



National Guard Chemical, Biological, Radiological and Nuclear (CBRN) Response Enterprise (NG CRE)

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Purpose



Provide an overview of the National Guard (NG) Chemical, Biological, Radiological, and Nuclear (CBRN) Response Enterprise (CRE) capabilities.



CBRN Response Enterprise



Title-32 State Response

Title-10 Federal Response

Follow-on

Total Force
10,535

Total Force
~8,200

WMD-CST
(57 teams)
1254 personnel

- 22 personnel
- Detection
- Identification
- Monitoring
- Communication

1-3 hours

CERFP
(17 units)
3451 personnel

- 203 personnel
- C2
- Search/Extraction
- Decontamination
- Triage/Stabilization
- Fatality Search and Recovery
- Joint Incident Site Communications Capability (JISCC)

3-6 hours

HRF
(10 units)
5830 personnel

- 583 personnel
- C2
- Search/Extraction
- Decontamination
- Triage/Stabilization
- Fatality Search and Recovery
- JISCC
- CBRN Assistance Support Element (CASE)
- Logistic Support

6-12 hours

**Defense CBRNE
Response Force
(DCRF)**
5200 personnel

- CBRN Assessment
- Search/Rescue
- Decontamination
- Emergency Med
- Security
- Logistics Support
- C2
- FP1 - 2000 personnel, 24hrs
- FP 2/3 - 3200 personnel, 48 hrs

C2CREs A/B

- 1500 personnel (each) 96hr
- 3000 personnel (total)

Follow-on
General
Purpose
Forces

General
Purpose
Forces

- Aviation
- Security
- Medical
- Logistics



NSSE Support / Standby Missions /
Nuclear Detection Mission /
Pre-Incident Liaison and Planning

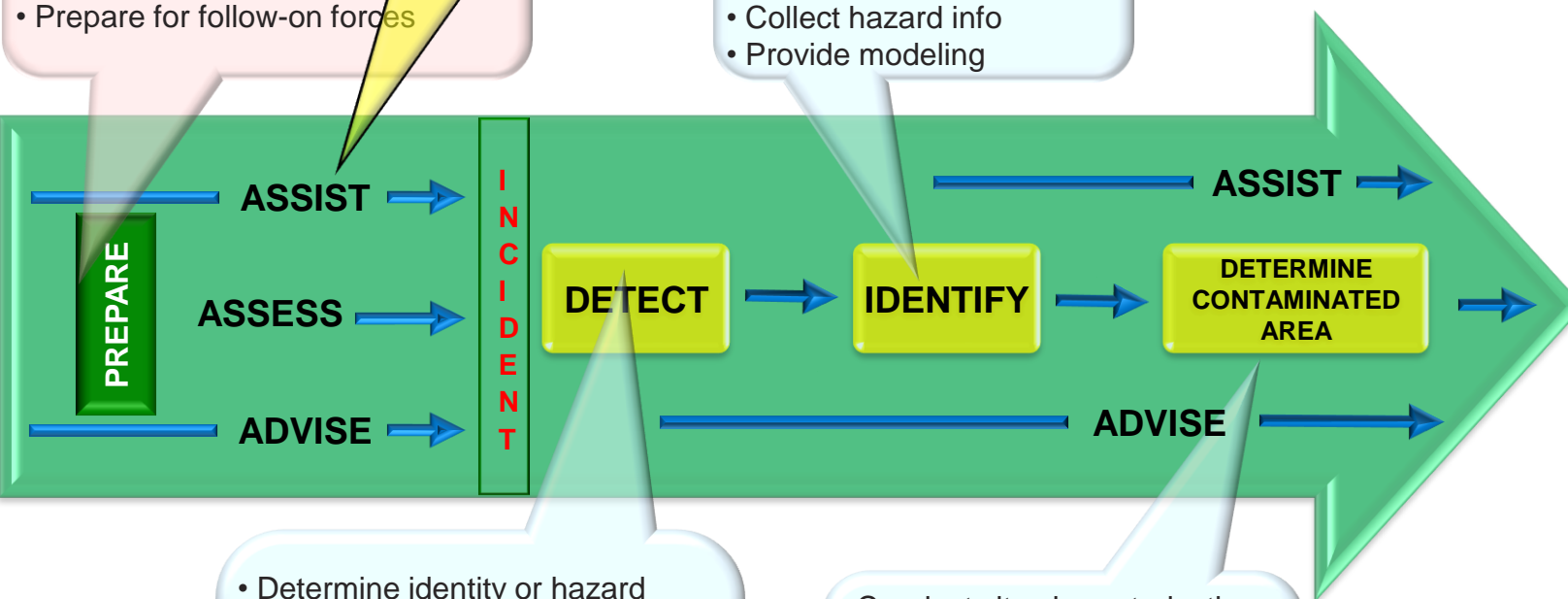
WMD-CST CONOPS



- Participate in advance planning
- Coordinate for potential response
- Report / info exchange
- Link to support agencies
- Prepare for follow-on forces

