

Disaster Management Cycle



Response - Definition

- 1) contain or mitigate the effects of a disastrous event to prevent any further loss of life and/or property

and

- (2) Restore normalcy in its immediate aftermath.



Incident Response System

- Management system
- Based on principles of management
- Used in disasters and events
- Used in day-to-day life



High Powered Committee-Sri. J. C. Pant

- Recommendations:
- -Best practices:
- ICS
- Specialized teams (Hazmat, Emergency med. Services)
- FOG
- EOC



Incident Command System- Its History

- 1970s wildfire in California
- Different Agencies worked together
- Their problems
- FIRESCOPE (Firefighting Resources of California for Organizing Probable Emergencies)
- Became a national response mechanism in USA
- Adapted as IRS in our country

Problems Faced by Agencies Involved in Firefighting

- Too many people reporting to one supervisor
- Different organizational structures in different agencies
- Lack of reliable incident information
- Non-standard terminology
- Inadequate communications
- Unspecified incident objective
- Lack of designated facilities, for ex: where to operate from and where to store materials etc



When is ICS/ IRS used?

- Mass casualty events: bus crash, aviation incidents, fires, bomb threat
- Management tool for emergencies
- Some private companies use it to better coordinate resources
- Events



Event

- There is a Minister's programme for distribution of assets in your Mandal.
- Let us say one nodal Offr. is responsible for organizing this event.
- What all do you have to organize?
- How will you organize it?







Principles & Features of IRS

- **Five primary functions of IRS**
- Command
- Planning
- Logistics
- Operations
- Finance and Administration



Organizational Flexibility

- Can be used in an
- EVENT
- DISASTER
- INCIDENT
- SIZE OF THE EVENT / DISASTER / INCIDENT MAY BE BIG OR SMALL



2) Management by Objectives



MBO

- Highjacking incident
- **Objective:** Release all hostages within 72 hours safely with no further casualties
- **Strategy:**
 - 1) Release through talks with the hijackers
 - 2) Release through force
- **Agency Policy:**
 - No compromise with the hijackers
- **Tactics:**
 - Use commandoes to release all hostages safely

MBO

- **Objective:**
- Reduce reservoir level to 35 feet by 0800 hours tomorrow
- **Strategy:**
- 1) Divert / reduce inflow
- 2) Open spillways
- 3) Use pumps
- **Tactics:**
- Use truck-mounted pumps on the north and discharge into spillway

