



DECOMMISSIONING SOLUTIONS

BASED ON STRONG ENVIRONMENTAL EXPERTISE

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ENVIRONMENTALLY SAFE DECOMMISSIONING SOLUTIONS

At Ramboll we focus on delivering the best solutions to customers by combining a practical approach with all required technical disciplines.

When the initial decision to cease operation of an offshore facility is taken, a number of complex areas are central to manage in order to conduct an environmentally safe decommissioning.

Full range of services

We have been involved in several major decommissioning projects in the North Sea. Our projects span from minor early phase desktop studies to detailed assessment, including offshore surveys, handling of information and authority management.

The right decommissioning strategy is essential when the decision to safely retire a facility is taken. There are significant environmental aspects to consider when planning and executing the often complex removal of the facility. Identification

and predication of potential environmental challenges and impacts early in the project phases constitute a cornerstone in making the right decommissioning decisions.

Authority management is a central factor in all decommissioning projects where knowledge of national and international laws and standards is a prerequisite for all major decisions. We facilitate the complex interrelations between oil companies, authorities, contractors and counsellors in all projects.

Based on our environmental know-how and many years of expertise, we offer a full range of multidisciplinary decommissioning services.

Setting the right team

As a full-service, international engineering consultancy with 10,000 specialists in 20 countries, we have local insight and can offer high quality decommissioning solutions tailored for each specific project and all customer needs.

Ramboll's environmental team includes:

- Environmental engineers
- Chemists
- Biologists/Marine biologists
- Geophysicists
- Specialised technicians

Managing complex relations

We have specialised in comparing a variety of alternative removal and disposal options, including provisions for post-abandonment monitoring and maintenance. Regardless of which options are required, we are able to assist and manage throughout.

More information on www.ramboll.com/oil-gas.



Sampling and monitoring is a very important task to obtain solid knowledge in the decision-making process. The pictures illustrate Ramboll's team at an offshore sampling assignment.

DECOMMISSIONING SERVICES

MANAGEMENT

- Impact assessment programme and decommissioning plan
- Legislation and authority management
- HSEQ management

STUDIES

- Removal, disposal and remediation studies
- Environmental studies and analyses (EIA, LCA, BAT etc.)
- Weight and cost estimates

MODELLING

- Numerical modelling, including CFD, MIKE/OSCAR etc.
- Offshore oil spill and sediment transportation
- Leaking contaminants from installations

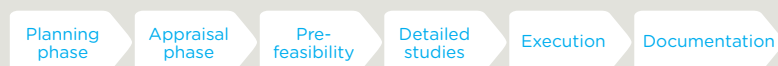
SAMPLING AND MONITORING

- Sampling of oil, water and sediment phases
- Seabed sampling
- Development of unique tools for specific applications

INSPECTION AND MAPPING

- Onshore and offshore inspection and audits
- Inventory mapping
- Waste mapping and handling

CESSATION PHASES



WHO ARE WE?

Ramboll is a leading engineering, design and consultancy company founded in Denmark in 1945. Today, we employ close to 10,000 experts and have a significant presence in Northern Europe, India and the Middle East. With almost 200 offices in 21 countries we emphasise local experience combined with a global knowledge base. We constantly strive to achieve inspiring and exacting solutions that make a genuine difference to our customers, the end-users and society as a whole. Ramboll operates within the areas of: Buildings, Transport, Environment, Energy, Oil & Gas, and Management Consulting.

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