PUBLIC SAFETY COMMITTEE AGENDA

Friday, January 20, 2006
12:00 to 2:30 p.m.
SANDAG Board Room
401 B Street, 7th Floor
San Diego

AGENDA HIGHLIGHTS

• INTEROPERABILITY AND COMMUNICATIONS WORKSHOP I

PLEASE TURN OFF CELL PHONES DURING THE MEETING

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Welcome to SANDAG. Members of the public may speak to the Public Safety Committee on any item at the time the Committee is considering the item. Please complete a Speaker's Slip, which is located in the rear of the room, and then present the slip to Committee staff. Also, members of the public are invited to address the Committee on any issue under the agenda item entitled Public Comments/Communications/Member Comments. Speakers are limited to three minutes. The Public Safety Committee may take action on any item appearing on the agenda.

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ITEM #                        RECOMMENDATION

1. ROLL CALL

2. PUBLIC COMMENTS/COMMUNICATIONS/MEMBER COMMENTS

Members of the public will have the opportunity to address the Public Safety Committee on any issue within the jurisdiction of the Committee. Speakers are limited to three minutes each and shall reserve time by completing a “Request to Speak” form and giving it to the Clerk prior to speaking. Committee members also may provide information and announcements under this agenda item.

+3. INTEROPERABILITY AND COMMUNICATIONS WORKSHOP I (Pam Scanlon) DISCUSSION

The Public Safety Committee has identified interoperability and communications as its top priority with the objective of creating and gaining consensus on a strategic regional vision and plan. To help accomplish this priority, a series of workshops are being held to provide the latest information to policy-makers and top public safety officials, and identify the key elements/principles that should be included in the strategic plan. This first workshop focuses on key federal interoperability and communications initiatives. It will feature high-ranking federal officials: Congressman Duncan Hunter (invited); Dr. David Boyd, Director of SAFECOM, U.S. Department of Homeland Security; Harlin McEwen, International Association of Chiefs of Police and Major Cities Chiefs Association; and Councilmember Marilyn Praisner, Montgomery County, Maryland, Executive Director of the SAFECOM Executive Committee.

4. UPCOMING MEETINGS INFORMATION

The next meeting of the Public Safety Committee is scheduled for February 17 at 12 p.m.

5. ADJOURNMENT

+ next to an agenda item indicates an attachment
WORKSHOP ONE
WHAT IS INTEROPERABILITY AND WHY
A REGIONAL PERSPECTIVE AND STRATEGY IS IMPORTANT

Friday, January 20, 2006
11:30 a.m. Luncheon for Invited Participants
12:00 noon - 2:30 p.m. Workshop

1. WELCOME AND INTRODUCTIONS (Hon. Steve Padilla, Mayor of Chula Vista and Chair of the Public Safety Committee; and Hon. Duncan Hunter, Congressman representing California’s 52nd District (Invited))

2. VIDEO: INTEROPERABILITY: DIFFERENT PERSPECTIVES  12:20 p.m.
The San Diego region is uniquely qualified to serve as a national model for interoperability and communications. The perspectives of several key local leaders will be shared during this video.

3. EXPERT PANEL PRESENTATION  12:30 p.m.
   • Dr. David Boyd, Director of SAFECOM, U.S. Department of Homeland Security
   • Harlin McEwen, International Association of Chiefs of Police and Major Cities Chiefs Association
   • Hon. Marilyn Praisner, Councilmember, Montgomery County Council, Executive Director of the SAFECOM Executive Committee

   Interoperability of data and voice communications is critical to all types of incidents from terrorist events to natural disasters and daily public safety operations. An executive overview of interoperability by federal representatives will be presented, including lessons learned from 9/11 and Hurricane Katrina, the critical needs of state and local agencies, and legislative/funding priorities and opportunities.

4. GROUP DISCUSSION  1:30 p.m.
   Attendees are encouraged to share feedback regarding the three presentations and to discuss regional perspectives and needs related to interoperability and communications.

5. WRAP UP AND NEXT STEPS (Hon. Steve Padilla)  2:15 p.m.

The second Interoperability and Communications Workshop is tentatively scheduled on Friday, February 17, 2006, at 12:00 p.m. The focus of this second workshop will be interoperability at the local/regional level.

