

# Training Module

# INCIDENT RESPONSE SYSTEM

## Operation Section Chief





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# Training Module

# INCIDENT RESPONSE SYSTEM

## Operation Section Chief



Towards a disaster free India

**National Institute of Disaster Management**

*(Ministry of Home Affairs, Govt. of India)*

5-B, I.P. Estate, M.G. Road

New Delhi – 110 002

## **Training Module**

### **INCIDENT RESPONSE SYSTEM Operation Section Chief**

ISBN : 978-9382571-19-3

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**Edition:** 2015

#### **Published by**

National Institute of Disaster Management, Ministry of Home Affairs,  
New Delhi – 110 002

#### **Citation**

**Training Module : Incident Response System Operation Section Chief**  
National Institute of Disaster Management, New Delhi-110 002,  
Page 168

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#### **Design and Printing**

Chandu Press, D-97, Shakarpur, Delhi-110092, Ph.: 22526936



## Preface

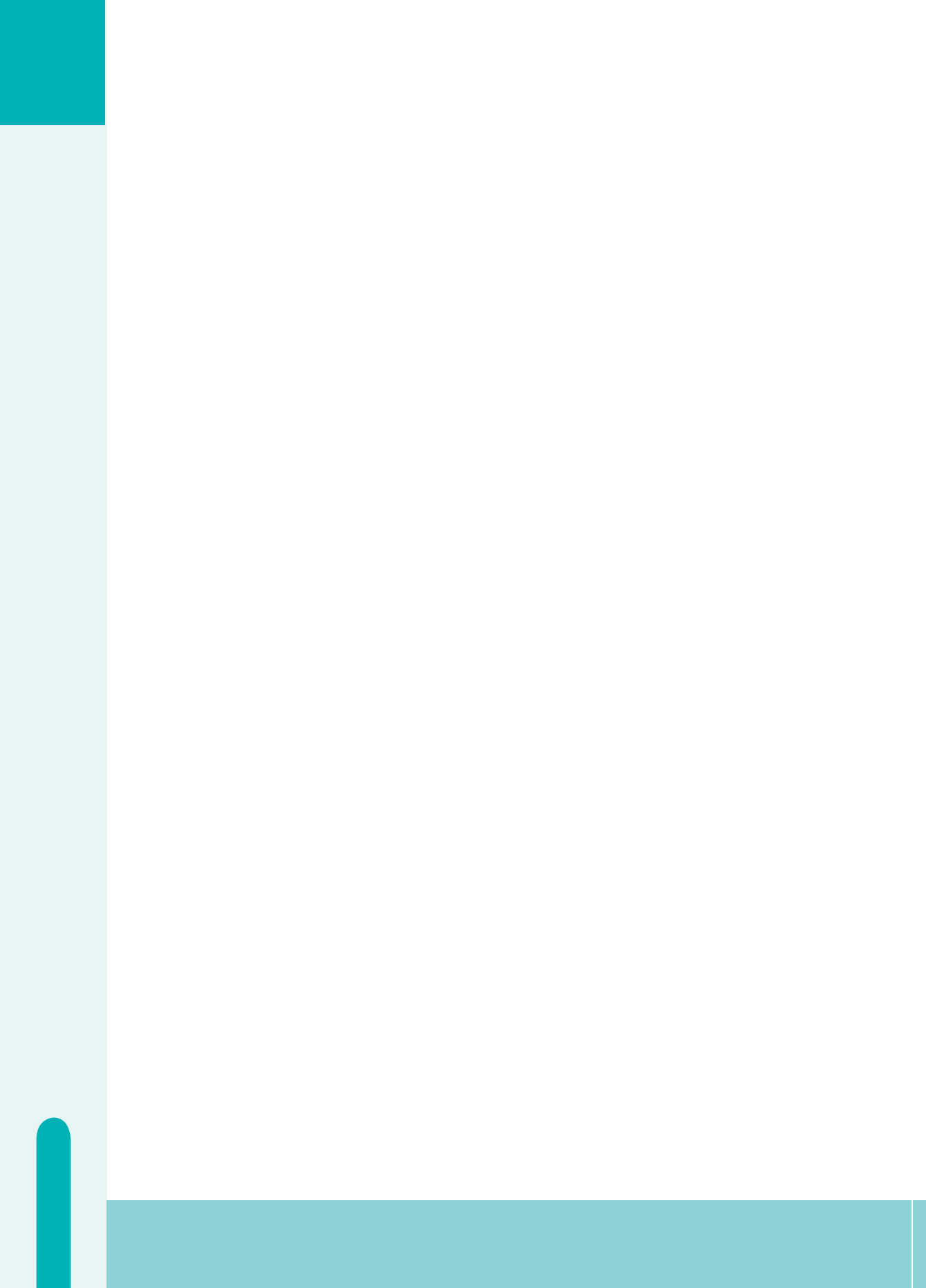


India is a disaster prone country with high percentage of risk exposure vulnerable to natural disasters. The Disaster Management Act 2005 mandates the National Institute of Disaster Management (NIDM) as a nodal national institute for training, research, documentation and development of national level information base relating to disasters. NIDM is entrusted with the nodal responsibility for planning and coordination of **'Incident Response System'** training. The Incident Response System (IRS) provides a systematic, proactive approach guiding the concerned departments and agencies at all levels of government, the private sectors and Non-Governmental Organizations to work flawlessly in disaster situation.

The basic aim of the present training modules is to promote the Incident Response System among disaster responders i.e. disaster management teams and administrators. These modules are designed to provide management skills to those who have been working in disaster management and incident response planning. The modules also provide detailed quick planning on how to handle the disaster effectively, including training of trainers.

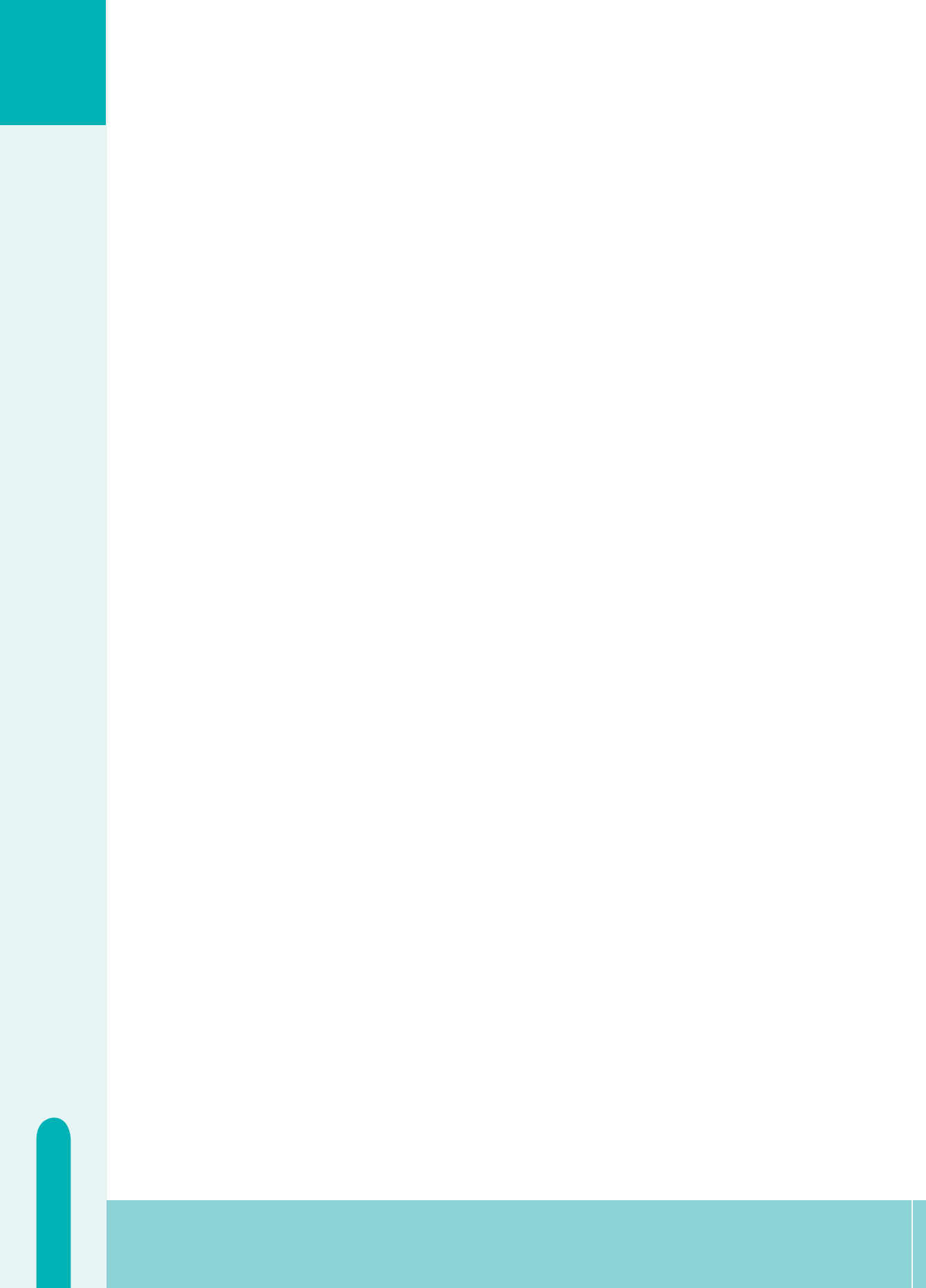
These modules have been customized by core trainers and experts who have been trained in Incident Command System and have vast experience in handling operations/administrations. I sincerely acknowledge the contribution of Shri Chiranjiv Choudhary, IFS and express my gratitude for customizing the training module "Operation Section Chief". We are pleased to publish the modules which may be widely used by various stakeholders engaged in disaster management. I hope these modules will be very effective to all organizations, departments and planners.

**Prof. Santosh Kumar**  
Executive Director, NIDM



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# **Incident Response System Operations Section Chief**

## **Unit 1**

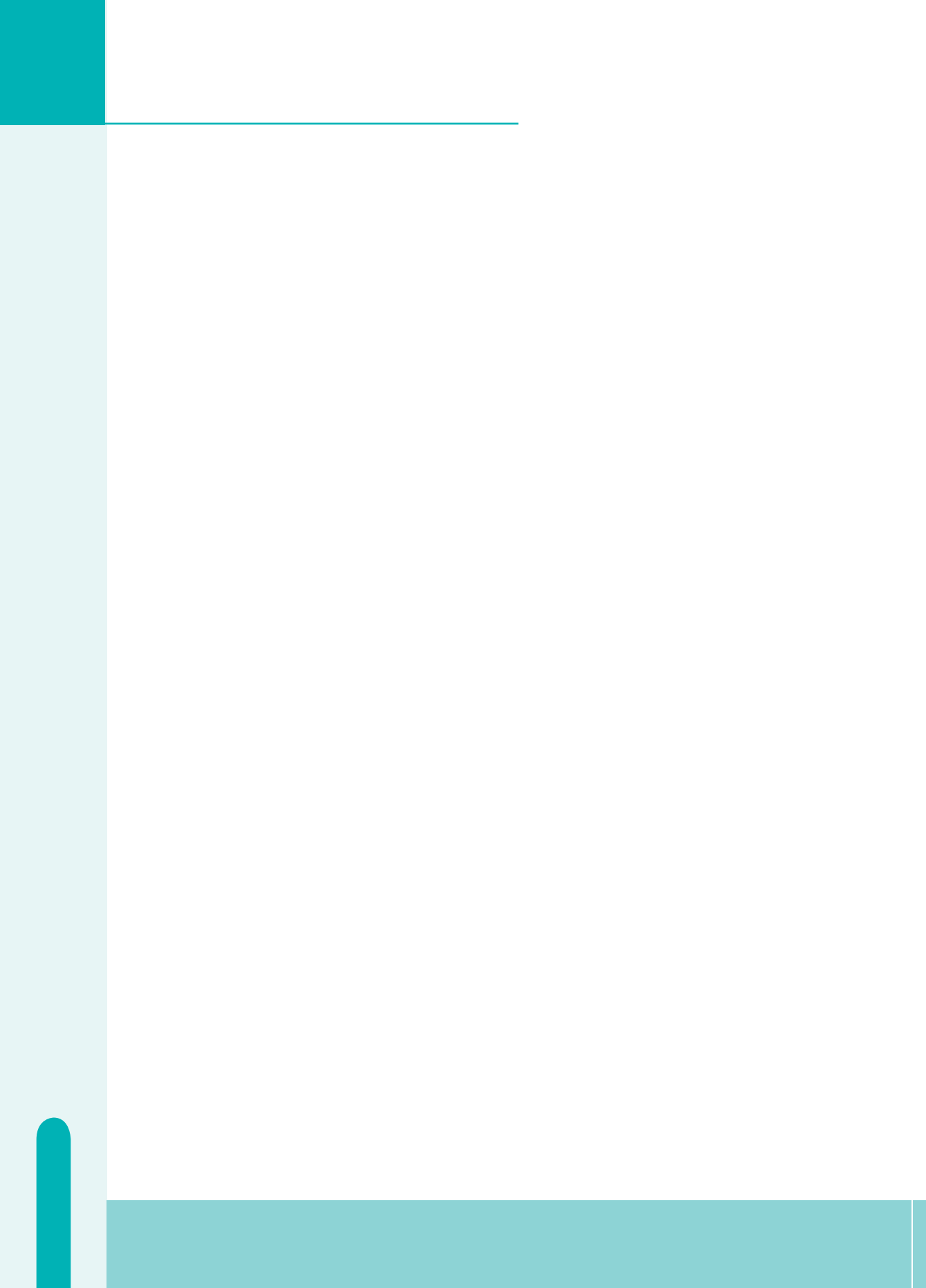
### **Course Introduction**

#### **Lesson 1-1**

#### **Introduction**

## **Participant Manual**

**National Institute of Disaster Management**  
Government of India, New Delhi



## Detailed Lesson Outline

**Course:** Operations Section Chief (OSC)

**Unit:** 1-1 Introduction

**Objectives:** The introduction of Trainees / participants with each other and having expressed their expectations of the course will provide initial feedback to the Instructors and make a smooth transition into the presentation of the course content.

This also facilitates better and more effective participation in the scenario exercises.

## **I. Introduction**

- A. Instructors
- B. Trainees/ participants
  - 1. Self introductions
  - 2. Experiences
  - 3. Why be an OSC?
  - 4. Participants expectations
- C. Discuss grading standards and expectations for participation in scenario exercises

## **II. Course Objective**

Given a specific incident situation, perform the role of an OSC as it applies to planning, supervision, and coordination of an incident

III. In the ICS model as practiced in the US, trainees for the OSC follow a prescribed set of tasks during onscene management of incident evaluated by the qualified OSC, Australia and other countries are considering a similar system. In the Indian context successful performance in the position as evaluated by a qualified trainer will be prerequisite for qualification.

# **Incident Response System Operations Section Chief**

## **Unit 1**

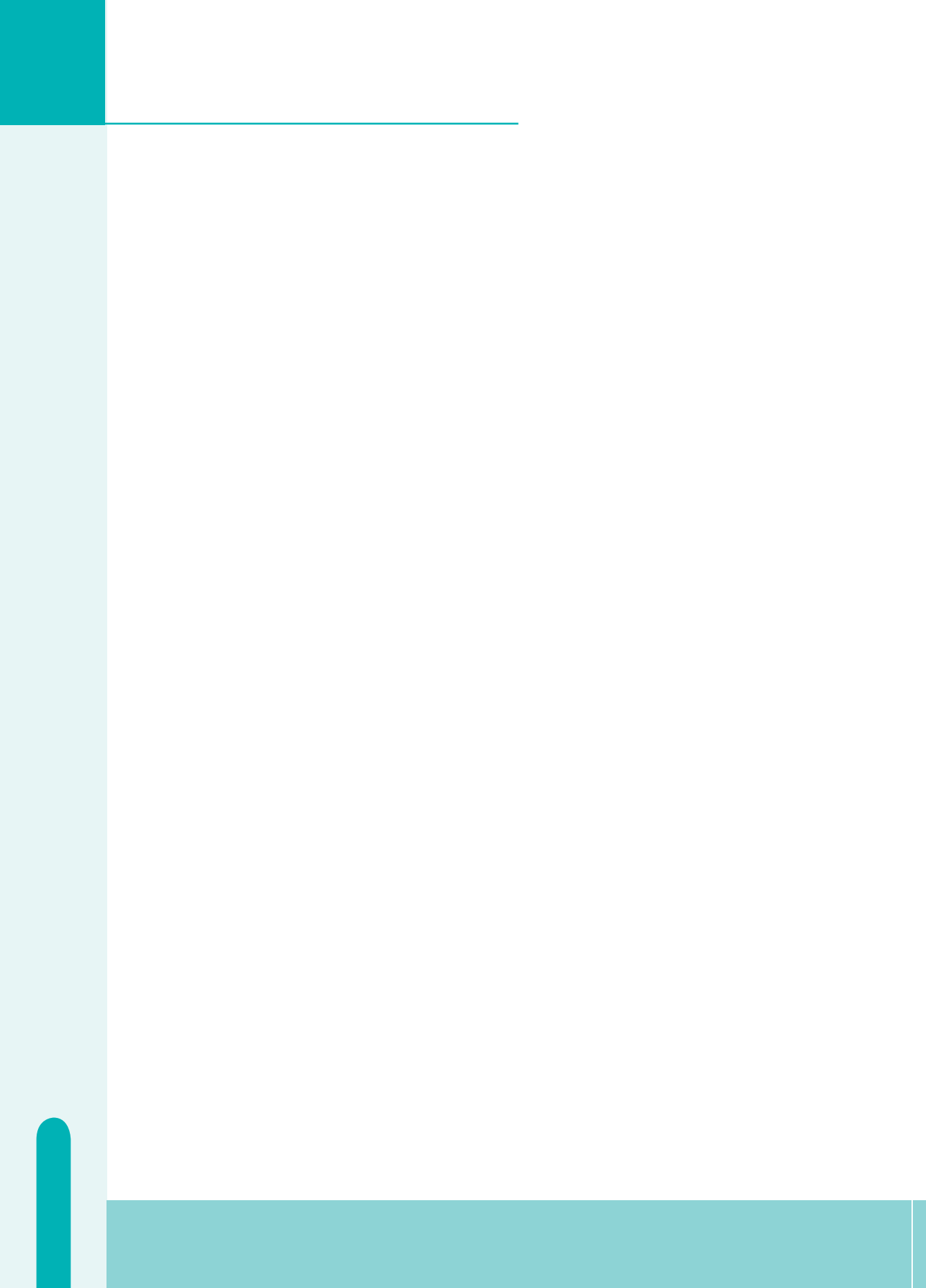
### **Course Introduction**

#### **Lesson 1-2**

#### **Introduction**

## **Participant Manual**

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## Detailed Lesson Outline

|                    |                                                                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                                                                                                                        |
| <b>Unit:</b>       | <b>1-2 Introduction to Operation Section</b>                                                                                                                                                                                 |
| <b>Objectives:</b> | The objective is to briefly recapitulate the essential features and functional structure of the Operation Section so that the course participants will have a smooth transition into the presentation of the course content. |

## **I. Unit 1-2**

- A. The Operation Section is responsible for managing and directing the required tactical actions in an incident to meet incident objectives.
- B. The build up of Operation section is generally dictated by the number of tactical resources involved and span of control considerations.
- C. It comprises of Response Branch (RB), Transportation Branch (TB) and Staging Area (SA).
- D. Activation of RB, TB and SA are situational, depending on the scale and complexity of the incident.

## **II. Response Branch (RB)**

- A. It consists of various Divisions and Groups depending on the functional and geographical requirements of the incident.
- B. RB is the main responder in the field dealing with the situation and performing various functions.
- C. Depending on the scale and complexity of the incident, RB could be expanded by activating required numbers of Divisions and Groups.
- D. Further some of the functional positions such as Group-in-charge, Loading and unloading-in-charge is common to all the four Operational Groups i.e. Road, Rail, Water and Air and will be activated as and when the situation demands.
- E. Similarly, there is another functional position of Coordinator between the Group-in-charge and Loading and Unloading-in-charge which could be activated for Road, Water and Rail Operations to maintain span of control and better communication and coordination.

## **III. Roles and Responsibilities of Response Branch Director (RBD)**

- A. Works under the supervision of OSC and responsible for implementation of IAP as per the assigned role.
- B. Attend planning meetings.
- C. Review Assignment List (IRS Form-005) for Divisions/Groups.
- D. Assign specific tasks to Divisions and Group-in-charge.
- E. Resolution of conflicts within the Branch.
- F. Report to OSC regarding modifications required if any in the IAP, need for additional resources, availability of surplus/excess resources.
- G. Provide Single Resource, Strike Team and Task Force support to various operational areas. Ensure that all team leaders maintain record of various activities performed in IRS Form-004.

#### IV. Roles and Responsibilities of Division Supervisor and Group -in-charge

- A. The OSC may create a Division depending on the functional requirement for close and proper supervision when the span of control becomes larger or when some locations are very distant and difficult to reach.
- B. Except for the hierarchical difference, the roles and responsibilities of Division Supervisors and the Groups-in-charge are the same.
- C. Implement Division and Group assignment list.
- D. Assign resources within the Division or Group under them.
- E. Report on the progress of operations and status of resources within the Division or Group.
- F. Circulate Organizational Assignment List (Division/Group) IRS Form 005 to leaders of Group, Strike Team and Task Force.
- G. Review assignments and incident activities with subordinates and assign tasks as per the situation.
- H. Coordinate activities with adjacent Divisions or Groups.
- I. Submit situation and resource status to RBD and the OSC.
- J. Participate in the development of IAP.

#### V. Transportation Branch (TB)

- A. Transportation Branch (TB) supports the response efforts by transporting different resources, relief materials, personnel to the affected site and transportation of victims, if necessary.
- B. It manages actual deployment and utilization of transport at ground zero according to the needs of IRT and the IAP.
- C. It may comprise of four Operational Groups such as Road, Rail, Water and Air. These groups may be activated as and when required in an incident.

#### VI. Roles and Responsibilities of Transport Branch Director (TBD)

- A. All functional groups i.e. Road, Rail, Water and Air are managed by the TBD
- B. Activate and manage different operations groups
- C. Coordinate with LS for required resources
- D. Ensure that Organizational Assignment List (divisional /groups)- IRS Form 005 is circulated among the Group-in-charge and other responders
- E. Provide ground support to Air Operations and road transport to Rail and Water operations

- F. Prepare transportation plan as per IAP.
- G. Determine the need for additional resource, their proper and full use
- H. Maintenance of record of activities performed in IRS Form-004.

## **VII. Roles and Responsibilities of Staging Area Manager (SAM)**

- A. Over all in-charge of Staging Area.
- B. Works in close liaison with the Logistics Section (LS) and Planning Section (PS) through OSC.
- C. Establish the SA with proper layout, maintain it in an orderly condition and ensure proper traffic management.
- D. Organize storage and dispatch of resources received.
- E. Maintain records of receipts and dispatches and report to OSC.
- F. Establish check-in function as appropriate.
- G. Demobilize SA in accordance with the Demobilization Plan (IRS Form-010).
- H. Maintain record of various activities performed in IRS Form-004.

## **VIII. Nodal Officer (Air Operations)**

- A. Coordinate with Authorities concerned for Air Operations
- B. Project the type of Air support to appropriate authorities based on IAP and place demand at least 24 hours in advance
- C. Inform IC and OSC about Air movements and landing schedules
- D. Ensure relevant maps of incident locations are available with all agencies involved in Air Operations
- E. Determine suitability of Helibases /Helipads in coordination with Air Force Authorities
- F. Maintain communication with Air Traffic Control (ATC) and Ground Support Staff regarding Air movements and other related activities
- G. Report about Air Operations to the Responsible Officer (RO)

## **IX. Roles and Responsibilities of Group-in-Charge (Air Operations)**

- A. Provide ground support to Air Operations as per IAP
- B. Report progress of Air operations to TBD and work in close coordination with the NO, IC, OSC and TBD
- C. Ensure resources and supplies required for Air Operations are available at different locations

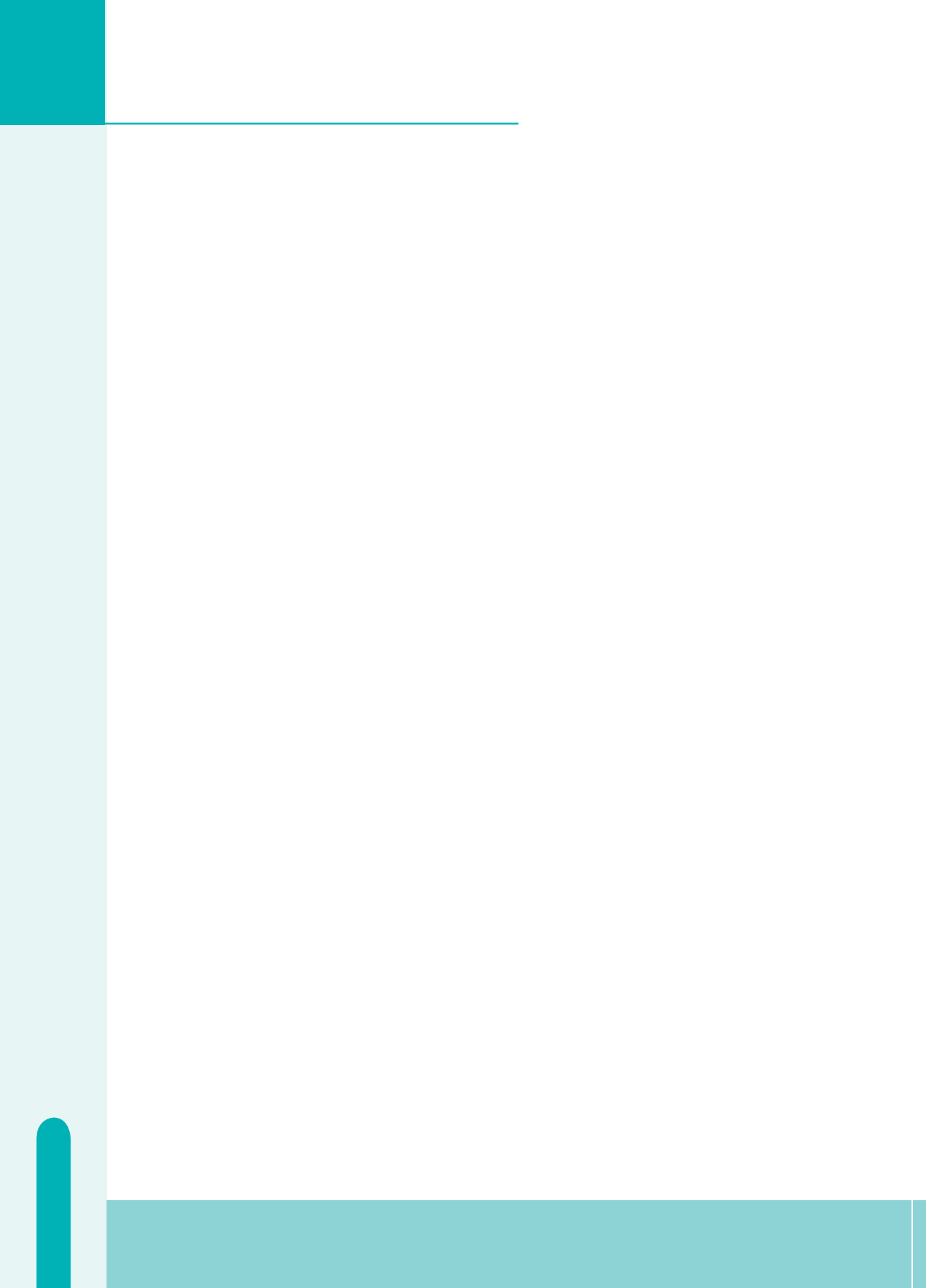
- D. Requisition additional personnel support
- E. Keep appropriate maps in order to provide correct coordinates to Pilots
- F. Ensure refueling facilities are available at the landing and takeoff locations
- G. Ensure Helibase and Helipad locations are identified and approved by appropriate authorities
- H. Ensure identification and marking of Helibases and Helipads
- I. Arrange for unloading and dispatch or storage of relief materials that arrive at Helibase / Helipads
- J. Liaise with Road Operations Group for road transportation needs
- K. Ensure functionality of Aircraft rescue and firefighting services at Helibase and Helipads

#### **X. Roles and Responsibilities of Helibase /Helipad -in-charge**

- A. Report to the TBD
- B. Provide all ground support requirement for Aircrafts at the location
- C. Survey the locations for any potential Aircraft hazards or any other likely problems
- D. Ensure proper marking of Helibase / Helipads for identification
- E. Coordinate with Ground Supervisor for Aircraft operations
- F. Determine and implement ground and air safety requirements and procedures
- G. Ensure aircrafts rescue measures, fire fighting services, lights, smoke candles, security etc. are in place and working properly.
- H. Ensure proper facilities for rest, food/refreshment, water and sanitation for Aircrew
- I. Maintain record of various activities performed in IRS Form 004

#### **XI. Roles and Responsibilities of Loading /Unloading -in-charge**

- A. Responsible for safe operations of loading and unloading of cargo and personnel
- B. Ensure load manifest of cargo and personnel
- C. Supervise loading and unloading crew
- D. Maintain record of activities performed in IRS Form 004



# **Incident Response System Operations Section Chief**

## **Unit 1**

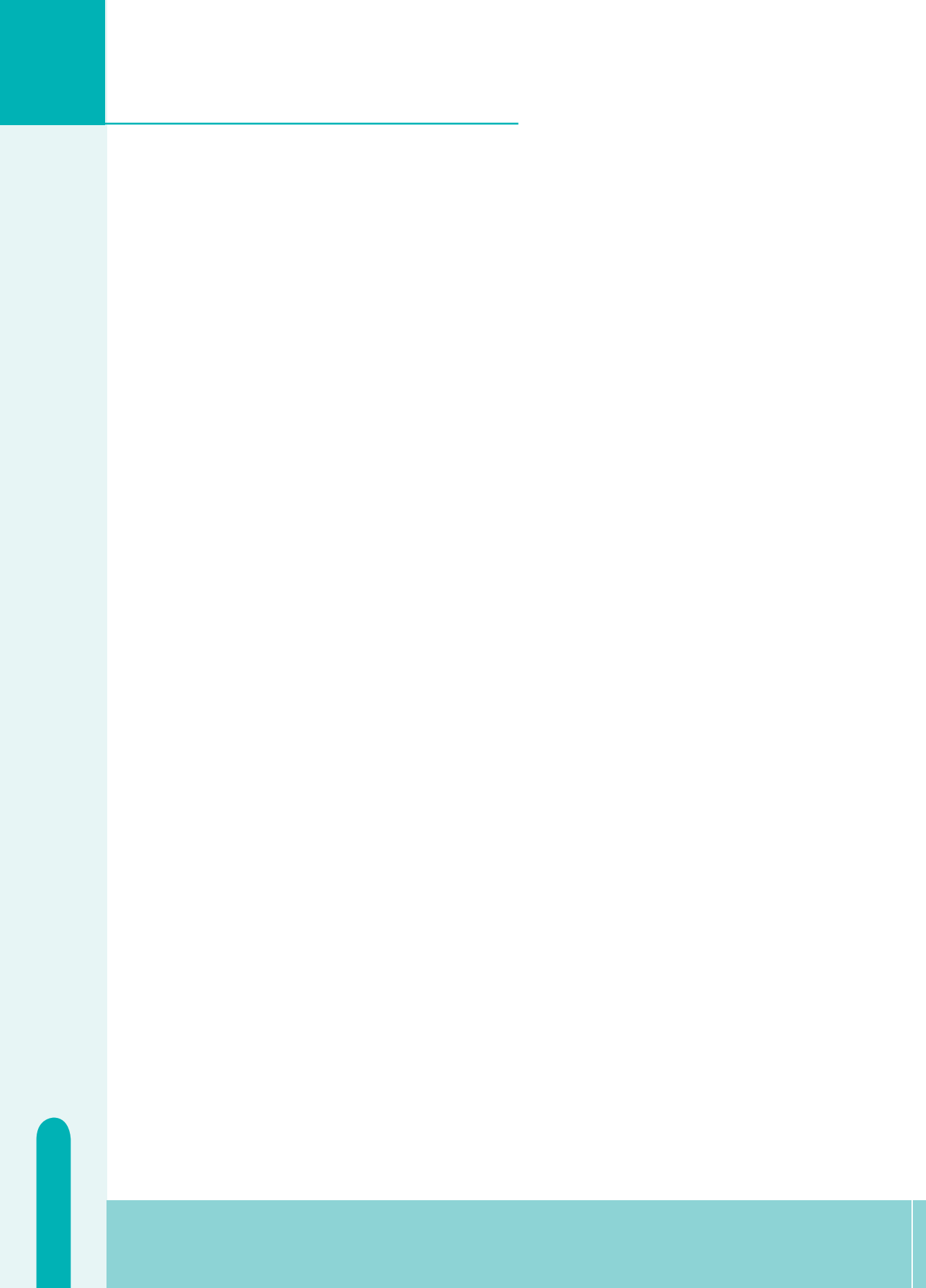
### **Course Introduction**

#### **Lesson 1-3**

#### **Roles and Responsibilities**

## **Participant Manual**

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Government of India, New Delhi



## Detailed Lesson Outline

**Course:** Operations Section Chief (OSC)

**Unit:** 1-3 Roles and Responsibilities

**Objectives:** The Operations Section Chief is responsible for tactically executing the Incident Action Plan (IAP) in a safe and effective manner to achieve established objectives.

