



JUSTICE INSTITUTE
of BRITISH COLUMBIA

Emergency Management Division

EMERGENCY OPERATIONS CENTRE

Level 1

British Columbia





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By

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Introduction

Introduction

Course Goal

At the end of this course, students will be able to participate in the development of an emergency operations centre.

Learning Objectives

At the end of this course, participants will be able to:

1. Explain the purpose of the British Columbia Emergency Response Management System.
2. Describe the staffing structure used to organize an emergency operations centre (EOC).
3. Explain the role of the EOC Working Group in the establishment of an EOC facility.
4. Discuss the key factors to consider when determining the location, size / configuration, equipment and communication system requirements of the EOC.
5. Explain the purpose of an EOC Plan in the operation of an EOC facility.

Course Overview

This course may be taken by classroom-based instruction or independent self-study. It is intended to provide participants with an introduction to the British Columbia Emergency Response Management System (BCERMS), and the planning and organizing of an Emergency Operations Centre (EOC) including the design, set up and staffing of an EOC facility.

It is expected that participants will have completed the required course prerequisite, Introduction to Emergency Management in BC.

This course contains the following seven Sections:

Section 1: British Columbia Emergency Response Management System (BCERMS)

This section provides a review of BCERMS – a comprehensive management scheme for the coordinated and organized response to and recovery from emergency events.

Section 2: Emergency Operations Centre (EOC) Organizational Structure

This section describes the management structure used to organize an agency's emergency operations centre.

Section 3: EOC Working Group

This Section reviews the role of the EOC Working Group in the establishment of an EOC facility.

Section 4: EOC Facility

This section outlines how to select, design, equip and fund an emergency operations centre.

Section 5: EOC Plan

This section outlines the purpose and key components of an Emergency Operations Centre Plan.

Section 6: Answer Keys

This section contains the answer keys to the student worksheets.

Section 7: EOC Level 1 Exam - Click [here](#) for instructions to request the exam.

The section contains the exam, which will determine the knowledge you have gained from the course.

How to Complete this Self-Study Course

Work through this course at a pace that is comfortable for you. The more you interact with the material, the better you will remember it. Take enough time with each Section to ensure that you understand the material before proceeding to the next Section.

Each Section has questions for you to answer based on the material you will have completed. The answers to the student worksheets are included in Section 6 Answer Keys.

You must score 70% or higher to receive a “Certificate of Achievement.”

Additional Emergency Operations Centre (EOC) Training

Upon successful completion of EOC Level 1, students may continue their studies in the following advanced courses.

EM711 Emergency Operations Centre Level 2

The purpose of this course is to enable participants to perform their roles and responsibilities in an emergency operations centre.

EM712 Emergency Operations Centre Level 3 – Operations;

EM713 Emergency Operations Centre Level 3 – Planning;

EM714 Emergency Operations Centre Level 3 – Logistics;

EM715 Emergency Operations Centre Level 3 – Finance and Administration.

These courses are designed to familiarize participants with the roles and responsibilities of the EOC Operations, Planning, Logistics and Finance and Administration functions respectively.

Emergency Management Certificate Program

This part-time 15-credit certificate program incorporates the fundamentals of emergency management from the initial planning stages through to appropriate and comprehensive response strategies. Specific aspects of emergencies are examined from an operations, logistics and human perspective. Students accepted to the program have up to three years to complete the required and elective course work.



For more information on the Certificate Program or other, courses, contact the Emergency Management Division, Justice Institute of B.C. at (604) 528-5790, visit our website at www.jibc.bc.ca or email emd@jibc.bc.ca.

Section

1

**British Columbia Emergency
Response Management System
(BCERMS)**

British Columbia Emergency Response Management System (BCERMS)

What is BCERMS?

The British Columbia Emergency Response Management System (BCERMS) is a comprehensive “all hazards” provincial emergency management system that ensures a coordinated and organized provincial response to and recovery from any and all emergencies.

BCERMS is designed to:

- standardize the process for the delivery of a multi-jurisdictional, multi-agency coordinated response to all emergencies,
- guide agencies and departments in preparing their emergency plans,
- clarify the role and responsibilities of individual response functions, and
- facilitate the coordination of public and private sector response.

Agencies with emergency management responsibilities face many challenges. One of them is how to effectively perform their tasks while contributing to a coordinated response. Emergencies do not recognize boundaries or areas of responsibility. Thus, agencies must be able to work cooperatively with one another under an organized response structure while maintaining full responsibility and authority for their respective jurisdictional and legal roles. BCERMS provides for agency autonomy in the context of coordinated response efforts.



Standard Response Structure

The standards established for BCERMS are mandatory for provincial ministries, agencies, and Crown corporations and are recommended for use by local governments, federal agencies, First Nations communities, and the private sector. Emergency management organizations in BC are encouraged to develop and implement emergency plans that:

- Reflect the BCERMS response goals.
- Incorporate the BCERMS components, which are designed to help achieve those goals.
- Adopt the BCERMS response structure.

BCERMS and the Incident Command System

BCERMS is based on the Incident Command System (ICS), which was originally developed as a fire response management system in the United States. ICS has been widely adopted by first responders and emergency management programs throughout North America. BCERMS, much like ICS, uses a structure consisting of the following sections to coordinate response activities:

- Command and/or Management
- Operations
- Planning
- Logistics
- Finance and Administration

BCERMS Components

There are five components in BCERMS:

COMPONENT	PURPOSE
Operations and Control	<ul style="list-style-type: none"> ▪ Provides a common organizational structure and control method for the management of personnel, equipment, facilities, and resources. ▪ Enhances communication between agencies responding to the emergency or disaster. ▪ Provides a site response structure based on the Incident Command System.
Qualifications	<ul style="list-style-type: none"> ▪ Establishes a standard for the management of each area and level within the emergency response management system.
Technology	<ul style="list-style-type: none"> ▪ Facilitates the deployment and encourages the use of common technology in support of emergency operations and coordination.
Training	<ul style="list-style-type: none"> ▪ Mandates the training of designated personnel to meet an established set of criteria.
Publications	<ul style="list-style-type: none"> ▪ Designs and distributes a common set of forms, reports, instructional terminology, and other written material in support of BCERMS.

BCERMS Response Structure

There are four designated levels in the Operations and Control component of BCERMS. These include:

- Site
- Site support
- Provincial regional coordination
- Provincial central coordination



The key features of each level are described below:

LEVEL	KEY FEATURES
Site	<ul style="list-style-type: none"> ▪ Resources are applied to solve the problems presented by an emergency incident. The BC Incident Command System is used to manage the response. ▪ Responders may come from all three levels of government, First Nations, or the private sector. ▪ Onsite response is directed by single command or unified command from a single onsite incident command post (ICP).
Site support	<ul style="list-style-type: none"> ▪ In larger incidents, onsite responders might require policy, coordination, and resource support. An Emergency Operations Centre (EOC) is set up off-site in a pre-designated facility to provide this support. ▪ EOCs may be set up by any level of government or the private sector to support individual response agencies or the entire onsite response effort. ▪ ICS principles are used in the organization and management of the EOCs.
Provincial regional coordination	<ul style="list-style-type: none"> ▪ This level coordinates, facilitates, and manages information, policy direction, and provincial resources in support of local authorities and provincial agencies responding to an emergency. ▪ In circumstances where incidents cross local authority boundaries, or where local authorities are not organized to fulfill their role, the provincial regional coordination level defines an operational area in order to manage and coordinate the overall provincial response within that area. ▪ Together with the provincial central coordination level, it integrates overall provincial support to the incident and is usually staffed by local/regional provincial representatives.

