### **Green Award Foundation**

Westerkade 7B | 3016 CL ROTTERDAM | The Netherlands | www.greenaward.org

# Annex 3h: Green Award Requirements (Ro-Ro Cargo Ship) Version 2023

Checklists for Office Audits and Ship Surveys

Effective as of 1 March 2023



## Annex 3h: Green Award Requirements (Ro-Ro Cargo Ship)





#### Table of contents

Appen- dix	Subject	Doc. Nr.	Effective date	Total pages
1	Checklist <b>Basic</b> Criteria - <u>Office audit</u> - Ro-Ro Cargo Ship	RMC-06	01/03/2023	3
2	Checklist <b>Ranking</b> Criteria - Office audit - Ro-Ro Cargo Ship	RMC-07	01/03/2023	9
	Checklist <b>Ranking</b> Criteria - Office audit - Total Score Review		01/03/2023	41
3	Checklist <b>Basic</b> Criteria - Ship survey - Ro-Ro Cargo Ship	RMC-08	01/03/2023	46
4	Checklist <b>Ranking</b> Criteria - Ship survey - Ro-Ro Cargo Ship	RMC-09	01/03/2023	52
	Checklist <b>Ranking</b> Criteria - Ship survey - Total Score Review		01/03/2023	83
5	Checklist <b>Visual</b> Inspection - Ship survey - Ro-Ro Cargo Ship	RMC-10	01/03/2023	90

#### **Legend for Checklists**

0	Indicates which crew/employee may be interviewed/questioned.
	Shows that a certain item is complied.
	Shows that a certain item is not complied.
0	Indicates that an alternative is used, hence the score for that item is a "0".
	The checklist was filled in incorrectly, thus shows "error".
0	Indicates that the whole element did not reach the minimum score, hence a finding is issued. The number shows the scores obtained.
	Shows which elements are minimum = maximum. Hence scores on all items is required to fully comply.
	Indicates that the minimum score for the relevant element is "0", hence a finding will not be issued.

<sup>\*</sup> for detailed interpretations of the colours and the usage of the checklist, please refer to the pdf-file named

#### **Revision codes**

RN Item/question is renumbered

RR Rating score of item/question is changed

N New item or question

D Item/question is deleted

M Text of item/question is modified

CKL ROR / VERSION 2023 / 1.0 2 of 97

<sup>&</sup>quot;Instruction Notes" located on www.greenaward.org under "Certification/Download".

## **APPENDIX 1**

CHECKLIST - BASIC CRITERIA - OFFICE AUDIT - RO-RO CARGO SHIP

(RMC-06)

		CHECKLIST - BASIC CRITERIA - OFFICE AUDIT -	RO	-RO	CA	RG	o s	HIP	- VE	ERS	ION	202	23								
Revision Code	Norm item	BASIC Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	Doc. & Impl.	- KION WIE	Doc. & Impl.	п DEPT.	Doc. & Impl.	INS-/CLAIM DEPT. Doc. & Impl.	NOT APPLICABLE
	100	MANAGEMENT ELEMENTS																			
	101	GENERAL			0		0		0		0		0		0			0		0	
	101.1	Are the Management System (MS) Manuals maintained and updated?																			
	102	SAFETY AND ENVIRONMENTAL PROTECTION POLICY			0		0		0		0		0	(	0						
		Is a company policy concerning safety and the environment and which is signed by the Man. Dir., available?																			
	102.2	Are objectives concerning safety and the environment described?																			
		Is this policy maintained and implemented at all shore-based levels as well as all ship-based levels?																			
	103	COMPANY RESPONSIBILITIES AND AUTHORITY			0		0		0		0		0		0			0		0	
		Is the entity who is responsible for the operations of the ship clearly defined ? (Owner or entity)																			
		Are shore-ship communications, defined levels of authority and lines of communication documented and working effectively?																			
	103.3	Are responsibilities and authorities of all office personnel clearly defined?																			
	103.4	Is the designated person provided with shore-based support and adequate resources?																			
	104	DESIGNATED PERSONS	0		0																
	104.1	Is/are (a) designated person(s) assigned in the office?																			
	104.3	Is objective evidence available that the safety and environmental aspects of the operation of each ship is monitored and that the required adequate resources and shore-based support is applied?																			
	105	MASTER'S RESPONSIBILITY AND AUTHORITY			0		0		0		0		0		0					0	
	105.1	Is the responsibility of the master clearly defined and documented?																			
		Does the company have the overriding authority of the master clearly defined? (ISM Code 2002 5.2)																			
	105.7	Are master's reviews reported and evaluated?																			

		CHECKLIST - BASIC CRITERIA - OFFICE AUDIT -	RO	-RC	) CA	ARG	o s	SHIP	- VE	ERS	ION	202	23								
Revision Code	Norm item	BASIC Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.  Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	т рерт.	Doc. & Impl.	INS- / CLAIM DEPT. Doc. & Impl.	NOT APPLICABLE
	100	MANAGEMENT ELEMENTS (continued)																			
	106	RESOURCES AND PERSONNEL AND STCW			0						0										
	106.1	Does the company have a procedure to verify the integrity of the sea staff certification and medical fitness before being assigned to the ship?																			
	106.2	Have the owners/managers established documented policies concerning shore/ship personnel?																			
	106.3	Has the level of competency been defined and documented for office personnel performing functions pertinent to safety and the environment?																			
	106.4	Do arrangements include a provision for masters and officers to receive an adequate introduction and continuous update of the company's safety and environmental system?																			
	106.5	Do arrangements include training and an introduction to the quality system for the executive management?																			
	106.6	Do office personnel receive training/courses with regard to the ISM Code and are they consistent with the MS manuals?																			
	106.7	Are records of this training/courses available?																			$\perp \perp \mid$
	106.8	Are internal audits held on board the ships?																			
	106.9	Is standard composition of crew documented in company policy?																			
	106.10	Is personnel promotion policy (ship & office) documented in company procedures?																			
	106.11	Is the working language between the office and the vessels defined?																			
	106.12	Are all senior and deck officers conversant with the English language for maritime communication?																			
	106.13	Are operational instructions on board written in a language understood by officers and shipboard personnel?																			
	106.14	Is the working language monitored and checked by the ship's staff and verified during internal audits?																			
	106.17	Is the Master of a vessel fully conversant with the Company's Management Systems?																			
	107	DEVELOPMENT OF PLANS FOR SHIPBOARD OPERATIONS			0		0		0		0		0		0					0	
	107.1	Does the company have procedures for the preparation of plans and instructions for key shipboard operations concerning safety of the ship and prevention of pollution?																			
	107.3	Are tasks, qualifications and responsibilities defined in the manuals and in the job descriptions?																			
	108	EMERGENCY PREPAREDNESS	0		0		0		0		0		0		0			0		0	
	108.1	Does the system cover the arrangements needed to ensure that the company, day and night, is prepared to respond effectively to hazards, accidents or emergencies involving their ships?																			
	108.2	Are tasks,qualifications and responsibilities described in the manuals and in the job descriptions?																			
	108.3	Is communication with media included in the emergency procedures?																			
	108.4	Are procedures for an "Emergency room" in the office defined?																			

		CHECKLIST - BASIC CRITERIA - OFFICE AUDIT	- RO	-RC	) CA	ARG	O S	SHIP	- VE	ERS	SION	202	23									
Revision Code	Norm item	BASIC Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.  Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOI AFFLICABLE
	100	MANAGEMENT ELEMENTS (continued)																				
	109	REPORTS AND ANALYSES OF NON-CONFORMATIES, ACCIDENTS AND HAZARDOUS OCCURENCES			0		0		0		0		0		0					0		
	109.1	Are safety and environmental inspections carried out, documented and reported?											•				•		•			
	109.2	Does the company have instructions/procedures for the reporting of non-conformities/ near misses?																				
	109.3	Are non-conformities, accidents and hazardous occurrences reported to the office?																				
	109.4	Are corrective and/or preventive actions taken ?																				
	109.5	Does the company have objective evidence to show their support of the shipboard personnel in reporting of non-conformities / near misses?																				
	110	MAINTENANCE OF THE SHIP AND EQUIPMENT			0		0		0													
	110.1	Are ship inspections held at defined intervals? (minimum of twice a year or equivalent)																				
	110.2	Are non-conformities reported including their possible cause?																				
	110.3	Is appropriate corrective action taken?																				
	110.4	Are records of these activities maintained?																				
	110.5	Does the MS require ship-critical equipment and systems to be identified?																				
	110.6	Does the MS provide for specific measures aimed at promoting the reliability of ship-critical equipment and systems?																				
	111	DOCUMENTATION			0																	
	111.1	Does the company have procedures to control documents and data relevant to the Man.System?																				
	111.2	Are valid documents available at all relevant locations?																				
	111.3	Are changes to documents reviewed and approved by authorised personnel?																				
	111.4	Are obsolete documents removed promptly?																				
	112	COMPANY VERIFICATION, REVIEW AND EVALUATION	0		0		0		0		0		0		0		0	0		0		
	112.1	Are internal audits carried out to verify whether safety and pollution-prevention activities, and other procedures, comply with the Management System (MS)?																				
	112.2	Does the company periodically evaluate the efficiency of the MS and review the MS, in accordance with procedures established by the company, when necessary?																			$\perp$	
	112.3	Is a management review done?																				
	112.4	Are the results of audits and reviews brought to the attention of all personnel having responsibility in the area involved?																				
	112.5	Have the management personnel, responsible for the area involved, taken timely corrective actions on deficiencies found?																				

