

National Capital Region

Electronic Designation and Validation of Federal/Emergency Response Officials (F/EROs) in support of National Preparedness

Presented to Missouri Responder Credentialing Strategy Meeting June 18, 2009





Topics for Discussion

► **Policy:** Public Law 110-53 and supporting requirements

Process: Credential issuance, attribute registration, validation

People: Federal/Emergency Response Official (F/ERO) registrations

Products & services: FIPS 201 infrastructures and tool sets

Practice: NCRC validated demonstrations

Performance measures: Proven capability

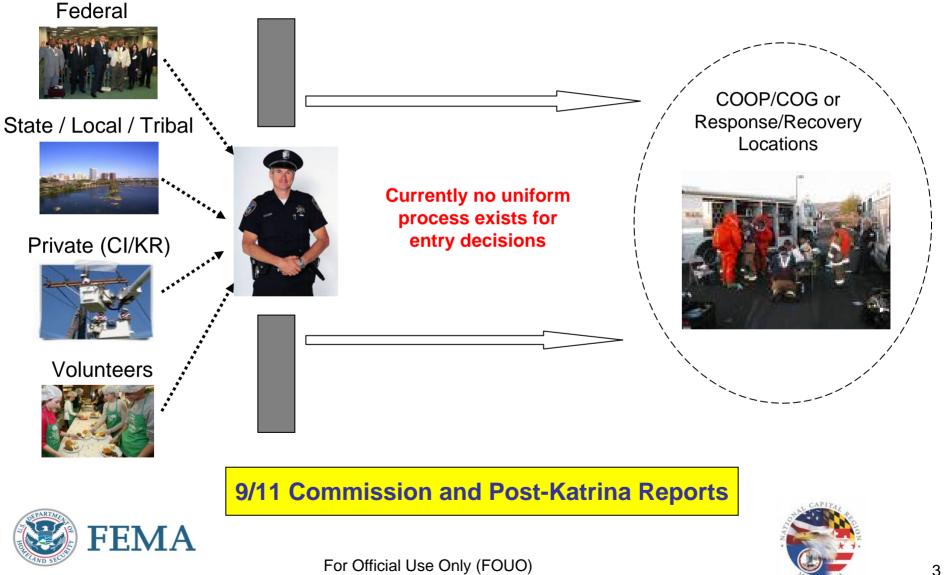
Timeline: National roll-out plan

End state: Streamlined investment strategy





Current Disaster/Emergency Access Process



Public Law 110-53

"Implementing Recommendations of the 9/11 Commission Act of 2007"

I. Date of enactment: August 3, 2007

- (1) Title IV SEC. 405. FEDERAL RESPONSE CAPABILITY INVENTORY
- (2) Title IV SEC. 406. REPORTING REQUIREMENTS
- (3) Title IV SEC. 407. FEDERAL PREPAREDNESS
- (4) Title IV SEC. 408. CREDENTIALING AND TYPING
- (5) Title IV SEC. 409. MODEL STANDARDS AND GUIDELINES FOR CRITICAL INFRASTRUCTURE WORKERS
- II. NLT August 2, 2008: The FEMA Administrator is to develop standards for credentialing and typing of incident management personnel, emergency response providers, and other personnel (including temporary personnel) and shall:
 - (1) provide the standards developed, including detailed written guidance, to
 - a) Federal agencies that have responsibilities under the National Response Plan and other personnel (e.g. National Infrastructure Protection Plan critical infrastructure/key resources, National Continuity Policy Implementation Plan essential government personnel)
 - b) State, local, and tribal governments
 - (2) provide expertise and technical assistance to aid Federal, State, local, and tribal government agencies with implementing the standard
 - (3) consult with the Secretary of Health and Human Services in developing standards for credentialing health care professionals
 - (4) establish model standards and guidelines for credentialing critical infrastructure workers that may be used by a State
- III. NLT February 2, 2009: Each Federal agency with F/ERO responsibilities are to be credentialed and typed in accordance with the standards
 - (1) F/ERO personnel are to be registered in the database system (F/ERO Repository) for real time exchange of information and rapid validation of credentialed personnel
 - (2) F/ERO repository will be populated by Federal agencies via HSPD 12 Issuance Infrastructure

