



NIMS Supporting Technology Evaluation Program (NIMS STEP)

6 October 2010



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Background



Current Mission:

The U.S. Department of Homeland Security (DHS) established the National Incident Management System Support Center (NIMS SC) in 2005 to support FEMA's National Integration Center (NIC) Standards and Technology Branch. The NIMS Support Center is designed to enhance technology integration, interoperability, and compatibility and to improve incident management and information sharing. The center is expanding with an emphasis on standards and technology integration for the non-traditional response community.



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Scope

- NIMS Support Center is an established national resource with a three prong focus centered on integration
 - Test and Evaluation
 - Systems/Tool Development
 - Exercises, workshops, training, and guidance documents identified through outreach and offered as technical assistance
- NIMS Support Center is funded through the NIMS General Support Contract
- Current Projects
 - Supporting Technology Evaluation Program (STEP)
 - Incident Resource Inventory System (IRIS)
 - Standards
 - Outreach
 - Technical Assistance



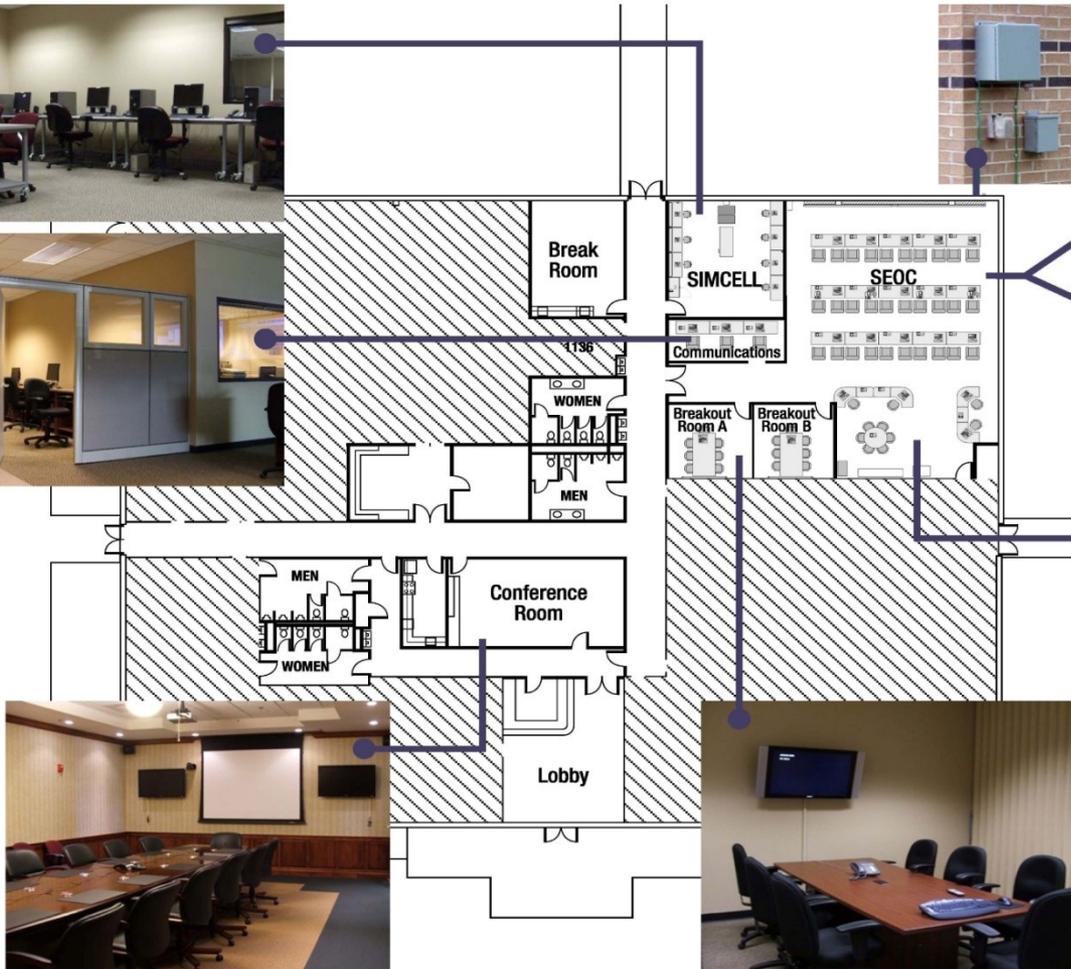
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NIMS Support Center