		CHECKLIST - BASIC CRITERIA - OFFICE AUDIT -	· RO	-RC	) CA	ARG	O S	HIP	- V	ERS	ION	202	23										
Revision Code	Norm item	BASIC Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	П DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE
		IMO ELEMENTS																					
	200	SOLAS 1974																					
	201	SOLAS, General Provisions					0		0														
	201.1	Compliance with General Provisions																					
	212	SOLAS Certificates					0		0														
	212.1	Is an overview of the valid certificates per ship available and is the overview updated?																					
	217	Safety of Navigation / SOLAS chart carriage requirements							0				0										
		ECDIS (Compulsory carriage of ECDIS)										ı				-							
	217.1	If carriage of ECDIS is compulsory, is it a company policy for the ECDIS to be type-approved according to Res A 817(19) as amended by MSC 64 (67) and MSC 86 (70) or MSC.232(82)?																					
	217.3	Is it a company policy that an acceptable back-up arrangement is in place? (an independent type-approved ECDIS with an independent position fixing system using official Electronic Navigational Charts (or a combination of official ENCs and Raster Navigational Charts) or a full / reduced folio of up-to-date paper charts, as relevant to the ship's voyage)																					
		Training & Onboard Use of ECDIS (Compulsory carriage of ECDIS)								•		•		•									
	217.5	Is it a company policy that all officers and masters that use ECDIS for primary navigation are to complete generic training based on IMO model course 1.27?																					
	217.7	Is it a company policy that a risk assessment is carried out for the operation of ECDIS which identifies and controls the hazards when using ENCs and (if used) when ECDIS is in RCDS mode?																					
	217.9	Is the risk assessment and relevant onboard procedures + instructions reviewed on a regular basis (at least once a year or if circumstances require a review)?																					
	218	Noise Levels On Board Ships																					
		(Only applicable to new ships (ships contracted to build on or after 1st July 2014) of a gross tonnage of 1,600 and above.)			T		1													-			
	218.1	Is it company policy that the ships are surveyed for the measurement of noise level and the results recorded in the noise survey report in accordance with the Res MSC.337(91)?																					
	218.2	Is it company policy to identify areas of the vessels based on the noise levels and to place relevant visible warning notices at the entrance to these areas? (IMO noise symbols)																					

		CHECKLIST - BASIC CRITERIA - OFFICE AUDIT -	RO	-RC	CA	ARG	so s	HIP	- VE	ERS	ION	202	3								
Revision Code	Norm item	BASIC Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	ІТ DEPT.	Doc. & Impl.	INS- / CLAIM DEPT. Doc. & Impl.	NOT APPLICABLE
	300	MARPOL 73/78																			
	301	Provisions concerning Reports on Incidents Involving Harmful Substances (Protocol 1)			0				0				0								
	301.1	Does the company have a procedure in order to report an incident to the nearest coastal state in the event of the ship being abandoned or if a report from the ship is incomplete or unobtainable?																			
	310	Prevention of pollution by oil			0				0				0								
	310.1	Is a shipboard oil pollution emergency plan developed?																			
	310.3	Is training and testing of the oil pollution emergency plan done?																			
	310.4	Is the plan reviewed? (periodic and event review)																			
	310.5	Is an updated list of persons to be contacted available? (coastal States, port contacts, company interest contacts)																			
	310.6	Is office personnel familiar with the shipboard oil pollution emergency plan?																			
	310.7	Does the company have a policy concerning the retention and disposal of oil residues (sludge)?																			
	350	Prevention of pollution by garbage			0		0		0												
	350.2	Has the company developed a ship specific garbage management plan detailing the specific ship's equipment, arrangements and procedures for the handling of garbage?																			
	350.4	Is it a company policy to designate a person responsible for execution of the garbage management onboard?																			

## **APPENDIX 2**

CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - RO-RO CARGO SHIP

(RMC-07)

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO C	AR	GO S	HIP	- VE	RSI	ON :	2023	3									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	TECHNICAL DEPT	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	T DEBT	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE RANKING SCORE	RANKING MAX. SCORE	
	1000	GENERAL																				
	1200	Enclosed Space Entry & Hot Work				•		0														
	1200.1	Is there an Enclosed Space Entry and Hot Work permit to work system, taking account of IMO and industry guidelines and where relevant local port / terminal requirements?																		0	10	0
	1200.6	Is company approval of the Hot Work permit required before work can begin?																		0	10	٥
	1200.7	Is an evaluation of the Hot Work permit made (permit shows the appropriate safety precautions relevant to the location of work)?																		C	20	D
	1200.12	Is the HSQ Manager designated to authorise hot work?																		C	20	0
	1200.2	Is crew on board provided with suitable personal protective equipment and suitable equipment for testing the atmosphere of an enclosed space? (e.g. breathing apparatus, protective clothing and approved + calibrated atmosphere testing equipment)																		c	5	i
	1200.8	Are all personnel entering an enclosed space provided with a personal gas detector which can measure HC, oxygen and relevant toxic vapours?																		0	10	D
	1200.9	Is it company policy that a safety meeting, attended by all personnel involved, is held prior to entering the space or commencement of hot work in order to review procedures and PPE (including those specific for the intended work)?																		C	10	D
	1200.10	Does the company require a responsible officer to be designated for all aspects of the operation?																		C	5	į.
	1200.3	Is ship's crew trained and drilled periodically according to enclosed space entry procedures?																		0	5	;
	1200.4	Does training also include rescue and first aid?																		0	5	j.
					Ministra		- I de c				otal s		200	400			•			C	10	10
		Compressor for the refilling of air cylinders for breathing apparatus or Alternative, Additional			Minimu				requir	ea for	eiem	ent 1	200 = 1	100								
	1300	Green Award requirement				•		0														
	1300.1	Is it company policy that the vessels have a compressor for the refilling of air cylinders for breathing apparatus?																		C	20	0
	1300.2	Alternative for 1300.1: sufficient number of air cylinders for the sole purpose of safety drills.																		C	10	0
					Minde		alder.				otal s		200	40						C	20	<u> </u>
	ļ				Minimu	ım ra	inking	score r	requir	ed for	elem	ent 1	300 =	10								

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO (	CAF	RGC	) SI	HIP -	VER	SIC	)N 2	023	3										
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.  Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	ІТ DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	RANKING SCORE	RANKING MAX. SCORE	
	1400	Control of drugs & alcohol onboard								0														
	1400.2	Are all seafarers subject to an unannounced alcohol testing on board as initiated by the office? (Approved test equipment to be available on board)																				0	10	0
	1400.1	Are all seafarers subject to shore-based drug and alcohol testing at least once in last 12 months?																				0	15	5
	1400.5	Are all fleet vessels subject to unannounced drug and alcohol testing at least once every year (not exceeding 18 months between two consecutive tests) by an external organisation?																				0	10	0
	1400.6	Alternative to 1400.1 & 1400.5: In case crew members are not subject to shore-based drug and alcohol testing at least once in last 12 months, are all fleet vessels subject to unannounced drug and alcohol testing at least twice in 12 months by an external organisation?																				0	25	5
	1400.7	Does the company contract an external drug and alcohol test organization to monitor fleet vessels for next due vessel tests such that the organization can appropriately decide themselves location and date of attendance?																				0	10	0
					Minim		ronki		core re			al sc		100 -	20							0	45	5
	1500	Emergency Response System			IVIIII	lulli	Taliki	_	0	quirec	1101	0	1111 14	+00 =	20									
	1500.4	Are company vessels in receipt of an evaluation report of an annual drill between company, ERS service provider (class) and a company vessel?																				0	10	0
	1500.5	Is an annual ERT drill performed at the office which includes participation by the ERS service provider (class) and one company vessel?																				0	15	5
	1500.9	Is an updated list of national & local authorities, as required in the SOPEP & the emergency response plan, available in the office ?																				0	10	0
	1500.10	Do relevant ERT member(s) participate in an ERS training course as provided by the ERS service provider (class) ?																				0		
					Minim	num	ranki	ing s	core re	auirea		al sc		500 =	25							0	45	5
	1510	Emergency Oil Recovery																						
	1510.1	Does the company equip its vessels (GA-certified) with a system providing emergency access to cargo tanks and bunker tanks (for example, from the vessel deck), should the vessel be submerged?																				0	5	;
	1510.2	Does the company ensure that its ships (GA-certified) carry an oil skimmer or a similar device that																				0	5	j
	1310.2	can be used in an emergency situation of oil spill overboard?										al sc										<u>ل</u> ــــــــــــــــــــــــــــــــــــ		

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	₹0-	RO	CA	RG	SH	IP -	VER	SIO	N 20	)23									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	1550	Fire Safety Standards																				
		Fire Prevention																				
	1550.1	Does the company have a policy on fire patrols describing the frequency and quality aspects of patrols?																			0	10
	1550.3	Does the company ensure that GA-certified vessels provide and use only their own connectors and cables for providing electrical power to 'reefer' units during the voyage?				_															0	10
	1550.5	Does the company ensure that electrical circuits providing reefer connections are fitted with a means of ground fault detection and an alarm to the engine control room (on board GA-certified ships)?																			0	10
		Fire Detection																				
	1550.7	Does the company ensure that during the voyage all vehicle decks (of all GA-certified ships) are continuously monitored by means of combination of remote supervision (e.g., CCTV) and crew patrol?																			0	20
	1550.8	ALTERNATIVE to 1550.7 & 1550.9: Does the company ensure that during the voyage all vehicle decks (of all GA-certified ships) are continuously monitored by means of adequate technical equipment such as CCTV?																			0	10
	1550.9	ALTERNATIVE to 1550.7 & 1550.8: Does the company ensure that during the voyage all vehicle decks (of all GA-certified ships) are continuously monitored by means of frequent crew patrols?																			0	10
		Fire Suppression/Extinction																				
	1550.13	Does the company ensure that the fire drills conducted on board GA-certified ships are evaluated to improve the preparedness and effectiveness of the shipboard personnel?																			0	10
	1550.14	Does the company ensure that training of shipboard personnel and fire drills on board GA-certified ships strive towards minimizing the initial response time to a reported smoke/fire?																			0	10
	1550.15	Is early activation of fixed-fire fighting system for cargo spaces included in fire management procedures of all GA-certified ships?					-														0	5
	1550.16	Does the company ensure that all shipboard officers have the knowledge and mandate for activation of fixed-fire fighting system for cargo spaces, without fear of negative consequences for the individual personnel.																			0	10
												al sco									0	85

