Resiliency & Maritime Security Preparedness Planning

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Office of Port and Facility Activities (CG-544)

Resilience
*What Does it Mean?*

- Pertains to: Systems, Infrastructure, Government, Business, Individuals

- Core Characteristics:
  - Resist
  - Absorb (including response)
  - Recover from
  - Adapt to

- Applies for an adverse occurrence that may:
  - cause harm, destruction, or loss of national significance
  - Impair capacity of an organization to:
    - recognize threats and hazards
    - make adjustments that improve future protection efforts and risk reduction measures.
MTS Security Requirements

National-Level Requirements, Direction & Policy

• Magnuson Act of 1950/E.O. 10173, as amended/33 CFR 6
• Ports and Waterways Safety Act of 1972, as amended
• MTSA 2002
• SAFE Port Act 2006
• Various Executive Directives
• Implementing Regulations
• National Strategy for Maritime Security
• National Infrastructure Protection Plan
  o Transportation Systems Sector-Specific Plan / Maritime Transportation Annex
• National Response Framework
• National Disaster Recovery Framework (forthcoming)

MTS Security Requirements

Coast Guard Implementation

• COMDTINST 16601.28 (Area Maritime Security Process)

• COMDTINST 16000.28 (Recovery of the Marine Transportation System for the Resumption of Commerce)

• Navigation and Vessel Inspection Circular 9-02 (Ch 3)
Approximate Functional and Incident Management Phase Alignment

Prevent/Protect/Respond/Recover

Pre-Incident

Natural or Man-Made Disaster

Pre-Incident

Prevent-Protect—Respond—Recover

MTS Preparedness
Always Ready Begins Pre-Incident

Pre-Incident

Natural or Man-Made Disaster

Preparedness

Safety

Prevention

• Alerts & Warnings

• Advance Measures

Awareness

Protection

Maritime Security Incident

MTS (short-term) Recovery

Response Phase
Establishing MTS Resilience

At Each Link in the Chain

- **Knowledge**
  - Understanding Systems, Functions, and Interdependencies
  - Understanding Roles, Responsibilities, Authorities, Capabilities
  - Understanding Process and Structures

- **Designing / Building Resilient Structures & Capabilities**
  - Infrastructure, Equipment, Hardware
  - System Functionality
  - Plans, Procedures, Relationships
  - Resources
  - Emergency Capability
  - Reserve Capacity
  - Restore/Rebuild Capability

- **Tests/Rehearsals/After-Action Measures**

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MTS Preparedness

Understanding the System

Planning Considerations (Partial)

- **MTS Critical Infrastructure and Key Resources**

- **Supply Chain/Intermodal/CIKR**
  - Priorities
  - Dependencies & Interdependencies
  - MTS Infrastructure Linkages

- **Economic Risk**

- **Operational & Business Continuity Issues**
MTS Preparedness
Understanding the System

Essential Elements of Information (EEI)

<table>
<thead>
<tr>
<th>Aids to Navigation</th>
<th>High Capacity Passenger Vessels/Ferries</th>
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<tr>
<td>Deep Draft Channels</td>
<td>Small Passenger Vessels</td>
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<td>Non-Deep Draft Channels</td>
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<td>Locks</td>
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<td>Vessel Salvage/Wreck Removal</td>
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<td>Oil Pollution Incidents</td>
<td>Offshore Platforms</td>
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<td>Hazardous Materials Incidents</td>
<td>Offshore Platforms (Top 100 Producers)</td>
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<tr>
<td>Bridges</td>
<td>Offshore Production</td>
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<tr>
<td>Bulk Liquid Facilities</td>
<td>Offshore Renewable Energy Installations</td>
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<tr>
<td>Container Cargo Facilities</td>
<td>Mobile Offshore Drilling Units</td>
</tr>
<tr>
<td>Vessels in queue</td>
<td>Monitoring Systems</td>
</tr>
<tr>
<td>Non-Containerized Cargo Facilities</td>
<td>Shipyards</td>
</tr>
</tbody>
</table>

MTS Preparedness
Understanding the System – Economic Risk

THE CHALLENGE

- **Substantial High Interest Issue**
  - Information Requests may Precede Information Availability

- **Response Phase Economic Assessment Relies on:**
  - Availability of Economic & Business Continuity Information
  - Supporting Specialized Expertise & Assessments

- **Economic Dollar Value Difficult to Correlate with:**
  - Tactical Response & Short-term Recovery Needs
  - Supply Chain Priorities, Dependencies & Interdependencies
  - Local Operating Conditions Affecting MTS Functionality
**MTS Preparedness**
*Understanding the System – Economic Risk*