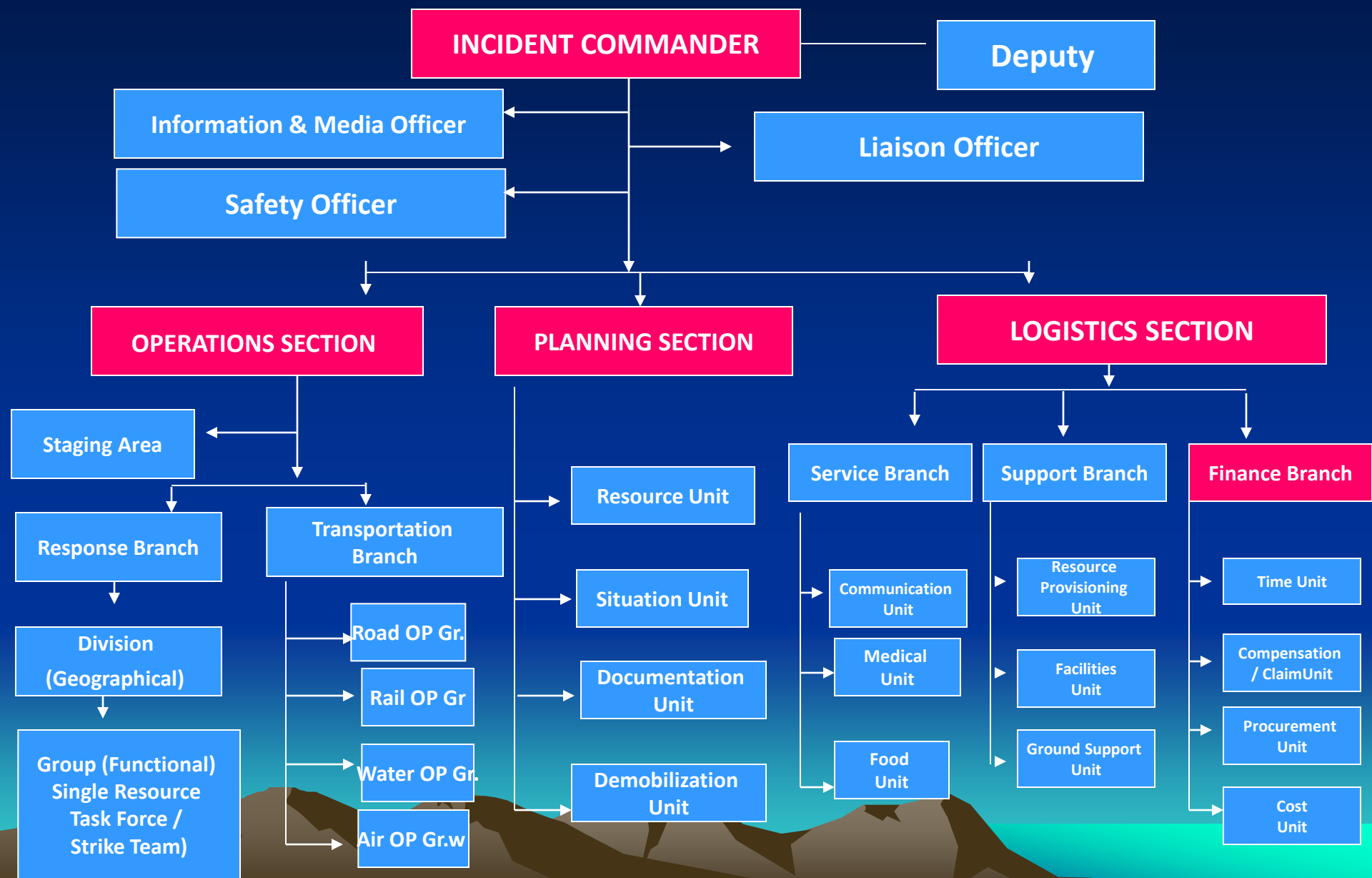


Overall priorities of Objectives

- Incident objectives are based on the following priorities:
- Life saving
- Stabilization of incident
- Saving property



Incident Response System Organisation Chart



Unity and Chain of Command

- Orderly line of authority (chain of command)

RO



IC



Planning Section Chief



Unit Leader

Unity of command

- Report to only one supervisor
- Receive work assignments from one supervisor



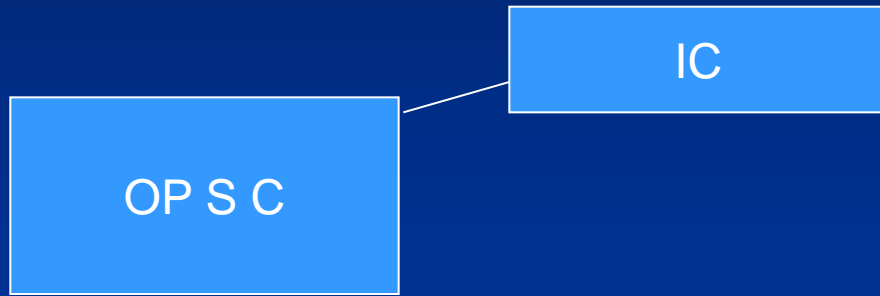
Span of Control

- No. of individuals one supervisor can effectively manage.
- 3-7 permissible
- 5 desirable



