EMSI Framework: Requirements to Capability

(Emergency Management System Interoperability)



Work with stakeholders and legislators to structure a legislative, policy and regulatory framework enables the development and

delivery of interoperable information systems and processes that support evolving operational requirements. Work to assure

delivered capability established the correct balance between the need for decision makers have access to quality information and the

Establish a governance structure that informs, directs, coordinates, and monitors activities pertaining to the delivery of inter-agency

Provide a roadmap for the delivery of interoperable systems (communication, networks, Information systems and processes) across

Provide standards, practices and guidance that enable the development and deployment of interoperable systems; with the capacity

to operate within and across differing levels of security and information sensitivity. The specified capabilities incorporate capabilities

and services that enforce GC legislation, policy and regulations pertaining to the handling, processing and release of sensitive, private

That enables the exploitation of capability developments of other community partners, as well as the international community.

Provide practices and a knowledge base that allows stakeholders to rapidly adapt to changes in legislated mandates, policy,

Provide standards, practices and guidance that maximize the opportunity for stakeholders to minimized custom development in

If appropriately exploited, the benefits can yield a reduction in life-cycle costs and improved returns on investment (ROI). Other

Promote open architecture practices standards to facilitate the addition, replacement and swapping of components to enhance EM

Communication Interoperability (governance, process and procedures, technology [data and voice communications], exercises

Information Interoperability (governance, process and procedures, information management, technology [information protection]

Provide standards (e.g., TOGAF, DODAF and UPDM), practices and guidance that enables the capture, maintenance and sharing of

architecture and engineering data that enables enhanced levels of governance, certification and accreditation, rationalization,

information sharing, and communications and networks], architecture, exercises' and training and usage)

That provides for a gradual alignment of agency system to a community-defined target architecture

Dynamic and Agile Systems and Provide standards, practices and guidance that maximize system and operational flexibility, adaptability and agility; and their

Identify and align (GC Profile) open community standards and publically accepted Specifications in order to

references, which describe similar benefits related to the adoption of open standards and technologies.

nteroperability Continuum and Provide the community with a defined continuum of interoperability through which individual stakeholders can assess and report

there ability to interoperate with partner agencies across specified capability domains

Emergency, Crisis and Major Event Management capability. The governance structures provide the community with the ability to

select or develop standards and specifications for the design, implementation (/acquisition) deployment, operation and maintenance

EMSI Framework Vision Statements

and classified information

favour of off-the-shelf capability

Increased Durability

Increase Flexibility

Increase Vendor Choice;

Increased Competition;

Simplified Integration; and

capability portfolio management.

- Support and Mentoring for Early Adopters

Roadmap Elements

- Open Standards

- Capability Prototypes

Provide standards, practices and guidance

need of the GC to protect sensitive, private and classified data.

the spectrum of EM activities; plan, prevent, detect, respond and recover

That accommodates stakeholder priorities, budgets and funding cycles

That maximises the preservation of legacy investments.

ability to adapt to tactical, operational and strategic changes.

Increased Quality; Achieve Vendor Independence

Increased availability of resources (e.g., SMEs)

Characteristics

Alignment to GC Legislative

Security, Confidentiality and

Evolution, not Revolution

Change Management

Standards and Publically

Accepted Specifications

Open Architecture

Common Architecture

Mandates and Policy





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 nternet Porta GC Intranet Portal (GCpedia) **Publication of the EMSIF Knowledge Base**

EMSI Framework

Governance

Knowledge Based

Interoperability Continuum

Architecture Framework

Open Standards

Enhanced Community Collaboration

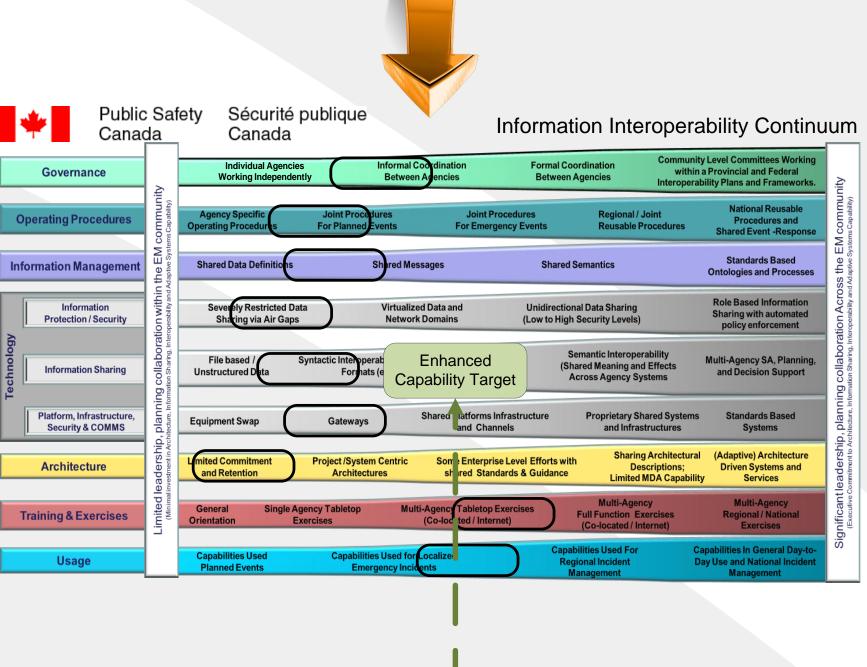
Voice and Information Interoperability

Enhanced Planning, Response and Recovery

Enhanced SI and Capability

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.