- Alert to presence of potential hazard model
- Sample for characterization
- Collect hazard info
- Provide modeling

- Prepare to redeploy
- Prepare for follow on support for IC
- Prepare for additional CSTs
- Prepare to support CERFP or HRF Mission
- Prepare for split operations

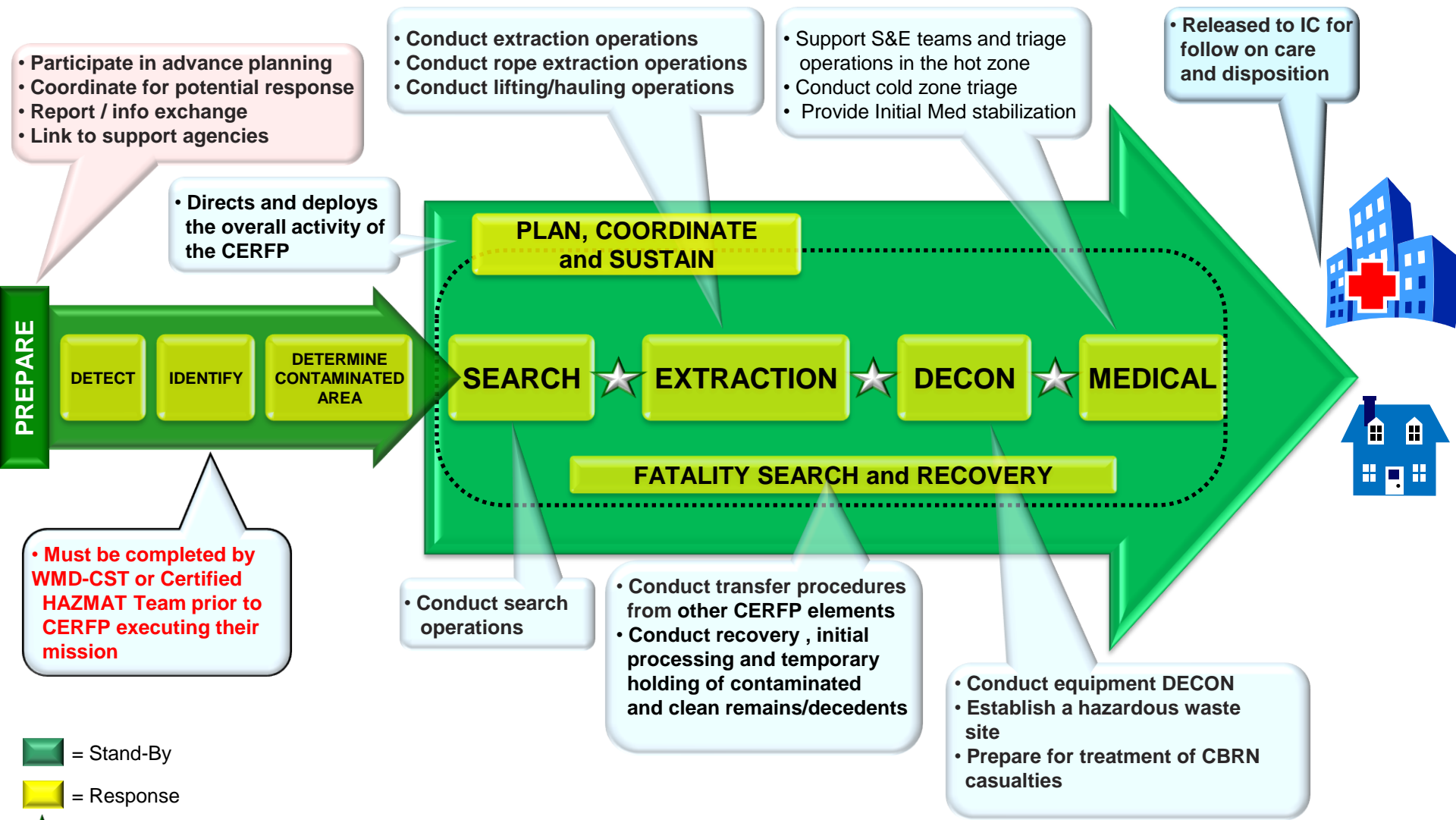


- Determine identity or hazard class
- Identify effects
- Advise on casualty minimization measures
- Advise on containment measures
- Report / info exchange
- Refine hazard model
- Provide reach-back

- Conduct site characterization
- Assess consequences
- Assess infrastructure effects
- Refine models
- Advise on mitigation measures
- Advise and link to follow-on forces