Office - Ro-Ro    1600   Computer Systems, Networks, Data Security and Training. CAr requirement   1600   1			CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - I	RO-	-RO	CA	RG	o s	SHIP	- VE	RSI	ON:	2023	3										
1900.1 Are arrangements for shore and vessel systems obcumented? (cortiguistion scheme) 1900.2 Are adequate system back-ups for vessel computer-based systems are made (where applicable) and a personal procedures for this documental? 1900.3 Is there a policy that system back-ups for vessel computer-based systems are made? 1900.5 Is there a policy that system back-ups for vessel computer-based systems are made? 1900.5 Is there a policy that system back-ups for vessel computer-based systems are made? 1900.6 Is the policy that system back-ups for vessel administrative PC systems are made? 1900.6 Is the policy that system back-ups for vessel administrative PC systems are made? 1900.6 Is the policy that system back-ups for vessel administrative PC systems are made? 1900.6 Is the policy that system back-ups for vessel administrative PC systems are made? 1900.6 Is the policy that system back-ups for vessel administrative PC systems in the office? 1900.6 Is the internal audit cheme applicable to the IT department? 1900.6 Is a system administrator designated for administrative PC systems in the office? 1900.6 Is a system administrator designated for administrative PC systems in the office? 1900.6 Is a system administrator designated for administrative PC systems in the office? 1900.6 Is a system administrator designated for administrative PC systems in the office? 1900.6 Is a system administrator designated for administrative PC systems in the office? 1900.7 Is a system administrator designated for administrative PC systems in the office? 1900.7 Is a system administrator designated for administrative PC systems in the office? 1900.8 Is a system administrator designated for administrative PC systems in the office? 1900.9 Is a system administrator designated for administrative PC systems in the office? 1900.0 System	Revision Code	Norm item		GENERAL MAN.	Doc. & Impl.	алапту DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	ІТ DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE	
An adequate system back-ups of your first administrative PC systems made (where applicable) and approachuse for this documented?  1800.7  1800.8  18 there a policy that system back-ups for vessel computer-based systems are made?  1800.3  1800.3  1800.3  1800.3  1800.3  1800.4  1800.4  1800.4  1800.6		1600	Computer Systems, Networks, Data Security and Training. GA requirement			0													0						
1 septice-duries for this documented? 1 septice-duries for this documented for administrative PC systems and cover or for this document for a septice-duries for administrative PC systems in the office? 1 septice-duries for this document for administrative PC systems in the office? 1 septice-duries for this document for administrative PC systems in the office? 1 septice-duries for this document for administrative PC systems in the office? 1 septice-duries for this document for administrative PC systems in the office? 1 septice-duries for this document for administrative PC systems in the office? 1 septice-duries for this document for administrative PC systems in the office ? 1 septice-duries for this document for administrative PC systems in the office ? 1 septice-duries for this document for administrative PC systems in the office ? 1 septice-duries for administrative PC systems in the office ? 1 septice-duries for administrative PC systems in the office ? 1 septice-duries for septice-duries for administrative PC systems in the office ? 1 septice-duries for administrative PC systems in the office ? 1 septice-duries for this document for administrative PC systems in the office ? 1 septice-duries for this document for administrati		1600.1	Are arrangements for shore and vessel systems documented ? (configuration scheme)																				0	10	
1900.8   some provided at a level required to effectively operate and maintain the system and cover common, abnormal and emergency conditions?   1900.3   straining provided at a level required to effectively operate and maintain the system and cover common, abnormal and emergency conditions?   1900.4   stream and the internal audit scheme applicable to the IT department?		1600.2																					0	5	
Set training provided at a level required to effectively operate and maintain the system and cover normal, abnormal and emergency conditions?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department?   Set the internal audit scheme applicable to the IT department of the IT department in the Set the IT department in the Set the IT department in the Set the IT department (cyber risk policy)   Set the company have palicy focus on elements such as third-party access and bring your own device (Set YoOb) in the Office?   Set the company designate and train personnel as appropriate to identify and respond to cyber threats to the company in formation technology is systems?   Set the company have a policy in place to build new ships equipped with cyber secure systems and components?   Set the company have a policy in place to build new ships equipped with cyber secure systems and components?   Set the company have a policy to carry out cyber risk requirements that reflect the company is department to echnology systems?   Set the company have a policy to carry out cyber risk requirements that reflect the company is department and gents?   Set the company have a policy to carry out cyber risk assessments on its ships (at an interval deemed suitable by the company have a policy to carry out cyber risk assessments on its ships (at an interval deemed suitable by the company have		1600.7																					0	5	
Normal, abnormal and emergency conditions?		1600.8	Is there a policy that system back-ups for vessel administrative PC systems are made?																				0	5	
1600.5   Are computer systems, in relation to IMO MSC/Circ. 891, certified by a recognised organisation?		1600.3																					0	10	
1500.6 Is a system administrator designated for administrative PC systems in the office?    Secondary   Secondary		1600.4	Is the internal audit scheme applicable to the IT department?																				0	10	
Section   Sect		1600.5	Are computer systems, in relation to IMO MSC/Circ.891, certified by a recognised organisation?																				0	10	
1610. Cyber Risk Management  1610.1 Does the company have plans and procedures of cyber risk management (cyber risk policy) incorporated within its Safety Management System (SMS)?  1610.3 Does the cyber risk policy differentiate between IT (information technology) and OT (operational technology) systems?  1610.4 Does the cyber risk policy focus on elements such as third-party access and bring your own device (BYOD) in the office?  1610.5 Does the cyber risk policy focus on elements such as third-party access and bring your own device (BYOD) in the office?  1610.6 Does the company share a policy in place to build new ships equipped with cyber secure systems and components?  1610.7 Does the company have a policy in place to build new ships equipped with cyber secure systems and components?  1610.8 Does the company have a policy in place to build new ships equipped with cyber secure systems and components?  1610.8 Does the company have a policy to carry out-oyder risk assessments on its ships (at an interval deemed suitable by the company) using either of the following:  1610.8 Does the company have a policy to carry out-oyder risk assessments  1610.8 Does the company have a policy to carry out-oyder risk assessments  1610.8 Does the company have a policy to carry out-oyder risk assessments  1610.9 Does the company provide its ships with contingency plans and related information in a non-electronic form that need to be followed in the event of a cyber attack?  1610.1 Si ta company provide its ships with contingency plans and related information in a non-electronic form that need to be followed in the event of a cyber attack?  1610.1 Si ta company provide its ships with contingency plans and response plans on board and ashore?  1610.1 Does the company use the information from investigations of previous identified cyber incidents to improve the technical and procedural protection measures and response plans on board and ashore?  1610.1 Does the company forbid remote access by technicians and manufacturers to on-boar		1600.6	Is a system administrator designated for administrative PC systems in the office ?																				0	10	
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deemed suitable by the company) using either of the following: - self-assessments followed by third party risk assessments - penetration tests of critical IT and OT infrastructure performed by external experts simulating cyber attacks?  1610.9 Does the company provide its ships with contingency plans and related information in a non-electronic form that need to be followed in the event of a cyber attack?  1610.10 Is it a company policy to involve IT department while preparing to purchase OT systems for ships?  1610.11 Does the company use the information from investigations of previous identified cyber incidents to improve the technical and procedural protection measures and response plans on board and ashore?  1610.12 Does the company forbid remote access by technicians and manufacturers to on-board systems without authorization by the vessel's senior leadership team (For example, by following a two-step digital authorization process)?		1610.7																					0	5	
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Does the company use the information from investigations of previous identified cyber incidents to improve the technical and procedural protection measures and response plans on board and ashore?  Does the company forbid remote access by technicians and manufacturers to on-board systems without authorization by the vessel's senior leadership team (For example, by following a two-step digital authorization process)?		1610.9																					0	5	
1610.11 improve the technical and procedural protection measures and response plans on board and ashore?  Does the company forbid remote access by technicians and manufacturers to on-board systems without authorization by the vessel's senior leadership team (For example, by following a two-step digital authorization process)?		1610.10	Is it a company policy to involve IT department while preparing to purchase OT systems for ships?																				0	5	
1610.12 without authorization by the vessel's senior leadership team (For example, by following a two-step digital authorization process)?		1610.11	improve the technical and procedural protection measures and response plans on board and																				0	5	
		1610.12	without authorization by the vessel's senior leadership team (For example, by following a two-step																					5	
Total score 0 7 Minimum ranking score required for element 1610 = 35						Indie:	i.m.		rina :		*****************				640 .	25							0	75	4

		CHECKLIST - RANKING CRITERIA - OFFICE AUI	IT - I	RO-	-RO	CA	RGO	SHI	P - \	/ER	SIO	N 2	023	}									
Nevision code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиапту рерт.	Doc. & Impl.	TECHNICAL DEPT. Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.  Doc. & Impl.	T DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOTAPPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	1700	Noise and Vibration Management											_										
		Noise/Vibration Monitoring and Measures																					
	1700.1	Is it company policy to verify the noise survey report every 5 years?																				0	15
	1700.2	Is it company policy that the crew entering spaces where noise levels exceed 85db(a) should wear hearing protectors which meet the requirements of the HML(High-Medium-Low) method (ISO 4869 2:1994)?																				0	5
	1700.3	Is it company policy to periodically inspect the noise and vibration of all machinery equipment and rectify any abnormalities?																				0	5
	1700.4	Is it company policy to take appropriate measures in order to protect the crew from cargo handling equipment noise if it exceeds 85db(a) (by taking into account technical solutions and/or exposure limits)?																				0	10
		Noise Mitigation and Health Hazards														-							-
	1700.5	Does the SMS include the following?  1.Hearing protection;  2.Exposure limits;  3.Training regarding noise and health hazards.																				0	5
	1700.6	Does the company provide the crew with a hearing conservation programme which includes the following:  1.Hazards of high and long duration of noise exposure;  2.Maintenance of audiometric test records;  3.Periodic analysis of records and hearing acuity of individuals with high hearing loss.																				0	5
	1700.7	Does the company assess the risks associated with distractions to onboard operations, communication and rest hours caused by exposure to high levels of noise?																				0	10
	1700.8	Is it company policy to determine the noise exposure level of each rating/officer by taking into account the job profile, time spent by each crew member in different work spaces? (ISO 9612:2009 procedure)																				0	10
					la attack		ranking					al sco		,00 (	15							0	65
	1710	Underwater Noise and Vibration Management			IVIIII	Imum	ranking	SCO	ereq	uirec	1016	eileille	11	00 = 2	20								
	1710.1	Is it company practice to design a newbuild ship in such a manner to attenuate/reduce underwater noise?																				0	10
	1710.2	Does the company take any of the following measures to reduce underwater noise and vibration:  1.Installation of state of art propellers (With reduced cavitation);  2.Wake conditioning devices;  3.Installation of air injection propeller;  4.Vibration isolators mounted on the diesel generators;  5. Installation of propeller boss cap with fins;  6. Others = *fill during audit*?																				0	10
		If others	= *fill	durin	ng au	udit*																	
	1710.3	Does the company take any additional maintenance routines (e.g. polishing/coating) to reduce cavitation from the propeller?																				0	5
	1710.4	Does the company opt for re-routing or slow steaming where possible and practicable to protect whale sensitive areas?																				0	5
		whale sensitive areas:			<u> </u>							al sco										0	30

	CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	₹0-	RO	CA	RG	SH	IIP -	VER	RSIC	N 20	)23										
Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT. Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT. Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	Т DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE		RANKING MAX. SCORE
1800	Social Dimension / Sustainability		_													_						
	A. Good Health & Well-Being																					
1800.1	Does the company ensure that all vessels under its control have an ITF or similar agreement in place?																			(	)	10
1800.2	Does the company have procedure regarding relieving shipboard personnel on compassionate grounds? (For example, in case of a family emergency)																			(	)	5
1800.3	Is the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?																			(	)	5
1800.4	Does the company ensure that the shipboard staff is aware of platforms (online/offline) providing access to emotional support networks to tackle mental health issues?																			(	)	5
1800.5	Does the company provide access to the internet at all times for shipboard personnel on board all ships under its control?																			(	)	5
	B. Reduced Inequalities / Equal Opportunities / Diversity																					
	B.1 General																					
1800.6	Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at workplace (office and ship)?																			(	)	10
1800.7	Does the company have confidential reporting procedures enabling all employees to report harassment & discrimination?																			(	)	5
1800.8	Does the company take steps to create awareness among its staff (on shore & off shore) and to ensure effective implementation of its policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?																			(	)	5
	B.2 Gender-specific																					
1800.10	Does the company take steps to promote and achieve gender diversity/equality at office and on board vessels (at all levels)?																			(	)	10
1800.11	Does the company provide the following specific facilities for its women seafarers:  - feminine hygiene items (in bonded stores) & separate disposal facilities on board  - separate washrooms with sanitary facilities on board  - suitable sized (gender specific) safety and protective clothing on board  - access to medical supplies without having to consult male colleagues on board																			(	)	5
	C. Sustainability Reporting																					
1800.12	Does the company prepare and publish its performance on environmental, social and governance criteria annually (in line with internationally recognised frameworks, such as GRI, IIRC and SASB standards)?																			(		20
							• • • •						00 4-							(		85
	1800 1800.1 1800.2 1800.3 1800.4 1800.5 1800.6 1800.7 1800.8	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good Health & Well-Being  1800.1 Does the company ensure that all vessels under its control have an ITF or similar agreement in place?  1800.2 Does the company have procedure regarding relieving shipboard personnel on compassionate grounds? (For example, in case of a family emergency)  1800.3 Is the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?  1800.4 Does the company provide access to take the metal health issues?  1800.5 Does the company provide access to the internet at all times for shipboard personnel on board all ships under its control?  8. Reduced Inequalities / Equal Opportunities / Diversity  8.1 General  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at workplace (office and ship)?  Does the company have confidential reporting procedures enabling all employees to report harassment & discrimination?  Does the company take steps to create awareness among its staff (on shore & off shore) and to ensure effective implementation of its policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?  8.2 Gender-specific  Does the company take steps to promote and achieve gender diversity/equality at office and on board vessels (at all levels)?  Does the company provide the following specific facilities for its women seafarers: - feminine hygiene items (in bonded stores) & separate disposal facilities on board - separate washrooms with sanitary facilities on board - separate washrooms with sanitary facilities on board - access to medical supplies without having to consult male colleagues on board  C. Sustainability Reporting  Does the company prepare and publish its performance on environmental, social and governance criteria annually (in line w	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good Health & Well-Being  Does the company ensure that all vessels under its control have an ITF or similar agreement in place?  1800.2 Does the company have procedure regarding relieving shipboard personnel on compassionate grounds? (For example, in case of a family emergency)  1800.3 Is the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?  1800.4 Does the company ensure that the shipboard staff is aware of platforms (online/offline) providing access to emotional support networks to tackle mental health issues?  Does the company provide access to the internet at all times for shipboard personnel on board all ships under its control?  B. Reduced Inequalities / Equal Opportunities / Diversity  B.1 General  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at workplace (office and ship)?  1800.7 Does the company have confidential reporting procedures enabling all employees to report harassment & discrimination?  1800.8 Does the company take steps to create awareness among its staff (on shore & off shore) and to ensure effective implementation of its policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?  B.2 Gender-specific  Does the company take steps to promote and achieve gender diversity/equality at office and ship?  Does the company take steps to promote and achieve gender diversity/equality at office and on board especial examples to the promote of	RANKING Office - Ro-Ro    Page   Page	RANKING Office - Ro-Ro    Page 2   Page 3   Page 3   Page 3	RANKING Office - Ro-Ro    Page 2	RANKING Office - Ro-Ro    Social Dimension / Sustainability   A. Good Health & Well-Being   Boes the company ensure that all vessels under its control have an ITF or similar agreement in place?   Boos the company have procedure regarding relieving shipboard personnel on compassionate grounds? (For example, in case of a family emergency)   Boos the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?   Boos the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?   Boos the company ensure that the shipboard staff is aware of platforms (online/offline) providing access to emotional support networks to tackle mental health issues?   Boos the company provide access to the internet at all times for shipboard personnel on board all ships under its control?   B. Reduced Inequalities / Equal Opportunities / Diversity   B.1 General   Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at workplace (office and ship)?   Does the company have confidential reporting procedures enabling all employees to report harassment & discrimination of its policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?   B.2 Gender-specific   Does the company take steps to create awareness among its staff (on shore & off shore) and to ensure effective implementation of its policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?   B.2 Gender-specific   Does the company take steps to promote and achieve gender diversity/equality at office and on board essential effective implementation of its policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, asterial po	RANKING Office - Ro-Ro    Social Dimension / Sustainability	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good Health & Well-Being  Does the company nesure that all vessels under its control have an ITF or similar agreement in place?  Does the company nesure that all vessels under its control have an ITF or similar agreement in place?  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Does the company have a policy focusing on subjects such as equal opportunities, equality and at workplace (office and ship)?  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?  B.2 Gender-specific  B.3 Gender-specific  Does the company have spotifice facilities for its women seafarers:  - ferminine hygiene items (in bonded stores) & separate disposal facilities on board  - access to medical supples without having to consult male colleagues on board  - access to medical supples without having to consult male colleagues on board  C. Sustainability Reporting  Does the company prepare and publish its performance on environmental, social and governance	RANKING Office - Ro-Ro    Page 1   1   1   1   1   1   1   1   1   1	RANKING Office - Ro-Ro    Social Dimension / Sustainability   A. Good Health & Well-Being	RANKING Office - Ro-Ro    Social Dimension / Sustainability   Light of the company of the company of the company ensure that all vessels under its control have an ITF or similar agreement in place?   Does the company have procedure regarding relieving shipboard personnel on compassionate grounds? (For example, in case of a family emergency)	Social Dimension / Sustainability	Page   Page	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good Health & Well-Being Does the company have procedure regarding releving shipboard personnel on compassionate grounds? (For example, in case of a family emergency)  Isona to employ the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?  Does the company provide access to the internet at all times for shipboard personnel on board all ships.  B. Reduced Inequalities / Equal Opportunities / Diversity  B. General  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, arti-descrimination, anti-harassment, etc. to prevent and eliminate discrimination  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, arti-descrimination?  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, arti-descrimination?  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, arti-descrimination?  Does the company have confidential reporting procedures enabling all employees to report  B. General  Does the company have an policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, arti-descrimination, anti-harassment, etc. to prevent and eliminate descrimination  Does the company have confidential reporting procedures enabling all employees to report  B. Center-specific  Company that contribution is policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, arti-descrimination, anti-harassment, etc. 7.  B. Zender-specific  Company that control is populated and procedure enabling all employees to report  Company that the company that control is populated and procedure enabling all employees to report  Company that the company that the company that the procedure enabling all employees to report	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. 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General  Does the company rybace tages to the internet at all times for shipboard personnel on toward all ships under its control?  B. Reduced Inequalities / Equal Opportunities / Diversity  B. Reduced Inequalities / Equal Opportunities / Diversity  B. Reduced Inequalities / Equal Opportunities / Diversity  B. Reduced Inequalities / Equal Opportunities / Diversity and diversity, inclusion, anti-discrimination, anti-harassment, etc.?  B. Reduced Inequalities / Equal Opportunities / Diversity and diversity, inclusion, anti-discrimination, anti-harassment, etc.  Does the company provide the following specific facilities for boardseparate wastroroms with sanitary facilities on boardseparate wastroroms with sanitary facilities on boardaccess to medical supplies without having to consult make colleagues on boardaccess to medical supplies without having to consult make colleagues on boardaccess to medical supplies without having to consult make colleagues on boardaccess to medical supplies without having to consult make colleagues on board	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good Health & Well-Being  Does the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?  Sobes the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?  B. Reduced Inequalities / Equal Opportunities / Diversity  B. 1 General  Does the company have policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. 7:  B. Reduced Inequalities / Equal Opportunities / Diversity  B. 1 General  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at workplace (office and ship)?  B. Reduced Inequalities / Equal Opportunities / Diversity  B. 1 General  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. 7:  B. Reduced Inequalities / Equal Opportunities / Diversity  B. 1 General  Does the company provide access to the internet at all imes for shipboard personnel on board all ships under its control?  B. Reduced Inequalities / Equal Opportunities / Diversity  B. 1 General  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?  B. 2 General-specific  Does the company provide the following specific facilities for its women seafarers:  - formitime hygiene tense in flow of the policies focusing on board  - subscribed asset (grant levels)?  Does the company provide the following specific facilities on board  - subscribed asset (grant levels)?  Does the company provide the following specific facilities on board  - substantially Reporting  Does the company provide the following specific facilities on bo	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good leaths & Well-Being  1900. 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I General  Obes the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, and-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at working and shaping of the company takes teps to create awareness among its staff (on shore & off fishore)  Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, and-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at which is control?  9. C. Sandanous and discrimination of the policies such as equal opportunities, equality and diversity, inclusion, and-discrimination, anti-harassment, etc.?  9. C. Sandanous and the company take steps to promote and achieve gender diversity/equality at office and on control discrimination of the policies for customy of the company provide the following specific facilities on board -separate washrooms with sanitary facilities on board -separate washrooms w	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good Health & Well-Being  1900. Does the company heave procedure regarding relieving shipboard personnel on compassionate growing of resemble and driversity.  1900. Does the company value of the shipboard staff is aware of platforms (onlino/filline) providing according to receive the internet at all times for shipboard personnel on board all shipp.  1900. B. Reduced Inequalities / Equal Opportunities / Diversity  B. I. General  Obes the company have policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, arti-discrimination, arti-harassment, etc. to prevent and eliminate discrimination and diversity, inclusion, arti-discrimination?  Does the company have confidential reporting procedures enabling all employees to report hardwards to stack of shore) and to respect the company have confidential reporting procedures enabling all employees to report and eliminate discrimination?  Does the company have confidential reporting procedures enabling all employees to report and eliminate discrimination?  Does the company have confidential reporting procedures enabling all employees to report and eliminate discrimination and elimi	RANKING Office - Ro-Ro  Social Dimension / Sustainability  A. Good Health & Well-Being  1900.  Does the company ensure that all vessels under its control have an ITF or similar agreement in place?  Good Health & Well-Being  1900.  Does the company have procedure regarding relieving shipboard personnel on compassionate growing relieving shipboard personnel on compassionate growing state of the company ensure that all vessels under its control have an ITF or similar agreement in place?  1900.2 grounds? (For example, in case of a family energency)  1900.3 staff or seeking medical advise?  1900.4 staff or seeking medical advise?  1900.5 staff or seeking medical advise?  1900.5 staff or seeking medical advise?  1900.6 staff company resure that the shipboard staff is aware of platforms (online)offline) providing access to mentional support metworks to land davise?  1900.5 staff or seeking medical advise?  1900.6 staff company resure that the shipboard staff is aware of platforms (online)offline) providing access to mentional support metworks to land davise?  1900.6 staff company resure that the shipboard staff is aware of platforms (online)offline) providing access to the internet at all times for shipboard personnel on board all advises to mentional support metworks to land advise?  1900.6 staff company resure that the shipboard staff is aware of platforms (online)offline) providing adversity, inclusion, anti-discrimination?  1900.6 staff company resure that the shipboard staff is aware of platforms (online)offline) providing adversity, inclusion, anti-discrimination?  1900.6 staff company resure that the shipboard staff is aware of platforms (online)offline) providing adversity, inclusion, anti-discrimination?  1900.7 staff included the control of the shipboard personnel on board adversity, inclusion, anti-discrimination?  1900.8 staff company have confidential reporting procedure sensiting all emptyless to report hardwards and the shipport of the following specific facilities on board excess to made a support take	RANKING Office - Ro-Ro  800 Social Dimension / Sustainability  A. Good Health & Well-Being 1990 Does the company ensure that all vessels under its control have an ITF or similar agreement in place of the company have procedure regarding relieving shipboard personnel on compassionate grounds? (For example, in case of a family emergency) 1990 Does the company passure that all vessels under the control have an ITF or similar agreement in place of the company passure that all vessels under the control have an ITF or similar agreement in place of the company passure that the shipboard addition of the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard addition is under the company passure that the shipboard passure that the shipboard addition is under the company passure that the shipboard passure that the shipboar	RANKING Office - Ro-Ro    Very 1 - 14 - 15 - 15 - 15 - 15 - 15 - 15 -

