NATIONAL OIL SPILL DISASTER CONTINGENCY PLAN

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Introduction

- First promulgated in July 1996
- Updated in 1998, 1999, 2000, 2002 and 2006
- Originally designed for responding to oil spills

- Completely revised to reflect current international norms and best practices, key relevant national regulations, and cumulative experience
- Revised version facilitates national preparedness to HNS incidents and also fulfils obligation to have in place national plan to respond to HNS incidents
- Revised NOS-DCP 2014 comprises nine Chapters and 41 Appendices

Scheme of Chapters

1. Introduction
2. Emergency Organization
3. Division of Responsibility
4. Preparedness Management
5. Discovery and Notification
6. Initial Response
7. Response to Oil Spills
8. Response to HNS Incidents
9. Plan Review

Hierarchy of Contingency Plans

Objectives of NOS-DCP

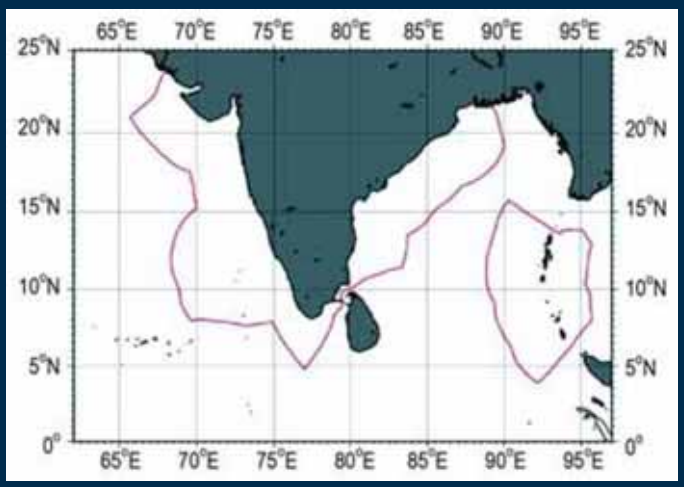
To establish…

- Effective system for detection and reporting of spill
- Adequate measures for preparedness for pollution
- Rapid and effective response to oil pollution
- Procedures for disposal of recovered material in an environmentally sound manner
- Record-keeping procedures for recovery of costs