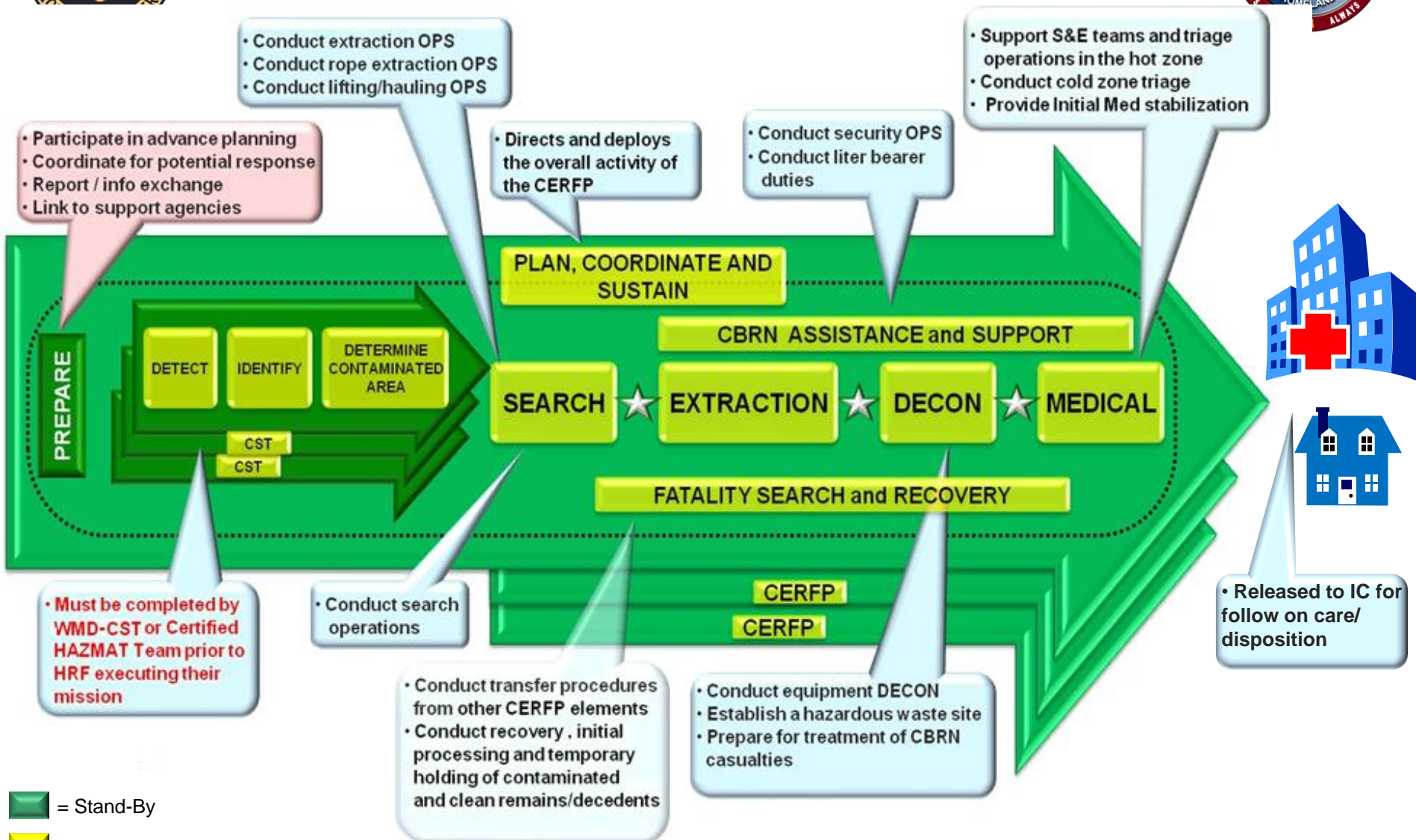


CERFP CONOPS





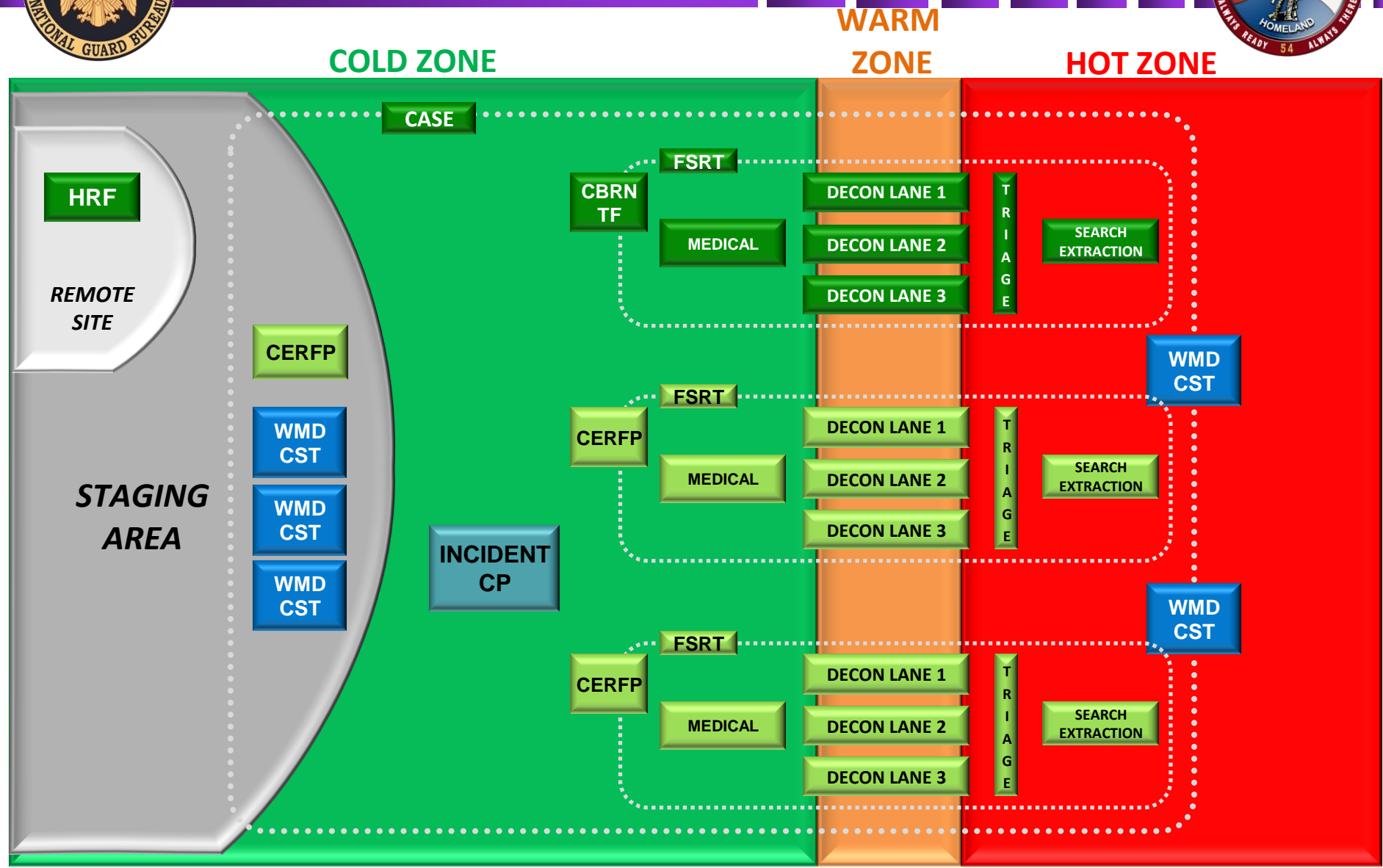
HRF CONOPS



Released to IC for follow on care/disposition

= Stand-By
 = Response
 = Triage

Example of a HRF Operational Picture





MISSION: Support civil authorities at a domestic CBRNE incident site by identifying CBRNE agents and substances, assessing current and projected consequences, advising on response