In accomplishing tactics, the OSC mitigates or controls the emergency and is accomplishing the primary mission of emergency response. The OSC must be a leader, manager, coordinator, and most important of all, an excellent planner.

Effective and respected leadership of emergency workers is a primary role of the OSC. The best OSCs will lead by positive example and be team players. Workers will follow their OSC's example and be motivated by their Chief.

Additionally, the OSC must effectively manage and coordinate all kinds of resources, often numbering into the hundreds.

Also, the OSC must not only supervise or lead emergency workers, but also must plan tactical activities for future operational periods. The job is very complex and demanding.

In addition, the OSC must be a frugal, cost-effective manager of costly taxpayer-supported resources.

## **I. Unit 1-3 Objectives**

1. Discuss the job of the OSC as it applies to Planning, Supervision, and Coordination.
2. Review the roles and duties of the OSC

## **II. The OSC Must Be:**

- A. A Planner
- B. A Supervisor
- C. A Coordinator

These are the “Big Three” of the OSC’s duties

- D. Role of an OSC differs from that of a Division/Group Supervisor:
  1. He/She is no longer responsible for a single geographic area
  2. Now responsible for an entire incident
- E. The OSC is responsible for:
  1. Tactics employed on the incident
  2. Gathering information and formulating the Tactical Plan for the IAP for each Operational Period
  3. Supervision of:
    - Branch Directors
    - Div/Group Supervisors
    - Air Operations Organization
    - Staging Areas
    - Deputy OSC
  4. Coordination with:
    - Command
    - General staff
    - Subordinates
    - Responsible Officer
    - Resources Advisors

## **III. Key Elements of the OSC’s Position**

- A. Obtain and assemble information and materials.
- B. Provide for the safety and welfare of assigned resources during the entire period of supervision.

- C. Establish and maintain position, interpersonal and interagency working relationships.
- D. Obtain complete information about the incident from Communication Center upon initial activation.
- E. Gather information necessary to assess incident assignment and determine immediate needs and actions.
- F. Obtain a briefing from the Responsible Officer or outgoing Incident Commander. Receive Incident Commander's IRS Form 001 (Incident Briefing).
- G. Obtain a briefing from your Incident Commander. This should be one-on-one or in the Incident Response Team Strategy Meeting.
- H. Collect Information from the outgoing Operations Section Chief, Initial Incident Commander, or other personnel responsible for previous incident management.
- I. Prepare for Planning Meetings, using IRS Form 015s and meet time frames.
- J. Evaluate and monitor the current situation.
- K. Personally observe and review current operations to update tactics for the next Operational Period Planning Meeting.
- L. Regularly evaluate resource status and tactical needs to determine if resource assignments are appropriate.
- M. Participate in preparation of the Incident Action Plan (IAP).
- N. Present the Operations portion of the briefing, particularly emphasizing any changes from the written Incident Action Plan. During this briefing, review the IAP and safety points, highlighting changes.
- O. Interact and coordinate with all team members and functions.
- P. Supervise and adjust operations organization and tactics as necessary, based on changes in incident situation and resource status. As part of this step, consider Contingency Plan.
- Q. Coordinate with other OSCs for shift changes and relief.
- R. Evaluate the overall effectiveness of the IAP and adjust as necessary.
- S. Include technical information to plan/organize tactical operations.

- T. Update the Incident Commander on current accomplishments and/or problems. Keep the IC informed—no surprises.
- U. Complete a Unit Log, IRS Form 003, for each Operational Period.
- V. Report and record special events, i.e., incidents, accidents, political contacts.
- W. Ensure that all personnel and equipment time records are complete and have been submitted to the Finance/Administration people as required.
- X. Consider demobilization plans early in the incident. Assist in development, approval, and implementation of the Incident Demobilization Plan. Identify excess resources. Coordinate with subordinates and provide the Planning Section Chief a list of excess personnel and other resources. Use IRS Form 015M or equivalent.
- Y. Ensure that performance evaluations are completed as required by the Incident Commander or as per the Govt. policy.
- Z. Document good/bad performance for future learning and effective implementation of established objectives in IAP .
- AA. Let agencies know how their personnel performed.
- BB. Evaluations required for trainees.
- CC. Complete demobilization and check-out.
- DD. De-brief the Responsible Official, through a close-out meeting and critique.
- EE. Ensure trainees' PTBs are current and accurate before leaving the incident.

# **Incident Response System Operations Section Chief**

## **Unit 2**

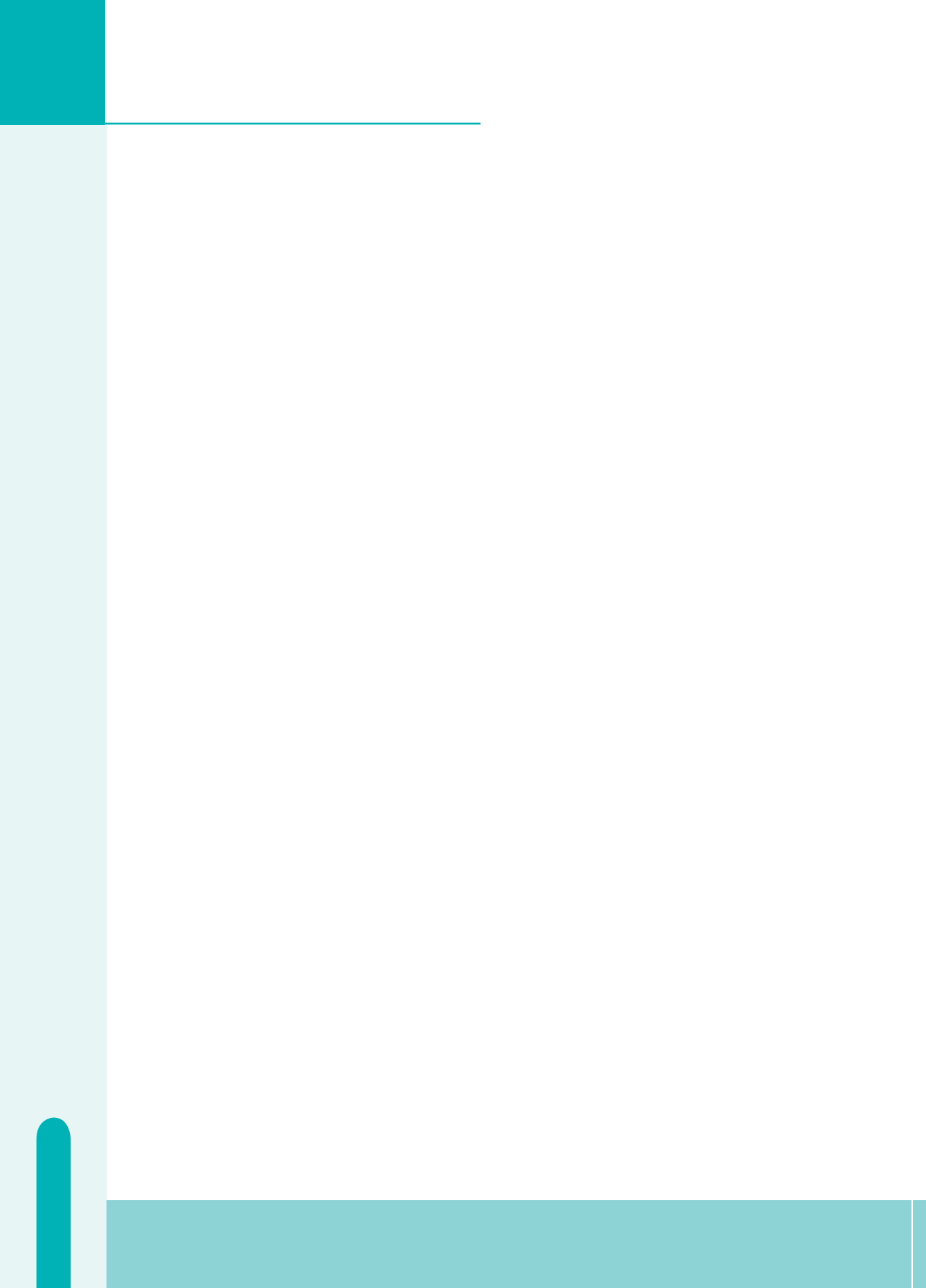
### **Planning**

#### **Lesson 2-1**

#### **Management Cycle**

### **Participant Manual**

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## Detailed Lesson Outline

|                    |                                                                                                                                                                                                            |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                                                                                                      |
| <b>Unit:</b>       | <b>2-1 Management Cycle</b>                                                                                                                                                                                |
| <b>Objectives:</b> | The Management Cycle is a key process that the OSC must develop if he/she is to be a successful planner. We will compare various operational period schedules and how they relate to the planning process. |

## **I. Unit 2-1 Objectives**

- A. Understand how the management cycle is applied to the OSC's job.
- B. Understand the OSC's role in resource planning.
- C. Gather information necessary to assess incident assignments and determine immediate needs and actions based on current survey and anticipated changes.
- D. Prepare for and participate in strategy meetings.
- E. Develop the tactical portion of the IAP. Reason: the OSC develops more tactical objectives in developing a total tactical plan.

## **II. The Management Cycle**

- A. A thought process used in problem solving.
- B. Should happen quite rapidly as a mental exercise.
- C. Used as a step-by-step checklist.
- D. Once familiar, the steps become automatic.
- E. Helps in effective coordination with team members to achieve established objectives of IAP in a cost effective manner
- F. The six components of the Management Cycle are:
  - 1. Planning
  - 2. Organizing
  - 3. Staffing
  - 4. Directing
  - 5. Controlling
  - 6. Evaluating

## **III. Planning**

Management of every incident needs an action plan and proper briefing of all personnel / respondents. The purpose of the action plan and briefing is to provide all personnel with appropriate directions for various tasks to be performed on the incident. The action plan is prepared through a process for each operational period duly assessing the current incident situation and review / evaluation of previous IAP.

- A. Determining the objectives and deciding which resources to use to achieve the established objectives in the most effective and economical manner.

- B. It is a mental process of evaluating the situation and meshing the resources in a realistic way to achieve the desired goal.
- C. The elements of planning are:
  - 1. Objectives: The strategy statement as laid out by the Incident Commander on the IRS Form 001, Incident Briefing, or the Incident Objectives.
  - 2. Policies: The policy of Govt. of India / State Govt. on the subject must be communicated to all the members and should be kept in mind while planning for an incident. These are contained in the National Disaster Management Act, 2005 / State Disaster Management Act of respective States/ Guidelines on IRS by NDMA and in the Field Operations Guide for different incidents and position manuals of the various functions of the IRS organization when developed.
  - 3. Procedures: The procedures that are to be followed are outlined during the training for the IRS functions, as well as during basic and intermediate training, which has been received by all incident and emergency response personnel.
  - 4. Tactics: The methods or tasks that are used to accomplish established objectives.
- D. The importance of planning to the IRS
  - 1. Planning is vital during the initial course of action. It will directly affect the final outcome of the incident.
  - 2. The strategic control points that will be discussed later in the Management Cycle are established during the planning process.
- E. Planning for resources
  - 1. Ground resources (i.e .Road and Rail)
  - 2. Air
  - 3. Water
  - 4. Staging Area

#### IV. Organizing

- A. Organizing is a structured method whereby managers bring together essential resources based on actual functional requirement and incorporate them into a formalized relationship to achieve established objectives in a cost effective manner in an incident.

- B. The organization established in the IRS is the mechanism for grouping activities together. It establishes relationships between functions.

## V. Staffing

This refers to the assignment of resources to identified organizational needs:

- A. Personnel Staffing
  - 1. Personnel are evaluated according to their experience, education, and other pertinent information for assignment into individual functions in the Incident Response System.
  - 2. The IRS Qualification System establishes minimum standards of qualification. There is no guarantee of success, only an indication of level of training and experience.
  - 3. Use the most qualified people in lead positions.
- B. Resource Staffing
  - 1. Apparatus are the basic functional units used to identify tasks in emergency operations. Examples are skilled labour for debris removal, sanitation staff, earthmovers, helicopters, ambulances, Search and Rescue (SAR), Floats/Boats, sand bagging machinery, Fire engines etc.
  - 2. Equipment

Resources should be evaluated based on the capabilities of the resource needed to accomplish the task, not the experience of the leader.

## VI. Directing

- A. Guiding, communicating, and supervising the efforts of subordinates toward the attainment of specified objectives.
- B. An important part of directing subordinates is motivation.
  - 1. Positive motivation implicitly promises some kind of a reward at the end of a task. Examples: recognition of performance in a public function, by awarding, certificates of appreciation, cash awards, medals, or any other incentive as considered by the Central /State Government etc; .
  - 2. Negative motivation implicitly promises some sort of punishment if the task or assignment is not completed. Examples: poor performance ratings / premature de-mob from an incident.

### C. Leadership styles

1. Autocratic is a one-way street with information flowing down to subordinates.
2. Laissez-faire is a go-your-own-way system that relies on the presumption that all members of the organization are working toward a common goal and moving in the proper / desired direction.
3. In democratic or participatory management, objectives and organization are established at the top with information about progress and needs constantly flowing up from the bottom. Needs are then addressed by top management, with information flowing back down the chain.
4. Delegation assigns tasks on the principle of division of labor. More specifically, it does not tie up the top of the organization with the details required to accomplish an individual task. Delegation uses the knowledge of others, facilitates timely completion of tasks without unnecessary delay, and enhances training and personal development. It provides a more meaningful work environment for people than other management styles.

## VII. Controlling

- A. Evaluating the performance of an organization or its components by applying the necessary corrections to make sure the performance constantly supports the established objectives as contained in IAP.
- B. Steps in establishing control are:
  1. Establish standards of performance, generally based on accepted norms.
  2. Compare the actual results with the established standards.
  3. Make adjustments as necessary.
- C. Strategic control points are set by IC as Incident Objectives. They are certain critical points in each operation that must be achieved to have an effective operation.
- D. Tactical control points
  1. Tactical control points are used by the OSC to compare actual tactical accomplishments to planned tactical activities.
  2. They are simple evaluation thresholds, as defined by the OSC, which alert the OSC when tactical activities meet or fail to meet expectations.

Examples of not meeting expectations might include delays in implementing air tactics, providing air supply at isolated pockets/ spots where victims are trapped, failure to find victims at an SAR incident, sudden change in the incident situation for reasons beyond control leading to incident escalation etc.

An example of exceeding expectations might be having excess resources.

3. OSCs should continuously develop and analyze tactical control points.

## **VIII. Evaluating**

- A. Determining whether the existing plan is adequate based on a comparison of planned objectives and actual incident results.

- B. Evaluation must be done objectively.

Evaluation should always judge the effectiveness of the objectives for the plans that are in force during the incident, whether it be the incident protection plan, the police protection plan, or the emergency medical plan.

Evaluation should use current accepted standards for comparison of actual accomplishment in a given situation. Heroics should be considered as an exception and not the rule in performance at emergencies.

## **IX. Establish Operational Period Schedule**

- A. Explain and discuss 12- and 24-hour operational shifts and their application to incidents.
- B. Discuss 12-hour operational period. Keep discussion to a minimum because policy and procedures vary with departments.
- C. Discuss 24-hour operational period. Include the work, rest, and fatigue study.
- D. Discuss variations in operational periods:
  1. Rescue operations
  2. SAR
  3. Confined Space (isolated pockets / spots where victims are trapped)
  4. Swift water/flooding
  5. Hazardous Material (Chemicals of toxic nature etc.)

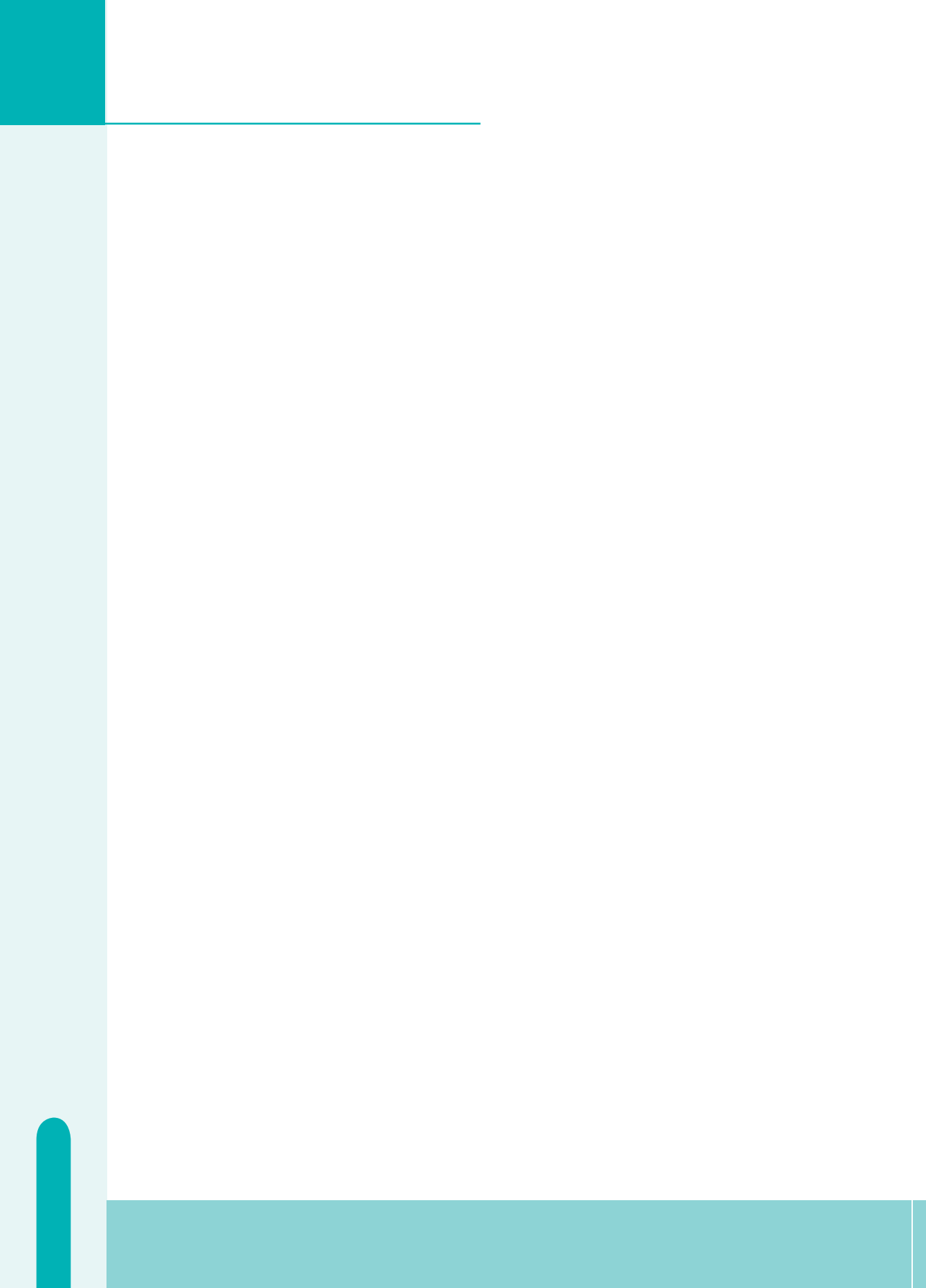
# **Incident Response System Operations Section Chief**

## **Unit 2 Planning**

### **Lesson 2-2 Information Gathering**

## **Participant Manual**

**National Institute of Disaster Management**  
Government of India, New Delhi



## Detailed Lesson Outline

**Course:** Operations Section Chief (OSC)

**Unit: 2-2** Information Gathering

**Objectives:** It is important that the OSC gather all available information. There are numerous sources of information available to assist the OSC in developing a mental picture of an escalating incident. Having the best/latest updated authentic information available will enable the OSC to organize a successful tactical plan.

It helps in achieving the established objectives as contained in IAP in a cost effective manner.

## I. Information Gathering

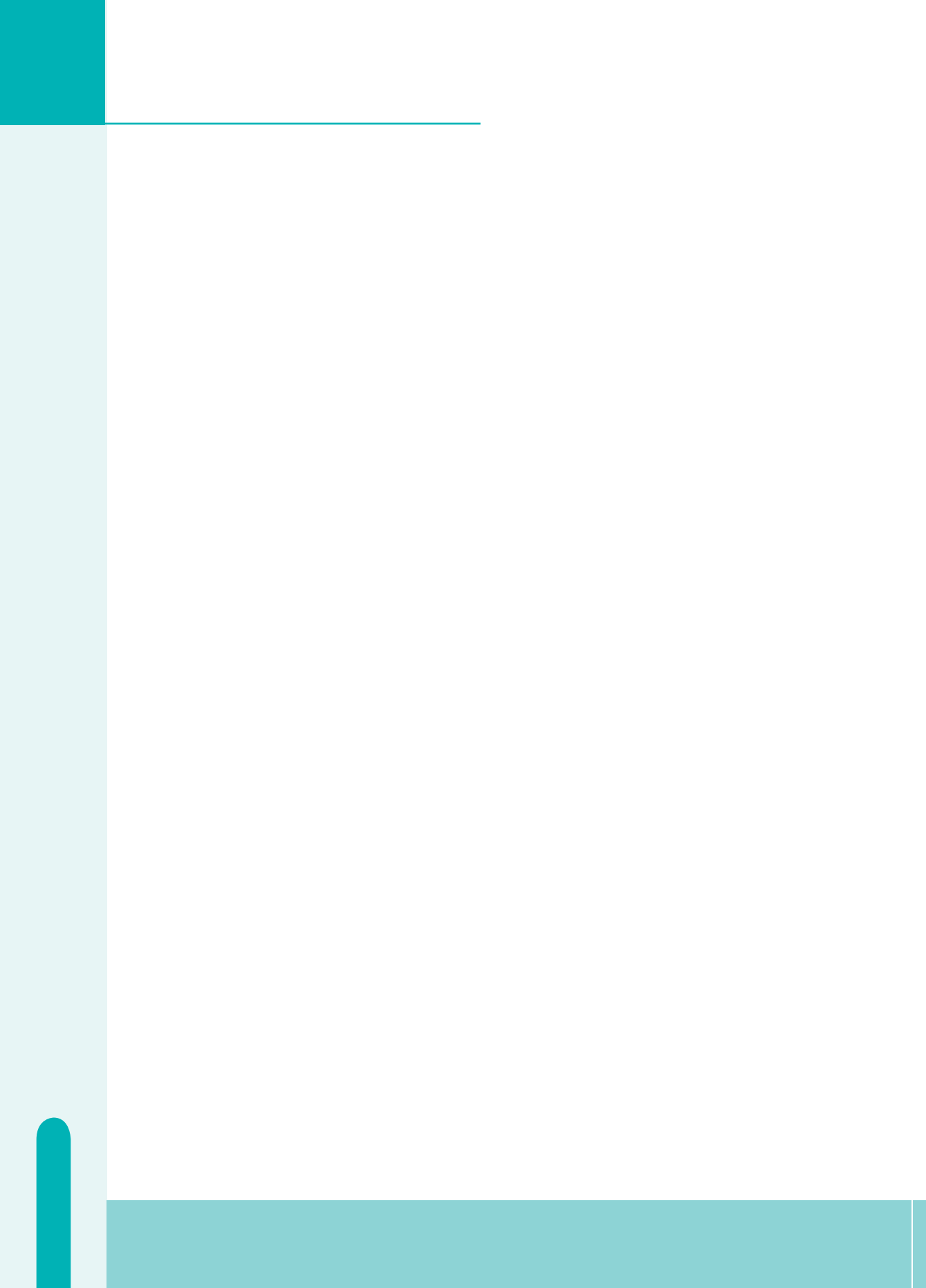
- A. Timely and accurate information is the essential input for formulation of appropriate strategy and tactics for effective response management. Therefore, information gathering is essential to your success as an OSC.
- B. There are many sources of information necessary for initial incident assessment, such as:
  - 1. Technical Specialists: Who do they work for? It is recommended they report to Plans.
  - 2. Critical information could be contained in the Incident Strategic Assessment (an ISA), and the Delegation of Authority. These forms could be used by agencies for planning and cost estimating. Make sure you are familiar with both.
- C. Debriefing of the Initial Incident Commander (IIC) or current team.

Be aware of the situation. The IIC/team may be tired, rushed, or resentful.

  - 1. Treat with respect and sensitivity to the situation and you will receive the full benefit of their knowledge and experience.
  - 2. Make the debriefing as concise as possible. Discuss the history of the incident.
  - 3. Get a good briefing and understanding of incident objectives (strategy). These will be your marching orders. Also get an understanding of current tactics and resource concerns.
  - 4. The IIC should provide the OSC with a completed IRS Form 001. Review this form.
- D. Incident Commander Briefing
  - 1. This is an important step in information gathering.
  - 2. The IC will set immediate priorities, make assignments, identify deficiencies in the incident intelligence, set time frames for meetings, and set broad strategic objectives.
  - 3. Establish operational period schedule
- E. Use other sources of information in the initial period, as well as throughout the incident.
  - 1. Current and projected resource status, as well as current and projected situation status. The OSC must know these elements at all times.

They should become a mental checklist for OSCs, who will constantly use them in developing tactical plans for the IAP. OSCs will also find them very helpful when debriefing Branch Directors and Division/Group Supervisors or when gathering intelligence for building future tactical plans (IRS Form 014). Use the Division/Group Operational Period Debriefing Form.

2. Local agency personnel, dispatch, Responsible Official's Representative, Resource Advisors, etc.
3. Personnel on the line and Field Observers.
4. Ground and aerial reconnaissance (recon).
5. Briefings from Planning and Logistics Sections personnel.



# **Incident Response System Operations Section Chief**

## **Unit 2**

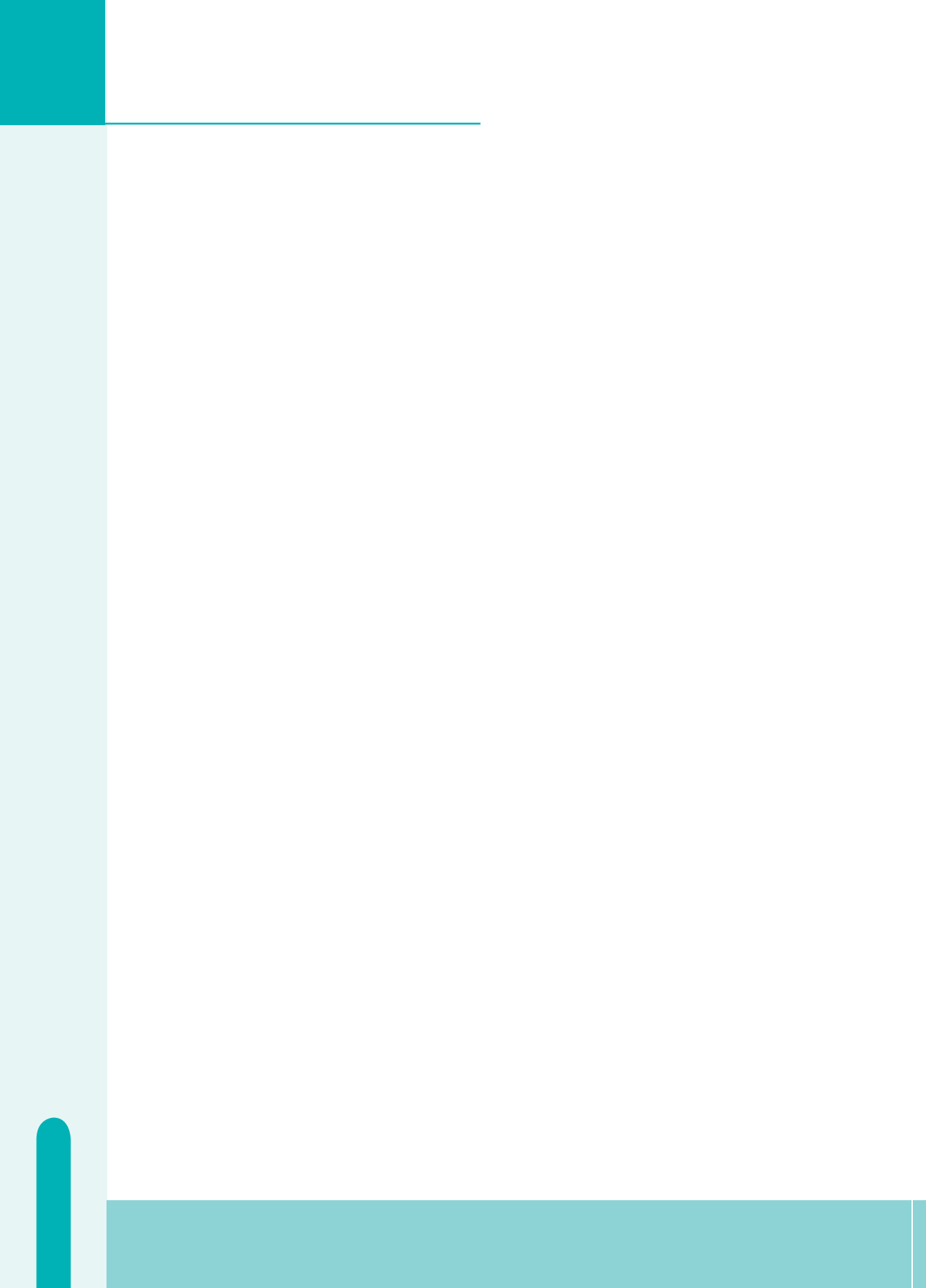
### **Planning**

#### **Lesson 2-3**

#### **Strategy and Planning**

### **Participant Manual**

**National Institute of Disaster Management**  
Government of India, New Delhi



## Detailed Lesson Outline

|                    |                                                                                                                                                                                                                                 |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                                                                                                                           |
| <b>Unit:</b>       | <b>2-3 Strategy and Planning</b>                                                                                                                                                                                                |
| <b>Objectives:</b> | An effective OSC must understand how to gather information necessary to develop the operations part of the IAP. This unit describes how the OSC develops information and processes it through the planning meeting for the IAP. |

## I. Strategy Meetings

A. What is strategy? Strategy is the overall objectives for managing the incident, given the direction(s) from the Responsible Officer / IC. For instance if the objective is to reduce the water level of the reservoir to a certain safe level i.e. 55 meter due to heavy inflow into the reservoir and likely threat of either overtopping or breach of the embankment. There could be many strategies to achieve this objective.