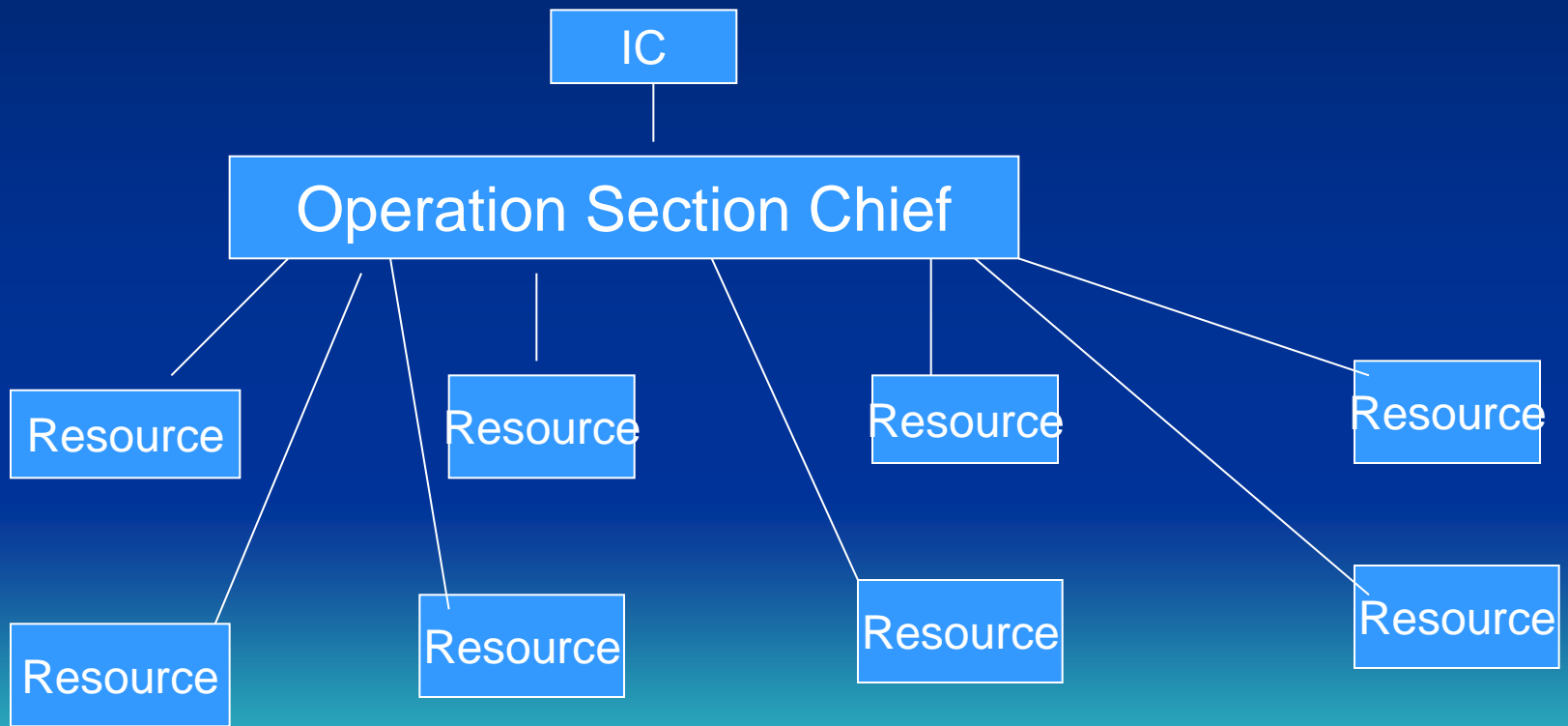
Situation

- Flash flooding has occurred.
- Initially, only IC & OP section chief were there.