measures, and assisting with appropriate requests for additional support.

NDAA FY07 expanded the mission set to include responses to intentional or unintentional releases of Toxic Industrial Chemicals (TICs) and Materials (TIMs), and natural or man-made disasters in the United States that result, or could result, in catastrophic loss of life or property.

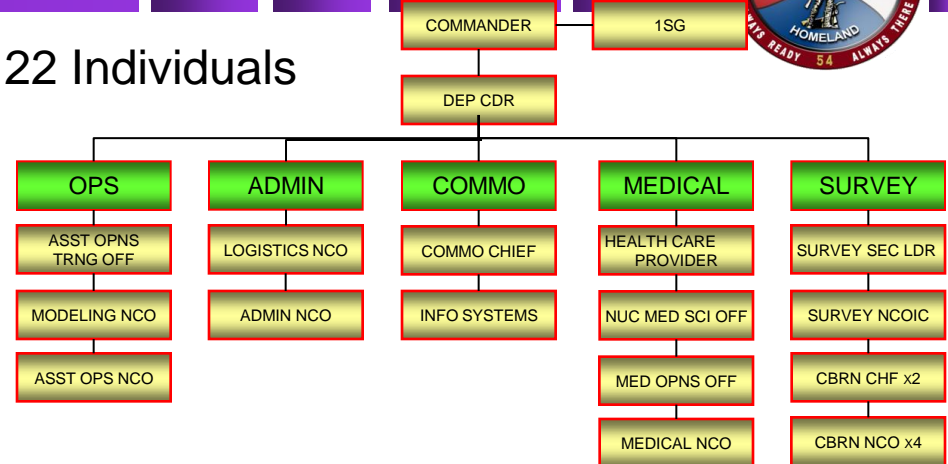
WMD-CST KEY CHARACTERISTICS:

- **Established in Statute (10 USC 12310)**
- 57 WMD-CSTs certified by the SECDEF
- Operates under control of the Governor
- Operate only in US and Territories
- 22 Full-time, T32 AGR Personnel, Jointly manned w/ ARNG and ANG personnel
- 80% Non-standard equipment
- Sophisticated Reach back System
- Interoperable with First Responders
- **All WMD-CST personnel are HAZMAT TECH certified**

WMD-CST Overview



22 Individuals



Unified Communications Suite (UCS)

- Radios:
 - UHF/VHF
 - SATCOM
 - INMARSAT
- Phones:
 - DSN
 - Commercial
- Data:
 - NIPRNET
 - SIPRNET
- Video

Analytical Laboratory System (ALS)

- Refrigerator
- Glove Box
- GC/MS
- Immunoassay Tickets
- Gamma Spectrometer
- Fluorescent Microscope
- PCR
- FTIR
- Digital transmission link to UCS



Detection and Monitoring Equipment



Chemical Capabilities

Point Detection

- Multi Rae
- GCMS
- Colorimetric tubes
- RAID-M

Area Monitoring

- Area RAE
- FTIR / RAMAN Detection Systems
- First Defender Raman non-invasive detection
- HazmatID FTIR liquid/solid identification

Sampling

- Certified clean containers
- Uniquely numbered sample containers
- Sample Types
 - Air
 - IBAC
 - Liquid
 - Wipe/Swab
 - Sludge
 - Vegetation
 - Powder/Crystalline



Radiological Capabilities

- (alpha, beta, gamma, neutron, x-ray)
- ANUDR-13 (UDR 14s with DRSKO)
- ANPDR-77,
- ANVDR-2
- Area RAE
- ORTEC, Micro Detector
- AN PDR 75A
- Gamma Spectrometer
- MPDS, fielding begins FY 17
- Reach back (DOE, DNDO, DTRA)





