

This and the following 59 pages comprise Schedule 22 referred to in the foregoing Contract between the Scottish Ministers and Serco Ltd.

SCHEDULE 22 – ENVIRONMENTAL MANAGEMENT DELIVERY PLAN

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Glossary of Terms

Term	Definition
ALS	Aberdeen Laundry Services
AoSP	Areas of Special Protection
AMS	Assurance Management System
CDP	Carbon Disclosure Project
CFINE	Community Food Initiatives North East
Effluent	Liquid waste or sewage
EIA	Environmental Impact Assessment
ESOS	Energy Saving Opportunities Scheme
HSE	Health, Safety and Environment
Horizon Scanning	Very long-term scenario planning
IMO	International Maritime Organisation
IOSH	Institute of Occupational Safety and Health
ISM	International Safety Management System
Lairage	Holding pens for livestock
PMSC	Port Marine Safety Code
QHSE	Quality, Health, Safety and Environment
LNRs	Local Nature Reserves
MARPOL	(Marine Pollution) The International Convention for the Prevention of Pollution from Ships
MCA	Maritime and Coastguard Agency
MCR	Mandatory Carbon Reporting
MNR	Marine Nature Reserve
MPAs	Marine Protected Areas
NNRS	National Nature Reserves
RoHS	Restriction of the Use of Certain Hazardous Substances
SAMS	Scottish Association for Marine Sciences
SECA	Sulphur Emission Control Area
SEEMP	Ship Energy Efficiency Management Plan
SEMS	Ship Energy Monitoring Systems
SEPA	Scottish Environment Protection Agency
SMEs	Small and medium sized enterprises
SMS	Serco Management System
SOP	Standard Operating Procedure
SOPEP	Ships Oil Pollution Emergency Plan
SSMO	Shetland Shellfish Management Organisation
SSSI	Sites of Special Scientific Interest

Term	Definition
STC	Technical training and professional development services provider for the oil and gas industry
VMS	Vessel Management System
WEEE	Waste Electrical and Electronic Equipment

B5 Environmental Management Delivery Plan

1. Executive summary

1.1. Serco's Approach to the delivery of the Environmental Management Delivery Plan

The purpose of this Environmental Management Delivery Plan is to demonstrate our understanding of the objectives that Serco and Scottish Ministers have set for the operation of the new Northern Isles Ferry Service, with respect to Environmental Management.

Our proposed Environmental Management Delivery Plan provides a comprehensive and 'best practice' approach to ensuring an efficient, reliable ferry service through environmental management, mitigating environmental impact of the service, minimising the effect on marine life and securing the health and protection of marine mammals. We have provided details of our environmental management policy, systems and procedures which form part of Serco's integrated Health, Safety and Environment Policy (HS&E). We have also outlined our steps for satisfying all statutory requirements and explain how we monitor compliance with this Plan.

Our Environmental Management Delivery Plan is mindful of Scottish Government's (SG) high level objectives:

- Be safe, sustainable and efficient
- Responsive to local needs and appropriate to the requirements of those using them
- Contribute to sustainable economic growth on our islands and in our remote rural communities

This Delivery Plan has been structured around the ITT Vol 2 – B5, with a section explaining about the challenges of Environmental Management as a whole – relating to technical, logistical and management challenges. Then we have explained:

- Our Approach and methodology, utilising the best practice we have developed over the last six and a half years on which our proposals have been based
- Our Proposals for the new contract term

We have set out our proposals which will form part of the agreement between SG and Serco and show where there are areas of continuous improvement which will be targeted throughout the term of the Contract. The areas of continuous improvement may require TS, CMAL or third party approvals, feasibility studies or business cases in order for them to be delivered, and thus are to be viewed as having the potential to be implemented.

Serco has an in-depth knowledge of the risks that could affect the operation, and we have identified the high-level risks and the actions required to mitigate them, or to bring them to as low a level as reasonably practicable.

We have not included any costs associated with regard to the delivery of the contract, but they can be found in the financial model.

Building on our existing experience of operating the current Northern Isles Ferry Service (NIFS) since 2012, Serco is well placed for taking our environmental management performance to a new level, with clearly defined systems, processes and procedures embedded across all our operations, underpinned by application of latest technology, such as DNV GLS Navigator insight for monitoring energy consumption and emissions.

Our operations team will be supported by the expertise of Serco Group's Quality, Health, Safety and Environment team personnel, who will continue to bring learning from across our wider

organisation to deliver added value for the new Northern Isles Ferry Service and our eight Green Champions. Many of whom have already volunteered for the roles, and will become environmental ambassadors, driving efforts to continuously improve performance and encourage others to get involved.

Redacted

Supporting our alignment with the Scottish Government’s digital strategy and to operating transparently, we welcome the potential opportunity of enabling information sharing with Transport Scotland. We will do this through our provision of a bespoke reporting solution using innovative, cloud-based, Redacted technology which is being rolled out over Serco Group, (timeframe to be confirmed for the Transport business). When implemented this would have the functionality to further demonstrate transparency in our operations for Transport Scotland as well as granularity of information on environmental issues, enabling manipulation and interrogation of data that will support informed decision-making. Speed, efficiency and accessibility to report information would all be increased, while use of interactive visualisation tools will bring data to life and enable swift identification of any emerging trends.

In accordance with our alignment with ISO 14001:2015 environmental management system requirements, our Environmental Management Delivery Plan will be reviewed, at least, annually to inform and drive interventions for improving performance.

For the new contract, we will maintain the continuous improvement (CI) culture we have developed since 2012 encouraging ideas, however small, for ways that environmental management improvements can be made. The combination of top down leadership and bottom up input will underpin our efforts in continuously improving our environmental performance, capturing innovation, and ensuring continued implementation of best practice methodology.

Section 1.2 details our proposed improvements to be delivered through implementation of this Environmental Management Delivery Plan.

1.2. Key Improvements

Table 1: Key proposed improvements

Number	Improvements to be delivered by Serco for the Northern Isles Ferry Service
1	Appointment of eight Green Champions who will proactively assist in the implementation of our Environmental Management Delivery Plan, driving efforts to continuously improve performance and encourage others to get involved; this will continue to foster an environmentally focused culture and communication
2	Environmental awareness training for all staff and ongoing re-assessment to ensure continued competence
3	Application of Serco Group’s operational excellence methodology to formalise our approach to driving continuous improvement and realise environmental management benefits for Scottish Government
4	New measures for preventing pollution relating to vessel construction and ongoing maintenance, effective foul water management, use of shore power and consideration of smart lighting will further minimise our impact on the environment
5	Adopting a holistic approach to upholding a zero waste to landfill for commercial and general waste, by working closely with our supply chain partners and Redacted

Number **Improvements to be delivered by Serco for the Northern Isles Ferry Service**

- | | |
|----|---|
| 6 | Support sustainable procurement through simplified supplier packs for small and medium sized enterprises (SMEs) and mentoring workshops in marketing, the tendering process, accounting, health and safety, environmental management and ensuring innovation is included in our review process; this will support sustainable economic growth for the islands and remote rural communities |
| 7 | Communications campaign and support for staff in selecting environmentally friendly travel options to include the cycle to work scheme, information about public transport, electric vehicle charging, care sharing and technological support for home working; take-up of travel options will demonstrate our proactive approach to reducing our environmental impact as individuals |
| 8 | Green travel communications campaign for customers and supporting initiatives to include car parking for those not travelling with a vehicle, improved cycle storage facilities, electrical vehicle charging at ports, promotion of walking routes, extended customer contact centre opening hours to support transport integration enquiries and environmentally themed marketing promotion; these measures will raise awareness and increase take up of environmentally friendly travel choices available to mitigate the environmental impact of the Service |
| 9 | Use of DNV GLS Navigator insight for monitoring energy consumption and emissions will assist co-operation with Transport Scotland in the compilation and publication of emissions information |
| 10 | Implementation of carbon reduction strategy, in collaboration with port authorities to include our recently launched carbon offsetting initiative with environmental services company 'highland carbon'; this will direct our efforts in reducing CO ₂ emissions for the contract duration |
| 11 | Implementation of the Ship Energy Efficiency Management Plan will support us in driving further energy savings for the duration of the new contract |
| 12 | Completion of pilot for using shore power on MV Hamnavoe at Stromness will enable us to consider rolling out the initiative elsewhere, as well as exploring other opportunities for reducing the CO ₂ footprint of our operation of NorthLink Ferries, demonstrating our commitment to innovation |
| 13 | Roll out of internal awareness campaign to reduce energy consumption across ship and shore will encourage the continuity of positive behaviours |
| 14 | Implementation of Ecology Management Plan to include effective management of time to enable NorthLink personnel to undertake community projects, consulting with and supporting research organisations and engaging the public in wildlife spotting will raise awareness and assist in securing the health and protection of marine mammals |
| 15 | Enabling improved reporting through use of Redacte technology which is being rolled out over Serco Group, (timeframe to be confirmed for Transport Division). When implemented this has the functionality to further demonstrate transparency in our operations for Transport Scotland and the granularity of information on environmental issues |
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2. Introduction

Our objectives for the Environmental Management Delivery Plan include:

- To have in place suitably qualified, environmentally focused and experienced personnel with strong leadership for ensuring the successful execution of this Plan
- To continue providing a safe, sustainable and efficient service for stakeholders, applying our proven Environmental Management System and operating procedures, underpinned by that of the Serco Group organisation
- Successfully mitigating our impact on land and at sea for the contract's duration

- To continue to adopt our existing approach to sustainable procurement, providing opportunities that support sustainable economic growth on the islands, the mainland and in remote rural communities
- To use internal and external communication campaigns to raise awareness and encourage NorthLink's stakeholders to adopt and embrace environmentally responsible behaviour
- To promote green travel choices through collaboration with other transport providers to improve travel integration and provision of relevant information and communication
- To measure and monitor Environmental Management Delivery Plan outputs and use our proven methodology from the existing contract for capturing ideas, learning from experience and continuously improving our performance

Serco is committed to addressing the impact and protecting the vulnerable marine world in which our ferry services operate. We will continue to support sustainable economic growth for the islands and their remote rural communities. Since 2012, we have a very strong track record of safely meeting stakeholder requirements, while minimising our impact on this region's water quality, rugged coastline, unspoilt landscape and fascinating wildlife, protecting them for the enjoyment of future generations.

