

# Shell Shipping

*Waves of change*



# Dimensions of a dynamic organisation

A cargo-transfer operation on behalf of the Group is completed every ten minutes.

Management and/or manning services are provided for more than 40 vessels, from 10,000 deadweight product carriers up to 300,000 deadweight very large crude carriers.

Over the past decade STASCO has successfully completed 450,000 million tonne sea miles of liquified natural gas transportation.

We procure more than one million tonnes of bunkers a year and work with shipping agents in some 250 ports.

In the last three years alone, STASCO's Shipping division has provided consultancy advice in over 40 countries. It has been engaged in dialogue with a high proportion of the world's tanker ship owners.

Shipping can call on a large pool of marine experts to provide advice on a wide range of ship and port projects, adding value to customers' business.

Our concerns about protecting the environment touch on every aspect of shipping operations, including the prevention of oil spills, ballast water management, ship recycling and emissions to the atmosphere.

Our expertise in risk and crisis management is recognised world-wide.

Our knowledge is offered for others to share through regional and local training, not just for Shell companies but for third-parties, including governments.

STASCO's skills and experience are helping the future of the tanker industry, with representation on all the main industry bodies, in the UK and internationally.



# Our Vision

is to be 'Global leaders  
in Shipping Excellence'



## A Global Player Supporting a Global Business Enterprise

Shell International Trading and Shipping Company Limited (STASCO) is the principal trading and shipping business of the Royal Dutch/Shell Group.

STASCO is part of the Shell trading network (Shell Trading) which consists of a number of separate companies covering world markets.

While remaining distinct entities responsible for running their own business, these companies all use the Shell Trading identity to demonstrate their close working relationships and provide a global service to their customers.

The Shipping division of STASCO is responsible for managing and/or manning Shell's large portfolio of liquefied natural gas carriers and oil tankers.

**Taken together, Shell companies conduct one of the world's largest and most varied marine operations.**

**Every day, we:**

- Trade some four million barrels of crude oil and over one million barrels of oil products  
- 10 per cent of total international movements;
- Deliver 20% of the world's international seaborne gas;
- Move cargoes on 100 deep-sea tankers and gas carriers around the globe
- With more than a 100 years of shipping experience, transporting crude oil, refined products, liquefied natural gas and liquefied petroleum gas by sea is the backbone of Shell's business.

# LNG Continuous involvement for over 40 years

## *Heritage*

Shell International Trading and Shipping Company (STASCO) and its predecessor organisations have maintained a continuous involvement in Liquefied Natural Gas (LNG) shipping for over 40 years. Our extensive knowledge of the LNG shipping business has its roots in the first vessels designed and constructed for the LNG trade. These vessels entered service in 1964 and were built under our supervision for the trade between Algeria and the UK.

## *A wide ranging portfolio of services*

STASCO has an unrivalled experience which has seen the safe delivery of thousands of cargoes world wide for a variety of customers representing LNG buyers, sellers, charterers and vessel owners. STASCO provides a comprehensive range of LNG shipping services.

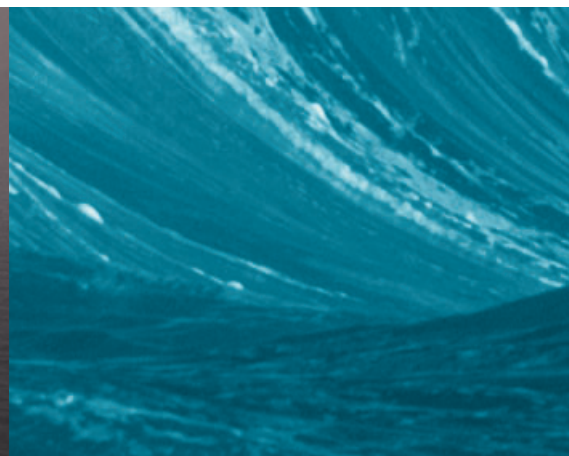
## *One of the worlds largest managed/manned LNG Fleets*

STASCO currently manages around 25 LNG carriers and is acknowledged as having a first class safety record with a round the clock 24 hour emergency response system.

