

# Spill Contingency Planning



Centre of Documentation, Research and Experimentation  
on Accidental Water Pollution



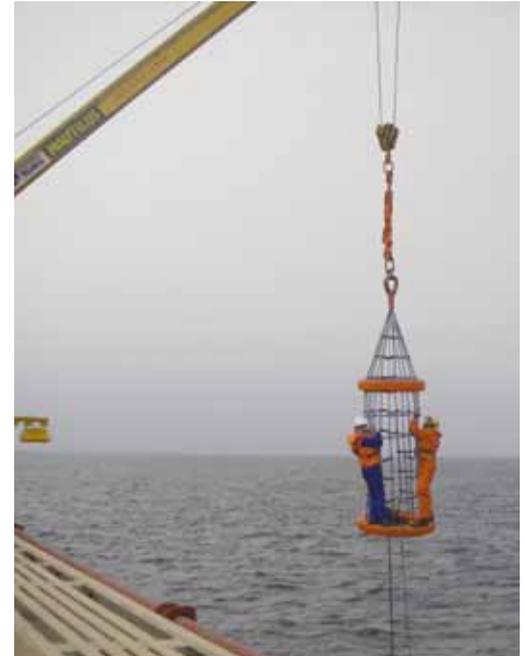
## Cedre develops spill response contingency plans

- for public clients (States, regions, counties, etc.) and private clients (offshore exploration sites, ports, refineries, oil depots, chemical and petrochemical sites, etc.)
- for coastal areas, estuaries, ports, rivers, lakes, etc.
- for risks relating to oil or other hazardous substances

These plans can be written in French, English or Spanish. Translations into other languages are possible (please enquire)

+ point

Once the plan has been established, additional services such as training, exercises or assistance in equipment selection can be provided.



# Our approach in three steps

SITUATION  
ASSESSMENT

PLAN  
PREPARATION

TRAINING,  
EXERCISES,  
SUPPORT

1

## SITUATION ASSESSMENT

Contingency planning is an interactive process, involving regular exchanges between the client and Cedre's team. The first stage in this process involves studying the specific issues encountered by the client.

2

## PLAN PREPARATION

The second phase of the process involves identifying the strategies and actions that may be implemented in response to the issues highlighted during the first phase, then drafting an operational document.

3

## TRAINING, EXERCISES, SUPPORT

Cedre then assists its clients in the implementation of their plans.



# 1 Information gathering and analysis

The first phase in the development of a plan consists in studying the specific issues involved and the background to your activities.  
We analyse:

- local and national regulations
- the company or group's drafting policies and guidelines
- the site's activities and organisation
- the sensitivity of the surrounding environment
- the available response equipment.

Some of this data is provided by you; we conduct research to obtain the rest.

## Our + point

Cedre has a unique collection of documents and publications, covering the field of accidental water pollution. It comprises several thousand references, mainly available in French and/or English. Two specialised documentalists can conduct the bibliographic research required to draft the plan.



## Pollutant behaviour study

As a crucial component of contingency planning, information on the behaviour of the substances liable to be spilled is taken into account, either drawing upon existing data or following tests performed at Cedre using product samples that you provide. If this is not possible, we run models, whose results are discussed and analysed by our specialists before being used.

### Our + point

- Biodegradability tests, oil viscosity and density measurements.
- Flash point determination.
- Oil and chemical characterisation (fingerprinting).
- Weathering in a flume tank, with regular analysis and plotting of curves showing the product's physical and chemical evolution (dispersion, evaporation, water content, emulsion stability, flash point, density and viscosity).
- Tests with various dispersants at different stages of emulsification.
- Use of weathering models.

These tests are carried out at Cedre based on the parameters defined by the client.



# 1 Slick drift forecasts

The drift of oil or chemical slicks can be predicted in rivers or offshore.

These simulations are performed using the models available at Cédre based on:

- the selected scenarios (location and type of spill – instantaneous or continuous –, type and quantities of pollutant),
- statistical meteocean data (wind, currents, temperatures) collected.

We can also work from previously run simulations provided by you.

## Our + point

These forecasts are performed by experienced specialists able to interpret the results generated by the models. The results are not provided as raw model output data but rather are formatted following a critical analysis of the scenarios.

Cédre has the following models:

- ADIOS
- ALOHA
- OILMAP
- CHEMMAP
- OSCAR weathering module



## 1 On-site assignment

Once the project leaders are familiar with the local context and have developed a questionnaire to be used as a basis for the interviews and visits to be conducted, an initial on-site assignment is organised.

This assignment is followed up with a report presenting the spill scenarios to be covered in the contingency plan, the equipment available and any recommendations to improve the site's level of preparedness.

### Our + point

Cedre has a multidisciplinary team. The agents who visit your facilities work in pairs and are chosen based on their skills and experience. They can work in French, English or Spanish.



## 2 Scenario resolution

The second phase of the process involves identifying the strategies and actions that may be implemented in response to the issues highlighted during the first phase, then drafting an operational document.

It starts with resolving the scenarios identified during the on-site assignment. Each scenario is analysed in detail by a hand-picked group of experts from Cedre. Each plan produced therefore benefits from Cedre's experience and each option selected is debated until the best possible operational solution is found.

### Our + point

Cedre has over 35 years of experience. Over the past 10 years, we have been involved in the response to almost 900 incidents, 60 of which resulted in assignments (sometimes lasting several months) in the field or command centres, in France and abroad. Feedback from all we have observed, advised, tried and resolved during these real emergencies is drawn upon during the scenario analysis phase.



