



## CONCEPT-TO-CAPABILITY (C2C)

In the modern battlespace tactical superiority is achieved by information sharing, information access and speed facilitated by networked forces.

The C2C facility developed by SELEX GALILEO offers a synthetic environment where integrated sensor solutions can be developed and deployed, providing cost-effective and demonstrable operational capability across disciplines as diverse as C4ISTAR, land, maritime and air Operations, Electronic Warfare (EW) and Homeland Security (HLS).

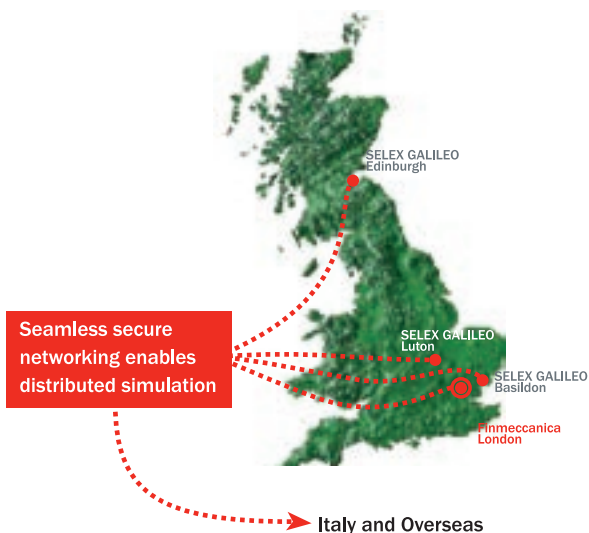
### FINMECCANICA C2C NETWORK

The C2C architecture has been designed to allow secure connectivity and interoperability across the Finmeccanica network.

#### KEY BENEFITS

- Provides a synthetic environment for the demonstration of new and evolving concepts for sensor development and integration within a defined enterprise architecture
- Supports the development of sensor products and systems using hardware-in-the-loop (HWIL)
- Connectivity to platforms supporting system integration
- Enables Synthetic Environment Based Trials (SEBT) at both sensor and platform levels using live and simulated data feeds
- De-risking at an early stage of a programme lifecycle.

The C2C facility uses state-of-the-art modelling and simulation software and also incorporates comprehensive data-bases, including Geographic Information Systems (GIS), EW and Intelligence data.





Representative graphics from the C2C synthetic environment

**FACILITY OVERVIEW**

C2C has been designed using the Finmeccanica Synthetic Environment Advanced Management System (SEAMS). SEAMS provides common technological platforms, protocols and network architectures which are used by companies within the Finmeccanica Group to develop synthetic environment and simulation facilities that are interoperable with each other.

SEAMS will enable the C2C facility to “plug-in” to the Finmeccanica community creating almost unlimited access to a diverse range of sensors, systems and platforms. Additionally, the C2C architecture has been designed to allow scenarios across a broad federation of Government facilities, research laboratories and platform simulators spanning multiple security domains.

C2C is designed to support all stages of a sensor product or system lifecycle, from very early concept demonstration through development (particularly integration and qualification) to in-service support; training, mission rehearsal, evaluation of product enhancements and technology insertion benefit analysis. This approach enables SELEX GALILEO to provide a unique capability to support “Tier 0/1 level” integrators with high fidelity (often hardware-in-the-loop derived) data “feeds” across all sensor types for all environments at any stage of a system development lifecycle.

The flow diagram on the right illustrates the benefits that the C2C facility can bring to each stage of the system development process.

