



Cross Border Mobilisation of Resources

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Oil Spill Response Thailand 2017

21 – 22 September

Overview

- ▶ Tiered Preparedness & Response (TPR)
- ▶ Equipment Mobilisation Considerations
- ▶ Aircraft Charter and Permits
- ▶ Aerial Dispersant Application Aircraft

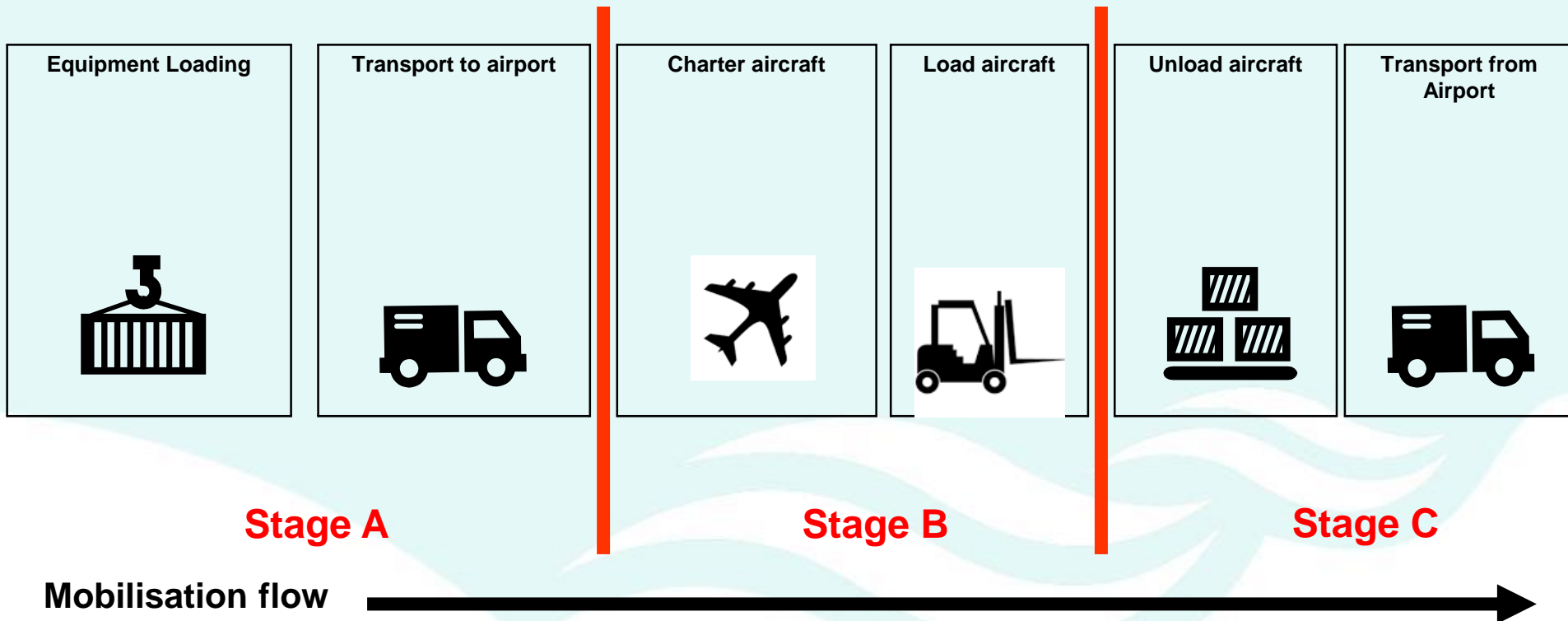
TPR and Equipment Mobilisation Considerations

Tiered Response

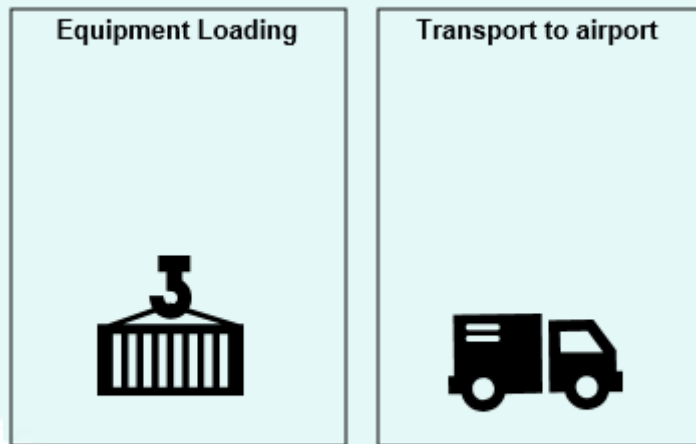
- Introduction of new Tiered Preparedness and Response Model
 - Realistic consideration of logistic requirement for each of the capabilities
 - Transport of some equipment are more logistically challenging than the other