Accredited Test Lab



Training/Exercise Venue



Working Group/Virtual Instruction Venue



NIMS STEP

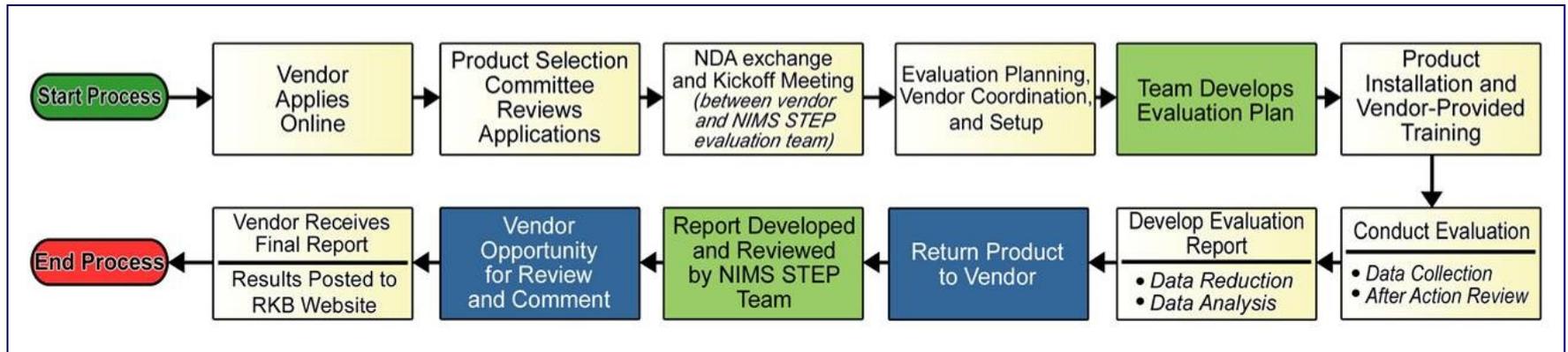


- Objective evaluations of software and supporting hardware against NIMS standards and criteria to aid government officials when purchasing incident management products.
- Equipped to evaluate products that support emergency managers and responders prior to and during an incident.
- Emergency management and response Subject Matter Experts inspect systems for NIMS Concepts and Principles in a controlled, simulated Emergency Operations Center.
- Test engineers verify system capabilities and adherence to NIMS recommended technical standards in laboratory environment.



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Evaluation Process and Outcomes



- Community has access to NIMS STEP reports through the FEMA sponsored Responder Knowledge Base (RKB) (<https://www.rkb.us>) website.



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Program Benefits – Practitioners

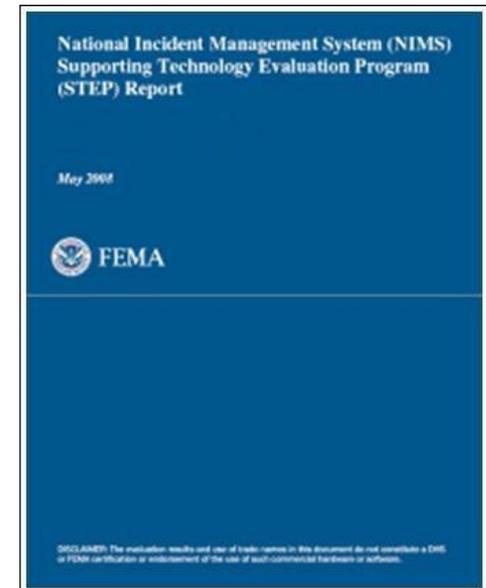
- A list of product descriptions and key capabilities based on results from an objective evaluation. This information will be shared through websites.
 - Responder Knowledge Base (RKB) (<https://www.rkb.us/>).
- Technical standards and criteria for reference when purchasing hardware and software, off-the-shelf software and hardware or when developing original products (e.g., request for proposals).



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Program Benefits – Vendor

- No cost to participate; evaluations do require vendor support for initial planning calls, logistics coordination, training support, etc.
- Evaluation Report - identification of capabilities and limitations:
 - Incorporation of NIMS concepts and principles.
 - Adherence to EDXL suite of standards including CAP.
 - Adherence to other standards as they are approved / adopted.
- Exposure to government officials and other users through websites.