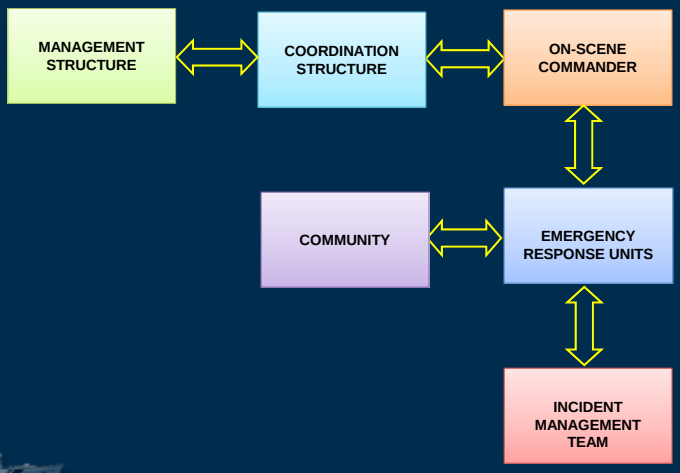
Definitions Included in the Plan

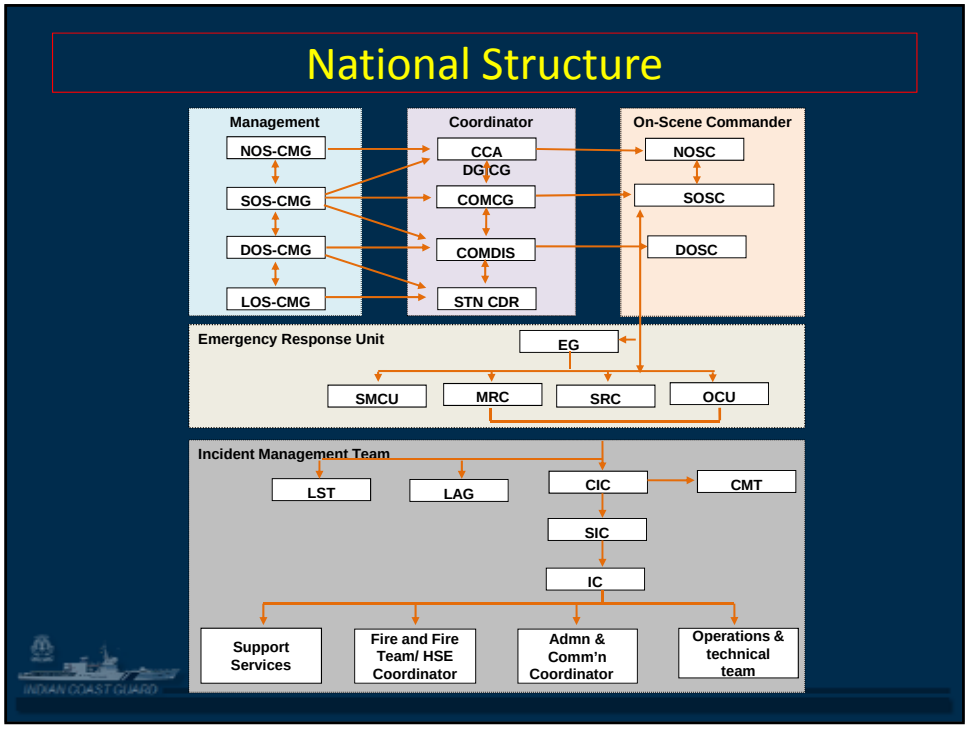
- Ship
- Offshore installation
- Oil
- Oily mixture
- Crude oil
- Noxious liquid substance
- Harmful substance
- Hazardous and noxious substance
- Incident
- Discharge
- Pollution damage
- Preventive measures