## 2 Your plan

An initial version of the plan is drafted based on the identified elements, using the format defined in your procedures. The document presents the different scenarios and the associated response options, and contains the alert chart, crisis organisation, emergency directories, emergency response sheets, practical response sheets, equipment lists, etc.

The draft plan is then submitted to you to be read and discussed. Once Cedre has received your comments, the required changes are made to the document.

The final version of the plan is delivered in electronic format (USB device or CD-Rom comprising all the documents accessible via a web-style interface) and in printed format.

### Our + point

Cedre publishes operational guides. We have a photo library comprising 10,000 analogue and digital photos, and a database of diagrams. Cedre's DTP team, in charge of formatting these guides, is also involved in the development of contingency plans.



## 2 Technical equipment recommendations

Cedre can also offer additional services:

- recommending the procurement of new equipment
- developing technical specifications and a priced bill of quantities for pre-identified suppliers
- providing assistance in reviewing the offers for each lot, based on the bill of quantities alone
- providing assistance in testing the equipment delivered and in initial deployment for exercises.

### Our + point

These recommendations are developed in collaboration with Cedre's spill response equipment specialists, drawing mainly on the results of trials conducted at our facilities on various types of oil.



### 3 Training and exercises

In order for the plan to be efficient, it must be widely distributed and reviewed internally. To help operational teams to familiarise themselves with the plan, Cedre presents it in person to your teams on your premises. This provides the opportunity to communicate internally and more widely with partners and contractors, as well as representatives of industry and administration.

In addition to this presentation, a theory and/or practical training course, tabletop exercises and/or equipment deployment exercises can be organised.

#### Our + point

Cedre's training staff are well-practised: every year we train over 1,000 people, in France and abroad, in the classroom or in the field.



## 3 Support

Once your plan has been delivered, Cedre can offer a series of support services which may include:

- regular updates
- regular tabletop or practical exercises
- an assistance agreement in case of emergency, guaranteeing not only technical assistance from Brest but the rapid dispatch of one or more advisers on site.

### Our + point

Cedre runs a 24-hour advisory service, in French and English, and can rapidly launch drift and behaviour simulation models, consult numerous databases, provide advice on the techniques to be implemented and promptly send advisers on site.

# Assistance to authorities

Cedre develops contingency plans for local and regional authorities, both in France and abroad.

Across the globe Cedre works in compliance with national and local legislation and in cooperation with the relevant administrations and organisations which it meets during on-site assignments.

Several meetings are also held, in order to gather information and clarify the distribution of responsibilities. A draft version of the plan is then produced, and is presented and discussed during workshops. These workshops also provide the opportunity to build a national network of stakeholders involved in response preparedness, thus promoting a shared understanding and synergy in case of a spill. The plans can be supplemented with:

- a sensitivity atlas
- assistance in policy development (for instance on dispersant use) or resource development (setting up a resource centre)
- support in the implementation of the plan.



# ISO certifications

Cedre is certified ISO 9001: 2008 (n° FR03/01320),  
"Quality management systems", for its full range of activities:

- advisory services
- assisting in the implementation of contingency plans
- producing and providing documentation
- designing and conducting training courses
- following up on pollution incidents
- assessing techniques, products and equipment.

Cedre is also certified ISO 14001: 2004 (n° FR06/01319),  
"Environmental management systems", for its full range of activities.

# Contact\*

Name	
First name	
Company/ Organisation	
Professional address	
Phone	
Fax	
Email	

\* All fields are mandatory

## Contact

Want to discuss your  
contingency planning needs?

Contact us:

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# Getting to Cedre

## LOCATION

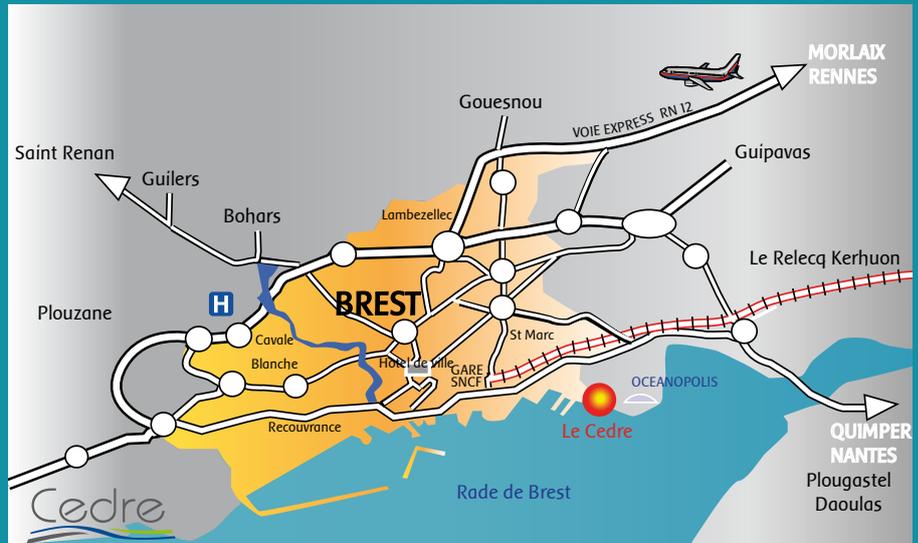
Cedre is located in Brest's port area, 715 rue Alain Colas, near Océanopolis, 15 minutes from Brest-Guipavas international airport and 10 minutes from Brest railway station.

## BY BUS

See: [www.bibus.fr](http://www.bibus.fr)

## BY PLANE

A shuttle bus operates between the airport and the city centre. For more information, see: [www.brest.aeroport.fr](http://www.brest.aeroport.fr)



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