Source: Public Law 110-53

http://intelligence.senate.gov/laws/pl11053.pdf

FEMA Administrator Statutory Requirements





HSPD-12 Requirement

- Applicable to employees of the Federal Executive Branch and associated employees contracted for more than 180 days
- > "Secure and reliable forms of identification" for purposes of this directive means identification that:
 - > is issued based on sound criteria for verifying an individual employee's identity;
 - > is strongly resistant to identity fraud, tampering, counterfeiting, and terrorist exploitation;
 - can be <u>rapidly authenticated electronically</u>; and
 - > is issued only by providers whose <u>reliability has been established by an official accreditation process</u>.
- The Standard will include graduated criteria, from least secure to most secure, to ensure flexibility in selecting the appropriate level of security for each application

Source: HSPD-12

http://www.dhs.gov/xabout/laws/gc_1217616624097.shtm#1

Mandated Very Highly Trusted Cyber-Secure Identities





Personal Identity Verification Interoperability (PIV I)

Non-Federal Issuers (NFI) Identity Authentication PKI Certificate

NFI PIV Interoperable Cards:

- must include an Identity Authentication PKI Certificate issued by a Certification Authority (CA)
- chains to the Federal Bridge Certification Authority (FBCA) at the Medium Hardware assurance level via cross-certification

This will enable Federal government relying parties to:

- verify the validity of the identity card via the Identity Authentication PKI Certificate
- verify the issuing organization (i.e., CA cross-certified with FBCA)
- be assured that the certificate (and by extension, the card) has not been revoked or invalidated since issuance

Identity Proofing

During identity proofing, the applicant is required to:

- appear in person and provide two forms of identity source documents in original form from the list of acceptable documents included in Form I-9
- At least one of the documents must be a valid State or Federal government-issued picture identification (ID)
- This identity proofing process is commensurate with OMB Memorandum M-04-04, E-Authentication Personal Identity Verification (PIV) Interoperability For Non-Federal Issuers

Source: Personal Identity Verification Interoperability (PIV I)

http://www.idmanagement.gov/documents/PIV_IO_NonFed_Issuers_May2009.pdf



Established Highly Trusted Cyber-Secure Identities



Cyberspace Policy Review

• The Federal government, following the guidance of Homeland Security Presidential Directive 12 (HSPD-12), is seeking to leverage the federal interoperable identity credentialing mechanism across the federal enterprise.

• The Federal government should ensure resources are available for full federal implementation of HSPD-12.

• The Federal government also should consider extending the availability of federal identity management systems to operators of critical infrastructure and to private-sector emergency response and repair service providers for use during national emergencies.

Source: Cyberspace Policy Review

http://www.whitehouse.gov/assets/documents/Cyberspace_Policy_Review_final.pdf

Presidential Endorsement for Trusted Cyber-Secure Identities



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FIPS 201 Interoperability



Roles & Responsibilities

- **1. Attribute:** The qualification, certification, authorization, and/or privilege of an individual
- 2. F/ERO: Federal/Emergency Response Official is an HSPD 12 Federal employee or contractor who is responsible for the execution of the NRF, NIPP, NCPIP, and/or NIMS
- **3. F/ERO Attribute:** The designated categories along with the qualifications, certifications, authorizations, and/or privileges of a F/ERO who is responsible for the execution of the NRF, NIPP, NCPIP, and/or NIMS
- 4. F/ERO Attribute Source Authority: The authoritative source document for F/ERO attribute designations
- 5. F/ERO Attribute Administrator: The person(s) authorized to sponsor or revoke F/ERO attributes
- 6. F/ERO Attribute Registrar: The person designated to electronically assign or revoke F/ERO attributes within the F/ERO Attribute Repository as authorized by the F/ERO Attribute Administrator
- 7. F/ERO Attribute Recipient: The F/ERO who has been authorized by the F/ERO Attribute Administrator to be registered for the designated F/ERO attribute
- 8. F/ERO Attribute Validation Authority: The relying official who is authorized to electronically validate the designated F/ERO attributes of the bearer for access permissions