LEVEL	KEY FEATURES
Provincial central coordination	<ul style="list-style-type: none"> ▪ This level coordinates provincial resources and prioritizes provincial government objectives in response to the emergency requirements of the other levels. ▪ It also serves as the coordination and communications link with the federal disaster support system.

Figure 1-1 identifies the response structure for the Province and Local Authorities. Figure 1-2 provides examples of parallel response structures for the health sector and private organizations, both of which may have either an obligation or desire to communicate with provincial and local authorities.

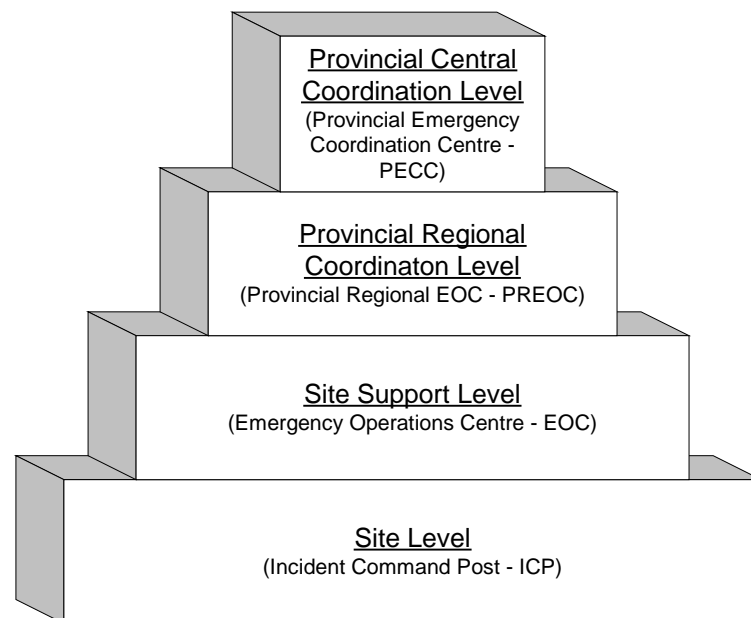


Figure 1-1. Provincial/Local Authority Response Structure

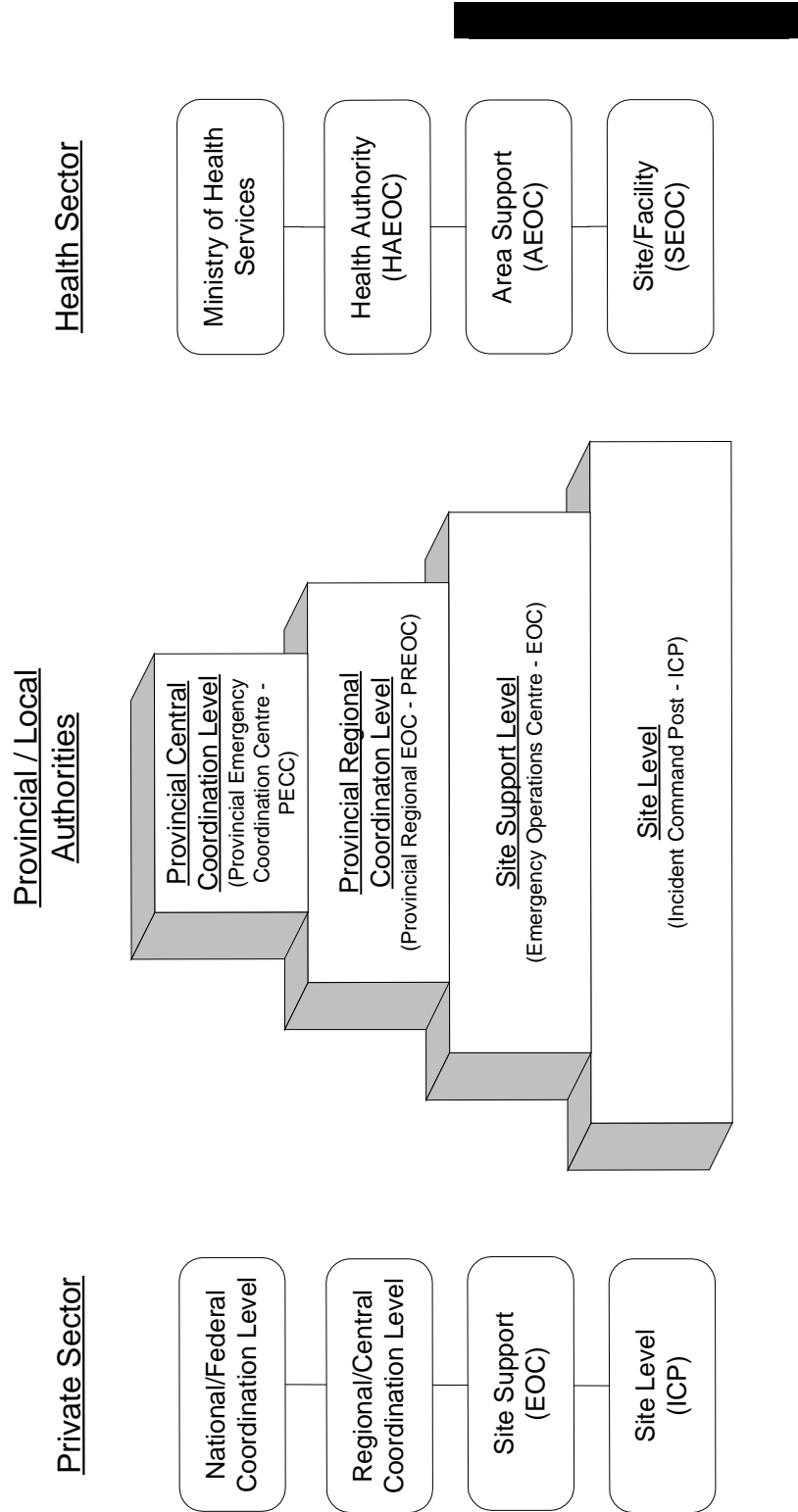


Figure 1-2. Parallel health and private sector response structures

BCERMS Response Goals

Each level in BCERMS supports a prescribed set of response goals. The response goals, in order of priority, are to:

1. Provide for the safety and health of all responders.
2. Save lives.
3. Reduce suffering.
4. Protect public health.
5. Protect government infrastructure.
6. Protect property.
7. Protect the environment.
8. Reduce economic and social losses.

Action Plans at all BCERMS levels will take these goals into consideration.



Section 1

Student Worksheet

Purpose: To assess your understanding of the information that was presented in this Section.

Directions: Please answer the following questions. You can check your answers in Section 6 Answer Keys.

1. What are the four levels of response in BCERMS?

2. List the first three BCERMS response goals, in priority order.

3. What is the purpose of the Operations and Control component in BCERMS?

Section

2

**Emergency Operations Centre (EOC)
Organizational Structure**

Emergency Operations Centre (EOC) Organizational Structure

What is an EOC?

The majority of emergency incidents are managed at the site, by an Incident Commander. Incident objectives, strategies and tactics for the site are formulated and directed from the Incident Command Post (ICP). In larger emergencies, onsite responders may require policy, coordination, and resource direction to support site activities.

An Emergency Operations Centre (EOC) is a pre-designated facility, set up off-site, to provide this support. The EOC provides policy direction to site Incident Commander(s), coordinates resource requests from the site(s), and manages all non-site activities.

An EOC may be established by any level of government or the private sector to support individual response agencies or the overall response effort. Emergency Operations Centres are normally activated at the request of the Incident Commander and/or designated senior officials.