Future Capability Enhancements

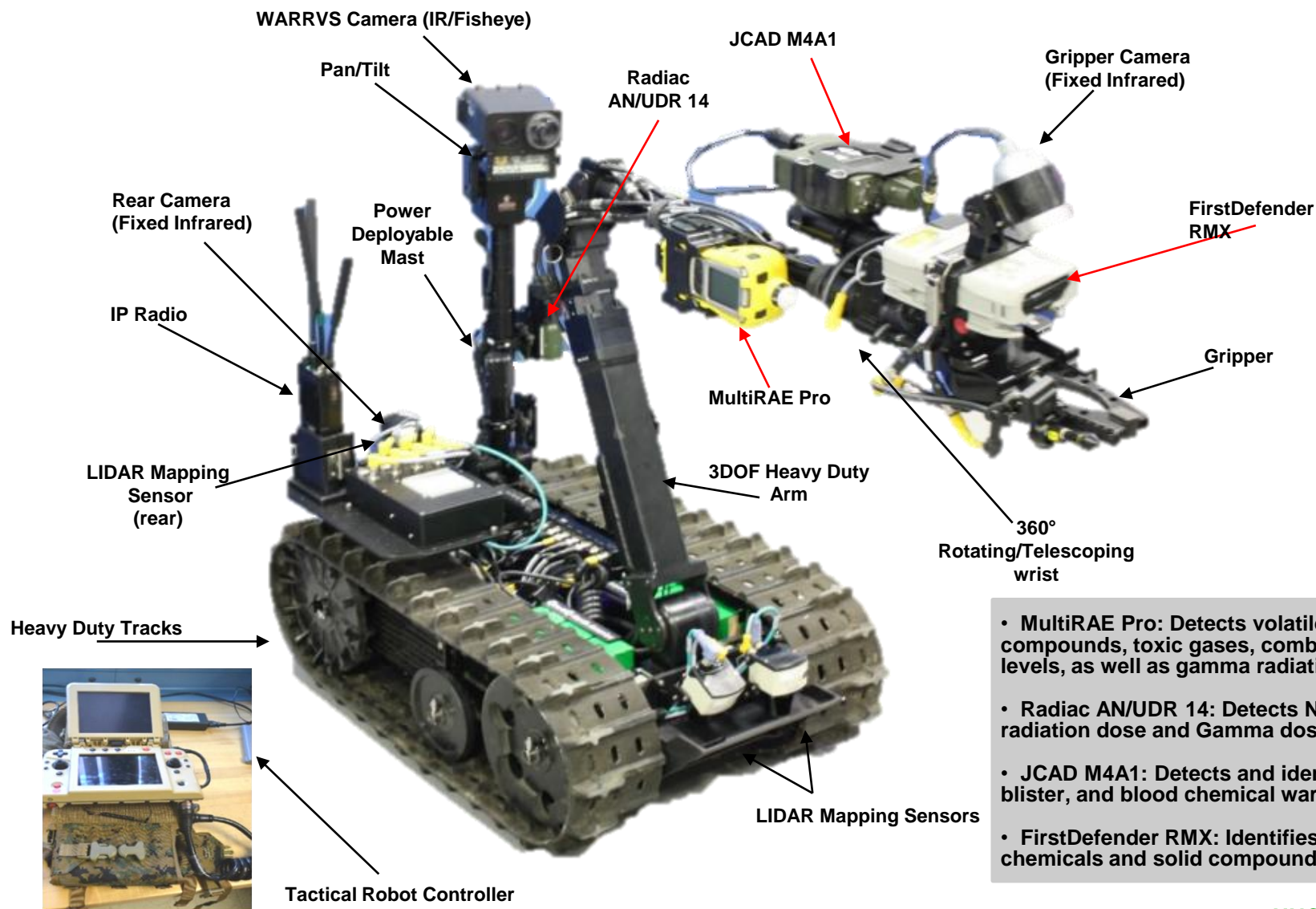


- Talon IV CBRNe Robot (Currently conducting Robot NET with WMD-CSTs)
- Physiological Monitoring (Fielding and NET for 12 WMD - CSTs will be completed by 4Q, FY17)
- National Guard CBRN Response Enterprise Information Management System (NG CIMS) (System fielding to WMD-CSTs - 2Q, FY18: CERFP & HRF 3Q, FY18)

NGB leveraging Joint Program Executive Office (JPEO) Joint CBRN Advanced Capability Sets (JCACS) Enhanced Capability Demonstrations (ECD) program to evaluate technologies.