3. Understanding the requirements of the Environmental Management Delivery Plan

Table 2: Assessment of the Challenges – Environmental Management

Technical	Redacted
Logistical	Redacted

Table 2: Assessment of the Challenges – Environmental Management

Management	Redacted
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4. Environmental Management System – EM1

4.1. Approach to Environmental Management

All our proposals outlined in this Environmental Management Delivery Plan have been developed in accordance with environmental management specifications 16.1 to 16.4 of the Northern Isles Ferry Service Specification of Requirements. They will be underpinned by Serco's environmental management system, which meets and is certified to the ISO 14001:2015 standard, with rigorous processes for monitoring, measuring and reviewing performance and additional governance provided by Serco Group.

4.1.1. Leadership

Serco will continue to adhere to the objectives from Transport Scotland's Corporate Plan to deliver environmental protection, community benefit, and to adapt and mitigate against climate change across our operations, projects and activities. Serco confirms we will continue to promote a culture for NorthLink in which we all share this commitment.

Our existing approach for protecting the environment will continue to be achieved through visible leadership, executive and management commitment, focusing on behaviours and personal responsibility, coupled with a moral obligation to demonstrate care for the environment.

Our values of Trust, Care, Innovation and Pride underpin our strategy for protecting the environment in the delivery of the new Northern Isles Ferry Service contract.

All Serco leaders and staff are required to live Serco's values, linked with their own, individual environmental objectives and responsibilities for improving performance. Based on Serco's corporate key performance indicators (KPIs), these are continuously monitored and managed through the executive chain of command, from the Serco Group CEO to our Transport Divisional Managing Director and individual contract management and staff.

4.1.2. Policies

In the existing contract, managers communicate the details of the environmental element of the HS&E policy to all staff and subcontractors at induction sessions. Copies of the policy are posted on noticeboards located on vessels, in our offices and Contact Centre, as well as on the NorthLink intranet site Redact , and are made available to the public, on request.

Signed by the Serco Group Chief Executive, our policy statement, shown in Figure 1, underpins our standards and related operating procedures, and is aligned with ISO14001:2015 standard on Environmental Management.



Figure 1: Serco’s Health, Safety and Environment policy statement, 2018

4.1.3. Systems

Environmental protection is already embedded within all aspects of our delivery of the current Northern Isles Ferry Service through our existing Environmental Management Plans and application of the proven Serco Management System covering Quality, Health, Safety, and Environmental Management. This will continue to provide a well-structured framework defining the rules that govern the way we operate and the way we behave for the new contract. Figure 2 illustrates the relationship between health, safety and environmental management for NorthLink, underpinned by Serco Group’s Management System.

Redacted

Figure 2: Serco Management System, underpinning delivery of environmental protection for NorthLink

Our management plans play a central role in ship and shore side health, safety and environmental management functions, providing a comprehensive range of processes and procedures that ensure we adhere to all legislative requirements as a minimum and maximise opportunities for adopting best practice as a result of our established processes for continuously improving our performance and capturing innovation. These are formally recorded and retained in our Standard Operating Procedure (SOP) documents referred to in Section 4.1.4, available in printed formats on each vessel as well as via Redacted for shore-based staff.

4.1.4. Procedures

Building on the proven methodology applied on our existing contract, we will review all current and relevant past activities, documenting all significant environmental aspects and impacts using an Environmental Aspects and Impacts Register for the new contract. This will provide a baseline enabling us to establish control measures for minimising negative impacts. It will also highlight areas requiring assessments of environmental risk, according to our defined process, whereby any significant environmental risks identified will be escalated as part of our risk management processes. Where we have direct control or influence, we will apply processes and procedures for minimising their impact, with systems in place for monitoring and measuring the results of our actions, such as ECO Insight software developed by DNV GL, used for monitoring fuel consumption and CO₂ emissions for our current Northern Isles Ferry Service contract. We will ensure ongoing compliance with Monitoring, Reporting, Verification (MRV) regulations and mandatory Ship Energy Efficiency Management Plan Requirements Part II.

Redacted

Figure 3: Example Environmental Aspects and Impacts Register page in Serco's Redacted database

The current processes and procedures we use for minimising our environmental impact through the delivery of the Northern Isles Ferry Service include but are not limited to the following:

Redacted

Redacted

4.1.5. How we will satisfy all statutory requirements

Serco will operate the Northern Isles Ferry Service in accordance with Serco Group's ISO 14001:2015 accredited environmental management system. We confirm that following completion of recent gap analysis and a document review by the accredited certification body, DNV-GL Business Assurance, NorthLink is on track to receive ISO 14001:2015 for all shore side operations.



Figure 4: Serco Group's ISO 14001:2015 certificate awarded by BSI for its Environmental Management System

4.1.6. People responsible for environmental protection

Our people are responsible for delivering a diligent and comprehensive approach to environmental management and our organisational design has been developed to take account of shoreside requirements as well as the specific environmental management needs of each vessel. The shore-based, Redacted, will be responsible for environmental management, with defined authority for establishing, maintaining and reporting on environmental management performance to Transport Scotland.

The Redacted will be responsible for environmental management of the vessels.

Redacted will be responsible for ensuring we continue to satisfy all statutory requirements throughout our service delivery for the new contract and will work closely with local port authorities: Scrabster Harbour Trust, Lerwick Port Authority, Aberdeen Harbour Board and Orkney Harbours to reduce our impact on the environment.

Redacted will be accountable for the delivery of this Environmental Management Delivery Plan, liaising with Redacted, who will be responsible for informing shipboard personnel of new regulatory requirements and operational instructions.

Our environment-focused culture for the new contract will be further embedded by support from up to eight Green Champions from our workforce. These personnel, many of whom have already volunteered for the roles, will be environmental ambassadors; they will proactively assist in the implementation of our Environmental Management Delivery Plan, driving efforts to continuously improve performance and encourage others to get involved.

Table 3: Roles and responsibilities for environmental management of the Northern Isles Ferry Service

Role	Responsibilities	Relevant Qualifications
Redacted		

Role

Responsibilities

Relevant Qualifications

Redacted

-

4.1.7. Monitoring and ongoing compliance

Serco will draw on its transport business and wider Group expertise and resource to continue to support the Northern Isles Ferry Service contract, providing assistance to ensure ongoing compliance with the Energy Saving Opportunities Scheme, (ESOS), the annual CRC Energy Efficiency Scheme and annual Mandatory Carbon Reporting (MCR). Our Environmental, Energy and Sustainability experts, and QHS&E managers hold academic and professional certifications and accreditations Redacted To date, they have contributed specialist support and provided additional assurance in relation to NorthLink's ongoing compliance with shipping regulations, undertook an Integrated Assurance Review and have, more recently, contributed advice and assistance for achieving ISO 14001:2015 certification. The following capability matrix outlines the credentials of senior members of this team in Table 4:

Table 4: Capability Matrix for senior members of our UK & Europe Environment, Energy and Sustainability Team

Serco UK & Europe Environment, Energy and Sustainability Team Capability

Role	Competency	Professional Memberships	Experience
Redacted			

Serco UK & Europe Environment, Energy and Sustainability Team Capability

Role	Competency	Professional Memberships	Experience
Redacted			

4.1.8. Training and information

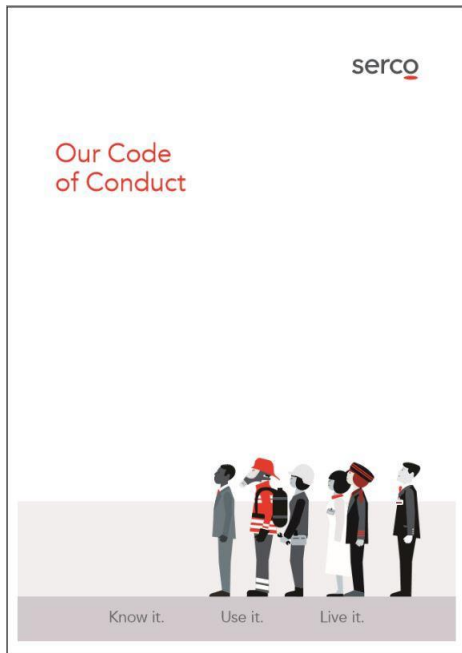


Figure 5: Serco's Code of Conduct underpins our Local Operating Procedures (LOP), providing effective levels of control for managing specific risks and requirements

As in the current NIFS contract, under the direction of the Managing Director, all managers will be required to lead by example and take full ownership of their own individual environmental performance. We will continue to ensure that all new shore-based and seagoing personnel receive online environmental awareness training as part of our induction process.

Staff will be required to adhere to our Code of Conduct, illustrated in Figure 5 and Figure 6, while those based on the vessels will be required to adhere to the Code of Safe Working Practice for Merchant Seafarers. This process will continue to be managed and verified online, via Serco's HR Management Information System.

HS&E training for personnel, pertinent to their role and work environment, is linked to relevant legislation and hazards they could face while delivering the services, to ensure they can be competently undertaken.
Redacted

Respecting the Environment

We strive to prevent environmental damage and minimise our use of energy and resources.

We work with our stakeholders to continuously assess and reduce our environmental impact and improve our environmental performance.

You have a vital role in protecting the places where we work:

- Report any violation of our environmental policies
- Report any risk or incident that could do harm to the environment
- Listen to the concerns of the people and communities we work among
- Let us know if you think we're failing, or you have an idea about how we might improve. We promise we will listen to you
- This way's cheaper. That way's better for the environment. Which way do we go?

What you can expect from us:

Our vision is Zero Harm. So we strive to prevent any environmental damage that could result from our work.

We do this by measuring and understanding the environmental impact of what we do, and putting effective systems in place to manage, minimise and prevent it.

This is a process of continuous improvement. We look for best practices in sustainable development. And as we learn, adopt and improve, we set ourselves increasingly demanding targets to reduce our use of energy and resources, recycle and re-use, and re-think and re-model the way we do things. We also encourage and help our customers, contractors and suppliers to do the same.

This is an integral part of who we are and how we do our work.