EOC Responsibilities

An EOC has overall responsibility for the following activities:

- Policy, direction and support
- Information, collection, evaluation and display
- Coordination of agencies and operations
- Establishment of priorities
- Resource management
- Communications
- Public Information and Warnings



EOC Organizational Structure

Policy Group

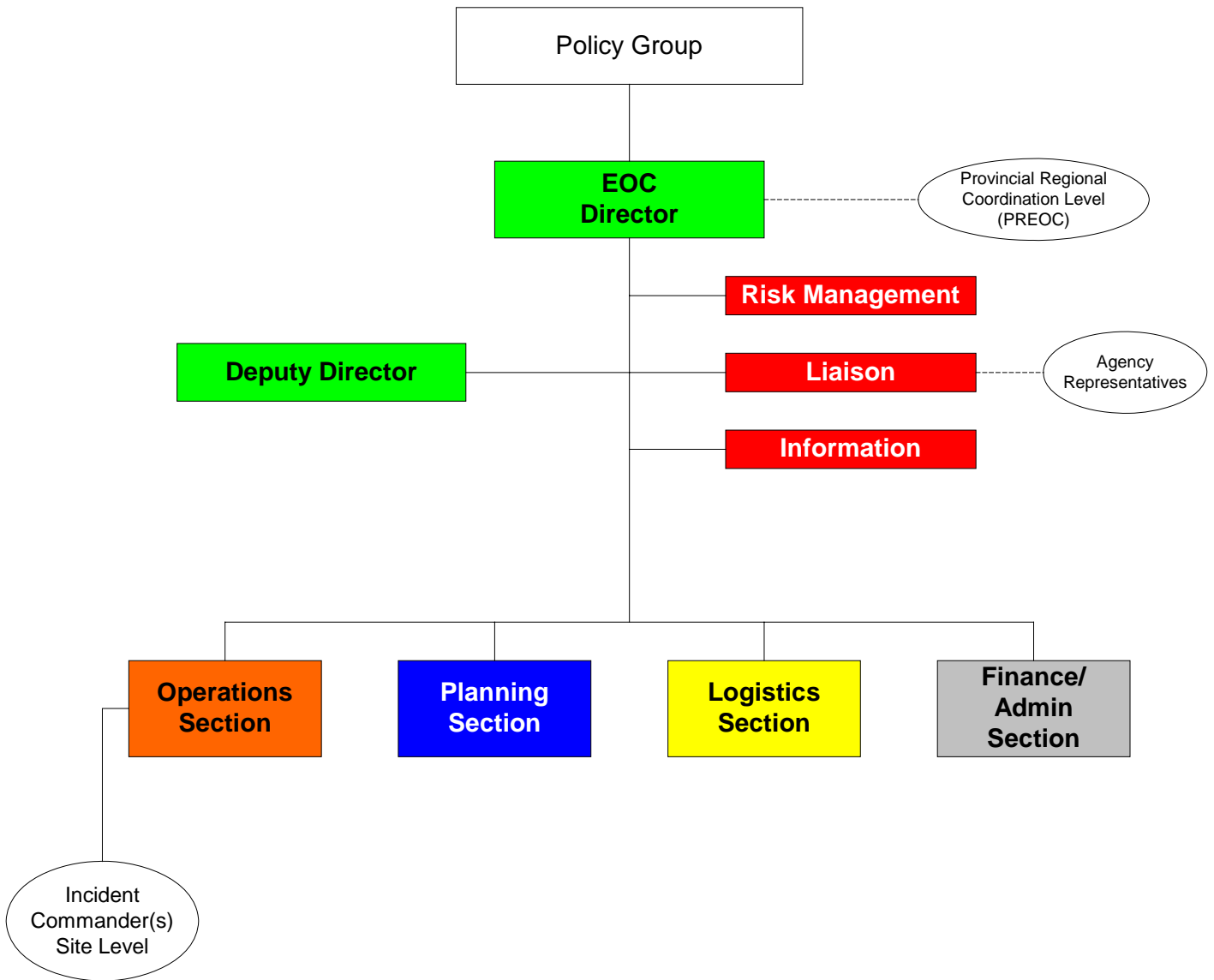
When an EOC is activated, the agency may establish a Policy Group, comprised of the head of the organization (e.g. Mayor, Board Chair) and other senior executive officers, in order to provide the EOC Director with policy direction. Two examples of this level of policy direction are the declaration of a “state of local emergency” and formal requests for outside support/resources (e.g. Provincial and Federal) through the Province.

EOC Functions

The EOC is organized around five major functions: Management, Operations, Planning, Logistics and Finance/Administration. A diagram of this EOC structure is provided on the next page. The primary responsibilities of each of these functions are described below:

EOC FUNCTION	ROLE IN EOC
Management	<ul style="list-style-type: none"> Responsible for overall emergency policy and coordination through the joint efforts of government agencies and private organizations. Management includes the EOC Director, Deputy Director, Risk Management, Liaison, and Information.
Operations	<ul style="list-style-type: none"> Responsible for coordinating all jurisdictional operations in support of the emergency response through implementation of the EOC's Action Plan.
Planning	<ul style="list-style-type: none"> Responsible for collecting, evaluating, and disseminating information; developing the EOC's Action Plan and Situation Report in coordination with other functions; and maintaining all EOC documentation.
Logistics	<ul style="list-style-type: none"> Responsible for ensuring the EOC is operational and providing facilities, services, personnel, equipment and materials.
Finance/ Administration	<ul style="list-style-type: none"> Responsible for financial activities and other administrative aspects.

Emergency Operations Centre (EOC) Site Support Organization Chart



EOC and Site Interface

To facilitate your understanding of the functions within the EOC, read the following scenario and review the corresponding function activities for a local authority, health authority and the private sector.



Scenario

A chemical accident and resulting fire has occurred at a chemical plant in an industrial district of the community. In addition to producing toxic smoke, the event has caused a large quantity of a gaseous substance to be released. The substance has extremely irritating vapors, which under long-term exposure could cause serious illness or death. Fire, Police, and Ambulance personnel have responded and established an Incident Command Post at a safe distance from the site. As Incident Commander, the Deputy Fire Chief has taken control of the site and is directing response personnel to establish a control perimeter and initiate evacuation of individuals in the immediate area.

Due to the steady wind in the community, the gaseous substance has now traveled into a nearby residential neighbourhood with more than 500 occupants. The neighbourhood consists of single-family homes, apartments and a seniors care facility.

Recognizing the threat of further chemical release and explosion, the Incident Commander orders all residents of the neighbourhood be evacuated. Close to 100 residents and workers from the industrial areas are already complaining about breathing difficulties and will require some level of medical attention.

As a result of this incident, three different EOC's are being activated to directly or indirectly support the site. The Incident Commander has requested the activation of the Local Authority's EOC to support the response and in particular the evacuation measures. The Health Authority has activated its EOC to support the possible evacuation of the seniors care facility, to support local emergency departments and hospitals and to deal with environmental and public health issues. The chemical company has activated an EOC at their Head Office to support employees, address media issues and effectively address core business functions at the impacted facility.