Equipment Mobilisation Flow Chart



Stage A



- ▶ Type of equipment to be Exported
- ▶ Mode of transport – sea or air
- ▶ Equipment packaging
- ▶ Transport to port or airport
- ▶ Export permit
- ▶ Loading to vessel or aircraft

Stage B

Charter aircraft



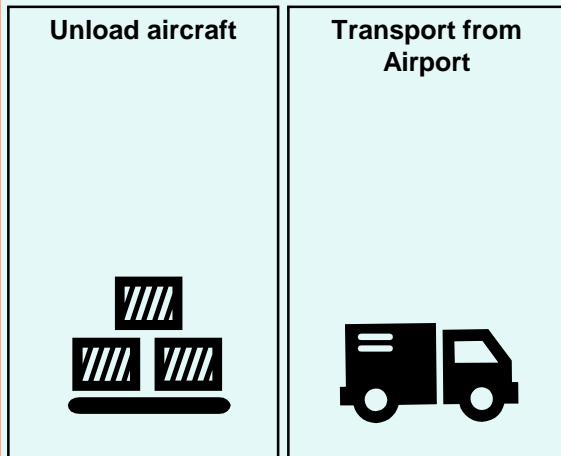
Load aircraft



Stage B

- ▶ Vessel available / aircraft charter
- ▶ Documents – airway bill, invoice, packing list
- ▶ Charter contract

Stage C



Stage C

- Unloading from vessel or aircraft – logistic capability
- Custom clearance – temporary import permit
- Transport to destination
- Identification of staging area / security at staging area

Shared Responsibility – OSRL and Members

- ▶ Transfer of responsibility at airport of departure
- ▶ OSRL provide logistics support for Stage A and Stage B
 - OSRL works with its dedicated freight forwarder and aircraft charter broker
- ▶ Members to
 - Assist in customs clearance
 - Identify and arrange local logistics

Shared Responsibility – OSRL and Members



Responsibility

INCIDENT
OWNER

Equipment Loading

Equipment to be mobilised will be agreed between OSRL and the Incident Owner and will be loaded for transport by OSRL



Transport to airport

Insurance and transport provided by OSRL but recovered from mobilising party at cost



Charter aircraft

If OSRL arrange flight costs must be approved by incident owner in writing prior to charter booking



Load aircraft

Including export Customs clearance



Unload aircraft

Including clearance of equipment through Customs



Transport from Airport

Transport and additional security as necessary for transfer from airport to Incident



Transfer of responsibility

Incident owner takes responsibility for equipment once it reaches the departure airport. Mobilising party must insure equipment from this point.

OSRL arrange aircraft charter

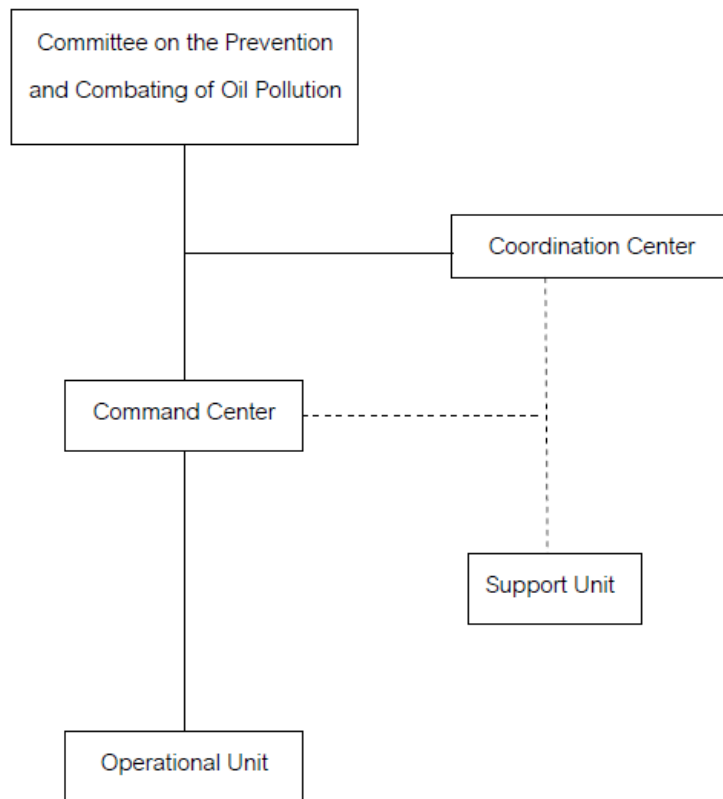
Aircraft Charter and loading of the aircraft may be arranged by OSRL with written agreement to the OSRL Duty Manager from the incident owner. Any costs incurred during this will be recharged to the mobilising party at cost.

