



BUILDING A **SAFE AND RESILIENT CANADA**



Public Safety Canada CIOD

Interoperability and Portfolio Management

NIEM

Overview for CIOD

RDIMS N°: 2103841

Date: September 11, 2017



Public Safety
Canada

Sécurité publique
Canada

Canada

Agenda



- Legislative framework and requirements
- How language impacts Interoperability in Canada
- Public Safety Canada and NIEM
- PS-NIEM Use Cases



Legislative Framework and Requirements



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Canada is officially bi-lingual (English and French); this introduces some complexities to Government business:

The Official Languages Act (French: Loi sur les langues officielles) is a Canadian law that came into force on September 9, 1969, which gives French and English equal status in the government of Canada.

- Canadians have the right to be served in the Official Language of their choice
- Canadian public servants have the right to communicate and use the tools required for their jobs in the language of their choice
- It should be mentioned that Canadian English is a combination of U.S. and British English (e.g., “colour” instead of “color”)



Canadian Interoperability Challenges



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- Information stores and data may come from sources originating in either language
- Information may be requested by French-speaking partners
- Information must be provided in both official languages, with some exceptions for emergency situations



NIEM adoption in Canada



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- Successful NIEM projects:
 - CIC's biometrics major crown project (TRBP), NIEM award!
 - CBSA's entry/exit criteria project
- Pilot projects:
 - Stolen Vehicle (Mexico, U.S., Canada)
 - Suspicious Activity Reporting (SAR)
 - Trusted Information Exchange System (TIES)
- Endorsements:
 - Canadian Association of Chiefs of Police (CACCP)
 - Government of Canada's Interoperability Framework
 - Part of CBSA's Enterprise Architecture Information Sharing vision
 - Transport Canada
 - Part of the IMSWG (Marine Security) work plan
 - Part of the CAN-US CIWG priorities



Current status



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What has Public Safety done with NIEM in the last few years?

- NIEM adoption in Canada is a reaction to cross-border information sharing requirements, and not self-directed
- Limited efforts to evangelize or promote NIEM across the public safety community within Canada
- GC requirement to institute a bilingual requirement into NIEM
- Need for and information (/tools) clearinghouse (web-site, wiki) to enable adoption across public safety community (US site is far to technical to support the GC need)
- Future of NIEM in Canada is tied to Public Safety exercising its mandate



What are our goals?



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- Develop a Roadmap of activities for attaining Departmental goals for NIEM
- Promote general adoption through better web presence
- Support adoption through best-practices, standards, and tools
- Push the development of a multilingual capability
- Limit PS stewardship to PS-related domains
- Work with TBS to develop policy supporting Information Sharing, including NIEM
- Actively promote NIEM and supporting IE standards (e.g., the Public Safety-developed Emergency Management System Interoperability Framework (EMSIF))