*Please note that all proceedings will be taped for future distribution.
Communications & Interoperability

Dr. David Boyd
Director, OIC

ARJIS Interoperability Workshop: Interoperability 101
January 20, 2006

What is Interoperable Communications?

**Wireless interoperability** is the ability of public safety service and support providers to talk with each other via voice and data

- on demand
- in real time
- when needed
- when authorized
OIC

The Office for Interoperability and Compatibility (OIC) was established to serve as the office within the Department of Homeland Security’s Science and Technology Directorate’s Office of Systems Engineering and Development to strengthen and integrate interoperability and compatibility efforts to improve local, tribal, state, and federal public safety preparedness and response.

OIC is addressing:
- Communications (SAFECOM, Disaster Management)
- Equipment
- Training
- Other areas as identified

OIC Responsibilities

- Identify and certify all DHS programs that touch on interoperability
- Support the creation of interoperability standards
- Identify priorities within DHS and assist other federal agencies in identifying priorities for research, development, and testing and evaluation (RDT&E) to improve interoperability and compatibility
- Integrate and promote the coordination of grant guidance across all DHS grant-making agencies that touch on public safety interoperability
OIC Responsibilities

- Develop guidance for and implement technical assistance for public safety interoperability
- Design and conduct interoperability pilot demonstrations for public safety
- Establish an effective outreach program on interoperable issues for public safety

Disaster Management (DM)

- One of the 24 eGov initiatives established by the President’s Management Agenda
- Provides a single source of access to information and services relating to disasters
- Enhancing the nation’s capacity to cope with all types of disasters and day-to-day incidents through the ability to share information

Initiative Components:
- Portal to information and services
- Information exchange standards
- Disaster Management Interoperability Services (DMIS)
SAFECOM
SAFECOM, a communications program of OIC, provides research, development, testing and evaluation, guidance and assistance for local, tribal, state, and federal public safety agencies working to improve public safety response through more effective and efficient interoperable wireless communications.

- SAFECOM is a public safety practitioner-driven program that works cooperatively with more than 60,000 local and state public safety agencies.

- SAFECOM makes it possible for the public safety community to leverage resources by promoting coordination and cooperation across all levels of government.

*With its partners, SAFECOM is working to ensure a safer America through effective public safety communications.*

Practitioner-Driven Approach

![Practitioner-Driven Approach Diagram](image)
Governance Structure

Communications Interoperability Projects

- Communications Interoperability Continuum
- Interoperability Baseline Initiative
- Common Federal Grant Guidance
- Public Safety Statement of Requirements (SoR)
- Acceleration of Standards Process
- Statewide Communications Interoperability Planning (SCIP) Methodology
The Interoperability Baseline project is a 5 phase process that will measure the current state of communications interoperability across the Nation:

- Establishes a coherent picture of current communications interoperability
- Includes operational, governance, and technical considerations
- Offers a yardstick to identify and drive investment needs
- Serves as an integrated component of SAFECOM’s approach to interoperability

**PHASE 1**
Create and Develop a Summary and Analysis of Past Interoperability Studies

**PHASE 2**
Develop a Descriptive and Measurable Definition for Public Safety Interoperable Communications

**PHASE 3**
Develop a Methodology for Measuring the State of Interoperability

**PHASE 4**
Field the Execution of the Survey

**PHASE 5**
Formulate a Nationwide Measurement That Can Be Analyzed by its Component Demographics Down to the Local Level
Guidance for Interoperability

- Grant Guidance

SAFECOM has provided common grant guidance to Federal agencies to assist in planning and implementing the community's interoperability solutions. Grant guidance provides Federal grant dollar criteria to avert the creation of public safety communications systems stovepipes at the local and state levels.