Communication Interoperability Continuum** Data Communication



Communit

Enterprise, System of Systems and

System engineering to provide the

collaborate in the development of

environments will enable partner

capability and retain institutional

tools. The framework and

knowledge.

Emergency Management and Public

Safety Communities with the ability to

information sharing and collaboration

commercial-off-the-shelf (COTS) tool

agencies to share requirements and

design information, deliver enhanced

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

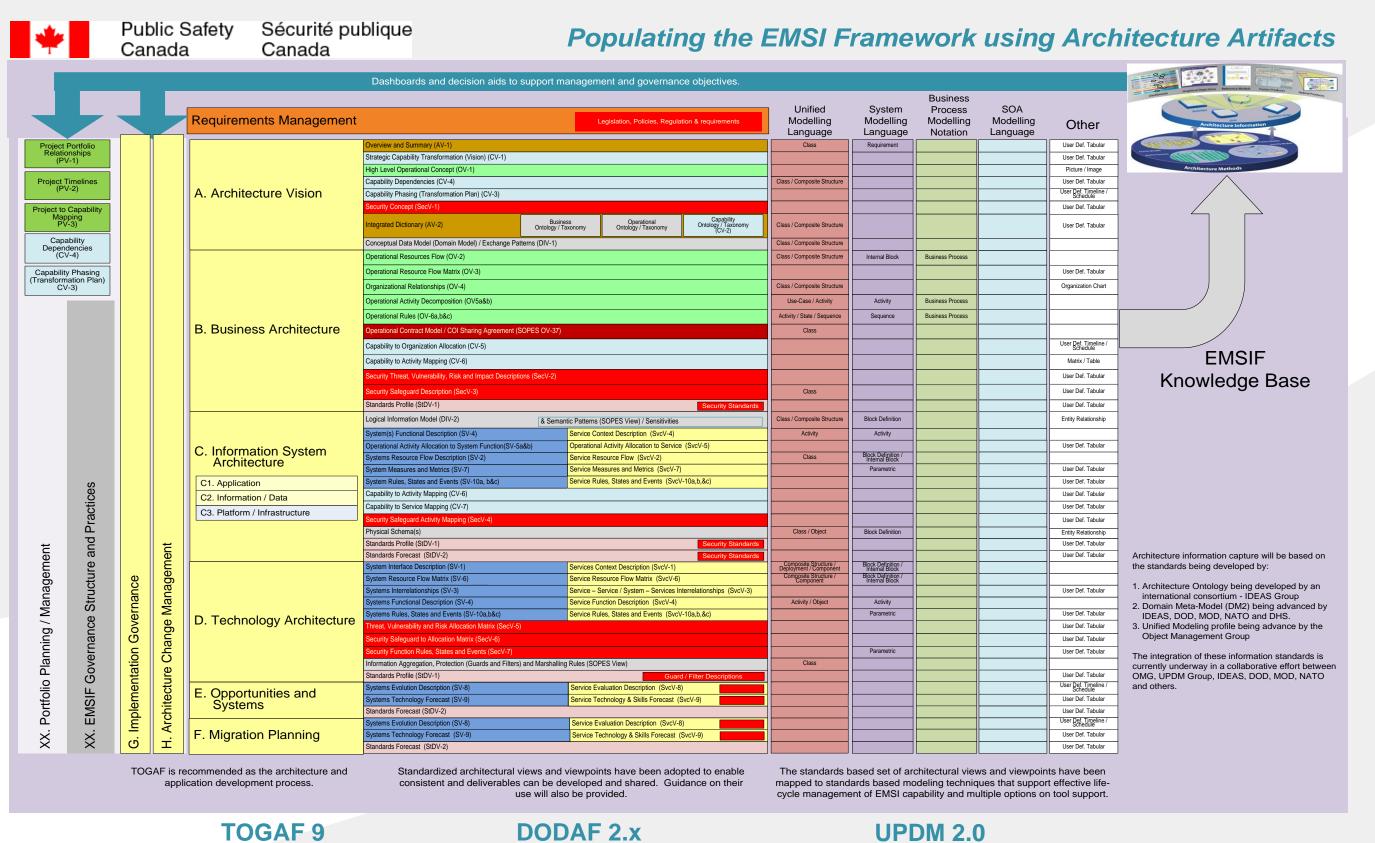
The EMSIF will provide metrics to assist community members assess their internal capability and their ability interoperate in local, regional and national operations. The metrics are intended to assist stakeholders develop IM/ IT strategies and roadmaps that enhance municipal, provincial and national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

during a literature review (Sept 2009) Community / Business / User Requirement Legislation / Regulation / Policy / SOPs **This Initial Stage Definition** focussed on: Many IM/IT systems, applications and technologies developed for the public safety community are not fit for purpose. They are too complex for, or do not easily adapt to, the operational environment, or practices of the user community.

