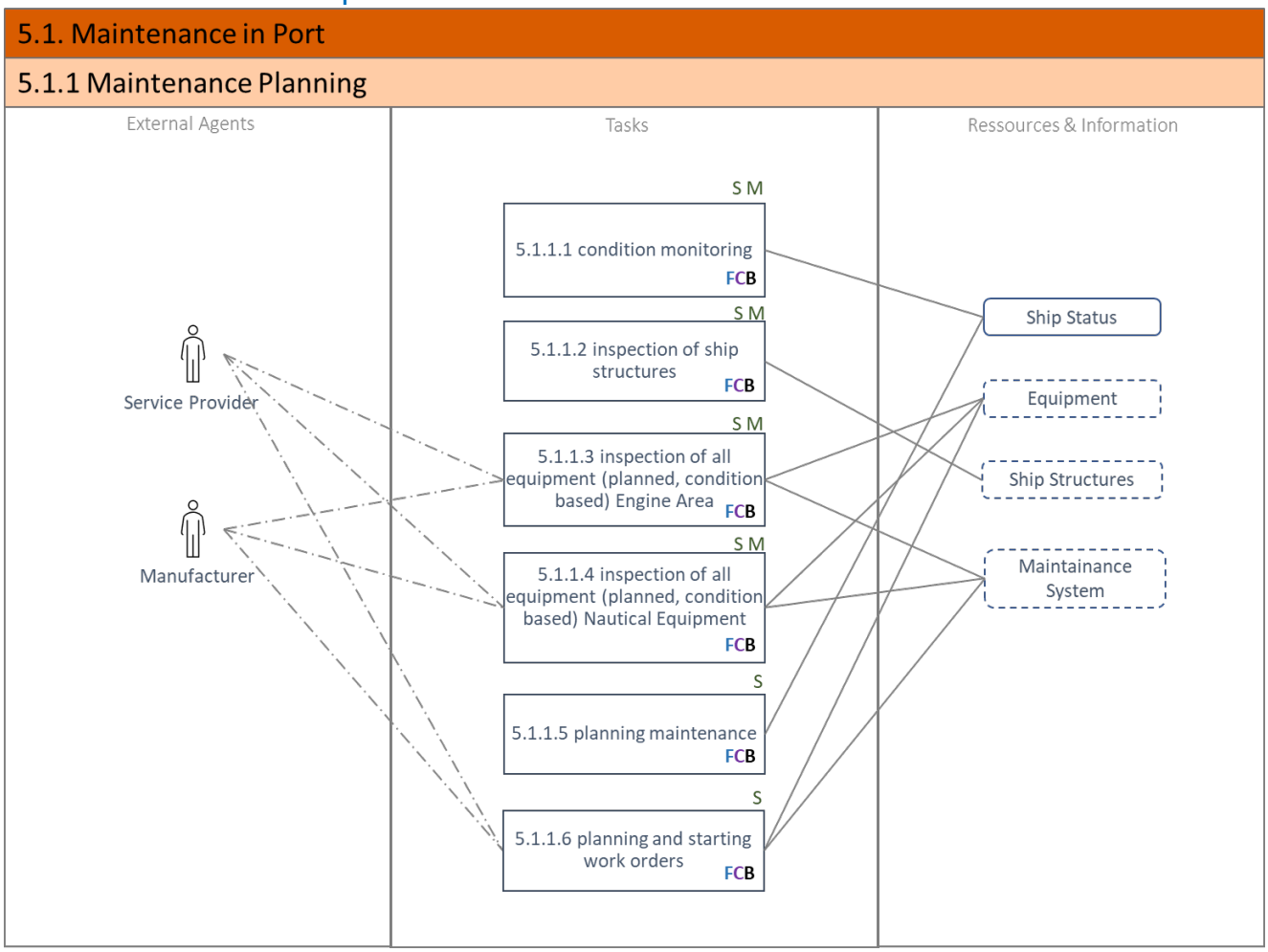


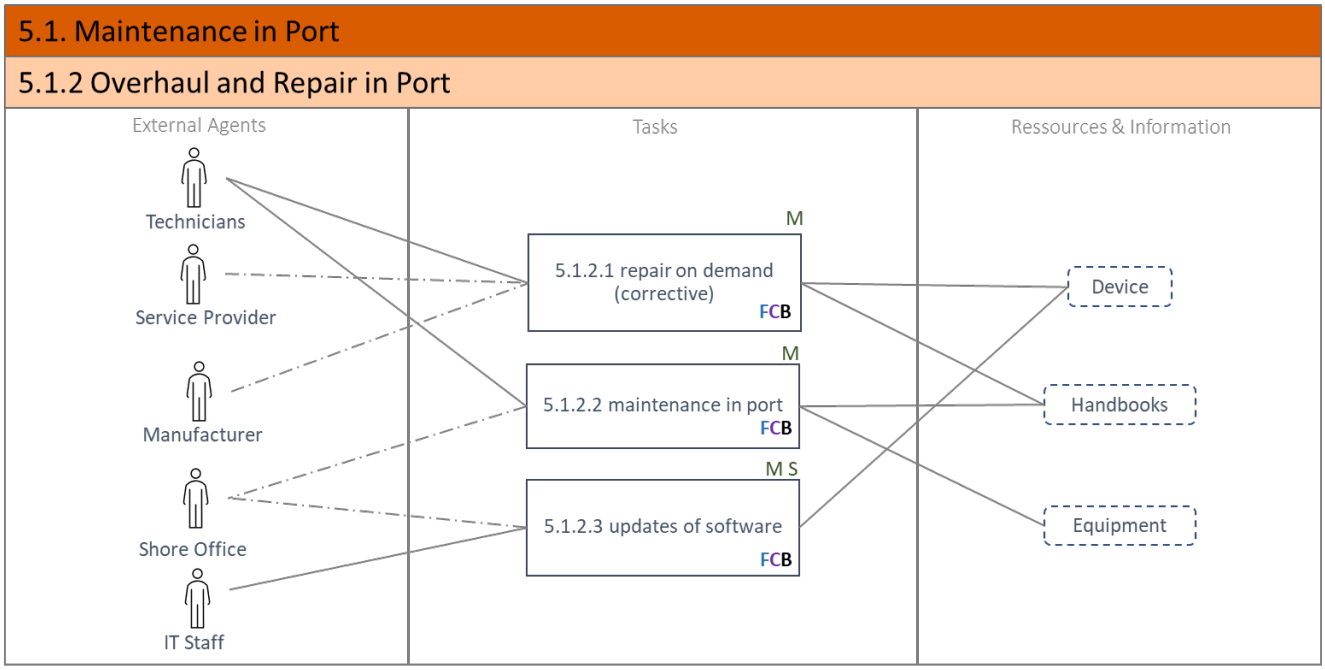
4.3 Discharging residuals