Establishing Baseline Terminology





Agency Requirements

F/ERO Repository Registration & Revocation Process

- 1. Agencies are to designate NRF, NIPP, and NCPIP Attribute Administrators
- 2. Attribute Administrators are to actively sponsor or revoke F/ERO registrations in the F/ERO Repository
- 3. Repository registrations or revocations are achieved in one of two ways:
 - a) Manual solution Agency PIV post-issuance process (e.g., DoD, FEMA)
 - b) Automated solution Agency PIV initial-issuance process (e.g., FAA, GSA)

Establishing the Agency F/ERO Audit Trail





Requirements for F/ERO Designator When Issuing a Personal Identification Verification (PIV) Credential



Federal / Emergency Response Official:

X YES NO

When checking the "yes" box during PIV issuance, the sponsoring Agency must determine and keep current what NRF, NIPP, or Continuity of Government category is being sponsored as depicted in the drop down boxes shown on the right or on the next slide.

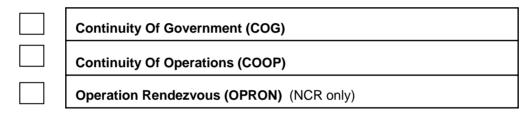


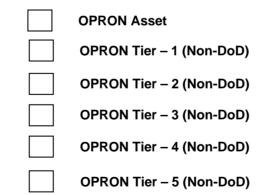
_		
	ESF 1	Transportation
	ESF 2	Communications
	ESF 3	Public Works and Engineering
	ESF 4	Firefighting
	ESF 5	Emergency Management
		Mass Care, Emergency Assistance, Housing and
	ESF 6	Human Services
	ESF 7	Logistics Management and Resource Support
	ESF 8	Public Health and Medical Services
	ESF 9	Search and Rescue
	ESF 10	Oil and Hazardous Materials Response
	ESF 11	Agriculture and Natural Resources
	ESF 12	Energy
	ESF 13	Public Safety and Security
	ESF 14	Long-Term Community Recovery
	ESF 15	External Affairs

Sector 1	Agriculture and Food
Sector 2	Banking and Finance
Sector 3	Chemical
Sector 4	Commercial Facilities
Sector 5	Dams
Sector 6	Defense Industrial Base
Sector 7	Emergency Services
Sector 8	Energy
Sector 9	Government Facilities
Sector 10	Information Technology
Sector 11	National Monuments and Icons
Sector 12	Nuclear Reactors, Materials and Waste
Sector 13	Postal and Shipping
Sector 14	Public Health and Healthcare
Sector 15	Communications
Sector 16	Transportation Systems
Sector 17	Water
Sector 18	Critical Manufacturing

F/ERO Designation (COOP/COG)

- X National Continuity Policy Implementation Plan (NCPIP) Essential Government Function
- **X** Emergency Support Function (ESF) 5 Emergency Management





<u>Notes:</u> Check all that apply If checking OPRON, please check one box under Tiers 1-5





F/ERO Repository Architecture

DoD / FEMA Validated Model

Credential Issuance Process

HSPD-12 Identity Management Systems (IDMS) w/ Personally Identifiable Information (PII)



https secure internet connection IDMS / BAE Interface

Public ID Registration Process

21 Federal HSPD-12 Infrastructures:

 GSA SSA SBA DHS Dept of Labor Dept of Education EOP EPA National Credit Union Administration Veteraps Affairs 	 DoD DOT / FAA Federal Housing Financial Board Federal Trade Commission HHS HUD USAID Dept. of State Peace Corps Hational Science Foundation
10. Veterans Affairs	20. Peace Corps 21. National Science Foundation
11. NASA	

*Backend Attribute Exchange (BAE):

The end-state identity credential issuance and attribute registration interface to F/ERO Repository

F/ERO Registration Process

Shared F/ERO Repository w/ no PII (contains public identities with numeric F/ERO attributes)

Image: Consolidated Public ID Registration List Image: Consolidated Public ID Registration Registra



