EMSI Framework: Requirements to Capability
(Emergency Management System Interoperability)

Community members will be provided access to the EMSIF Knowledge Base through GCpedia for Government of Canada Agencies and a Web Portal for Provincial, Municipalities and private sector agencies

EMSI Challenges identified during a literature review (Sept 2009)

GC Intranet Portal (GCpedia)

Internet Portal (TBD)

Publication of the EMSIF Knowledge Base

Community members can assess their ability to interoperate using the Communication Interoperability Continuum which mirrors the DHS Interoperability Continuum, OR the expanded EMSIF Information Interoperability Continuum for networks, architecture, Information protection and information management, based on agency needs and priorities.

EMSI Framework Vision Statements

Communication Interoperability Continuum**

Information Interoperability Continuum

EMSI Framework

- Governance
- Architecture Models
- Training and Exercises
- Profiles and Guidance
- Standards
- Practices, Processes and Tools

Knowledge Based

Interoperability Continuum

Support Infrastructure

Capability Metrics

Architecture Framework

Community / Business / User Requirements
Legislation / Regulation / Policy / SOPs
Open Standards
Industry Best Practices

- Enhanced Community Collaboration
- Enhanced SI and Capability
- Voice and Information Interoperability
- Enhanced Planning, Response and Recovery
- Risk Mitigation

Enhanced Interoperability, Increase Information System Capability Improved Information Quality and Situational Awareness

EMSIF Community Metrics

This Initial Stage of EMSIF Definition focussed on:

ENABLERS
- Shared Vision
- A Roadmap
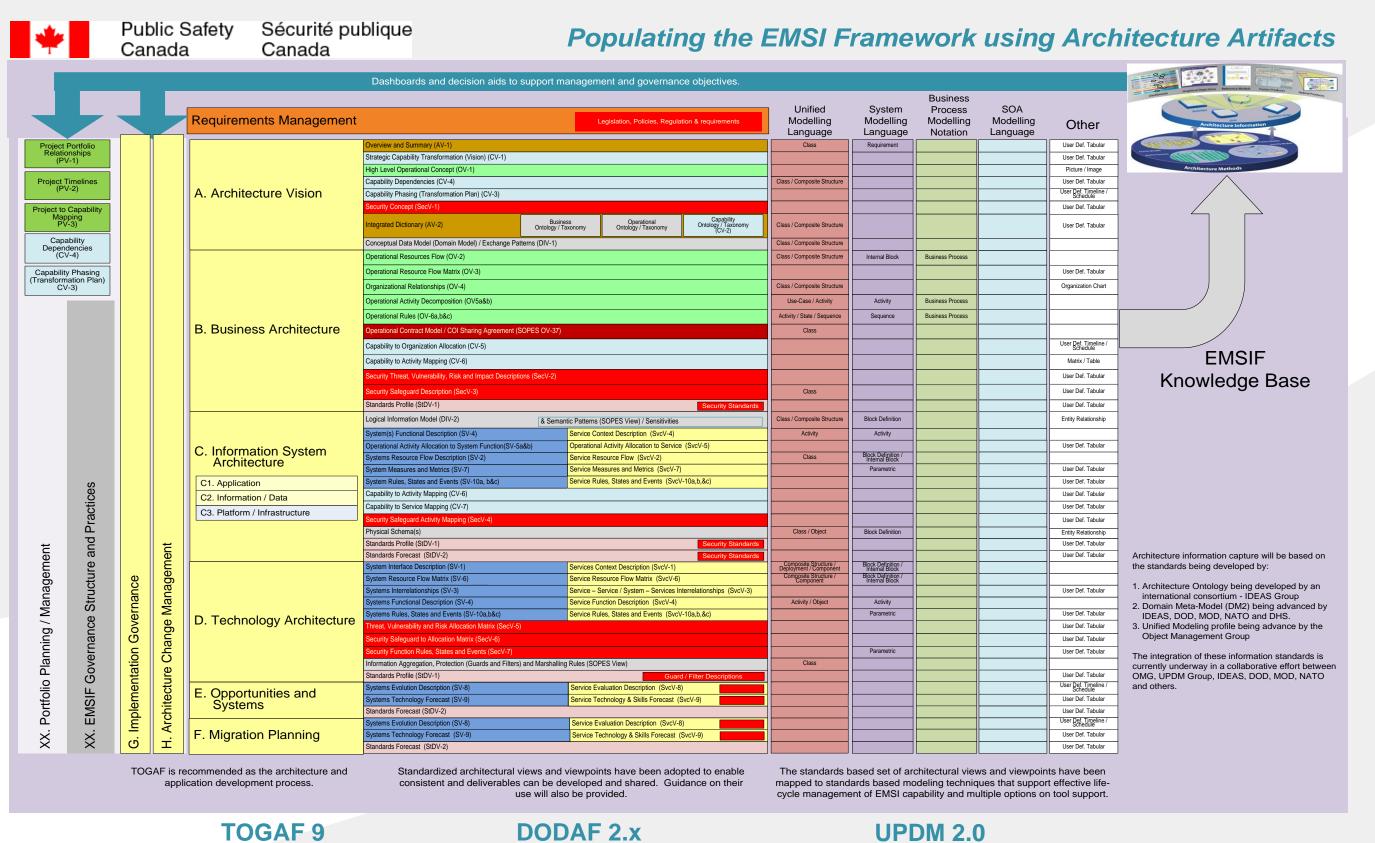- Information & Knowledge
- Resources
- SMEs

