



- > Total area: ~ 330,000 km<sup>2</sup>
- > Total coastal line: 3,260 km
- > More than 2,360 rivers and canals with total length of over 42,000 km




---

---

---

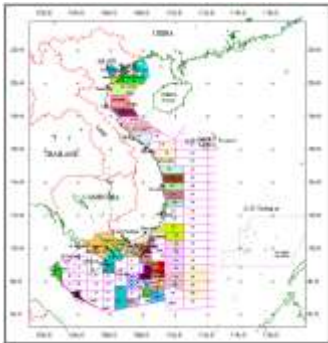
---

---

---

---

---



- > Petroleum exploration and production activities
  - > Transport, storage, transfer and distribution activities
  - > Vietnam borders the South China Sea (East Sea)
- => Vietnam is vulnerable to oil spill

---

---

---

---

---

---

---

---

### The three resources of Vietnamese spill response

- > Governmental resources
- > Provincial resources
- > Private industry resources




---

---

---

---

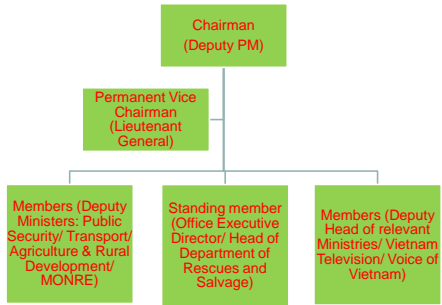
---

---

---

---

## Vietnam National Committee for Search and Rescue (Vinasarcom)




---

---

---

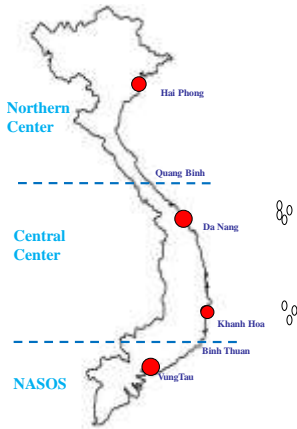
---

---

---

---

---



Under Vinasarcom, there are 3 regional oil spill response centers in Vietnam:

- The National Northern Oil Spill Response Center: OSR base in Hai Phong
- The National Central Oil Spill Response Center: OSR base in Da Nang and Khanh Hoa
- The National Southern Oil Spill Response Center: OSR in Vung Tau

---

---

---

---

---

---

---

---

**SET UP  
COMPREHENSIVE  
LEGAL DOCUMENTS**

---

---

---

---

---

---

---

---

❖ Law on environmental protection dated 29 November 2005

❖ Prime Minister Decision No. 02/2013/QĐ-TTg dated 14 January 2013 promulgating the regulation on oil spill response:

- Classify 3 levels of OSR
- Classify 3 Tiers of Oil Spill Incidents
- Oil spill preparedness
- Inspection to determine the cause of oil spill incident
- Procedures of settlement of oil spill consequences
- Specify responsibilities of all stakeholders in oil spills

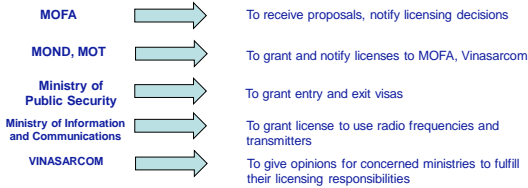


■ Decree 95/2010/ND-CP on licensing of and cooperation with foreign search and rescue forces in Vietnam:

- The process of approval of participation of foreign search and rescue forces

■ Licensing agencies:

■ Coordination in licensing:



❖ Decree No 93/2013/ND-CP on administrative violation sanctions in maritime sector (applied for vessels):

- A fine from 10 – 20m VND for those vessels not having OSCP as required by current regulations.
- A fine from 20 – 40m VND for those vessels not building OSR forces as required by current regulations.