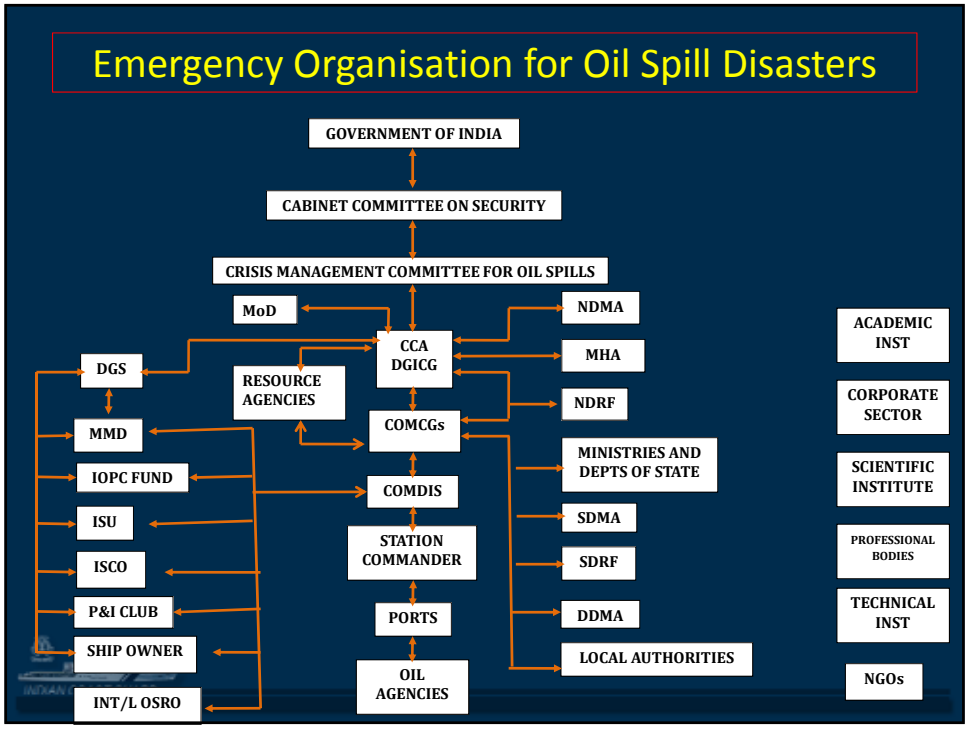
National Pollution Response Area



Block Diagram - National Structure




National Structure
Management
NOS-CMG
SOS-CMG
DOS-CMG
LOS-CMG
Coordinator
CCA
DG ICG
COMCG
COMDIS
STN CDR
On-Scene Commander
NOSC
SOSC
DOSC
Emergency Response Unit
EG
SMCU
MRC
SRC
OCU
Incident Management Team
LST
LAG
CIC
CMT
SIC
IC
Support Services
Fire and Fire Team/ HSE Coordinator
Admn & Comm'n Coordinator
Operations & technical team


Emergency Organisation for Oil Spill Disasters
GOVERNMENT OF INDIA
CABINET COMMITTEE ON SECURITY
CRISIS MANAGEMENT COMMITTEE FOR OIL SPILLS
MoD
CCA
DGICG
DGS
RESOURCE AGENCIES
MMD
IOPC FUND
ISU
ISCO
P&I CLUB
SHIP OWNER
INT/L OSRO
COMCGs
COMDIS
STATION COMMANDER
PORTS
OIL AGENCIES
NDMA
MHA
NDRF
MINISTRIES AND DEPTS OF STATE
SDMA
SDRF
DDMA
LOCAL AUTHORITIES
ACADEMIC INST
CORPORATE SECTOR
SCIENTIFIC INSTITUTE
PROFESSIONAL BODIES
TECHNICAL INST
NGOs

Functions of NOS-CMG

- Continuously monitor the post incident situation
- Suggest measures to prevent recurrence of incidents
- Arrange manpower, equipment, resources and financial assistance
- Evaluate response to major oil pollution incidents
- Review adequacy of national and other contingency plans
- Suggest measures to reduce risk of pollution from ports/ oil installations

Functions of SOS-CMG

- Review local and facility contingency plans
- Assist the State Government in planning, preparedness and mitigation of major pollution incidents
- Review/ facilitate work of District Crisis Management groups
- Nominate personnel to the Local Action Group (LAG) and Local Action Group Support Team (LST)
- Publish a list of experts and officials in the State who are concerned with the management of oil pollution incidents

Composition of SOS-CMG

Chief Secretary	Chairperson
Secretary (Labour)	Member.
Secretary (Environment)	Member
Secretary (Health)	Member
Secretary (Industries)	Member
Secretary (Public Health Engg.)	Member
Secretary (Fisheries)	Member
Chairman, State Pollution Control Board	Member
4-Experts (Industrial Safety & Health) nominated by State Govt.	Member
Secretary/Commissioner(Transport)	Member
Director (Industrial Safety)/ Chief Inspector of Factories	Member
Fire Chief	Member
Commissioner of Police	Member
One Industry Representative nominated by State Govt.	Member
State Civil Defence Chief	Member
Secretary (Revenue/Home)	Member
Directorate of Industrial Safety and Health	Member
Any other member deemed necessary by the Chairman	Member
Chairman State Maritime Board	Member Secretary

INDIAN COAST GUARD

Appendix B 2

Functions of DOS-CMG

- Review facility contingency plans of ports/ oil installations
- Assist in preparation of the district oil spill contingency plan
- Assist the district administration in management of oil pollution incidents
- Continuously monitor every pollution incident
- Ensure continuous information flow to SOS-CMG regarding incident situation and mitigation efforts
- Conduct at least one full scale mock-drill at a facility each year and report observed strengths and the weaknesses of the plan to SOS-CMG

