

MAJIIC Coalition Data Broker (CDB)



Providing coalition situation awareness and information sharing

Key Features and Benefits

- Improves situational awareness across coalition partners
- Enables network interoperability and sharing of sensor data
- Coordinates tasking, planning, monitoring, and management of real-time ISR sensor and exploitation assets
- Supports the development of future North Atlantic Treaty Organization and U.S. national doctrine
- Enables interoperability between Distributed Common Ground System (DCGS) and coalition partner systems

The modern battlefield environment is constantly changing placing a higher value on gathering surveillance and reconnaissance information that will lead to actionable intelligence. This information provides a better understanding of our adversary's intentions and the positions of their units. Without situational awareness theater commanders are blind to important battlefield conditions.

The Multi-Sensor Aerospace-Ground Joint Intelligence, Surveillance and Reconnaissance Interoperability Coalition (MAJIIC) project is a multinational effort to maximize the military utility of scarce and expensive surveillance and reconnaissance resources. The development and evaluation of operational and technical sources will achieve interoperability with a wide range of intelligence, surveillance and reconnaissance assets.

Raytheon developed the United States MAJIIC Coalition Data Broker in close cooperation with the Distributed Common Ground System (DCGS) program along with NATO Consultation, Command and Control Agency (NC3A). NC3A is the facilitator for the MAJIIC project and provides overall technical management. The nine nations presently participating in MAJIIC are Canada, France, Germany, Italy, Netherlands, Norway, Spain, United Kingdom and the United States.

The MAJIIC Coalition Data Broker provides interoperability and harmony between the United States DCGS environment and the NATO coalition environment. The Coalition Data Broker provides the technology to interface MAJIIC functionality with the DCGS Integration Backbone (DIB). Harmonizing software makes the two enterprises transparent to each other while also providing cross-enterprise coalition data sharing.





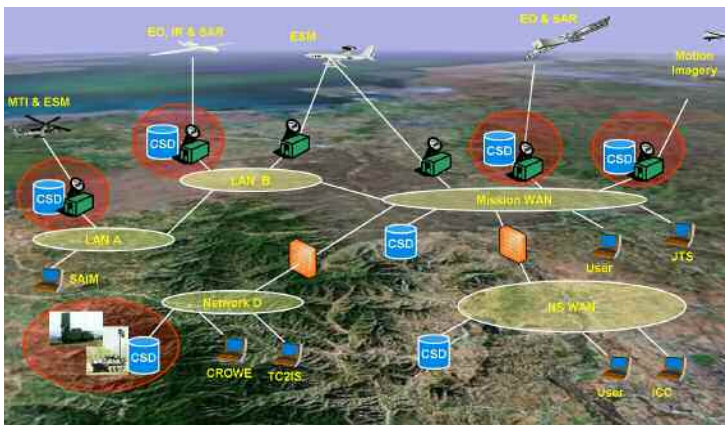
The MAJIIC Coalition Data Broker provides flexible interoperability ranging from small tactical systems to strategic multi-user systems utilizing many sensor platforms. Systems manned or unmanned can include space-based, airborne, ground-based or maritime. The sensor data types include ground moving target indicator radar, synthetic aperture radar, electro-optical and infrared imaging and video sensors, electronic warfare support measures sensors, and artillery locating radar.

The MAJIIC technology is:

- Suitable for near term application
- Mature and available
- Unique from existing systems
- Transformational with innovative concepts of operations

System Description

- Compliant with the NATO Network-Enabled Capabilities (NNEC) initiative
- Enables interoperability between United States DIB technology and NATO MAJIIC Coalition Shared Database (CSD) servers
- Uses NATO standardization agreements (STANAG) as the common format and exchange mechanisms, these include:
 - ▶ STANAG 4545: synthetic aperture radar, electro-optical and infrared
 - ▶ STANAG 4607: ground moving target indicator radar
 - ▶ STANAG 4609: electro-optical and infrared imaging and video sensors
 - ▶ STANAG 5516: track management messages



MAJIIC has implemented an interface based on STANAG 4559 (NATO Standard ISR Library Interface) for metadata-based access to and retrieval of archived data from any Coalition Shared Database (CSD) throughout the net centric MAJIIC environment.

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