❖ Decree No 179/2013/ND-CP on administrative violation sanctions in environmental protection (applied for organizations on land):

- A fine from 10 – 30m VND for those organizations not sending participants to OSR training or not organizing OSR drill as required by current regulations.
- A fine from 30 – 40m VND for small organizations trading petroleum products not having OSCP approved as required by current regulations, 10 – 20m VND fine for not investing in OSR equipment or not signing contract with OSR service provider
- A fine from 40 – 50m VND for ports not having OSCP approved as required by current regulations, 20 – 30m VND fine for not investing in OSR equipment or not signing contract with OSR service provider

# OIL SPILL RESPONSE TRAINING, DRILL AND WORKSHOP

---

---

---

---

---

---

---

---

## GOT TRAINING & WORKSHOP

### GOT TRAINING VIII

- Time: 3 days, 19 – 21/05/2015
- Venue: Ca Mau province
- Main contents:
  - + Overview of oil spill response
  - + GOT ESI Mapping project: achievements and lessons learned (PEMSEA representative).
  - + Guidelines for shoreline cleanup
  - + Development of OSCP at provincial level and grassroots level.
  - + Field survey in coastline of Ca Mau province.

### GOT WORKSHOP 06

- Time: 3 days, 12-14/10/2015
- Venue: Vung Tau city
- Main contents: experience sharing and progress report on the development Provincial Oil Spill Contingency Plan & Provincial ESI Maps as well as appraisal of OSCP at grassroots level of southern provinces.

---

---

---

---

---

---

---

---

**GOT Training VIII (2015)**



---

---

---

---

---

---

---

---

**GOT Workshop 06 (2015)**



---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

**OSR DRILL**

- ❖ Internal exercise of 3 regional centers
- ❖ Annual exercise of oil companies: conducted by PV Drilling
- ❖ National exercise: 1<sup>st</sup> time: 2002

---

---

---

---

---

---

---

---

## NASOS internal exercise

### ❖ Objectives:

- To enhance OSR professional capability of NASOS staff in general and OSR skills of responder teams in particular;
- To test NASOS capability in terms of personnel, OSR equipment and facilities, methods of communications and coordination among relevant teams.
- To help newcomers in getting familiar with OSR equipment, their functions and method of operation in reality as well as understanding clearly roles and responsibilities of each team member in OSR.

---

---

---

---

---

---

---

---

---

---

## NASOS internal exercise (cont')

### ❖ Equipment and facilities:

- 02 oil recovery vessels: NASOS I and NASOS II;
- 02 sets of offshore Ro-boom: 250m/set.
- 01 offshore skimmer: 66m<sup>3</sup>/h.
- 01 temporary storage tank: 25 tonnes.
- 01 dispersant spray set.
- 03 hydraulic sets

### ❖ Manpower:

- Crew of 02 vessels NASOS I and NASOS II: 24 persons
- NASOS offshore responder team: 14 persons

---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

## Training

- ❖ Annual training of 3 regional centers for provincial environmental officers in designated area
- ❖ Training for HSE staff of oil companies: conducted by PV Drilling
- ❖ Training for military forces: organized by Vinasarcom
- ❖ Training for provincial officers: organized by each province

---

---

---

---

---

---

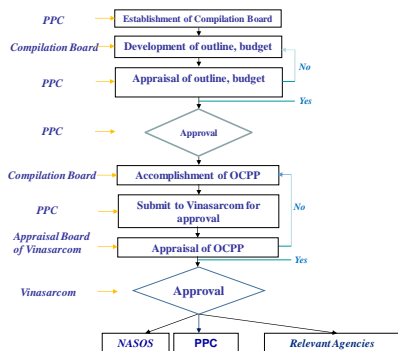
---

---

---

---

## Procedure for review and approval of OCPP



---

---

---

---

---

---

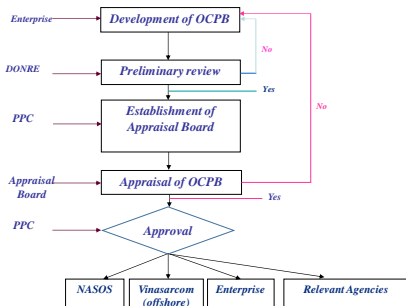
---

---

---

---

## Procedure for review and approval of OCPB



---

---

---

---

---

---

---

---

---

---



**DEVELOPING PROVINCIAL CONTINGENCY PLANS (OCP)**

Up to date, the OCPs of the following Southern provinces have been approved:

1. Binh Thuan
2. Dong Nai
3. Tra Vinh
4. Ben Tre
5. Ca Mau
6. Ho Chi Minh city
7. Soc Trang
8. Kien Giang
9. Tien Giang
10. Bac Lieu

---

---

---

---

---

---

---

---

---

---

**DEVELOPING PROVINCIAL CONTINGENCY PLANS (OCP)**

Outline of OCPP:

- PART I: GENERAL INTRODUCTION OF OCPP
  - PART II: NATURAL, SOCIO-ECONOMIC AND BIOLOGICAL FEATURES OF THE PROVINCE
  - PART III: SOURCES OF POTENTIAL OIL SPILL AND REAL SITUATION OF OIL SPILL RESPONSE AT PROVINCE
  - PART IV: OIL SPILL RESPONSE CLASSIFICATION
  - PART V: PREPAREDNESS ON OIL SPILL RESPONSE ACTIVITIES
  - PART VI: TECHNICAL ISSUES RELEVANT TO OIL SPILL RESPONSE
  - PART VII: RESPONSE ACTIVITIES IN OIL SPILL
  - PART VIII: ASSURANCE ON OIL SPILL RESPONSE
  - PART IX: COMPENSATION FOR DAMAGE FROM OIL SPILL
  - PART X: MANAGEMENT, UPDATE, BUILD UP AND IMPLEMENTATION OF OIL SPILL RESPONSE PLAN
- Appendix 1: List and address of relevant agencies  
Appendix 2: List of local forces available for mobilization during oil spill

---

---

---

---

---

---

---

---

---

---

**DEVELOPING PROVINCIAL SENSITIVITY INDEX MAP (ESI-MP)**

Up to date, the ESI-MPs of the following Southern provinces have been approved:

- Ca Mau
- Binh Thuan
- Dong Nai

---

---

---

---

---

---

---

---

---

---

## INVESTMENT IN VESSEL, BASE AND EQUIPMENT

### OSR capacity of 3 centers

- ❖ Northern Center:
  - ✓ 3 offshore recovery vessels
  - ✓ 1 river oil recovery vessel
  - ✓ 1 vessel for storage of spilled oil (1,000 m3)
  - ✓ 04 oil recovery devices
  - ✓ 3,500m oil boom, shoreline cleanup equipment
- ❖ Central Center:
  - ✓ 2 offshore recovery vessels
  - ✓ 03 oil recovery devices
  - ✓ 5,000m oil boom, shoreline cleanup equipment
- ❖ Southern Center:
  - ✓ 2 offshore recovery vessels
  - ✓ 1 Transrec 125 oil recovery system, 1 Helix skimmer
  - ✓ 500m offshore boom 1800, 250m boom 2200  
(agreement in principle with PV Drilling: 2,200m oil boom, 9 skimmers, storage tanks, 2 river oil recovery vessels, shoreline cleanup equipment)



### 2 OIL RECOVERY VESSELS OF NASOS

#### VESSEL NASOS I

- **Technical data:**
  - + 589 DWT
  - + 559 GT
  - + Length overall: 44m
  - + Breadth moulded: 10.6m
  - + Engine: 2,000 BHP
  - + Max speed: 12knots
  - + Spilled oil storage: 180 m3
  - + Dispersant tank: 10 m3
- Operation scope: international sea, limited level 1
- Handover: Nov 2010

#### VESSEL NASOS II

- **Technical data:**
  - + 952 DWT
  - + 922 GT
  - + Length overall: 53m
  - + Breadth moulded: 12m
  - + Engine: 3,300 BHP
  - + Max speed: 12knots
  - + Spilled oil storage: 327 m3
  - + Dispersant tank: 12 m3
- Operation scope: international sea, unlimited level
- Handover: August 2012