- i. The inflow coming into the reservoir could be diverted
- ii. Release of water through spillways / surplus weir
- iii. Pumping of water by deploying required number of pumps / motors of appropriate capacity

Either any one of the alternatives mentioned above could be used or a combination of strategies depending on the prevailing situation and the assessment of anticipated changes.

B. What is a strategy meeting?

1. Strategy Meeting which is also referred as the Pre-planning Meeting is held to discuss strategy and tactics in details and it helps to shorten the time required for preparing IAP and to complete the process within the time frame.
2. This is when discussion and agreement on the Incident Objectives for management of the incident occurs.
3. By its nature, the plan will be broad rather than specific. It is necessary to hold a Strategy Meeting prior to a Planning Meeting.
4. The plan must reflect the priorities and constraints developed by the IC.
5. The initial Strategy Meeting should be held after initial information gathering, Responsible Official's Briefing, and IC Debriefing.
6. The incident strategic assessment will assist in determining the strategy for the initial and subsequent IAPs.

C. Additional Strategy Meetings may be held throughout the course of the incident.

1. Some teams hold one of these meetings prior to every Planning Meeting. During the meetings, the team will review the incident objectives.
2. Other teams hold them as and when needed (need based.)

3. Meetings must be held when a significant change is anticipated in the current strategy.
  4. Strategy Meetings may be combined with Planning Meetings.
  5. IC will determine the frequency of Strategy Meetings.
- D. The OSC's role in the Strategy Meeting:
1. Must be well prepared
    - Will have the Responsible Official's directions
    - Will have information from other sources, including recon and local sources
    - Will have updates from operational personnel
  2. Present a summary of the current situation to the team.
    - Time of day
    - Weather
    - Transportation routes
    - Occupancies
    - Other agencies needed
  3. May present alternative(s)
  4. After initial Strategy Meeting, OSC role may consist simply of a summary of current activities and any anticipated changes.
- E. Other Command and General Staff Members will verify as to whether they can support the Incident Objectives developed from initial Strategy Meetings.
1. Finance/Administration Branch may identify that the anticipated costs will significantly exceed the Responsible Officer's directives.
  2. Logistics needs to be able to support the type and amount of resources you require.
- F. The Incident Commander will approve the final decision on the proposed strategy.

## II. Planning Meetings

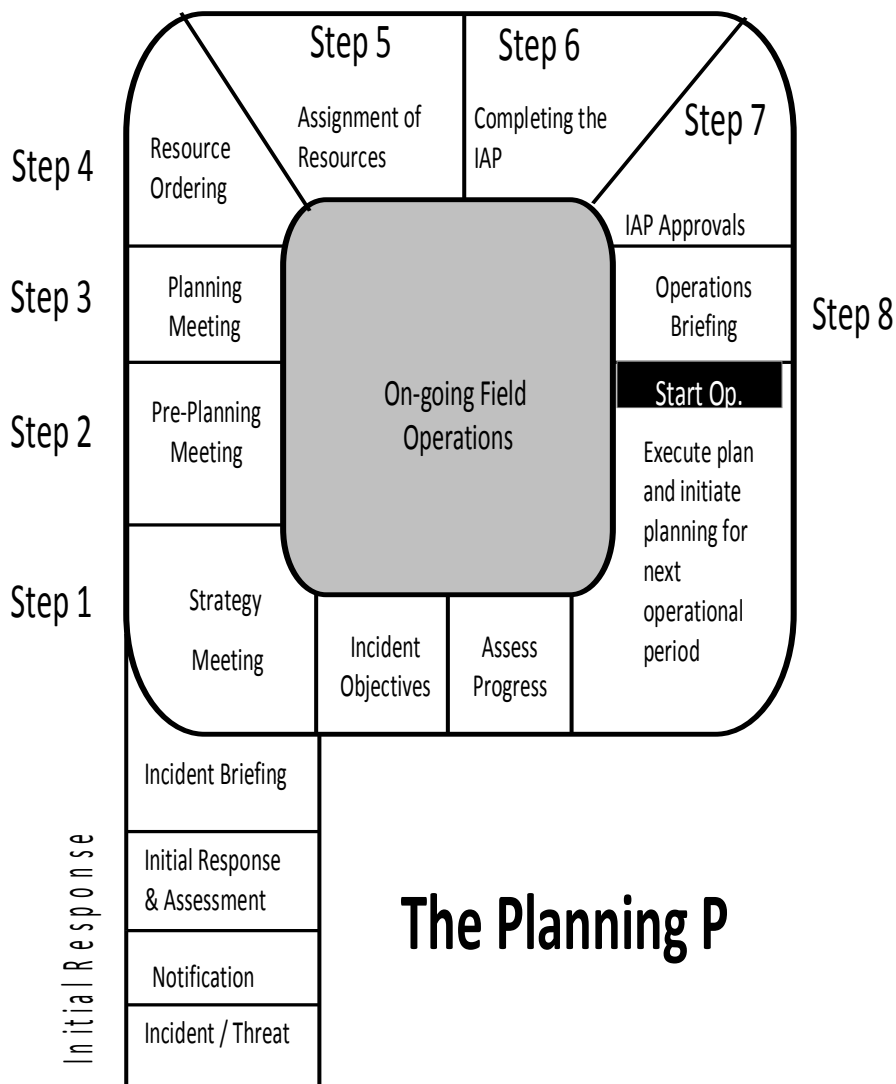
- A. A Planning Meeting is a meeting held as needed throughout the duration of an incident to select specific strategies and tactics for incident control operations and for service and support planning. This is held for each planned operational period.

- B. The OSC's role in the Planning Meeting and development of the IAP requires that he/she be prepared, and be on time.
- C. What is the definition of Planning? It is an ordered sequence of events taking place over a specific time period to meet the established objectives of the incident.
- D. The IAP is the "playbook" for the Operational Period. It is the framework for the successful functioning of the Operational Period. The Planning Meeting is conducted by the Planning Chief and is attended by Command and General Staff, Responsible Officer, Resource Unit Leader, Situation Unit Leader, Communication Unit Leader, Technical Specialists, and other invited participants.
- E. The OSC must be fully prepared for the Planning Meeting.
  - 1. Must ensure, through the IC, that Incident Objectives are still valid. Obtain a copy of them for the next Operational Period and validate it by discussion with Incident Command and General Staff.  
 The OSC must complete IRS Form 015 (Operational Planning Worksheet) and IRS Form 015A (Incident Safety Analysis) at least one hour *before* the Planning Meeting if possible IRS Form 015A is completed in conjunction with the Safety Officer.
  - 2. Must have current situation and resource status information from Branch Directors and Division/Group Supervisors, and on more complex incidents, from Branch Directors, Nodal Officer (Air Operations), and Group -in-charge (Air Operations)
    - a. Current location/status of resources
    - b. Accomplishments—current and anticipated—at Operational Period change.
    - c. OSC is responsible for tactical control points, establishing Division and Branch boundaries.
    - d. Identify new helispots, drop points, line locations, and perimeters.
    - e. Safety concerns
    - f. Recommended resource needs for next Operational Period:
      - Numbers and types of resources
      - Values needing protection or attention
    - g. Need for Technical Specialist
    - h. Need for Unified Command

3. It is critical that this information be current. Ensure that Division/Group Supervisors and Branch personnel know they will be expected to provide this information as and when it is required.
4. Obtain current and predicted weather forecasts.
5. Planning Section will provide current incident status.
- F. The Operations Section Chief summarizes the current situation for the Incident Management Team
  1. Observed incident conditions
  2. Status of Branches, Divisions, and Groups
  3. Significant accomplishments
  4. Problems encountered in meeting objectives
  5. Significant events
  6. Safety concerns
- G. The OSC will work with the Planning Section to finalize the Operational Planning Worksheet, IRS Form 015.
- H. The following are the major elements of the Operational Planning Worksheet, IRS Form 015, which the OSC is responsible for.
  1. Establishing division boundaries and functional groups (branch boundaries on more complex incidents)
    - Natural barriers and breaks
    - Specific functional areas
    - Clockwise from point of origin in alphabetic order
  2. Identify staging areas
  3. Identify helipads
  4. Identify resource needs to meet Incident Objectives:
    - Specify kind, such as heavy equipment, hand crews, SAR Teams, hazmat responders, swift water equipment
    - Specify type, such as Type I Strike Team, Type II Strike Team, Task Forces, etc., if applicable
    - Specify amount of resources by Branches, Divisions, and Groups
    - Supervisory or overhead needs
  5. Transportation needs and types- Can you meet the objectives?
  6. Drop-off/pick-up points and times

7. Work assignments (tactics). Pay attention to cost effectiveness, safety, and environmental impacts when making assignments
  - Tactical objectives
  - Expected standards and limitations
  - Specialty tools/equipment needed
  - Specialized skills and experience needed
8. Special instructions: These may be specific to one Division/ Group or applicable to all divisions. Special safety information and/or messages to be communicated should be contained on the particular Division/Group IRS Form 003 (Unit Log) under the Special Instructions Block.
9. Keep assignments clear, concise, and achievable.
10. Keep changes from the previous IAP to a minimum. The reason for this is that it maintains continuity and familiarity by using the same resources in the same division or area.
- I. It is imperative that the Logistics Section Chief be present at all Planning Meetings.
  1. The Logistics Section Chief should have updates on resource orders.
  2. The Logistics Section Chief can have critical information, such as road conditions, and equipment availability.
- J. Other requirements of the OSC to ensure completion of the IAP include:
  1. Completion of Air Operations Summary Worksheet. This is usually done by the Nodal Officer (Air Operations) or the Group in charge (Air Operations).
  2. Work with the Safety Officer to complete the Incident Safety Analysis (LCES), IRS Form 015A.
    - a. LCES, hazardous conditions, and safety concerns are analyzed and mitigated on the IRS Form 015A.
    - b. Once hazards are identified, ensure that mitigation measures are also identified and documented on Division Assignment Lists. This is the responsibility of the Planning Section.
    - c. If hazards cannot be mitigated, adjust tactics.
  - K. Review the OSC's responsibilities for the development of the IAP

- L. The OSC must monitor the IAP for accuracy, efficiency, and effectiveness.
1. Review and correct IAP prior to Operational Period Briefing
  2. Make verbal corrections during Operations Period Briefing.
  3. Provide input to the Planning Section to assist in developing a better product. Division Supervisors must debrief with the Planning Section.
  4. Use a corrected copy of the IAP to build the IAP for the next Operational Period. This will save the OSC and Planning Section time and effort.



M. The Planning Process consists of the INITIAL RESPONSE after an incident occurs and comprises of the following steps;

- Incident Notification
- Initial Response and Assessment
- Incident Briefing

In certain incidents such as cyclone, floods and Tsunami where adequate early warning is received, the Responsible Officer i.e. Chief Secretary (at State level) and District Collector (at the District level) on receipt of early warning will activate the IRT at appropriate level for response management. And assessment of the situation in case a disaster occurs without any warning such as Earthquake the local IRT will immediately take up response management and if it exceeds their capability they will contact the RO for further support.

Further, during the on-going field operations, the step wise Planning Process is a sequence of activities which culminates in formulation of IAP and its implementation during the operational period. The sequence of activities involved in the planning process is mentioned as under;

- Step 1 - Strategy Meeting
- Step 2 - Pre-planning Meeting
- Step 3 - Planning Meeting
- Step 4 - Resource Ordering
- Step 5 - Assignment of Resource
- Step 6 - Completion of IAP
- Step 7 - IAP Approval and distribution to all concerned
- Step 8- Operation Briefing
- Operation Period Starts, Execute IAP, assess progress and initiate planning for the next operational period

Although, planning and preparation of IAP is the responsibility of Planning Section Chief but OSC plays a critical role in contributing to the operational part of IAP.

# **Incident Response System Operations Section Chief**

## **Unit 2**

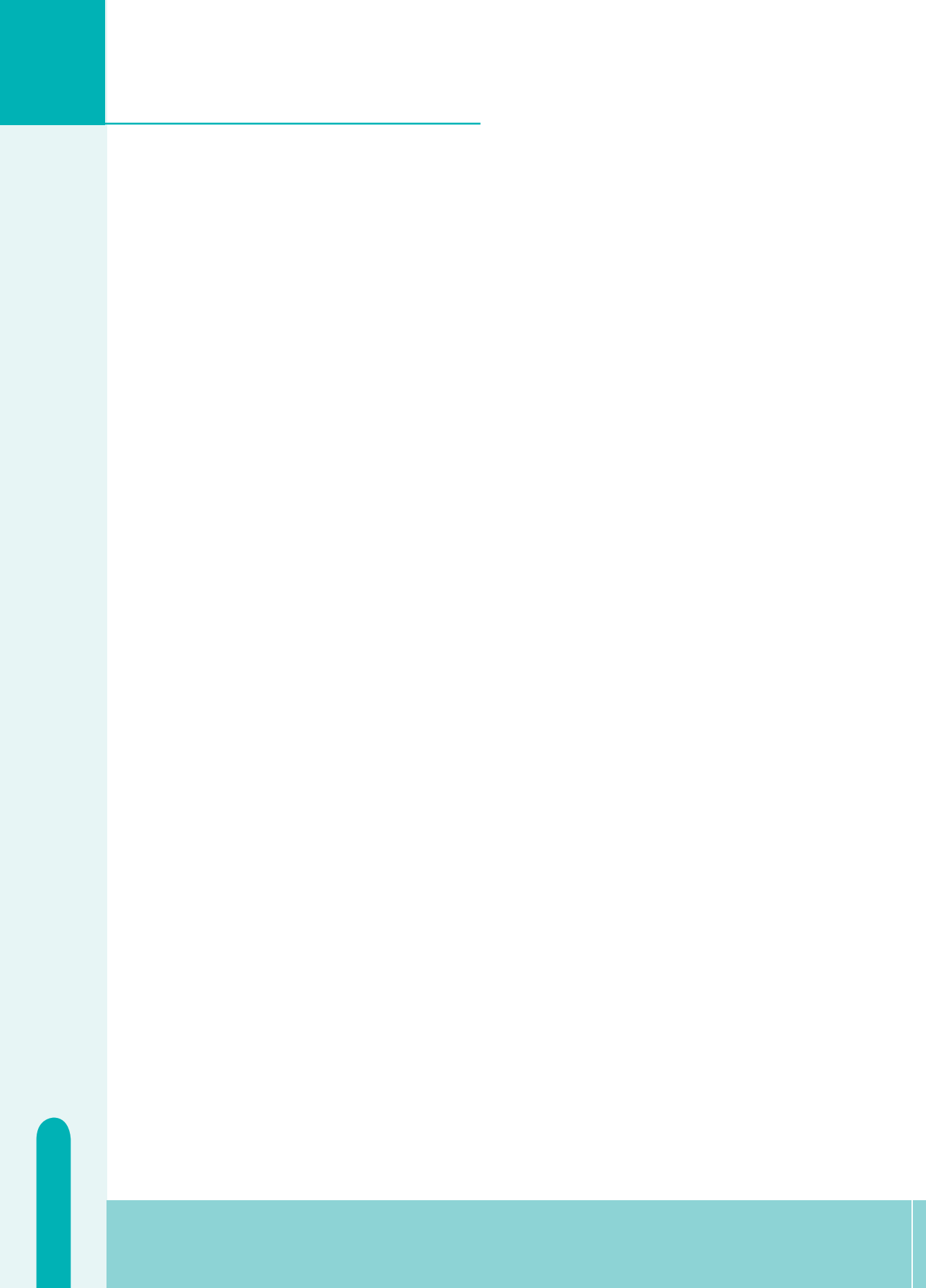
### **Planning**

#### **Lesson 2-4**

#### **Contingency Planning**

### **Participant Manual**

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## Detailed Lesson Outline

|                    |                                                                                             |
|--------------------|---------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                       |
| <b>Unit:</b>       | <b>2-4 Contingency Planning</b>                                                             |
| <b>Objectives:</b> | As incident expands, the need for contingency planning on the part of the OSC is essential. |

## I. Modes of Operation

- A. Immediate attention (short preparation time). You arrive and the situation is already occurring or will occur within one Operational Period.
- B. Planned event: A threat is anticipated and you have one or more Operational Periods to prepare for the incident to arrive at the location of the threat.
- C. A long-term event with a possibility of sustained operations for weeks or months.

## II. Protection Operation

- A. Each incident will be different:
  - 1. Relatively small size: incident threatening or advancing toward one to five houses in an isolated situation.
  - 2. Large-scale event: incident threatening or advancing on an entire Gram Panchayat / town.
  - 3. Anywhere in between—unlimited possibilities. Remain flexible, and think “outside the box.”
- B. Find and meet local cooperators
  - 1. Communities: Do they have any pre-plans already completed? Many agencies do. If so, use them as a foundation for the Plan.
  - 2. Law Enforcement/Military/NDRF: They are responsible for evacuation unless there are other local agreements relinquishing that charge.
  - 3. Utilities: Most have some form of emergency plan in place. You need to support these. Turning off power to an electrically pumped water system can have negative effects on communities.
- C. Survey the area(s) of concern
  - 1. If the local community/District can provide one of their staff, use him or her as an escort. Now is not the time to get lost.
  - 2. Get copies of all locally produced maps or the mapping system they are using.
  - 3. Survey areas that may be threatened: They may consist of an entire neighborhood or community, or only a portion of it. Concentrate on that area, keeping damage potential in mind.
  - 4. Pay particular attention to:

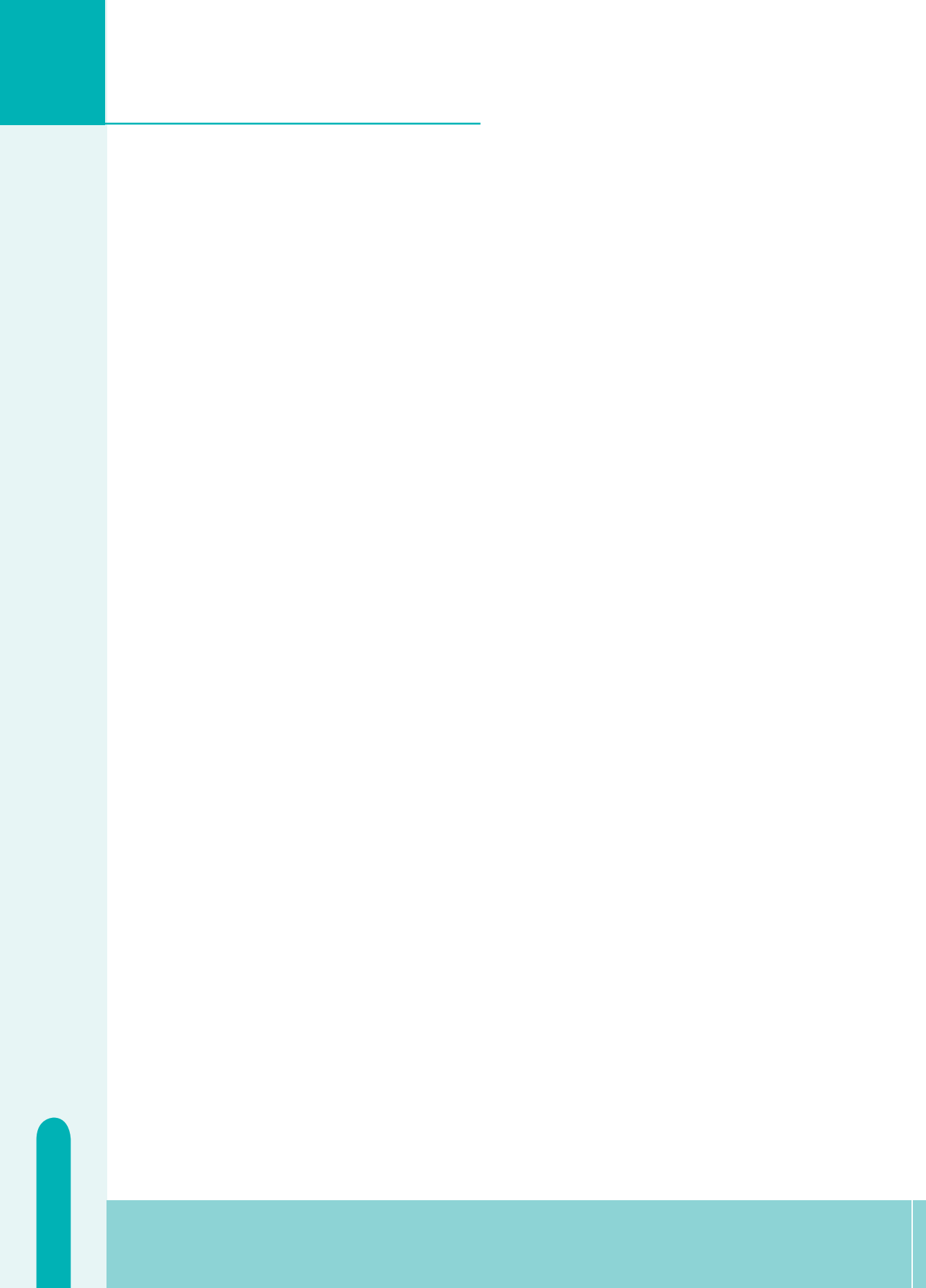
- Areas of safe refuge, establishment of relief camps and requisite needs
  - Safety zones
  - Triage of structures or entire streets
  - Additional resources available
- D. Prepare a “Threat Analysis”
1. Use a technical specialist, Planning and Operations Chief, Meteorologist, and local experts if available. Ask: Has this incident occurred before? Are there existing pre-plans?
  2. Map potentially threatened areas based on a current survey, anticipated weather, and hazard assessment.
  3. The meteorologist can develop potential weather scenarios.
  4. Determine the probability of additional events occurring, based on weather, seismological, and meteorological factors.
  5. Develop sub-contingency plans as time permits.
  6. Determine a trigger mechanism.
    - a. If the incident reached its current state, then the probability is great enough to warrant initiating the action for safe and effective operations to occur.
    - b. The trigger is determined by the amount of resources needed, the time needed to obtain them and get them into position, the rate of the incident’s spread, etc.
  7. Required resources
    - a. Review the amount of available resources required to protect the values at risk.
    - b. Plan for additional needs, such as other infrastructure, staging, commodities, and relief for emergency personnel.
    - c. Use the IRS Form 015 to break into manageable divisions or functional groups.
- E. Develop Contingency Plan(s) based on the Threat Analysis that was developed.
1. Suggested format:
    - a. Problem-Statement
    - b. Objectives of Plan
    - c. Pre-incident actions

- d. Pre-incident
- e. Tactical Guidelines (if appropriate)
  - Appendices
  - Maps
  - Triage guides
  - Search marking system
  - Safe refuge areas
  - Escape routes
  - Evacuation routes
- 2. Steps to develop
  - a. Don't forget to get other agencies' input for getting update status as part of information gathering in preparation of IAP. These include law enforcement, local agencies, and other available expertise.
  - b. Problem Statement covers the overall problem faced. An introduction and description of what may be/is expected to occur. This orients the reader.
  - c. Objectives of plan cover the overall Plan. This is the what/when/why/how of your intentions. It orients the reader, giving them the strategic big picture.
  - d. Pre-incident actions: Available lists, permissible steps that can be taken during the preparation phase. Certain areas may have restrictions, legal or otherwise that may guide your actions.
  - e. Tactics: Though you shouldn't have to give a class in tactics, each area may have specifics that need to be covered. Local experts, propositioned overhead, and other agencies may have helpful material.
  - f. Tactical Guidelines (if appropriate): May be needed depending on expertise of local and mutual aid resources. Be prepared for personnel inexperienced in the "art" of structure protection.
    - Use short bulleted lists of tips
  - g. Appendices should include:
    - Maps: use the existing system if possible
    - Triage guides: if needed or already in existence

- Consider the system used by SAR, which employs symbols that indicate status of a structure
  - Consider sensitivity in the terminology used to describe indefensible structures. Avoid judgmental terms.
- 3. Obtain IC approval on form and content of the Plan. By its very existence, a structure protection plan can become very political and is potentially controversial, especially where triage is concerned. Don't surprise your team—you need each others' support.
- F. Advise the Incident Response Team of potential scenarios and timetables
  1. Finance: cost, claims, compensation
  2. Logistics: parking, support, feeding, personnel rehab, traffic, etc.
  3. Plans: resource status, situation status, and potential de-mob
  4. Command staff: impact to Information Officer, Liaison Officer, and Safety Officer
- G. Based on analysis of likely scenarios, order overhead for advance planning divisions or groups.
  1. Let them conduct triage, surveys for water, LCES, etc.
  2. Resolve any identified problems.
  3. Use them to develop, fine-tune, or revise contingency plan.
- H. Familiarize yourself with Mutual Aid Agreements, if any.
  1. Who has the jurisdictional responsibility
    - a. Work with them on scenarios
    - b. Ask for feedback on capabilities of system
    - c. Determine response time of local resources and their limitations
    - d. Agree on trigger points
  2. Research and pre-script the notification process and channels to request additional resources
    - a. Who, what, where, why, and how
    - b. Review with the involved Communication Centers
    - c. Long response times would indicate that early notification should be planned or pre-planned.

- I. Media: Coordination with the Information Officer.
  - 1. The “additional threat” condition will place your incident as a top priority for news media coverage. Expect to be deluged with:
    - a. Media personnel and equipment
    - b. Parking congestion
    - c. Unsupervised and unprotected media personnel infiltrating all portions of your incident
    - d. General confusion
  - 2. Give the Information Officer enough warning to allow him or her to staff up to meet the level of activity expected
    - a. Notification process as part of evacuation
    - b. Information kiosks or other public information tools established as needed
- J. Utilities: Coordination with Operations Personnel
  - 1. Water—Ability to supply affected area
    - a. Probable “water line” draw-down level
    - b. Alternate sources not readily available
  - 2. Electricity—Protection of service and equipment
    - a. May want to kill a circuit or area to protect the equipment
    - b. May affect ability to obtain water from private sources. This must be taken into consideration.
  - 3. Fuel
  - 4. Phones- landline and mobile
  - 5. Cable TV
  - 6. Sanitation
  - 7. Sewage systems
  - 8. IT connections
- K. Law enforcement/Military / Para Military: Coordination with tactical operations
  - 1. Obtaining cooperation or agreement may be difficult due to
    - a. Unfamiliarity with IRS
    - b. They don’t feel “in charge”

- c. “Too busy” for a POTENTIAL threat. They are normally responsible for evacuation, so giving them an assignment will give them a feeling of being important.
- d. Evacuation Group
  - Ensure they understand their part of plan
  - Ensure they understand plan implementation
  - Maintain contact through knowledge of radio call sign and frequency, mobile phone number, department and title
- e. Use Liaison Officer and Agency representatives to assist
- f. Provide them opportunity for input in the development of IAPs.



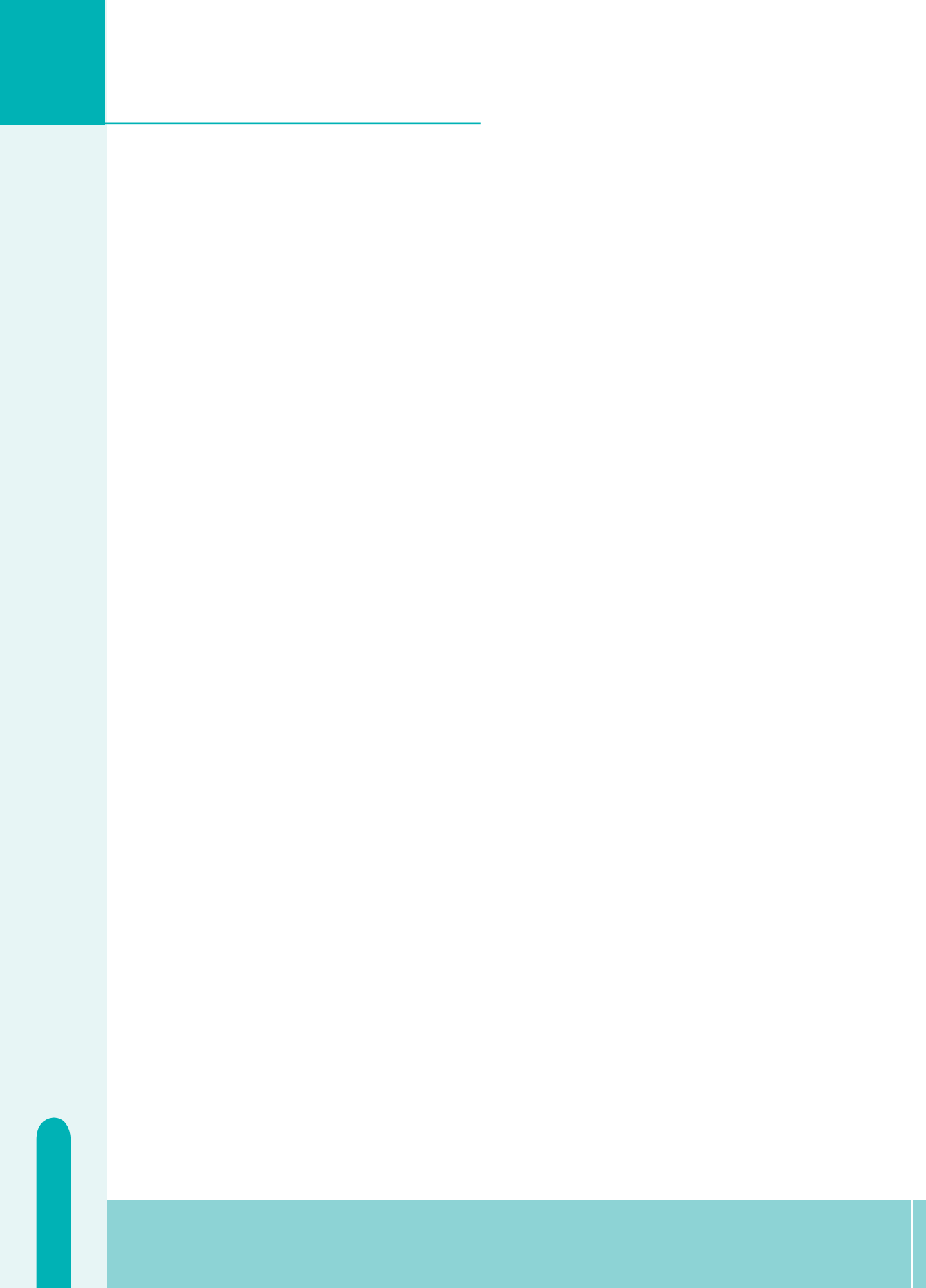
# **Incident Response System Operations Section Chief**

## **Unit 2 Planning**

### **Lesson 2-5 Demobilization Planning**

## **Participant Manual**

**National Institute of Disaster Management**  
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## Detailed Lesson Outline

|                    |                                                                                                                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                                                                                         |
| <b>Unit:</b>       | <b>2-5 Demobilization Planning</b>                                                                                                                                                            |
| <b>Objectives:</b> | Demobilization planning occurs throughout an incident. It is important for the OSC to understand the demobilization process and provide input for the preparation of the Demobilization Plan. |

## I. Demobilization

- A. Demobilization will occur throughout the incident and in accordance with the Demobilization Plan
- B. Resources may be demobilized prior to the completion of the incident for a variety of reasons.
- C. Demobilization procedures and priorities need to be understood by Command and General Staff early in the incident
- D. The OSC must plan ahead for demobilization. This allows adequate notice and ensures an orderly, efficient demobilization.
- E. The Incident Response Team obtains jurisdictional agency input on demobilization.
- F. The OSC must develop an Incident Resource Projection Matrix forecasting future resource needs based on Operational Period. The Matrix is updated with every subsequent Operational Period. It allows needed resources to be clearly projected, allows the OSC to determine what other resources are excess to operational needs.