INDIAN COAST GUARD

Composition of DOS-CMG

District Collector	Chairperson
Inspector of Factories	Member Secy.
District Energy Officer	Member
Chief Fire Officer	Member
District Information Officer	Member
Controller of Explosives	Member
Chief, Civil Defence	Member
One Trade Union Representative nominated by District Collector	Member
Deputy Superintendent of Police	Member
District Health Officer/Chief Medical Officer	Member
Commissioner, Municipal Corporations	Member
Representative of the Department of Public Health Engineering	Member
Representative of Pollution Control Board	Member
District Agriculture Officer	Member
4 Experts (Industrial Safety & Health) nominated by District Collector	Member
Commissioner (Transport)	Member
One Representative of Industry to be nominated by the District Collector	Member
Chair-person/Member-Secretary of Local Crisis Groups	Member
Representative of the Port	Member
Representative of State Maritime Board	Member
District Forest Officer/ Wildlife advisor	Member
Any other member deemed necessary by the Chairman	

Appendix B 3

Functions of LOS-CMG

- Prepare local oil spill contingency plan
- Train personnel involved in incident management
- Educate the population at risk of pollution about remedies and existing preparedness in the area
- Conduct at least one full scale mock-drill at a site every six months and forward a report to DOS-CMG
- Respond to all public inquiries on the subject

Composition of LOS-CMG

Sub-divisional Magistrate / District Emergency Authority	Chairperson
Inspector of Factories	Member Secy.
Industries in the District/Industrial area/ industrial pocket	Member
Transporters of Hazardous Chemicals(2 Numbers)	Member
Fire Officer	Member
Station House Officer (Police)	Member
Block Development Officer	Member
One Representative of Civil Defence	Member
Primary Health Officer	Member
Editor of local News paper	Member
Community leader/ Sarpanch/ Village Pradhan nominated by Chairperson	Member
One Representative of NGO to be nominated by the Chairperson	Member
Two Doctors eminent in the Local area, nominated by Chairperson	Member
Two Social Workers to be nominated by the Chair-person	Member
Environmental NGOs dealing with corals, mangroves, marine environment	Member
Representative of oil agencies	Member
Any other member deemed necessary by the Chairman	

Appendix B 4

Periodicity of meeting - CMGs

CMG	Periodicity of meeting
NOS-CMG	As required basis
SOS-CMG	Once a year
DOS-CMG	Every six months
LOS-CMG	Every three months

National Plan Working Group
Functions

- Advice CCA on strategic policymaking and funding direction
- Support CCA by considering overall operational aspects
- Consider issues such as the national plan, response equipment stockpiles, training, and contingency plan audits
- Address research, development, and technology, and environmental and wildlife interests of stakeholders to the Plan

National Plan Working Group
Composition

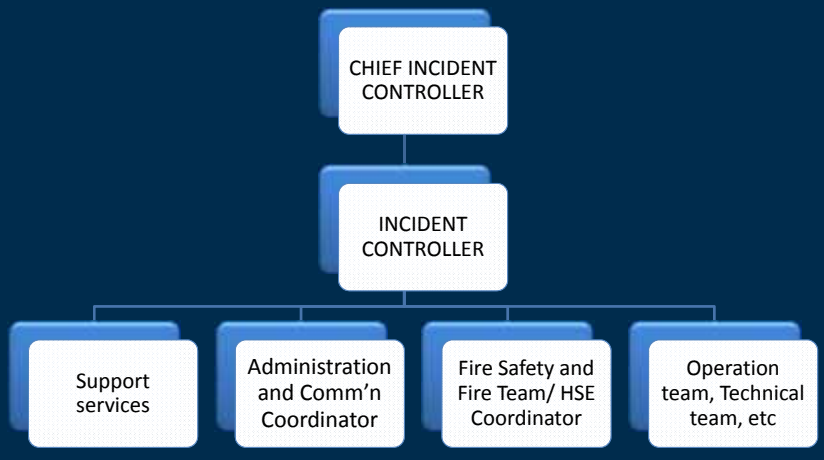
Ministry of Environment and Forests
Ministry of Petroleum and Natural Gas
Ministry of Shipping/ Directorate General of Shipping
Ministry of Chemicals and Fertilizers
Ministry of Agriculture, Dept of Animal Husbandry, Dairying and Fisheries
Ministry of Earth Sciences
Directorate General of Civil Defence
Ministry of Health
Central Pollution Control Board
Indian Council of Agricultural Research
Industrial Safety and Health
Concerned industries
Centre for Environment and Explosive safety
Indian Chemical Manufacturers Association
Any other member who could advise on specialist matters

