The key process of the MARINE DEPARTMENT are following.

- Shipping Movement.
- Hydrographic Survey
- Possisioning of Buoys
- Dredging Activity
- Port Control Based Communication
- Fire & Emergency
- Pollution Response
- Oil Cargo Operations
Shipping Movement.

A1: Schedule Shipping Movement

A2: Communicate to Pilots/Tugs/Marine Foreman

A3: Arrange Pilot mooring boat

A4: Board Pilot on vessel

A5: Establish Communication with Port Control and Tugs

A6: Operate tugs

A7: Execute Shipping Movement

A8: Moor / Unmoor Ships

A9: Report
**Hydrographic Survey**

Bathymetric & Topographic Survey

B1.1 Receive Instruction from DC

B1.2 Plan & Allocate

B1.3 Calibrate instruments

B1.4 Execute Survey

B1.5 Prepare Chart

B1.6 Submission of sounding charts/Topographical maps in hard/soft copies
Possisioning of Boyes

Alignment of Channel Positioning of Bouys

B2.1 Receive Instruction from HM

B2.2 Confirm With MES

B2.3 Plan

B2.4 Execute work

B2.5 Report
Dredging Activity

C1: Receive Chart with instruction from DC

C2: Sent chart to dredger commander with instruction

C3: Carry out Dredging

Diamond: Own on outside develop vs. Port's own

Branch 1: Outside agency

Branch 2: Dredger
  - Nehru Shatabdi
  - L & T Poclain

C4: Follow WI MAR/C/WI-05

C4: Follow WI MAR/C/WI-01

C4: Follow WI MAR/C/WI-04

C4: Report to MES

Report to DC
**Port Control Based Communication**

1. **Receive Vessel Queries** (D2.1)
2. **Routine**
   - **Yes**
     - **Provide information** (D2.3)
     - **Communicate with vessels in operation** (D2.4)
     - **Give clearance to vessels in movement** (D2.5)
     - **Maintain communication equipment** (D2.6)
     - **Record** (D2.7)
   - **No**
     - **Consult H.M.** (D2.2)
Fire & Emergency

1. Receive Information (E1.1)
2. Mobilise Resources and Proceed to site (E1.2)
3. Act to control Emergency (E1.3)

- Critical
  - Yes:
    - Inform DC (E1.4)
    - Mobilise Additional resources from outside (E1.5)
    - Control Emergency situation (E1.6)
    - Report (E1.7)
  - No:
    - Act with the resources available (E1.7)
Pollution Response

Receipt of information on oil spill

Collect details about spill

Size

Minor

Mobilize necessary resources

Carry out oil combat exercise

Report

Major

Inform coast guard, seek assistance

F2.1

F2.2

F2.3

F2.4

F2.5
**Oil Crago Operations**

Connection/Disconnection of ULA

1. Receive Request from agent
2. Confirm alignment of ULA with manifold
3. Connect ULA
4. Inform KRL to commence pumping
5. Check the system for leak

- If Leak:  
  - Major Leak: Inform V/L to stop pumping and inform DH/EE(M)  
  - Minor Leak: Rectify

- If No Leak:  
  - Monitor Continuously
  - Request for disconnection of ULA
  - Disconnect and park
  - Record