Command and Control Analysis of the South West Provincial Regional Emergency Operations Centre during Vancouver 2010

Lynne Genik
DRDC Centre for Security Science

David Smith
DRDC Toronto

June 2011
Overview

• Introduction and background
• Methodology
• Major observations
• Conclusions
Vancouver 2010 Olympic Winter Games

- February 12-28, 2010
- 82 participating countries, 6500 athletes and officials, 1.6 M tickets
- Planning started years in advance
DRDC Major Events Coordinated Security Solutions (MECSS) Model

“Operationalizing S&T Investment”

Federal

Safety /Security Partners

Integrated Public Safety

Joint Task Force (G)

G8/G20 ISU

Regional

SA

Privy Council Office

Exercises/CI/ CBRNE

SA

SA

SA

SA

MECSS

National Science and Technology Community

S&T Source

S&T Clusters

Federal Labs

Centres of Excellence

Academia

International S&T

Industry

SA – Scientific Advisor
Integrated Public Safety and the South West PREOC

- IPS video:

http://www.youtube.com/watch?v=IZbnwpCFgiI&feature=youtu.be
Preparing for the Games

• Three “pillars” of V2010:
  1. Public Safety
  2. Security (new)
  3. Games (new)

• Three major preparatory exercises (Bronze, Silver, Gold)
  – DRDC teams analysed PREOC operations for Silver & Gold

• DRDC scientific advisors applied architecture frameworks with EMBC staff for PREOC operations to help:
  – Articulate requirements
  – Understand interactions with other organizations
  – Define processes
  – Focus and manage planning
C2 Analysis Methodology

• DRDC resources
• Preparatory research and experience
• Focus of C2 analysis
• Direct observation
• Semi-structured interviews
• Surveys
• Limitations
Major Observations

- Objective of analysis: To observe and report on issues to improve PREOC operations
- Despite significant preparation, including joint exercises with VANOC and the ISU, PREOC encountered some operational problems
Handling of Sensitive Information

• Issue:
  – Lack of comprehensive policy
  • Confusion over identifying sensitive information/rules for sharing
    – E.g., information provided by critical infrastructure asset owner shared outside of the PREOC to dismay of owner
  • Staff often erred on over-cautious side, unnecessarily limiting information sharing

Recommendation: Sensitive information should be clearly identified, shared with all PREOC staff, and only shared beyond the PREOC with the explicit consent of the director
Information Sharing

• Issues:
  – Lack of agreement and understanding on what PREOC would report on and to whom
  – Concern that providing additional information would create unrealistic expectations for future

• Recommendation: Agreements for information sharing should be made in advance, documented and communicated to all parties
New Software

• Issues:
  – PREOC adopted new software tool (Eteam) in lead-up to the Games to facilitate situational awareness
  – Some policies and processes not completely worked out - led to confusion
  – Staff had various levels of training and comfort with tool

• Recommendation: Protocols for tool use should be established and full use of tools exercised before major event
Situational Awareness (SA)

• Issues:
  – Staff not always aware of issues that could affect operations
    • E.g., telephone line repair
  – PREOC organized in two rooms: Command Room for PREOC staff and Agency Room for agency representatives
    • Information flow often perceived as “one way” from the Agency Room to the Command Room
• Recommendation: Regular all-staff briefings should be provided by director or another individual with a holistic understanding of issues
Chain of Command

• Issues:
  – In normal chain of command, agency representatives dealt with agency branch coordinator
    • At times, director bypassed agency branch coordinator and operations chief (usually for security-related issues)
    • Led to confusion - agency representatives unsure of when to deal with director over agency branch coordinator
  • Recommendation: Chain of command should be enforced to maintain situational awareness for staff and reduce confusion as to the roles of senior staff
Shared Leadership

• Issue:
  – Several individuals in director role during different shifts

  • Personalities, experience, leadership styles led to inconsistencies and sometimes conflicting direction

• Recommendation: Management staff should operate as united team, coordinating plans and actions across shifts and delivering consistent message to staff
Consistency of Standard Operating Procedures (SOPs)

• Issues:
  – Inconsistencies in SOPs occasionally noted
    • Especially when procedures unclear
  – Interpretation of procedures occasionally varied between directors
    • E.g., “change management” forms created by one director/shift

• Recommendations: Documented and clear SOPs should be established to prevent confusion and provide consistency, staff should be educated regarding relevant SOPs
Conclusions

- Research methodology
  - Pre-deployment knowledge gathering
  - Direct observation
  - Semi-structured interviews
  - Survey
- Each provided valuable and complementary information
Final Recommendations

• Info sharing a theme of challenges
• Clear definitions, policies, clearances, etc. required
  – Staff must be educated and trained appropriately
• Operators must understand roles, responsibilities, operating procedures
  – Documented guidelines, training, thorough exercises
• Operational analysis and the use of knowledge capture and exploitation is an effective means of improving operations