**THE PRACTICAL APPROACH**

- Develop Baseline Economic Information Pre-Incident

- Correlate MTS and Economic Functional Relationships
  - Trade Patterns & Cargo Stream Criticality and Priorities (as known)
  - Local and Intermodal Operating Conditions & Priorities
  - Response & Restoration Needs, Priorities, & Activities

**MTS Preparedness**
*Understanding Roles, Responsibilities, & Authorities and Capabilities*

- **Roles**
  - Federal
  - State
  - Local
  - Tribal
  - Territorial
  - Non-Governmental Organization
  - Industry
  - Individual

- **Responsibilities**
  - Institutional and Organizational
  - Shared

- **Authorities**
  - Statutory
  - Regulatory
  - Directives
  - Other

- **Capabilities**
MTS Preparedness
Understanding Roles, Responsibilities, & Authorities and Capabilities

- Area Committee
- Area Maritime Security Committee
- Port Readiness Committee
- Harbor Safety Committees
- Other Port-Level Groups
  - Advisory
  - Coordination

MTS Preparedness
Understanding Process & Structures

- National Strategies and Plans
- National Incident Management System (NIMS)
- National Response Framework (NRF)
- National Disaster Recovery Framework (NDRF – in draft)
- Structural Alignment for Incident Management
  - Institutional Jurisdictions
  - Geographic Boundaries
  - Functional Systems Crossing Jurisdictions and Boundaries
MTS Preparedness
Understanding Process & Structures

• Pre-Incident Preparedness
  o Working relationships, Communications, Coordination
  o Planning/Readiness
  o Deterrence/Prevention (Safety & Anti-Terrorism)
  o Protection

• Alerts and Warnings

• Response
  o First response & follow-up response activities
  o Mobilization for recovery
  o System stabilization

• Post-Incident MTS Recovery (Short-term: +/- 90 days)
  o Facilitation of partial recovery of functions
  o Maintenance of marine safety and maritime security
    (deterrence/prevention/anti-terrorism activities)

• Long-term Community Recovery
  o Support for transition from short-term to long-term recovery
  o Operations informed by long-term recovery issues
  o Rebuild

MTS Preparedness
Understanding Process & Structures

Maritime Security Levels

**MARSEC Level 1**
“Significant Risk”
- USCG’s baseline posture
- General, non-specific threats
- Nationwide
- Sustained deterrence

**MARSEC Level 2**
“Heightened Risk”
- Increased security posture
- Increased specific or non-specific threat
- Nationwide or region or port
- Sustained deterrence

**MARSEC Level 3**
“Terrorist Incident Imminent or Post-Impact”
- Most focused security posture
- Post-incident or attack imminent

Aligned with HSAS
**MTS Preparedness**

*Understanding Process & Structures*

Port Area Response, Mitigation & Recovery Plans and Operation Orders

- **Environmental Response**
  - Area Contingency Plans (ACP) *(community-based)*

- **Maritime Security**
  - Operation Neptune Shield (ONS) *(Coast Guard)*
  - Area Maritime Security Plan (AMSP) *(community-based)*
  - Port Readiness Plan (for strategic ports) *(community-based)*

- **Local Emergency Response Plans**

- **MTS Recovery**
  - All-Hazard MTS Recovery Procedures/Plan *(community-based)*
  - AMS Salvage Response Plan *(community-based)*

**MTS Recovery Preparedness**

*Documentation and Reporting*

- **Common Assessment Reporting Tool (CART)**
  - Database Repository for MTS Baseline Data *(Essential Elements of Information - EEI)*
  - Incident-Specific Files *(Actual Events, Exercises)*
  - Generate Reports & Trend Lines
  - Storage for Past Incident Documentation
MTS Recovery Preparedness

Documentation and Reporting

Example - data subject to change
MTS Recovery Preparedness
Documentation and Reporting

Tracking Vessel Decon Stations and Status

Mobile Decon Teams

“Fixed” Locations

Vessel Decon Sites
approx locations

Data as of 7-13-10: Number, location and status subject to change
MTS Preparedness
Learning from Experience

2001: 911 Terrorist Attack  
2005: Hurricane Katrina  
2006: Lake Charles Oil Spill

2006: Cook Inlet Grounding  
2007: I-35 Collapse  
2010: BP Oil Spill

Potential for Large-Scale Transportation & Associated Supply Chain Disruptions

MTS Preparedness
Learning from Exercises

SONS 07 - MTS RU - St. Louis Venue
Coast Guard staff & Marine Industry subject matter experts
Waterways Management Recovery Issues - Working List

- Reconstitution
  - Operating Resources and Capabilities
  - Labor
- Operational Continuity & Business Continuity
- Communications
- Force Protection/Recovery Resource Security
- Damage ID, Surveys, Assessments
  - Channels
  - Locks and Dams
  - Bridges
  - Aids to Navigation
  - Fleeting Areas
  - Facilities
  - Leveses
  - Maritime Critical Infrastructure
  - Other CI/KR
- Breakaways
- Salvage Response
  - Obstructions to Navigation
  - Marine Debris
- Supply Chain Disruption
  - Logistic and Supply
  - Commerce
- Economic Effects (“functional”)
- Port/Area Maritime Security
- Supporting Infrastructure (e.g., electrical service)
- Repair and Construction Criteria
- _________________?