STASCO has been involved in the specification, construction and commissioning of approximately 35% of the worlds fleet of LNG carriers and by its technical leadership STASCO has also influenced the specification and design of many others

STASCO continues to exert a major influence on the setting of the industry standards through active involvement in industry bodies such as the Society for International Gas Tankers and Terminal Operators (SIGGTO) and the Oil Companies International Marine Forum (OCIMF).

We work to high quality standards aiming to ensure that each cargo to each customer is delivered safely, reliably and efficiently



**Technical feasibility studies**  
**Commercial studies operations**  
**Ship and shore operations**  
**Design and construction supervision**  
**Vessels acquisition**  
**Vessel operation**  
**Longevity Studies**



# Ship Management

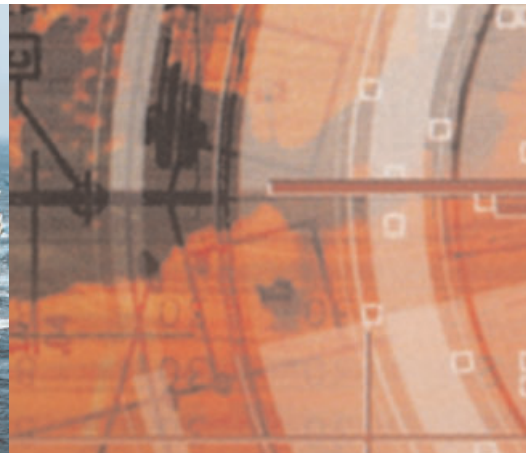
STASCO's Ship Management division manages/mans Shell's portfolio of oil and gas carriers.

It offers technical and operational expertise for the safe conduct of Shell managed and/or manned vessels. It also serves as a focus for business management of the portfolio and relationships with the ship-owning community.

Shell International Shipping Services (SISS), based in Singapore, provides seagoing staff for the Shell fleet.

Shell Ship Management Limited, based in the Isle of Mann, acts as the contract administrator for SISS. Its structured recruitment and training programme ensures that the fleet is manned by staff who will operate and maintain the vessels safety and efficiency.

Shell currently has more than 1 500 seafarers on board oil tankers and gas carriers, carrying out skilled tasks in a challenging environment



**Ship management**

**Procurement and  
corporate contracts**

**Emergency response**

**Portfolio and strategic support**

# Shell

## Shipping Technology

Winning global respect as a  
centre of excellence

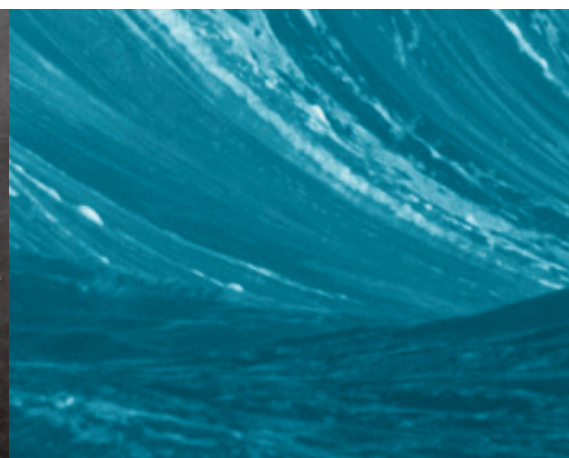
Shipping offers a consultancy service covering the full range of professional engineering and nautical expertise to Shell companies and third-parties - all aimed at focusing on the needs of the customer.

Its 50 strong global team boasts a wealth of unrivalled experience among its marine engineers, cryogenics specialists, naval architects, master mariners, electrical and instrumentation engineers, computing and communications experts.

All the technical services provided by Shipping have won high respect throughout the marine industry, widely recognised as being "best in class".

We play active roles in the Oil Companies International Marine Forum (OCIMF) and the International Maritime Organisation (IMO), particularly on environmental issues.