## II. Incident Resource Projection Matrix

- A. The Matrix, IRS Form 015, is designed to be used to project critical resource needs during the Operational Period. It is valuable to use.
- B. Steps to use the Matrix form, IRS Form 015
  - 1. Complete the incident information at the top of the form.
  - 2. Determine and enter what critical resource kinds and types you have. List one resource kind and type per line, in the critical resource column.
  - 3. Determine the length of the Operational Period and enter the same information, with one Operational Period per column.
  - 4. Estimate the number of critical resources needed per Operational Period and enter under the appropriate Operational Period date and time.
  - 5. Update the form during every Operational Period when you revise critical resource needs.
  - 6. When nearing the demobilization phase of an incident, use the form to estimate critically needed operational resources. List these resources, in addition to those needed for future Operational Periods, and give their identification numbers

to the Demobilization Unit Leader for consideration for release.

### III. The Demobilization Plan

- A. This plan will be developed by the Planning Section and approved by the IC.
- B. Will identify procedures for demobilization, as well as for local, regional, and national priorities.
- C. These priorities should not be considered demands. Try to meet them, realizing that the situation on the incident may preclude following the priorities 100 percent of the time. Be flexible.

### IV. The OSC's Responsibilities for Demobilization

- A. The OSC provides input for the Demobilization Plan. The OSC advises the Planning Section of excess resources to be released. Releases should be identified at least one Operational Period in advance.
- B. Identify resources available for release by:
  - 1. Name/type
  - 2. Quantity
  - 3. Time/date available for release. Post in base and include in the IAP.
- C. Review the Demobilization Plan daily for accuracy
- D. OSC can cancel/delay demobilization if the situation changes
- E. Ensure that your subordinates are informed of and follow the demobilization procedures
  - 1. Ensure that all paperwork, such as personnel evaluations, equipment time records, personnel time records, accident reports, mechanical inspections are complete and accurate.
  - 2. Return all incident-loaned equipment.
  - 3. Follow demobilization instructions as outlined in Demobilization plan.

### V. Planning for Demobilization

- A. Consider demobilizing resources from out of the area as it would help in cost reduction.

- B. Demobilize the most expensive excess equipment and resources first
  - 1. Some resources are more expensive than others
  - 2. If you are getting good performance from less expensive equipment, let the more costly equipment demob.
  - 3. Demobilization can occur at locations other than base, such as demob centers and staging areas.
- C. Consider condition of personnel
  - 1. Consider Government policy and MOUs or agreement (if any)
  - 2. Consider length of time on assignment(s) before release
  - 3. Consider fatigue and special needs
  - 4. Consider last rest period
- D. Obtain input from other agencies regarding release of their resources by Agency representatives

# **Incident Response System Operations Section Chief**

## **Unit 3**

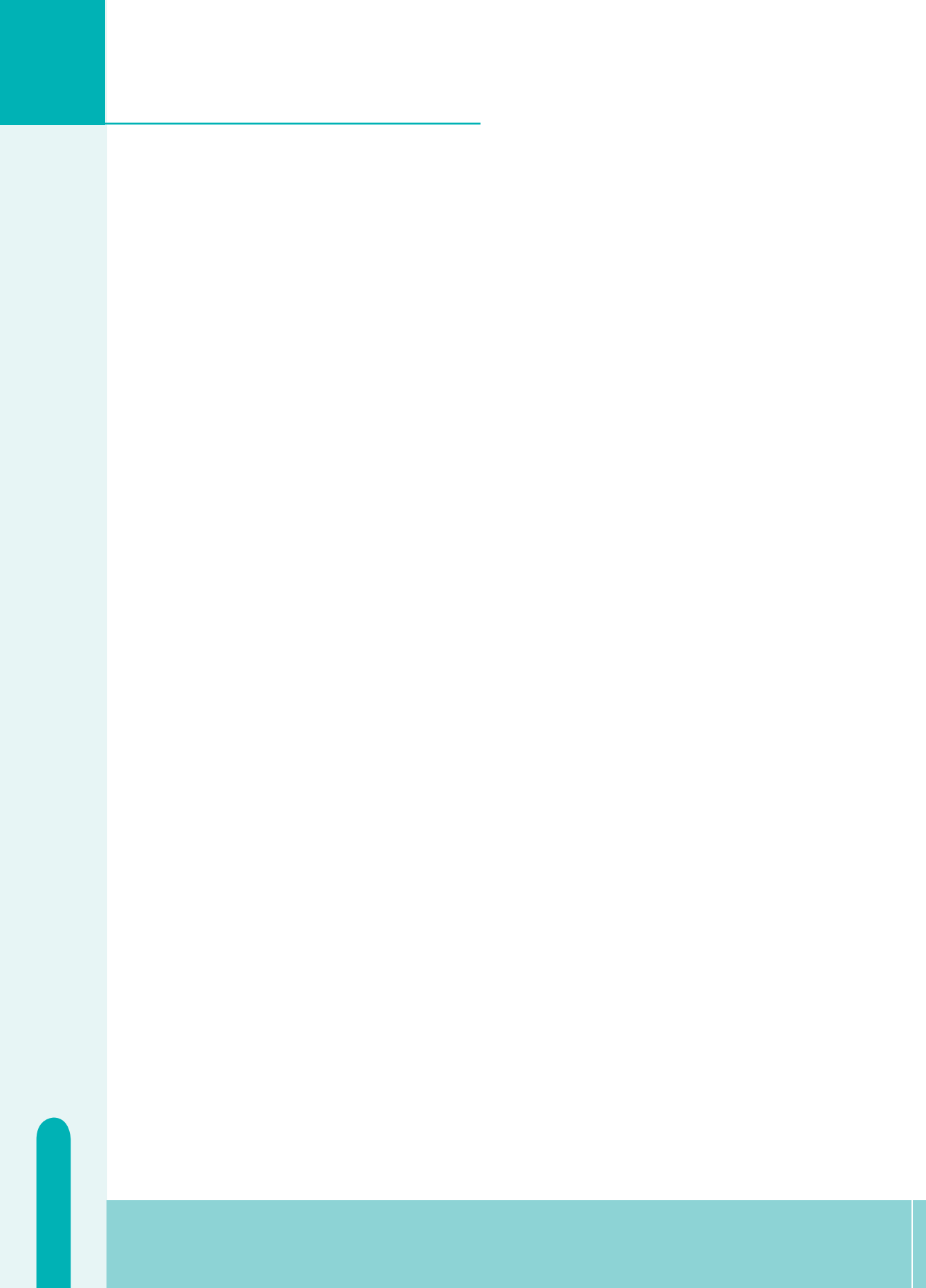
### **Supervision**

#### **Lesson 3-1**

#### **Supervision and Communications**

### **Participant Manual**

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## Detailed Lesson Outline

|                    |                                                                                                                                                                                                                                                             |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                                                                                                                                                       |
| <b>Unit:</b>       | <b>3-1 Supervision and Communications</b>                                                                                                                                                                                                                   |
| <b>Objectives:</b> | <p>It is the responsibility of OSC to present the critical information necessary for a successful tactical operation. This is done at the Operational Period Briefing. This topic will present you with those skills necessary to conduct the briefing.</p> |

## **I. Unit Objectives**

- A. Demonstrate the OSC's role in the Operational Period Briefing
- B. Describe how to manage and adjust the operations organization
- C. Describe why and when tactics may need to be adjusted
- D. Describe the role of the OSC in risk assessment and safety management

## **II. Supervisory Elements**

- A. Supervisor
  - 1. Any individual having the authority to direct human resources in the interest of the employer to accomplish established incident objectives in a cost effective and efficient manner.
  - 2. Must communicate instructions and expectations well:
    - a. In briefings
    - b. One on one (should discuss/consult the Division/Group supervisors for specific issues, including priority changes related to changing situations and needs.
    - c. Request feedback
    - d. Follow up by clarifying instructions where problems exist
    - e. Provide honest performance evaluations at the end of assignments
  - 3. Must delegate effectively
    - a. Empower subordinates by explaining what you want and expect. You must then give them the latitude/flexibility to do the job. Let them know that you will hold them accountable for getting their jobs done in accordance with the IAP.
    - b. Listen to and use your people. You are not in this alone.
    - c. Assign personnel according to their qualifications, experience, and ability.

## **III. Operational Period Briefing**

- A. Physical arrangements (Logistics Section)
  - 1. Away from noise caused by such things as generators and traffic
  - 2. Plenty of light for people to see IAP, maps, and presenters
  - 3. PA system that can be easily heard by all

4. Space to post maps where everyone can see them
5. Elevated platform so speaker can be seen from back rows
- B. IAP and maps (Planning Section)
  1. Provide adequate copies of IAP
  2. See that IAP is handed out in organized fashion so that critical positions, down to Strike Team Leader, get their copies.
  3. Display a large map of the incident showing division boundaries, active perimeter, incident facilities, staging areas, etc.
  4. Post a copy of the IAP at the Incident Base.
- C. Preparation and Presentation (Operations Section)
  1. Review IAP ahead of time for errors/omissions. Using a different colored ink pen than the IAP print, correct all errors and omissions and list changes. Using a different colored pen will help the OSC ensure a complete and accurate briefing that includes all changes.
  2. Be on time; keep your portion of the briefing moving.
  3. Speak in a clear voice with adequate volume
  4. Repeat questions from the group so that everyone can hear them
  5. Avoid disruptions of the briefing. Turn off radios and hold one-on-one discussions till afterwards.

#### IV. Operational Period Briefing Outline

- A. Planning Section Chief facilitates the Operational Briefing, as well as all formal meetings in IRS. The PSC distributes Incident Action Plan to all concerned members.
- B. Situation update is presented by previous Operational Period OSC and/or Situation Unit Leader.
- C. Incoming Operations Section Chief briefly covers activities for the planned Operational Period.
  1. Give general overall assignments by Division/Group
  2. Have Division/Group supervisors raise their hands to be recognized
  3. Allow opportunities for questions
  4. Finish with positive, encouraging and motivating comments to keep the IRT motivated
  5. Designate sites for later Branch/Division sub-briefings.

- D. Planning Section Chief introduces comment from the following personnel, who give a quick, to-the-point oral summary (not reading what is already written in the IAP)
  - 1. Meteorologist
  - 2. Safety Officer
  - 3. Communications Unit Leader
  - 4. Transport Branch Director or Nodal officer, Air Operations (OSC is responsible if there is no Air Operations Branch Director)
  - 5. Medical Unit Leader
  - 6. Technical Specialists i.e. Structural Engineer, Environmental Impact Specialist, Hydrologist, Hazardous substance specialist, Training specialist etc.
- E. Give General Staff members a chance to comment. Planning and Logistics or one of the sub-groups, such as Finance/Administration Branch, Ground Support or Supply unit Leader may need to make a comment to the members of IRT. It is acceptable for these individuals to pass if there is no pertinent information to be shared with all the responders.
- F. Closing comments by IC.
- G. Specific Branch/Division Operations sub-briefing
  - 1. Done after Operational Briefing, specifically for subordinate personnel
  - 2. Specific directions given
  - 3. Specific questions are answered
  - 4. Reiteration of expected timelines for various input, etc.

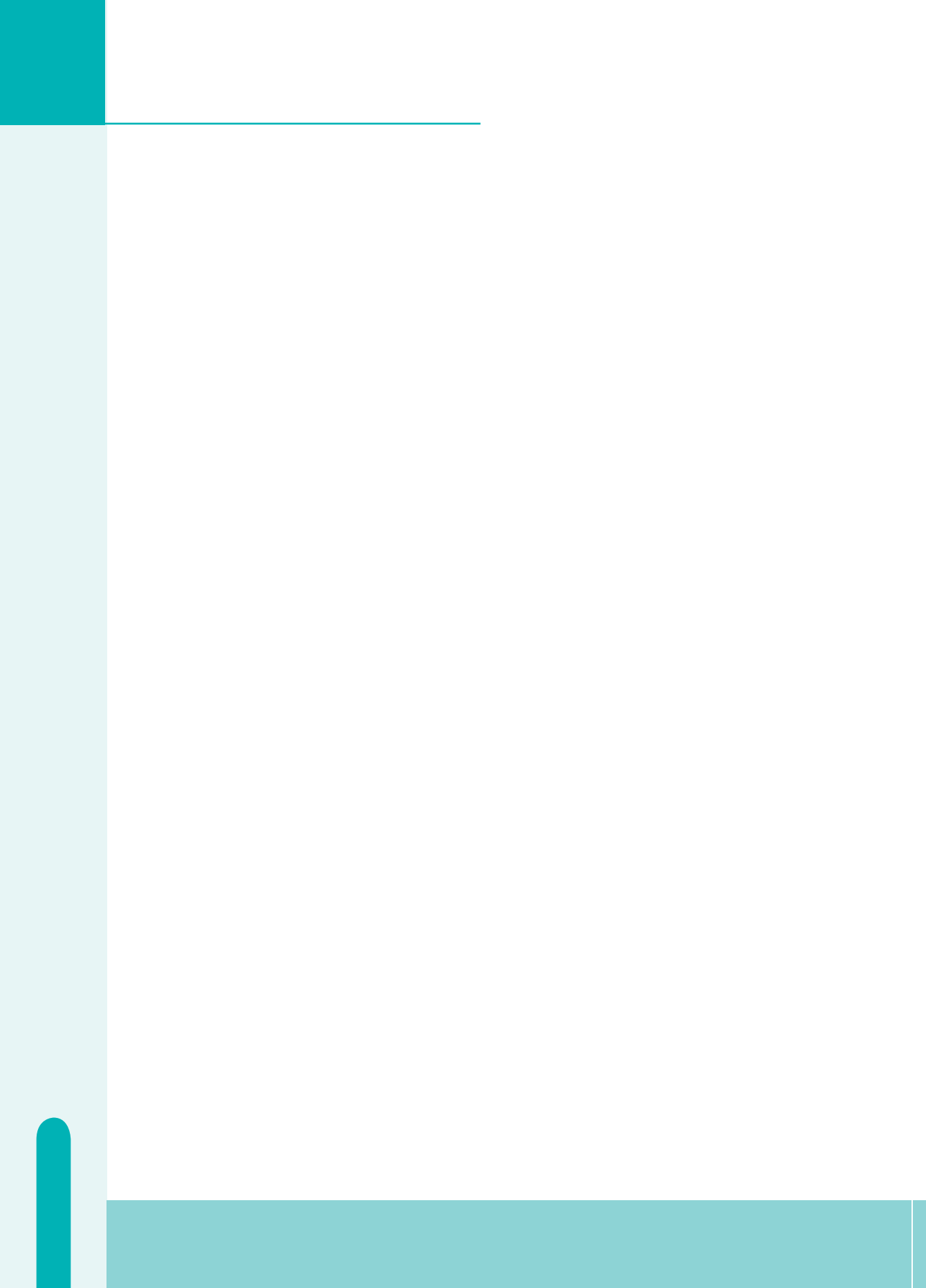
# **Incident Response System Operations Section Chief**

## **Unit 3 Supervision**

### **Lesson 3-2 Managing and Adjusting the Section**

## **Participant Manual**

**National Institute of Disaster Management**  
Government of India, New Delhi



## Detailed Lesson Outline

|                    |                                                                                                                                                                                                                                                                                                                                            |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                                                                                                                                                                                                                                      |
| <b>Unit:</b>       | <b>3-2 Managing and Adjusting the Section</b>                                                                                                                                                                                                                                                                                              |
| <b>Objectives:</b> | To be an effective Operations Section Chief, it is necessary to manage all components of the Operations Section. This includes Branches, Groups, Divisions, Air Operations, and Staging. The ability to adjust tactics and make changes on short notice is essential for successful discharge of the roles and responsibilities of an OSC. |

## **I. Multiple Operations Section Chiefs**

- A. Two or three OSCs may work for the IC as equals; however one OSC needs to be clearly identified as the point of contact for the Division/Group Supervisors for decisions and the IRT. The other OSCs serve as deputies to the OSC.
- B. Stress teamwork
- C. Other options sometimes used on incidents that are complex or not staffed for a night Operational Period. One OSC does planning and coordination while the other does field supervision.
- D. Under Unified Command, a Deputy OSC from another agency may be used. However, only one OSC initiates and implements the IAP.
- E. Trainee positions are desirable but must be approved by the IC and the responsible Officer. Sometimes there may be automatic trainee requirements.
- F. Use a Deputy OSC position to reduce the span of control, for better management of the workload, or for special assignments, i.e., contingency planning.
  - 1. Various aspects of the OSC's job can be delegated to the Deputy OSC. These include monitoring, supervising air operations, incident planning, or supervision of highly technical Divisions/ Groups/Branches where closer supervision than normal is required.
  - 2. Sometime we may use a third OSC for planning/coordination between Planning and Operations in a complex incident with expanded organization. This position is usually referred to as "Planning Ops."

## **II. Contingency Planning**

- A. When ordering, remember to staff adequately all Operational Periods, i.e., 12-hour or 24-hour, depending on needs.
- B. Check on previous orders for overhead, and "fill" or "kill" orders to avoid having resources reaching the incident that are no longer needed. This will help the Operations Section manage costs during the incident.
- C. Start planning for demobilization before resources become excess. Use IRS Form 015M.
- D. Utilization and staffing of staging areas

### III. Staging Areas

- A. Defined: Forward location for temporary resource positioning. Resources are stationed in the state of readiness on a maximum 3-5 minutes availability or any other timeline as agreed.
- B. Assign a Staging Area Manager.
- C. Set minimum resource levels (draw-down levels) with Staging Area Manager.
- D. Order replacement of resources when the draw-down levels are reached.
- E. There may be multiple staging areas on the incident depending on the situation.
- F. Staging Area Manager is responsible for staging area logistics.

### IV. Nodal Officer (Air Operations)

- 1. Coordination with Authorities concerned with Air operations and activation of Air support
- 2. Project the type of Air support required and place the demand at least 24 hours in advance
- 3. Inform IC and OSC about the Air movements
- 4. Determine the suitability of Helipads and Helibases
- 5. Maintain communication with Air Traffic Control (ATC) and Ground Support Staff
- 6. Report on Air Operations to the RO

### V. Transport Branch Director (TBD)

- A. Transport Branch Director (TBD)
  - 1. Reports directly to OSC; evaluates risk.
  - 2. OSC must always consider pilot duty-hour limitations.
  - 3. Manages agency restrictions as related to aircraft use.
  - 4. Implements and manages air tactics and air resources.
  - 5. Ground-based, normally will not be flying.
  - 6. Constant communications with OSC.
  - 7. Prepares Air Operations Summary Worksheet.
  - 8. Maintains contact with local dispatch or Communications Center.

- B. Group-in-charge (Air Operations)
- C. Helibase / Helipad -in- charge
- D. Loading / Unloading-in-charge

#### **VI. The Group-in-Charge (Air Operations)**

- 1. Provide Ground Support to Air Operations as per the IAP
- 2. Report to TBD on the progress of Air Operations
- 3. Ensure resources and supplies required for Air Operations
- 4. Requisition additional personnel, if needed
- 5. Keep appropriate maps and provide correct coordinates to Pilots
- 6. Ensure availability of re-fuelling facility
- 7. Ensure Helibase and Helipad locations are identified and approved by appropriate Authorities.
- 8. Ensure communication systems are in place
- 9. Update landing and takeoff schedules

#### **VII. The Helibase and Helipad-in-charge**

- 1. Provide all ground support requirement of Helicopters at the locations
- 2. Keep appropriate maps to provide correct coordinates to Pilots
- 3. Survey the Helibase / Helipad area to analyse situations and potential Aircraft hazards
- 4. Ensure proper facilities for rest, refreshment/food, water, sanitation for the Air Crew
- 5. Coordinate with Ground Supervisor for Helicopter operations
- 6. Determine and implement ground and air safety requirements and procedures
- 7. Establish good communication facilities
- 8. Ensure Aircraft rescue measures, firefighting services, lights, smoke candles etc. at Helibase and Helipads

#### **VIII. Loading/Unloading-in-charge**

- 1. Responsible for safe operations of loading and unloading of cargo and personnel

2. Report to Helibase and Helipad-in-charge
3. Ensure proper packaging of loads
4. Maintain record of various activities performed in IRS Form-004 (record of performed activities) and send to Group-in-charge

## IX. Adjusting Tactics

- A. The OSC must constantly compare actual accomplishments vs. planned tactical activities. In some cases, conditions may change so dramatically that strategic objectives are compromised. In this situation, the OSC must evaluate the change and communicate with the IC to seek revised incident objectives. In other cases, changes may occur but stay within the overall parameters of the current incident objectives. In this case, the OSC may need to adjust tactical objectives by changing work assignments or relocating resources. In any event close coordination with the IC is required and depending on the information needs of the IC will determine the appropriate level of coordination.
- B. Need for adjustment
  1. Sudden change in weather
  2. Present tactics not working
  3. Incident safety
  4. Resource availability and capability
  5. Political or social events
  6. Significant events such as injuries
  7. Costs
- C. Implementation of adjustments
  1. Timing is important. The window of opportunity is very short. If you don't act quickly, the chance to act may be lost. Can you evacuate villages/settlements before an embankment breaks?
  2. Changes may be necessary on short notice. Once some activities start, it is difficult to change your objectives.
- D. Making adjustments
  1. Don't hesitate to make adjustments if they are needed. The tendency is to stay with the present plan, so if adjustments are really necessary, the OSC will have to overcome resistance to change.

- a. Compare actual tactical accomplishments vs. planned activities (using tactical control point). It is critical for the OSC to make this comparison.
  - b. If operations are OK, continue on course
  - c. If operations are off course, adjust tactics
2. Involve others in decision making. Examples are: Branch Directors, Division Supervisors, Transport Branch Director (TBD), other line personnel, technical specialists.
3. Clear with the IC in advance of any changes in objectives.
4. Make sure all incident personnel are notified of the change.
5. Monitor the changes that were made.
6. Always have a contingency plan, which has been developed during the planning process and been updated each Operational Period.

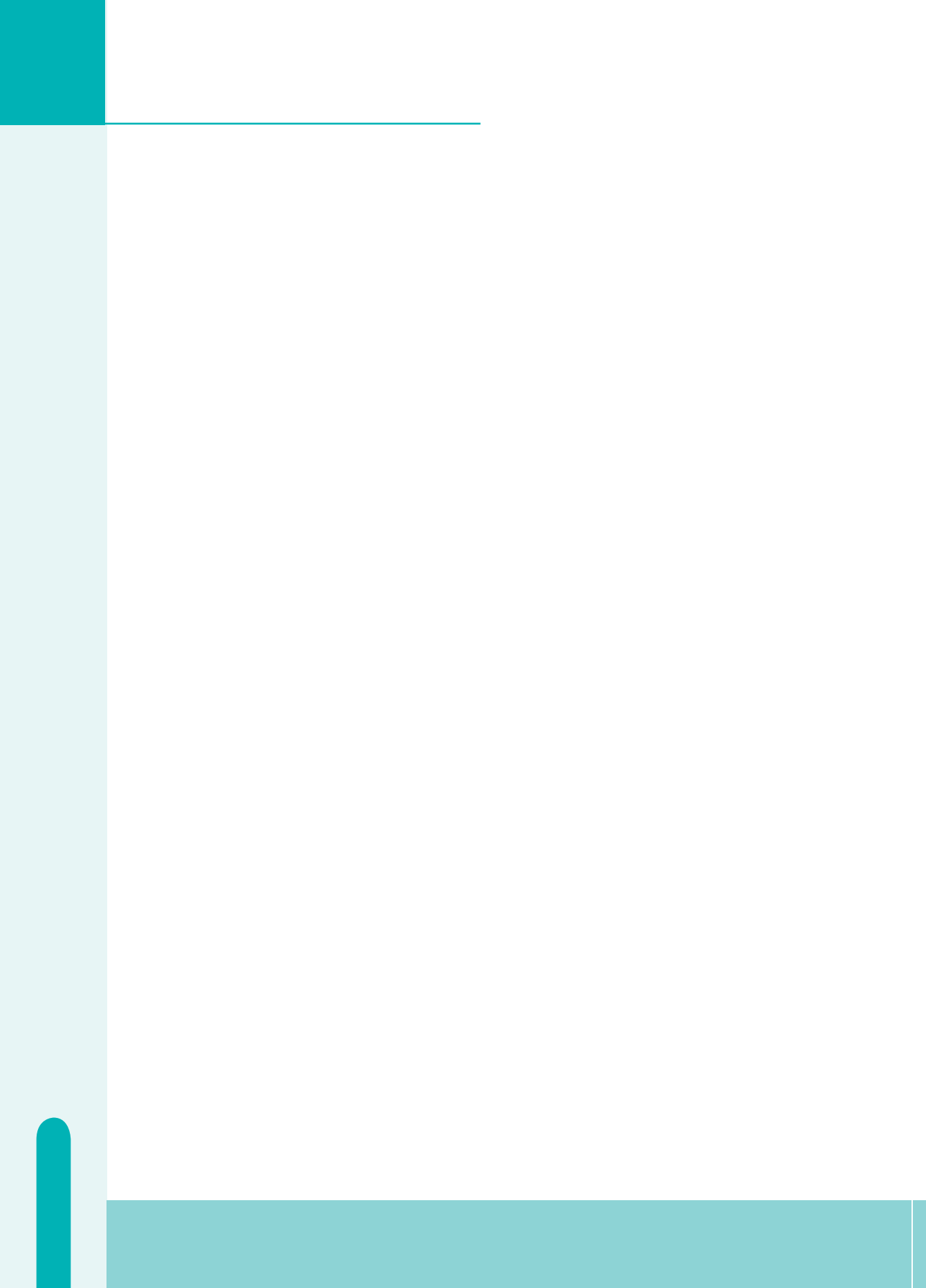
# **Incident Response System Operations Section Chief**

## **Unit 3 Supervision**

### **Lesson 3-3 Risk Assessment and Safety Management**

## **Participant Manual**

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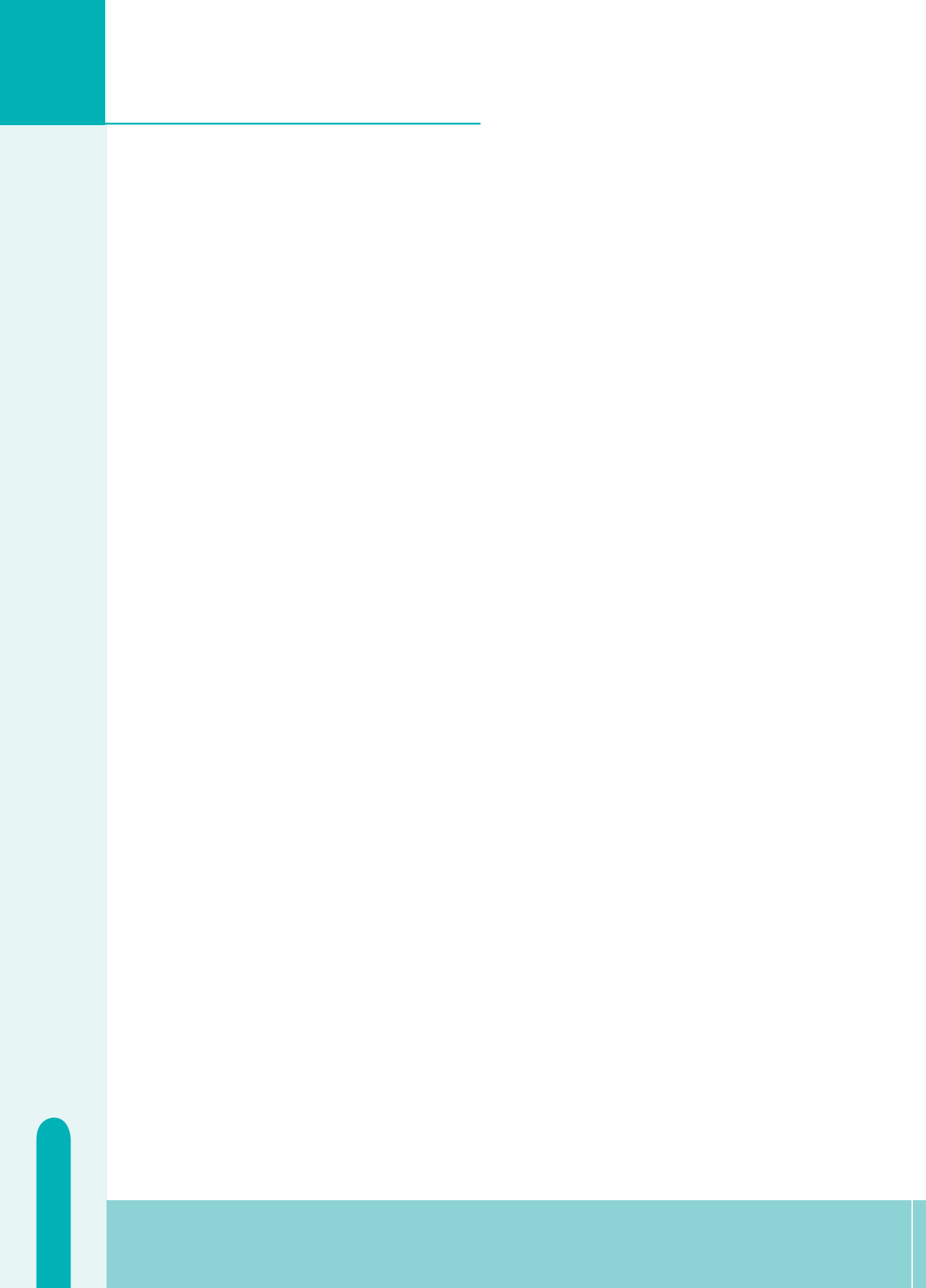
## Detailed Lesson Outline

|                    |                                                                                                                       |
|--------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                 |
| <b>Unit:</b>       | <b>3-3 Risk Assessment and Safety Management</b>                                                                      |
| <b>Objectives:</b> | To be effective, the Operations Section Chief must have a strong personal commitment to safety and hazard mitigation. |

## I. Risk Assessment and Safety Management

- A. The OSC's responsibility is to ensure that safety is a high priority. Hazards must be identified and mitigated to the fullest extent possible so that risks are minimized.
  - 1. Safety is everyone's business—not just the Safety Officer's
  - 2. Are the incident objectives safely attainable?
  - 3. Analyze hazards and develop ways to neutralize them as a standard part of the planning process. Use Incident Safety Analysis (LCES), IRS Form 015A, and local forms and checklists.
  - 4. Use safety elements outlined in the Field Operations Guide and other publications.
    - a. Use Lookouts, Communication, Escape routes, and Safety zones (LCES) to evaluate where you are assigning resources
    - b. Departmental SOPs
    - c. Industry standards
- B. Use your staff and other team members to assess risk and manage safety
  - 1. Work closely with the Incident Safety Officer
    - a. Establish common goals
    - b. Develop rapport with Safety Officers
    - c. OSC and Safety complete 015A
  - 2. Use Branch Directors, Division Supervisors, or Technical Specialists to advise you on safety issues, including where it is safe to assign personnel
  - 3. Work with Law Enforcement and Logistics on traffic control, evacuation, and security issues. The Liaison Officer can coordinate with other agencies
- C. Show your personal commitment to safety
  - 1. Stress safety in briefings and one-on one
  - 2. Listen to and take immediate action to address safety concerns from incident personnel
  - 3. Make sure your subordinates understand their responsibilities for safety
  - 4. Visit all divisions and incident facilities personally

5. Set the example by wearing appropriate Personal Protective Equipment
6. Never take anything for granted. Act on anything that feels or appears hazardous
7. Consider personnel welfare needs
  - a. Food
  - b. Liquids
  - c. Rest
  - d. Critical incident stress debriefing
  - e. Rehab