Post-issuance "Interim Manual Registration" Process **Guard Station**

Access Validation Process

Jurisdiction-owned Management Stations and

Validation Devices (validates and captures public

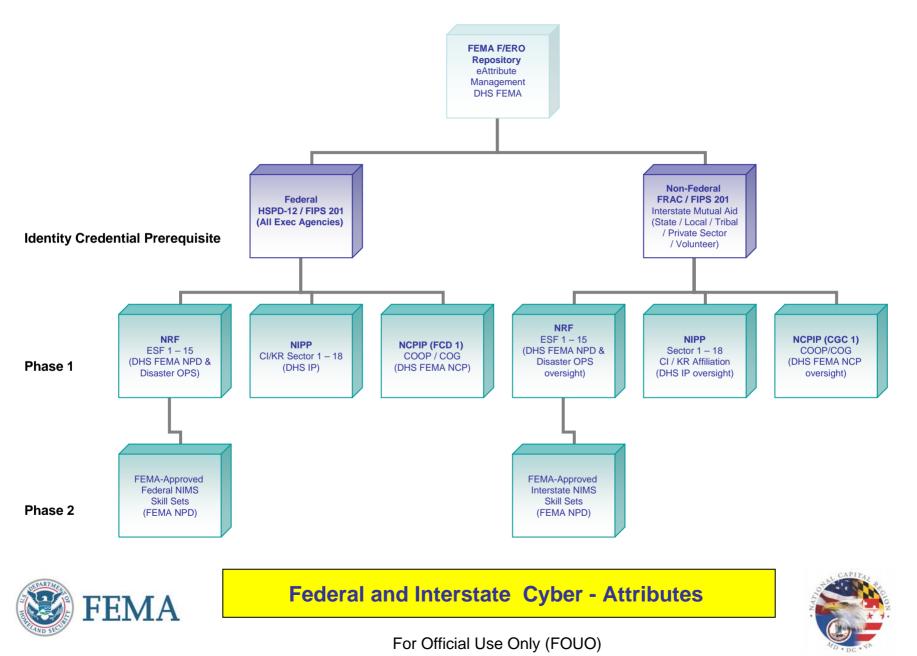
transaction data)

Leveraging Over \$2.3B in FIPS 201 Investments





F/ERO eAttribute Configuration Management



NRF F/ERO Repository Status (sample report)

Managenent

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fanagement and Resource

¹, Emergency Assistance,

^{4, and Human Services}

ath and Medical Services

³ and Natural Resources

terdous Materials

n Community Recovery

Vitrand Security

Federal National Response Framework (NRF)
Emergency Support Function (ESF)
Consolidated Attribute Repository

		Transport	Communi	Public M.	Flitefights	Emergen	2	Logistics	Public Ho	Search an	H Pule IIO	Agricultur	Energy	Public Sad	Long Tem	Erternal	/
		ية	/ है	13	18	1 5	/ # ×	3	13	18	/ 🖁 👘	ş	1 5	13	15	18	/
		ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	Totals ESF
	(ESF) 1-15	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	
1	Department of Homeland Security (DHS)																0
	Department of Defense (DoD)																0
3	Department of Interior (DOI)																0
	United States Department of Agriculture (USDA)																0
	Department of Commerce (DOC)																0
	Department of Energy (DOE)																0
	Department of Labor (DOL)																0
	Department of Transportation (DOT)																0
	Department of Health and Human Services (HHS)																0
	Environmental Protection Agency (EPA)																0
	General Services Administration (GSA)																0
12	Department of State (DOS)																0
	Department of Justice (DOJ)																0
	Department of Veteran Affairs (VA)																0
	United States Postal Service (USPS)																0
16	American Red Cross (ARC)																0
17	Department of Treasury (TREAS)																0
18	National Aeronautics and Space Administration (NASA)																0
19	Nuclear Regulatory Commission (NRC)																0
	Department of Housing and Urban Development (HUD)																0
21	Small Business Administration (SBA)																0
	Tennessee Valley Authority (TVA)																0
	Corporation for National and Community Service (CNCS)																0
	Federal Communication Commission (FCC)																0
	United States Agency for International Development (USAID)																0
26	Office of Personnel Management (OPM)																0
	Social Security Administration (SSA)																0
	National Voluntary Organizations Active in Disaster (NVOAD)																0
29	Education Department (ED)																0
	Advisory Council on Historic Preservation (ACHP)																0
	Delta Regional Authority (DRA)																0
32	Heritage Emergency National Task Force (HENTF)																0
33	National Archives and Records Administration (NARA)																0
34	Inspector General (IG)																0
	Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