Consultancy services extend to commercial and technical aspects of LNG shipping. Shell has been involved in the specification, construction supervision and commissioning of more than a quarter of the world's LNG fleet.



consultancy

**Ship specifications and contracting**

**Ship construction supervision**

**Shipping advice**

**Safety audits**

**Port project management**

**Manoeuvring and mooring simulation**

**Ship and berth interface studies**





# Ship & Offshore Projects

Shell Shipping Technology has built up a wealth of unmatched experience in managing the construction of vessels and offshore structures in European, Korean and Japanese shipyards.

We cover every aspect of a project's life from enquiry specification and bid lists through to commissioning, trials and guarantee administration. In between, we evaluate tenders, negotiate both contract and specification, draw up equipment supplier lists and supervise every stage of construction.

Ship and Offshore Projects has been involved in every conceivable type of oil and gas tanker newbuilding, from 40-80,000 dwt products carriers to VLCCs and LNG carriers of 135,000 m<sup>3</sup> (membrane and spherical tanks), as well as offshore floating storage and production units (FPSOs).

Conversion and re-activation projects also figure strongly in our portfolio of skills and knowledge. Shell was one of the first companies to convert oil tankers for use as Floating Production Storage Offtake; our staff have been providing expertise in this field almost continuously for the past 25 years



## Port Project Development

Our specialists offer expertise in all aspects of the ship - shore interface, including port development, manoeuvring and mooring simulation, advice on operational procedures, berth design, commissioning and upgrade, objective review of design and operations, hazard identification and risk management, single and multi-buoy moorings, floating hoses, offshore mooring and berthing.

We can also advise on ship and berth compatibility issues.

Major projects are ongoing in all five continents.

# Shipping Standards

## *Shipping and Marine Reviews*

An audit and review service provided by our Shipping Standards team for Shell companies world-wide centres on the commercial and risk-management aspects of the marine business.

This includes assessment of the effectiveness of oil-spill prevention and response process, together with HSE management as it relates to shipping and marine activities.

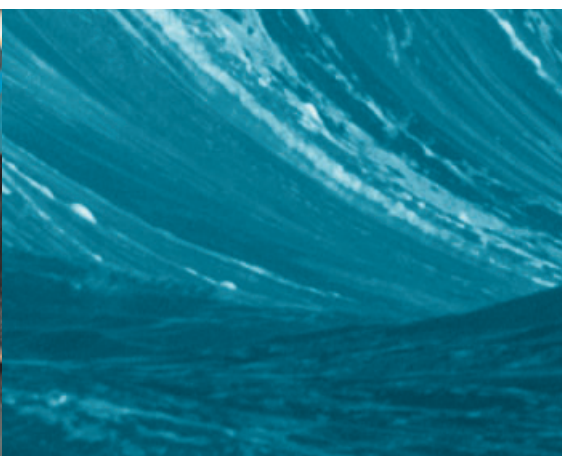
Our HSE department provides advice for the whole of STASCO and the Group's marine businesses, including local fleet management in Australia, Norway and Argentina and Group charterers of tonnage worldwide.

Regular safety audits of sites where STASCO staff work are also an essential element of our work

## *Ship vetting*

Our Ship Quality Assurance department plays a key role by clearing vessels that conform to the most critical element of business operations: the management of marine risk to meet Shell's commitment to protecting the environment.

STASCO has a rigorous vetting process for vessels chartered-in to transport its oil, carried out through a network of inspectors.



## *Ship vetting*

The Shell inspection reports enable us to build up a comprehensive database of suitable vessels, determining the acceptability for charter of every tanker in the world. This is used by our freight traders as their yardstick of quality.

We both contribute to and access the findings of other oil companies that are stored in the Ship Inspection Reporting (SIRE) database run by the Oil Companies International Marine Forum.

We also check out the management policies of other owners as part of the review process for long term commitments.

# Risk man



# Working with Customers

to make the most of shipping

Transporting oil and gas by sea is a high-profile activity. Conducting our operations safely, reliably and efficiently and minimising the impact of our activities on the environment is not only a sound proposition: it's also good business. Maintaining a hard-won reputation without harming the company's profitability are the more tangible benefits that also accrue from adopting and developing the principles of sustainable development - a priority area for staff and management alike.