# **Incident Response System Operations Section Chief**

## **Unit 4**

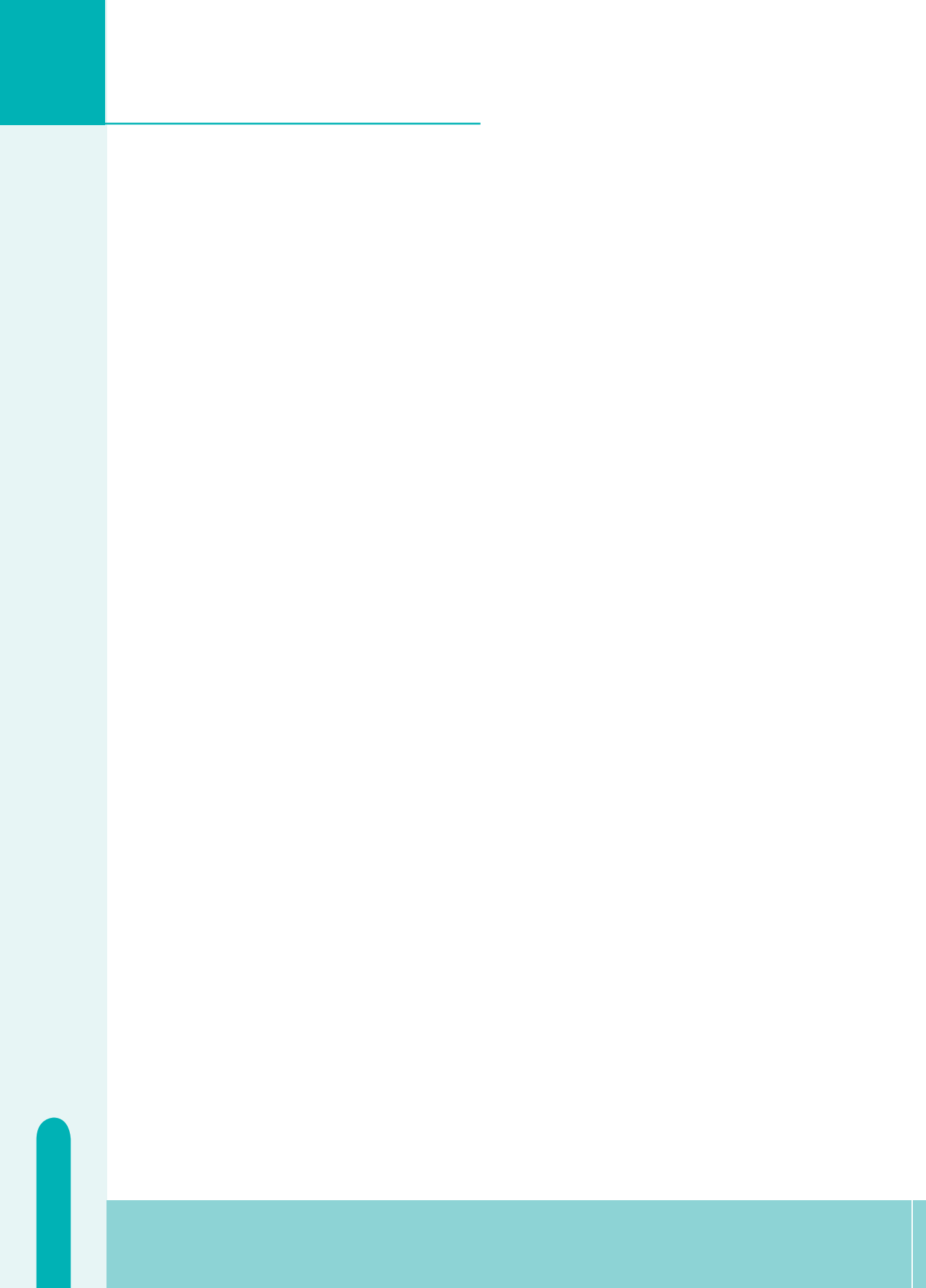
### **Coordination**

#### **Lesson 4-1**

#### **Personnel Interactions**

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## Detailed Lesson Outline

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course:</b>     | <b>Operations Section Chief (OSC)</b>                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Unit:</b>       | <b>4-1 Personnel Interactions</b>                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Objectives:</b> | Developing and maintaining relations with people internal and external to the incident organization is important. The OSC is the focal point for activities on large and complex incidents. You, as an OSC, will need to master the skills necessary to successfully address and resolve many types of coordination activities. The following information will help you understand the cooperation needed for a successful operation. |

## **I. Unit Objectives**

- A. Demonstrate how to successfully coordinate internal relations
- B. Demonstrate how to successfully coordinate external relations

## **II. Internal Cooperation**

- A. Interact with the Incident Commander
  - 1. Participate in the development of the strategy by showing all options and making recommendations. Consider contingency planning.
  - 2. Keep the IC informed of any changes. The IC has to maintain communications with the involved jurisdictions and the local community and must have current and accurate information. Each IC has unique informational requirements and as an OSC, you must tailor your performance to meet those needs.
- B. The IC should be made aware of significant events.
  - 1. High media interest
  - 2. Serious injury or damage
  - 3. High profile political issue
  - 4. Any event that changes incident objectives
- C. As an OSC, your successful performance depends upon developing good relationships with other functions. It is imperative that you and your subordinates maintain positive working relationships with other sections.
- D. Coordinating with other functions to achieve good communications and coordination. Establish procedures with other team members before the Operational Period begins.
  - 1. Determine how requests from Branch Directors and Division Supervisors will be filled and delivered. Review and adjust as necessary. Be clear on delegations to subordinates.
  - 2. Establish air operation priorities for crew deployment, supplies, water drops, Medical evacuation, reconnaissance, and support early. Let all sections know your priorities.
  - 3. Coordinate with the Finance/Administration Section with procedures to ensure that all necessary paperwork is complete and submitted in a timely manner. This would include items such as: equipment time, personnel time, compensation / injury paperwork, accident reports, claims and agency-specific paperwork.

4. OSC must coordinate with the IC to determine how resource costs will be paid.
5. It is critical that the OSC and Logistics Section Chief pre-determine how logistical needs are met. Determine if Operational Tactical Plans can be supported by Logistics.
6. The Information and Media Officer (IMO) can arrange access to the media and local residents for you. You should establish a set of operation procedures with the IMO.
7. For a VIP visit, require close coordination with the IMO and Divisions/Groups.
8. Enabling authority: The OSC must know or be able to determine what enabling authorities allow him/her to do certain activities. Laws guide actions and as such are enabling authorities.

### III. External Cooperation

- A. Use local residents, knowledge for information on resources, access, weather, vulnerable areas and vulnerable sections of the community such as old and aged men/women, children, poor and weaker section, local strengths, community resources etc.
- B. Use your resources, such as Strike Team Leaders or Division Supervisors who may be working in the vicinity, to gather information.
- C. Develop rapport with local law enforcement personnel.
- D. Locate all structures, improvements, and resources that may be threatened by the incident. Keep residents informed. Use the Information section and Field Observers to assist in this effort. Use any pre-emergency or local disaster plans.
- E. Make sure your subordinates know your expectations on how to deal with local residents. Many problems can be resolved or avoided if emergency personnel treat local people with respect and concern. Communication with the local population is critical therefore proper communication mechanism must be in place.
- F. The news media may arrive at the incident without the escort of the IMO. The OSC will have to determine how to manage the media so they do not negatively impact the disaster response.
  1. The OSC should have an understanding with the IMO on how the media can report the news with the least disturbance to operations.

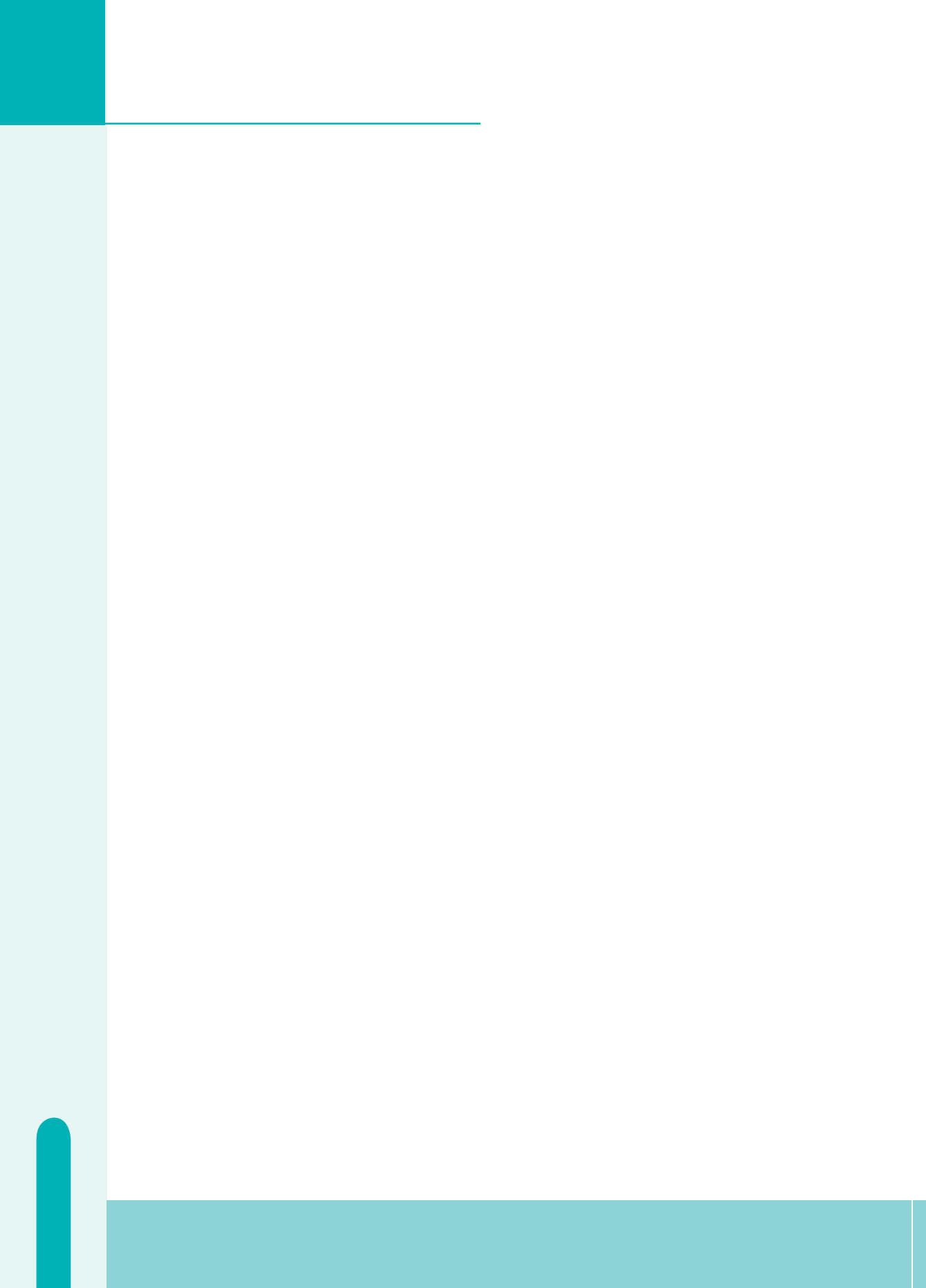
2. Safety of all personnel, including the media, is important. All media personnel must have proper Personal Protection Equipments (PPE).
- G. It is important to coordinate with the Responsible Officer's representative.
1. The Responsible Officer's representative is another source of information on details of pre-emergency plans and policies.
    - a. Resource specialists, fisheries biologists, soil scientists, public health, public works, EMS, HazMat, seismologists, and hydrologists can be helpful in determining the effects of your operations in sensitive areas.
    - b. The rehabilitation teams will want to interact with you to discuss the rehabilitation needs.
  2. Remember that your team works for the jurisdictional agency. How you interact with the agency personnel affects how the Responsible Officer evaluates your team.

# **Incident Response System Operations Section Chief**

## **Exercises**

### **Participant Manual**

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## Operations Section Chief Course Unit 1-2 Course Introduction Exercise 1-2-1: Toxic Gas Release Scenario

### Timeframe

30 – 45 minutes

### Materials Needed

- Scenario Exercise
- Flip Chart Papers & Marking pens
- Display Board & Clips
- Pen or pencil

### Introduction

- The exercise is intended to have the students/trainees develop skills to organize an Operation Section

### Directions

- Participants/Trainees to be divided into groups of 4-6 each. Instructors to monitor groups to ensure that they stay on track and each member of the group participates in the discussion/ deliberations
- Preferably each group should be provided separate work locations
- Supply required training materials i.e. flip chart, marking pens, pencils
- Each group will have 30 minutes (approx) to develop the organization
- Each group will be given 5 minutes to make a presentation and explain Organization Chart of the Operation Section and the rationale.

### Instructions to Participants

- Develop the Operation Section Organization based on the given scenario and draw the Organization Chart
- Select a group spokesperson who will make the presentation to the class

### Scenario

- You are Operation Section Chief (OSC) on an Incident Response Team (IRT) that is assigned to manage response to chemical disaster i.e. release of Sarin (an Organophosphorous compound which is classified as a chemical weapon of mass destruction) in Cannaught Place area of New Delhi. As per the initial report Sarin was released at two locations i.e. Rajiv Gandhi Metrorail Terminal and in Palika Bazar, about 55 persons are confirmed dead and another 425 persons are seriously ill. There is panic around Cannaught Place with people frantically wanting to get out of the area to safe locations. The Delhi Metrorail Authorities have communicated the message and all trains coming to the Rajiv Gandhi Metrorail Terminal, Cannaught Place have been stopped / diverted to other stations.
- It has been learnt that a Terrorist Organization has claimed the responsibility for release of toxic gas and is threatening for more such incidents if members of their group lodged in Tihar Jail are not released with in next 48 hours.

## Unit 1-3: OSC Roles and Responsibilities

### Exercise 1-3-1

**Timeframe**

40 Minutes

**Introduction**

The exercise is intended to generate discussion about periodicity and topics of interactions between the OSC and other members of the Command and General Staff. The discussion should also focus on which decisions and authorities lie with OSC and those that need to be elevated to the IC.

**Directions**

1. Break the participants/trainees into subgroups consisting of 4-6 participants in each subgroup. Instructors should monitor the subgroups to ensure that they stay on track.
2. The subgroups will have about 30 minutes for discussion.
3. Each subgroup may preferably be allotted a separate work locations.
4. Subgroups should be supplied with flip charts and pen/pencil for making group presentation.
5. At the end of discussion, approx. 3-4 minutes may be allowed to summarize the discussion and document it.

**Instruction to Participants**

1. Discuss the periodicity and topics of interactions between the OSC and other Command and General Staff members.
2. One member of the sub-group may be designated as spokesperson to make presentation.

## Unit 2-3: Strategy and Planning

### Exercise 2-3-1

#### Timeframe

3-4 hours

#### Materials Needed:

- Pen or pencil
- Scenario Exercise (Kendra)
- Kendra Flood Incident Exercise Instruction
- Kendra Flood Incident Briefing Form (IRS Form 001)
- Kendra Flood Incident Objectives
- Kendra Flood Incident Status Summary (IRS Form 002)
- Completed Incident Strategic Assessment (ISA) for Kendra Incident
- Kendra Incident Map
- Display Board, flip-chart papers, marking pens

#### Instructions

1. Within your individual work groups, all members will function as the Operations Section Chief and will select a group spokesperson. One person should participate in the planning meeting, with another person participating in the Operational Briefing.
2. Review all information provided.
3. Conduct a normal planning process, including information gathering and assimilation, projection to develop a tactical plan, tactical organization, and projected resource needs.
4. Complete an Operations Planning Worksheet (IRS Form 015)
5. Complete Division Assignment Lists in the Unit Log (IRS Form 003)
6. Complete an Air Operations Summary Worksheet
7. Develop an organization chart for the Operations Section.
8. Develop a tactical operations briefing map showing division/branch, drop point and staging areas.
9. When requested, provide Operations Chief input in the planning meeting and operational briefing.

## Scenario

August 16, 0100 hours: You are an Operations Section Chief on an IRT which is delegated responsibility to help manage the response to a flood in the Kendrapara District in Orissa. The flood has already inundated 60,000 hectares of area. Many villages have been flooded and it is estimated that about 80 persons are swept away by the rising water of the Mahanadi River. Approximately 500 persons are reported to be missing, many others have left their homes for higher ground, but they are in need of food and shelter. Water supplies have been contaminated. It has been reported that two bridges have been washed away causing disruption of traffic. Distress is widespread throughout the area due to lack of food and other essential items lost during the flooding. Power supply has been disrupted in most villages and is intermittent in others.

The UNDP has been working in the District to help communities develop Community-Based Disaster Management Plans, and a number of local villages have mobilized to reinforce weak embankments and undertake search and rescue operations. As men folk are engaged in relief efforts, women and children are left behind to protect their households and livestock.

Evacuations are being organized but is currently going on at a small scale and is not well coordinated. There is a lot of confusion which has resulted in loss of life and property. Further, there is growing disagreement between local jurisdictions on the issue of prioritization of areas for evacuation.

Information has been received that a senior cabinet Minister of the State Government accompanied by local elected representatives are expected later in the day. They have expressed concerns to the District Magistrate regarding lack of coordination between affected Blocks and delay in providing relief. The media has been critical regarding handling of gender/equity issues pertaining to the distribution of relief materials.

## Actions Taken

1. Local residents have been constructing embankments along both banks of the river to prevent further inundation.
2. The Indian Red Cross Society has set up relief camps on the north and south sides of the river, but capacity of relief camps and specific locations are unknown at this point of time.
3. Search and Rescue teams (SAR) are rescuing victims using Boats and by Air, but in an uncoordinated manner.
4. The military is preparing to air drop food and other relief supplies, expected to begin in 24 hours but their ICP is located in Cuttack District.

5. Initial incident objectives were very general:
  - a. Save life and property, including livestock
  - b. Distribute essential relief materials to victims
  - c. Repair weak/breached embankments to prevent further inundation
  - d. Receive and distribute supplies and equipments
  - e. Repair essential infrastructure i.e. Roads, Electricity, Water supply

**Predicted Situation** — Rainfall is predicted to continue and the Mahanadi River has not yet peaked. There is a potential threat that few more villages and agricultural lands might get inundated if the rains continue for longer.

**Resource Status**

- Resources currently on incident: refer to completed IRS Form 001, Incident Briefing

## Unit 2-4: Contingency Planning

### Exercise 2-4-1

#### Timeframe

1 hour

#### Materials Needed:

- Pen or pencil
- Scenario Exercise (Kendra)
- Kendra Flood Incident Exercise Instruction
- Kendra Flood Incident History
- Kendra Flood Incident Briefing Form (IRS Form 001)
- Kendra Flood Incident Objectives
- Kendra Flood Incident Status Summary (IRS Form 002)
- Completed Incident Strategic Assessment (ISA) for Kendra Incident
- Kendra Incident Map
- Display Board, flip-chart papers, marking pens

#### Scenario

The PSC has just arrived and informs you that the Meteorologist has predicted potential heavy rains in Chhattisgarh, which is upstream and above the Hirakud dam in Jharsuda District. If rainfall continues, rising water level may cause inundation of some areas including few habitations in Chhattisgarh and authorities may need to release water from the reservoir, possibly up to 1.4 million cubic meters per second to prevent inundation. However, due to release of excess water from the reservoir through crest gates of the dam it is feared that the Interstate Highway and Railway track might get affected causing disruption of vehicular movement which would affect supplies and relief operations. There is also a threat to the District Magistrate's Office and another 20 villages and their associated agricultural lands.

The IC has asked you to prepare a Contingency Plan for the possibility of additional flooding if water is released from the dam.

#### Exercise Instructions

Develop a Contingency Plan for the possibility of additional flooding if water is released from the dam.

## Unit 3-3: Risk Assessment and Safety Management

### Exercise 3-3-1

#### Scenario

You are the Operations Section Chief on a District Incident Response Team (IRT) assigned to a flood incident. Your team has been on the incident for the past two days now, and at the planning meeting for tonight's Operational Period, you learn that heavy rains are predicted sometime during tomorrow afternoon. Your priority is to reinforce the embankment system so that it will hold under these predicted weather conditions. Currently, a dozer is working on a 600-foot breach in the embankment that threatens a large village.

Thirteen Type I and five Type II skilled workers are available. Your plan is to use them during tonight's Operational Period to determine the source of leaks and to strengthen and raise weak embankments. The workers are ready and eager to work on the embankment tonight, but the Safety Officer is concerned that another breach in the embankment may cause concern about safety of workers and equipment. You have talked to the Division A supervisor, and he says he won't be able to get much work done before dark, due to the weakened embankments in his division. A Water Rescue Team is on order, but won't be on scene until 1200 hours tonight.

The Division B supervisor says she thinks workers can work safely on the embankments in her division without any problems tonight. The workers need to be vigilant and keep somebody on watch to observe any such life threatening situation/indication which may be communicated in advance.

Discuss this situation in your group and decide how you would handle it as the OSC.

## Unit 4-1: Personnel Interactions

### Exercise 4-1-1

**Timeframe**

30 minutes

**Materials Needed**

- Scenario Exercises
- Pen or pencil

**Scenario 1**

Assume that the following occurred:

You, as the OSC, call the Logistics Section Chief immediately after having submitted orders for your Division Supervisors and complain that the orders are not being given proper attention. The Logistics Section Chief tells you that he will “get right on it” and ensure the Resource Provisioning Unit (RPU) has filled those orders.

During the evening, you find that Division B did not receive an order for sandbags and more shovels for which order was placed at 0935 that morning and was to be delivered by Truck. The Division Supervisor says they would have completed rehabilitation on their section of the embankment had they received the order.

You let the Resource provisioning Unit know that because they “messed up,” you were not able to accomplish the objectives. Later, the Logistics Section Chief finds fault with your action and suggests that you were not justified in being harsh with the Resource Provisioning Unit personnel.

What was wrong with the way this situation was handled, and how could it have been done better?

## Unit 4-1 Personnel Interactions

### Exercise 4-1-2

#### Scenario 2

Two specially trained Water Rescue Teams are rescuing stranded victims on rooftops from small islands.

You are familiar with these teams and how they operate, but this is your first practical experience in working on an incident with these specialized resources.

After the Operational Period Briefing, you are personally observing the progress of the rescue effort. You want to meet with one of your Branch Directors overseeing the rescue efforts face to face, but you are not able to locate him. You ask one of the Division Supervisors where the Branch Director might be. She responds, "The Branch Director is operating one of the rescue boats."

The Branch Director is not a regularly assigned member of your team but was a special resource request based on his expertise in water rescue.

How do you handle this situation? What do you do if it continues?

## Unit 4-1 Personnel Interactions

### Exercise 4-1-3

#### Scenario 3

Early on in the incident it has come to your notice that access to one of the embankments is through a road which is narrow and single lane road.

The trucks transporting supplies and personnel working on the embankment have experienced problems in not being able to pass one another, resulting in traffic jam of incident resources.

Once you have been successful in correcting this situation, you want to ensure that it doesn't occur again during the next Operational Period.

How do you correct this? Who would you need to coordinate with?

## Unit 4-1 Personnel Interactions

### Exercise 4-1-1

#### Scenario 4

The embankment on south side of the river was rebuilt last year and you have been assured by a specialist from the State Water Resources Department that the embankment is strong and should not breach. Based on this information, you have convinced the local official from Village C that her men can be deployed to work on the embankment on the other side of the river. Men from Village C were concerned about leaving their property, but, based on your persuasive skills, agreed to cross the river by boat to work on the embankment on the opposite bank. These men have been working for 14 hours and are now resting in a camp on the other side of the river.

In the middle of the night, you receive a message from the same local official from Village C with whom you had talked earlier, and she informs you that in some portion of the embankment severe erosion is observed and it may get breached near their village. She is concerned that the embankment may breach by tomorrow morning and is upset that the village men are not able to restore the embankment to required standards immediately and they may take some more time.

What would you do next?

## Unit 4-1 Personnel Interactions

### Exercise 4-1-2

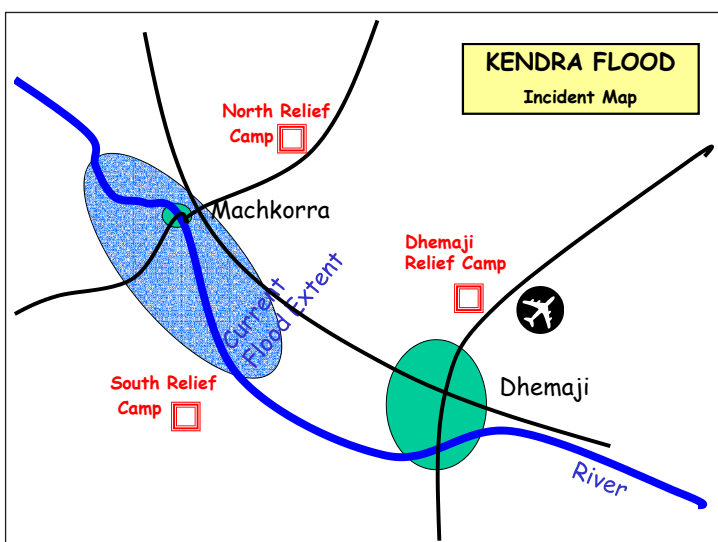
#### Scenario 5

Last year, the residents of Village D had made a representation to the State Water Resources Department / Irrigation Department that the embankment of the medium irrigation reservoir near their village needed strengthening before the monsoon season so as to avoid any breach and consequent damage to their properties and threat to their life. The local officer of the Water Resources Department assured the villagers that the work would be taken up and completed before onset of monsoon, but the Department did not complete the needed repairs. The fear of the villagers came true and yesterday the embankment breached and inundated most of the structures in the village.

As the population of Village D is small, it was decided to focus on repair work in more densely populated areas.

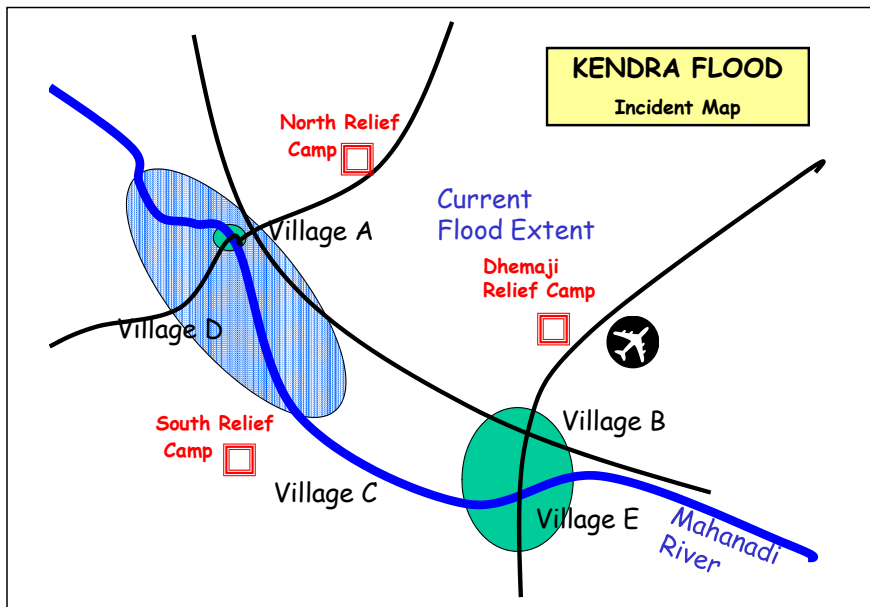
The local official who has ties with influential political figures at the State level blames your team for the loss of structures in the village, and many of the residents support his view. The IC has agreed to a meeting with the local community and has asked you to explain the events that occurred on the previous day.

How would you prepare for this meeting and what information would you present?

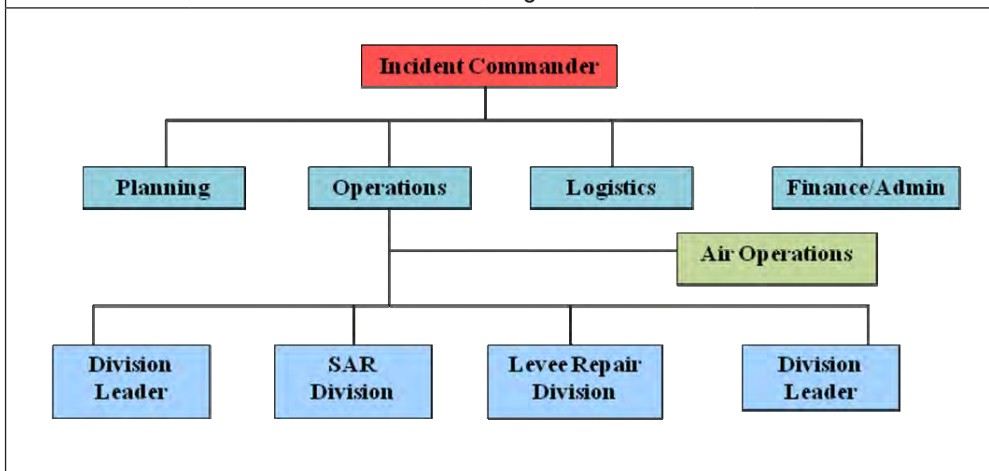


|                          |                            |                           |                 |
|--------------------------|----------------------------|---------------------------|-----------------|
| <b>Incident Briefing</b> | 1. Incident Name<br>Kendra | 2. Date<br>16 August 2004 | 3. Time<br>1400 |
|--------------------------|----------------------------|---------------------------|-----------------|

4. Map Sketch



5. Current Organization



## 6. Resource Summary

| Resources Ordered | Resource Identification | ETA  | On Scene | Location Assignment              |
|-------------------|-------------------------|------|----------|----------------------------------|
| 20-Ft Petrol Boat | Orissa PB1              |      | 0600     | On River/Search and Rescue       |
| 20-Ft Petrol Boat | Orissa PB2              |      | 0600     | On River/Search and Rescue       |
| 20-Ft Petrol Boat | Orissa PB3              |      | 0600     | On River/Search and Rescue       |
| Light Boat        | Unknown                 |      | 0600     | On River/Search and Rescue       |
| Light Boat        | Unknown                 |      | 0600     | On River/Search and Rescue       |
| Light Boat        | Unknown                 |      | 0600     | On River/Search and Rescue       |
| Light Boat        | Unknown                 |      | 0600     | On River/Search and Rescue       |
| 20-Ft Petrol Boat | PB4                     | 1800 |          |                                  |
| 20-Ft Petrol Boat | PB5                     | 1800 |          |                                  |
| 20-Ft Petrol Boat | PB6                     | 1800 |          |                                  |
| 20-Ft Petrol Boat | PB7                     | 1800 |          |                                  |
| UH1H Helicopter   | MOD 1                   |      | 0800     | Search and Rescue                |
| UH1H Helicopter   | MOD 2                   | 1800 |          |                                  |
| Front End Loader  | Orissa State            |      | 0800     | Reinforcing levees               |
| Dozer             | Village A               |      | 0800     | Reinforcing levees               |
| Crew 100 Person   | Village B               |      | 0600     | Reinforcing levees with sandbags |
| Crew 100 Person   | Village C               |      | 0600     | Reinforcing levees with sandbags |
| Crew 100 Person   | Village D               |      | 0600     | Reinforcing levees with sandbags |
| Crew 100 Person   | Village E               |      | 0600     | Reinforcing levees with sandbags |
| Crew 100 Person   | Unknown                 |      | 0600     | Reinforcing levees with sandbags |
| Police Squad      | Unknown                 |      | 0600     | Evacuations and security         |
| Police Squad      | Unknown                 |      | 0600     | Evacuations and security         |
| Police Squad      | Unknown                 |      | 0600     | Morgue                           |

## 7. Summary of Current Actions

- Air and water search, rescue and recovery is currently ongoing.
- Evaluation and reinforcement of levee system along both banks of river began at 0600.
- Relief camp has been established, but camp capacity and location are unknown at this time.
- Police have been engaged for evacuation and security.
- Police are providing security for temporary morgue.
- Some incident mapping has been done.
- Alternative relief camp locations are being analyzed by State Government.

|                                                                                                                                                                                                                                                                                                                                                                    |                            |                                      |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------|-----------------|
| <b>Incident Objectives</b>                                                                                                                                                                                                                                                                                                                                         | 1. Incident Name<br>Kendra | 2. Date<br>16-08-2011                | 3. Time<br>0215 |
| 4. Operational Period<br>Day 0600 – 1800 16 August                                                                                                                                                                                                                                                                                                                 |                            |                                      |                 |
| 5. General Control Objectives for the Incident (include alternatives)                                                                                                                                                                                                                                                                                              |                            |                                      |                 |
| 1. Provide for emergency worker and public safety<br>2. Reinforce affected levees in weakened areas.<br>3. Establish and maintain transportation routes for relief and incident supplies.<br>4. Search for and rescue victims trapped by flood waters.<br>5. Evacuate threatened areas downstream.<br>6. Develop contingency plans in the event of levee failures. |                            |                                      |                 |
| 6. Weather Forecast for Period<br>Hot, humid, 75 percent chance of rain                                                                                                                                                                                                                                                                                            |                            |                                      |                 |
| 7. General Safety Message<br>All assigned personnel must wear personal protective equipment                                                                                                                                                                                                                                                                        |                            |                                      |                 |
| 8. Attachments (mark if attached)                                                                                                                                                                                                                                                                                                                                  |                            |                                      |                 |
| <input type="checkbox"/> Organization List - IRS Form 006 <input type="checkbox"/> Medical Plan - IRS Form 008 <input type="checkbox"/> (Other)                                                                                                                                                                                                                    |                            |                                      |                 |
| <input type="checkbox"/> Div. Assignment Lists - IRS Form 014 <input type="checkbox"/> Incident Map                                                                                                                                                                                                                                                                |                            |                                      |                 |
| <input type="checkbox"/> Communications Plan - IRS Form 009 <input type="checkbox"/> Traffic Plan                                                                                                                                                                                                                                                                  |                            |                                      |                 |
| 9. Prepared by (Planning Section Chief)                                                                                                                                                                                                                                                                                                                            |                            | 10. Approved by (Incident Commander) |                 |

## Final Exercise

### Dimapur Bombing

#### Timeframe

4-5 hours

#### Materials Needed

- Pen or pencil
- Scenario Exercise (Dimapur Bombing)
- Incident History
- Exercise Instructions
- Organizational Structure
- Additional information
- Site Safety and Control Plan
- Incident Objectives
- Division Assignment List in Unit Log (IRS Form 003)
- Incident Resource Projection Matrix (IRS Form 015)
- Air Operations Summary Worksheet
- Operations Planning Worksheets (IRS Form 015)
- Display Board, Flip chart papers, and marking pens
- Understand how the information from the IRS Form 015 is used in the development of the Incident Action Plan
- Participate as an OSC in an Operational Period Briefing.