MTS Preparedness

Port Security Grants

- Federal Funding Opportunities
  - Stakeholder Area Maritime Security
    - Preparedness
    - Capabilities
  - Port Stakeholder Resiliency
    - Port Resiliency Plans
    - Resiliency Improvements
All-Hazard Incident Management
Response Phase Contingency Planning

- Incident Management
  - Structures
  - Staffing
  - Communications
- Alerts and Warning
- Response
  - First Response
  - Plan Implementation Process
  - Damage & Transportation Disruption Assessments
  - MTS Recovery Unit (MTSRU) Activation
- System Stabilization
- Recovery Facilitation
- Continuation of Prevention and Protection
  - Marine Safety
  - Maritime Security (Anti-terrorism)

MARINE TRANSPORTATION SYSTEM (MTS)

All-Hazard Response Planning Issues
### All-Hazard Incident Management

#### First (Emergency) Response

<table>
<thead>
<tr>
<th>Notice</th>
<th>No Notice</th>
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</thead>
<tbody>
<tr>
<td>• Alerts and Warnings</td>
<td>• Situation &amp; Preliminary Risk Assessment</td>
</tr>
<tr>
<td>• Unified Command</td>
<td>• Reconstitution?</td>
</tr>
<tr>
<td>• Begin Mobilization &amp;</td>
<td>• Alerts &amp; Warnings</td>
</tr>
<tr>
<td>Prepositioning of Surge</td>
<td>• Unified Command</td>
</tr>
<tr>
<td>Assets Response and MTS</td>
<td>• Initiate First Response or “Position” Steady-State Assets for First</td>
</tr>
<tr>
<td>Recovery Assets</td>
<td>Response Consistent with Risk</td>
</tr>
<tr>
<td>• Situation &amp; Preliminary Risk</td>
<td>• Begin Mobilization of Surge Response and MTS Recovery Assets</td>
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<tr>
<td>Assessment</td>
<td></td>
</tr>
<tr>
<td>• Reconstitution?</td>
<td></td>
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<tr>
<td>• Initiate First Response w/</td>
<td></td>
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<tr>
<td>Steady-State Assets</td>
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</tbody>
</table>

#### All-Hazard Incident Management

#### Response Operations

##### Natural or Man-Made Disaster

- **Risk Assessment**
  - Active or Secondary Threat?
  - Areas/Populations at Risk?
- **Operational Response**
  - Continue First Response by Steady-State Assets Supplemented by Surge Assets
  - Port Evacuation / Shelter-in-Place?
  - Vessel Damage Control
  - Vessel Breakaway Response
  - Marine Firefighting
  - Environmental Response
  - Marine Salvage Response
  - Law Enforcement (incl investigation, preservation of evidence)
  - Force & Resource Protection
- Implement MTS Recovery Activities

##### Maritime Security Incident

- **Risk Assessment**
  - Active or Secondary Threat?
  - Areas/Populations at Risk?
- **Operational Response**
  - Counter-terrorism Operations?
  - Force & Resource Protection
  - Law Enforcement (incl investigation, preservation of evidence)
  - Port Evacuation / Shelter-in-Place?
  - Continue or Directed First Response by Steady-State Assets Supplemented by Surge Assets
  - Vessel Damage Control
  - Marine Firefighting
  - Environmental Response
  - Marine Salvage Response
  - Intelligence Analysis & Assessment
- Implement MTS Recovery Activities
All-Hazard Incident Management
MTS Recovery Planning and Implementation

• Supplement MTS RU Planning & Technical Capability
• Plan Short-term Recovery of Partial Functionality
• Coordinate Salvage Response

All-Hazard Incident Management
System Stabilization

Balance Response, Recovery, Safety & Security Needs and Requirements
Natural or Man-Made Disaster
• Prevention: Marine & Port Safety
• Vessel Traffic Management
• Prevention: Anti-terrorism

Maritime Security Incident
• Prevention: Anti-terrorism
• Prevention: Marine & Port Safety
• Vessel Traffic Management

Applies Inside and Outside Incident Area(s)
All-Hazard Incident Management

Accessibility

• Enable/Provide Legitimate Access
  • News Media
  • Recovery Workers
  • Surge & Replacement Maritime Labor
  • Contractors
  • Others

All-Hazard Incident Management

Disaster Strikes