Figure 6: Extract from Serco's Code of Conduct, detailing our commitment to protecting the environment

Redacted

Redacted

Supporting our existing approach to continuous improvement (CI), relevant training will be provided for all our people with enhanced training for managers and operational excellence lead practitioners. Redacted

Our Green Champions will support us in teaching personnel about the sustainable nature of products on board vessels and raise awareness of any issues or opportunities for harnessing improvement ideas.

As standard practice on our existing contract for operating NorthLink, any sub-contracted personnel will be required to align themselves with Serco's core values, adopt our Code of Conduct for Suppliers and complete the same induction processes as our staff. Once appointed they are subject to the same HS&E processes, procedures and systems to ensure they are legally and regulatorily compliant, as well as providing assurance of consistency in service delivery at all times.

Serco has developed a strong HS&E culture for NorthLink, whereby our actions and impacts are 'top of mind' considerations. This assists in delivering our Zero Harm goal and we confirm that anyone working on our behalf is always empowered and encouraged to report any environment-related concern at any time, in relation to safety, service delivery or equipment.

We confirm continued compliance of all vessels and our operational activities with statutory requirements of the UK, European Union and the International Maritime Organisation (IMO), MCA statutory instruments and merchant shipping guidance notes, as well as MARPOL, Scottish Environment Protection Agency (SEPA) regulations and all relevant port authority requirements. Environmental legislation applicable to our operations includes, but is not limited to, the following:

Ports and Port Authority:

- Port Marine Safety Code (PMSC)
- Harbour Works (Assessment of Environmental Effects) (Amendment) Regulations 1996
- Harbour Works (Environmental Impact Assessment) Regulations 1999
- Transfrontier Shipment of Waste Regulations 1994
- Merchant Shipping (Port waste Reception Facilities) Regulation 1997
- Conservation (Natural Habitats &c.) Regulations 1994 (implementation of the Habitats Directive (92/43/EC))
- Countryside and Rights of Way Act 2000
- Environmental Impact Assessment (EIA) Directive (97/11/EC)
- Surface Waters (Dangerous Substances) (Classification) Regulations 1997 & 1998
- Shellfish Waters Directive (79/923/EC)
- Port Harbour Master requirements
- Sulphur Emission Control Area (SECA) regulations

Waste Management:

- The Environmental Protection Act 1990 (EPA90)
- The Environment Act 1995 and all other relevant legislative constraints
- Waste Electrical and Electronic Equipment (WEEE) Regulations 2006
- Restriction of the Use of Certain Hazardous Substances (RoHS) in Electrical and Electronic Equipment Regulations 2006
- Hazardous Waste Regulations 2005
- Special Waste Regulations 1996 as amended
- Special Waste (Scotland) regulations 2005
- Waste (Scotland) Regulations 2005
- Water Resources Act 1991
- UK's Nature Conservation Legislation
- European Commission (EC) Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive, 92/43/EEC)
- The Environmental Protection Act 1990 (EPA90)
- Wildlife and Countryside Act 1981 – Sites of Special Scientific Interest (SSSI) and Areas of Special Protection (AoSP)
- National Nature Reserves (NNRS) and Marine Nature Reserve (MNR)
- National Parks and Access to the Countryside Act 1949 – National Parks and Local Nature Reserves (LNRs)
- The Environment Act 1995
- Water Framework Directive (2000/60/EC)
- Marine Scotland Act 2010

Regulations defined by the International Convention for the Prevention of Pollution from Ships (MARPOL):

- Prevention of Pollution by oil, Annex 1

- Control of pollution by noxious liquid substances, Annex 2
- Prevention of pollution by harmful substances in packaged form, Annex 3
- Prevention of pollution by sewage from ships, Annex 4
- Prevention of pollution by garbage from ships, Annex 5
- Prevention of Air Pollution from Ships, Annex 6
- Ballast water regulations

In accordance with our protocol for delivering the existing Northern Isles Ferry Service, Serco will continue to undertake annual reviews of stakeholder requirements and associated environmental legislation applicable to our service delivery, resulting from the MCA issuing Marine Notices. We will apply and communicate any updates to our policies and procedures, as necessary and in accordance with the requirements of ISO14001:2015.

It can be a challenge to retain current knowledge, but as an experienced operator we ensure ongoing compliance with all statutory requirements. Serco has systems in place for capturing and implementing any arising changes to procedures at the earliest opportunity, making certain that industry best practice is adopted by our workforce. Redacted

Regular annual internal audits on vessels and ashore, Document of Compliance verification audits and our system of drills to meet ISM and safety management code requirements ensure our ongoing compliance with legislative and regulatory requirements. We also receive regular notifications of changes from the MCA, DNV Classification Society and Regulations for Ships and undertake proactive horizon scanning in anticipation of changes through memberships of organisations such as the UK Chamber of Shipping and Nautical Institute.

Serco's Redacted

maintain a Compliance and Obligations register that includes an environmental legislation section covering all UK and European legislation that is relevant to all sectors of the organisation. They horizon scan to ensure the environmental management system reflects current requirements and is ready for future compliance obligations. Updates to legislation, British Standards, best practice and supplier information is provided through our subscription to the online HS&E information tool, IHS (<http://uk.ihs.com/>) and BSI membership.

4.1.9. Best practice approach to environmental management

Since the start of the current NIFS contract in 2012, Serco has re-engineered facilities and modified our operations, embedding new ways of working to become daily routines to **improve** the environmental impacts of the service. We have introduced the Planned Maintenance System for vessels, aiding planning and execution of our maintenance activities, through the production of regular, automated reports following every Redacted of operations.

In line with the proven measures we have in place on the existing Northern Isles Ferry Service contract, and to ensure we continue to adopt a best practice approach in how we manage the environment, we will:

- **Include environmental objectives as part of performance** reviews for managers and supervisors

- **Undertake planned Health, Safety and Environmental Management** General Inspections and Leadership and Engagement (Zero Harm) Tours, performed by designated NorthLink shore managers, in conjunction with the Marine Manager
- **Ensure mandatory, annual, self-assessment exercises**, that include safety and environmental protection are completed by all management levels, who will review their contract performance against Ship Energy Monitoring Systems (SEMS) requirements
- **Put in place an annual programme of risk-based HS&E compliance audits**, to be undertaken by our independent QHSE team
- **Ensure effective arrangements are in place** for recording and managing non-conformances to their satisfactory conclusion for all relevant parties concerned
- **Apply our proven, operational excellence methodology** for identifying, capturing and evaluating new or potential improvements to environmental management during the contract term, making sure those that are feasible are disseminated to all relevant parties before being incorporated into their working practices. This could be achieved through making small, incremental improvements over time or through a breakthrough improvement delivered all at once.

The combination of our existing processes, procedures, training, communication and information will enable us to promote continuous improvement as a method for creating innovation. This will not only assist in improving our environmental management performance but will also support our efforts to deliver stakeholder satisfaction which, in turn, will drive greater staff satisfaction. For instance, during our development of this tender, as a result of our existing approach to environmental management, we have already generated interest from staff working at ports and on vessels to take up voluntary roles as Green Champions for the new contract.

Details of how we intend to continuously improve our environmental management performance are provided in section 5.1.2 of this Delivery Plan.

Ongoing third-party approval and surveillance audits by DNV-GL will ensure our continued compliance with OHSAS 18001 and ISO 14001:2004 approvals, while Serco's centrally based Quality, Health, Safety and Environmental team will provide added assurance for Transport Scotland that our operations meet or exceed legislative requirements and industry standards, through conducting internal audits.

4.2. Proposals for Environmental Management

4.2.1. How we will mitigate our impact on land and at sea

4.2.1.1. Pollution prevention and control

Pollution at sea is governed by IMO MARPOL regulations and the mandatory requirement for prevention measures in accordance with the International Safety Management System (ISM). In response to Transport Scotland's requirement for an operator with comprehensive systems to control and minimise pollution and effective incident response, Serco confirms we operate a policy of zero discharge from vessels of any liquid or solid waste that has the potential to cause pollution and we operate strictly in accordance with IMO MARPOL regulations, relevant EU Directives and local authority requirements. The fuel we use is compliant with existing MARPOL Annex 6 SECA requirements relating to air pollution and we already comply with 2020 requirements to have low sulphur content fuel of less than 0.5% m/m.

For the new NIFS contract, we will put in place the following measures for preventing and controlling pollution:

- Continue to use Navigator Insight (details featured in section 4.2.3 Minimising Generation of Greenhouse Gases and Carbon Release) for monitoring, reviewing and verification

- Meet and, where practical, exceed the mandatory requirement in Serco Management System’s VMS, approved by the MCA
- Ensure vessel equipment is maintained in accordance with requirements of the Classification Society, the Flag State and manufacturers’ recommendations
- Ensure crew competence in preventing the likelihood of pollution from occurring through training, communication, day-to-day operational procedures in accordance with our Environmental Management System and implementation of a regular programme of drills to ensure optimum emergency preparedness
- Provide the necessary resources, through our emergency response process to co-ordinate and manage a response should an incident occur
- Take remedial action in the event of an oil spillage, applying our basic drill to include:
 - Finding and stopping the source of the spillage
 - Activating the Ships Oil Pollution Emergency Plan (SOPEP) plan
 - Containing the overflow where applicable
 - Attempting to block drains where necessary
 - Reporting the spill to the Operations Director and appropriate authorities
 - Recovering as much oil as possible

Having reviewed our existing contract operations during our preparation of this tender, we have identified those activities with the potential to cause pollution, highlighting preventative measures we currently have in place. To ensure that we continue to minimise the impact of pollution we will implement preventative measures as detailed in Table 5.