The functional activities of each EOC might include, but are not limited to:

EOC FUNCTION	LOCAL AUTHORITY (GOVERNMENT)	HEALTH AUTHORITY (HEALTH SECTOR)	CHEMICAL COMPANY (PRIVATE SECTOR)
Policy Group	<ul style="list-style-type: none"> ▪ Act as spokespersons for local authority ▪ Approve declaration of state of local emergency 	<ul style="list-style-type: none"> ▪ Approve extraordinary resources and costs 	<ul style="list-style-type: none"> ▪ Act as company spokespersons ▪ Receive briefing regarding cause and liability
EOC Director	<ul style="list-style-type: none"> ▪ Establish EOC priorities ▪ Provide Policy Group with event status ▪ Direct / support EOC Management Team 	<ul style="list-style-type: none"> ▪ Establish EOC priorities ▪ Ensure operational capability of EOC ▪ Direct/support EOC Management Team 	<ul style="list-style-type: none"> ▪ Establish EOC priorities ▪ Ensure operational capability of EOC ▪ Direct/support EOC Management Team
Risk Management	<ul style="list-style-type: none"> ▪ Monitor overall safety to the public and responders 	<ul style="list-style-type: none"> ▪ Monitor health worker safety and liability implications 	<ul style="list-style-type: none"> ▪ Assess overall liability to organization
Liaison	<ul style="list-style-type: none"> ▪ Liaise with neighbouring jurisdiction and other levels of government 	<ul style="list-style-type: none"> ▪ Liaise with local authority and/or health resource providers 	<ul style="list-style-type: none"> ▪ Liaise with response agencies and other stakeholders
Information	<ul style="list-style-type: none"> ▪ Develop/release public information messaging about evacuation measures and road closures 	<ul style="list-style-type: none"> ▪ Develop public safety/health key messaging ▪ Ensure consistency with local government and other agencies 	<ul style="list-style-type: none"> ▪ Develop/release company's public statement/position
Operations	<ul style="list-style-type: none"> ▪ Deploy resources as requested by Incident Command ▪ Activate Reception Centre to receive evacuees ▪ Support site with perimeter and traffic control measures 	<ul style="list-style-type: none"> ▪ Allocate/monitor resources to support impacted facilities ▪ Adjust processes for delivery of care ▪ Liaise with Ambulance Services 	<ul style="list-style-type: none"> ▪ Acquire and deploy specialized resources to Incident Commander at site ▪ Implement business continuity / recovery plans
Planning	<ul style="list-style-type: none"> ▪ Develop Situation Report ▪ Collect and post event/resource information ▪ Plan for expanded evacuation measures 	<ul style="list-style-type: none"> ▪ Develop Situation Report ▪ Collect and post patient load, alternate care and resource information ▪ Report status of other impacted 	<ul style="list-style-type: none"> ▪ Develop Situation Report ▪ Collect and post equipment / personnel information ▪ Review product inventory and safety records ▪ Assess overall impact



EOC FUNCTION	LOCAL AUTHORITY (GOVERNMENT)	HEALTH AUTHORITY (HEALTH SECTOR)	CHEMICAL COMPANY (PRIVATE SECTOR)
		health services	to company
Logistics	<ul style="list-style-type: none"> ▪ Acquire contracted traffic control services ▪ Arrange meals for EOC personnel 	<ul style="list-style-type: none"> ▪ Acquire necessary supplies such as portable oxygen equipment 	<ul style="list-style-type: none"> ▪ Acquire chemical response and recovery contractor ▪ Identify trained personnel for next shift
Finance and Administration	<ul style="list-style-type: none"> ▪ Track response costs for reimbursement 	<ul style="list-style-type: none"> ▪ Track event specific staff overtime 	<ul style="list-style-type: none"> ▪ Track specific event costs for insurance recovery

EOC Staffing

Personnel to staff the EOC would be drawn primarily from an organization's existing departments, though it may also include representation from external agencies. The personnel to support the EOC may be full-time, part-time, paid staff or volunteers.

Staffing for the following functions may include:

- **Policy Group:** Mayor, Council, Legal Advisor, Chief Administrative Officer and Department Heads.
- **Management:** Chief Executive Officer or Chief Administrative Officer, Emergency Program Coordinator / Planner, Communications (Media) Officer, and Risk Manager.
- **Operations:** Departments/Divisions that would be in direct communication with site activity and providing direct support to the Incident Commander. For example, in a local authority EOC, Operations may consist of Police, Fire, Health Region, School District, BC Ambulance Service, Emergency Social Services and Public Works.
- **Planning:** Staff who possess an ability to analyze and summarize information, knowledge of information management systems and familiarity with the use of maps and plotting information.
- **Logistics:** Staff from the organization's Purchasing Department, Information Technology Department (includes communications and computer systems support) and Human Resources.
- **Finance:** Finance and Accounting Department staff.

EOC Considerations

The following are key points to remember about the Emergency Operations Centre:

- EOCs are key to disaster planning, response, and recovery. They are crucial to saving lives and property.
- EOCs pull together people and resources to handle emergencies and disasters that are beyond regular emergency response capabilities.
- EOCs are the key to managing disaster efforts through the centralized, coordinated efforts of government officials, response agencies and the private sector.
- EOCs provide a means of centralizing and managing communications and information within an EOC, between an



EOC and the Incident Commander(s) in the field, and between the EOC and the public.

- EOCs facilitate long-term operation and increase continuity.
- EOCs provide ready access to all available information and verify the information.
- EOCs help to identify and use all available and necessary resources.

Section 2

Student Worksheet

Purpose: To assess your understanding of the information that was presented in this Section.

Directions: Please answer the following questions. You can check your answers in Section 6 Answer Keys.

1. Why would an EOC be activated to support site activities?

2. What five functions are used to organize the EOC?

3. What is the role of the Policy Group when an EOC is activated?

Section

3

EOC Working Group

EOC Working Group

The process of identifying, designing and equipping an Emergency Operations Centre (EOC) is a major undertaking. One of the first steps in establishing an EOC is the formation of an EOC Working Group. Typically, the EOC Working Group is created by and reports to the agency's larger Emergency Management Committee. The Working Group is responsible for addressing the facility and equipment requirements for one primary and at least one secondary EOC.

Establishing Terms of Reference

To be successful, the EOC Working Group must establish terms of reference. The terms of reference should clearly define the work to be undertaken, as well as how and when it will be accomplished. These may be developed by the larger Emergency Management Committee or by the Working Group itself.

The following are examples of information that should be addressed in the terms of reference:

- Membership
- Purpose and scope of activities
- Reporting structure / authority
- Frequency of meetings (i.e. bi-monthly)
- Timeframes and deadlines

Selecting Members

You can identify potential members by reviewing your agency's Emergency Plan and consulting with your Emergency Management Committee.

In selecting members of the team who will bear overall responsibility for the design and funding of the EOC, four considerations are important:

- The members of the team must have the ability, commitment, authority and resources to get the job done.
- The team must possess, or have ready access to, a wide range of expertise relating to the community / organization and the mechanics of emergency response and planning.
- The members of the team must agree on their purpose and be able to work cooperatively with one another.



- The team must have appropriate representation from the organization.

The EOC Working Group may consist of the following representatives:

- Chief Administrative Officer
- Risk Manager
- Emergency Program Coordinator / Planner
- Communications (Media) Officer
- Staff appointed to the Operations, Planning, Logistics and Finance functions
- Information Technology Staff
- Building / Facilities Staff

For the Working Group to function effectively, its size should be limited to a workable number.

Section 3

Student Worksheet

Purpose: To assess your understanding of the information that was presented in this Section.

Directions: Please answer the following questions. You can check your answers in Section 6 Answer Keys.

1. What is the purpose of the EOC Working Group?

2. Identify two considerations when selecting Working Group members.

Section

4

EOC Facility

EOC Facility

Selecting the EOC Location

The decision on where to locate the EOC should be based on an analysis of potential threats to the community, since the EOC must survive likely disasters. The community's hazard, risk and vulnerability analysis will assist you in determining if a particular geographic location is vulnerable, due to a known hazard. For example, in areas prone to earthquakes, the EOC should be located away from fault lines and unstable soil areas. Likewise, an EOC should not be located near a floodplain or a hazardous materials facility. It is also desirable to select a central location that is readily accessible to vehicle traffic. This offers better access for EOC personnel and outside agencies.

