



maritime



ROYAL HASKONING

thinking in
all dimensions

maritime



Clockwise from above: Felixstowe Container Terminal, UK; Port of Ennore development, India; Diving and maintenance services; Development of Port of Flushing, Netherlands.

your first choice partner for maritime development

We take great pride in the fact that we are internationally acclaimed as a world leader in the maritime sector and have the capability and experience to meet all your development needs in this vital link in the international transport and logistics chain.

We can support you at all stages of your maritime development, from initial feasibility studies, planning approvals and environmental assessments through finance, design and implementation to the provision of maintenance and operational support.

With over 100 years of maritime experience, we place great importance on understanding the pressures placed on the port and shipping sector and our underlying

philosophy is to treat your development issues and concerns as if they were our own.

Our vision is to be the industry's (and hence your) first choice partner for maritime development and our aims and principles when working with you are based on value, integrity, understanding and enthusiasm.

We also aim to make our Maritime Division an employer of choice that attracts and provides you with personnel of high intellect and a positive attitude. To achieve this we provide structured career paths underpinned by appropriate training within a progressive and varied working environment.



Clockwise from above: Gravel stacking beds, Thamesport, Isle of Grain; Western Jetties, HM Naval Base, Portsmouth; Port Operation Manuals; Offshore marine resource management; Ferry terminal, Dun Laoghaire, Dublin; Wave modelling, Port of Galle, Sri Lanka; Port expansion, Kota Kinabalu, Sabah, Malaysia.

we can meet all your development needs relating to:

- Development Planning, Trade Forecasting, Economic and Financial Evaluations
- Planning Approvals and Environmental Assessments
- Privatisation and Institutional Organisation and Management Structuring
- Equity Participation, Financing and Bid Packaging
- Site Investigations and Land Remediation
- Numerical Modelling
- Container Terminals
- Ro-ro, Car, Passenger, and Ferry Terminals
- LNG/LPG and Liquid Cargo Terminals
- Dry Bulk Facilities & General Cargo Berths
- Cruise Terminals
- Naval Base and Defence Facilities
- Regional and River Ports
- Marinas
- Shipbuilding and Shiprepair Yards
- Drydocking Facilities
- Dock and Lock Gates
- Offshore Activities
- Infrastructure, Intermodal Terminals and Inland Depots
- Breakwaters, Dredging and Reclamation
- Navigational Aspects
- Mechanical and Electrical Services
- Repairs, Refurbishment and ALWC
- Asset and Marine Resource Management
- Maintenance and Operational Support
- Due Diligence
- Insurance Claims

maritime



Clockwise from above: Rail freight terminal, Felixstowe; Dredging, Aden container terminal, Yemen; Garrison Point ro-ro, Sheerness, UK; Mechanical and electrical services; Victoria Container Terminal 3, Belfast.

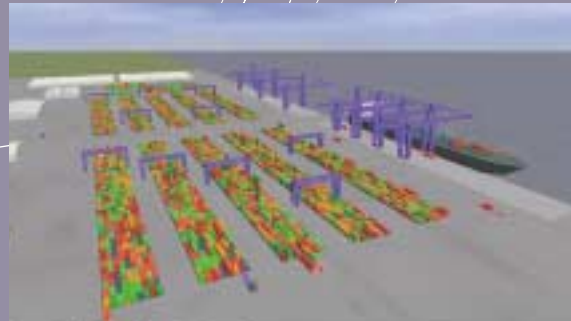
maritime consultancy

Royal Haskoning is internationally renowned for the planning, design and operation of ports and maritime installations. Careful analysis of the demand for port facilities is an essential precursor to deciding on an investment. We provide the trade forecasting, economic and financial analyses upon which to base these judgements. We have the operational know-how to produce the optimum development phasing to accommodate the present and future demand.

We understand the pressures on the port and shipping industry for ever greater economies in passenger and cargo handling and the need for a faster turnaround time for vessels. Our long experience in this market

enables us to provide solutions which meet your specific requirements and are flexible for the future.

Royal Haskoning enjoys long-term involvement with many successful ports and we have a proven track record in devising cost-effective and efficient solutions. Our experience spans the globe, extending from ports in South America through Central America, Caribbean, Europe, the Middle East, Africa and Asia to the Far East. This international experience means that we are able to provide clients with a broad and informed perspective.



Clockwise from above: Belfast ro-ro Terminal; Balikpapan Coal Terminal, Indonesia; Cruise Terminals; Liquid Bulk Terminals; Simulation Modelling.

ports and terminals

Royal Haskoning is at the forefront of container and ro-ro terminal technology, planning and infrastructure design.