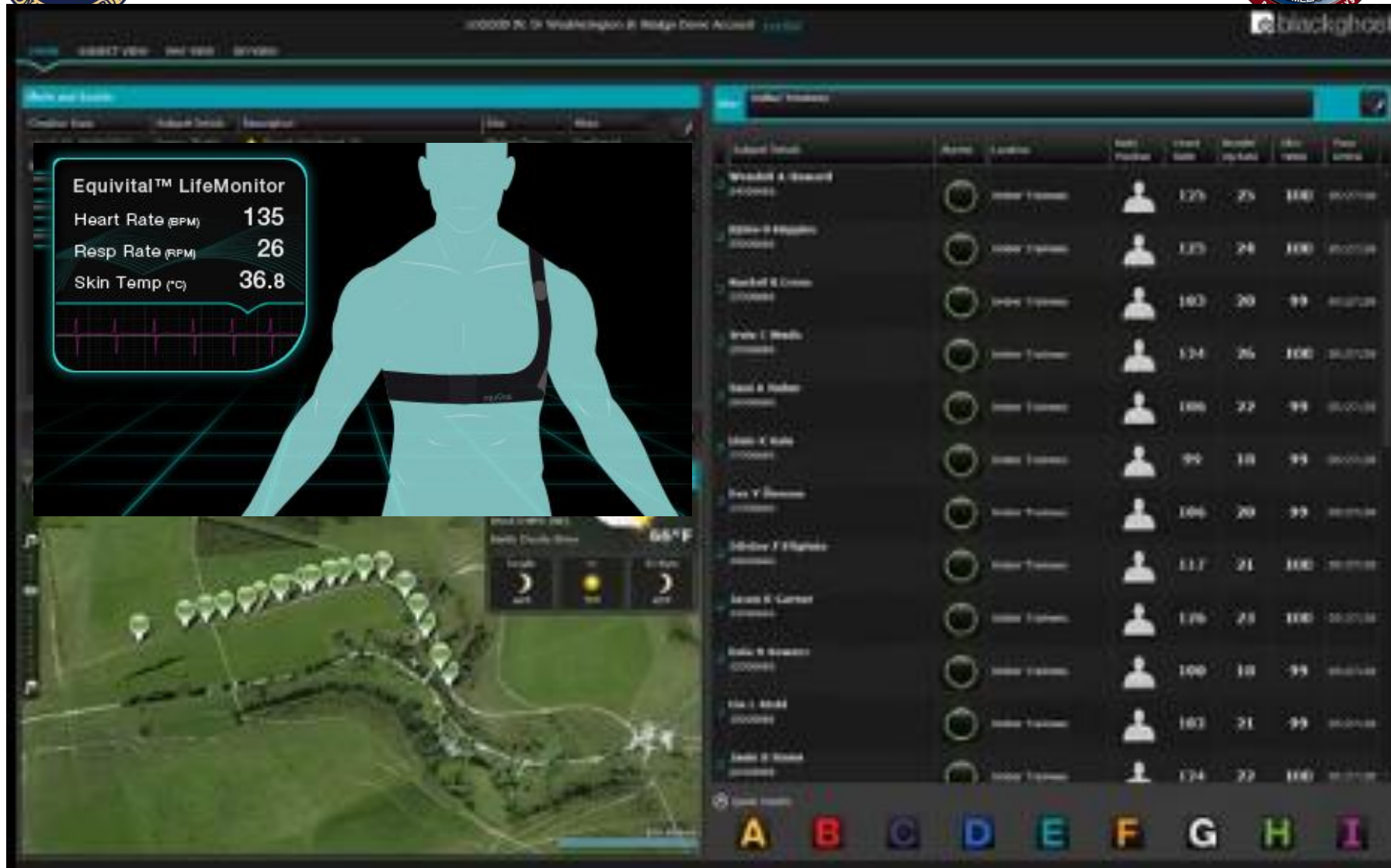
Talon IV CBRNe Robot



- MultiRAE Pro: Detects volatile organic compounds, toxic gases, combustibles, oxygen levels, as well as gamma radiation.
- Radiac AN/UDR 14: Detects Neutron/Gamma radiation dose and Gamma dose rate.
- JCAD M4A1: Detects and identifies nerve, blister, and blood chemical warfare agents.
- FirstDefender RMX: Identifies unknown liquid chemicals and solid compounds.



NG WMD-CSTs Physiological Monitor



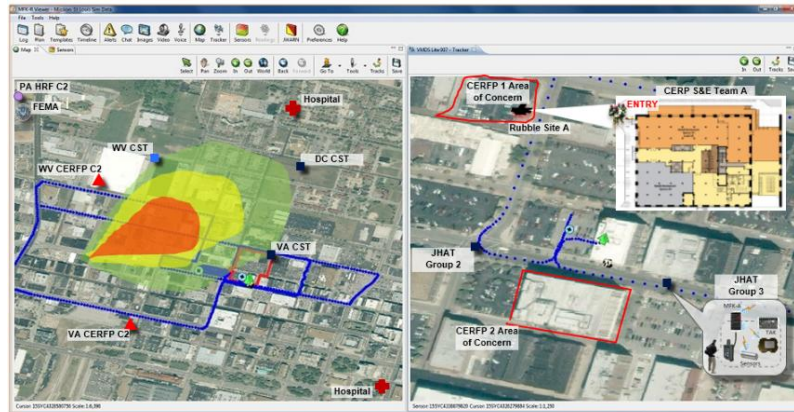


NG CIMS Overview



National Guard (NG) CRE Information Management System (NG CIMS):

- NGB system of record to provide WMD-CSTs, CERFPs, and HRFs a standardized tactical-level COP/SA tool for managing mission operations and information
- Entails a system/suite of software applications, end-user devices (EUDs), and communications support
- Enables information sharing between NG CRE forces and externally with other DoD and Civilian response partners



NG CIMS KEY CAPABILITIES & CHARACTERISTICS:

- Tactical COP display and management
- Integration of CBRN detection sensor and EUD information
- Mission-area Information management support
- Integrates with NG CRE organic communications assets
- Integrates position location information of personnel and CBRN sensor systems operating in the warm and hot zones
- Integrates multiple CBRN sensors located throughout a broad geographic area to provide real-time detection of potential CBRN threats