Appendix B 5

Emergency Response Units

SALVAGE MONITORING AND CONTROL UNIT	**SMCU**	To monitor and control salvage operations
MARINE RESPONSE CENTRE	**MRC**	To direct response action at sea
SHORELINE RESPONSE CENTRE	**SRC**	To direct shoreline response
EMERGENCY CONTROL CENTRE	**ECC**	To monitor operations to contain any potential pollution within an offshore installation and its reservoir or a port facility jurisdiction
ENVIRONMENT GROUP	**EG**	To provide environmental and public health advice to all these centres

Incident Management Team



Chief Incident Controller

- Preparation, review and updating of plan
- Assessment of situation and declaration of oil spill emergency
- Mobilisation of main coordinators and key personnel
- Activation of Emergency Control Centre
- Deciding on assistance from MoU members/ external agencies
- Continuously reviewing situation and deciding response strategy
- Taking stock of casualties and ensuring timely medical aid
- Accounting for personnel after the emergency
- Ordering evacuation of personnel as and when necessary
- Taking decision in consultation with local Coast Guard and District Authorities when a tier 2 or tier 3 spill is to be declared

Local Action Group

- Planning Coordinator
- Operations and Technical Coordinator
- Logistics and Administration Coordinator
- Response Team Leaders (five per State)

Local Action Group Support Team

- Environmental Advisers
- Finance & Administration Officer
- Wildlife Officer
- Equipment Operators

Environment Group

- Advise on environmental aspects and public health impacts
- Advise on impacts of response, both real and potential
- Encourage collection of baseline data of vulnerable environmental features immediately before impact of the pollution plume
- Track success of preventive and counter pollution measures
- Begin to assess overall long term environmental impact

Facility Contingency Plan

- Requirement to hold a facility Contingency Plan
- List of plan holders by MoS, MoPNG, State Maritime Board, State Government
- Revision, at least once every five years or, whenever significant change in any of the plan elements
- Updating, at least annually

Place of Refuge

- Obligation to provide place of refuge
- Certain places identified in Committee Report of Chairman National Shipping Board
- Guidelines being developed

Mock drills and Exercises

- By every port facility and oil installation
  - at least once every three months
- Area or regional level exercises
  - at least once every six months
- National level pollution response exercises
  - conducted at least once a year
  - mobilization of stakeholder resources

Competency Standards

- **IMO OPRC Level 1**
  - all responders including LST personnel, and supervisors appointed as on-site managers
  - certificate deemed to be valid for 5 years from date of issue
  - periodic training to maintain currency of certification
- **IMO OPRC Level 2**
  - middle management personnel responsible for managing the operational response, e.g. CIC, SIC, IC, and environment and scientific coordinators, and Fire Brigade (Haz Mat) specialists, and LAG personnel

Discovery and Notification

- Duty to Report
- Occasions for Report
- Contents of Report
- Supplementary Report
- Reporting Procedures
- Follow-up on Reports

Response

- Salvage
- At-Sea Response
- Harbour Response
- Shoreline Response

Salvage Monitoring and Control Unit

The Salvage Monitoring and Control Unit (SMCU) will be set up based on the merits of the incident.