The Dual Purpose EOC

Whether the EOC will be newly built or a modification to an existing building, it will likely be a dual-purpose facility. Budgetary and space restraints often make it difficult to dedicate a facility solely to EOC activities. The use of facilities that serve an alternate purpose, on a daily basis, can be effectively provided:

- The facility can be converted into an EOC within 30 minutes to 1 hour.
- EOC staff has ready access to the facility.
- Appropriate security measures can be put in place.
- Exercises are held at least once a year to practice activating and converting the space into an EOC.

Co-locating the EOC in space that is used daily by staff offers some advantages. EOC staff may be more readily available when the EOC is activated and communications and equipment that are used regularly tend to be kept at a higher level of readiness.

Suggested Dual-Purpose EOC Locations

To identify the appropriate dual-purpose space, begin by conducting a review of facilities in your organization that either already exist or are soon to be built. Each facility should be

evaluated based on its ability to survive the range of anticipated hazards and continue to function effectively. The facility must also be able to accommodate the minimum requirements for sustained operations (e.g. generator for back up power).

Identify usable space within each facility such as,

- council/board rooms,
- auditoriums, and
- meeting/training rooms.

The decision on which option to pursue will depend on day-to-day operating needs, emergency functions and their cost impact. Consult with your building or facilities staff for further guidance.

Alternate EOC Site(s)

In addition to identifying the location and building for a primary EOC facility, it is important to develop redundant capability at one to two alternate locations. In the event the emergency requires moving the primary EOC, a pre-identified alternate EOC with backup power and communications equipment will ensure continued operations. Just as in the primary EOC, this facility should be sited to avoid threats from natural and man-made hazards.

Size and Physical Configuration of the EOC

There is no standard EOC. They vary in size and configuration. The key to designing an effective EOC is to ensure the facility meets your organization's needs for response and recovery operations. In most cases either financial constraints or staffing will dictate the design and layout that is ultimately selected.

The EOC Working Group should begin its research by organizing site visits to other EOCs within the region. These visits can provide you with ideas on space requirements, building design and lessons learned in the

design of an EOC. If the EOC Working Group cannot visit other sites, look at some paper-based designs. Your Provincial Emergency Program, Regional Manager may be able to assist you by providing sample EOC designs. The data collected can then be used to make projections for your space requirements, draft layouts, review them and revise as appropriate.

There are several factors to consider when determining the size and physical configuration of the EOC. These include:

- Staffing Requirements
- Functional Requirements
- Equipment and Resources

Staffing Requirements

The size of the EOC will depend on the number of staff members required. The number of staff required will depend on the type and scope of anticipated emergency events the agency could encounter. For example, in smaller jurisdictions/organizations 8-12 people are all that may be required to staff the EOC. However in larger communities/agencies a staff composition of 35-50 may be required. When determining the optimal size for the EOC, you should consider the maximum number of people you are likely to have in the facility at any one time to ensure there is sufficient space to house both personnel and equipment.

Functional Requirements

In any EOC set-up, you must ensure that representatives are capable of meeting basic direction and control functional responsibilities including: gathering information, setting priorities and coordinating multi-agency response.

The EOC should be physically arranged to provide, at a minimum, space for the following areas of responsibility:

- All EOC functions (Management, Operations, Planning, Logistics and Finance/Admin)
- Policy Group
- Communications Centre
- Break-out/Meeting Rooms
- Rest and Eating Areas
- Storage

Although a Media Relations area and Public Information Centre may not be included in the EOC itself, you will need to address the unique space requirements for these activities.

When designing the EOC's functional layout in Figure 4-1, keep the following points in mind:

- The EOC Director should be in a position where she / he can keep abreast of the current situation and manage operations. He or she should be located in the main operations area with connecting communications and appropriate displays.
- Functions that interface continually, are interdependent, or are in direct support should be co-located. For example, the Operations and Planning sections should be co-located to facilitate communication, as should Logistics and Finance/Administration.
- EOC functions should be located adjacent to displays pertaining to their activity. This allows for ease of posting and ready reference of situations.
- It is important to have a quiet meeting room where emergency personnel can discuss priority problems and conduct management briefings away from the noise and disruption of the operations and communications rooms.
- Agencies that operate their own communications networks (e.g., police, fire, ambulance and public works) must either be located near the source of their communications or have the capability to remove the system to their location in the EOC (usually radio communication).
- Noise levels may be a problem, so try to position offices, workstations or functional teams with adequate space between them so as to lessen interference.
- Security procedures should be considered in the design to ensure unauthorized personnel do not have access to the facility. A security booth / desk could be positioned near the entrance of the EOC.
- Food and rest areas should be situated away from the main operations area.

Equipment and Resources

To function effectively the EOC must be adequately equipped with furniture, communications equipment, information displays and office supplies. A detailed list of recommended items is provided in this Section. The following are some key points to consider in determining your EOC's equipment and resource requirements.

Building Systems

The EOC facility must be able to accommodate the requirements for both short-term and sustained operations. Ensure the EOC is adequately equipped with electrical power, water, sewer, heating

and ventilation systems. Because primary power sources can fail, the facility should have a generator, which can provide back-up power for 2-3 days without refueling.


Furniture

When designing the EOC, you will need to decide on whether workstations will be fixed or movable. Movable furniture (i.e. folding tables) can provide greater flexibility during emergency activations and in the daily use of the facility.

Ensuring workstations are ergonomically suitable is also important given that staff may be required to work long hours during a sustained activation. This is particularly critical if workstations will be equipped with computer equipment.

Communications

The EOC must be equipped with survivable communications systems for internal operations and connectivity with the site(s), other EOCs, and key response and recovery organizations. Providing alternative communication methods facilitates redundancy and continued operations. Some examples of communications equipment/methods include: landline telephone, satellite phone, cellular phone, computers, internet/email, VHF/UHF radio and Amateur Radio.



The design of the EOC may be influenced by special considerations to accommodate communications equipment, such as ensuring that there is no interference with communications capability. Developing a mobile capability that can be moved away to an alternate EOC can also impact the EOC's configuration.

It is also important to develop a layout plan for activation of phone, fax and data lines. Label all cables, switches and outlets to conform to the layout plan. This will facilitate easy set up and re-configuration of the EOC.

Information Displays

The ability to gather, share and evaluate information is critical to all EOC functions. In addition to providing adequate wall space to post information, ensure that both manual (e.g. flipcharts/whiteboards) and electronic (projector/screen) equipment are available to facilitate the display of information.

Office Supplies/Equipment

When assembling office supplies for the facility, consult with EOC staff for any specific supply requirements. Staff will be more comfortable in their work environment if they have access to the items they depend on daily. You should also store copies of maps, and relevant reference materials in the EOC for quick access.

Food/Rest Areas

Designated food and rest areas are important for the health and well being of staff. In the event staff must remain on-site for extended periods of time, sleeping facilities will also be required. The EOC layout should provide for minimum interference between operations and support areas such as eating, sleeping, health and sanitary facilities.