#### Directions

1. Within your individual groups, select members to function as Operations Section Chiefs and group spokesperson (one person to participate in the Planning Meeting, another member to participate in Operational Briefing, and one person to present the Demobilization Plan Outline).
2. Review the incident objectives, Incident History Information Sheet and the provided incident maps.
3. Conduct a formal planning process including information gathering, assimilation and projection to develop a tactical plan, tactical organization and projected resource needs.
4. Complete an Operations Planning Worksheet (IRS Form 015).
5. Complete an Incident Resource Projection Matrix using Operational Planning Worksheet (IRS Form 015) for the probable duration of fire department involvement at the incident.

6. Complete at least two Division Assignment Lists in Unit Log (IRS Form 003)
7. Develop a tactical operations briefing map showing incident organization and facilities including drop points and staging areas.
8. When requested, provide Ops Chief input to a Planning Meeting and Operational Briefing.
9. When requested, present a demobilization outline and how conclusions were reached.

**Note:**

When requested, present demobilization outline and how conclusions were reached.

**Exercise Objectives**

1. Complete the operational planning process for the Day Operational Period of October 3, 0800-1600 hours (assimilate Ops Section input from Branches, Divisions, and other sources).
2. Develop an Incident Resource Projection Matrix using Operational Planning Worksheet (IRS Form 015), Operational Planning Worksheet (IRS Form 015), and Division Assignment Sheets (IRS Form 003) for at least two selected divisions or groups and an operations briefing map.
3. Participate as an OSC in developing an IAP at a planning meeting.
4. Conduct the OSC portion of the Operational Briefing for assigned resources.
5. Prepare a demobilization outline using IRS Form 015 and explain how conclusions were reached.

**Scenario**

Two bombs have simultaneously exploded on a crowded railway platform and busy marketplace in Dimapur on October 3, 2010 at 2000. It is estimated that 60 people have been killed, with hundreds injured. A number of buildings in the marketplace are on fire and train service have been halted. At 2020, two smaller bombs of lower intensity were detonated targeting the electrical grid and a gas pipeline. Electricity supply is disrupted in half of Dimapur, and a gas pipeline has developed leakage and the gas is leaking at a rate of 200 liters per second and flowing into a nearby river, which is the source of water supply for downstream villages. The Superintendent of Police has stated that the bombings were most likely carried out by a separatist group. There is mass panic and concern about the possibility for additional terrorist acts.

The Police Station received an anonymous phone call to expect additional

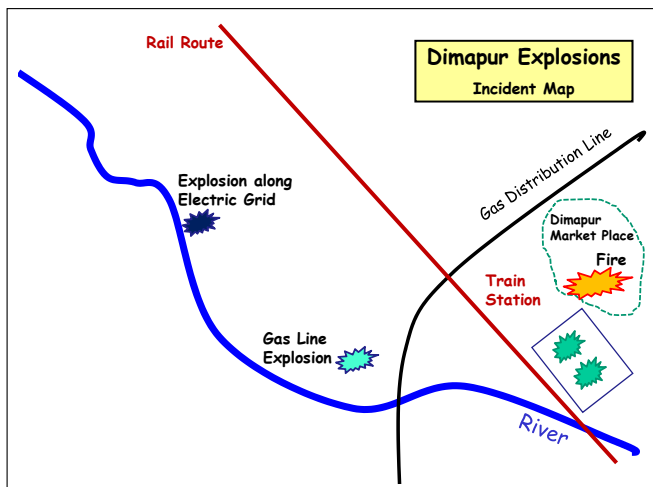
bombings and other acts of violence tomorrow unless their demands are met. Last month some villagers were taken from their homes and shot by the same separatist group, so officials are taking their threats seriously and want to increase security to thwart potential attacks.

### Situation and Resource Status

You are the Operations Section Chief on a Nagaland State IRT and have been deployed to manage the incident. You are stationed close to Dimapur and have arrived at the scene as the Operations Section Chief, but the rest of the team is en route and expected to arrive at 2200 and take control tomorrow at 0600. The resources listed below are also at the scene and have been responding, but not in a coordinated fashion. There are no other outstanding or unfilled orders. The SDO is the current IC and his capacity is overwhelmed at this time. He is eagerly awaiting the team's arrival.

### Local Resources on Scene

- 30 Police patrol units
- 5 Fire trucks
- 6 Ambulances
- 20 Doctors from local hospitals
- Volunteers attending to victims at the rail station and marketplace
- 1 Utility crew
- 1 Railroad crew
- 1 Planning Section Chief from the Block Office
- 1 Safety Officer
- 3 Division Group/Supervisors from the police department
- 1 HazMat Team working on the containing the gas spill



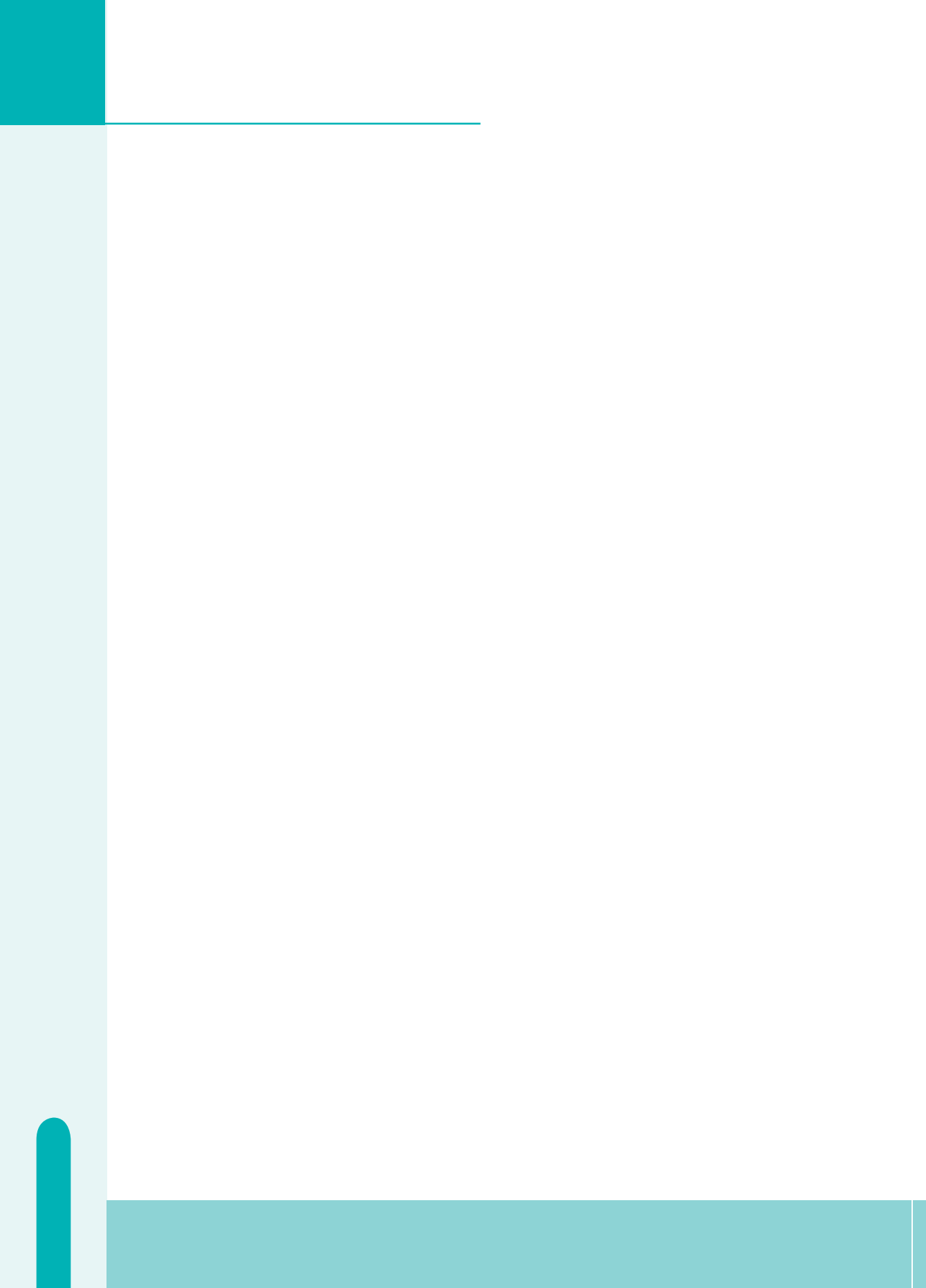
|                                                                                                                                                                                                                                                                                                                                                                                   |                             |                                      |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|-----------------|
| <b>Incident Objectives</b>                                                                                                                                                                                                                                                                                                                                                        | 1. Incident Name<br>Dimapur | 2. Date<br>3 October, 2011           | 3. Time<br>2330 |
| 4. Operational Period<br>Day 0600 – 1800 4 October                                                                                                                                                                                                                                                                                                                                |                             |                                      |                 |
| 5. General Control Objectives for the Incident (include alternatives)<br>1. Provide for safety of emergency workers, public through clear concise work directions.<br>2. Isolate/deny entry to non-essential personnel and the public.<br>3. Secure the scene.<br>4. Contain contaminants.<br>5. Secure pipeline<br>6. Identify other threat areas and develop contingency plans. |                             |                                      |                 |
| 6. Weather Forecast for Period<br>Clear skies, moderate temperature, slight wind                                                                                                                                                                                                                                                                                                  |                             |                                      |                 |
| 7. General Safety Message<br>All assigned personnel must wear personal protective equipment.                                                                                                                                                                                                                                                                                      |                             |                                      |                 |
| 8. Attachments (mark if attached)                                                                                                                                                                                                                                                                                                                                                 |                             |                                      |                 |
| <input type="checkbox"/> Organization List - IRS Form 006 Medical Plan - IRS Form 008 <input type="checkbox"/> (Other)<br><input type="checkbox"/> Div. Assignment Lists - IRS Form 003 Incident Map<br><input type="checkbox"/> Communications Plan - IRS Form 009 <input type="checkbox"/> Traffic Plan                                                                         |                             |                                      |                 |
| 9. Prepared by (Planning Section Chief)                                                                                                                                                                                                                                                                                                                                           |                             | 10. Approved by (Incident Commander) |                 |

# **Incident Response System Operations Section Chief**

## **Incident Strategic Analysis**

### **Participant Manual**

**National Institute of Disaster Management**  
Government of India, New Delhi



## Incident Strategic Analysis (ISA)

Incident Strategic Analysis (ISA) is a decision – making process in which the Responsible Officer or his/her representative describes the situation, establishes objectives and constraints for the management of the incident, compares multiple strategic alternatives, evaluates the expected effects of the alternatives, selects the preferred alternative, and documents the decision. The format and level of details required for the ISA is dependent on the specific incident and it's nature and complexity. The key is to document the decision.

### ISA Initiation

**Incident Name**

Jurisdiction (S)

Date and Time Initiated

|                      |
|----------------------|
| <b>Kendra</b>        |
| Kendrapara, Orissa   |
| 16 August, 2011 0100 |

### VI. Decision

The selected alternative is : Full response with IMT

Rationale: Inadequate current response is resulting in loss of life and property.

Responsible officer'S signature

Date/Time

16 August, 2011

| I. Incident Strategic Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| A. Jurisdictions (S): Kendrapara District                                                                                                                                                                                                                                                                                                                                                                                                                                        | B. Geographic Area: Orissa State |
| C. Unit(S): Blocks A, B and C                                                                                                                                                                                                                                                                                                                                                                                                                                                    | D. ISA # 1                       |
| E. Incident Name: Kendra                                                                                                                                                                                                                                                                                                                                                                                                                                                         | F. Incident #                    |
| G. Financial Accounting Code: XXXXXX                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  |
| H. Date/Time Prepared: 16 August XXX                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  |
| <input type="checkbox"/> Attachments:<br><input type="checkbox"/> Complexity Matrix/Analysis<br><input type="checkbox"/> Risk Assessment<br><input type="checkbox"/> Probability of Success<br><input type="checkbox"/> Consequences of Failure<br><input type="checkbox"/> Maps<br><input type="checkbox"/> Decision Tree<br><input type="checkbox"/> Projections<br><input type="checkbox"/> Calculations of Resource Requirements<br><input type="checkbox"/> Other (Specify) |                                  |

## II. Objectives and Constraints

The Responsible Officer completes this page.

- III. A. Incident Management Strategy: Briefly describe the general responsible strategies for each alternative. Alternatives must meet resource management plan objectives.
- III. B. Narrative: Briefly describe each alternative with geographic names, locations, etc., that would be used when implementing a strategy. For example, "Contain the chemical spill to 3 hectares by March 1".
- III. C. Resources Needed: Resources listed must be reasonable to accomplish the tasks described in Section III B. It is critical to also look at the reality of the availability of these needed resources.
- III D. Estimated Final Incident Affected Size: Estimated final size for each alternative at the time of containment.
- III .E. Estimated Objective Accomplishment Date: Estimates for each alternative shall be made based on predicted weather, political considerations, resource availability and the effects of management efforts.
- III. F. Cost: Estimate all costs for each alternative. Consider rehabilitation, Impact on local Economic activities and Agriculture and other costs as necessary.
- III. G. Risk assessment: Probability of success/Consequences of failure: Describe probability as a % and associated consequences for success and failure. Develop this information from models, practical experience or other acceptable methods. Consequences described will include projected effects and costs. Include projections and long term forecasts to derive this information.
- III. H. Maps: A map for each alternative must be prepared. The map shall be based on the "Probability of success/Consequences of Failure" and include other relative information.

| <b>II. Objectives and Constraints</b>                                          |                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A. Objectives</b> (must be specific, measurable, realistic and attainable): |                                                                                                                                                                                                                   |
| <b>1. Safety:</b>                                                              | Public: Save life and livestock with quick response<br>Aviation: Ensure aviation safety by observing correct procedures<br>Responder: Prevent accidents and injury to responders by adhering to safety standards. |
| <b>2. Economic:</b>                                                            | Protect property by carrying out quick repairs to embankment. Rapid repair to roads, power lines, and other infrastructures as per the IAP.                                                                       |
| <b>3. Environmental:</b>                                                       | Have appropriate medical assistance to prevent disease outbreaks of any kind.                                                                                                                                     |
| <b>4. Social:</b>                                                              | Distribute relief materials to victims. Ensure gender equity is considered during relief distribution.                                                                                                            |
| <b>5. Other:</b>                                                               | timely distribution of supplies and equipment.                                                                                                                                                                    |
| <b>B. Constraints</b>                                                          | Finance is Limited - be Efficient                                                                                                                                                                                 |

## Section III. Alternatives

The Responsible Officer complete (s) this page, with input from others.

- III. A. Incident Management Strategy: Briefly describe the general response strategies for each alternative. Alternatives must meet resource management plan objectives.
- III. B. Narrative: Briefly describe each alternative with geographic names, locations, etc., that would be used when implementing a strategy. For example, "Contain the chemical spill to 3 hectares by March 1".
- III. C. Resources Needed: Resources listed must be reasonable to accomplish the tasks described in Section III B. It is critical to also look at the reality of the availability of these needed resources.
- III. D. Estimated Final Incident Affected Size: Estimated final size for each alternative at the time of containment.
- III. E. Estimated Objective accomplishment Date: Estimates for each alternative shall be made based on predicted weather, political considerations, resource availability and the effects of management efforts.
- III.F. Cost: Estimate all costs for each of the alternatives. Consider rehabilitation, business impacts, and other costs as necessary.
- III.G. Risk assessment: Probability of success/Consequences of failure: Describe probability as a % and associated consequences for success and failure. Develop this information from models, practical experience or other acceptable means. Consequences described will include projected effects and costs. Include projections and long term forecasts to derive this information.
- III.H. Maps: A map for each alternative must be prepared. The map shall be based on the "Probability of success/Consequences of Failure" and include other relative information.

| III. Alternatives                       |                                        |                                                                     |                                                                                                |
|-----------------------------------------|----------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|                                         | A                                      | B                                                                   | C                                                                                              |
| A. Strategy:                            | Limited                                | Moderate                                                            | Full                                                                                           |
| B. Narrative:                           | Take very limited action to save lives | Repair/Strengthen weak/breached embankments, save life and property | Repair/strengthen the weak/breached embankments, repair infrastructure, save life and property |
| C. Resources Needed:                    |                                        |                                                                     |                                                                                                |
| Responders                              | 20 People                              | 40 People                                                           | 100 People                                                                                     |
| Equipment                               | 5 boats                                | 10 boats                                                            | 16 boats                                                                                       |
| Earth Movers                            | 1                                      | 5                                                                   | 10                                                                                             |
| Aircraft                                | 1 Helicopter                           | 1                                                                   | 1                                                                                              |
| Police                                  | 2 cars                                 | 4 cars                                                              | 8 cars                                                                                         |
| Other                                   |                                        |                                                                     |                                                                                                |
| D. Estimated Final Affected Area Size:  | 6 0 , 0 0 0 Hectares                   | 60,000 Hectares                                                     | 60,000 Hectares                                                                                |
| E. Estimated Date To Achieve Objectives | 3 Days                                 | 6 Days                                                              | 6 Days                                                                                         |
| F. Costs:                               | Rs.4,00,000                            | Rs. 12,00,000                                                       | Rs. 18,00,000                                                                                  |
| G. Risk Assessment:                     | Good<br>Severe                         | Good<br>Poor                                                        | Excellent<br>Moderate                                                                          |
| H. Attach Maps For Each Alternative     |                                        |                                                                     |                                                                                                |

## Section IV. Evaluation of Alternatives

The Responsible Officer completes this page.

IV A. Evaluation Process: Conduct an analysis for each element of all the objectives and each alternative. Objective shall match those identified in section II A. Use the best estimates available and quantify whenever possible. Provide ratings for each alternatives and corresponding objective element. Effects may be negative, cause no change or may be positive. Examples are: 1) a system which employs a “-“ for negative effect, a “0” for no change, and a “+” for positive effect; 2) a system which uses a numeric factor for importance of the consideration (soils, watershed, political, etc.,) and assigns values (such as -1to +1, -100 to +100 etc .,) to each consideration, then arrives at a weighted average. If you have the ability to estimate value in monetary terms for natural resource and cultural values this data is preferred. Use those methods which are most useful to managers and most appropriate for the situation. To be able to evaluate positive effects, the area must be included in the resource management plan and be consistent with prescriptions and objectives of any applicable guidelines and protocols.

Sum of Economic Values; Calculate for each element the net effect of the rating system used for each alternative. This could include the balance of pluses (+) and minuses (-), numerical rating (-3 and +3), or natural and cultural resource values in dollar amount.

| IV. Evaluation of Alternatives |                                |                                |                                |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| A. Evaluation Process          | A                              | B                              | C                              |
| Safety                         |                                |                                |                                |
| Public                         | Not Good                       | Good                           | Excellent                      |
| Aviation                       | Not Good                       | Good                           | Excellent                      |
| Responder                      | Not Good                       | Good                           | Excellent                      |
| Sum of Safety Values           |                                |                                |                                |
| Economic                       |                                |                                |                                |
| Incident                       | Good                           | Ok                             | Ok                             |
| Business                       | Not Good                       | Ok                             | Ok                             |
| Other (Specify)                |                                | Ok                             | Ok                             |
| Sum of Economic Values         |                                |                                |                                |
| Environmental                  | Pollution, Disease<br>Outbreak | Pollution, Disease<br>Outbreak | Pollution, Disease<br>Outbreak |
| Sum of Economic Values         |                                |                                |                                |
| Social                         |                                |                                |                                |
| Employment                     | Poor                           | Good                           | Excellent                      |
| Public Concern                 | High                           | Good                           | Excellent                      |
| Cultural                       | High                           | Good                           | Excellent                      |
| Religious                      | High                           | Good                           | Excellent                      |
| Gender/Equity                  | High                           | Good                           | Excellent                      |
| Other (SpecfY)                 |                                |                                |                                |
| Sum of Social Values           |                                |                                |                                |

## Section V. Analysis Summary

The Responsible Officer completes this page.

- V.A. Compliance with Objectives: Prepare narratives that summarize each alternative's effectiveness in meeting each objective. Alternatives that do not comply with objectives are not acceptable. Narratives could be based on effectiveness and efficiency. For example: "effective and efficient". Or answers could be based on a two-tiered rating system such as "complies with objective" and "fully complies with or exceeds objective". Use a system that best fits the needs of the Responsible Officer.
- V.B. Pertinent Data: Data for this section has already been presented and is duplicated here to help the Responsible Officer confirm their selection of an alternative. Final Affected Area Size is displayed on page three, section III.D. Costs are displayed on page three, section III.F. Economic Values have been calculated and displayed on page four. Probability of Success/Consequences of Failure are calculated in the attachments and displayed on page three, section III.G.
- V.C. External and Internal Influences: Assign information and data occurring at the time the ISA is signed. Designate the Resource Availability status. This information is available at the State and Central Government level and needed to select a viable alternative. Designate "yes" indication an up-to-date weather forecast has been provided to, and used by, the Responsible Official (s) to evaluate each alternative. Assign information to the "other" category as needed by the Responsible Official.

| V. Analysis Summary              |                 |                 |                 |
|----------------------------------|-----------------|-----------------|-----------------|
| Alternative                      | A               | B               | C               |
| A. Compliance With Objective     |                 |                 |                 |
| Safety                           | -               | +               | +               |
| Economic                         | -               | -               | +               |
| Environmental                    | -               | -               | +               |
| Social                           | -               | -               | +               |
| Other                            |                 |                 |                 |
| B. Pertinent Data:               |                 |                 |                 |
| Final Affected Area Size         | 60,000 hectares | 60,000 hectares | 60,000 hectares |
| Cost                             |                 |                 |                 |
| Resource Values                  | Rs. 4,00,000    | Rs.12,00,000    | Rs.18,00,000    |
| Probability of Success           |                 |                 |                 |
| Consequences of Failure          | Good            | Good            | Excellent       |
|                                  | Severe          | Poor            | Moderate        |
| C. External/Internal Influences: |                 |                 |                 |
| Incident Priority Within State   |                 | 1               |                 |
| Resource Availability            |                 | Can Meet Needs  |                 |
| Other Long Range Projections     |                 |                 |                 |
| Projections                      |                 | Can Support     |                 |

## Section VI. Decision

Identify the alternative selected. Must have clear and concise rationale for the decision and a signature with date and time. Responsible Official signature is mandatory.

**Decision Rationale:** Select full response because it has the least impact to the public, businesses, and environment. In addition, political consequences are severe if there is a large loss of life and property

## Section VII. Daily Reveiw

The Responsible Official or designate complete this page.

The daily review is a process to validate and/or update the ISA to ensure it is consistent with the current and projected situation. Any changes need to be documented. The review should be signed and dated.

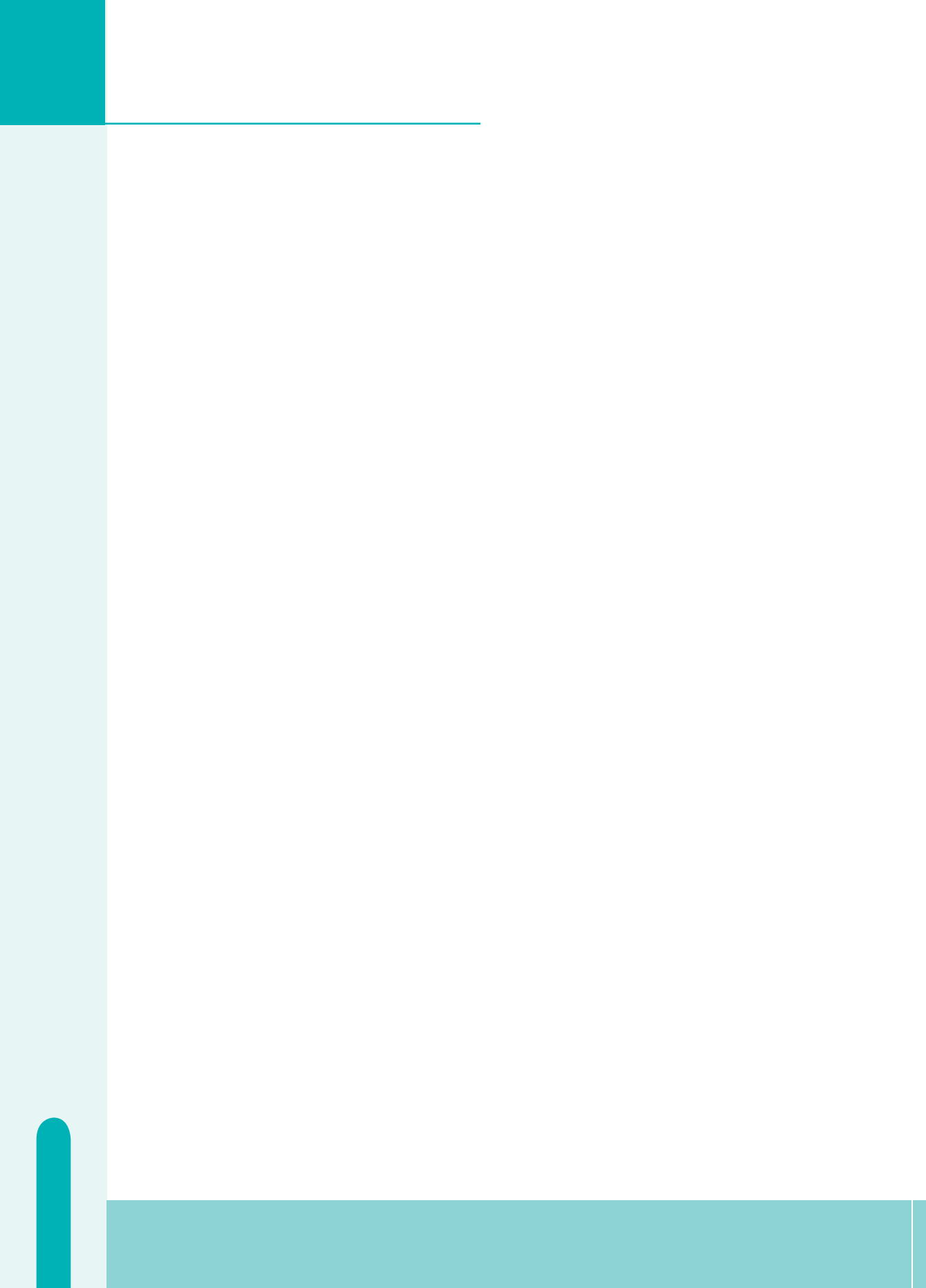
| Date | Time | Comments | Signature |
|------|------|----------|-----------|
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|      |      |          |           |

# **Incident Response System Operations Section Chief**

## **Guideline**

## **Participant Manual**

**National Institute of Disaster Management**  
Government of India, New Delhi



## Operations Section

### 1.1 Operations Section (OS)

The OS comprises Response Branch (RB), Transportation Branch (TB) and Staging Area (SA) and is headed by the OSC. The activation of the RB and TB is situational.

The RB consists of various Divisions and Groups depending upon the functional and geographical requirements of the incident response. The Groups are classified by their functional characteristics, such as Single Resource, Strike Teams and/or Task Force.

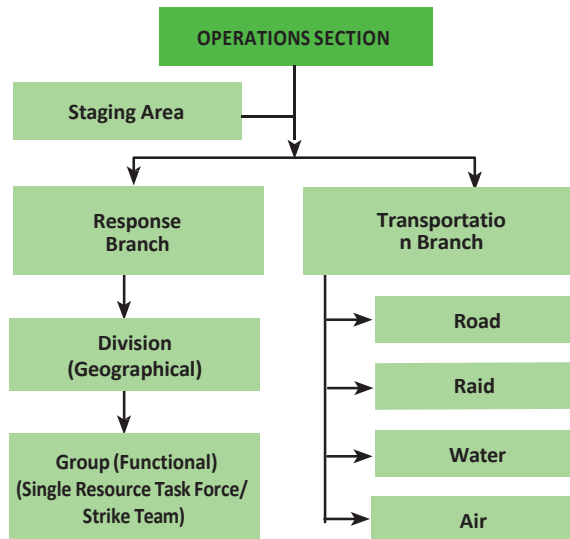


*Fig. 1. Composition of Operations Section*

The TB may consist of Road Operations Group, Rail Operations Group, Water Operations Group and Air Operations Group. These Groups are also activated according to the transportation modes that may be required in the incident response.

SA is the area where resources mobilized are collected and accounted for. It is from this location that the resources are deployed for specific assignments or tasks. The composition of OS is shown in Fig. 1.

RB is activated according to the nature of response required. For example in case of earthquake and loud where a lot of houses get damaged or destroyed and people need to be rescued and provided relief and temporary shelter. The rescue and relief group of the Response Branch will be activated to provide these services.

The TB will manage the transportation of the affected people and the movement of relief materials. Groups within the TB like Road group or Water group will be activated as required for managing and providing the Road or Water transport.