The EMSIF will provide metrics to assist community members assess their internal capability and their ability interoperate in local, regional and national operations. The metrics are intended to assist stakeholders develop IM/IT strategies and roadmaps that enhance municipal, provincial and national capability.

Roadmap Elements
- Continued Evolution of EMSIF (e.g., Metrics, Assessment Guide, ...)
- Support and Mentoring for Early Adopters
- Domain Meta Models (e.g., Information Exchange, SA, other)
- Open Standards
- Capability Prototypes

Alignment of EMSIF Elements

Governance Structures
Operating Procedures
Information Visualization (Security, Accreditations, etc...)
Information Applications (Security, Accreditations, etc...)
Middleware (Protocols, Policies, Security, Accreditations, etc...)
Data and Information
Services (Security, Accreditations, etc...)
Platform (Interfaces, OS, Security, Accreditations, etc...)
Networks (Network OS, Protocols, Security, Accreditations, etc...)
Communications (Protocols, Frequencies, Security, Accreditations, etc...)
Lessons Learned
Operations & Exercises
Capability (Usage)
Voice
VOIP
Stakeholder Requirements
Standards
Security
Architecture

The Emergency Management System Interoperability (EMSI) Framework is intended to provided a single universally accessible source of information, tools and best practices that will enable the Emergency Management and Public Safety Communities to Align capability and deliver Communications Interoperability and Information Interoperability. This will enable collaboration, situational awareness and coordination during the Planning, Response and Recovery Phases of an operation.
