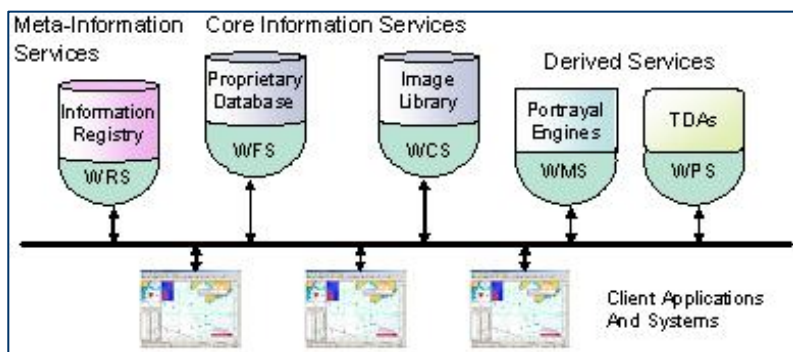


## Envitia

As world leading geospatial information subject matter experts Envitia has provided impartial advice to the MoD in areas such as Spatial Data Infrastructures (SDI) and interoperability, geospatial

Envitia have been very successful in defining structures in XML and UML which can then be mapped to both relational storage models and to exchange standards using GML or other geospatial encodings.



**Components of an SDI**

metadata, Services Oriented Architecture (SOA), Common Core Combat Systems (CCCS) architectures and other key areas of specialist knowledge.

## Data Modeling

A key component of any SDI is data modeling and Envitia has extensive experience in geospatial data modeling using relational modeling, UML and XML derivatives such as GML.

Modeling activities have included dealing with complex vector formats, relational structures and gridded data in 2D, 3D and 4D as well as sophisticated coordinate systems such as 3D spherically organized grids and Triangulated Irregular Networks.

## Envitia

- A world leading provider of geospatial solutions and COTS software, Envitia works with the Ministry of Defence, other allies and leading system integrators.
- A UK privately owned company with over 15 years experience of delivering geospatial solutions and software for mission critical systems plus technical advice to deliver Networked-Enabled Capabilities. Annual turnover in excess of £5million.
- An approved MoD company with secure premises.
- An approved supplier in accordance with MoD's Framework Agreement for Technical Services (FATS) and NATO's Basic Ordering Agreement (BOA).

## Data Modeling Examples:

Envitia has a proven track record of delivering world-class advice and research on time and budget. Two key examples are presented here:

### MoD's GeoInt Integrated Reference Architecture (GIRA)<sup>1</sup> Research project:

MoD recognizing the need to unify geospatial information provision awarded Envitia this three year research project. GIRA seeks to establish a defense wide geospatial information model with the intent to support future geospatial information delivery, allowing all defense systems and users to access integrated, coherent, complete and up-to-date geospatial information.

This project is seen as a key enabler as MoD moves towards NEC within a SOA environment as well as a de-risking activity for Environmental Fusion Capability (EFC) within the DABINETT program.

<sup>1</sup> Previously known as 4D Environmental Information Cube.

## GeoInt Integrated Reference Architecture



### NATO Core GIS Data Preparation:

Envitia, acting as the prime contract, has undertaken one of the largest modeling, data capture and data conversion exercises to OGC and ISO compliant open geospatial standards to date.

The project also involved the development of one of the largest geospatial ontology models created to date. The project utilizes Envitia's significant knowledge and technologies in the area of automated data conversion and quality control as well as in the area of open SDI, reinforcing Envitia's position as a leading specialist in high performance distributed geospatial solutions.

Envitia have also conducted data modeling work packages for MoD and UKHO including GML vector schema development and 4D gridded climatology products and bathymetry.

### The Envitia Team

Through Envitia's combined research, development and consultancy expertise we provide sophisticated technology, innovative research and expert technical advice and support. Combined with our service delivery Envitia offers outstanding support, always there for our customers, and willingness to provide that extra level of expertise every time.