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Standards-Based Sharing

```
<?xml version="1.0" encoding="utf-8"?>
<alert xmlns="urn:oasis:names:tc:emergency:cap:1.1">
  <identifier>NBMASASui10286</identifier>
  <sender>DAllport</sender>
  <sent>2009-07-17T23:49:40.0436089+00:00</sent>
  <status>Exercise</status>
  <scope>Public</scope>
  <valueName>profile:CAP-CP:Location</valueName>
  <value>1301006</value>
  </geocode>
  </area>
  </info>
</alert>
```



```
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  <valueName>profile:CAP-CP:Event:0.3</valueName>
  <value>roadClose</value>
</eventCode>
<parameter>
  <valueName>layer:CAPAN:eventLocation:point</valueName>
  <value>45.2449203344103,-66.11091613769532</value>
</parameter>
<area>
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  <value>45.2449203344103,-66.11091613769532</value>
  <valueName>CAP-CP:Location:0.3</valueName>
  <value>1301006</value>
  </geocode>
</area>
</info>
</alert>
```



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Recommended Technical Standards

- Products are tested against relevant technical standards
- Common Alerting Protocol (CAP)
 - The CAP is a general format for exchanging all-hazard emergency alerts and public warnings over all kinds of networks.
- EDXL-Distribution Element (DE)
 - The Distribution Element specification describes a standard message distribution framework for data sharing among emergency information systems using the XML-based EDXL.
- EDXL- Hospital AVailability Exchange (HAVE)
 - Hospital AVailability Exchange reports allow the communication of the status of a hospital, its services, and its resources.
- EDXL- Resource Messaging (RM)
 - The Resource Messaging specification provides a set of standard formats for XML emergency response messages and is intended to expedite all activities associated with resources needed to respond and adapt to emergency incidents.



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NIMS Concepts and Principles

- Products are inspected against NIMS concepts and principles
- NIMS criteria:
 - Applicability to Emergency Support and Incident Command functions.
 - Hazards (all-hazards philosophy).
 - Preparedness (full cycle of planning, training and exercise, etc)
 - Communication and Information Management (e.g., interoperability, scalability, plain language, information security).
 - Resource Management (e.g., FEMA typed resources).
 - Command and Management (consistent with ICS).

NIMS Criteria (Number of Minimum Product Requirements)	# Agree	# Disagree	# Not Applicable
Emergency Support (1)			
Hazards (1)			
Preparedness (1)			
Communications and Information Management (9)			
Resource Management (10)			
Command and Management (2)			



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Target Capabilities List (TCL)

- Assessors identify core capabilities applicable to the product
 - Common Capabilities
 - Prevent Mission Capabilities
 - Protect Mission Capabilities
 - Respond Mission Capabilities
 - Recover Mission Capabilities

Reference: Target Capabilities List (TCL)

<https://www.rkb.us/hspd8.cfm>

<http://www.fema.gov/pdf/government/training/tcl.pdf>

<p>Common Capabilities Planning Communications Community Preparedness and Participation Risk Management Intelligence and Information Sharing and Dissemination</p> <p>Prevent Mission Capabilities Information Gathering and Recognition of Indicators and Warning Intelligence Analysis and Production Counter-Terror Investigation and Law Enforcement CBRNE Detection</p> <p>Protect Mission Capabilities Critical Infrastructure Protection Food and Agriculture Safety and Defense Epidemiological Surveillance and Investigation Laboratory Testing</p> <p>Respond Mission Capabilities On-Site Incident Management Emergency Operations Center Management Critical Resource Logistics and Distribution</p>	<p>Volunteer Management and Donations Responder Safety and Health Emergency Public Safety and Security Animal Disease Emergency Support Environmental Health Explosive Device Response Operations Fire Incident Response Support WMD and Hazardous Materials Response and Decontamination Citizen Evacuation and Shelter-in-Place Isolation and Quarantine Search and Rescue (Land-Based) Emergency Public Information and Warning Emergency Triage and Pre-Hospital Treatment Medical Surge Medical Supplies Management and Distribution Mass Prophylaxis Mass Care (Sheltering, Feeding and Related Services) Fatality Management</p> <p>Recover Mission Capabilities Structural Damage Assessment Restoration of Lifelines Economic and Community Recovery</p>
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Assessor Outreach