---

---

---

---

---

---

---

---

---

---

**Base in Vung Tau city**

- > The base was put into operation in October 2012.
- > Total area: 26,000 m2: land 6,000m2; water and pier: 20,000 m2
- > Pier: 130m long, 8-16m wide (for 02 vessels to harbour)

---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---



**HEUNG A DRAGON INCIDENTS**

---

---

---

---

---

---

---

---

**GENERAL INFORMATION**

- **CAUSE OF INCIDENT:**
  - Collision between Eleni Ship & Heung A Dragon at buoy no. 2, VungTau.
- **LOCATION:**
  - Bouy no. 2, Vungtau
- **TIME OF INCIDENT:**
  - 23h40 on 7 Nov. 2013
- **SPILL RISK:**
  - Est. 400 m<sup>3</sup> FO, 40 m<sup>3</sup> DO & some LO inside Heung M/V



---

---

---

---

---

---

---

---

**GENERAL INFORMATION**

- **SHIP INFORMATION:**
  - Name: Heung A Dragon
  - Type: container ship
  - GW: 13199 tons
  - Cargoes on board: food, chemical...
- **RESPONSE TEAM:**
  - Salvage Team: Svitzer (US)
  - Oil spill response: PVDO/NASOS
- **RESPONSE TIME:**
  - 22 Nov. – 22 Dec. 2013



---

---

---

---

---

---

---

---

## GENERAL INFORMATION

### • SHIP STATUS:

- Grounding & machine room is damaged.
- All fuel tanks are safe.
- All crews are safe.
- Some containers are on fire



### • HAZARDS:

- No infor. on chemicals
- Containers fall out & drift away
- Weather is bad (NE wind) & tide changes 04 times/day.



---

---

---

---

---

---

---

---

## INITIAL RESPONSE

### SITE SECURITY PLAN

- Port authority assign 03 ships from (border guard & police) to keep all non-authorized ships be away from the incident site.
- Launch out some Marking Buoys.
- Inform the isolation zone to all shipping companies on Marine Notices.



---

---

---

---

---

---

---

---

## RESPONSE OPERATION

### Salvage Team

- Transfer all the containers from Heung to barges via crane.
- Divers use hot-tap equipment to drill some holes on fuel tanks & pump out all the fuel inside

### OSR Team

- Booming behind the Heung, ready to recover all oil slick leaked.

---

---

---

---

---

---

---

---

**RESPONSE OPERATION**



---

---

---

---

---

---

---

---

**RESPONSE OPERATION**



---

---

---

---

---

---

---

---

**RESPONSE OPERATION**



---

---

---

---

---

---

---

---

## RESPONSE OPERATION



---

---

---

---

---

---

---

---

## RISKS AT SITE



---

---

---

---

---

---

---

---

## CONCLUSION

- Response operation was conducted in a fast, effective & safe way.
- All the fuels inside the vessel were transferred to tankers safely. All spilt oil was recovered (est. > 3 m<sup>3</sup>).
- Site security plan was not conducted in proper way.
- No information on the dangerous cargoes on board of the vessel.
- Lack of awareness on Hazardous Material Spill Response.

---

---

---

---

---

---

---

---



## RECOMMENDATIONS

- ✓ Promulgating the regulation on dispersant use ASAP
- ✓ The OSR national exercise maintained
- ✓ Procedures, forms and deadline to approve the mobilization of foreign oil spill response forces into Vietnam.
- ✓ Strengthening the regular inspection of business.



## Q & A

For further information, please contact:

Mr. Nguyen Huy Trong

Permanent Deputy Director

The National Southern Oil Spill Response Center (NASOS)

4<sup>th</sup> Floor, 43 Mac Dinh Chi Street

District 1, Hochiminh city, Vietnam

Tel: +84-8-38242120

Fax: +84-8-38242125

Cell: +84-937 000 334

Email: [trongnh@pvdrilling.com.vn](mailto:trongnh@pvdrilling.com.vn)

---

---

---

---

---

---

---

---

---

---

---

---

---

---