Table 5: Existing pollution control measures at NorthLink and those to be implemented for the new contract

Activity	Potential for pollution impact	Control measures in place for NorthLink	Measures to be implemented for new contract
Vessels and building construction and maintenance	<ul style="list-style-type: none"> • Use of hazardous materials, including oils 	<ul style="list-style-type: none"> • Minimised use of chemicals for maintenance and external treatments • Adoption of green solutions, e.g. dilution and hosing down, where appropriate • Use of tin free, environmentally friendly paints and coatings free from biocides and volatile organic compounds • Use of water only for cleaning vessel windows 	<ul style="list-style-type: none"> • Continued use of paint coatings with a 10-year life span reducing the need for more frequent blasting and painting of the underwater areas • Use of self-polishing hull coatings to improve fuel efficiency by reducing drag • Use of propeller blade coatings to maintain and improve their efficiency by reducing propeller slip

Activity	Potential for pollution impact	Control measures in place for NorthLink	Measures to be implemented for new contract
Foul water and waste management	<ul style="list-style-type: none"> Disposal of foul and waste water 	<ul style="list-style-type: none"> Use of environmentally friendly cleaning materials combined with anaerobic sewage treatment to enable controlled disposal of grey water with no detrimental effect on the environment Rainwater harvesting in Aberdeen and using grey water for cleaning livestock containers and lairage Removal of lairage effluent by vacuum tanker for separating water from solids through use of an anaerobic digester plant, with remaining material injected into the land 	<ul style="list-style-type: none"> Use of benign cleaning materials enabling continuous use of the anaerobic sewage treatment plant, eliminating the need for bypassing the system to aid toilet cleaning
Noise and light applications	<ul style="list-style-type: none"> Vessel generators Lighting 	<ul style="list-style-type: none"> Consideration of use of shore power as part of existing contract 	<ul style="list-style-type: none"> Exploration of potential to develop wider use of shore power, subject to completion of feasibility studies Consideration and feasibility of use of smart lighting to diffuse direct light

4.2.1.2. Waste minimisation

Transport Scotland requires an effective approach to waste minimisation and management. Serco confirms we will continually review our approach as legislation changes. An example being the recent announcement by the Scottish Government of its commitment, in principle, to introducing a charge on disposable drinks cups, the 'latte levy'. In anticipation, we have already removed approximately 210,000 disposable plastic items from the NorthLink Ferry service, as part of our ongoing efforts to limit the impact of our services on the natural environment, especially marine life. Specific measures applied include:

- 100% compostable single-use cups and lids supplied by ethical beverage supplier, ^{Redacted}, across NorthLink Ferries' food and drink outlets
- Replacement of wax-lined, disposable drinking cups with reusable polycarbonate beakers have led to approximately 87,000 disposable cups and 28,000 plastic lids being removed from the waste stream per annum
- Replacement of Polystyrene cups with reusable 'Thermos' mugs in crew areas have resulted in the annual reduction of 140,000 cups being sent to landfill

- Removal and replacement of plastic glasses, cups, lids, teaspoons and portion pots with sustainable/re-usable alternatives
- More than 5,000 polystyrene food trays used in children's meal packages have been replaced by a plant-based, 100% compostable alternative supplied by Scottish company, Vegware

Serco supports the targets set by the Scottish Government of a zero-waste society. We currently divert 97% of waste from landfill across all waste streams for our existing NorthLink operation and 100% of all general and commercial waste from landfill through recycling and waste-to-energy. For the new contract, we will continue to work closely with our supply chain partners to ensure we uphold this commitment, in accordance with legislation. This will be achieved by implementing a Waste Management Plan for our operations on vessels and at shoreside locations, Redacted

Building on our existing contract success, we will introduce further initiatives to reduce waste including phasing out single use, individually packaged condiments from our food and beverage service, and incentivising passengers to purchase hot and cold drinks served from crockery or glass.

Redacted

Wherever possible, we will continue to upcycle. For example, we currently extend the life of used electrical goods by donating them Redacted and provide mattresses from vessels to Redacted

Redacted

We have identified the following waste streams from our areas of operation:

- Food and beverage operations – food, kitchen product packaging and delivery packaging
- Passengers – small disposable items, packaging and food
- Hotel services: product and delivery packaging
- Stock losses, e.g. foods that will go out of date before opportunity to sell them
- Maintenance and repair – products and packaging
- Administration replacement of machinery, furniture and consumable items

Our approach to effectively managing each waste stream involves holistic consideration of product lifecycles involved in our service delivery from acquisition to disposal, as detailed in Table 6:

Table 6: Serco's holistic approach in considering waste stream outputs through our operations from product sourcing through to waste management

Product sourcing Considerations	Usage	Resource recovery and waste management
Redacted		

For the duration of the new contract, we will establish waste targets for each of our identified waste streams to ensure we continue to achieve our overall goal of 'zero waste to landfill' for general and commercial waste, monitoring, measuring and reporting our performance for our management team and Transport Scotland.

Serco confirms we have segregated recycling in place for our back-office operations at the shore-side. We comply with MARPOL Annex 5 Waste disposal requirements 'Regulations for the Prevention of Pollution by Garbage from Ships' and we follow all procedures to minimise waste, as stated in our Shipboard Garbage Management Plan. For the new Northern Isles Ferry Service contract, we will continue to apply the following measures:

- Crews will ensure cabin waste is segregated into paper, plastic and glass, though we will facilitate this process by exploring the potential of installing dual bins in cabins to encourage recycling by passengers



Figure 9: Current recycling receptacles installed in public areas on the Hamnavoe vessel

- Waste from the galley will be segregated at source and managed by Redacted
- Dry food waste will be composted, mixed with lime and woodchips for use in fertiliser manufacture, while wet food waste will be transformed into slurry and sent to an anaerobic digestion plant for gas extraction with any left-over material used for enhancing soil

In all public areas on-board vessels, passengers are encouraged to use suitably colour-coded disposal facilities provided for segregating waste.

Our established Shipboard Garbage Management Plan comprises the following content:

- Ship particulars
- Introduction
- Record of Crew Familiarisation
- Record of Amendments
- Regulatory requirements – Garbage Management Plan, Placards, Garbage Record Book
- Details for preventing pollution from garbage – General waste minimisation, shipboard garbage handling (collection, processing, storage and discharge), special exceptions for the discharge of garbage
- Protocols for effective implementation of the Garbage Management Plan, including details of the Designated Person in charge of carrying out the plan, procedures for collecting garbage, including plastics and plastics mixed with non-plastic garbage, food wastes, synthetic fishing net and line scraps, other garbage and recovery of garbage at sea
- Details of procedures for processing garbage, including use of grinders or comminutors and compactors
- Training instructions
- Appendices including: Form of Garbage Record Book, Record of Garbage Discharges, Training Record, Definitions, Inadequacy of Port Reception Facilities, Sample Placards

All waste from vessels is landed for collection Redacted, supported by all necessary documentation and transfer notes, in accordance with current legislative requirements for vessels.

Benefits to Transport Scotland in respect of our strategy for effectively managing waste include:

- Our proven approach and ongoing commitment to supporting the Scottish Government in reducing waste volumes to achieve its ultimate goals
- Reduced cost and management of harbour wastes and those landed from vessels, working with our locally based supplier, Redacted, which also contributes to delivering additional community value
- Drawing from across Serco's extensive Group experience to apply latest technology and innovation in managing waste to deliver cost savings for the contract

Examples of current waste control measures in place for working with stakeholders and those we will implement for the new contract are explained in Table 7.

Table 7: Existing waste control measures in place for the Northern Isles Ferry Service and those to be implemented for the new contract

Existing waste and garbage management plan audiences	Control measures in place for NorthLink	Measures to be implemented for new contract
Suppliers	<ul style="list-style-type: none"> • Collaboration to reduce waste and encourage re-cycling and upcycling, e.g. removal of unnecessary packaging • Adopting just in time delivery cycles • Donating obsolete electrical goods through Redacted 	Implement Waste and Garbage Management Plan to continue achieving zero general and commercial waste to landfill by 2021 from all sea and land-based operations, working closely with our supply chain and Redacted
Service operations	<ul style="list-style-type: none"> • Proactive staff engagement • Proactive use of biodegradable materials 	
Passengers	<ul style="list-style-type: none"> • Communications campaign and onboard announcements to encourage use of segregated waste disposal receptacles provided on vessels and at harbours to prevent people from throwing rubbish overboard 	

NorthLink waste management reporting

Serco adopts a rigorous approach to monitoring and reporting NorthLink's waste management performance. For the existing Northern Isles Ferry Service contract, we report on the following waste streams: FEL, Wheelie bin (1100 ltr), Wheelie bin (240 ltr) - Own Bins, Mixed Recycling (14yd/40yrd RoRo), Animal Waste Skip, General Waste (14 yd), Skip Service – 8 Cubic Yard skip (General), Ad-Hoc Skip Service, Metal, Waste Safe – Paint Tins, Paint Tins –25 ltr, Batteries, Oily Rags/Solids, Fluorescent Tubes, Aerosols, Rope, Electrical Equipment, Shredding, Wood, Fire Extinguishers, Food Recycling, Glass. The granularity of output information provides transparency in our waste management operations for Transport Scotland.

Details of the proportion of waste sent to landfill, compared with that recycled and converted to energy (W2E) from April 2018 to March 2019 are provided in the following graph and results table. Although we do not currently recycle hydraulic hoses, ropes, buoyancy material, or ash, we can confirm that we have been diverting 100% of all general and commercial waste from landfill during the last 12 months.

Redacted

	Total Recycled (%)	Total Landfill (%)	Total Waste to Energy (W2E)%	Total %
Apr-18	Redacted			100.0
May-18				100.0
Jun-18				100.0
Jul-18				100.0
Aug-18				100.0
Sep-18				100.0
Oct-18				100.0
Nov-18				100.0
Dec-18				100.0
Jan-19				100.0
Feb-19				100.0
Mar-19				100.0

4.2.1.3. Pollution incident response

In accordance with MARPOL Annex 1 Regulations for the prevention of pollution by oil and our standard procedure for our existing contract for operating the Northern Isles Ferry Service, Serco will continue to ensure that all vessels have in place full and sufficient pollution control and spill response equipment in line.

Serco has in place specific contingency plans to deal with potential shipboard emergencies, including those associated with pollution. Developed to cover both ship and shore incident response, these plans ensure we respond to an emergency in a co-ordinated, prompt and effective manner, working with Harbour Authorities, the MCA, and local oil spill response teams as well as providing support and marine advice for vessels.