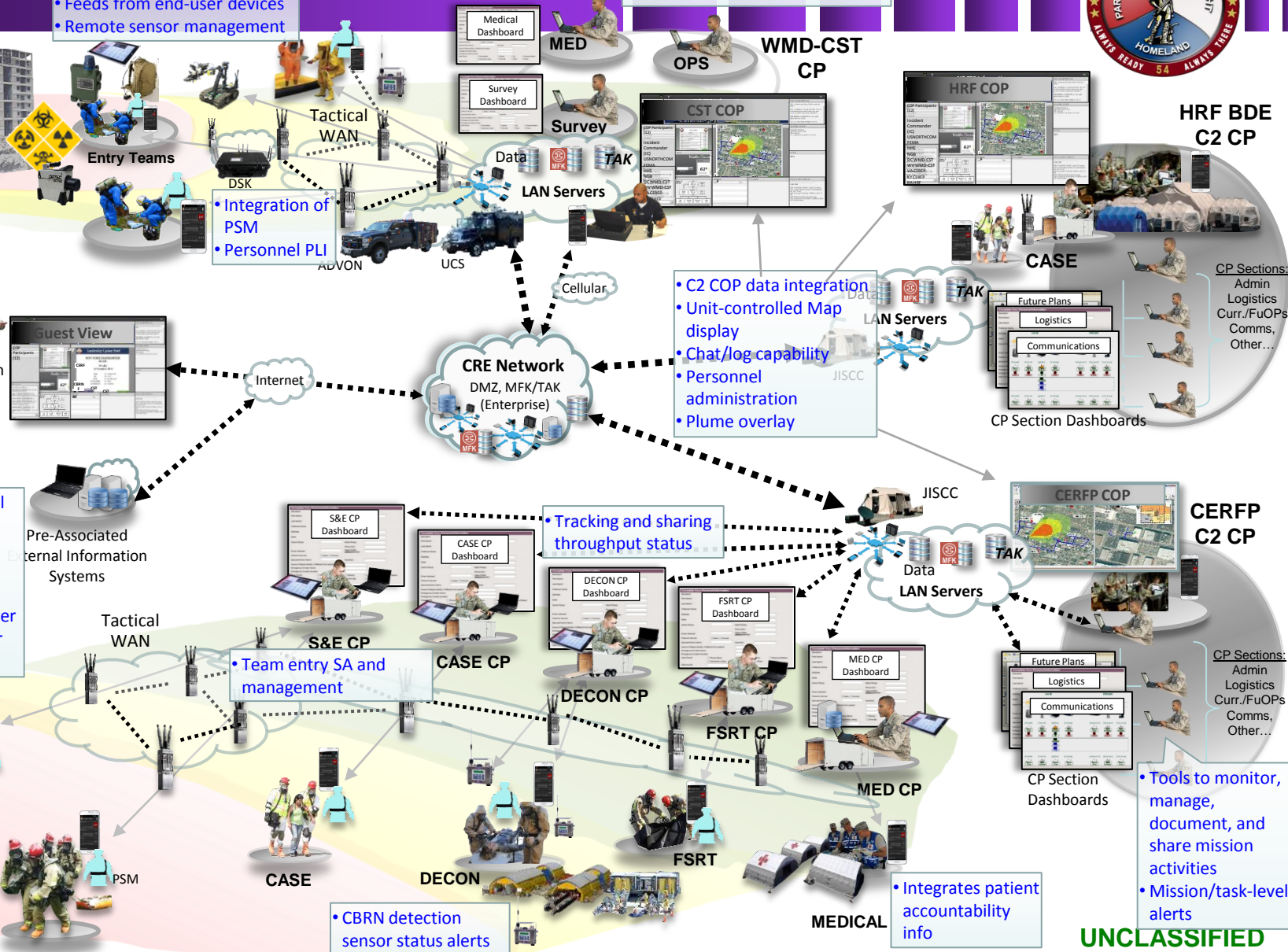
NG CIMS Equipment

NG CIMS Operational Concept



- Integration of sensor data
- status of CBRN detectors
- Feeds from end-user devices
- Remote sensor management

- Team entry SA & management
- PSM





NG CRE Mission Support



- **Examples of missions supported**

- Boston Marathon Bombing Response (MA CST w/ Augmented personnel)
- Washington, Oso Mud Slide (Elements of HRF and CERFPs)
- Papal Visit (multiple CSTs and CERFPs, and HRF)
- Presidential Inauguration (multiple CSTs, and CERFPs (2), HRF (1))
- State of the Union (CSTs)
- Republican and Democratic National Convention (CSTs)
- Super Bowl (CSTs and HRF)
- Elk River Water Contamination (Multiple CSTs)
- Hurricane Mathew (Multiple CSTs, HRF and CERFP)
- Other various NSSE and Natural Disaster events

- **Response partners supported**

- Local Civilian Incident Commander (IC)
- USSS, FBI, DOE, DHS, USCG, FEMA, HHS, CDC, LRN



Future Capability Needs



- Mass Casualty Dry Decontamination capability
- Treatment of Decontamination Runoff to reduce or eliminate waste water, possible recycle of water for further decontamination.
- Patient/Evacuee Tracking System- Identify a management system capable of providing Identification, Tracking, Regulation, Information sharing and Interoperability with NG CIMS and Inter-agency partners (i.e.: HHS, FEMA, DHS)
- Low cost Class 4 radiological/ biological PPE.

NGB leveraging Joint Program Executive Office (JPEO) Joint CBRN Advanced Capability Sets (JCACS) Enhanced Capability Demonstrations (ECD) program to evaluate technologies.

CNGBI 9000.01 (Jul 16) NGB Vendor Procedures



- All points of contact responsible for contractor visit, will complete the Contractor Visit Data Sheet and Briefing Agreement
- POC will coordinate with the NGB Principal Assistant Responsible for Contracting (NGB-OPARC), the NGB Chief Counsel (NGB-JA), and the Office of Small Business Programs (NGB-SBP) to review information on the visit and attend the representation. Small business phone is 703/601-6765
- The Sponsor Lead:

will work with the Contractor to schedule the demonstration, product display, or briefing, and coordinate logistics, security, and information technology requirements.

does not have the authority to commit the U.S. Government to any agreements or contracts.

will not be authorized to make any contact with the Contractor's organization until the Lead has contracted NGB-AQ.



QUESTIONS?