Suggested Equipment and Supplies for the EOC

FURNISHINGS

- | | |
|--|---|
| <input type="checkbox"/> Workstation desks or tables | <input type="checkbox"/> Flipchart stands |
| <input type="checkbox"/> Bookshelf(s) | <input type="checkbox"/> Conference tables |
| <input type="checkbox"/> Filing cabinet(s) | <input type="checkbox"/> Folding tables |
| <input type="checkbox"/> Ergonomic chairs | <input type="checkbox"/> Coat rack/hangers |
| <input type="checkbox"/> Whiteboards/cork boards | <input type="checkbox"/> Garbage cans/recycling boxes |

COMMUNICATIONS EQUIPMENT

- | | |
|---|--|
| <input type="checkbox"/> Telephones | <input type="checkbox"/> AM/FM radios |
| <input type="checkbox"/> Computers/laptops with networking capability | <input type="checkbox"/> Radio station remote hook-ups |
| <input type="checkbox"/> Digital camera/video camera | <input type="checkbox"/> Tape recorders |
| <input type="checkbox"/> Overhead projector | <input type="checkbox"/> Cassettes for tape recording |
| <input type="checkbox"/> LCD Projector/screen | <input type="checkbox"/> Power generator |
| <input type="checkbox"/> Photocopier | <input type="checkbox"/> Extension cords |
| <input type="checkbox"/> Television/VCR/DVD | <input type="checkbox"/> Power bars |
| | <input type="checkbox"/> Phone / computer cables |

OFFICE EQUIPMENT & SUPPLIES

- | | |
|---|--|
| <input type="checkbox"/> Calculator(s) | <input type="checkbox"/> Coloured grease pencils |
| <input type="checkbox"/> Pencil sharpeners | <input type="checkbox"/> Dry erase markers |
| <input type="checkbox"/> In/out boxes | <input type="checkbox"/> Envelopes of various sizes |
| <input type="checkbox"/> Stamps (“For Action,” “Completed,” “Approved”) | <input type="checkbox"/> Wastebaskets/Recyclable containers |
| <input type="checkbox"/> Staplers | <input type="checkbox"/> Felt-tip markers |
| <input type="checkbox"/> Staple removers | <input type="checkbox"/> Paper for flipcharts |
| <input type="checkbox"/> Scissors | <input type="checkbox"/> Poster board for signs |
| <input type="checkbox"/> Scotch tape dispensers/scotch tape | <input type="checkbox"/> String |
| <input type="checkbox"/> Appropriate printer cartridges | <input type="checkbox"/> Photocopy/printer paper |
| <input type="checkbox"/> Scratch pads | <input type="checkbox"/> Identifications tags/name plates |
| <input type="checkbox"/> Message pads | <input type="checkbox"/> Message forms and other EOC forms |
| <input type="checkbox"/> Thumbtacks/map tacks | <input type="checkbox"/> Function log sheets |
| <input type="checkbox"/> File folders | <input type="checkbox"/> Forms for each function |
| <input type="checkbox"/> Elastics | <input type="checkbox"/> Appropriate batteries for all equipment |
| <input type="checkbox"/> Light bulbs | <input type="checkbox"/> Film |
| <input type="checkbox"/> Flashlights | <input type="checkbox"/> Clocks |

REFERENCE MATERIALS

- | | |
|--|--|
| <input type="checkbox"/> Checklists (operational guidelines) | <input type="checkbox"/> Forms for recording and telecommunication information |
| <input type="checkbox"/> CANUTEC Guide | <input type="checkbox"/> Emergency plans (+ extras for others) |
| <input type="checkbox"/> Local, area, and regional maps; aerial photos | <input type="checkbox"/> Contingency plans |
| <input type="checkbox"/> Updated EOC floor plan | <input type="checkbox"/> Resource inventories |
| <input type="checkbox"/> Updated contact/supplier/media lists | <input type="checkbox"/> Current phone/email lists |
| <input type="checkbox"/> Current telephone books | |



FOOD SERVICE AREAS

- | | |
|---|--|
| <input type="checkbox"/> Coffee/tea pot and cups | <input type="checkbox"/> Refrigerator/freezer |
| <input type="checkbox"/> Coffee maker filters | <input type="checkbox"/> Dishwashing supplies |
| <input type="checkbox"/> Food preparation/serving equipment | <input type="checkbox"/> Pitchers, glasses or paper cups |
| <input type="checkbox"/> Eating utensils/dinner plates | <input type="checkbox"/> Garbage bags |
| <input type="checkbox"/> Food supplies and storage cabinets | <input type="checkbox"/> Water |
| <input type="checkbox"/> Stove | |
-

STORE SUPPLIES & DISPENSARY

LODGING

- | | |
|---|--|
| <input type="checkbox"/> Toiletry kits | <input type="checkbox"/> Sheets, blankets, pillowcases, towels |
| <input type="checkbox"/> Paper towels/toilette paper/dispensers | <input type="checkbox"/> Cots |
| <input type="checkbox"/> First Aid Kit | |

EOC Floor Plan

A floor plan must be developed that shows the basic layout including: arrangement of furniture, location of displays, maps, and the communication arrangement within the EOC. The floor plan, once it is approved, should become part of the organization's EOC plan.

The EOC's layout and configuration will change many times based on experience and evaluation. The optimum layout can be determined only through exercises or actual emergency operations. It is not uncommon to take several activations to determine the best configuration.

Exercise

Directions – Review the floor plan (Figure 4.1) provided, and identify where you would assign the functions listed below.

- Management (EOC Director, Information, Liaison, and Risk Management)
- Operations
- Planning
- Logistics
- Finance / Administration
- Communications