Mobilisation flow



Custom Clearance

3.1 Organization Chart



- National Oil Spill Contingency Plan
 - Marine Department assumes the role of Coordination Center
 - Custom Department as part of Support Unit

Custom Clearance

► Role of The Customs Department

- Coordinate and develop measures or special procedure or orders to facilitate the temporary importation of oil spill clean-up equipment from abroad
- Suggestion: predevelopment of procedures for this kind of temporary importation

Aircraft Charter and Permits

Aircraft Charter

► Mobilisation of Tier 3 equipment

- Large scale and urgent
- Solution: Chartering aircraft of opportunity
- Aircraft with large payload is preferred



B777-200F
Boeing - USA

MAX PAYLOAD (kg/lb)	103,000 / 227,076
MAIN DOOR WIDTH (cm/in)	372 / 146
MAIN DOOR HEIGHT (cm/in)	315 / 124
TOTAL LOAD VOLUME (m³/ft³)	653 / 23,060
MAXIMUM LOAD RANGE (km/mi)	9,065 / 5,633
CRUISE SPEED (kmh/mph)	891 / 554



B747-400F
Boeing - USA

MAX PAYLOAD (kg/lb)	120,000 / 264,290
MAIN DOOR WIDTH (cm/in)	340 / 134
MAIN DOOR HEIGHT (cm/in)	312 / 123
TOTAL LOAD VOLUME (m³/ft³)	735 / 25,956
MAXIMUM LOAD RANGE (km/mi)	7,169 / 4,455
CRUISE SPEED (kmh/mph)	909 / 565



AN-124
Antonov - Ukraine

MAX PAYLOAD (kg/lb)	120,000 / 264,554
MAIN DOOR WIDTH (cm/in)	640 / 252
MAIN DOOR HEIGHT (cm/in)	440 / 173
TOTAL LOAD VOLUME (m³/ft³)	750 / 26,483
MAXIMUM LOAD RANGE (km/mi)	4,650 / 2,889
CRUISE SPEED (kmh/mph)	800 / 497

Airports and Capability

Airports	Logistic Support for Aircraft Type	Flight Time from Singapore
BKK (Suvarnabhumi)	Able to support B777F/B747F/AN124	2 hours
UTP (U-Tapao)	Able to support B777F/B747F/AN124	1 hour 50 mins
HKT (Phuket)	No main deck loader Project aircraft types like IL76 or AN124 (subject to airport approval)	1 hour 30 mins
HDY (Hat Yai)	No main deck loader Project aircraft types like IL76 or AN124 (subject to airport approval)	1 hour

Flight Permit

- ▶ For Thailand, typically takes about 3 working days
- ▶ With letter of emergency, permit can be obtained in 1-2 working days
- ▶ Letter of emergency to be written by mobilising party to Department of Aviation (Civil Aviation Authority of Thailand, CAAT)

Letter of Emergency Template

Company Letter Head

Date

Name and address of
Department of Aviation

Subject: 'Company' Charter Flight from Singapore to Bangkok

Letter of Emergency

Dear 'Name of Officer'

Kindly accept this letter as confirmation that 'Company' has chartered and IL-76 aircraft, operated by Chapman, to transport urgently oil spill response equipment from Singapore to Bangkok

This charter flight is on behalf of 'Company'

OPERATOR: 'Name of Airline'

TYPE OF A/C: IL76TD-90VD

REGISTRATION No.: RA-76950

FLT NBR: VDA6390

PURPOSE OF FLIGHT: Urgent delivery of oil spill response equipment

ROUTE: From Singapore to Bangkok

'Company' urgently needs your assistance in granting the operator the necessary permits to perform the flight.

