

“Emergency Management” Domain Update

Domain Steward & Stakeholders: DHS S&T Directorate, Ajmal Aziz / Dan Cotter

Description

The Emergency Management (EM) domain serves as EM Col exchange facilitator working to improve decision-making by organizations that exchange information relating to emergency preparedness and response. The EM Domain operates under the stewardship of DHS Science and Technology Directorate (DHS S&T) with continual engagement/alignment to DHS FEMA.

Highlights & Current Activities

- **Model Management** – Maintenance updates included in NIEM 4.1 release. 300+ new attributes identified via International Tiger Team submitted for initial review and planned for inclusion in NIEM 4.2 release.
- **Outreach, Engagement and Technical Assistance** – 1) Cross-domain support (Col engagement briefing w/ MilOps to Marine Corp. 2) DHS S&T Next Gen IoT alignment, 3) FEMA PDA IEPD review/JSON technical assistance sessions, 4) Developed Microservices for FEMA Grants using NIEM conformant attributes imbedded in JSON

Best Practices

- Facilitation and support to NBAC (monthly meetings), NBAC Tiger Teams (representative co-chair/facilitator roles to International and Emerging Technologies)
- Domain Facilitator infrastructure for communications, standard process (membership form, letter and participation questions) for onboarding new domain members from EM community of interest. 30% membership increase
- Cross-domain collaborative initiatives to identify requirements, investigate opportunities (grants w/ MilOps)
- NIEM Microservices / JSON

Challenges & Recommendations

- Continued engagement across the federal, state and local community is required.
- Significant regional emergency response impact scenarios (hurricanes, flooding, fire) have burdened organizational resources and replaced strategic focus with reactive stance.
- Emerging technologies (IoT, AI,...) and cross-domain alignment rapidly progressing in some areas, but absent in others. Utilize tiger teams to map priorities to action.

First Responder Opportunity & Challenges (Cont.)

- Rapid IoT sensor growth (wearable, deployable, fixed, mobile, UAS...)
- Promise of: Protected, Connected & Fully Aware
- Bring Your Own Device (BYOD) with over 6 billion smartphones and other device active by 2020
- Body-worn devices – Size, Weight and Power of multiple devices for ‘plug and play’
- A wide variety of vendor proprietary data formats, interfaces and ‘one-off’ systems
- Goal: **drive interoperability and integration through Data Standards**



What was “the Future” is now “the Here and Now”

Internet of Things (IoT)