Since Air Operations in disaster response involves coordination between the Central Government, Ministry of Civil Aviation Air Force, State and the Districts concerned and also require technical inputs, procedures for activation is dealt in detail separately in this chapter at para 1.4.4

Selection of the OSC depends on the nature of operations required. Rescuing people and taking them to shelter in case of earthquake or floods can best be handled by the police/Armed Forces and thus in such cases it should ideally be headed by them. However in cases of such disaster like bird flu epidemic, the main requirement will be providing medical treatment to the victims, vaccinating and culling of birds. In such cases the OS shall have to be headed by Doctors for treatment of victims and supported by Animal husbandry department and Municipal institutions for vaccinating and culling of birds.

In disaster response a large number of duties and activities need to be performed. To meet the various duty requirements, the IRS provides for Single Resource, Task Force and Strike Teams. The details of the Single Resource, Task Force and Strike Teams and their illustrative roles have been discussed at para 1.3.4

As the operational activity increase because of the largeness and magnitude of the disaster, the OSC who is responsible for directing all tactical actions to meet the incident objectives will have to deploy more and more functional teams. It has been generally accepted that an ideal span of control is 1:5 that is one leader or supervisor can effectively manage five groups. In order to maintain close supervision, the IRS provides for the formation of Branches, Divisions and Groups. The details of Branches and Divisions are discussed at paras 1.3.1. and 1.3.2.

## **1.2 Operations Section Chief (OSC)**

On activation of the OS, the OSC will assume command of all the field operations and will be fully responsible for directing all tactical actions to meet the incident objectives.

The OSC will report to the IC. He will be responsible for activation, deployment and expansion of his Section as per IAP. As the operational activities increase and because of geographical reasons, the OSC will introduce or activate and expand the Branch into Divisions for proper span of control and effective supervision.

## Roles and Responsibilities of OSC

### ***The OSC will:***

- i. coordinate with the activated Section Chiefs;
- ii. manage all field operations for the accomplishment of the incident objectives;
- iii. ensure the overall safety of personnel involved in the OS and the affected communities;
- iv. deploy, activate, expand and supervise organizational elements (Branch, Division, Group, etc.) in his Section in consultation with IC and in accordance with the IAP;
- v. assign appropriate personnel, keeping their capabilities for the task in mind and maintain On Duty Officers list (IRS Form-007) for the day
- vi. request IC for providing a Deputy OSC for assistance, if required;
- vii. brief the personnel in OS at the beginning of each operational period;
- viii. ensure resolution of all conflicts, information sharing, coordination and cooperation between the various Branches of his Section;
- ix. prepare Section Operational Plan in accordance with the IAP; if required;
- x. suggest expedient changes in the IAP to the IC;
- xi. consult the IC from time-to-time and keep him fully briefed;
- xii. determine the need for additional resources and place demands accordingly and ensure their arrival;
- xiii. ensure record of various activities performed (IRS Form-004) by members of Branches, Divisions, Units/Groups are collected and maintained in the Unit Log IRS Form-003 and
- xiv. Perform such other duties as assigned by RO / IC.

### **1.2.1 Roles and Responsibilities of the Staging Area Manager (SAM)**

The SA is an area where resources are collected and kept ready for deployment for field operations. These may include things like food, vehicles and other

materials and equipment. The SA will be established at a suitable area near the affected site for immediate, effective and quick deployment of resources.

More than one SA may be established if required. If resources are mobilized at other locations to be ultimately dispatched to the affected areas, these locations are also known as SAs. The overall in-charge of the SA is known as Staging Area Manager (SAM) and he needs to work in close liaison with both the LS and PS through the OSC.



*Pic. 2. Staging Area*

School and college playgrounds, community halls, cyclone shelters and Panchayat Offices, stadia etc. may be used as SA. In case of total destruction of buildings in an incident, tents or temporary shelters may be used for such purposes.

For Air Operations, open space of Airport Authority of India (AAI) may be used for loading and unloading of relief materials. If area of AAI is not available, other suitable places near Helipads, Helibases etc. will have to be selected for such purpose.

For parking of vehicles, playgrounds of the schools or any large plain areas may be used. Such parking area will preferably have separate entry and exit points. The SAM will arrange for separate entry and exit points to avoid and reduce traffic jam in an emergency.

***The SAM will:***

- i. establish the SA with proper layout, maintain it in an orderly condition and ensure that there is no obstruction to the incoming and outgoing vehicles, resources etc;
- ii. organize storage and dispatch of resources received and dispatch it as per IAP;
- iii. report all receipts and dispatches to OSC and maintain their records;
- iv. manage all activities of the SA;
- v. utilize all perishable supplies expeditiously;

- vi. establish check-in function as appropriate;
- vii. request maintenance and repair of equipment at SA, as needed;
- viii. ensure that communications are established with the ICP and other required locations e.g. different SAs, Incident Base, Camp, Relief Camp etc;
- ix. maintain and provide resource status to PS and LS;
- x. demobilize SA in accordance with the Demobilization Plan IRS Form-010
- xi. maintain record of various activities performed as per IRS Form-004 and send to Sections concerned; and
- xii. perform any other duties as assigned by OSC.

### 1.3 Response Branch

#### 1.3.1 Roles and Responsibilities of Response Branch Director (RBD)

Response Branch is the main responder in the field dealing with the situation and performing various functions. Depending on the scale of disaster, the RBD may have to expand the number of Groups which in turn may require creation of Division. This structure is meant for close supervision by the OSC in the management of a large incident.

The ideal span for supervision is 1:5. i.e. one Branch Director can supervise up to five Divisions, one Division Supervisor can supervise up to five Groups and one Group-in-charge can supervise five teams as shown in Fig. 3. More Branches, Divisions, Groups may be formed as required.

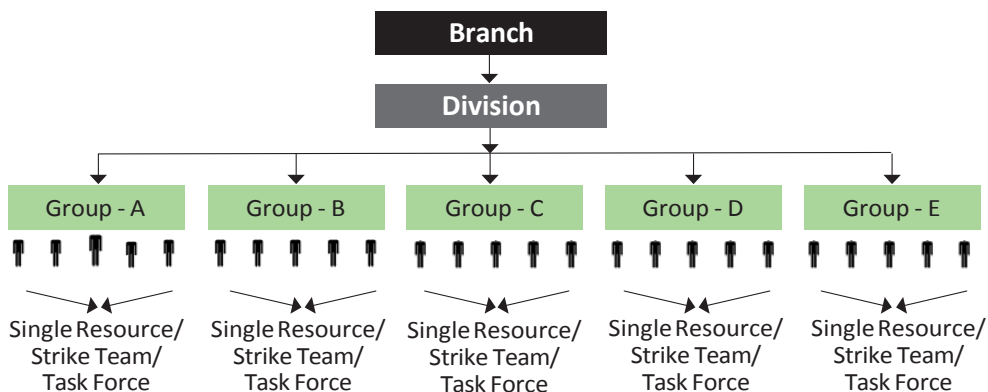


Fig. 3. Expansion of Branch

***The RBD will:***

- i. work under the supervision of the OSC and is responsible for the implementation of IAP as per the assigned role;
- ii. attend planning meetings as required by the OSC;
- iii. review Assignment Lists IRS Form-005 for Divisions or Groups under his Branch;
- iv. assign specific tasks to Division and Groups-in-Charge;
- v. supervise Branch functions;
- vi. resolve conflicts reported by subordinates;
- vii. Report to OSC regarding modifications required if any in the IAP, need for additional resources, availability of surplus resources and when hazardous situations or significant events occur, etc.
- viii. provide Single Resource, Strike Team and Task Force support to various operational areas;
- ix. ensure that all team leaders maintain record of various activities performed as per IRS Form-004 relating to their field Operations and send to OSC;
- x. perform any other duties assigned by the OSC;

**1.3.2 Roles and Responsibilities of Division Supervisor and Groups-in-charge**

As the operational activity increase because of the largeness and magnitude of the disaster, the OSC who is responsible for directing all tactical actions to meet the incident objectives will have to deploy more and more functional teams. There may be such locations which are distant, isolated and difficult to reach. There may also be a situation when simultaneously different types of incidents occur requiring different specialized handling. For example while a lot of building may have collapsed in case of earthquake, gas leaks may also have occurred resulting in fire at a number of places.

The OSC may create a Division for close and proper supervision, when the span of control becomes larger or when some locations are very distant and difficult to reach.

Except for the hierarchical difference, the roles and responsibilities of the Division Supervisors and the Groups-in-charge are the same. Divisions are

activated when there are supervisory requirements in an isolated and distant geographical area or for the purpose of a proper span of control when the number of functional Groups increases or for various specialized response. While Groups-in-charge are assigned to accomplish specific functions within the Branch, Divisions are created for effective supervision over a large number of Groups.

### **Division Supervisors and Group-in-charge will:**

- i. implement Division or Group assignment list;
- ii. assign resources within the Division or Group under them;
- iii. report on the progress of Operations, and the status of resources within the Division or Group;
- iv. circulate Organizational Assignment List (Divisional / Group) IRS Form-005 to the leaders of the Group, Strike Team and Task Force;
- v. review assignments and incident activities with subordinates and assign tasks as per the situation;
- vi. coordinate activities with adjacent Divisions or Groups, if required;
- vii. submit situation and resource status to the RBD and the OSC;
- viii. report all hazardous situations, special occurrences or significant events (e.g., accidents, sickness, deteriorating weather conditions, etc.) to the RBD and the OSC;
- ix. resolve problems within the Division or Group;
- x. participate in the development of IAP for next operational period, if required;
- xi. ensure that record of various activities performed (IRS Form-004) are collected and sent to the RBD and OSC; and
- xii. perform any other duties as assigned by the RBD/OSC.

### **1.3.3 Single Resource**

Single Resource includes both personnel and their required equipment to be deployed in a given incident, e.g. a fire tender with the required personnel, an ambulance with the required medical officer, paramedic and driver etc. For the purpose of a correct and proper requisition and deployment, it is important that the resources should be categorized into 'kind' and 'type'. The ROs of

the States and Districts will ensure that the resources are categorized into 'kind' and 'type'.

In IRS, resources are categorized under; a) 'kind' and b) 'type'. 'Kind' refers to equipment, vehicles or personnel for example; truck, medical team, bulldozer, etc. 'Type' refers to its capacity for that kind of resource e.g. truck having 1 ton capacity or 2 tons capacity, medical team having 1 doctor and 3 paramedics etc.



*Pic. 4. Types of Single Resource*

#### Roles and Responsibilities of Single Resource Leader

##### ***The Single Resource Leader will:***

- i. take charge of necessary equipment and supplies;
- ii. assess local weather and environmental conditions, law and order situation etc. in the assigned area and report to the in-charge;
- iii. perform the assigned duty;
- iv. keep contact with his supervisor; and
- v. perform any other duties that may be assigned by his supervisor.

#### **1.3.4 Strike Team or Task Force**

A Strike Team is a combination of same 'kind' and 'type' of Single Resource with a common communication facility and one leader. A Task Force is a combination of different 'kinds' and 'types' of Single Resources. They are assembled for a particular tactical need, with a common communication facility and one leader. A Strike Team may be needed when specific type of work,



*Pic. 5. Types of Strike Teams*

requiring specific expertise and resources are grouped under one leader.

A Task Force may be grouped with different 'kinds' and 'types' of Single Resource and dispatched under a leader, when a number of different tasks requiring different expertise need to be performed. For example, if a combination of Medical team, Rescue personnel, Fire personnel, Sanitation workers

and workers for disposal of dead bodies and animal carcasses is required to be sent to a particular location, the team so constituted will be called a Task Force. The concept of proper span of control should be kept in mind while constituting the Task Force.



*Pic. 6. Task Force*

The Strike Team or Task Force Leader reports to the Division Supervisor or Group Supervisor and is responsible for performing the tactical assignments assigned to the Strike Team or Task Force. The leader of the Strike Team and Task Force reports on work progress and status of resources, maintains work records on assigned personnel and relays important Information to their supervisor. In case the Branch, Division, or Group is not activated, the team leader will directly report to the OSC.

Roles and Responsibilities of Strike Team or Task Force Leader

***The Strike Team or Task Force Leader will:***

- i. review assignments with members of his team;
- ii. report on work progress;
- iii. coordinate activities with adjacent Single Resource, Strike Teams and Task Forces if assigned;
- iv. establish and ensure communications;
- v. perform any other duties assigned; and
- vi. Maintain record of various activities.

## 1.4 Transportation Branch (TB)

The TB in the OS supports the response effort by transporting different resources, relief materials, personnel to the affected site and also transportation of victims if necessary. Though there is a Ground Support Unit (GSU) in the LS which is responsible for providing all transportation and other related resources, the TB in the OS manages the actual deployment and utilization of the transport at ground zero according to the needs of the IRT and the IAP. The TB may comprise four operational Groups such as Road, Rail, Water and Air. These Groups may be activated as and when required.

Air Operations is an important transportation activity during disasters which requires coordination at the National, State and District level. For coordination of Air Operations, the RO of the State and District will identify and designate a NO.

### 1.4.1 Roles and Responsibilities of Transportation Branch Director (TBD)

All functional Groups (Road, Rail, Water and Air) of the TB are managed by the TBD. Since the air transportation is to be coordinated at the State and District levels, the TBD also needs to function in close coordination with RO, IC and NO for Air Operations. He will collect the details of all related flights from the concerned NO and organize the ground support requirement. The TBD will also be responsible for the activation and expansion of various functional Groups as per the IAP. More details on Air Operations are provided at para 1.4.4.

#### ***The TBD will:***

- i. activate and manage different Operations Groups like Road, Rail, Water and Air;
- ii. coordinate with the LS for required resources, and activate Groups of his Branch;
- iii. coordinate with railways, road transport, waterways and airport authorities for support as required;
- iv. ensure that Organizational Assignment List (Divisional / Group) IRS Form-005 is circulated among the Group-in-charge(s) and other responders of his Branch;
- v. provide ground support to the air operations and ensure appropriate security arrangements;

- vi. provide Road transport support to the Rail and Water Operations Group as required;
- vii. ensure safety of all personnel of his Branch involved in the Incident Response activities;
- viii. ensure that all units moving in the area are familiarized with route with the help of road maps or local guides;
- ix. report to the OSC and IC about progress of the TB;
- x. prepare transportation plan as per the IAP, if required;
- xi. determine the need for additional resources, their proper and full use and place demand accordingly in advance;
- xii. resolve problems and conflicts, if any;
- xiii. ensure the maintenance of the status of hired resources, their full utilization and timely release;
- xiv. ensure that the record of various activities performed (IRS Form-004) by different operational groups (Road, Rail, Water and Air) are collected and sent to the Section concerned; and
- v. perform any other duties assigned by the IC or OSC;

#### 1.4.1.1 Roles and Responsibilities of Group-in-charge (Road Operations)

The Group-in-charge (Road Operations) works under the TBD and is responsible for all road transportation activities. He has a Coordinator (Road Operations) under him for assistance. If the scale of operations increase, the TBD may activate the position of an Assistant Coordinator. The Loading and Unloading-in-charge will work under the Coordinator as shown in Fig. 7.

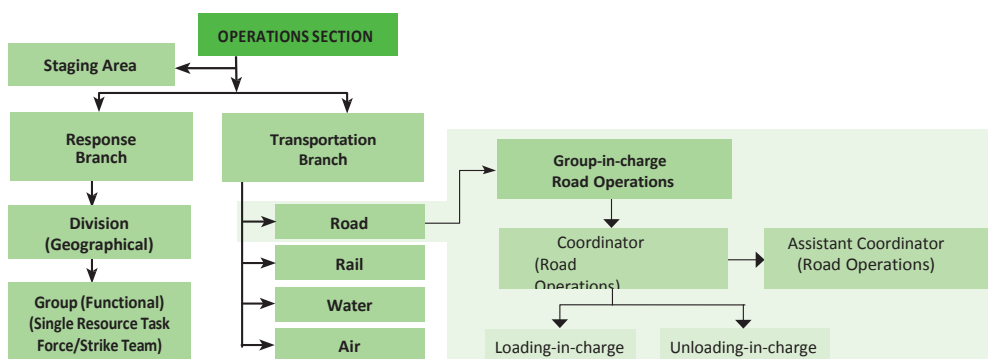


Fig. 7. Composition of Road Operations Group

***The Group-in-charge (Road Operations) will:***

- i. ensure transportation of resources by Road to the affected sites;
- ii. requisition additional personnel support, if required;
- iii. attend planning meetings on the direction of OSC;
- iv. determine coordination procedures with various designations as per IAP;
- v. ensure proper parking locations;
- vi. resolve conflicts of the Group, if any;
- vii. update Road Operations plan as required and share them with higher authorities;
- viii. in case of accidents, inform the TBD, the local police and provide assistance in investigation, if required;
- ix. ensure that mechanics are available for repair of vehicles and also ensure adequate availability of Petrol, Oil and Lubricants (POL);
- x. maintain the records of all important activities relating to the number of vehicles deployed, source of vehicles (i.e. Government or private), locations where vehicles are deployed along with resource details they are carrying, etc.;
- xi. support and coordinate the Road Operations part of the Rail, Water and Air Operations as required;
- xii. collect record of various activities performed (IRS Form-004) from coordinator and other members and send to TBD or OSC; and
- xiii. perform any other duties assigned by the TBD or OSC.

**1.4.1.2 Roles and Responsibilities of Coordinator (Road Operations)**

The Coordinator (Road Operations) is primarily responsible for coordinating the Road transport needs. There may be more than one coordinator depending upon the number of vehicles deployed.

***The Coordinator (Road Operations) will:***

- i. survey the assigned incident area to analyze situation and identify other potential problems in the context of transportation;
- ii. requisition an Assistant Coordinator (Road Operations) depending on the magnitude of the incident and requirement;

- iii. coordinate with SAM for smooth transportation of resources;
- iv. receive assignments, brief drivers regarding the routes, assign missions, supervise vehicle movement and attend to the vehicle maintenance and repair needs;
- v. monitor activities of all assigned vehicles and keep senior officers informed;
- vi. report incidents or accidents that occur in Road Operations to the TBD;
- vii. maintain the records of supplies to different locations;
- viii. keep track of vehicle movements. Provide GPS support, if available;
- ix. request security support for transportation of relief materials if required and alert the police administration in the affected areas along the transportation route;
- x. maintain coordination at loading and unloading points;
- xi. ensure that communication facilities are established at loading stations, SAs and designation points;
- xii. attend to and resolve the needs of the personnel working under him;
- xiii. maintain record of various activities performed (IRS Form-004) and send to the Group-in-charge or TBD; and
- xiv. perform any other duties assigned by the OSC or TBD.

#### **1.4.1.3 Roles and Responsibilities of Loading / Unloading-in-Charge (Road, Rail and Water)**

The Loading and Unloading-in-charge has a very significant role to play in any disaster response. The roles and responsibilities in Road, Rail and Water Operations are the same where as the roles and responsibilities for the Air Operations is slightly different. Therefore the roles and responsibilities of Loading / Unloading-in-charge are being dealt together for the Rail, Road and Water and separately for the Air Operations. The Loading / Unloading-in-charge will work under the Road, Rail and Water Coordinator.

#### ***The Loading / Unloading-in-charge (Road, Rail and Water) will:***

- i. supervise the safe Operations of Loading / Unloading activities;
- ii. obtain Operations Summary from the Groups-in-charge (Road, Rail and Water transport);
- iii. organize the Loading areas;

- iv. supervise Loading and Unloading crews and collect equipment (ladder, gloves, helmet, etc.) as required;
- v. from time to time inform the coordinator about the progress of Loading/ Unloading activities;
- vi. prepare a Loading / Unloading plan with details of their resources and designations;
- vii. maintain record of various activities performed as per IRS Form-004 (enclosed in Annexure-IV) and send to the TBD or Coordinator; and
- viii. perform any other duties assigned by Coordinator or in-charge (Road, Rail and Water).

### 1.4.2 Roles and Responsibilities of Group-in-charge (Rail Operations)

In most disaster response situations, Rail Transportation is utilized for transporting relief materials and resources from very distant places. It requires coordination with the railway authorities for making available trains and wagons at appropriate places.

Railway stations are located at specific locations, sometimes far away from the affected sites. Loading and Unloading may be required from Rail to Road and Road to Rail. Whenever transportation by Rail is envisaged, a Rail Operations Group needs to be activated and they should have close liaison with the Road Operations Group-in-charge.

The Group-in-charge (Rail) works under the TBD and is responsible for supervision of all Rail Transportation activities. In keeping with the scale of transportation requirements and management of proper span of control, the TBD may activate position of Assistant Coordinator if required. The Loading / Unloading-in-charge will work under the Coordinator as shown in Fig. 8.

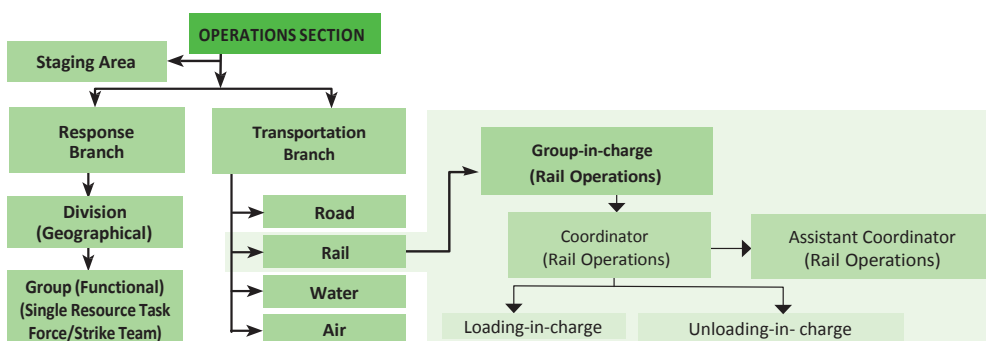


Fig. 8. Composition of Rail Operations Group

***The Group-in-charge (Rail Operations) will:***

- i. work under the TBD and coordinate all Rail Operations;
- ii. organize crew for Loading and Unloading;
- iii. ensure safe storage and warehousing of the materials;
- iv. evaluate storage locations, ensure safety and obtain guidance from the TBD, if required;
- v. coordinate with Road Operations Group for movement of resources;
- vi. prepare and provide Rail Operations Summary including time of departure and arrival, designations, resource details, etc as and when required by the senior officers;
- vii. request for additional personnel support, if required;
- viii. update the TBD from time to time and seek support, if required;
- ix. resolve conflicts within his Group, if any;
- x. update Rail Operations Plan;
- xi. establish and maintain communications with various storage and warehousing areas, designation points and railway officers;
- xii. collect record of various activities performed IRS (Form-004) from Coordinator and other in-charges and send to TBD or OSC; and
- xiii. perform any other duties assigned by OSC or TBD.

**1.4.2.1 Roles and Responsibilities of Coordinator (Rail Operations)*****The Coordinator (Rail Operations) will:***

- i. work under the Group-in-charge and provide coordination services for transportation of relief materials by Rail;
- ii. survey assigned stations or points, to analyze the situation and other potential problems;
- iii. ask for additional personnel support, if required;
- iv. receive assignments, and supervise movement of resources;
- v. maintain liaison with Railway authorities regarding train timings etc.;
- vi. report incidents or accidents that may occur in Rail Operations;
- vii. ask for and monitor security arrangements of the resources;

- viii. maintain record of various activities performed as per IRS Form-004 and send to the Group-in-charge or TBD; and
- ix. perform any other duties assigned by Group-in-charge.

#### 1.4.2.2 Roles and Responsibilities of Loading / Unloading-in-charge (Rail Operations)

The roles and responsibilities of Loading/Unloading-in-charge of Rail Operations are similar to those of the Loading/Unloading-in-charge of Road Operations. Para 1.4.1.3 will be referred.

#### 1.4.3 Roles and Responsibilities of Group-in-charge (Water Operations)

In some disasters, especially floods and cyclones, the need for Water Operations may become essential. The deployment of boats / country boats and other water transport may be necessary both for rescue work and transportation of relief materials. Depending on the scale of the disaster, the TBD may activate a Water Operations Group, consisting of Group-in-charge, Coordinator and Loading / Unloading-in-charge. If required, the Group-in-charge may request for an Assistant Coordinator as shown in Fig. 9.

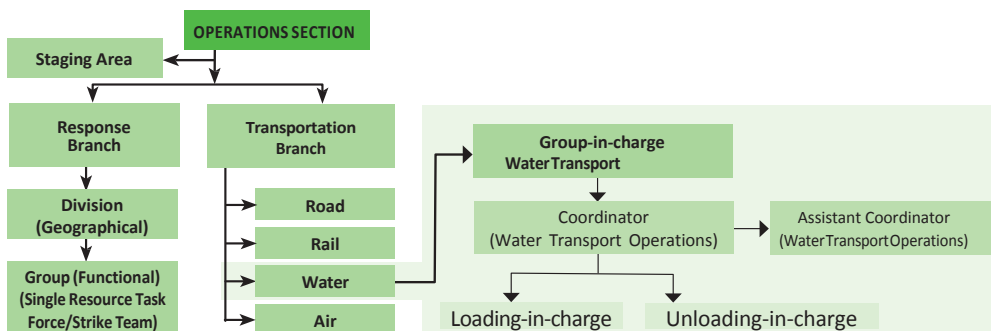


Fig. 9. Composition of Water Operations Group

#### The Group-in-charge (Water Operations) will:

- i. ensure transportation of rescue teams and relief materials by motor boats / country boats or by any other water transport to the affected sites with communication facilities and a local guide for guidance with each team;
- ii. requisition personnel support, if required;
- iii. determine coordination procedures with various designations as per IAP;
- iv. supervise all Water Operations and related activities associated with the incident;

- v. evaluate and ensure docking or harboring locations;
- vi. resolve conflicts, if any;
- vii. update Water Operations plan and share it with the higher authorities, including the LSC;
- viii. arrange for an accident investigation team as and when required and cooperate with the appropriate investigating authorities;
- ix. ensure availability of POL and other logistic support for boat operations;
- x. attend to the needs of the personnel working with him.
- xi. collect record of various activities performed (IRS Form-004) from Coordinator and other in-charges and send to TBD or OSC; and
- xii. perform such other duties as assigned by TBD or OSC.

#### **1.4.3.1 Roles and Responsibilities of Coordinator (Water Operations)**

The Coordinator (Water Operations) will:

- i. coordinate all activities relating to transportation of resources by motor boats / country boats etc. Activation of this position is contingent upon the complexity of the incident. There may be more than one Coordinator (Water) assigned to an incident with Loading and Unloading-in-charge;
- ii. survey assigned incident areas to analyze the situation and other potential problems;
- iii. coordinate with SAM for smooth transportation of relief materials, if required;
- iv. receive assignments and supervise Water transport movement activities;
- v. monitor all Water Operations for their safety;
- vi. ensure proper communications with Water transport personnel deployed in search and rescue as well as relief operations;
- vii. keep the records of supplies to different locations, Water transport movements etc;
- viii. report incidents or accidents that may occur in Water Operations to the TBD and other designated authorities;

- ix. assess requirements of POL etc. for Water Operations and ensure their availability;
- x. maintain liaison with Coordinator (Road Operations) as most relief supplies will arrive by road;
- xi. maintain record of various activities performed as per IRS Form-004 and send to the Group-in-charge or TBD; and
- xii. perform any other duties assigned by the OSC or TBD.

#### **1.4.3.2 Roles and Responsibilities of the Loading and Unloading-in-charge (Water Operations)**

The roles and responsibilities of Loading and Unloading-in-charge for Water Operations will be similar to those of their counterparts in the Road Operations Group. Para 1.4.1.3 will be referred.

#### **1.4.4 Air Operations**

For disaster response in India air operations may be needed for four tasks: (a) quick transportation of relief materials and resources to the affected area, (b) quick distribution of relief materials, food, medicine etc (Air dropping) in inaccessible and affected areas, (c) search and rescue of victims trapped in inaccessible areas, and (d) evacuation of casualties.

Normally, the Indian Air Force will be tasked for Air support Operations. At times, Indian Airlines, Pawan Hans and other private Airlines may also be utilized for transportation purposes. Different types of Aircrafts may need to be utilized for different mission requirements e.g. transport Aircraft or helicopter etc. from any of the agencies discussed above.

Close coordination at the National Level is essential for the launch of any Air Operations. It needs a close liaison among the NDMA, NEC, Air Force, Ministry of Civil Aviation, State RO and the ROs of the Districts where the Air Operations is to be performed. It is therefore very essential that a NO should be identified and designated in advance at all these levels for coordination and activation of the Air Support. The stakeholders should be aware of the designated NO for Air Operations.

In the context of the IRS, a ground support element will have to be placed at all required landing and takeoff facilities in the affected areas. The ground support requirements including Aviation Turbine Fuel (ATF), security etc. for the Air Operations will be the responsibility of the TBD. On taking the decision to launch Air Operations, the TBD will activate the Air Operations Group under

him. The Group will be headed by a supervisor and necessary organizational elements will have to be activated at all required landing and takeoff locations headed by an in-charge at airbases, helibases and helipads.

The composition of the Air Operations (Fig. 10.) will be: NOs who will be designated by the State and District level ROs at their respective level, Group-in-charge, who will work directly under the TBD for coordination of logistic support at Airbase, Helibase and Helipad.

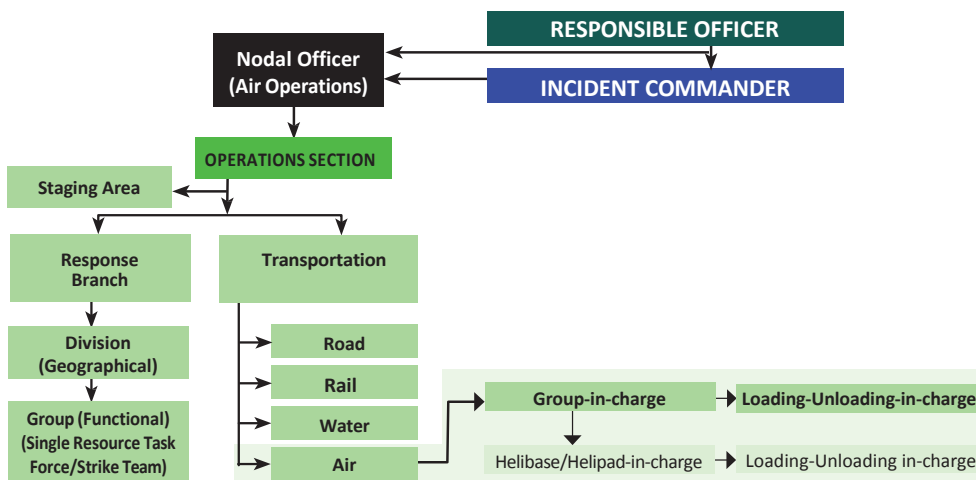


Fig. 10. Composition of Air Operations Group

#### 1.4.4.1 Roles and Responsibilities of Nodal Officer (NO)

**The Nodal Officer (Air Operations) will:**

- coordinate with concerned authorities for air operations;
- project the type of Air support required to the appropriate authorities based on the IAP and place the demand at least 24 hours in advance or as early as possible;
- inform the IC and OSC about the Air movements and landing schedules in their respective areas;
- ensure that relevant Maps of the incident locations are available with all agencies involved in the Air Operations to give the correct coordinates etc. of the locations where Air support is required;
- determine the suitability of Helipads or Helibases in coordination with the Air Force authorities and the State authorities;

- vi. maintain communication with Air Traffic Control and the ground support staff regarding the Air movements and other related activities;
- vii. assist the IC and the LSC in the procurement of required ATF etc.;
- viii. report on Air Operations activities to the RO; and
- ix. perform any other duties assigned by the RO and IC.