Situation

- Flash flooding increased. Then 8 Resources report to OP section chief

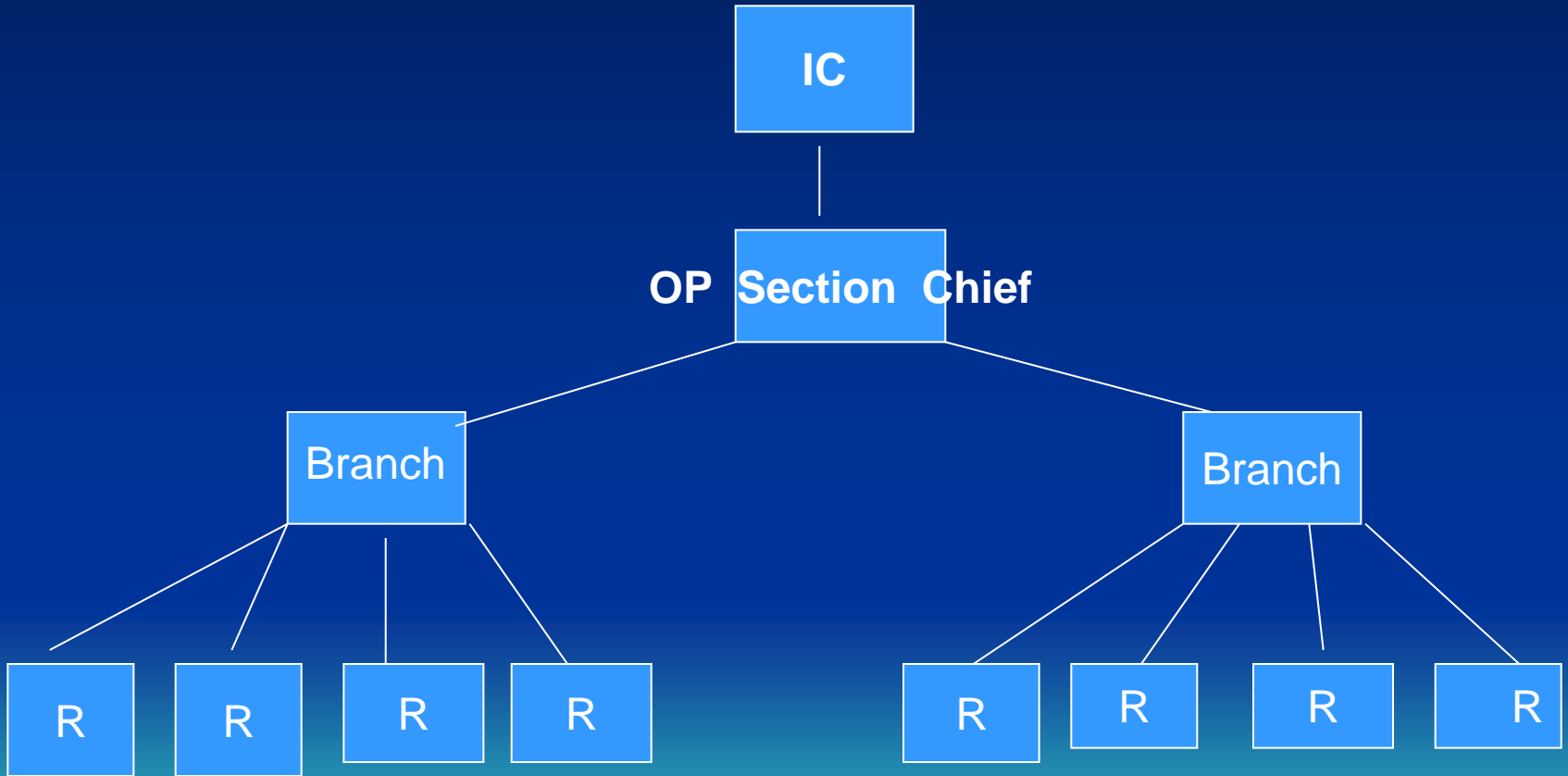


Flash flooding

- How will you show the Operation section chief and the 8 Resources as per span of control?



As per span of control



Modular Organization

- Observe how the organization grows from top to bottom as the complexity of the flash flooding increases. This is called modular organization.