This is the thread running through all of STASCO's shipping business activities. We:-

- Ensure best practice in marine operations and ship chartering, both for Group and third-party customers;
- Are a low-cost competitive supplier of quality-assured vessels;
- Leverage cost-performance through best-in-class procurement services;
- Provide expertise in design, supervision and operation of oil and gas carriers;
- Are highly active in trading support through portfolio management and period chartering;
- Offer cost-effective commercial solutions for LNG projects;



- Set the benchmark for business growth in gas shipping by achieving the highest industry standards;
- Develop innovative solutions for Exploration & Production, including offshore floating units, and in marine project management
- Can map staff competence and provide solutions for development training

ent

# Commercial Shipping



Shell International Trading and Shipping Company's (STASCO) acclaimed expertise in transporting liquefied natural gas is an integral element of the Shell Group's world leadership in the development of the LNG business. Through this, Shell has contributed to the transformation of gas from a more or less regional energy supply into a worldwide resource.

Our portfolio and track record demonstrate the ability to capture growth opportunities

"Poised to capture value for customers"

In LNG shipping, Shell International Trading and Shipping Company Limited's 40 year track-record extends to the full range of commercial, technical, and operational services in LNG Shipping.

With the start of LNG projects in Oman and Nigeria, Shell's equity capacity is approaching 11 mpta, with further growth in prospect.

Shell has equity in 29 LNG vessels with a further 5 on order.

STASCO currently manages around 23 LNG carriers.

STASCO has been involved in some 26 per cent of all LNG cargoes ever delivered - an impressive achievement.

STASCO's safety record has been exemplary, with several vessels achieving a coveted award for 10 years of operation without a single lost-time injury.

STASCO employs more than 400 officers who are qualified to serve in senior positions on LNG ships.

STASCO monitors and promotes industry standards and policies in line with both Group, Joint Venture and Industry interests.

STASCO has been involved in pioneering Floating LNG processes involving both storage and regasification of LNG offshore.

Innovation in propulsion methods of LNG ships is continually researched and monitored within STASCO.

Examples of the services STASCO provides.....

## *Project Development*

- Shipping Advisor: Technical and commercial Shipping advisor to Shell Group LNG projects
- Shipping economics: Analysis of the optimum project fleet requirements at the lowest cost supported by freight modelling
- Shipping availability: Analysis of the current availability of existing vessels and their potential suitability for use and likely cost
- Newbuilding tendering: Advice on the tendering and negotiation process for newbuilds and subsequent construction management

The Portfolio, Timecharter and Economics division works with Shell companies to define shipping strategy and plan vessel portfolios. It also develops the oil and gas portfolio based on Group business requirements and the market and the market environment acting as focal point for period chartering and sale and purchase.

## *Vessel Procurement*

- Vessel Financing: Evaluation of alternative finance options for vessels and best purchase or charter options
- Vessel Marketing: Assistance in securing vessel employment and advice on possible future trading opportunities
- Contract Management: Negotiation and management of LNG charters and new-build contracts
- Fleet Management tendering: Management and advice on the tendering process for fleet operations

## *Shell Group Shareholder Support*

- Focal point for LNG shipping activities: Advice and guidance on LNG shipping matters to Gas & Power and Gas & Power Joint Venture projects
- Market Intelligence: Analysis of competitor activity including vessel availability using knowledge of world-wide requirements for LNG project shipping



**Shell Trading**



# Ship Management



## Providing a safe and cost-effective delivery service

As vital elements of the Shell Trading network, our own managed ships provide a high-quality core of reliable tonnage around which our oil traders can develop a portfolio of time & voyage chartered business.

The Ship Management division co-ordinates the day-to-day operational management and manning of a fleet of around 19 oil tankers ranging from 10,000 to 300,000 deadweight and 23 LNG carriers.

We are progressively modernising our fleet through innovative financing arrangements. Where health, safety and the environment are concerned, we are a world class-operator, working to reinforce our reputation every day.

Shell has proved to be the supplier of choice for LNG and upstream projects, thanks to its unparalleled experience in both operations and shipbuilding.

The challenge is to perform at internationally competitive cost-levels while supplying the technical and operational skills essential for the safe conduct of cargoes for Shell's oil and gas businesses.