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:

- RCMP



Building on Industry Best Practices

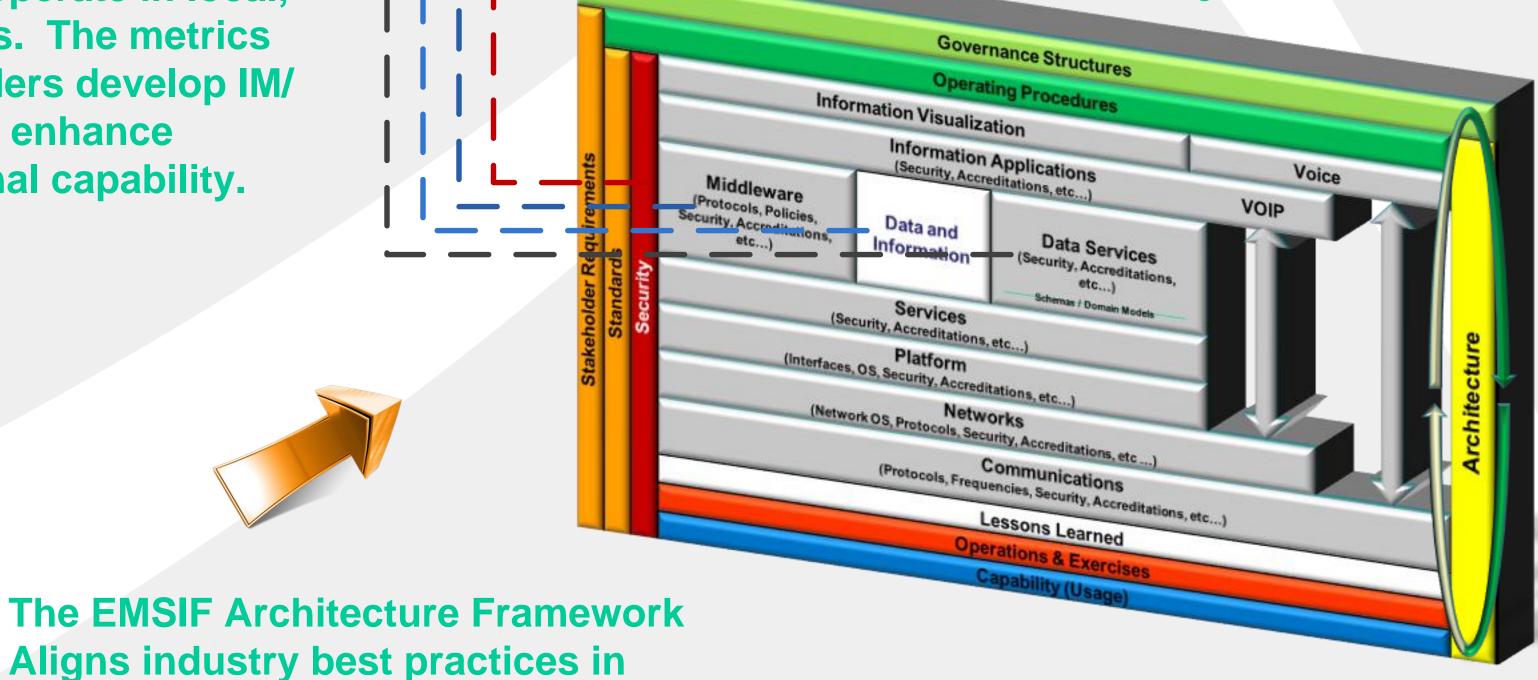
TOGAF 9 (OPEN GROUP) **DODAF 2.x** (DOD OSD-CIO)

Object Management Group (OMG)

Alignment of EMSIF Elements

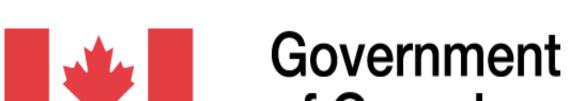
- Continued Evolution of EMSIF (e.g., Metrics, Assessment Guide, ...)

- Domain Meta Models (e.g., Information Exchange, SA, other)



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





- TBS,

- CSEC,

- DRDC (Ottawa, Atlantic),