At the Port of Felixstowe we have been responsible for designing all the container quays and infrastructure throughout 40 years of expansion. Our design for the Thamesport terminal at London's Isle of Grain features the very latest computer technology to control driverless gantries and trailers and our design of the new CERES Amsterdam Terminal provides the world's first twin sided re-entrant berth.

Our skills in the planning and design of container terminals are demonstrated by successful developments not only in the UK and Netherlands but throughout the world.

We know that for a busy port, speed of construction and the minimum of disruption to existing operations are vital. We have great experience in meeting these requirements, from the provision of berths for cruise ships, fast ferries and ro-ro vessels with their associated passenger access facilities and terminals, to the design of terminal facilities for liquid and dry bulk cargoes.

maritime



Clockwise from above: Keppel Tuas shipyard, Singapore; Cantilever dock gate, Hellenic Shipyards Co., Skaramanga, Greece; Shiplift, Benoi, Singapore; Ajman dry dock, United Arab Emirates.

shipyards and dock gates

Royal Haskoning leads the world in shipyard planning and design of drydocking facilities. Whether there is a need to build a brand new shipyard or upgrade an existing one, we have the expertise to provide a comprehensive service which includes feasibility studies, planning, environmental assessment and design.

Royal Haskoning has provided advice for the modernisation and expansion of projects in many countries including Canada, UAE, Sri Lanka, Singapore, Korea and New Zealand.

We have particular expertise in the design of dock and lock gates. New types of gate to suit clients' particular requirements; intermediate gates to divide dry docks; the replacement of existing gates – all are approached with innovative ideas to ensure substantial savings through reduced cost of construction, practicality of use and ease of maintenance.



Clockwise from above: Pontoon and marina brow safety, Pwllheli Marina, Wales; Design and reconstruction, Beadnell Harbour, Northumberland, UK; RNLI Lifeboat launch; Brighton Marina, UK.

marinas, small harbours and the RNLI

Royal Haskoning brings a wealth of experience to the planning and design of waterside developments, marinas and harbour projects.

In many parts of the world, pressure on development space at the water's edge has raised demand to such an extent that a premium of up to 60% can be added to the value of waterside property.

Development on river and marine sites already demands an unusually wide range of specialist planning and design skills. Recently, the pressure on space and the environment has led to burgeoning legislation and a new-found popularity for brownfield sites. In turn, the waterside developer requires an ever wider range of

specialist knowledge in relatively new areas of expertise.

Royal Haskoning provide all this expertise.

Nothing better illustrates the long-term partnerships we develop with our clients than our work for the Royal National Lifeboat Institution. Since 1887 we have been responsible for the design and maintenance of numerous slipways and boat houses around the coast, ensuring their operational viability 24 hours a day, 365 days a year.

Royal Haskoning is an independent, worldwide operating consultancy that has its origins in a firm established in 1881 in the Netherlands. The consultancy now has a staff of 2,300 who together combine a wide range of knowledge and experience. Rooted in a technical background, our consultancy services focus on the broad field of the interaction between people and their environment.

We are committed to working enthusiastically with our clients to achieve sustainable solutions in an increasingly complex society. The expertise and experience of our professionals in a variety of disciplines allow us to consider all technical, logistical, architectural, legal,

organisational, social, environmental and economic aspects of your project, in order to develop sustainable and practical solutions. Royal Haskoning has subsidiaries and partners throughout the world.

Posford Haskoning is the UK branch of Royal Haskoning. Through our branch and project offices in Europe and overseas, we have access to all major international markets. This way, Royal Haskoning offers multidisciplinary and integrated services locally, based on experience built globally. With our personal service in consultancy, we contribute effectively to the successful planning, design, implementation, commissioning and operation of your projects and programmes.

Royal Haskoning, through Posford Haskoning Ltd and Haskoning Nederland bv, is a member of:

- ACE The Association of Consulting Engineers
- BCB British Consultants Bureau
- PIANC Permanent International Association of Navigation Congresses
- ICHCA International Cargo Handling Co-ordination Association
- CIRIA Construction Industry Research Information Association British Section
- ICID International Commission on Irrigation and Drainage
- IEMA Institute of Environmental and Management Assessment
- FIDIC International Federation of Consulting Engineers

As part of Royal Haskoning, Posford Haskoning Ltd or Haskoning Nederland bv is registered with: African Development Bank, Asian Development Bank, Caribbean Development Bank, European Bank for Reconstruction and Development, European Development Fund, International Development Bank, Islamic Development Bank, Kuwait Fund for Arab Economic Development, Overseas Development Administration, United Nations Development Programme World Bank, and many other Funds and National Authorities.



From top: Alderney Breakwater; Humber Sea terminal; HSS berth, Hoek van Holland, the Netherlands; West Port Container Terminal, Malaysia; Palm Island Development, Nigeria; Main image: Port of Dublin, Ireland.

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