



FCC

Fire Control Center

Operational Role

The Fire Control Center (FCC) is the central command and control node in the NSM Coastal Defence System, responsible for planning, coordinating, and executing long-range precision strike missions. It generates the Recognized Maritime Picture (RMP) or Common Operational Picture (COP) by fusing surveillance data from coastal radars, aircraft, naval units, satellites and tactical data links. This creates a unified situational awareness foundation for coastal defence operations.

Networked Coastal-Defence Architecture

The FCC integrates seamlessly into national and NATO command structures through Link-16, Link-22, JREAP-C, SATCOM and IP-based connectivity. This enables real-time sharing of maritime picture and mission data with Higher Echelon Units (HEU) and allied forces. Its distributed network design supports cooperation across wide geographical areas, including beyond-line-of-sight (BLOS) operations.

Control of Missile Launch Vehicles

Each FCC can command up to three Missile Launch Vehicles (MLV), coordinating their deployment, mission preparation, and engagement. From the FCC, operators distribute mission packages, validated target data, engagement criteria and firing orders. Redundant wired and wireless links ensure mission continuity even in contested electromagnetic environments.

FCC features

Command Node

- Full C2 suite for maritime strike
- Uses RMP/COP for threat assessment

Multiple Launch Vehicles

- Commands up to three MLVs
- Sends mission data and fire orders

NATO-Compliant Interoperability

- Link-16 / Link-22 connectivity
- Multinational operations ready

Distributed Communications

- Fiber, VHF/UHF, SHF, SATCOM
- Supports dispersed battery layouts

Mission-Ready Console (CDC)

- Two-operator 4K touch displays
- Safe, intuitive engagement workflow

Coastal Defence Console (CDC)

Operators carry out mission tasks via the dual-operator Coastal Defence Console (CDC). Each station features a 32" 4K touch display presenting the Tactical Control Picture (TCP), status panels, track data and system health. Fixed-function keys and tactile controls support rapid, safe execution of engagement sequences. The user interface follows a clear workflow that reflects the operational sequence: identify, plan, verify and engage.

Mission Planning & Execution

The FCC's mission-planning system delivers rapid start-up and fast trajectory computation using digital terrain and shoreline data. When target information is received, either from networked sensors or manual operator input, the FCC compiles the mission package and sends it securely to the assigned launcher. This integration ensures the NSM's autonomous seeker can operate effectively even against complex or partially obscured targets.

Hybrid Communication Suite

The FCC incorporates an advanced communication system combining fiber, Ethernet, VHF/UHF, SHF radio links and SATCOM. This hybrid design allows dispersed deployment of launch vehicles and supports large-area coastal coverage with minimal units.

Mobility, Survivability & Flexibility

Engineered for mobile, vehicle-mounted operations, the FCC supports voice communication during movement and emplacement. Combined with multi-path communication and distributed deployment options, the FCC maintains high survivability and mission effectiveness under demanding operational conditions.

Key Elements

- **Battle-Management:** Creates a unified maritime picture from all sensors and links, and directs mission planning and engagements across assigned launch vehicles.
- **Coastal Defence Console:** Offers two 32" 4K operator stations with touch and fixed keys, enabling fast and precise control during engagements.
- **Communications & Data Links:** Combines a Tactical Communication Suite with fiber, VHF/ UHF, SHF and SATCOM, ensuring secure connectivity and NATO-standard interoperability via Link-16, Link-22 and JREAP-C.
- **Fire Control Center:** Integrates communication racks, crypto, servers and mission systems, with the vehicle cabin providing reliable VHF communication while moving and deploying.
- **Missile Launch Vehicles:** Delivers real-time mission data and updates to all launch vehicles.