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - I	RO-	RO	CA	RGC	) SF	IIP - '	VER	SIO	N 202	23									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алашту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.  Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	DOC. & Impl:	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	2000	NAVIGATION / BRIDGE OPERATIONS																				
	2100	Navigation						_	0			0										
	2100.6	Does the company have a contract for automatic supply of new hydrographic publications?																			0	10
	2100.7	Does the company have a contract for electronic update of hydrographic publications? (eg. Temporary and Preliminary NtM)																			0	10
	2100.8	Is it a company policy to include navigational equipment in electronic Planned Maintenance System?																			0	10
	2100.9	Are masters entitled to use non-compulsory pilot services? (must be stated in a company procedure)																			0	10
	2100.12	Is the company aware of the vessel's critical areas transiting?																			0	10
	2100.13	Does the company use weather routing services for ships on long haul voyages?																			0	10
	2100.18	Is it a company policy to enrol the vessels in a meteorological & oceanographic service in a form of a software application?																			0	10
	2100.19	Alternative to 2100.18: Do the vessels have a capability to receive comprehensive weather information from the office or from coastal stations / platforms?																			0	5
	2100.14	Does the company have instructions for navigating in sensitive areas? (IMO SN/Circulars)																			0	10
	2100.15	Is it a company policy to equip vessels with the multi constellation GNSS receivers?																			0	10
	2100.16	Is it a company policy to equip vessels with the eLoran receivers?																			0	10
	2100.17	Is it a company policy that the position for all stages of voyage is compared with a different method of positioning than GPS?																			0	20
					la ar . r							al score									0	120
		<u>l</u>			Mini	mum	rankı	ıng sc	ore rec	uirec	ı tor e	lement	2100 =	: 50								

	RANKING Office - Ro-Ro  Electronic chart display & information systems / ECDIS  Applicable to the companies with ships for which carriage of ECDIS is compulsory  Does the company provide navigational procedures concerning the use of ECDIS?  Is it a company policy to list ECDIS as critical equipment and integrate into PMS? (hardware and software)  Is it a company policy that ECDIS is tested according to IHO ECDIS data presentation and	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT. Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
11.3	Applicable to the companies with ships for which carriage of ECDIS is compulsory  Does the company provide navigational procedures concerning the use of ECDIS?  Is it a company policy to list ECDIS as critical equipment and integrate into PMS? (hardware and software)																			
11.4	Does the company provide navigational procedures concerning the use of ECDIS?  Is it a company policy to list ECDIS as critical equipment and integrate into PMS? (hardware and software)																			
11.4	Is it a company policy to list ECDIS as critical equipment and integrate into PMS? (hardware and software)																			
11.5	software)																		0	10
	le it a company policy that ECDIS is tooted according to ILIO ECDIS data proportation and																		0	5
	performance check with a use of test data set after every update of the software (including back up)?																		0	5
11.6	Is it a company policy that regardless of the generic training the crew is familiarised with the ECDIS unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?																		0	15
11.7	Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?																		0	5
11.8	Does the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?																		0	5
11.11	Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?																		0	5
11.12	Is it a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?																		0	10
				Minimi	ım rar	nkina s	ecora r	oguiro				- 35							0	60
20	Fuel Change Over / Ballast Water Exchange			0	rai		0	cquire	101	o	. 2111	- 55								
20.1	Is it company policy that the voyage plan (checklist) include when fuel change over should be carried						-												0	10
20.2	Is it company policy that the voyage plan (checklist) include when ballast water exchange <u>can</u> be carried out?																		0	10
			- 1	Minim	ım ro	nking	ccore -	oquiro				1 - 20							0	20
00	Mooring Operations			warming	ım rar	iikiiig s	o o	equire	iu ior (	sierrien	1 2 1 2 0	20								
00.1																			0	10
	, , , , , , , , , , , , , , , , , , , ,								Tot	al scor	e		<u> </u>			1		<del>-  </del>	0	10
111111111111111111111111111111111111111		unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?  Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?  Does the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  Is it a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?  Fuel Change Over / Ballast Water Exchange  Is it company policy that the voyage plan (checklist) include when fuel change over should be carried out?  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Boos the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  Is it a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?  Total scor Minimum ranking score required for element out?  Is it company policy that the voyage plan (checklist) include when fuel change over should be carried out?  Is it company policy that the voyage plan (checklist) include when ballast water exchange can be carried out?  Minimum ranking score required for element out?  Minimum ranking score required for element out?  Minimum ranking score required for element out?  Total scor Minimum ranking score required for element out?  Does the company have procedures/instructions for mooring/unmooring operations?	unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?  Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?  Boes the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  Is it a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?  Total score  Minimum ranking score required for element 2111  Is it company policy that the voyage plan (checklist) include when fuel change over should be carried out?  Is it company policy that the voyage plan (checklist) include when ballast water exchange can be carried out?  Mooring Operations  Mooring Operations  Does the company have procedures/instructions for mooring/unmooring operations?	unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?  Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?  Boes the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  Is it a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?  Fuel Change Over / Ballast Water Exchange  Is it company policy that the voyage plan (checklist) include when fuel change over should be carried out?  Is it company policy that the voyage plan (checklist) include when ballast water exchange can be carried out?  Minimum ranking score required for element 2110 = 20  Mooring Operations	unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?  Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?  Boes the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  Is it a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?  Total score  Fuel Change Over / Ballast Water Exchange  Is it company policy that the voyage plan (checklist) include when fuel change over should be carried out?  Is it company policy that the voyage plan (checklist) include when ballast water exchange can be carried out?  Minimum ranking score required for element 2120 = 20  Mooring Operations  Mooring Operations  Does the company have procedures/instructions for mooring/unmooring operations?	unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?  Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?  Boes the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  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Minimum ranking score required for element 2120 = 20  Mooring Operations  Mooring Operations  Mooring Operations  Is it company have procedures/instructions for mooring/unmooring operations?	unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?  Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?  Boes the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  It is a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?  Fuel Change Over / Ballast Water Exchange  It is it company policy that the voyage plan (checklist) include when fuel change over should be carried out?  Total score  Minimum ranking score required for element 2112 = 20  Mooring Operations  Mooring Operations	unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?  Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?  Be Does the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?  Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?  It is a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?  Fuel Change Over / Ballast Water Exchange  It is it company policy that the voyage plan (checklist) include when fuel change over should be carried out?  It is the company policy that the voyage plan (checklist) include when ballast water exchange can be carried out?  Minimum ranking score required for element 2111 = 35  Total score  Minimum ranking score required for element 2120 = 20  Mooring Operations  Minimum ranking score required for element 2120 = 20  Does the company have procedures/instructions for mooring/unmooring operations?

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - I	RO-	RO	CA	RG	o s	HIP -	VER	SIO	N 202	23									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алапту DEPT.	Doc. & Impl.	TECHNICAL DEPT.		NAUTICAL DEPT.  Doc. & Impl.	L DEPT.		OPER./CHART DEPT. Doc. & Impl.	G DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	3000	MACHINERY / ENGINE OPERATIONS																				
	3100	Bunker Operations					0					0										
	3100.1	Does the company MS specify a safe-maximum percentage fill for bunker tanks? (max. limit 95%)																			0	10
	3100.2	Is a checklist used for bunker operations (company format) ?																			0	10
	3100.3	Does the bunker procedure include a bunker plan (company format) ?																			0	10
	3100.4	Are there procedures/instructions for the internal transfer of fuel oil between main storage tanks?																4			0	10
	3100.5	Is there an instruction that all persons involved are to be familiar with the intended bunker operation and/or internal transfer operation and their duties?																			0	10
												al score			1	- '					0	50
					Mini	imum	rank	ing s	core re	quired	for e	lement	3100 :	= 50								
	3101	Bunker Operations - LNG																_				
	3101.1	Does the company SMS specify that only a relevant IAPH LNG bunkering checklist must be used?																			0	10
	3101.2	Is it company policy to ensure that LNG-fuelled ships are equipped with LNG specific PPEs such as protective cryogenic gloves and safety goggles with side protection?																			0	10
	3101.3	Does the company install CCTV on LNG bunker stations for the purpose of observing the bunkering operation from the bridge or operation control room?																			0	10
	3101.4	Is it company policy that ships are mandated to provide a dedicated watch (from a safe location) on bunker station during the entire duration of the LNG bunkering?																			0	5
	3101.5	Does the company provide thermal imaging camera/equipment for leakage detection during bunkering on board its LNG-fuelled ships (GA-certified only)?																			0	5
	3101.6	Does the company provide its shipboard personnel a shore-based training on LNG bunkering?																			0	10
								•		•		al score			•						0	50
					Mini	imum	rank	ing s	core re	quired	for e	lement	3101 :	= 25								