NIPP F/ERO Repository Status (sample report)

Federal National Infrastructure Protection Plan (NIPP) Consolidated Sector Attribute F/ERO Repository Enrollment Status			o and Finance Chemical		^{dal Facilities}	Defense L.	Emergence		Governme		National As	Nuclear React	Postal and Waste	Public House	Community and Healthcare	Transport		Critical Mo	anuracturing
(NIPP) Sectors 1-18	Sector #1	Sector #2	Sector #3	Sector #4	Sector #5	Sector #6	Sector #7	Sector #8	Sector #9	Sector #10	Sector #11	Sector #12	Sector #13	Sector #14	Sector #15	Sector #16	Sector #17	Sector #18	Total
1 Department of Agriculture (USDA)																			0
2 Department of Defense (DoD)																			0
3 Department of Energy (DOE)																			0
4 Department of Health and Human Services (HHS)																			0
Department of Homeland Security (DHS) / Office of Cyber																			
5 Security and Telecommunications (CS & C)																			0
6 DHS / Federal Protective Service																			0
7 DHS / Office of Infrastructure Protection (IP)																			
8 DHS / Immigration and Customs Enforcement (ICE)																			0
9 DHS / Transportation Security Administration (TSA)																			0
10 DHS / United States Coast Guard (USCG)																			0
11 Department of Interior (DOI)																			0
12 Department of Transportation (DOT)																			0
13 Department of Treasury (TREAS)																			0
14 Environmental Protection Agency (EPA)																			0
15 Nuclear Regulatory Commission (NRC)																			0
16 Office of Management and Budget (OMB)																			0
Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





NCPIP F/ERO Repository Status (sample report)

Federal National Continuity Policy Implementation Plan (NCPIP) Consilidated F/ERO Repository Enrollment Status	NCPIP ESC.	coe	coop	OPROW .	OPRON T.	OPRON T	OPRON T	Cian, And Ado	OPRON T	47 Jay Totals
1 Department of Homeland Security (DHS)										0
2 Department of Defense (DoD)										0
3 Department of Interior (DOI)										0
4 United States Department of Agriculture (USDA)										0
5 Department of Commerce (DOC)										0
6 Department of Energy (DOE)										0
7 Department of Labor (DOL)										0
8 Department of Transportation (DOT)										0
9 Department of Health and Human Services (HHS)										0
10 Environmental Protection Agency (EPA)										0
11 General Services Administration (GSA)										0
12 Department of State (DOS)										0
13 Department of Justice (DOJ)										0
14 Department of Veteran Affairs (VA)										0
15 United States Postal Service (USPS)										0
16 Department of Treasury (TREAS)										0
17 National Aeronautics and Space Administration (NASA)										0
18 Nuclear Regulatory Commission (NRC)										0
19 Department of Housing and Urban Development (HUD)										0
20 Small Business Administration (SBA)										0
21 Tennessee Valley Authority (TVA)										0
22 Corporation for National and Community Service (CNCS)										0
23 Federal Communication Commission (FCC)										0
24 United States Agency for International Development (USAID)										0
25 Office of Personnel Management (OPM)										0
26 Social Security Administration (SSA)										0
27 Education Department (ED)										0
28 National Archives and Records Administration (NARA)										0
29 National Economic Council										0
30 National Security Council (NSC)										0
31 Office of Administration										0
32 Office of Faith-Based and Community Initiatives										0
33 Office of Global Communications										0
34 Office of Management and Budget (OMB)										0
Totals	0	0	0	0	0	0	0	0	0	0



How Should It Work?