Personnel Accountability

- Unity and Chain of command
- Check in form
- Resource status keeping systems like
T-card holder

Division assignment list



Integrated Communications

- Hardware
- Planning for all available frequencies / nets
- Communication should be in plain English and not code
- Why plain English? Why not code?
 - EMT=Emergency Medical Technician
 - EMT=Emergency Management Team
 - EMT=E-mail money transfer
 - EMT=Effective methods team
 - EMT=Emergency Medical Treatment
 - EMT=El Monte, CA (Airport code)

Resource Status

- Required
- Available
- Assigned
- Out-of-Service



Resource Management

- Single Resource
- Strike Team
- Task Force



SINGLE RESOURCE - 1



SINGLE RESOURCE - 2



SINGLE RESOURCE - 3



SINGLE RESOURCE - 4



SINGLE RESOURCE - 5



STRIKE TEAM - 1



STRIKE TEAM - 2



STRIKE TEAM - 3

TASK FORCE



Why Resource Management?

- Maximizes effective use
- Reduces communication needs
- Span of control is maintained



Type of Resources

- 12 ton TATA Truck
- 6 ton TATA Truck
- Mahindra DPDP/4WD Ambulance
- TATA winger AMBULANCE
- TATA ambulance can be

I-two- stretcher

II-single stretcher



Common Terminology

- Common terminology can be applied to
- Organizational elements = **OP Section**
- Position titles = **OP Section Chief**
- Resources = **Single R, ST, TF**
- Facilities



Map Designations for ICS Facilities



Incident Command Post (Name)



Staging Areas (Name)



Base (Name)



**Camp (Name)
Relief Camp - RC**



Helibase (Name)



Helipad (Number or name)

HP-3

Unified Command

- Used for multiagency or multijurisdictional incidents
- Develop a common set of objectives.
- *Should have only one*
- ICP
- IAP (written / oral plan)
- OSC

Organizational Structures

- Louisiana national park : 1900 acres –a prof. lost his way. The cab driver waiting outside reported after a couple of hrs.
- **I : Regular command structure** using local area IMT involving Helicopters, ATVs, boats, foot patrol