Statement of Requirements (SoR)

- Created to identify a basic set of functional and technological interoperable communications requirements for public safety first responders from all disciplines in all jurisdictions to communicate and share information.
Lifecycle Approach to Standards Development

SCIP Methodology
Ongoing Initiatives

- Develop standardized tools and methodologies for communications planning
- Pilot tools and methods as national models at the rural, urban, state, and/or regional levels for public safety
- Create a baseline of public safety communications interoperability for first responders
- Accelerate the development of communications standards
- Publish a national public safety architecture framework
- Implement a coordinated RDT&E program for public safety

Contact Us

www.safecomprogram.gov
INTEROPERABILITY: A Local Government Perspective

Marilyn Praisner
Chair, Executive Committee
SAFECOM

INTEROPERABILITY

- CHALLENGES
- STRATEGIES FOR SUCCESS
CHALLENGES

- Spectrum
- Equipment
- OPERATIONS
- ORGANIZATION

- Need for more spectrum
- National Issue – National Solution

- National Discussions
- Local Decisions
Operational and Organizational Challenges

The 3 C’s:
- Control
- Culture
- Continuity

STRATEGIES
- Planning and assessment
- Build on existing structures and relationships
- Use external supports
Communications Interoperability Continuum

- Standard Operating Procedure
- Technology
- Training & Exercises
- Usages

Strategies

- Training
- Procedures
  - Table top and on the ground
  - Orientation and education
  - Inclusion
  - Documents
  - Vocabulary
**Strategies**

**External Supports**

- SAFECOM
  - Website
  - Continuum Assessment Process
  - Why We Can’t Talk
- National Organizations
- Other initiatives

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**QUESTIONS?**

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Chief Harlin R. McEwen
Chairman
Communications & Technology Committee
International Association of Chiefs of Police

Communications Advisor
Major Cities Chiefs Association
Major County Sheriffs' Association
National Sheriffs' Association

Chief of Police (Ret) City of Ithaca, NY
FBI Deputy Assistant Director (Ret) Washington, DC

SANDAG
PUBLIC SAFETY COMMITTEE

Friday, January 20, 2006
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San Diego
Current National Issues
Public Safety Communications

Priority #1 - Reliable Agency Specific Voice Communications
Priority #2 - Reliable InterAgency Voice Communications
Priority #3 - Reliable Data Communications

National Task Force on Interoperability
800 MHz Interference - Rebanding
Narrowbanding - VHF 150-170 MHz & UHF 421-512 MHz
700 MHz Band Clearing (TV Channels 60-69)
Coalition for Improved Public Safety Communications (CIPSC)
National Public Safety Telecommunications Council (NPSTC)
SAFECOM Program (U.S. Dept. of Homeland Security)
CommTech Program (U.S. Dept. of Justice)
Global Justice Information Sharing Initiative (U.S. Dept. of Justice)

Priority Number 1 Is Not Interoperability

PRIORITY # 1
Reliable Agency Specific Voice Communications
We must have reliable every day voice communications for Police-Fire-Rescue-Emergency Medical personnel
Priority Number 2
Interoperability

Priority Number 3
Reliable Data Channels

Priority # 2
Reliable InterAgency Voice Communications
This is what we commonly refer to as “Interoperability”

Priority # 3
Reliable Data Communications
PS has Wideband Data Channels at 700 MHz
PS has Broadband Data Channels at 4.9 GHz
Intended for local area networks and hotspots
PS needs broadband wide-area spectrum
700 MHz would be best & may need to change current rules to accommodate broadband in current public safety allocation
The complexity of public safety communications is reflected in five key challenges:

1. INCOMPATIBLE and AGING communications equipment
2. Limited and fragmented budget cycles and FUNDING
3. Limited and fragmented PLANNING and COORDINATION
4. Limited and fragmented radio SPECTRUM
5. Limited equipment STANDARDS

Identified by the National Task Force on Interoperability in its April 2003 final report.
**Public Safety Radio Spectrum is in Seven Bands**

Public Safety Land Mobile Radio Spectrum Bands

Primarily caused by the interleaving of Nextel cellular-type channels with public safety and private wireless channels

Adjacent cellular-band operations (Cingular, Verizon, AT&T etc. are also a significant contributing factor - particularly in the high end of the 800 MHz Band (NPSPAC Channels)

Case-by-case efforts to resolve interference have been ineffective and are "reactive" to interference after it occurs
Dec. 23, 2004 - FCC released order
Requires narrowbanding from 25 KHz to 12.5 KHz

Applications for new operations and for modifications to expand geographic coverage using 25 kHz channels accepted until January 1, 2011

Deadline for use of 25 KHz equipment in the Public Safety market is January 1, 2013
Narrowbanding
UHF 421-512 MHz

Example - UHF Refarming

UHF Wideband Channels
From Public Safety Pool Frequency
Table - Legacy 25 kHz Channel Centers