A comprehensive list of potential emergencies and response procedures is held by all vessels, along with a matrix of planned drills, which include:

- The allocation of duties and responsibilities of individuals to identified plans
- Actions to be taken to gain control in the event of a pollution emergency
- Primary and secondary communications methods
- Third-party support agencies and methods of contact
- Procedures for notifying and maintaining contact with the Company
- Procedures for handling the media, co-ordinated by our PR agency, Redacted, in accordance with established protocols agreed with TS
- Relevant contacts who can be called on to render assistance

Shore-based contingency plans for managing a pollution emergency are detailed in our Emergency Procedures Manual and cover:

- Composition and duties of the people assigned to any one plan
- Procedures to follow in response to a pollution accident or potential hazard

- Detailed information of individual fleet vessels covering stability, general arrangement, tank plans, safety equipment, anti-pollution equipment
- Procedures detailing priority and secondary lines of communications between ship and shore
- Third party organisations to be advised, consulted or mobilised to assist
- Reporting methods between ship and shore management
- Formalised checklists to assist systematic communication between ship and shore
- Procedures for notifying next of kin on a priority basis
- Procedures for issuing information bulletins to the media, co-ordinated by our PR agency, Redacted, in accordance with established protocols agreed with TS
- Back up arrangements in terms of resources and personnel for a protracted emergency

Our system for upholding environmental protection:

- Redacted is responsible for monitoring our environmental protection system for each vessel, as detailed in the Ship Energy Monitoring System (SEMS), ensuring strict adherence to procedures, maintaining records and our reporting process
- Redacted, in addition to being appointed as the Nominated Person for co-ordinating our immediate response and the resources necessary to support pollution incidents on any of the vessels
- Under the authority of Redacted, nominated management personnel will be responsible for liaising with and assisting third parties, including The Coastguard, rescue service, pollution response teams, harbour authorities and environmental protection agencies, as required
- Planning for pollution response falls within Serco's contingency plans that are tested at least annually, or in the event of identifying any additional potential shipboard emergency situations through regular reviews, inspections, safety meetings, changes of trading patterns and cargoes
- Our management team liaise with and assist the local and national authorities in dealing with any pollution incident, through the shore-based Nominated Person, in accordance with our existing arrangements in place
- All environmental incidents and near misses are reported and recorded for subsequent incident investigation using Redacted. This enables us to identify the root cause of the incident, record the actions required to remediate the incident or prevent it reoccurring, and tracks the closure of any actions identified. Redacted is regularly reviewed to identify and address any emerging trends.

We confirm that our current emergency response arrangements and the condition of oil spill equipment will continue to be reviewed as part of vessel condition surveys undertaken during mobilisation. As part of our review process we will ensure that lines of communication and the chain of command in the event of an incident remain clearly displayed on-board vessels, supported by communication of appropriate protocols for reporting of incidents or near miss events. Throughout the duration of the contract, spill plans will be tested to build awareness, knowledge and ensure preparedness, working closely with port authorities. Any identified improvements will be incorporated into our existing management system in place for each vessel.

4.2.1.4. Encouragement of sustainable procurement

Serco takes a responsible approach to ensuring the products, services, works and utilities we procure are not detrimental with respect to environmental, social and economic outcomes, as well as delivering value for money, on a whole life basis, for clients and the communities where we operate.

In accordance with our current, procurement protocols, we will consider the sustainability of resource production, transportation, full life energy and raw material consumption, waste production and percentage of recycled content in all our purchasing decisions. We also confirm our ongoing commitment to procuring goods and services within a 50 mile radius of our NorthLink Ferries operations, wherever possible.

Case Study **Supporting local procurement**

In the current contract, ^{Redacted} of Serco’s hotel operation services are from within a 50 mile radius of our operating ports and we have spent over ^{Redacted} with local suppliers and ^{Redacted} across the rest of Scotland from 2012 to 2017. The bar chart in Figure 10 highlights year-on-year growth in our procurement of goods and services supporting hotel operations within a 50-mile radius of NorthLink ports.

Redacted

Figure 10: Chart demonstrating year-on-year growth of Serco procurement of goods and services supporting its hotel operations within a 50 mile radius of NorthLink ferry ports

Serco recognises there are many environmental and economic benefits associated with procuring locally and we appreciate the assurance of service provided by local suppliers, especially during inclement weather, often experienced in North East Scotland.

As applied on our existing Northern Isles Ferry Service contract, our Group Management Standard for Procurement and the Supply Chain (SMS-GS-PSC1), illustrated in Figure 11 and Figure 12 below, outlines our commitment to sustainable procurement through effective supply chain management. It reflects our own ethical standards and Code of Conduct and ensures that our sourcing processes are fair and ethical to both Serco and participating suppliers, with full consideration for the environmental, social and economic factors that are important to our clients and communities where we are working.



Figure 11: Front cover from Serco's Group Management Standard for Procurement and the Supply Chain (SMS-GS-PSC1) that will continue to be applied for the new contract

Document Details	Contents
Document Details	Document Details 1
Reference SMS-GS-PSC1: Procurement & Supply Chain	Contents 1
Version 3.4	1 Objectives 2
Approval Date August 2017	2 Policy Standards 2
Date for next review August 2019	2.1 Policy 2
Applicability Serco Group covering all business regions, operating companies and business units throughout the world ¹ covering: - employees, officers, directors and individuals working as consultants and contractors and any other parties acting as representatives or agents of Serco (Employees) - wholly owned subsidiaries and majority-owned operations Where a minority interest and in regard to its subcontractors and suppliers Serco encourages alignment with this Standard	2.2 Risk management 2
Authority Chief Executive, Serco Group plc	2.3 Delegated Approval Authorities 2
Accountable Policy Owner (Group) Chief Procurement Officer	2.4 When to involve Procurement 3
Additional Information Supporting standards, standard operating procedures and guidance relating to this Group Standard are available within the Serco Management System	2.5 Supplier Selection and Sourcing 3
Governance Our policies and standards, together with any regional or market requirements and enhancements to them, are authorised through a robust governance process	2.6 Supplier contract approval 4
Consequence Management As a Group Standard the requirements detailed in this document are mandated and must be adhered to. Non-compliance will have consequences which may include disciplinary action. The Consequence Management Group Standard (SMS-GS-G1) details how instances of non-compliance will be dealt with	2.7 Transacting (P2P) 5
<small>¹As used herein, Serco Group and its affiliates, subsidiaries and operating companies are referred to as 'Serco', the 'Company' or 'company', or 'we', 'us' or 'our'.</small>	2.8 Responsible Procurement 6
	2.9 Supplier management and measurement 6
	2.10 Procurement savings 7
	2.11 What Serco expects from its suppliers 7
	3 Responsibilities & Accountabilities 8
	4 Processes and Controls 11
	4.1 Governance processes and controls 11
	4.2 Key processes and controls 20
	5 Supporting documentation and guidance 25
	6 Definitions 25
	7 Further information and support 27

Figure 12: Document details and contents page from Serco's Group Management Standard for Procurement and the Supply Chain (SMS-GS-PSC1) that will continue to be applied for the new contract

We also have in place a robust system of ensuring that potential suppliers are legally and regulatory compliant as well as meeting Serco's and our customer's Health, Safety and Environmental (HS&E) requirements for the existing NIFS contract. All prospective suppliers are required to submit the following information:

Redacted

Sustainable procurement begins at the start of all our potential supplier relationships, whereby organisations are required to adhere to the standards and practices detailed in our Supplier Code of Conduct in addition to aligning themselves with the following commitment to sustainable procurement.

Serco has a dedicated procurement team for managing our supplier relationships and we confirm that all suppliers used in the delivery of our services undergo an assessment to ensure that they meet the standards we require and are committed to supporting our sustainable procurement aims. The assessment process seeks to identify and reduce risk as well as maximising opportunities for delivering improvements.

'We recognise Serco's impact on society, the economy and the planet, and aim to make a positive difference. This is embedded in the way we do business. We are committed to maintaining a safe, healthy and sustainable working environment, with a vision of zero harm. Everyone in Serco is responsible for making this a reality and we look to our suppliers to help us deliver this commitment.' Quote from Serco Supplier Code of Conduct

Figure 13 features a letter from Iain Johnston, Director of Shetland based, JW Gray, the largest wholesaler serving both Shetland and Orkney, endorsing Serco's approach to local procurement and supplier relationship management for the existing contract.



Figure 13: Letter from Iain Johnston, Director of Shetland based, JW Gray, endorsing our approach to procurement and supplier relationship management for the current contract.

Our existing strategy for supplier assessment and supporting practices will be consistently applied across the NIFS contract, providing assurance for Transport Scotland that:

- All suppliers meet or exceed legal requirements for sustainability
- All suppliers work to the same standard of conduct as Serco
- Risk and opportunity for sustainability improvements will have been considered at the outset of working with any supplier, e.g. avoidance of use of hazardous materials, use of energy efficient equipment

Examples of some of our procurement and supply chain management objectives and principles underpinning our delivery of sustainable outcomes for Transport Scotland, are detailed in Table 8:

Table 8: Serco procurement and supply chain management objectives and principles underpinning delivery of sustainable outcomes for Transport Scotland

Objectives	Key principles	Outcomes
Treating suppliers fairly	<ul style="list-style-type: none"> Ensuring relationships with suppliers are based on fair and honest dealings at all times, in line with our Supplier Code of Conduct Working collaboratively with our suppliers to reduce and mitigate risk Provision of fair pay and working conditions consistent with the goals of Scottish Ministers Continuing to increase sourcing of fairly traded goods 	Social
Minimising environmental impact	<ul style="list-style-type: none"> Avoiding adverse impact on the environment Reducing the full life-cycle impact and cost of products and services Promoting practices that reflect responsible environmental management Collaborating with the supply chain to minimise waste (e.g. unnecessary packaging) and maximise resource efficiency, encouraging re-use and recycling, and consistent with the aims of Scottish Ministers 	Environmental
Promoting supplier diversity	Promoting supplier diversity and nurturing social enterprises and SMEs, to improve innovation and effectiveness of the supply base	Economic – our working relationship with Strachan’s and JW Gray has enabled us to build on our commitment to local sourcing from SMEs, supported by local Meet the Buyer events
	Fostering local economic development, entrepreneurship and innovation through use of local supply chains, wherever possible	Working with Opportunity North East, Shetland Food & Drink, Orkney Food & Drink and partnering with Redacted
		Redacted is being explored as it presents a focused approach to working with Redacted


To build on our successful efforts in sustainable procurement for the existing contract, we will continue working closely with members of our supply chain, especially, SMEs and social enterprises to aid sustainable economic growth and support the provision of a circular economy for the Northern Isles and its remote rural communities.