Exercise Worksheet

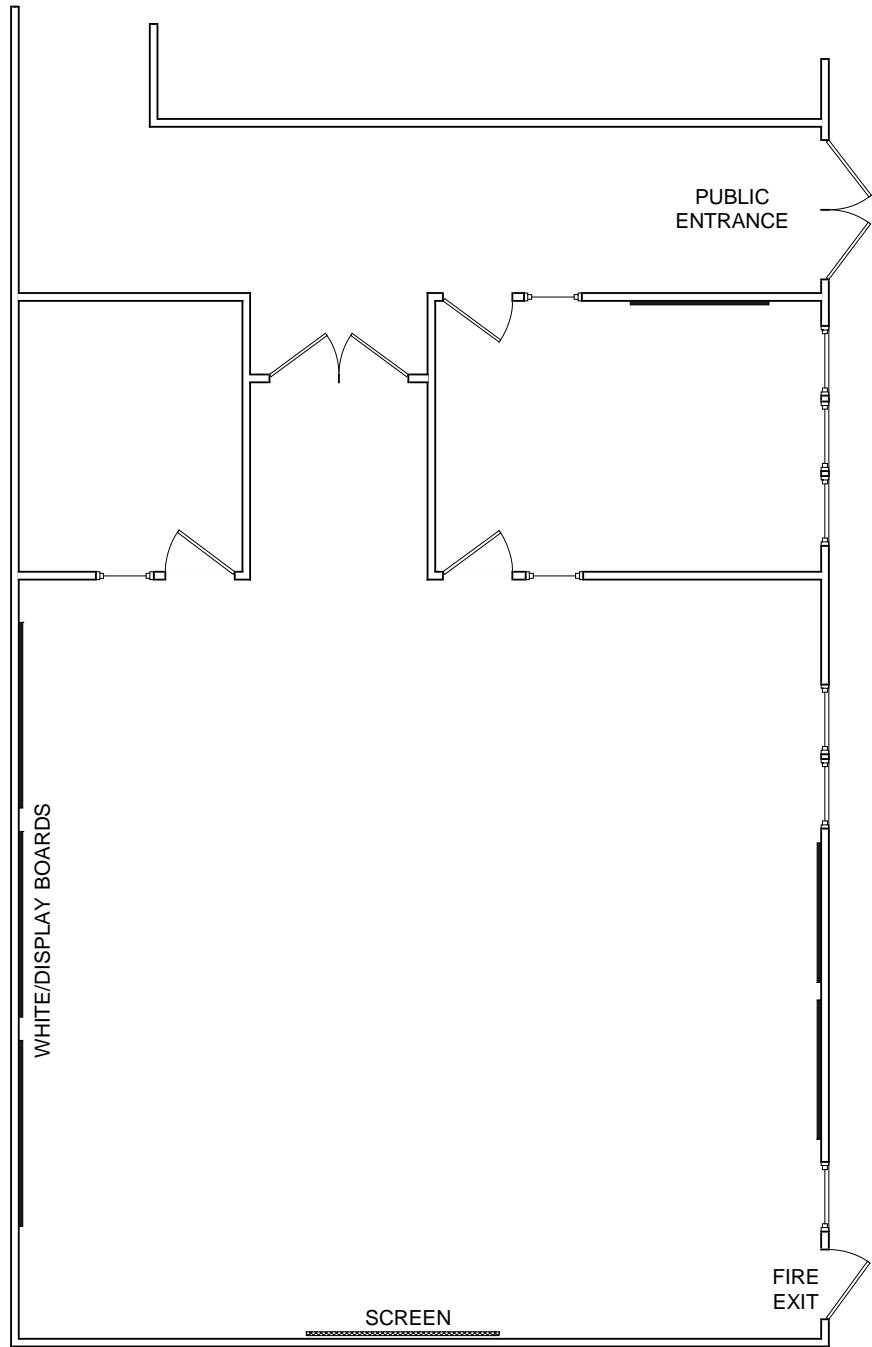


Figure 4-1 EOC Floor Plan Exercise

Set-up

In order for the EOC to be accessible 24 hrs a day, the following criteria should be addressed.

EOC Set-Up Criteria

CRITERIA	COMMENTS & INSTRUCTIONS
Access Control	
<ul style="list-style-type: none"> ▪ Who has keys/access cards? ▪ Where are keys/access cards located? ▪ What measures are in place for security during activation? ▪ What is the sign in procedure for EOC staff/visitors? 	
Furniture	
<ul style="list-style-type: none"> ▪ Where is it stored? ▪ Where does it go? (Include EOC floor plan.) ▪ Who is responsible for setting up furniture? ▪ How are they alerted? 	
Communications	
<ul style="list-style-type: none"> ▪ If communication devices are not permanently installed in the EOC, where are they stored? (phone sets, cellular phones, radios, scanners, etc.) ▪ Where should they be located in the EOC? ▪ Where are the systems connections located? ▪ Who is responsible for communications set-up and how are they alerted? 	



CRITERIA	COMMENTS & INSTRUCTIONS
Display Services	
<ul style="list-style-type: none"> ▪ If display services are not permanently mounted, where are they stored? ▪ Where should they be located? ▪ Who is responsible for setting up the displays? 	
Equipment and Supplies	
<ul style="list-style-type: none"> ▪ Where are the equipment and supplies stored? ▪ Who is responsible for distributing supplies? 	
Building Systems/Services	
<ul style="list-style-type: none"> ▪ Who is responsible for building maintenance and janitorial services and how are they contacted? 	

Financing the EOC

The goal of developing an EOC that meets safety and response requirements, within available financial resources can be challenging. Funds for emergency management can be scarce and competition for organizational dollars is a reality. You will need to determine the EOC's minimum and optimum requirements and the resources needed to satisfy those requirements. Once you have identified the basic needs and secured funding for them, you can pursue funding for other requirements as available.

Funding Alternatives

Financing for the EOC is an ongoing requirement and facility improvements will be necessary over time. Therefore, you should actively pursue new leads and funding sources. To ensure a successful Emergency Program, your organization may no longer be able to rely solely on internal funding. Additional sources may have to be sought. Government funding programs and external partnerships are two such sources.

Joint Emergency Preparedness Program

The Joint Emergency Preparedness Program (JEPP) was introduced by the federal government as a cost-sharing arrangement with the provinces and territories to encourage them to undertake emergency preparedness projects that support national objectives and priorities. It is not a grant program.


To be eligible, municipalities, regional districts and First Nations must have an emergency by-law in place and an operational emergency plan. However, those that have an emergency by-law in place, but do not have an emergency plan, are eligible to submit a JEPP application that includes the development of an emergency plan.

Allowable project expenses for a fixed EOC may include:

- Minor modifications to EOC buildings or rooms;
- Installation of workstations, map boards, electronic print boards, data projectors
- Communications equipment and installation – installation of rooftop aerial mounts, etc.

Approved JEPP funds are paid out upon completion of a project and submission of proof of payment. For further information on eligible expenses and application procedure, refer to the Joint Emergency Preparedness Guidelines available at www.pep.bc.ca/jcpp.

Partnerships



Partnerships can be an effective means of reducing costs in the building, design and operation of the EOC facility. Identify and approach potential partners who may have a vested interest in emergency preparedness / response. This may include companies whose operations pose an inherent threat to public safety or organizations who have made support of community preparedness and response a priority.

When you are securing funding from either internal or external sources, you will need to articulate needs and sound approaches for meeting those needs, as well as the overall strengths and capabilities of the Emergency Program.

Budgets

Once you have identified the sources of funding and have obtained a commitment from them, you can begin work on the budget. While each organization will have its own budget process, all programs will need to develop capital and operating budgets for the development and ongoing management of the EOC.

The capital budget addresses the financing and expenditures required to acquire, construct or improve fixed assets such as land, buildings and equipment. The operating budget addresses the total revenues and expenditures required to maintain the EOC on an annual basis.

SECTION 4

Student Worksheet

Purpose: To assess your understanding of the information that was presented in this Section.

Directions: Please answer the following questions. You can check your answers in Section 6 Answer Keys.

- 1. What criteria should be used when selecting the location of the EOC?**

- 2. Given the critical role communication equipment plays in the functioning of an EOC, what issue must be addressed in the event the EOC must move to an alternate site?**

- 3. List three factors (excluding budget) that will impact the size and physical configuration of the EOC?**

Section

5

EOC Plan

EOC Plan

Purpose of the Plan

The EOC Plan provides guidance for the management, operation and staffing of the emergency operations centre during response and recovery. It outlines the authority and procedures for activating the EOC along with response checklists of procedures for all EOC functions/roles, and supporting forms and documentation needed to operate an EOC. The Plan is a supporting document to the jurisdiction's/agency's Emergency Plan and is also supported by other departmental response plans.

The EOC plan should include the following information:

- Purpose and scope
- BCERMS / Emergency Management Structure
- Response goals
- Roles and responsibilities of EOC functions
- Activation procedures and levels
- Call-out list and notification procedures
- Facility floor plan, equipment needs, and supplies
- Checklists of procedures
- Information management processes (including a layout plan of phone, fax, data lines, cables, switches and outlets)
- Resource management guidelines
- Communication resources and procedures
- Restoration priorities for essential services
- Public information and warning processes
- Procedures for declaration of state of local emergency, including list of available powers, as applicable
- Forms and documentation
- Mapping information
- Worker care guidelines



Implementing the Plan

The EOC Plan must identify who can activate the EOC and under what conditions. At least three officials should be listed, by title, who have the authority to activate the Plan and initiate a call out of staff. It should also clearly state the circumstances, which will warrant the opening of the EOC so as to avoid delays when the situation is warranted.

Plan Maintenance

The EOC Plan is maintained and updated by the Emergency Coordinator/Planner. It should be reviewed annually for necessary additions or deletions to maintain the accuracy of the information. A system should also be established to enable staff to document and submit required changes in written form.

Training and Exercises

The EOC Plan should be exercised regularly to ensure staff/volunteers are familiar with their emergency roles and to exam existing policy and procedures. A schedule of regular training and exercises (table top, functional etc.) should be established on an annual basis. The lessons learned through training and exercise will assist in updating and maintaining the Plan as an effective and useful document.

Section 5

Student Worksheet

Purpose: To assess your understanding of the information that was presented in this Section.