- **II: Unified command**

Intermountain All Hazard IMT-**IC**

Louisiana SAR-**IC**

Gulf Coast SAR-**IC**

Jefferson Parish Fire Dept.-**IC**

72 members from 12 Parks of 12 States-**IC**

Establishment and Transfer of command

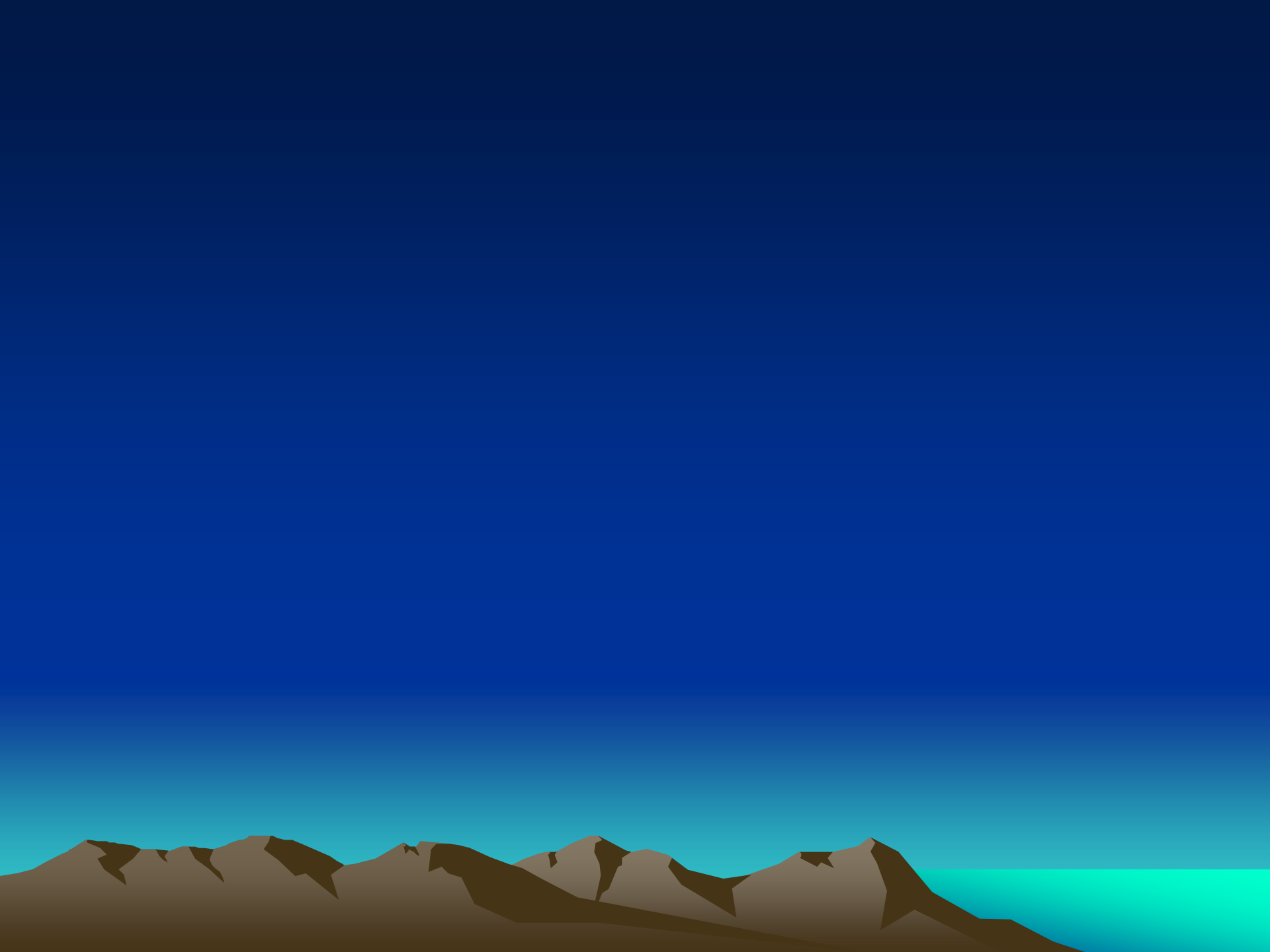
- When more qualified team comes
- When IMT is overwhelmed / tired
- Jurisdiction changes