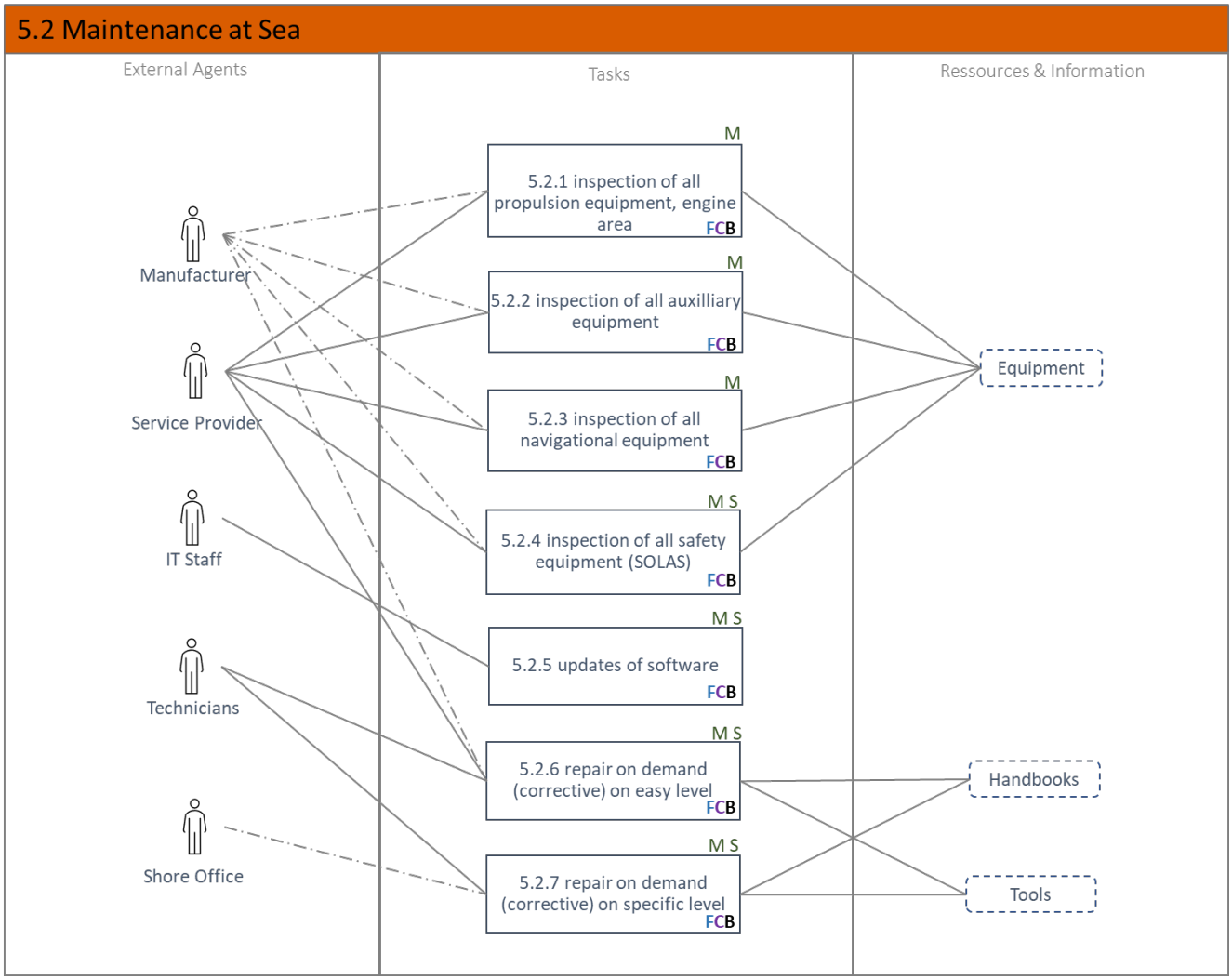
5. Maintenance

5.1 Maintenance in port





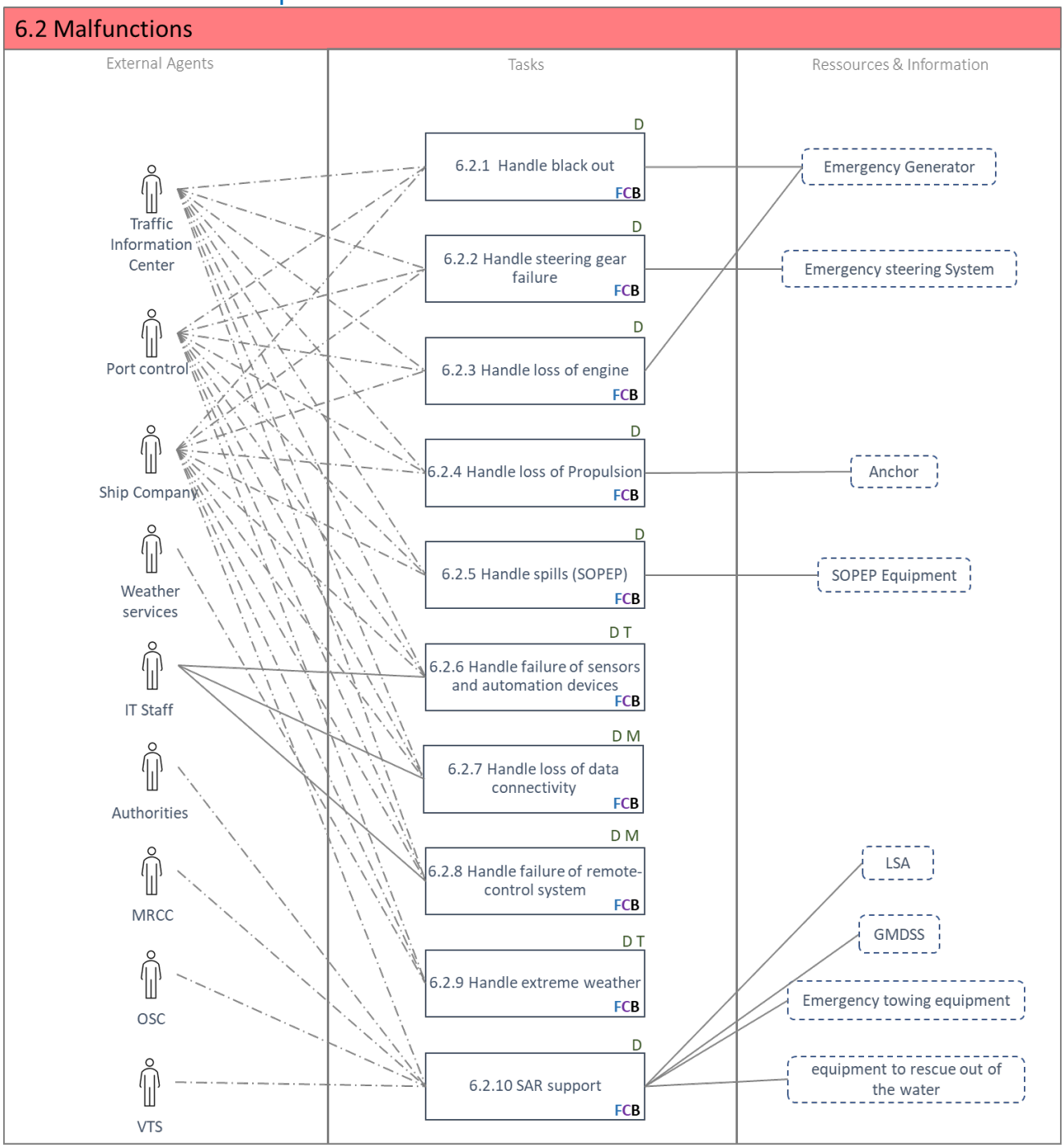