- Seeks involvement of state and local emergency management and response officials
- Uses qualified volunteers interested in making a contribution to NIMS and inspecting emerging technologies
- Reimbursement for travel expenses
- Requires completion of application and program approval



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Assessor Minimum Qualifications

- Five years experience in emergency management, response or recovery
- Experience with “real-world” emergency incidents/events
- Understanding of software systems application to exercises or incidents
- Completion of ICS courses: IS-100.a, IS-200.a, IS-700.a, and IS-800.B (certificates required)
- Proficient in basic Microsoft Office applications
- Periodically available 3-4 days for product evaluations



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Assessor Responsibilities

- Read vendor literature
- Attend vendor training
- Evaluate the product according to the NIMS STEP Guide
- Document findings through screen shots and evaluation worksheets
- Provide feedback on criteria and process



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Program Website

1) Go to: <https://www.nimsstep.org>

FEMA **NIMS STEP**
National Incident Management System
Supporting Technology Evaluation Program

NIMS STEP **VENDOR FORMS** **ASSESSOR PROGRAM** **REFERENCES** **FAQS** **CONTACT US** **ABOUT US**

NIMS STEP Overview

NIMS Supporting Technology Evaluation Program (NIMS STEP) provides an objective evaluation of commercial and government software and hardware products to assist in the implementation of NIMS. Evaluation activities are designed to expand technology solutions and provide the emergency response community with an objective process to evaluate their purchases. NIMS STEP uses the SAIC Incident Management Test and Evaluation Laboratory (IMTEL) to conduct evaluations. IMTEL is an A2LA accredited laboratory whose scope of accreditation is the Emergency Data Exchange Language (EDXL) suite of standards including the Common Alerting Protocol (CAP).

NIMS STEP supports practitioners in their decision making during the purchasing and procurement process. The primary benefits to Emergency Management/Response Personnel include access to reports based on results from an objective evaluation. Practitioners can also utilize NIMS technical standards and criteria for reference when purchasing hardware and software off the shelf or in Requests For Proposals (RFPs) when developing new products.

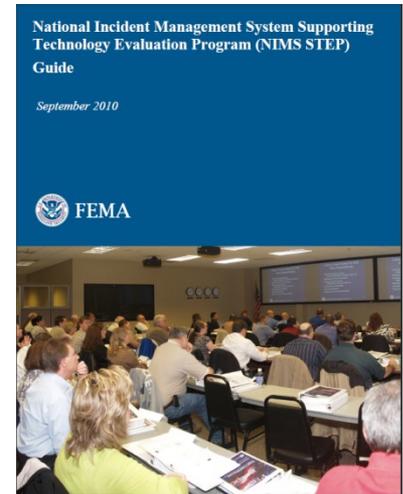
The program supports vendors in their implementation of NIMS and associated standards, concepts, and principles. Vendors will receive a copy of the evaluation report and summary including feedback from end-user representatives and test engineers; these services are provided at no cost to the vendor. Vendors may use results of the evaluation to demonstrate with

Log in:
UserName:
Password:

[Vendor Registration](#)
[Forget your password?](#)

Document Downloads
[NIMS STEP Guide \(PDF File, 1.03 MB\)](#)
[NIMS STEP Fact Sheet \(PDF File, 210 kB\)](#)

2) Download Program Guide



3) Vendors Register



Log in:
UserName:
Password:

[Vendor Registration](#)
[Forget your password?](#)



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Product Self Assessment

- Initial step in application process
- Allows vendors to review criteria that will be applied during an evaluation
- Supports evaluation team in determining what the product was designed or intended to do
- Allows vendors to perform independent testing

[Demonstration - https://www.nimsstep.org](https://www.nimsstep.org)



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Evaluation Documents

- Evaluation reports and summaries are available on the Responder Knowledge Base (RKB) website
- Keyword search: NIMS STEP
- Navigate to Other Content > Operational Assessments > NIMS SC – STEP Evaluations

<https://rkb.us>



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Comments and Questions

National Incident Management System

Supporting Technology Evaluation Program (NIMS STEP)

Website - <https://www.nimsstep.org>

Reports - <https://rkb.us/> (keyword search NIMS STEP)

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