We will:

- Continue to provide fair and transparent supplier tendering opportunities
- Provide simplified contents of our Supplier Pack (following SME feedback)
- Provide standard Request for Information response templates, requiring completion only once

- Increase accessibility for social enterprises and SMEs by engaging with SME aggregators, such as Shetland-based JW Gray, providing an additional interface for Serco
- Host Meet the Buyer events, providing local businesses with opportunities to showcase their offerings and engage with Serco about our strategy for NorthLink, aligned with Transport Scotland’s objectives
- Provide workshops and mentoring in subjects such as the tendering process, accounting, marketing, health and safety, and environmental management; this initiative will not only support organisations in fulfilling their contractual obligations but will also assist them to develop and grow by affording them the skills and tools to enable them to tender for larger contracts independently. Redacted
- Ensure innovation and growth opportunities are included as part of our supplier review process
- Monitor quarterly SME expenditure to ensure ongoing provision of opportunities for this sector to further improve the efficiency, economy and quality of our service delivery

Case Study	Partnership approach to working with SMEs for the existing Service has delivered real improvements for all stakeholders
<p>Serco engaged Redacted , for ship refurbishment work, with the company’s refurbishment teams undertaking refurbishment work Redacted . This reduced customer disruption and enabled us to maintain the lifeline service we provide. Following the project, customer demand for the newly refurbished ships has increased to 290,106 passengers in 2013/14, up from 282,024 in 2012/13 (+2.9%).</p> <p>Serco’s partnering role managing stakeholders, including the Coastguard, financiers, local communities and Transport Scotland, while maintaining the overall health and safety control of the project, enabled Redacted to complete their refurbishment work on time and within budgetary constraints.</p>	

Case Study	NorthLink’s commitment to social enterprise
<p>NorthLink is proud to work closely with the following social enterprises: Redacted</p>	

4.2.2. Encouragement for Green Travel

NorthLink serves multiple areas of natural beauty. We want our stakeholders to make environmentally friendly journeys, wherever possible, to reduce the negative impacts caused by

motorised transport and to improve health. Led by our Redacted
our strategy for encouraging green travel comprises:

Redacted

4.2.2.1. Serco Personnel

In accordance with existing Serco policy and our current NorthLink operation, we will continue to ensure we employ local personnel to prevent lengthy commuting, which impacts negatively on the environment as well as on staff health and wellbeing. Since the commencement of our existing contract in 2012, Serco has increased the employment of local people within the area of our operating ports by 12%. Our policy of direct local staff recruitment in the current contract has resulted in an £11.5 million contribution to the local economy.

Table 9: Table demonstrating geographic distribution of our local / based workforce

Grade Group	Location	2012	2018	Variance
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Redacted

With support from our marketing team and human resources personnel to improve the health and wellbeing of our workforce, the Redacted will implement a suitable internal communications campaign of green challenges for staff to encourage increased take up of low carbon transport alternatives, as detailed in Table 10:

Table 10: Serco's green travel initiatives for staff and how we will encourage personnel to adopt them

Green Travel Initiative	Promotion and Serco Support
Endorse wider use of public transport	Circulate information to staff of local availability, timetables, costs
Encourage use of cycling for travel to and from the workplace, wherever it is feasible	Promote Serco cycle to work and bike loan scheme, and ensure availability of cycle storage provision and facilities for staff – showers, changing facilities
Support use of low carbon vehicles	Provision of electric vehicle charging points at ports
Encourage car sharing where practical	Provide dedicated parking spaces for car sharers and promote environmental and cost saving benefits through internal communication campaign
Enable home working, where appropriate	Provision of technology that supports home working, such as teleconferencing

4.2.2.2. Customers

To assist customers in considering greener travel choices, our proposals for low carbon journeys take account of the various customer profiles using the vessels. They include:

- Forging links with other transport providers, including our Caledonian Sleeper service to improve travel connectivity and promote accessibility of the islands for foot passengers through integrated transport, targeting potential travellers from other parts of Scotland, the UK and further afield. This initiative will be supported by refreshing the 'routes' section of our website to provide detailed information on end-to-end journeys and offering live chat for assisting customers and responding to their specific questions.

For those customers who wish to make enquiries by telephone, the Customer Contact Centre based in Stromness will continue to receive telephone reservation requests. Currently available from 08:00 to 20:00. We will extend this service provision for the new contract from 05:30 to midnight, in accordance with Table 11, with calls answered by terminal teams in Stromness and Hatston.

Table 11: Revised contact centre opening times for the new contract

April to October (inclusive)	
Monday to Friday	05:30 through to 24:00
Saturday and Sunday	08:00 to 24:00 (note w/e Hamnavoe sails at 09.00)
November to March (inclusive)	
Monday and Tuesday	05:30 to 20:00 (No evening arrivals into Hatston)
Wednesday to Friday	05:30 to 24:00
Saturday and Sunday	08:00 to 24:00

This move will maximise the potential availability of office personnel at Stromness, who are already there for the 06:30 departure of the Hamnavoe vessel and in the evening by staff already employed at Hatston from 20:00 for the 23:00/23:45 arrival/departure of the Hjaltland or Hrossey service.

- Provision of car parking at Aberdeen and Scrabster for those choosing to travel to the Northern Isles without a vehicle
- Consulting with Sustrans and installing covered cycle storage facilities and charging points for electric bikes at terminals and improved cycle storage on vessels

- Provision of electric vehicle charging points at ports (we are currently working with port authorities and have an existing facility at Scrabster). We have also considered providing on-board vehicle charging in line with other ferry operators, though this would potentially create a considerable safety risk due to the vessels having closed decks. However, we are working with the UK Chamber of Shipping, the MCA and protection and indemnity insurers to explore whether a workable solution to potentially reduce this risk is possible
- Working with harbour authorities to promote walking routes via signage and ensuring harbour areas are safe and well-lit
- Ensuring information provision throughout the customer journey to aid transport integration and way-finding to and from ferries, railway stations, bus stations and taxi ranks
- Forging links with local car hire companies and promoting the benefits for passengers of hiring a car on arrival at their destination port without the hassle of driving independently from home
- As part of our Marketing Plan, making wider use of mobile apps and social media channels to attract relevant customer profiles with environmentally themed promotional campaigns for each season, run in partnership with event organisers and activity providers

Our proposed initiatives are designed to encourage green travel and enable tourists to explore North East Scotland and the Northern Isles, while at the same time, minimising their impact upon its natural beauty.

Redacted will manage the implementation of our campaign to raise awareness of green travel alternatives for customers and personnel, supported by Green Champions for each vessel. The Redacted will also monitor and report the take-up of green travel by route, on a monthly basis to ensure our communications content remains relevant to the target audience.

4.2.3. Minimising Generation of Greenhouse Gases and Carbon Release

Serco will use DNV GL's Navigator Insight programme (see Figure 14) for monitoring energy consumption and emissions from all vessels while adhering to EU MRV legislation and our Ship Energy Efficiency Management Plan (SEEMP) Part II. This enables the management team to remotely monitor and manage fuel consumed on each vessel in addition to:

- Providing an established baseline for carbon emissions across the vessel fleet, associated infrastructure and transport
- Enabling remote monitoring of daily, monthly and annual total greenhouse gas emissions per vessel
- Measuring monthly and annual greenhouse gas emissions per vessel, normalised by distance travelled, to provide an indication of its efficiency and enabling any changes to be monitored over time
- Providing accurate data and reporting, in real time, enabling us to effectively manage, control and report on our performance

Redacted

Figure 14: Sample ECO insight screen monitoring fuel oil consumption (FOC) per day speed for the Hjaltland vessel on our current Northern Isles Ferry Service contract

We are aware of the Scottish Government's revised target for a 56% reduction in greenhouse gas emissions by 2020 and an 80% reduction by 2050 and we will support Transport Scotland's requirement for us to continue the process of minimising the generation of greenhouse gasses in our operation of the services, having converted to using ultralow sulphur fuel (MGO) to avoid the need for scrubbers.

We are always seeking ways of reducing greenhouse gasses and, in anticipation of the new NIFS contract, Serco will explore the following opportunities for reducing the CO² footprint of our operation of NorthLink:

- Optimising the electrical load on the Hjaltland and Hrossey passenger vessels to make them more efficient
- Investigate options for using shore power and energy storage in Aberdeen
- Consider potential use of Hydrogen power generated on Orkney for potential use in a new build vessel as it could be possible to use the power to reduce the vessel's carbon footprint
- Continue to proactively identify further ways of minimising the generation of greenhouse gases as a result of our supply chain relationships. Redacted

4.2.3.1. Emissions reduction

Serco will develop a Carbon Reduction Strategy for the new Northern Isles Ferry Service in collaboration with local port authorities: Scrabster Harbour Trust, Lerwick Port Authority, Aberdeen Harbour Board and Orkney Harbours to maximise the potential of achieving the largest, sustainable carbon reduction at the earliest opportunity. It will include the following content:

- Scope
- Roles and responsibilities
- Current baseline statistics, including average daily emissions from peak season crossings
- Consideration of opportunities and challenges for further reducing emissions
- Identification of Carbon reduction targets to be achieved
- Plans for implementation with actions, clearly assigned
- Our process for monitoring, reviewing and reporting output results

We will work closely with the port authorities, engaging through regular drop-in sessions to discuss progress and meeting formally every six months. Outputs of The Carbon Reduction Strategy will be shared with Transport Scotland. A live document, it will be subject to change and adaptation over the life of the contract in accordance with Serco's change control process and will be reviewed annually, as part of our ISO 14001 management review process.

Redacted

Serco's Carbon Disclosure Project climate change questionnaire achievements

During 2017 Serco benchmarked our approach to climate change via the globally recognised annual Carbon Disclosure Project (CDP) climate change questionnaire, achieving a score of ^{Reb} (of all participating companies 23.3% scored A, 24.4% scored B and 52.3% scored C or D, while within our sector 22% scored A, 21.6% scored B and 56.4% scored C or D) – further information can be found on the CDP website, www.cdp.net/en.