Directions: Please answer the following questions. You can check your answers in Section 6 Answer Keys.

- 1. What is the purpose of training/exercises in maintaining the EOC Plan?**

- 2. Why is an EOC Plan necessary in the management of the EOC?**

Section

6

Answer Keys

Contains:

✓ **Answers to worksheets and exercise**

Answer Keys

SECTION 1 - BCERMS

Student Worksheet Answers

1. What are the four levels of response in BCERMS?

- Site
- Site Support
- Provincial Regional Coordination
- Provincial Central Coordination

2. List the first three BCERMS response goals, in priority order.

- Provide for the safety and health of all responders
- Save lives
- Reduce suffering

3. What is the purpose of the Operations and Control component in BCERMS?

- Provides a common organizational structure and control method for the management of personnel, equipment, facilities and resources.
- Enhances communication between agencies responding to the emergency or disaster.
- Provides a site response structure based on the Incident Command System.

SECTION 2 - EOC Organizational Structure

Student Worksheet Answers

1. Why would an EOC be activated to support site activities?

In larger emergencies, onsite responders may require policy, coordination, and resource direction to support site activities. An EOC is a pre-designated facility, set up off site, to provide this support. The EOC provides policy direction to the site Incident Commander(s), coordinates resources requests from the site and manages all non-site activities.

2. What five functions are used to organize the EOC?

- Management
- Operations
- Planning
- Logistics
- Finance/Administration

3. What is the role of the Policy Group when an EOC is activated?

The Policy Group, comprised of the head of the organization (e.g. Mayor, Board Chair) and other senior executive officers provides the EOC Director with policy direction. Examples of this level of policy direction would include the declaration of a “state of local emergency” and formal requests for outside support/resources (e.g. Provincial and Federal support) through the Province.

SECTION 3 - EOC Working Group

Student Worksheet Answers

1. What is the purpose of the EOC Working Group?

The EOC Working Group is responsible for addressing the facility and equipment requirements for one primary and at least one secondary EOC.

2. Identify two considerations when selecting Working Group members.

- The members of the team must have the ability, commitment, authority and resources to get the job done.
- The team must possess, or have ready access to, a wide range of expertise relating to the community and the mechanics of emergency response and planning.
- The members of the team must agree on their purpose and be able to work cooperatively with one another.
- The team must have appropriate representation from the organization.

SECTION 4 - EOC Facility

Student Worksheet Answers

1. What criteria should be used when selecting the location of the EOC?

The decision on where to locate the EOC should be based on an analysis of potential threats to the community, since the EOC must survive likely disasters. The community's hazard, risk and vulnerability analysis will assist you in determining if a particular geographic location is vulnerable, due to a known hazard.

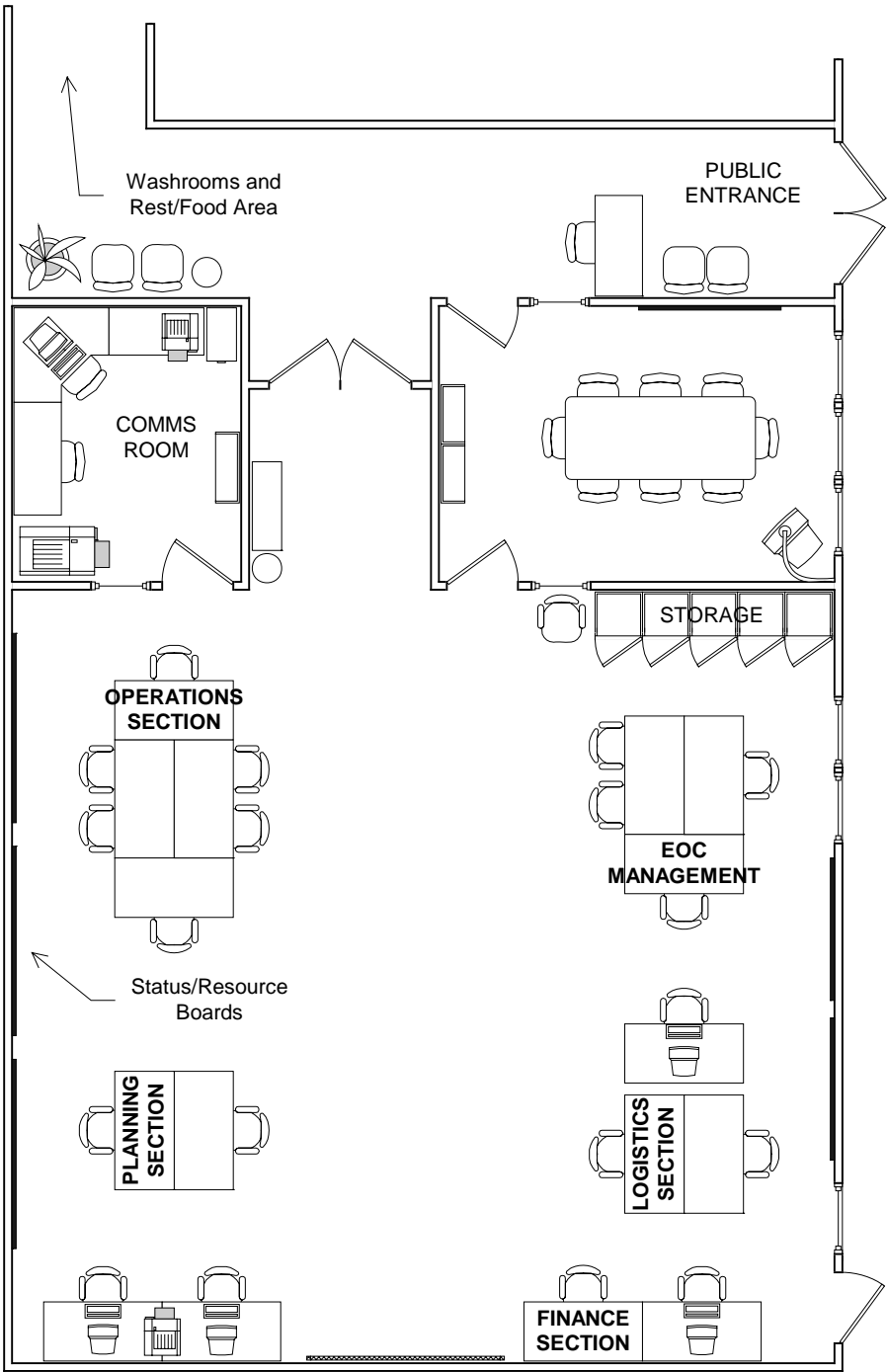
2. Given the critical role communication equipment plays in the functioning of an EOC, what issue must be addressed in the event the EOC must move to an alternate site?

A mobile communications capability that can be moved away to an alternate EOC.

3. List three factors (excluding budget) that will impact the size and physical configuration of the EOC?

- Staffing Requirements
- Functional Requirements
- Equipment and Resources

EOC Floor Plan Exercise – Sample Configuration



SECTION 5 - EOC Plan

Student Worksheet Answers

1. What is the purpose of training/exercises in maintaining the EOC Plan?

The EOC Plan should be exercised regularly to ensure staff/volunteers are familiar with their emergency roles and to exam existing policy and procedures. The lessons learned will assist in updating and maintaining the Plan as an effective and useful document.

2. Why is an EOC Plan necessary in the management of the EOC?

The EOC Plan outlines the authority and procedures for activating the EOC along with response checklists of procedures for all EOC functions/roles, and supporting forms and documentation needed to operate the EOC.

Section

7

EOC Level 1 – Exam

EOC Level 1 Exam

Click [here](#) for instructions to request the exam.