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	₹0-	RO	CA	ARG	o s	HIP	• - V	ER:	SIO	N 2	023	3										
Kevision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алапту DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	ІТ DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	3200	Fuel oil management																							
		A. Contracting / Procurement								•		•								•					
	3200.14	N/A in case charterer is responsible for supplying bunkers (for all GA ships) Is it company procedure that bunker purchasing contracts state that the fuel oil be supplied with reference to ISO 8217 specifications ( <u>latest edition is recommended</u> )?																						0	10
	3200.15	N/A in case owner / manager or third party ship manager is responsible for purchasing bunkers (for all GA ships)  Is it company procedure that the technical requirements of the ship and optimal fuel oil specifications are communicated to the charterer for their consideration?																						0	10
	3200.13	Is an evaluation of all fuel oil suppliers carried out to identify "quality-oriented fuel oil suppliers" before signing the bunker purchasing contract with a chosen supplier and are the negative results brought to the attention of the charterer (where applicable)?																						0	10
		B. Sampling & Testing			-																		•		
		B.1 MARPOL delivered fuel oil sampling																							
	3200.11	Is it company policy that fuel oil sampling (during bunkering) is carried out using an automatic sampler (time or flow proportional) in accordance with Marpol Annex VI?																						0	10
		B.2 In-use fuel oil sampling																							
	3200.16	Is it company policy that fuel oil samples are drawn from the following designated sampling points at least once every four months for testing of catalytic fines & separator efficiency at a recognized fuel analysis organization ashore?  1. at engine inlet 2. before separator 3. after separator																						0	10
		B.3 Testing		,						•		•								•					
	3200.1	Is it company procedure that bunkered fuel oil is <u>always</u> tested (before use onboard) by a recognized fuel analysis organization ashore in accordance with the requirements of ISO 8217 standard (same edition for which the fuel was ordered)?																						0	40
		C. Operational procedures																							
	3200.17	Does the company prohibits its ships to commingle two different bunkers (even of the same grade of fuel)?																Ţ						0	10
	3200.18	For the situations where commingling of two different fuels is unavoidable, does the company have commingling procedure explaining the steps to be followed to determine the compatibility of two bunkers (including the reference test methods)?																						0	5
		D. Additional questions					•																		
	3200.5	Are global bunker quality alerts received from company fleet experience and fuel analysis organisation shared with relevant ships by issuing technical bulletins or circulars?																						0	10
	3200.19	Is it company procedure that bunker suppliers are asked to provide the copies of the product's valid certificate of quality (COQ) and associated laboratory analysis reports verifying the details on the COQ?																						0	5
													al sco												

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO	CA	RGO	SHI	P - V	/ERS	NOI	202	3										
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	4000	CARGOES / CARGO OPERATIONS																					
	4600	Cargo Operations	0				0	0			•	)							0				
	4600.2	Is company aware of cargo specifications which are required by the charterer of the ship?																				0	10
	4600.5	Does the charter party specify that the cargo to be loaded must be under the supervision and direction of the master?																				0	20
												score		- 10								0	30
	4000	Cargo handling and operations	0		Wilni	mum	rankin	g sco		uirea 1		ment 4	4600 =	= 10					0				
	4602	Is it company procedure that the ship shore safety checklist for loading or unloading has to be used					U	-			'								U				
	4602.1	before loading/unloading operations?																				0	10
	4602.2	Does the company give procedures/instructions in relation to the entire cargo operations?																				0	10
								•	'			score										0	20
	4000	Cafata nasasatiana dining assas anasatiana	0		Wilni	mum	rankin	g sco	_	uirea 1		ment 4	4602 =	= 20					0				
	4606	Safety precautions during cargo operations					U	-				•							J				
	4606.1	Does the company have instructions / procedures to control the access of unauthorized persons on board?																				0	10
	4606.2	Are there procedures to ensure that a sufficient number of personnel will be available in case of an emergency during port stay?																				0	10
			₩		N. 81 1		rankin					score	1000	20								0	20
		<u>l</u>	<b>⊥</b>		WIITH	mum	rankin	y sco	re req	urred t	or ele	ment 4	= 0U0+	= 20									

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - I	RO-	RO	CA	ARG	o s	HIP	- VI	ERS	ION	202	3									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алапту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOTAPPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	4900	Cargo Operations - Ro-Ro Cargo Ship																					
		Preparation																					
	4900.2	Does the company ensure that procedures are in place for safe stowage and securing of specialised vehicles and cargo on board all GA-certified ships. (For example - tank vehicles, tank containers, track laying vehicles including bulldozers and cranes, low-loader trailers, flat-bed trailers, high-freight vehicles, refrigerated freight vehicles and freight vehicles carrying livestock)																				0	20
		Ventilation of Cargo Spaces																					
	4900.3	Does the company ensure that the inspection and maintenance criteria for the ventilation systems of the cargo spaces is included in the planned maintenance system (PMS) of all GA-certified ships.																				0	10
		Cargo Securing Manual												1									
	4900.4	Does the company ensure that the approved (by the Administration) cargo securing manual is up-to-date and readily available to shipboard personnel involved in cargo operations (on board all GAcertified vessels)?																				0	20
	4900.5	Does the company ensure that cargo securing manuals of GA-certified ships mandate shipboard personnel to inspect and correct (re-tension) cargo lashings at least every day during the first three days and then every third day?																				0	5
	4900.6	Does the company ensure that cargo securing manuals of GA-certified ships mandate shipboard personnel to establish daily checks on cargo lashings, if heavy weather is expected?																				0	5
		During Loading/Unloading																					
	4900.10	Does the company recommend an adequate distance to be maintained between vehicles (in accordance with the ECG Quality Manual or any other internationally recognized standard or as recommended by the customers)?																				0	10
	4900.11	Does the company ensure that the shipboard personnel on GA-certified ships maintain the angle between the lashings and the horizontal and vertical planes between 30° and 60°?																				0	10
	4900.12	Is it a company policy to ensure that the movement, stowage and securing of vehicles on vehicle decks and ramps of all GA-certified ships is supervised by the duty officer assisted by at least one other relevant (familiar with cargo operations) shipboard personnel?																				0	20
													score						•			0	100
					Min	imun	n ranl	king s	core	requi	red fo	r elei	nent 4	1900 = 7	70								

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - I	RO-	-RO	CA	RGC	SH	IIP -	VEF	SIC	N 20	)23									
Revision Code	Norm item	RANKING Office - Ro-Ro	SENERAL MAN.	Joc. & Impl.	аиашту DEPT.	Joc. & Impl.	ECHNICAL DEPT.	loc. & Impl.	MULICAL DEPT.	ERSONNEL DEPT.	Joc. & Impl.	OPER./CHART DEPT.	Joc. & Impl.	oc. & Impl.	INANCIAL DEPT.	loc. & Impl.	т DEPT.	Joc. & Impl.	NS- / CLAIM DEPT.	VOT APPLICABLE	ANKING SCORE	ANKING MAX. SCORE
	5000	PREVENTION OF POLLUTION	. 0				<u> </u>		2   0	1 1		0	<u> </u>	-   []	1 111				= 10	1   <	<u> </u>	<u> </u>
	5100	Biofouling Management																				
	5100.5	Does the company have ship-specific procedures/instructions (according to IMO guidelines) for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species?							'					,							0	10
	5100.6	Does the company define frequency and timing of in-water inspection and proactive hull cleaning in consultation with coatings manufacturer and/or coatings consultant for each ship under its management?																			0	5
	5100.7	Is it a company policy to define potential trigger points for reactive hull cleaning – based on performance monitoring or other relevant datasets (such as increased drag or increased friction)?																			0	5
	5100.8	Is it a company policy to use in-water cleaning only in combination with capture and filtration of the cleaned material and subsequent waste treatment and disposal, when made available in ports?																			0	10
					NA:							al sco		n - r	•					•	0	30
	5200	Wasta Managament / Garbaga Handling Onboord			Mini	ımum	ranki		ore re	quire	i ior e	ierner	it 5100	v = 5								
	3200	Waste Management / Garbage Handling Onboard			<b>.</b>		•															
	5200.17	A. General procedures  Does the company have a policy to reduce garbage at source? For example, bulk packaging of consumable items.																			0	5
М	5200.22	Is it a company policy that recyclable material such as paper, plastic, metal (for example, tin cans), glass, bottles, crockery & similar refuse, and dunnage are always delivered to the port reception facilities?																			0	5
		B. Garbage types																		- 1	1	.1
		B.3 Ashes and clinkers																				
	5200.25	Is it a company policy that all incinerated ashes and clinkers are always delivered to the port reception facilities?																			0	10
		B.4 Cleaning agents & additives					•						•			•					•	
	5200.28	Is it a company policy to use non harmful (MARPOL Annex V compliant) cleaning agents and additives for cleaning the deck / external surfaces?																			0	10
		B.5 Plastics																				
	5200.20	Is it a company policy that plastic is never incinerated?																			0	10
	5200.38	Does the company have a policy to reduce the use of disposable and single-use plastics on board (at least focusing on plastic cutlery, dishes & straws and beverages & mineral water bottles in bonded stores)?																			0	10
	5200.41	Does the company have a policy to avoid procuring food items in single servings of plastics pots (for example, replacing small yoghurt pots with decanted supplies in large containers)?																			0	5
	5200.42	Does the company combat micro-plastics in the laundry system by adding a fine filtering mesh to ship's washing machine's outlets to prevent fibres reaching the ocean?																			0	5
M	5200.43	Does the company have a procedure that clearly stipulates there should be no dumping of old plastic ropes and mooring lines at sea and encourage to retain them on board until landed ashore for correct disposal?																			0	5
		C. Additional questions																				
	5200.16	Does the company provide training / education programme for the crew in order to create awareness in relation to garbage management?																			0	5
	5200.18	Does the company participate in national / international Marine Litter Monitoring Programs?																			0	5
	5200.19	Does the company have a reporting system on lack of availability of reception facilities for certain types of garbage? (such as GISIS by IMO or equivalent)																			0	5
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	<u> </u>				IVIII	mun	ı ranki	ny sc	ore re	quire	ı ior e	nerner	n 5200	v = 3U								

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Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алапт рерт.	Doc. & Impl.	TECHNICAL DEPT.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	Doc. & Impl.	Т DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOTAPPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5410	NOx Emissions			0		0																
		A. Emission Monitoring																					
	5410.10	Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording NOx emissions?																				0	10
		B. Emission Reduction																					
	5410.20	Does the company use any one of the following measures on board one or more of its vessels to reduce NOx emissions from main and/or auxiliary engines?																				0	30
		Measures taken to reduce NOx emissions	If Y	ES,	cho	ose f	om b	low	optio	ns	•									•			
		Direct Water Injection																					$\nearrow$
		Fuel Water Emulsification																				/	
		Intake Air Humidification																			_		
		Slow Steaming						1		1	- 1		-,		-					1			
	5410.21	Is it company policy to implement regulated slow steaming on some or all of the vessels within their fleet in an effort to reduce NOx emissions?																				0	10
		C. Additional Questions																					
		Exhaust Gas Recirculation (EGR)															,						
	5410.22	Are negative results from the continuous monitoring of exhaust gas recirculation bleed-off discharge water collected from the ship and addressed by the company?  *The guidelines set out in MEPC.259 (68) are applicable to EGR bleed-off discharge water as well.																				0	10
	5410.24	Does the company's PPE matrix include handling of caustic soda for exhaust gas recirculation?																				0	5
	5410.25	Does the company provide the relevant crew with manufacturer training for the EGR unit?  *The manufacturer training should cover the normal operation of the EGR system including bunkering of any chemicals (consumables), calibration of sensors, routine maintenance as well as the procedures to be followed in case of system failure and deviation from normal operation.																				0	5
		Selective Catalytic Reduction (SCR)																					
	5410.26	Does the company install a monitoring unit which monitors and measures any formation of ammonia slip? *The monitoring unit should be capable of issuing a warning in the event of ammonia formation.																				0	10
_	5410.27	Does the company take adequate measures to avoid the breakdown of the SCR unit? Measures should include (all of) the following:  1. Requisition's of materials 2. Redundancy 3. Effects of back pressure 4. Maintenance regimes of the SCR 5. Monitoring the condition of the catalyst.																				0	10
	5410.28	Does the company provide the relevant crew with manufacturer training for the SCR unit?  *The manufacturer training should cover the normal operation of the SCR unit including bunkering of any chemicals (consumables), calibration of sensors, routine maintenance as well as the procedures to be followed in case of system failure and deviation from normal operation.																				0	5
		procedures to be removed in ease or system railiare and deviation from the man operation.										al sco											95