Redacted

4.2.3.2. Energy Efficiency

We currently have proven methodology and mechanisms in place to minimise the generation of greenhouse gases and carbon release, through the successful delivery of our SEEMP, first introduced in 2016 in accordance with MARPOL Annex 6 Regulations for the prevention of air pollution from vessels. Reviewed annually, our SEEMP for each vessel comprises:

- Objectives and goals
- Monitoring
- Data recording
- Measures to include:
 - Awareness and training
 - Performance management
 - Voyage performance efficiency
 - Vessel performance
 - Fuel Management
 - Main engines, auxiliary engines and bowthrusters
 - Electrical consumers
- Evaluation

Continuously improving energy efficiency on vessels through our SEEMP

Notable achievements from the delivery of our SEEMP include:

- Increased awareness of new regulatory requirements and operational instructions
- Timely performance monitoring, reporting and discussion of energy efficiency at every Shipboard Management Meeting, with feedback provided to shore management
- Optimal, fuel efficient and environmentally friendly vessel speed maintained to minimise consumption, while maintaining specified timetable requirements
- Load Shedding – Combinator is set up to avoid unnecessary fuel consumption
- Bunkers and Ballast – Bunkers and Ballast optimised
- Vessel hulls provided with modern anti-fouling coating system
- Since 2017 out-of-water surveys have been completed on vessels
- Propeller performance reduction – damage or fouling noticed during operation or hull inspections is reported and they are now applied with coatings to prevent performance reduction
- Additional initiatives delivered to minimise carbon release on vessels have included use of autopilot, stabilisers, effective management of the fuel system impacting fuel quality, waste oil, engine configuration and performance, shaft generators, bow thrusters, electrical load, galley equipment, heating, ventilation, air conditioning and replacement of lighting with low energy alternatives

2017 results demonstrated our achievement of a 15.25% reduction in the average CO2 Index from the baseline figure derived from 2012 data which further reduced to 17.1% in 2018, following our application of a new antifouling system to the Hamnavoe vessel. A further reduction will be achieved as a result of the provision of shore power for the Hamnavoe in Stromness and the potential roll out of the solution at other locations such as Aberdeen and Lerwick.

Through implementation of our SEEMP for the new contract, we will continue to apply, manage, measure, monitor and control energy efficiency, documenting outputs according to the following categories:

- Fuel efficient operations
- Optimised ship handling

- Hull and propeller optimisation
- Machinery and equipment optimisation
- Cargo handling optimisation
- Energy conservation and awareness

Serco confirms we will ensure compliance with Government requirements relating to waste to energy and we will continue to use the Energy Efficiency Operational Indicator, developed by the IMO for obtaining quantitative indicators of energy efficiency of a vessel and or fleet in operation.

Through our proven combination of staff experience, best practice procedures and our continuous improvement process, Serco will build on our existing track record for improving energy efficiency through delivery of our SEEMP for the new NIFS contract, to include the following initiatives:

Use of shore power

Having successfully engaged with Transport Scotland and been awarded funding, we will complete the pilot to develop shore power for use on the Hamnavoe to power the vessel while in Stromness harbour. This initiative has the potential to significantly reduce noise pollution as well as the vessel's CO2 footprint by up to 1,510 tonnes per year, so we intend to roll out an implementation programme elsewhere for the duration of the contract, as part of our wider air quality management, subject to completion of feasibility studies.

Energy conservation and awareness

To encourage reduced energy consumption for the contract term, we will continue to use internal awareness campaigns applied across all areas of operation. These will be led by our Green Champions.

Sustainable energy sources

Redacted

4.2.3.3. How we will minimise the effect of the Service on marine life and secure the health and protection of marine mammals

NorthLink ferry operations traverse many Marine Protected Areas (MPAs) and many of our passengers are tourists, attracted to the Northern Isles by the natural beauty and rich natural environment they offer. Any potential negative impact of our services on marine life will affect the tourism industry which, in turn, will be detrimental to the local economy. Thus, we are required to achieve a delicate balance of providing services that ensure accessibility for the travelling public while at the same time ensuring the health and protection of marine life for future generations.

The NorthLink Fleet of vessels, comply with all applicable environmental management legislation and, we confirm that during the delivery of our current contract, we have selected to make use of maintenance materials and coatings that have low environmental impact, wherever possible. As part of our route scheduling activity, we will continue to remain mindful of speed when travelling through in-shore waters and approaching harbours where there is usually a concentration of marine life. Our ship crews will be instructed to report any sightings of unusual behaviour or concerns, as in our existing contract, and our Redacted will ensure our ongoing compliance with all environmental codes and practices for oil pollution, exhaust gas emissions and water ballast.

Many of our Environmental Management Delivery Plan's proposals described in previous sections outline how we will minimise the effects of our operations on marine life, though we will also explore further opportunities for innovation; for example, consideration and or adoption of alternative materials and packaging, and working collaboratively with suppliers and manufacturers to minimise or eradicate those from our operation with the potential to impact negatively on marine life. Redacted



Figure 15: NorthLink personnel helping transport ghost fishing debris removed from Orkney's sea beds

Building on our existing efforts for removal of plastics from toiletries and food packaging, we will continue to work closely with Redacted

Increased use of marine safe products on NorthLink

Serco has made significant progress in adopting marine safe products on our existing contract. Redacted

These measures

have delivered the following benefits:

- Positive impact on the health, safety and wellbeing of staff and passengers
- Redacted

Ecology Management Plan

Serco will develop an Ecology Management Plan for the new NIFS contract, further building on our achievements to date. The plan will be prepared by the Redacted and will take account of any relevant findings from our successful existing relationships forged with the Environment Agency and wildlife protection and conservation agencies. This will ensure that we remain aware of any local conservation and wildlife issues that could be affected by our operations. This will enable us to anticipate and respond to them at the earliest opportunity, such as making certain vessels are navigated safely, avoiding close proximity to areas of known marine mammal habitats.

Once accepted by our Executive Team and Board, the Ecology Management Plan will be presented to Transport Scotland for approval and will then be subject to annual reviews.

The Ecology Management Plan will comprise:

Staff awareness, training and engagement – As part of our environmental awareness training all staff will be made aware of the sensitivity of the marine environment where we are operating and will receive role-specific training, where applicable. As proactive members of the local community, many of our staff currently offer support for many local causes in their free time with support provided by Serco on an ad-hoc basis. Through our commitment to corporate social responsibility, we will continue to manage time resource to enable personnel to undertake community projects, including those for protecting marine life, in accordance with need.

Working with organisations – We will regularly consult Redacted to ensure we remain abreast of research and initiatives to protect the marine environment and explore feasible ways to support these organisations, where appropriate. We will also continue to liaise with the Redacted and the Redacted to co-ordinate any agreed ecology management initiatives, and address any issues causing concern.

We will work closely with the Redacted to identify opportunities for supporting research into marine life and disseminating findings.

Case Study	Supporting research
On our existing contract, the vessels have frequently trailed sensors for monitoring plankton levels, salinity and the seawater temperature, supporting Marine Biological Association research.	

Customer engagement – Our strategy for engaging with the large number of people that use our ferries will involve continuing our existing work with Redacted, Royal Society for the Protection of Birds (RSPB) and ORCA. NorthLink has taken part in ORCA’s Ocean Watch initiative since 2014, involving collection of whale, dolphin and porpoise sightings and data.

We will engage in communications and activities designed to provide information about the unique and spectacular environment where we operate, which is home to myriad wildlife and to raise awareness of the negative effects caused by climate change.

Our proposals for the new contract include:

- Using passenger information screens at terminal buildings and on vessels for displaying relevant content to raise awareness of the potential wildlife that can be viewed from the shoreside and on vessels, combined with an app that will encourage members of the public and passengers to record any sightings. This initiative will support the community sightings network, generate wider public interest in marine mammals and support for monitoring migration patterns.
- Conducting systematic surveys of marine mammals spotted en-route.

Through our customer engagement initiatives, we hope to encourage increased social responsibility and proactive support for securing the continued health and protection of marine mammals. Our Northern Lights magazine reinforces this message, as demonstrated in Figure 16 and Figure 17.

Minke whale (Northern)

Balaenoptera octocarinata



Appearance

SIZE: MAX 7-10M

KEY FEATURES:
 - BLOW HOLE AND DORSAL FIN SEEN AT THE SAME TIME WHEN SURFACING
 - WHITE ARMBANDS ON ITS PECTORAL FINS
 - UNIFORMLY GREY ON ITS BACK AND FINS WITH A WHITE UNDERBELLY

Figure 16: Sample customer information screen content for encouraging wildlife spotting from the shoreside and on vessels