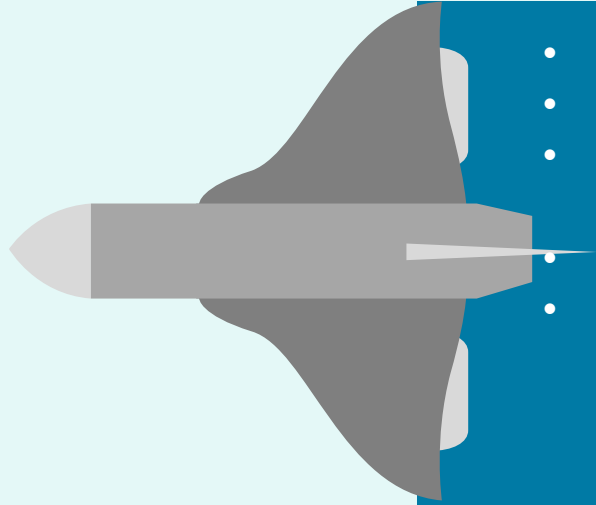
Sincerely,
Signature
Name
Title

Aerial Dispersant Application Aircraft

Dispersant Application Aircraft

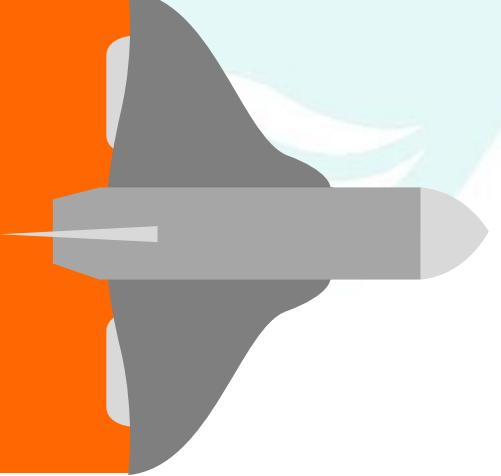
- ▶ Specialised aircraft with fitted dispersant delivery system
- ▶ Provided by OSRL for the region
 - Hercules C-130A
- ▶ Additional aircraft
 - Boeing 727 located in Doncaster, UK
 - Requires at least 16 hours flight time to reach this region
 - Requires additional approval

Dispersant Aircraft Specifications

- 
- Senai, Malaysia
 - 6hrs call to wheels-up
 - Dispersant spray application and monitoring system (SATLOCK)
 - GPS Positioning (Spidertrack)
 - Rapid Installation Dispersant Spray System (RIDDS)
 - 13m³ capacity



C130 Hercules

- 
- Doncaster, UK
 - 4hrs call to wheels-up
 - Live tracking
 - Dispersant System
 - 15m³ capacity



Boeing 727

Mobilising Dispersant Aircraft



Responsibility

INCIDENT OWNER

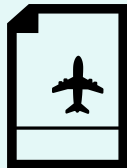
Aircraft Choice

OSRL will choose aircraft based on flight times, ease of overflight clearances and available airports in country



Aircraft Transit

OSRL's aviation contractors will file flight plans and arrange overflight clearances



Landing Rights

OSRL's aviation contractor will normally arrange landing rights but Incident Owners aviation team may be required to assist



Permission to Spray

OSRL will assist the Incident Owner to obtain low level flying and dispersant application permissions



Accommodation & Transport

Incident owner to provide aircrew with secure accommodation and transport to/from the airport



Immigration

Incident owner is responsible for assistance with LoI, visa, TWP for aircrew after initial 72hrs in country



Transfer of responsibility

Incident owner to support aircraft operations / aircrew in country

Mobilisation flow

Explanations

- Application for overflight clearance and Landing Permit will be done by operator (IAR)
 - Allows Hercules to land in country for 72 hours
- Mobilising party to:
 - Letter of Approval requesting for aerial dispersant spray, aerial surveillance and low level flying
 - Permit to spray with total volume of spray permitted (Pollution Control Department)
 - Report to PCD after dispersant application operation
 - Immigration: If the aircraft exceed 72 hours, assist to apply for visa/temporary work permit for air crew.

Letter of Approval Template

[Client company letterhead]

To

(Addressed to the Civil Aviation Authority/government entities/department e.g. military, maritime, environmental, humanitarian agencies)

cc: OSRL and IAR/Aberdair)

This letter serves to highlight that Oil spill response limited (OSRL) and her contractors, International Air Response (IAR) *and/or* Aberdair have been engaged by [client company name] to perform oil spill response operations in response to the [name of incident] in [location].

Your approval is sought to permit the above named companies to undertake the following oil spill response activities using Hercules L382G (N119TG) *and/or* Bandeirante EMB-110P1 (9G-FWD) aircraft:

1. Aerial surveillance,
2. Low level flight (75 – 100 ft above water surface) and
3. Dispersant application on the area of operations

Letter of Approval Template

The area of operation has been demarcated as shown. As such, we may require your assistance in establishing the necessary restricted air space and the exclusion zone around the incident site.

[Provide print screen of search box with coordinates]

The dispersant of choice to be used is *[name of approved dispersant]*. The use of dispersant is to rapidly reduce oil concentration in the sea to below harmful levels. The dispersant approval from *[name of country]* authority and its material safety datasheet and can be found attached.

We seek your kind understanding in giving the required approval and clearance to our aviation provider and their crew. *[Client company name]* will be more than willing to provide any additional information should you require.

Thank you.

Yours sincerely,

(Signed by client/responsible party)

IAR Flight Times

Airports	Dispersant Quantity (L)	Flight Time (h)
BKK (Suvarnabhumi)	12300	3
UTP (U-Tapao)	12300	3.7
HKT (Phuket)	12300	2
HDY (Hat Yai)	12300	1.5
CNX (Chiang Mai)	10440	4.1



THANK YOU!

Staying in touch

www.oilspillresponse.com

Subsea Well Intervention Service

- » **www.oilspillresponse.com/subsea**
subseaservices@oilspillresponse.com

Training courses

- » **www.oilspillresponse.com/training**
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training_sg@oilspillresponse.com

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