5.2 Maintenance at sea



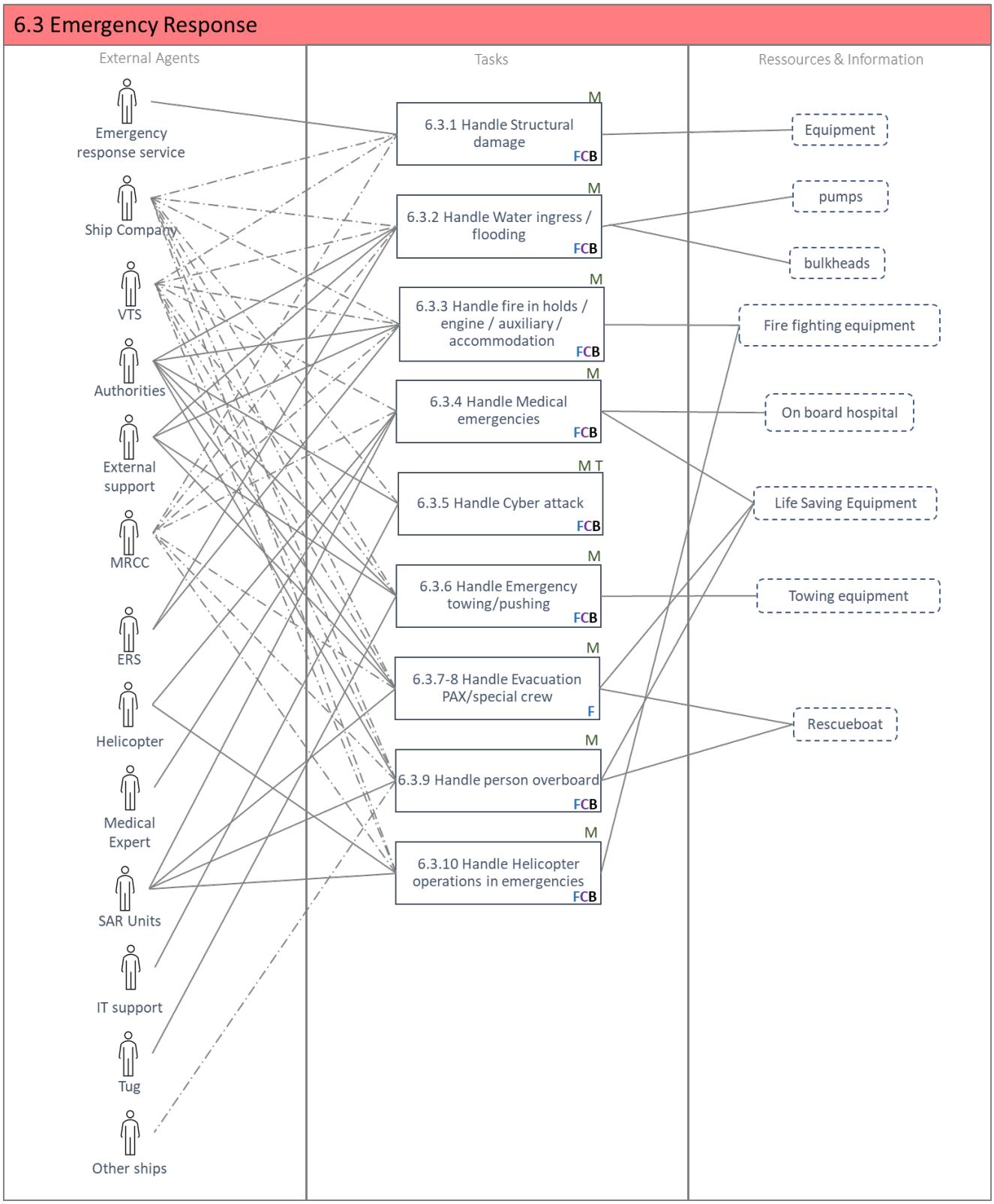
6. Malfunctions & Emergencies

6.1 Emergency preparedness

6.2 Malfunction response



6.3 Emergency response



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