Chronological Electronic Validation (sample data)

	Cardholder Name	Card Issuer	Summary	Privilege
	CAROLYN MCINERNEY	FRAC-Demo-CA	Success: Card Validation	Sector 2: Banking and Finance
	CAROLYN K ELLISON	ChoicelD Public SSP CA	Success: Card Validation	ESF-7 Resource Support
3/6/2008 9:26	Glenn Blanchette	HHS-SSP-CA-B7	Success: Card Validation	
3/6/2008 9:36	Leonard M. Kenon 102059	Veterans Affairs User CA B1	Success: Card Validation	
				ESF-13 Public Safety and Security; Federal Agent; ESF-5 Emergency
3/6/2008 9:39	Jonathan Edward Geary	GOVT-SSP-CA-B6	Failure: PIN Verification	Management; ERG; OPRON Tier 2
3/6/2008 9:39	BIAS, CYNTHIA LYNN	W	Success: Driver's license scan	× · · ·
3/6/2008 9:39	Mark Martin	FRAC-Demo-CA	Success: Card Validation	ESF-13 Public Safety and Security
3/6/2008 9:39	Sara Jones	FRAC-Demo-CA	Success: Card Validation	ž ž
				ESF-13 Public Safety and Security; Federal Agent; ESF-5 Emergency
3/6/2008 9:39	Jonathan Edward Geary	GOVT-SSP-CA-B6	Success: Card Validation	Management; ERG; OPRON Tier 2
3/6/2008 9:39	April Wood	FRAC-Demo-CA	Success: Card Validation	Ŭ
3/6/2008 9:39	Thomas Ferrantino	FRAC-Demo-CA	Success: Card Validation	ESF-5 Emergency Management
3/6/2008 9:41	Carmen Suarez	FRAC-Demo-CA	Success: Card Validation	Sector 11: National Monuments & Icons
3/6/2008 9:46	BRAMBLETTE, PAMELA, SUE	FL	Success: Driver's license scan	
				ESF-9 Urban Search and Rescue; ESF-5 Emergency Management; Sector
				7: Emergency Services; Sector 11: National Monuments & Icons; Sector
3/6/2008 9:53	JESSE REYNOLDS	FRAC-Demo-CA	Success: Card Validation	16: Transportation
3/6/2008 9:55	Jennifer Hannah	HHS-SSP-CA-B7	Success: Card Validation	
3/6/2008 9:55	Cheri Roe	FRAC-Demo-CA	Success: Card Validation	ESF-5 Emergency Management
	Donna Houle	FRAC-Demo-CA	Success: Card Validation	Sector 11: National Monuments & Icons
3/6/2008 9:56	HERBERT JOSEPH MCALLISTER	Exostar FIS Certificate Authority	Success: Card Validation	ESF-1 Transportation; ESF-13 Public Safety and Security; COOP/COG
				ESF-8 Public Health and Medical Services; Sector 7: Emergency Services;
	Geoffrey Miller	FRAC-Demo-CA	Success: Card Validation	Sector 14: Public Health & Healthcare
	Craig Wilson	FRAC-Demo-CA	Success: Card Validation	ESF-5 Emergency Management
3/6/2008 9:57	Mark Martin	FRAC-Demo-CA	Success: Card Validation	ESF-13 Public Safety and Security
3/6/2008 10:00	Dennis Haas	FRAC-Demo-CA	Success: Card Validation	COOP/COG; Sector 7: Emergency Services
				ESF-10 Oil and HazMat Response; ESF-13 Public Safety and Security;
				ESF-4 Firefighting; COOP/COG; ESF-8 Public Health and Medical
				Services; Sector 14: Public Health & Healthcare; Sector 7: Emergency
3/6/2008 10:00	Brandon Graham	FRAC-Demo-CA	Success: Card Validation	Services
	Russel Weiser	FRAC-Demo-CA	Success: Card Validation	ESF-2 Communications; Sector 15: Telecommunications
	Scott DOUGLAS Meyer	TWIC CA 1	Success: Card Validation	ESF-5 Emergency Management; ESF-1 Transportation
	THOMAS GRECO	FRAC-Demo-CA	Success: Card Validation	
3/6/2008 10:05	WALTER DUANE STAFFORD (Affiliate)	Exostar FIS Certificate Authority	Success: Card Validation	ESF-1 Transportation



Access Control Transaction Data



On-Scene Human Resources (sample data)