#### **1.4.4.2 Roles and Responsibilities of Group-in-charge (Air Operations)**

##### ***The Group-in-charge (Air Operations) will:***

- i. provide ground support to Air Operations as per the IAP;
- ii. report to TBD the progress of Air Operations and work in close coordination with the NO, IC, OSC and TBD;
- iii. ensure resources and supplies required for the Air Operations are available at the concerned locations;
- iv. keep appropriate Maps in order to provide correct coordinates to the pilots and others involved in the Air Operations;
- v. requisition additional personnel support, if required;
- vi. ensure refueling facilities are available at the landing and takeoff locations;
- vii. ensure that Helibase and Helipad locations are identified and approved by the appropriate authorities;
- viii. determine the need for assignment of personnel and equipment at each Helibase and Helipad;
- ix. ensure identification and marking of Helibases and Helipads;
- x. ensure that the communication systems are in place;
- xi. update landing and takeoff schedule of Aircrafts and Helicopters as informed by NO;
- xii. ensure preparation of the load manifest for proper loading or unloading of relief supplies;
- xiii. arrange for unloading and dispatch or storage of relief materials that arrive at the airports, helipads and helibase. In order to keep airports operational, special attention needs to be paid to unsolicited relief supplies that may arrive. They should be immediately cleared from the operational area;

- xiv. ensure that proper packaging and weighing facilities are in place and used for loading of relief materials;
- xv. liaise with the road operations group for the road transportation needs;
- xvi. ensure the functionality of Aircraft rescue and reigning service at Helibases and Helipads, security, proper lights, smoke candles/devices, weighing facilities, wind direction socks, etc. are in place;
- xvii. collect record of various activities performed (IRS Form-004) from Helibase and Helipad-in-charge and send to TBD or OSC or IC; and
- xviii. perform any other duties assigned by the TBD.

#### 1.4.4.3 Roles and Responsibilities of Helibase / Helipad-in-Charge

A Helibase is the main location for parking, fueling and carrying out the maintenance of the Helicopters. It may also be used for loading and unloading of relief materials. Helipads are temporary locations in the incident area where Helicopters can safely land and take off. The Helibase is often located at the Airport or at another location decided by the District



*Pic. 11. Helibase*

administration in consultation and approval by the agency operating the Helicopter. When more than one Helibase is established it will be designated by name of the incident with number. Helipads are established and used for operational purpose only like loading unloading of personnel and equipment and other relief materials etc. The Helibase / Helipad-in-charge will report to the TBD.

#### ***The Helibase, Helipad-in-charge will:***

- i. provide all ground support requirement of Helicopters at the location;
- ii. keep appropriate Maps in order to provide correct coordinates to the pilots;
- iii. survey the Helibase / Helipad area to analyze situation, potential Aircraft hazards and other likely problems;

- iv. ensure that the Helipad and Helibase is properly marked so that it is visible from the air for smooth landing of Aircrafts;
- v. coordinate with the ground supervisor for Helicopter Operations;
- vi. determine and implement ground and air safety requirements and procedures;
- vii. maintain continuous monitoring of the assigned Helibases and Helipads and remain vigilant for unusual happening or hazards that may affect the Air Operations and take precautionary measures;
- viii. ensure that all personnel deployed at the Helibases and Helipads are aware of the safety requirements;
- ix. establish ground communication facilities;
- x. notify supervisor immediately of any delays in Helicopter schedules;
- xi. ensure Aircraft rescue measures, fire-fighting services, lights, smoke candles, weighing facilities, wind direction socks, dust abatement measures and security etc. are in place and working properly at Helibases and Helipads;
- xii. ensure proper facilities for rest, refreshment, water and sanitation for the Air crew;
- xiii. inform the supervisor about the mission completion;
- xiv. maintain record of various activities performed as per IRS Form-004 and send to Group-in-charge; and
- xv. Perform any other duties assigned by the Group-in-charge.



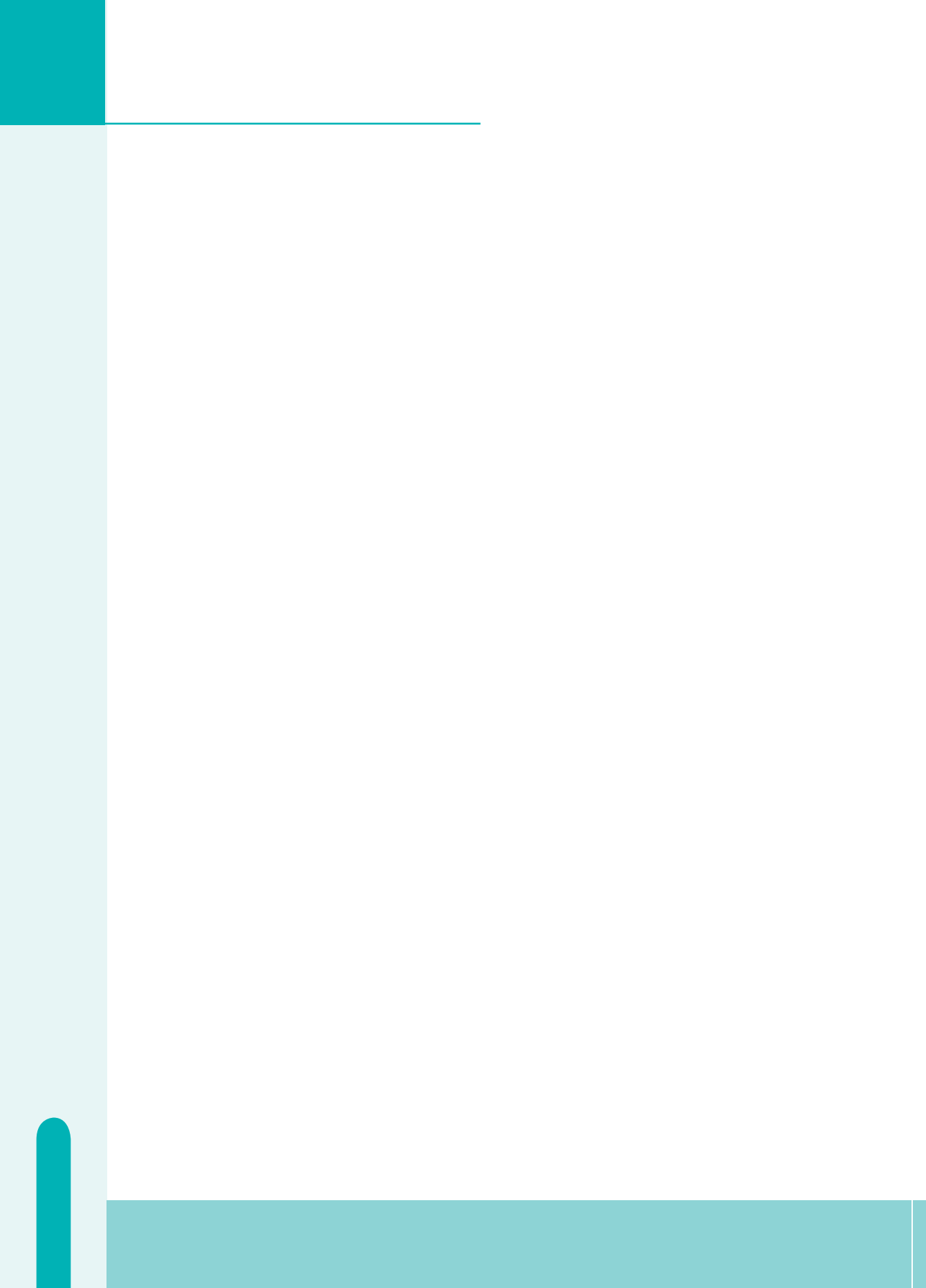
Pic. 12. Helipad

#### **1.4.4.4 Roles and Responsibilities of Loading/Unloading-in-Charge**

##### ***The Loading / Unloading-in-charge will:***

- i. be responsible for the safe Operations of Loading and Unloading of cargo and personnel at Helibases;
- ii. report to the Airbases, Helibases and Helipad-in-charge;

- iii. ensure load manifest of personnel and cargo;
- iv. ensure no inflammable material is loaded on the Aircrafts;
- v. supervise loading and unloading crew;
- vi. ensure proper packaging of the loads, keeping in view the weight restriction that may be imposed by the pilots due to weather conditions and make sure that weighing facilities are available for such purpose;
- vii. maintain record of various activities performed as per IRS Form-004 and send to Group-in-charge; and
- viii. Perform any other duties as assigned by the Group-in-charge, Helibase-in-charge and Helipad-in-charge.



# **Incident Response System Operations Section Chief**

## **IRS-Forms**

## **Participant Manual**

**National Institute of Disaster Management**  
Government of India, New Delhi

## Incident Briefing – IRS Form 001

Attach a separate sheet under each heading in case space is not sufficient

|                                                   |               |
|---------------------------------------------------|---------------|
| 1. Incident Name                                  |               |
| 2. Map Sketch (Give details of the affected site) |               |
|                                                   |               |
| Date Prepared                                     | Time Prepared |

Source: Adapted from ICS Form 201

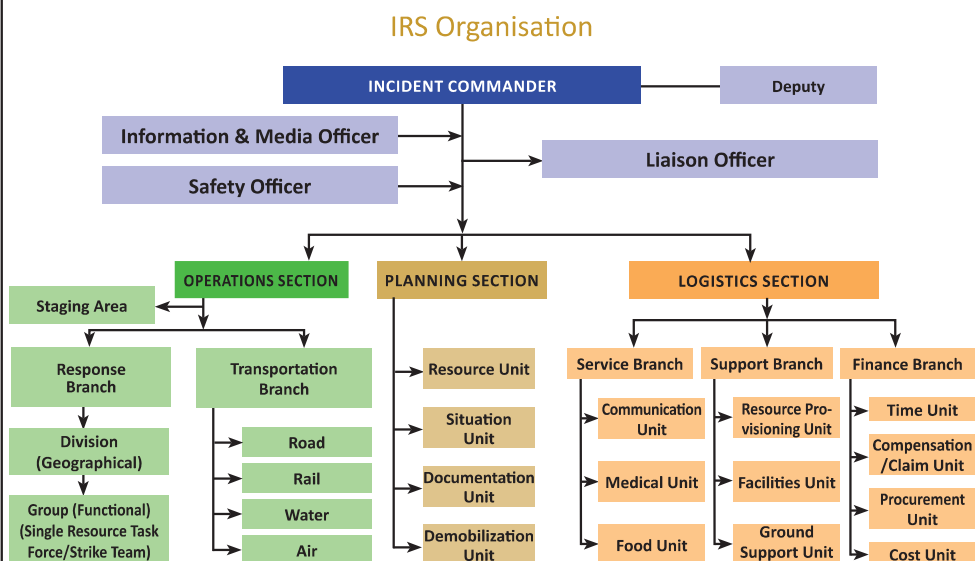
Contd...

| 3. Summary of Current Actions                                                       |                                                                                                                           |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| a. Action already taken                                                             | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |
| b. Action to be taken                                                               | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |
| c. Difficulties if any in response including mobilisation of resources and manpower | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |

Contd...

4. Current Organisation (Brief about activated section of IRT)

Highlight the activated Sections / Branches / Units



Contd...

| 5. Resources Summary                                             |        |     |                    |             |
|------------------------------------------------------------------|--------|-----|--------------------|-------------|
| Resources Ordered                                                | Source | ETA | Site of Deployment | Assignments |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
|                                                                  |        |     |                    |             |
| <div>Prepared by (Name and Position):</div> <div>Signature</div> |        |     |                    |             |

\*ETA: Expected Time of Arrival

Incident Status Summary (ISS) – IRS Form 002

(Major Components)

Attach a separate sheet in case space is not sufficient

|                                             |             |                     |                    |                                                                                   |      |                                                       |                                  |
|---------------------------------------------|-------------|---------------------|--------------------|-----------------------------------------------------------------------------------|------|-------------------------------------------------------|----------------------------------|
| 1. Name of the Incident :                   |             | 2. Name of the IRT: |                    | 3. Operational Period                                                             |      | 4. Prepared<br>Date:<br>Time:                         |                                  |
| 5. Name of the IC:                          |             | 6. Phone No. :      |                    |                                                                                   |      |                                                       |                                  |
| 7. Current Situation (Nos. of Casualty)     |             |                     |                    |                                                                                   |      |                                                       |                                  |
| (a)                                         | (b)         | (c)                 | (d)                | (e)                                                                               | Dead | Identified and<br>cremated /<br>buried dead<br>bodies | Un-<br>identified<br>dead bodies |
| Locations                                   | Injured     | Treated             | Discharged         | Patients referred (Specify Hospitals with<br>locations)                           |      |                                                       |                                  |
|                                             |             |                     |                    |                                                                                   |      |                                                       |                                  |
|                                             |             |                     |                    |                                                                                   |      |                                                       |                                  |
|                                             |             |                     |                    |                                                                                   |      |                                                       |                                  |
| 8. Status of Infrastructure (Put tick mark) |             |                     |                    |                                                                                   |      |                                                       |                                  |
| (a)                                         | (b)         | (c)                 | (d)                | 9. Threats, if any which may be increase severity of incident may be<br>indicated |      |                                                       |                                  |
| Infrastructure                              | Not Damaged | Partially Damaged   | Completely Damaged |                                                                                   |      |                                                       |                                  |
| Road                                        |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Railways                                    |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Airport                                     |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Water Supply                                |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Electricity Supply                          |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Communication Network                       |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Communities / Critical<br>Infrastructure    |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Residence                                   |             |                     |                    |                                                                                   |      |                                                       |                                  |
| Any Other (Specify)                         |             |                     |                    |                                                                                   |      |                                                       |                                  |

Contd...

| 10. Resources deployed for response with descriptions |                 |            |      |              |          |                        |  |     |  |
|-------------------------------------------------------|-----------------|------------|------|--------------|----------|------------------------|--|-----|--|
| (a)                                                   |                 | (b)        |      |              | (c)      |                        |  | (d) |  |
| Locations                                             | Resources       |            |      | ESF involved |          | Activities             |  |     |  |
|                                                       | Human Resources | Equipments |      | Gov.         | Non Gov. |                        |  |     |  |
|                                                       |                 | Kind       | Type | Quantity     |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
| 11. Need for additional resources                     |                 |            |      |              |          |                        |  |     |  |
| (a)                                                   |                 |            |      |              |          |                        |  |     |  |
| (b)                                                   |                 |            |      |              |          |                        |  |     |  |
| Resource Details                                      |                 |            |      |              |          |                        |  |     |  |
| Kind                                                  |                 | Type       |      | Quantity     |          | Source of Mobilization |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
| 12. Remarks if any:                                   |                 |            |      |              |          |                        |  |     |  |
|                                                       |                 |            |      |              |          |                        |  |     |  |
| 13. Name and designation of officer Prepared by _____ |                 |            |      |              |          |                        |  |     |  |

Source: Adapted from ICS Form 209

Unit Log – IRS Form 003

(Major Components)  
Attach a separate sheet if space is not sufficient

Operation Section Chief

|                                                                                             |                                 |                           |  |                        |  |                   |               |
|---------------------------------------------------------------------------------------------|---------------------------------|---------------------------|--|------------------------|--|-------------------|---------------|
| 1. Name of the incident:                                                                    |                                 | 2. Name of the Section:   |  | 3. Operational Period: |  | 4. Prepared       |               |
|                                                                                             |                                 |                           |  |                        |  | Date:             |               |
|                                                                                             |                                 |                           |  |                        |  | Time:             |               |
| 5. Name of the Units                                                                        | 6. Work Assigned with Resources | 7. Name of the Site       |  |                        |  | 8. Status of work |               |
|                                                                                             |                                 |                           |  |                        |  | (a)               | (b)           |
|                                                                                             |                                 |                           |  |                        |  | Completed         | Not completed |
|                                                                                             |                                 |                           |  |                        |  |                   |               |
|                                                                                             |                                 |                           |  |                        |  |                   |               |
|                                                                                             |                                 |                           |  |                        |  |                   |               |
|                                                                                             |                                 |                           |  |                        |  |                   |               |
|                                                                                             |                                 |                           |  |                        |  |                   |               |
|                                                                                             |                                 |                           |  |                        |  |                   |               |
| 9. Specify accident / incident / weather conditions which may increase severity of incident |                                 |                           |  |                        |  |                   |               |
| (a)                                                                                         | (b)                             | (c)                       |  |                        |  |                   |               |
| Time                                                                                        | Locations                       | Action taken or suggested |  |                        |  |                   |               |
|                                                                                             |                                 |                           |  |                        |  |                   |               |
| 10. Name and designation of officer Prepared by                                             |                                 |                           |  |                        |  |                   |               |

Source: Adapted from ICS Form 214

## Record of Performed Activities – IRS Form 004

### (Major Components)

*(Attach a separate sheet, if space is not sufficient)*

|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----|-----|-----------|---------------|
| <b>1. Name of the Incident:</b><br>_____                                                                                                                                                                                            | <b>2. Operational period</b><br>_____                                                                                                                                                                                                                                                                                                                 | <b>3. Prepared</b><br>Date: _____<br>Time: _____ |     |     |           |               |
| <b>4. Name of the</b> Section: _____<br>Branch / Division / Unit: _____                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
| <b>5. Name of the Facilities where</b> <i>(ICP / Incident Base / Camp / Relief Camp / Staging Area, Medical Camp / Helibase / Helipad / Any other )</i> <b>Division or Unit is deployed (Specify with exact location).</b><br>_____ |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
| <b>6. Work Assigned</b>                                                                                                                                                                                                             | <b>7. Status of work</b> <i>(Put tick mark)</i><br><table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">(a)</td> <td style="width: 50%; text-align: center;">(b)</td> </tr> <tr> <td style="text-align: center;">Completed</td> <td style="text-align: center;">Not completed</td> </tr> </table> |                                                  | (a) | (b) | Completed | Not completed |
| (a)                                                                                                                                                                                                                                 | (b)                                                                                                                                                                                                                                                                                                                                                   |                                                  |     |     |           |               |
| Completed                                                                                                                                                                                                                           | Not completed                                                                                                                                                                                                                                                                                                                                         |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
| <b>8. Any incident / accident during the response and action taken</b>                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
| (a)                                                                                                                                                                                                                                 | (b)                                                                                                                                                                                                                                                                                                                                                   |                                                  |     |     |           |               |
| Incident / Accident (Specify, if any )                                                                                                                                                                                              | Action Taken                                                                                                                                                                                                                                                                                                                                          |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                  |     |     |           |               |
| <b>9. Name and designation of officer Prepared by</b><br><i>(Specify Name Position and Section):</i><br><br>_____<br><br>_____<br><br><i>(Prepared by all responders below the Section)</i>                                         | <b>10. Despatch:</b><br>Date: _____<br>Time: _____<br><br>_____<br><b>11. Signature of Receiving Officer</b>                                                                                                                                                                                                                                          |                                                  |     |     |           |               |

## Organization Assignment List – IRS Form 005

### (Major Components)

*(Attach a separate sheet if space is not sufficient)*

This assignment list will be prepared as per IAP and will be circulated among all the responders and supervisory staff at the beginning of each operational period by the respective Section chiefs.

|                                                            |                                        |                                                   |
|------------------------------------------------------------|----------------------------------------|---------------------------------------------------|
| <b>1. Name of the Incident:</b><br>_____                   | <b>2. Operational Period:</b><br>_____ | <b>3. Prepared:</b><br>Date: _____<br>Time: _____ |
| <b>4. Name of the section to whom work assigned:</b> _____ |                                        |                                                   |
| <b>5. Name of the supervisory Officer concerned:</b> _____ |                                        |                                                   |
| <b>6. Name of the responder:</b> _____                     |                                        |                                                   |
| <b>7. list of task assigned</b>                            |                                        |                                                   |
| (a) _____                                                  |                                        |                                                   |
| (b) _____                                                  |                                        |                                                   |
| (c) _____                                                  |                                        |                                                   |
| (d) _____                                                  |                                        |                                                   |
| (e) _____                                                  |                                        |                                                   |
| (f) _____                                                  |                                        |                                                   |
| (g) _____                                                  |                                        |                                                   |
| (h) _____                                                  |                                        |                                                   |
| (i) _____                                                  |                                        |                                                   |
| _____                                                      |                                        |                                                   |
| <b>8. Name and designation of officer Prepared by:</b>     |                                        | <b>9. Approved by:</b>                            |

Source: Adapted from ICS Form 203

(Attach a separate sheet if space is not sufficient)

[illegible]

Source: Adapted from ICS Form 211

On Duty Officer List – IRS Form 007

(Major Components)

(Attach a separate sheet if space is not sufficient)  
This will be maintained by all the Section and sent to RO through IC

| 1. Name of the incident:                        |                    | 2. Name of Section / Branch / Division / Unit (Specify): |                          | 3. Operational Period:             |                           | 4. Prepared                               |                           |
|-------------------------------------------------|--------------------|----------------------------------------------------------|--------------------------|------------------------------------|---------------------------|-------------------------------------------|---------------------------|
|                                                 |                    |                                                          |                          |                                    |                           | Date:                                     |                           |
|                                                 |                    |                                                          |                          |                                    |                           | Time:                                     |                           |
| Sl                                              | 5. Name of Officer | 6. Designation in Normal Period                          | 7. Phone No. / E-mail ID | 8. IRS Position for the Incident   | 9. Location of Deployment | 10. Location of Camp with Contact Details | 11. Any other Information |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
|                                                 |                    |                                                          |                          |                                    |                           |                                           |                           |
| 12. Name and designation of officer Prepared by |                    |                                                          |                          | 13. Signature of the Section Chief |                           | 14. Dispatch                              |                           |
|                                                 |                    |                                                          |                          |                                    |                           | Date                                      |                           |
|                                                 |                    |                                                          |                          |                                    |                           | Time                                      |                           |

*Attach a separate sheet if space is not sufficient*

|                          |  |                        |  |                                             |  |                                                      |  |
|--------------------------|--|------------------------|--|---------------------------------------------|--|------------------------------------------------------|--|
| 1. Name of the incident: |  | 2. Operational period: |  | 3. Prepared                                 |  | 4. Total Nos. of medical aid camp to be established: |  |
|                          |  |                        |  | Date:                                       |  |                                                      |  |
|                          |  |                        |  | Time:                                       |  |                                                      |  |
| 4.1 Sl.No.               |  | 4.2 Location (s)       |  | 4.3 Resources Available in the medical camp |  |                                                      |  |
|                          |  |                        |  | (a)                                         |  | (b)                                                  |  |
|                          |  |                        |  | (c)                                         |  | (d)                                                  |  |
|                          |  |                        |  | (e)                                         |  | (f)                                                  |  |
|                          |  |                        |  | (g)                                         |  | (h)                                                  |  |
|                          |  |                        |  | (i)                                         |  | (j)                                                  |  |
|                          |  |                        |  | (k)                                         |  | (l)                                                  |  |
|                          |  |                        |  | (m)                                         |  | (n)                                                  |  |
|                          |  |                        |  | (o)                                         |  | (p)                                                  |  |
|                          |  |                        |  | (q)                                         |  | (r)                                                  |  |
|                          |  |                        |  | (s)                                         |  | (t)                                                  |  |
|                          |  |                        |  | (u)                                         |  | (v)                                                  |  |
|                          |  |                        |  | (w)                                         |  | (x)                                                  |  |
|                          |  |                        |  | (y)                                         |  | (z)                                                  |  |
|                          |  |                        |  | (aa)                                        |  | (ab)                                                 |  |
|                          |  |                        |  | (ac)                                        |  | (ad)                                                 |  |
|                          |  |                        |  | (ae)                                        |  | (af)                                                 |  |
|                          |  |                        |  | (ag)                                        |  | (ah)                                                 |  |
|                          |  |                        |  | (ai)                                        |  | (aj)                                                 |  |
|                          |  |                        |  | (ak)                                        |  | (al)                                                 |  |
|                          |  |                        |  | (am)                                        |  | (an)                                                 |  |
|                          |  |                        |  | (ao)                                        |  | (ap)                                                 |  |
|                          |  |                        |  | (aq)                                        |  | (ar)                                                 |  |
|                          |  |                        |  | (as)                                        |  | (at)                                                 |  |
|                          |  |                        |  | (au)                                        |  | (av)                                                 |  |
|                          |  |                        |  | (aw)                                        |  | (ax)                                                 |  |
|                          |  |                        |  | (ay)                                        |  | (az)                                                 |  |
|                          |  |                        |  | (ba)                                        |  | (bb)                                                 |  |
|                          |  |                        |  | (bc)                                        |  | (bd)                                                 |  |
|                          |  |                        |  | (be)                                        |  | (bf)                                                 |  |
|                          |  |                        |  | (bg)                                        |  | (bh)                                                 |  |
|                          |  |                        |  | (bi)                                        |  | (bj)                                                 |  |
|                          |  |                        |  | (bk)                                        |  | (bl)                                                 |  |
|                          |  |                        |  | (bm)                                        |  | (bn)                                                 |  |
|                          |  |                        |  | (bo)                                        |  | (bp)                                                 |  |
|                          |  |                        |  | (bq)                                        |  | (br)                                                 |  |
|                          |  |                        |  | (bs)                                        |  | (bt)                                                 |  |
|                          |  |                        |  | (bu)                                        |  | (bv)                                                 |  |
|                          |  |                        |  | (bw)                                        |  | (bx)                                                 |  |
|                          |  |                        |  | (by)                                        |  | (bz)                                                 |  |
|                          |  |                        |  | (ca)                                        |  | (cb)                                                 |  |
|                          |  |                        |  | (cc)                                        |  | (cd)                                                 |  |
|                          |  |                        |  | (ce)                                        |  | (cf)                                                 |  |
|                          |  |                        |  | (cg)                                        |  | (ch)                                                 |  |
|                          |  |                        |  | (ci)                                        |  | (cj)                                                 |  |
|                          |  |                        |  | (ck)                                        |  | (cl)                                                 |  |
|                          |  |                        |  | (cm)                                        |  | (cn)                                                 |  |
|                          |  |                        |  | (co)                                        |  | (cp)                                                 |  |
|                          |  |                        |  | (cq)                                        |  | (cr)                                                 |  |
|                          |  |                        |  | (cs)                                        |  | (ct)                                                 |  |
|                          |  |                        |  | (cu)                                        |  | (cv)                                                 |  |
|                          |  |                        |  | (cw)                                        |  | (cx)                                                 |  |
|                          |  |                        |  | (cy)                                        |  | (cz)                                                 |  |
|                          |  |                        |  | (da)                                        |  | (db)                                                 |  |
|                          |  |                        |  | (dc)                                        |  | (dd)                                                 |  |
|                          |  |                        |  | (de)                                        |  | (df)                                                 |  |
|                          |  |                        |  | (dg)                                        |  | (dh)                                                 |  |
|                          |  |                        |  | (di)                                        |  | (dj)                                                 |  |
|                          |  |                        |  | (dk)                                        |  | (dl)                                                 |  |
|                          |  |                        |  | (dm)                                        |  | (dn)                                                 |  |
|                          |  |                        |  | (do)                                        |  | (dp)                                                 |  |
|                          |  |                        |  | (dq)                                        |  | (dr)                                                 |  |
|                          |  |                        |  | (ds)                                        |  | (dt)                                                 |  |
|                          |  |                        |  | (du)                                        |  | (dv)                                                 |  |
|                          |  |                        |  | (dw)                                        |  | (dx)                                                 |  |
|                          |  |                        |  | (dy)                                        |  | (dz)                                                 |  |
|                          |  |                        |  | (ea)                                        |  | (eb)                                                 |  |
|                          |  |                        |  | (ec)                                        |  | (ed)                                                 |  |
|                          |  |                        |  | (ee)                                        |  | (ef)                                                 |  |
|                          |  |                        |  | (eg)                                        |  | (eh)                                                 |  |
|                          |  |                        |  | (ei)                                        |  | (ej)                                                 |  |
|                          |  |                        |  | (ek)                                        |  | (el)                                                 |  |
|                          |  |                        |  | (em)                                        |  | (en)                                                 |  |
|                          |  |                        |  | (eo)                                        |  | (ep)                                                 |  |
|                          |  |                        |  | (eq)                                        |  | (er)                                                 |  |
|                          |  |                        |  | (es)                                        |  | (et)                                                 |  |
|                          |  |                        |  | (eu)                                        |  | (ev)                                                 |  |
|                          |  |                        |  | (ew)                                        |  | (ex)                                                 |  |
|                          |  |                        |  | (ey)                                        |  | (ez)                                                 |  |
|                          |  |                        |  | (fa)                                        |  | (fb)                                                 |  |
|                          |  |                        |  | (fc)                                        |  | (fd)                                                 |  |
|                          |  |                        |  | (fe)                                        |  | (ff)                                                 |  |
|                          |  |                        |  | (fg)                                        |  | (fh)                                                 |  |
|                          |  |                        |  | (fi)                                        |  | (fj)                                                 |  |
|                          |  |                        |  | (fk)                                        |  | (fl)                                                 |  |
|                          |  |                        |  | (fm)                                        |  | (fn)                                                 |  |
|                          |  |                        |  | (fo)                                        |  | (fp)                                                 |  |
|                          |  |                        |  | (fq)                                        |  | (fr)                                                 |  |
|                          |  |                        |  | (fs)                                        |  | (ft)                                                 |  |
|                          |  |                        |  | (fu)                                        |  | (fv)                                                 |  |
|                          |  |                        |  | (fw)                                        |  | (fx)                                                 |  |
|                          |  |                        |  |                                             |  |                                                      |  |

Source: Adapted from ICS Form 206

**(Attach a separate sheet if space is not sufficient)**

Source: Adapted from ICS Form 205

Demobilisation Plan - IRS Form 010

(Major Components)

(Attach a separate sheet if space is not sufficient)

|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|--------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------|-------------------|-----------------------------|-----------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|
| 1. Name of the incident:                                                 |                                                    | 2. Name of Section / Branch / Division / Unit to be demobilized (Specify): |                   | 3. Operational Period:      |                                                     | 4. Prepared Date:<br>Time:                              |                                                           |
| 5. Name of responder (s) / details of resources to be demobilized        |                                                    | 6. Location from where demobilization will take place                      | 7. Date & Time    | 8. Mode of transport        | 9. Transit destination, if any                      | 10. Final Destination & name of agency to whom returned | 11. Ultimate destination agency notified or not<br>Yes No |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
| 12. Demobilisation plan for out of service equipments and sick personnel |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
| (a)                                                                      | (b)                                                | (c)                                                                        | (d)               | (e)                         | (f)                                                 | (g)                                                     |                                                           |
| Name of sick personnel / out of service equipments                       | Location from where demobilisation will take place | Date & Time                                                                | Mode of transport | Transit destination, if any | Final Destination & name of agency to whom returned | Ultimate destination agency notified or not<br>Yes No   |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
| 13. Name and designation of officer Prepared by                          |                                                    |                                                                            |                   |                             |                                                     |                                                         | 15. Issued by                                             |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         | 14. Approved by                                           |
|                                                                          |                                                    |                                                                            |                   |                             |                                                     |                                                         |                                                           |

Source: Adapted from ICS Form 221

| IRS - Operational Planning Worksheet - IRS 015 |                                    |                                                     |              |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|------------------------------------------------|------------------------------------|-----------------------------------------------------|--------------|------------------------|----|--|--|--|--|--|--|--------------------------|----------------------------|---------------------------------------|--------------------------|-------------------------------|
| 1. Incident Name:                              |                                    |                                                     |              | 2. Operational Period: |    |  |  |  |  |  |  | Date From:<br>Time From: |                            | Date To:<br>Time To:                  |                          |                               |
| 3. Branch                                      | 4. Division,<br>Group, or<br>Other | 5. Works<br>Assignment &<br>Special<br>Instructions | 6. Resources |                        |    |  |  |  |  |  |  |                          | 7. Overhead<br>Position(s) | 8. Special<br>Equipment &<br>Supplies | 9. Reporting<br>Location | 10. Requested<br>Arrival Time |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Need         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Req.         |                        |    |  |  |  |  |  |  |                          |                            |                                       |                          |                               |
|                                                |                                    |                                                     | Have         |                        | </ |  |  |  |  |  |  |                          |                            |                                       |                          |                               |