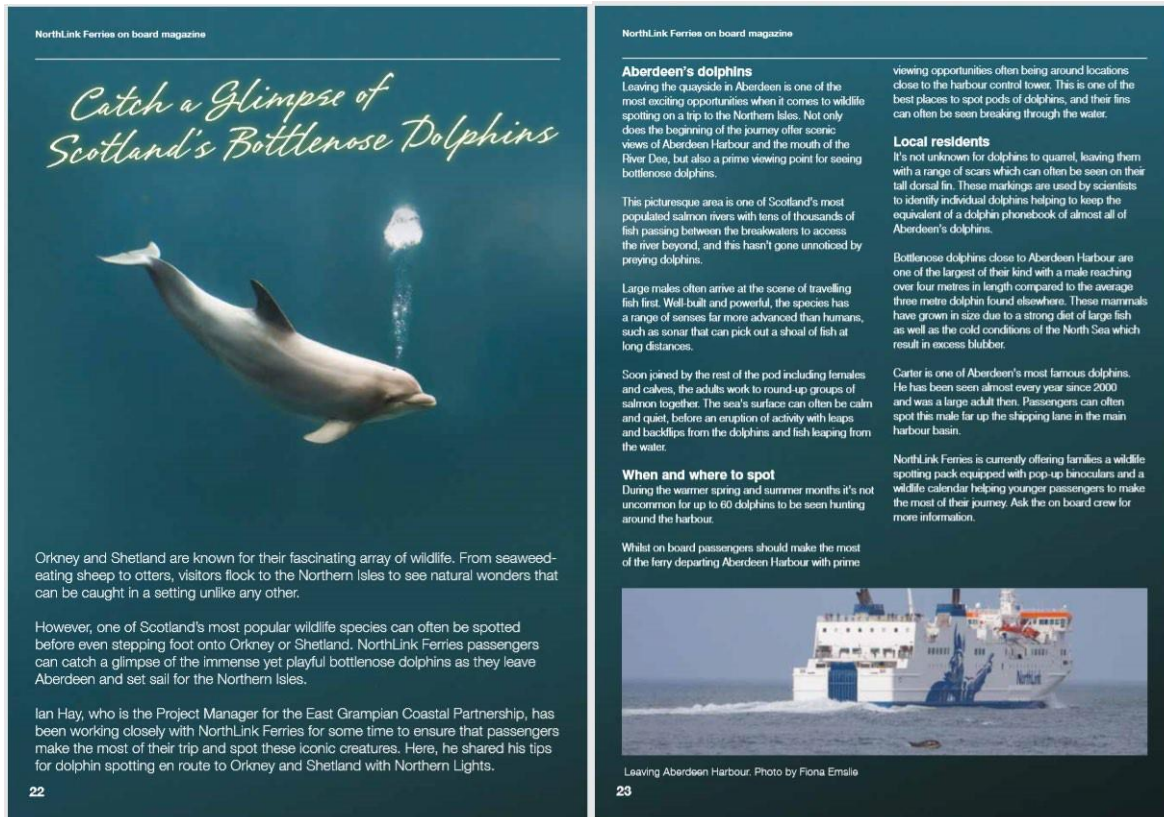


Figure 17: Northern Lights magazine article providing hints and tips on Bottlenose Dolphin spotting for passengers



Figure 18: NorthLink Marine Manager with ORCA team members. (Right) NorthLink's Managing Director presenting RSPB Conservation Officer with donation for £2,200, raised from the 2017 Nature Cruise on board the MV Hamnavoe

4.2.4. Management of the Environmental Management Delivery Plan

Redacted will be accountable for the effective delivery of all aspects of this Plan. Details of our proposals are provided in the following table:

Table 12: Proposals – Environmental Management

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
Engage with Transport Scotland to collaboratively agree the contents of this Plan and its associated deliverables for onward implementation	Redacted				
Communicate environmental content of HSE policy to personnel					
Review and completion of Environmental Aspects and Impacts Register					
Appointment of 8 Green Champions					
Environmental awareness training, environmental skills training relevant to individual roles					
Communication and understanding of Serco codes of conduct and Code of Safe Working Practice for Merchant Seafarers					

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
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Ongoing HSE training and competence re-assessment at biannual reviews

Redacted

Reviews of stakeholder requirements and changes in environmental legislation and applying and disseminating any changes

Completion of internal audits, leadership zero harm tours, Document of Compliance verification audits, drills to meet ISM and safety management codes, and third party approval and surveillance audits by DNV on vessels and shore

Environmental management objectives set for managers followed by self-assessment and performance reviews

Independent QHSE audits

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
Arrangements for recording and managing non-conformance to satisfactory conclusion	Redacted				
Implementation of Serco's operational excellence methodology					
Maintenance of vessel equipment in accordance with requirements of Classification Society, the Flag State and manufacturers' recommendations to prevent pollution					
Training, communication, procedures and drills for ensuring response capability for managing emergency and pollution incident response					

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
<p>Application of new measures to prevent pollution in relation to vessels and building construction maintenance, foul water management and exploration of potential to roll out wider use of shore power and consideration of smart lighting to combat noise and light pollution</p> <p>Continue to deliver 100% zero general and commercial waste to landfill by 2021 through implementing Waste and Garbage Management Plans for sea and land-based operations, working closely with our supply chain and One Stop Waste</p> <p>Commitment to encouraging sustainable procurement and working with SMEs, supported by appropriate standards, systems, processes and procedures</p> <p>Hosting Meet the Buyer events, provision of fair and transparent tendering opportunities supported by simplified SME Supplier Packs and ongoing monitoring</p>	Redacted				

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
Provision of mentoring workshops to support SMEs in marketing, tendering process, accounting, health and safety, environmental management and ensuring innovation is included as part of supplier reviews	Redacted				
Implementation of internal communications campaign of green challenges for staff, encouraging increased take-up of low carbon travel alternatives to include cycle to work scheme, information about public transport, electric vehicle charging, care sharing and technological support for home working					
Implementation of communications campaign and support to encourage increased take-up of green travel alternatives to include car parking for those not travelling with a vehicle, improved cycle storage facilities, electrical vehicle charging at ports, promotion of walking routes, extended customer contact centre opening hours to support transport integration enquiries and environmentally themed marketing promotion					

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
<p>Application of DNV GL's Navigator Redacted Insight programme for monitoring energy consumption and emissions, ensuring adherence to MRV legislation and SEEMP Part II</p>					
<p>Implementation of Carbon Reduction strategy to reduce emissions and explore opportunities for reducing CO² footprint of NorthLink, including ongoing application of our carbon offsetting programme with highland carbon</p>					
<p>Complete pilot for use of shore power on Hamnavoe vessel while in Stromness Harbour and consider potential roll out to Aberdeen as part of air quality management, subject to feasibility study</p>					

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
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Roll out internal awareness campaign to reduce energy consumption across ship and shore operations	Redacted				
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Continued application of existing sustainable energy measures in addition to exploration of new ones across all areas of operation					
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Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
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Development and implementation of Ecology Management Plan to include managing time to enable NorthLink personnel to undertake community projects, consulting with and supporting research organisations such as the Scottish Association of Marine Sciences, provision of passenger information screen content and an associated app to encourage wildlife spotting, conducting systematic surveys of marine mammals on customer ferries

Redacted

Discussion and agreement of key performance indicators, reporting on a route specific basis in consultation with Transport Scotland

Proposals	Timing and duration	Responsibility	Stakeholders involved	Assumptions/ dependencies	Method for measuring results
Discussion and potential agreement with Transport Scotland to introduce use of Power BI technology for reporting	Redacted				
Regular review of Environmental Management Delivery Plan					
Formalising existing combination of top down leadership with bottom up input to capture ideas for consideration and onward development into initiatives for improving environmental management					

5. Monitoring and Review

In accordance with our standard practice on the existing NIFS contract, Serco will discuss and agree KPIs and protocols for undertaking regular reviews relating to environmental management for the new Contract with Transport Scotland at the earliest opportunity following contract award. We will complete environmental performance reporting on a route specific basis, covering environmental impacts in relation to all aspects of our service delivery, associated with vessels, harbours, offices and ancillary activity. These will include but not be limited to:

- Incidents and near misses
- Reduced carbon release resulting from introduction of energy efficiency measures in buildings and on vessels
- Total carbon emissions for the vessel fleet
- Carbon emissions per vessel normalised to distance travelled
- Carbon emissions from road transport fleet
- Fuel efficiency achieved by vessels compared with baseline predictions
- Total waste arising
- Proportion of waste recycled
- Amount of waste sent to landfill
- Level of engagement in activities undertaken as part of our Ecology Management Plan proposals

We will continue to use ECO Insight software developed by DNV GL for capturing relevant ship to shore data associated with our environmental impacts. Output information will assist ongoing performance monitoring activity, enabling us to quickly identify any emerging trends. This, in turn, will enable us to optimise our resources for putting control mechanisms in place as soon as possible, should they be necessary. The accurate and granular information will also support our co-operation with Transport Scotland in presenting timely and relevant information related to our environmental impacts.

Redacted will oversee the delivery of our Environmental Management Delivery Plan, tracking and reporting results to our Senior Leadership Team and we confirm that we will fulfil all monitoring procedures and reporting requirements, specified in Schedule 13 of the contract.

Embracing our commitment to proactive contract management and operating transparently, we would welcome the opportunity of discussing the potential for using innovative, cloud-based, Power BI technology for reporting purposes with Transport Scotland. A sample dashboard is shown in Figure 19. This move will support our alignment with the Scottish Government's digital strategy through provision of a bespoke reporting solution that will enable information sharing in addition to delivering the following benefits:

- Accessibility to reports via a customised interface, created in collaboration with Transport Scotland, with built-in flexibility, allowing for any changes in environmental management reporting requirements throughout the term of the new contract
- Increased speed, efficiency and accessibility to report information, supporting Serco's commitment to operating transparently
- Ability to quickly interpret data using tools and techniques that aid understanding, such as dashboards, interactive visualisations, charts and graphs that bring data to life and enable swift identification of any emerging trends

- Increased granularity and ability to manipulate data sets and interrogate data to support informed decision-making
 - Decreased requirement for paper-based reports, supporting environmental commitments
-

Redacted

Figure 19: Sample Redacted dashboard featuring visualisation tools for sharing report information in real-time

5.1.1.1. Audits

In accordance with our alignment with ISO 14001:2015 environmental management system requirements, our Environmental Management Delivery Plan will be reviewed, at least, annually to inform and drive interventions for improving performance.

5.1.2. Our approach to continuously improving our environmental performance and sharing best practice

Serco's culture of continuous improvement (CI) at NorthLink has been an ongoing and evolving activity that has required significant effort to create and embed a CI ethos, underpinned by established processes, which have been adopted across our organisation from committed leadership through to front-line service delivery personnel.

To date, we have already made a significant investment in providing systematic and measured improvement solutions for Transport Scotland through implementation of Serco's operational excellence model supported through comprehensive training. An example of one of our arising achievements has been the successful execution of our Ship Energy Efficiency Management Plan each year since 2016.

For the new NIFS contract, we intend to formalise our strategy and will use the following mechanisms to support our efforts in continuously improving our environmental performance, capturing innovation, and ensuring the implementation of best practice methodology:

5.1.2.1. Top down leadership:
Redacted

5.1.2.2. Bottom up input
Redacted

Redacted

- Redacted

5.1.2.3. Maximising the resources of the wider Serco Group

As part of our commitment to innovation and information sharing across the Serco Group, we will explore opportunities for applying learning from other business units to deliver cost savings, increased quality and efficiency for Transport Scotland. Redacted