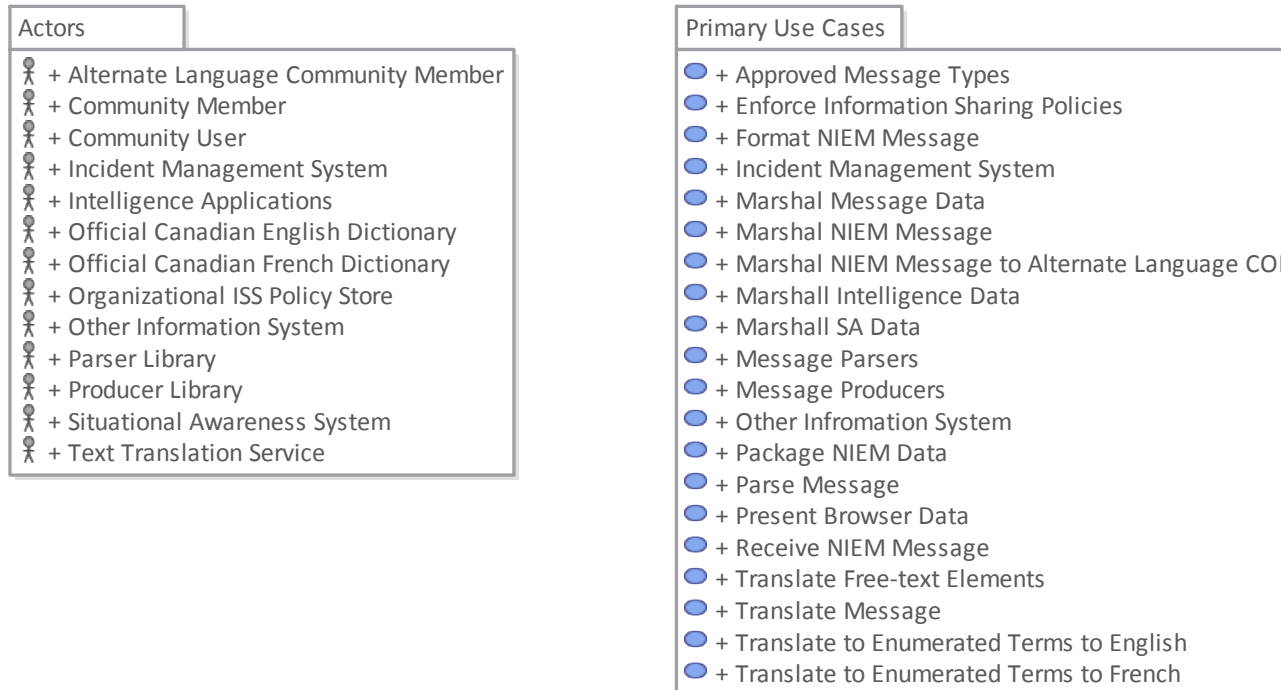


Public Safety NIEM Use Cases



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- Use Case Model diagram

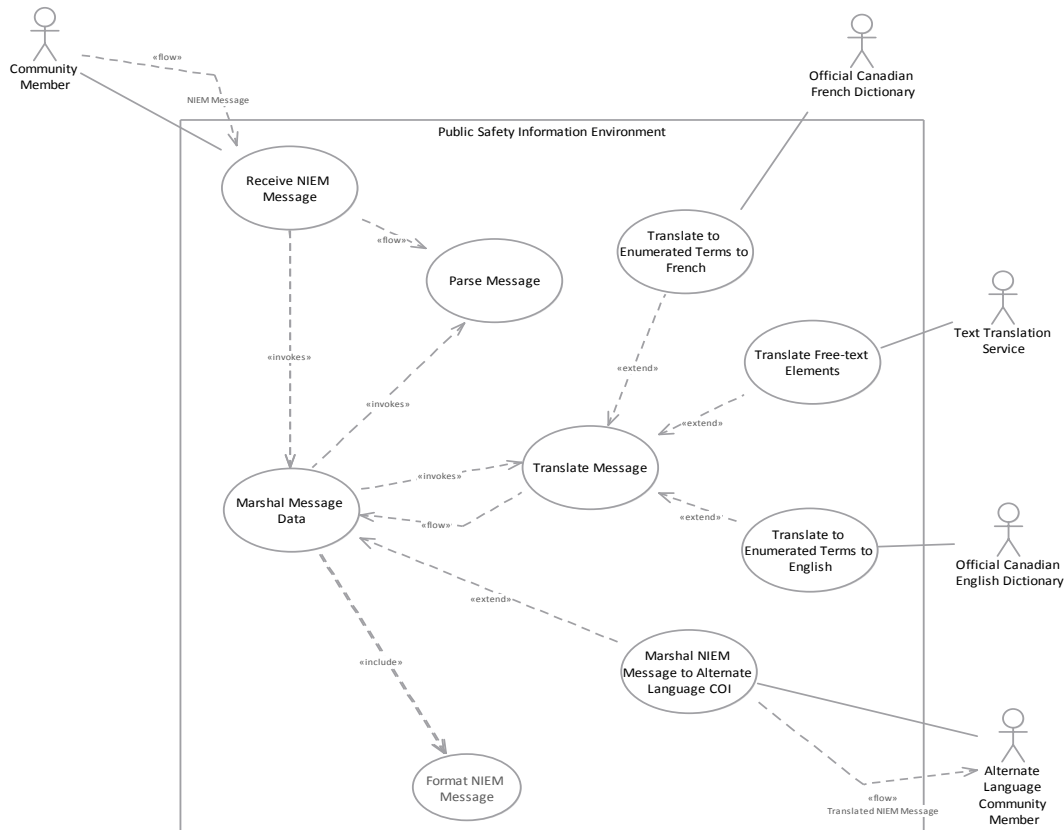


Public Safety NIEM Use Cases: Receive



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- Simplified Receive NIEM Message diagram



Process:

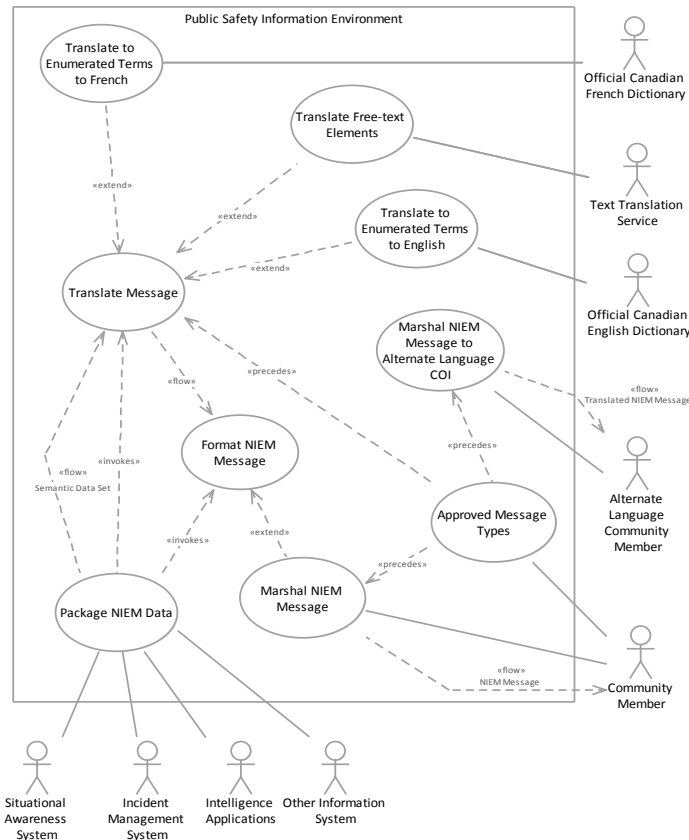
- Receive message
- Extract message data set
- Translate data set to alternate language preference
- Marshal information to local information store(s) / systems(s)
- If required, reformat data set (alternate language) as a NIEM message using IEPD/XSD
- Forward translated message to alternate language users

Public Safety NIEM Use Case: Send



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- Simplified SendNIEM Message diagram



Process:

- Pull required information from source system(s)
- Format from source system language preference to alternate language
- Format information in accordance with the IEPD (XSD)
 - Initial community preference
 - Alternate member preference
- Issue Language XML/JSON documents to members in language of choice



Additional Information



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<https://www.publicsafety.gc.ca/cnt/bt/niem/index-en.aspx>

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