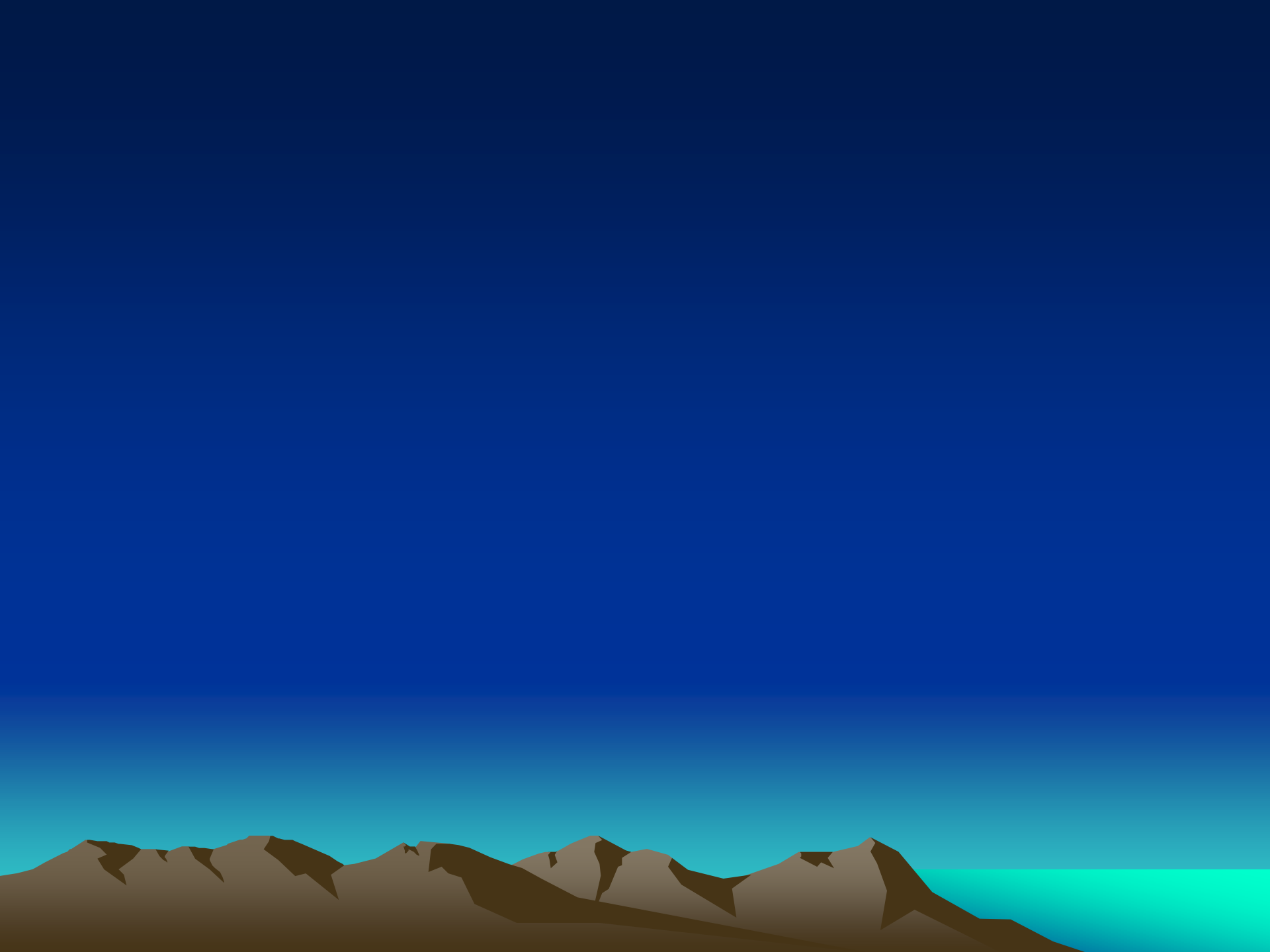


Incident Action Plan

- To provide all incident supervisory personnel with appropriate directions
- All key functions involved in the organization will sit together and plan
- (Finance may be left out as an option)







The Disaster Management Act, 2005


- The Disaster Management Act, 2005 was enacted on 26th December, 2005
- Landmark legislation for DM
- Emphasis on mitigation aspects



The Disaster Management Act, 2005

- The Act provides for establishment of
 - NDMA (National Disaster Management Authority)
 - SDMA (State Disaster Management Authority)
 - DDMA (District Disaster Management Authority)
- Act provides for constitution of Disaster Response Fund and Disaster Mitigation Fund at National, State and District level.
- Establishment of NIDM and NDRF.
- Provides penalties for obstruction, false claims, misappropriation etc.
- There shall be no discrimination on the ground of sex, caste, community, descent or religion in providing compensation and relief.

Other Provisions in DM Act

- **Establishment of District Disaster Mitigation and District Response Fund**
 - **Emergency Procurement and Accounting**
 - **Power of requisition of resources, provision of vehicles etc. for rescue operations etc. and payment of compensation for such resources etc.**
 - **Directions to media for communication of warnings etc.**
- 

Offences and Penalties

- **Whoever makes a false claims from Officers**
- **Misappropriates relief materials**
- **If one is spreading false warning**
- **Any officer on whom any duty has been imposed who ceases or refuses to perform or withdraws from the duties of office shall, unless he has obtained express written permission**
- **HOD to be held guilty for offences by the Dept. unless otherwise proved**



Management by Objectives

- Mother and son travel along hills
- Mother realizes son is not seen; 20 mins have passed
- What does she do?



MBO

- **Objectives :**
- a) Mark area of maximum probability of finding the boy
- b) Cut off the paths which lead from the hill
- c) Identify danger zones in the area for safety of boy
- d) Rescue the boy in 12 hrs from now
- **Strategy:**
- Aerial search
- Search on ground
- **Tactics:**
- For a)? For b)? For c) ?
- **If you don't find the boy in 12 hrs what do you do?**