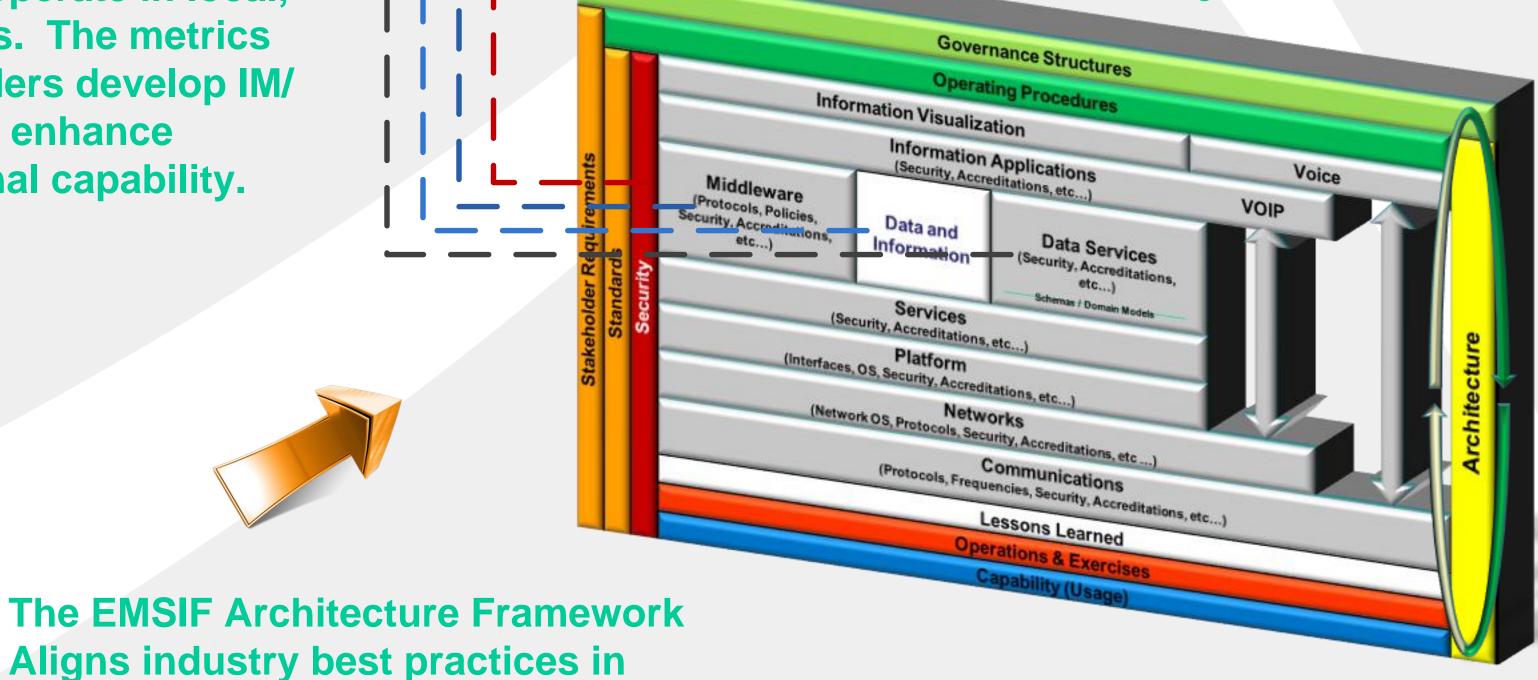
Other Supporting Agencies:
- TBS,
- CSEC,
- DRDC (Ottawa, Atlantic),
- DND,
- RCMP

Populating the EMSI Framework using Architecture Artifacts

Requirements Management
A. Architecture Vision
B. Business Architecture
C. Information System Architecture
  C1. Application
  C2. Information / Data
  C3. Platform / Infrastructure
D. Technology Architecture
E. Opportunities and Solutions
F. Migration Planning

Unified Modeling Language
System Modeling Language
Business Process Modeling Notation
SOA Modeling Language
Other

EMSIF Knowledge Base

Building on Industry Best Practices.

TOGAF 9 (OPEN GROUP)
DODAF 2.x (DOD OSD-CIO)
UPDM 2.0 Object Management Group (OMG)

The EMSIF Architecture Framework Aligns industry best practices in Enterprise, System of Systems and System engineering to provide the Emergency Management and Public Safety Communities with the ability to collaborate in the development of information sharing and collaboration tools. The framework and commercial-off-the-shelf (COTS) tool environments will enable partner agencies to share requirements and design information, deliver enhanced capability and retain institutional knowledge.

The EMSIF will support the planning, delivery and support of enhanced Emergency Management Systems and Interoperability (communications, technical and information)