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Assigned Channel</th>
<th>Adjacent (Low Power) channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>453.700 PX</td>
<td>453.7125 PX</td>
<td></td>
</tr>
<tr>
<td>453.725 PX</td>
<td>453.7375 PX</td>
<td></td>
</tr>
<tr>
<td>453.760 PX</td>
<td>453.7625 PX</td>
<td></td>
</tr>
<tr>
<td>453.775 PX</td>
<td>453.7875 PX</td>
<td></td>
</tr>
<tr>
<td>453.8125 PX</td>
<td>453.825 PX</td>
<td></td>
</tr>
</tbody>
</table>

Narrowband channels
From Public Safety Pool Frequency
Table - 12.5625 kHz Channel Centers

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Assigned Channel</th>
<th>Adjacent (Low Power) channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>453.725 PX</td>
<td>453.73125 PX</td>
<td>(6.25 kHz)</td>
</tr>
<tr>
<td>453.7375 PX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>453.74375 PX</td>
<td></td>
<td>(6.25 kHz)</td>
</tr>
<tr>
<td>453.760 PX</td>
<td>453.7625 PX</td>
<td>(6.25 kHz)</td>
</tr>
<tr>
<td>453.76875 PX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>453.775 PX</td>
<td>453.78125 PX</td>
<td>(6.25 kHz)</td>
</tr>
<tr>
<td>453.7875 PX</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This slide furnished courtesy of the CommTech Program of the National Institute of Justice

700 MHz – TV Clearing

700 MHz Band
24 MHz of New Public Safety Radio Spectrum

Unavailable to Public Safety in the most populous areas of the U.S. until TV Broadcasters vacate the spectrum

700 MHz (TV Channels 60-69)

60 61 62 63 64 65 66 67 68 69 500 MHz

Public Safety-TV Channels 63,64,68,69
Coalition For Improved Public Safety Communications (CIPSC)

Harlin R. McEwen
Chairman, IACP Communications & Technology Committee
Communications Advisor, MCC, NSA, MCSA

Alan Caldwell
Government Relations, IAFC

Gregory Ballentine
President, APCO

National Public Safety Telecommunications Council

NPSTC Member Organizations (13)

American Association of State Highway Transportation Officials (AASHTO)
American Radio Relay League (ARRL)
American Red Cross (ARC)
Association of Public-Safety Communications Officials-International (APCO)
Forestry Conservation Communications Association (FCCA)
International Municipal Signal Association (IMSA)
International Association of Chiefs of Police (IACP)
International Association of Emergency Managers (IAEM)
International Association of Fish and Wildlife Agencies (IAFWA)
International Association of Fire Chiefs (IAFC)
National Assn of State Emergency Medical Services Officials (NASEMSO)
National Association of State Foresters (NASF)
National Association of State Telecommunications Directors (NASTD)
National Public Safety Telecommunications Council

Current Activity

Quarterly Meeting in Los Angeles, CA
    November 9-10, 2005
Quarterly Meeting in Nashville, TN
    January 23-25, 2006

Technology Committee
Interoperability Committee
Spectrum Committee
Regional Planning Committee

SAFECOM Program

SAFECOM Program (U.S. Department of Homeland Security)

Governance

Executive Committee (EC) (Meets Quarterly)
    • The EC is the decision making body for the SAFECOM program
    • All EC members are included in the other committees
    • Meets quarterly
Advisory Group (AdG) (Meets Semi-Annually)
    • The AdG is responsible for making recommendations to the EC
    • First meeting held on June 17, 2004 (Philadelphia)
    • Second meeting on January 27, 2005 (Orlando)
    • Third meeting on June 16, 2005 (San Antonio)
    • Fourth meeting on January 26, 2006 (Nashville)
CommTech Program

Mission
To assist state and local public safety agencies to effectively and efficiently communicate with one another across agency and jurisdictional boundaries

Areas of Concentration
• Research and Development
• Test and Evaluation
• Pilot Programs
• Standards
• Outreach and Technical Assistance

Global Justice Information Sharing Initiative

Global Justice XML Data Model
GJ XDM

Management - XML Structured Task Force (XSTF)
Performance Testing
Online Database – Many agencies using the GJXDM
Challenges – Conformance/Compliance
Participating in development of National Information Exchange Model (NIEM)
Contact Information

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