SMCU Composition

- Representative of DG Shipping
- Representative of Coast Guard District or Regional Commander
- Salvage Master appointed by the ship-owner
- A single representative nominated by agreement between the ship-owner and insurers (for both the physical property and their liabilities)
- Harbour master, if the incident involves a port or its services
- District or Regional Pollution Response Officer
- Surveyor from the Mercantile Marine Department
- Surveyor from the Indian Register of Shipping
- Environment Liaison Officer, nominated by the Environment Group

Offshore Control Unit

- Coast Guard Commander
- Emergency operations manger
  - link between Coast Guard, Emergency Response Centre and Offshore Installation Manager
- Operator's representative
  - represents the interests of the owner, operator, contractors and liability underwriters of the offshore installation
- Environmental liaison officer
  - advises on the environmental implication of any proposed actions
- Representative of DGH
  - advices on the importance of the installation to strategic supplies and other matters of public interest
- Specialist or technical advisor
  - either from the operator, the DGH or an independent source, provides advice as circumstances require

Marine Response Centre

- Coast Guard Pollution Response Officer
  - to manage sea borne and air borne operations
- Coast Guard Logistics officer
  - to organise deployment of equipment and control all Coast Guard financial commitments
- Representative of the port authority
  - if the incident involves a port or its services
- An officer of the state fisheries department
  - to advise on impact on fisheries and liaise with fisheries cooperatives
- Local administration official
  - to act as liaison officer with the Shoreline Response Centre
- Environmental Liaison Officer, nominated by Environment Group
- Defence Public Relations Officer
  - to liaise with the media

Emergency Control Centre

The contingency plan will predetermine whether Emergency Control Centre would be located at the port's own operations room or at the nearest Coast Guard facilities taking account of many factors, including :-

- Availability and range of communication equipment
- Ancillary equipment such a radar for the control of port traffic
- Availability of local knowledge - sensitive areas, bathymetry, port resources to supplement salvage and counter pollution
- Size of building and number of rooms (large rooms for press briefings and communication, quiet rooms for decision making by SCU)
- Availability of support staff

Risk Categorisation: Port Facilities

Category	Description
A	Port handling crude oil/tanker visits /SPM/STS
B	Ports which handle products only OR Ports which handle ships carrying > 1000 tons of fuel/bunker oil
C	Other than Cat 'A' and Cat 'B'

Inventory Standards: Port Facilities

		Risk Category		
		A	B	C
EQUIPMENT	Inflatable Boom in metres	2000	1000	600
	Skimmer (20TPH)	4	4	2
	OSD Applicator	6	2	2
	Oil Spill Dispersant (litres)	10,000	5,000	3,000
	Flex Barge (10 Tons)	4	02	2
	Current Buster booms at ports where tidal current is >2 Kn (Nos)	2	---	--
	Current Buster booms at ports where tidal current is >4 Kn (Nos)	--	2	--
	Sorbent boom pack (meters)	500	200	--
	Sorbent Pads (Nos)	2000	1000	--
	Shoreline cleanup Equipment	Mini Vacuum pumps	--	--
		OSD Applicator	--	--
		Fast tanks-05	--	--
VESSEL	Work Boats	2	1	1
	Tugs	2	1	--
MANPOWER	IMO Level 1	10	6	2
	IMO Level 2	4	2	--
	Other	10	10	5

Risk Categorisation: Oil Agencies

Category	Description
Super A	Agencies operating more than five offshore platforms in an area
A	Offshore E&P Installation for crude oil, SPMs handling crude oil, FPSO, platform involved in crude oil transfer
B	Vessel/platform involved in drilling operation
C	Only gas based E&P Ops/LPG/LNG/Naptha