Cardholder Name	Privilege
Scott DOUGLAS Meyer	ESF-1 Transportation
WALTER DUANE STAFFORD (Affiliate)	ESF-1 Transportation
HERBERT JOSEPH MCALLISTER	ESF-1 Transportation
Russel Weiser	ESF-2 Communications
Brandon Graham	ESF-4 Firefighting
Thomas Ferrantino	ESF-5 Emergency Management
Jonathan Edward Geary	ESF-5 Emergency Managemen
Scott DOUGLAS Meyer	ESF-5 Emergency Management
JESSE REYNOLDS	ESF-5 Emergency Management
Cheri Roe	ESF-5 Emergency Management
Craig Wilson	ESF-5 Emergency Management
	0000000
Brandon Graham	
Dennis Haas	COOP/COG
HERBERT JOSEPH MCALLISTER	COOP/COG
CAROLYN K ELLISON	ESF-7 Resource Support
Brandon Graham	ESF-8 Public Health and Medical Services
Geoffrey Miller	ESF-8 Public Health and Medical Services
JESSE REYNOLDS	ESF-9 Urban Search and Rescue
Brandon Graham	ESF-10 Oil and HazMat Response
Jonathan Edward Geary	ESF-13 Public Safety and Security
Brandon Graham	ESF-13 Public Safety and Security
Mark Martin	ESF-13 Public Safety and Security
HERBERT JOSEPH MCALLISTER	ESF-13 Public Safety and Security
CAROLYN MCINERNEY	Sector 2: Banking and Finance
Brandon Graham	Sector 7: Emergency Services
Dennis Haas	Sector 7: Emergency Services
Geoffrey Miller	Sector 7: Emergency Services
JESSE REYNOLDS	Sector 7: Emergency Services
Donna Houle	Sector 11: National Monuments & Icons
JESSE REYNOLDS	Sector 11: National Monuments & Icons
Carmen Suarez	Sector 11: National Monuments & Icons
Brandon Graham	Sector 14: Public Health & Healthcare
Geoffrey Miller	Sector 14: Public Health & Healthcare
Russel Weiser	Sector 15: Telecommunications
JESSE REYNOLDS	Sector 16: Transportation
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Human Resource Situational Awareness



NCRC Coordinated Demonstrations

- Since 2006, FEMA NCRC coordinated over nineteen FIPS 201 demonstrations with Federal, State, Local, and CI/KR stakeholders
- Spring Ahead, conducted in May 2009, the most recent FIPS 201 demonstration which included proof-of-implementation for IL, CO, and San Antonio
- Spring Ahead also validated FIPS 201 modernization of jurisdiction owned equipment

Implementing FIPS 201 Capability as Common Practice





F/ERO Repository Population Timeline

- 1. By NLT the end of Q3 FY09, certify the FEMA Federal Emergency Response Official (F/ERO) Repository for Authority to Operate (ATO)
- 2. By NLT the end of Q4 FY 09, at least one infrastructure is to be connected machine-to-machine into the FEMA F/ERO Repository with at least one successful F/ERO electronic registration from each infrastructure
- 3. By NLT the end of Q4 FY 10, all 21 infrastructures are to be connected machine-to-machine into the FEMA F/ERO Repository with at least one successful F/ERO electronic registration from each infrastructure.
- 4. By NLT the end of Q1 FY10, all National Capital Region (NCR) precredentialed NCPIP (COOP/ COG) F/EROs are to be registered in the FEMA F/ERO Repository
- 5. By NLT the end of Q4, FY 10, all F/EROs nation-wide are to be registered in the FEMA F/ERO Repository







End State: Federal & Mutual Aid Preparedness

Incident Management:

To get the right people with the right attributes to the right places at the right times thus reducing response/recovery times and promoting restoration to pre-incident quality of life conditions

Intended benefit:

Emergency response officials will possess FIPS 201 identity credentials that align with Federal standards and enable e-Authentication of identity and disaster response/recovery attribute information for determining access privileges

Additional benefit:

FIPS 201 identity credentials issued by respective sponsoring agencies in a distributed environment can be integrated into standards-based physical and logical access systems thus eliminating proprietary solutions that can be costly to maintain/sustain or time

Federal and Non-Federal Standardization







(1) Federal Executive Branch:

FEMA-FEROSupport@dhs.gov

(2) All other inquiries:

FEMA-FRACSupport@dhs.gov







FEMA