

# FIRE DISTRIBUTION CENTER



## FDC - Fire Distribution Center - Ensuring Mission Success

The Fire Distribution Center (FDC) is a proven and fielded Air Defence BMC4I module. With its State-of-the-Art technology it delivers a scalable, mobile and intuitive BMC4I for current and future Air Defence missions. The FDC has an open SW/HW architecture to enable fully netted and distributed operations. The architecture enables insertion of new technology and capabilities.

The FDC ensures BMC4I functionality for any true mixed and layered Air Defence system configuration in national and multi-national scenarios. More than 200 FDCs are delivered as the BMC4I module for NASAMS, Coastal Defence, HAWK and BOC programs.

The FDC is the C2 node of the NASAMS air defence system. The various AMRAAM models, AIM-9X and AMRAAM ER have all been fired from NASAMS. More than 10 different sensors have been integrated with the FDC. Standard tactical data links as well as several national proprietary data links are fully integrated, consequently the FDC enables full interoperability with national, EU and NATO forces.

The FDC has embedded training, simulation and recording functionality. A high degree of commonality, use of Commercial-Of-The-Shelf (COTS) and Non-Developmental Items represent a low risk-low Life Cycle Cost (LCC) to satisfy current and evolving Air Defence requirements. The FDC has reduced manpower requirements compared to competitive systems.

### FEATURES

- The world's leading C2 for Air Defence
- 15 current customers
- Provides flexible BMC4I at any organizational level
- Weapon and Sensor independent
- Interfaces a range of Tactical Data Links, including all NATO standards
- Open Tactical Framework SW, enabling future growth and customer added functionality
- Fully netted and distributed Air & Missile Defence (AMD) operations



## Fire Distribution Center (FDC)

The FDC is characterized by its intuitive advanced fire control system with hard real-time data handling. The intuitive Man-Machine Interface provides clarity and mitigates information overload. The open and modular SW/HW architecture enables situational awareness across domains, providing merged Offensive and Defensive Precision Fires capabilities in a true Plug & Fight tailorable solution. The FDC has demonstrated C2 and Fire Control Capability for Multi-Domain Fires. A network of FDCs ensures shared awareness in the Area of Operations.



The system performs data link management, sensor control, air picture production, track identification and classification, friendly protection, threat evaluation, weapon allocation, weapon & engagement control and kill assessment. In addition an embedded or stand-alone Mission Support Tool (MST) is provided to accelerate the commander's decision making process regarding deployment planning, monitoring current system status, and for in-depth analysis and debriefs.

## Flexible Configuration

The same baseline FDC is used in multiple programs in various roles, delivering a true multi-domain capability. Functionality, interfaces and number of work stations can be selected and tailored to customer requirements. For mobility the FDC is shelter and vehicle independent and can also be delivered as a non-shelter version. Static versions can be mounted tailored to customer requirements based on the FDC interior. The following FDC configurations are available:



**BOC** – Battalion Operation Center. A BOC can control multiple Air Defence Battalions or other weapon systems.

**GBADOC** - Ground Based Air Defence Operation Center. A Higher Echelon GBAD C2 unit including a Current operations cell, a Planning cell, a Communications cell and real-time engagement operations.



**BFDC (HAWK)** - Battery FDC in HAWK role to control up to 2 HAWK firing sections and network up to other FDCs in the battery.

**NASAMS FDC (AMRAAM)** - The FDC in Fixed Wing, Helicopter, UAV, UCAS, Cruise Missile Defence role with defined tactical data links, sensor and weapon interfaces. Primary effectors are AMRAAM, AMRAAM Extended Range and AIM-9X.

**FDC-S (SHORAD/VSHORAD)** - Optimized to control and coordinate SHORAD/VSHORAD weapon systems.

**FDC - Coastal Defence** – Interfaces and controls sensors and weapons for Coastal Defence and surface-to-surface operations firing the Naval Strike Missile (NSM).

**FDC - Precision Fires** - Optimizing the use of an Army tactical air space to coordinate Multi-Domain Fires. The FDC gives the Army Battle Commander the tool he needs to coordinate all Precision Fires resources in real-time.



## Interoperability and integration - a key FDC capability

The FDC truly integrates systems, sensors and effectors into ONE system. Higher Echelon Units, adjacent units, sensors, effectors and other battle forces are integrated through the mature and fielded Network Access Nodes utilizing fielded legacy protocols.

The FDC has a wide range of fielded logical decision support tools ensuring ONE Integrated Air Picture, Common Operational Picture, Threat Evaluation and Weapon Allocation, providing a consistent Battle Command for all forces.

The integration of tactical data links in the FDC handles relevant messages according to the standard message catalogue, and the implementation of functionality in the C4I software, to support the needed level of system interoperability. Such functionality undertakes the sequence of events, leading to maximized coordination between the FDC and other actors in the Multi-Domain Battle Space.

KONGSBERG DEFENCE & AEROSPACE AS  
P.O. Box 1003  
N-3601 Kongsberg, Norway

Phone: +47 32 28 82 00

office.kda@kongsberg.com