Inventory Standards: Oil Agencies

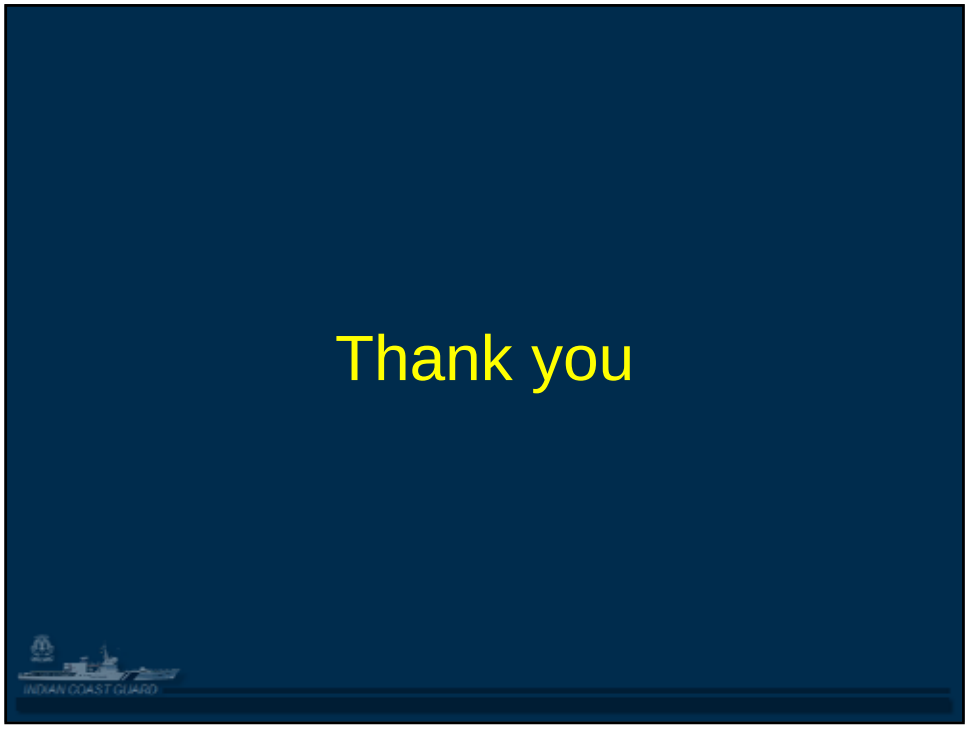
		Risk Category			
		Super A	A	B	C
EQUIPMENT	Inflatable Boom in metres	2000	1000	600	600
	Skimmer (20TPH)	4	4	2	2
	OSD Applicator	6	2	2	2
	Oil Spill Dispersant (litres)	10,000	5,000	3,000	3,000
	Flex Barge (10 Tons)	4	2	--	--
	Current Buster booms at ports where tidal current is >2 Kn (Nos)	2	2	---	--
	Sorbent boom pack (meters)	500	200	--	--
	Sorbent Pads (Nos)	2000	1000	--	
	Shoreline cleanup Equipment	Mini Vacuum pumps	--	--	--
		OSD Applicator	--	--	--
		Fast tanks-05	--	--	--
VESSEL	Work Boats	2	1	--	1
	MSV/OSV/Tugs	2	1	1	--
MANPOWER	IMO Level 1	10	6	2	2
	IMO Level 2	4	2	--	--
	OTHER	10	10	5	5

Inventory Standards: Coastal States

PALLETISED CONTENTS
Inflatable Boom 240m in 10m & 20m lengths
Boom ancillary pallet
Shore Sealing Boom 400m in 10m & 20m lengths
Minivac System
Multi Skimmer 10TPH and 20 TPH
Portable temporary Storage Devices x 8 nos.
Inflatable Shelters
Decontamination Station Equipment
Spate pumps x 3
Suitable Power pack
Discharge hose
Command pallet *(Walkie Talkie, Torch, Folding Table, Folding Chair Map of the Area, etc)*

Way Ahead - National Capabilities

AID TO RESPONSE	PROVISION BY
Capping device *(rating ≥ 10,000 PSI, 3000m depth, possibility of offset installation)*	MoPNG
Subsea oil spill dispersant system	
Large scale OSD stockpile	
Emergency towing vessels *(bollard pull ≥ 200 tons)* x two	MoS
Salvage vessel	
Hot Tapping Device	
High Volume Offshore Skimming System	MoD
Incineration Boom	
Aerial Dispersant Delivery System	
Ecological Sensitivity Index Map	MoEF
Oil Finger Printing Laboratory	DoST
Radar oil spill detection capability	MoD, MoPNG, MoS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