A comprehensive range of services is offered:

**Oil and gas ship management** operates through three separate groups, each with complete overall responsibility for operating the vessels, which includes manning and maintenance.

STASCO fleet personnel are employed through the manning company Shell International Shipping Services Ltd (SISS), with Shell Ship Management Ltd (SSML) acting as the administrator in the Isle of Man.

The recruitment and training of staff is carried out in line with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) requirements.

**Emergency Response and Industry Standards** maintains a 24-hour shipping emergency response support. The facility, located in a dedicated room, includes the provision of expert resources, together with the necessary equipment. It supports operating units in their management of a marine emergency.

**Procurement and Corporate Contracts** manages and supports the acquisition of goods and services for the fleet and head office. Activities range from the strategic development of key high-spend sectors to operational requirements, including logistics. Throughout, emphasis is placed on optimising total lifecycle costs by working with suppliers and the use of the latest techniques, including procurement solutions.

Our oil and gas ships provide an invaluable source of marine skills and experience. This is in terms of both operations and the development of highly trained officers and crew who migrate between the vessels. Their expertise also enables them to move positions amongst our team of marine advisors in operating units around the world as well as in the corporate office. We are also sensitive to the needs of our customers and partners, who require both training for their cadets and technology exchange.



**Shell Trading**

# Shipping Standards



## Assessing and managing marine risk

Under the umbrella of shareholder and stakeholder protection, Shipping Standards' role covers a range of activities concerned with the critical aspects of marine risk assessment and management. A broader governance remit will see greater activity in this division as it assists Shell companies in raising their marine standards and business performance.

Another vital element of our work is to ensure that operating units can mount an effective response to shipping casualties.

### The services we offer:

#### *Vessel Quality Assurance*

We are responsible for developing and administering well-defined Group standards for ship employment – a key element to the effective management of marine risk. These standards are supported by our vetting processes, centred on STASCO's SAFE 2000 system.

Constant maintenance and updating of the system's database and the expertise of a team of marine professionals ensures that tonnage available for use by any Shell company meets international requirements and robust industry standards.

Direct on-line access is provided, with information or advice readily available round the clock.

We are also responsible for developing standards, procedures and guidelines to assist operating units to establish local or regional vetting schemes to improve the management of risk associated with the employment of local tonnage, principally small coasters, barges and bunkering craft. A focal-point has been established within STASCO's Vessel Quality Assurance team with the prime remit to support Shell companies to develop their own suitable vetting processes.

A global database for the small ship and barge vetting is being developed.

#### *Health, safety and environment*

Health, safety and environment advice is provided for all the Group's marine businesses. We actively support the work of leading relevant industry associations, such as OCIMF, and through them, participate in the work of IMO, particularly on environmental issues. STASCO attends the Tanker Operators' Informal HSE Forum. Safety audits of sites where STASCO staff work are also conducted.

## *Business reviews*

Based on the Shipping and Marine Business Model which captures all elements of the shipping activities, reviews (Shipping and Marine Business Review - SMBR) are conducted as a governance assurance process for all Group Businesses with exposure to shipping. The review samples the entire scope of operation, including the documentation, implementation and effectiveness of processes that are required in the areas of emergency and crisis incidents, shipping standards and the ship/shore interface. The commercial and support aspects of the operation are also included, targeting areas for improvement e.g. oil quality and quantity, ship demurrage, competency profiling and internal audit. Concurrent with the SMBR, the Business's HSE MS, as it relates to shipping and marine activities, are conducted. These satisfy the Group requirement that HSE MS's are subjected to independent audits.

## *Risk and crisis management*

Shipping's expertise on oil spill preparedness and response issues is widely acknowledged. As advisor for the Group, we offer guidance to operating units, including risk-assessment and contingency planning, practical exercises, development of regional team resources and their interfaces with national and regional plans. We are also responsible for providing regular reports on overall preparedness and response capability to Shell's multi-business oil and chemical spill advisory group members and for liaising with primary responders such as the industry Tier 3 centres.

## *Training*

Comprehensive training packages are available and structured training programmes on a wide range of issues can be tailored to suit individual requirements. Examples of existing modules include shipping emergency response, oil spill preparedness and response, compensation regimes, ship/shore safety, commercial management, demurrage control and claim's processes. Advice on competence mapping and profiling is also available.



**Shell Trading**



# Shell Shipping Technology



## Shipping Consultants of First Choice

As a world leading shipping and offshore consultancy, Shell Shipping Technology aims to add value to shipping and marine businesses worldwide by offering a one-stop technical solution to an array of business needs. With up to 50 consultants and up to date market intelligence, we aim to provide first class advice from early project development to fast-track implementation of shipping and marine projects.

### *Project Management*

We provide advice on design and construction of oil, LNG vessels, offshore facilities, yard selection, tender assessments, contract negotiations, plan approval and construction management.

Our previous experience includes:

- Product and crude carriers (including VLCCs)
- LNG carriers (membrane and spherical tanks)
- Newbuild Floating Production Storage Offtakes (FPSOs)
- Floating Production and Storage Offtake Units (FPSO's)

Current projects include Newbuild Construction supervision and site representation for LNG Carriers for Nigeria LNG Ltd and Australia LNG as well as design and permitting work for the Broadwater FSRU.

### *Offshore Floating Production and Storage Technology for Oil and Gas*

We can assist with the conversion of oil tankers into Floating Storage Units (FSU), as well as newbuild design, procurement and construction.

Exciting new developments we are looking at include designs for Offshore Floating LNG (FLNG) and Floating Storage and Regasification Units (FSRU).

Our current projects include consultancy to Shell Deepwater Services and Shell Nigeria Exploration and Production Company (SNEPCO) for field developments in Brazil and Nigeria.

### *Port and Terminal Development*

Shell Shipping Technology is able to provide specialist advice on:

- Suitability of existing ports for specific ships
- Site suitability for port development
- Assessment of site alternatives
- Optimization of import/export opportunities and upgrade options
- Manoeuvring and mooring simulations

In addition, we also provide advice on:

- Operational procedures
- Berth design and commissioning
- HAZOP and HAZID studies
- Offshore mooring and berthing

We also supply operational advice on:

- Cargo care
- Cargo expediting
- Vessel inspection
- Ship/shore compatibility
- Safety management

We are currently engaged in ports and terminal advice worldwide.

### *Industry Representation*

Shell Shipping Technology consultants help to shape the standards of future industry regulations through active participation in a number of international organizations, such as:

- The Oil Companies International Marine Forum (OCIMF)
- Society of International Gas, Tanker and Terminal Operators (SIGTTO)
- The International Maritime Organisation (IMO)

To ensure environmental concerns are addressed in a responsive manner, we also help to address such issues as:

- Ballast water management
- Ship recycling and emissions to atmosphere

At Shell Shipping Technology, we believe that working closely with our clients ensures the successful delivery of a project. Give us a call today to find out more.

**Tel: +44 (0) 20 7546 4427 or visit  
[www.shell.com/shipping](http://www.shell.com/shipping)**



**Shell Trading**



**Shell Trading**

Visit our website at : **[www.shell.com/shipping](http://www.shell.com/shipping)**

Royal Dutch Shell plc and the companies in which it directly or indirectly owns investments are separate and distinct entities. But in this publication, the collective expressions 'Shell' and 'Shell Group' may be used for convenience where reference is made in general to those companies. Likewise, the words 'we', 'us', 'our', and 'ourselves' are used in some places to refer to the companies of the Shell Group in general. These expressions are also used where no useful purpose is served by identifying any particular company or companies.

Shell Trading is the principle trading and shipping business within the Shell Group. It comprises a network of companies which are all independent entities, trading in their own right, but also seeking to leverage the opportunities open to a global organisation by sharing information, advice and best practice.

Shell International Trading and Shipping Company Limited is authorised and regulated by the Financial Services Authority. Shell International Trading and Shipping Company Limited makes no representation or warranty of any kind concerning the accuracy of the information in this publication and disclaims all liability whatsoever (whether in negligence or otherwise) for the same.