		CHECKLIST - RANKING CRITERIA - OFFICE AUD	T - F	RO-	RO	CA	RGO	SH	IP - '	VER	SIC	N 2	023	}									
and local	Norm item	RANKING Office - Ro-Ro	SENERAL MAN.	Joc. & Impl.	алапту рерт.	Joc. & Impl.	FECHNICAL DEPT.	NAUTICAL DEPT	Doc. & Impl.	PERSONNEL DEPT.	Joc. & Impl.	OPER./CHART DEPT.	Joc. & Impl.	URCHASING DEPT.	Joc. & Impl.	FINANCIAL DEPT.	T DEPT	- ULT 1.	Joc. & Impl.	NS-/ CLAIM DEPT.	Joc. & Impl.	SANKING SCORE	RANKING MAX. SCORE
54	120	SOx Emissions			0		0							0				1		<u> </u>			
		A. Emission Monitoring																					
54		Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording SOx emissions?																				0	10
		B. Emission Reduction						•													•		
54	120.12	Main and auxiliary engines:  Does the company <u>voluntarily</u> burn low Sulphur fuel (max. 0.10% Sulphur) or use equivalent methodology during the ship's stay at every port?  (If exhaust gas cleaning system is used, Sulphur content is measured with SO2:CO2 ratio. Ratio of max 4.3 is equal to 0.10% Sulphur content)																				0	50
		C. Additional Questions																					
		Exhaust Gas Cleaning System (EGCS)																					
54		Does the company use the requirements of Scheme B* (continuous emission monitoring with parameter checks) for testing, survey, certification and verification of EGC systems on board all its ships having such systems (EGC)?  * Under scheme B, the SOx emissions compliance plan (SECP) should present how the continuous monitoring of ship exhaust gas emissions will demonstrate that the total SO2(ppm)/CO2(%) ratio is comparable to the requirements of 14.1 and/or 14.4 of MARPOL Annex 6.  * Ships should be in possession of EGC technical manual, scheme B (ETM-B).																				0	20
54		Are negative test results from the continuous monitoring of wash water discharge collected from the ship and addressed by the company?  *The wash water discharge criteria have been set out in MEPC.259 (68).																				0	10
54	120.16	Does the company take adequate measures to avoid breakdown of the EGCS unit?  Measures should include (all of) the following:  1. Material requisitions  2. Redundancy  3. Risk of condensation  4. Safety process regarding handling and storage of caustic soda.  5. Noise prevention  6. Contingency plan for failure  7. Remote monitoring  8. Technical support from the manufacturer (Telephone helpline)																				0	20
54	120.20	Does the company's PPE matrix include handling of caustic soda for closed-loop scrubbers?																				0	5
54	120.21	Does the company provide relevant crew with manufacturer training course for the EGC unit?																				0	5
					Mini	mur	rankir	.a.c.	ara rec	uire		al sco		120 - 1								0	120
54		Ships required to carry out Fuel Change Over to low Sulphur MARINE DIESEL OIL or low Sulphur MARINE GAS OIL ( low Sulphur Distillates )			IVIINI	mum	O	iy sco	ne rec	urec	iore	eme	in 54	+20 = 2	20								
54		Has the company carried out a safety assessment with respective manufacturers, for any necessary modifications to the vessel's boilers and each fuel system onboard? (modifications should be class approved)																		•		0	30
		Does company policy require <b>updated</b> fuel change over procedures (company approved) to be																					
54	121.2	available onboard for the main engine, auxiliary engines and boilers? (procedures should be available for each fuel type used onboard)																				0	10

		CHECKLIST DANIKING CRITERIA OFFICE AUDI	T	DO.	DC		NDCO !	CUIT	· ·	/ED	210	NI 20	22										
	T .	CHECKLIST - RANKING CRITERIA - OFFICE AUDI	-	KU.	-RC	) C <i>F</i>	ARGU	SHIF	- v	EK	SIU	N 20	23		1								
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT. Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Coc. & mbr.	PURCHASING DEFI.  Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5430	Particulate Matter (PM) Emissions					0																
	5430.10	Does the company use any one of the following measures on board one or more of its vessels to reduce PM emissions from main and/or auxiliary engines?																				0	30
		Measures taken to reduce PM emissions	If Y	ES,	cho	ose f	rom bel	ow o	ption	s													
		Diesel Particulate Filter																					
		Diesel Oxidation Catalyst																					
		Electrostatic Precipitator																					
			<i></i>									al scor							_	_		0	30
	5440	Creambayon Con (CHC) Emissiana CO2 Emissiana			Min	imun	n ranking	scor	e req	uired	ror e	iement	543	U = 0									
	5440	Greenhouse Gas (GHG) Emissions - CO2 Emissions																					
		A. Emission Monitoring					1								1		_		_				1
	5440.10	Does the company use flow meters for monitoring and recording of fuel consumption? (Flow meter is to be calibrated and certified by for example a classification society)																				0	10
	5440.6	Is an energy efficiency baseline measured for each ship?  *Using a calculation of fuel consumption (Unit = Fuel consumption per transport work expressed in grams per tonne-nautical mile or other relevant unit as applicable to relevant ship category) (or)  *Using measurement of CO2 emissions from emission monitoring equipment (grams CO2 per tonne nautical mile or other relevant units as applicable to relevant ship category)  (Baseline is a measurement of the ships average (operational) energy efficiency under normal operating conditions before energy efficient measures or policies are implemented).																				0	5
	5440.14	Does the company use a ship performance monitoring software to monitor and reduce energy consumption by operational measures for their entire fleet?																				0	20
		B. Emission Reduction																					
		Short term goals (CO₂ reduction through energy efficiency measures)																					
	5440.15	(Design and operational based measures) Energy efficiency measures implemented on-board company vessels?																				0	20
		For ease of use, measures are grouped according to the GLOMEEP Energy efficiency technologies information portal.	If Y	ES,	cho	ose f	rom bel	ow o	ption	s and	d fill	-in su	pple	ement	СО	<sub>2</sub> - Gl	oME	EP t	ab				
		Measures related to Machinery																					
		Measures related to Propulsion and Hull Improvements																					
		Measures related to Energy Consumers																					
		Measures related to Energy Recovery																			] ,		
		Measures related to Technical Solutions for optimizing the operations																			$\angle$		
	5440.16	Has the company achieved an annual average reduction of at least 2.0% in CO2 emissions per transport work (gCO2/tnm) since 1st Jan 2013?				-								-		-						0	30
_	5440.17	Alternative to 5440.16: Has the company achieved an annual average reduction of at least 1.0% in CO2 emissions per transport work (gCO2/tnm) since 1st Jan 2013?							_													0	15

		CHECKLIST - RANKING CRITERIA - OFFICE AUD	IT - F	RO-	RO (	CAF	RGO S	SHIP -	VE	RSIC	ON 2	023								
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Joc. & Impl.	алапту рерт.	Joc. & Impl.	rechnical DEPT.	VAUTICAL DEPT.	PERSONNEL DEPT.	Joc. & Impl.	OPER./CHART DEPT.	Joc. & Impl.	OURCHASING DEPT.	FINANCIAL DEPT.	Doc. & Impl.	T DEPT. Doc. & Impl.	NS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE RANKING SCORE	RANKING MAX. SCORE
		Mid term goals (CO <sub>2</sub> reduction through the use of low carbon fuels)																		
5440	10.18	Main engines:  Does the company have any vessels within their fleet which use low carbon fuels such as:																	0	15
		Low carbon fuels	If YE	S, c	hoos	e fro	om belo	w opti	ons											
		LNG (Liquefied Natural Gas)																		/
		LPG (Liquefied Petroleum Gas)																		/
		GTL (Gas to liquid) fuel																		
		Bio-diesel Bio-diesel																		
		Bio-LNG (Bio-methane)																		/
		Methanol																	/	
		Ethanol												_						
		Dimethyl Ether																		
		Other: *fill during audit*																	/	
		If others =	=					1	-		1			1			1	_/		
5440	10.19	Auxiliary engines:  Does the company have any vessels within their fleet which use low carbon fuels such as:																	0	15
		Low carbon fuels	If YE	S, c	choos	e fro	om belo	w opti	ons					_						
		LNG (Liquefied Natural Gas)																		/
		LPG (Liquefied Petroleum Gas)																		/
		GTL (Gas to liquid) fuel																		/
		Bio-diesel																		/
		Bio-LNG (Bio-methane)																		/
		Methanol																	/	
		Ethanol																		
		Dimethyl Ether																	/	
		Other: *fill during audit*																	/	
		If others =	•															- 1/	,	

		CHECKLIST - RANKING CRITERIA - OFFICE AUD	IT -	RO-	-RO	CA	RGO	SHI	P - V	/ER	SIO	N 20	23									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алапту рерт.	Doc. & Impl.	TECHNICAL DEPT. Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	PUBCHASING DEPT	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOTAPPLICABLE	RANKING SCORE RANKING MAX. SCORE
		Long term goals (CO <sub>2</sub> neutral operation through zero carbon fuels)																				
	5440.20	Main engines:  Does the company have any vessels within their fleet which use zero carbon fuels such as:																				0 25
		Zero carbon fuels	If Y	ES,	choo	se fi	rom bel	low c	ption	ıs			-									1
		Anhydrous Ammonia																				/
		Hydrogen																				
		Fuel Cells (Powered by ammonia or hydrogen)																				
		Batteries																				
		Nuclear																				/
		Other: *fill during audit*																				
		If others	=																		Ζ.	
	5440.21	Auxiliary engines:  Does the company have any vessels within their fleet which use zero carbon fuels such as:																				0 25
		Zero carbon fuels	If Y	ES,	choo	se fi	rom bel	low o	ptior	ıs												
		Anhydrous Ammonia																				/
		Hydrogen																				
		Fuel Cells (Powered by ammonia or hydrogen)																				
		Batteries																				
		Nuclear																			١,	/
		Other: *fill during audit*																			/	
		If others	=		1		ı	1			1		_		1		1		ı		Ζ,	1
	5440.22	Does the company have any vessels within their fleet which use renewable energy sources for energy production such as:																				0 25
		Renewable Energy source	If Y	ES,	choo	se fi	rom bel	low o	ption	ıs												
		Wind *fill during audit*																				
		Solar																				
		Other: *fill during audit*																				
		Wind	+																		/	
	1	If others	=				ı	1	1						ı		1		ı		Ζ,	
	5440.24	Does the company take steps to facilitate JIT Arrival of ships (for example, use of BIMCO's Virtual Arrival Clause for Voyage Charter Parties or speed decisions taken by the Master of owned ships to ensure JIT Arrival or implement measures from Port Information Manual by International Taskforce Port Call Optimization or other such measures)?																				0 10
			,,,,,,,,,									al score										0 200
					Mini	mum	n ranking	g sco	re req	uired	tor e	lement	5440	U = 0								

	CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO	CA	RGC	) SF	IIP -	VEF	RSIC	)N 2	023	1									
Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алапту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.  Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Coc. & mpr.	FINANCIAL DEPT.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
5441	Greenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion																					
	B. Emission Reduction																					
	Gas Turbine or High Pressure Dual Fuel engine																					
5441.2	Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?																				0	20
	Other Engine Types								•			•							•			
5441.3	Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?																				0	10
	A. Emission Monitoring																					
5441.1	Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?																				0	10
	C. Additional questions																	,				
5441.4	Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?																				0	5
5441.5	Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?																				0	10
				Mini	mum	ranki	na sa	ore re	auire				41 = 0								0	55
5450	Newbuild policy			0		0																
5450.1	Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?																				0	40
																•					0	40
5460	Environmental Chin Index (ECI)				mum		ng sc	ore re	quire	d for (	eleme	nt 54	50 = 0									
5460.1	Is it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air emissions are below regulatory limits and in doing so contribute to improvements in air quality and reduction of greenhouse gas emissions in the shipping sector).			0		U															0	50
										Tot	al scc	ore									0	50
	5441.2 5441.3 5441.4 5441.5 5450 5450.1	RANKING Office - Ro-Ro  Steenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion  B. Emission Reduction Gas Turbine or High Pressure Dual Fuel engine  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?  Newbuild policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Is it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air emissions are below regulatory limits and in doing so contribute to improvements in air quality and	RANKING Office - Ro-Ro  State   Greenhouse Gas (GHG) Emissions - Methane (CH <sub>A</sub> ) Emissions - Main Propulsion B. Emission Reduction Gas Turbine or High Pressure Dual Fuel engine  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?  Newbuild policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Between the Environmental Ship Index (ESI)  Is it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air air quality and	RANKING Office - Ro-Ro  Seenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion B. Emission Reduction Gas Turbine or High Pressure Dual Fuel engine  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  Other Engine Types  A. Emission Monitoring  Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  Octational questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Att. Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Newbuild policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Is it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air missions are pelow regulatory limits and in doing so contribute to improvements in air quality and	RANKING Office - Ro-Ro  See a Greenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion  B. Emission Reduction Gas Turbine or High Pressure Dual Fuel engine  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?  Minitiation  Newbuild policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Minitiation  Minitiation  See The Company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air equality and emissions are below regulatory limits and in doing so contribute to improvements in air quality and	RANKING Office - Ro-Ro  Representation  Greenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion  B. Emission Reduction  Gas Turbine or High Pressure Dual Fuel engine  5441.2  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  5441.4  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Minimum  5450  Newbuild policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Minimum  5460  Environmental Ship Index (ESI)  Is it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air equality and	RANKING Office - Ro-Ro  Representation of the properties of the pr	RANKING Office - Ro-Ro  Stati Greenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion  B. Emission Reduction Gas Turbine or High Pressure Dual Fuel engine  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  5441.3 Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  C. Additional questions  Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.4 Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?  Minimum ranking sc stations (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Minimum ranking sc emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Minimum ranking sc emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Minimum ranking sc emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?	RANKING Office - Ro-Ro  Septembrouse Gas (GHG) Emissions - Methane (CH4) Emissions - Main Propulsion B. Emission Reduction Gas Turbine or High Pressure Dual Fuel engine  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  A. Emission Monitoring  Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Other Engine Types  C. Additional questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Minimum ranking score re aming to improve methane emissions from LNG-fuelled engines?  Newbuild policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Minimum ranking score re missions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Minimum ranking score re steel to its its in consumption in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air emissions are below regulatory limits and in doing sco contribute to improvements in air quality and	RANKING Office - Ro-Ro  Status Greenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion  B. Emission Reduction  Gas Turbine or High Pressure Dual Fuel engine  Other Engine Types  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  A. Emission Monitoring  Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?  Minimum ranking score required the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Is it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its siam is to recognise ships whose air emissions are below regulatory limits and in doing so contribute to improve metian air quality and	RANKING Office - Ro-Ro  RANKING Office - Ro-Ro  Representation of the property	RANKING Office - Ro-Ro  Ranking Rankin	FAIL Careenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion  B. Emission Reduction  Gas Turbine or High Pressure Dual Fuel engine  5441.2 Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  5441.3 Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  5441.4 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.5 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Total score  Newbuild policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Total score  Minimum ranking score required for element 54  18 it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air equality and emissions are below regulatory limits and in oding so contribute to improvements in air quality and	Greenhouse Gas (GHG) Emissions - Methane (CH4) Emissions - Main Propulsion  B. Emission Reduction  Gas Turbine or High Pressure Dual Fuel engine  Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?  Other Engine Types  Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG fuelled engines fitted on board its fleet of ships?  A. Emission Monitoring  A. Emission Monitoring  C. Additional questions  Does the company buse a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?  C. Additional questions  Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?  Total score  Minimum ranking score required for element 5441 = 0  Setson  Newbulld policy  Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Total score  Minimum ranking score required for element 5450 = 0  Environmental Ship Index (ESI)  Si company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air emissions are below regulatory limits and in doing so contribute to improvements in air quality and reduction of greenhouse gas emissions in the shipping sector).	RANKING Office - Ro-Ro  RANKING Office - Ro  RANKING Office - Ro-Ro  RANKING Office - Ro  RANKING Office - Ro	RANKING Office - Ro-Ro  Representation of the properties of the pr	RANKING Office - Ro-Ro  Replace of the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  4. Emission Monitoring Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.1 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.2 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.3 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.4 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.5 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.6 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.6 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.6 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.7 Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  5441.6 Does the company policy for newbulds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  5460 Environmental Ship Index (ESI)  1s it company policy for ships to participate in the Environmental Ship Index, where applicable? (The emissions are below regulatory limits and in doing so contribute to improvements in air quality and reduction of greenhouse gas emissions in the shipping sector).	RANKING Office - Ro-Ro    Year   1	RANKING Office - Ro-Ro  Representation of the properties of the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip recording Retends Slip?  A Emission Monitoring A Emission Monitoring A Emission Monitoring and recording Methane Slip?  C. Additional questions  Settl. Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Minimum ranking score required for element 5441 = 0  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?  Nose the company policy for newbulks implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?  Total score  Note that the fuel of th	RANKING Office - Ro-Ro  Way Way 30 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	RANKING Office - Ro-Ro  Representation of the properties of the pr	RANKING Office - Ro-Ro  Representation of the company service of the state and is able to achieve annual reduction in Methane Slip from LNG-Nethane Slip reducing and recording and recording and recording dehance Slip?  A. Emission Monitoring  C. Additional questions  C.

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	₹0-	RO	CAI	RGC	) SI	HIP	- VEI	RSI	ON 2	2023	}										
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl. PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5500	Sewage Management																						
	5500.1	Sewage Treatment Plant Is it company policy to treat the sewage with a sewage treatment plant which uses minimal or no harmful chemicals?																					0	10
	5500.2	Is it company policy to sample and monitor the discharged effluent periodically (at least annually) for lab testing ashore to check the compliance with:  1. MEPC 159(55) for plants installed after 1st Jan 2010;  2. MEPC 227(64) for plants installed after 1st Jan 2016.																					0	10
	5500.4	Does the company have a procedure to monitor and address any non-compliance in the effluent standards?																					0	10
N	5500.10	Alternative to 5500.1, 5500.2 & 5500.4 (applicable ONLY for short-haul vessels) Is it company policy to ensure that ships deliver all their sewage / sewage sludge (regardless of treated or untreated) to port reception facilities (where available)?																					0	30
		For all ships: Sewage Holding Tank				•																		
	5500.6	Did the company perform a risk assessment to calculate the capacity of the holding tank?										Ļ					$oxed{\mathbb{I}}$						0	20
	1				Mini	mum	ranki	ing so	core i	equire		tal so		00 =	20								0	50
	5510	Grey Water Management						Ť		i														
	5510.1	Is it company policy to install a sewage treatment plant capable of treating grey water?																					0	15
	5510.2	Is it company policy to not discharge grey water within coastal and port areas?																					0	10
			,,,,,,,,,,,,									tal so											0	25
					Mini	mum		_		equire	d for	elem	ent 55	10 =	0									
	5700	Ballast Water Management																						
		<u> </u>					0		0															
		For ships required to follow D-1 standard (as per International Ballast Water Management					0		0															
	5700.5	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled ?					•		0														0	5
	5700.5 5700.6	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?					•		0														0	5
		For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry							0															
	5700.6	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?  Does the company ensure that relevant ships voluntarily comply with D-2 ballast water management																					0	5
	5700.6	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?  Does the company ensure that relevant ships voluntarily comply with D-2 ballast water management standard using a type-approved ballast water treatment system (BWTS)?  For ships required to follow D-2 standard (as per International Ballast Water Management																					0	5
	5700.6 5700.10	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?  Does the company ensure that relevant ships voluntarily comply with D-2 ballast water management standard using a type-approved ballast water treatment system (BWTS)?  For ships required to follow D-2 standard (as per International Ballast Water Management Certificate (IBWMC))  Does the company develop ship-specific contingency plans taking into account system design limitations, for example,  - the UV-based BWTS cannot operate correctly in ports where the water is very muddy,  - when operating in low salinity ports, the crew should plan to carry enough salt water or brine in																					0	5 10
	5700.6 5700.10 5700.11	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?  Does the company ensure that relevant ships voluntarily comply with D-2 ballast water management standard using a type-approved ballast water treatment system (BWTS)?  For ships required to follow D-2 standard (as per International Ballast Water Management Certificate (IBWMC))  Does the company develop ship-specific contingency plans taking into account system design limitations, for example,  - the UV-based BWTS cannot operate correctly in ports where the water is very muddy,  - when operating in low salinity ports, the crew should plan to carry enough salt water or brine in order for the electrochlorination BWTS to function effectively.  Does the company ensure the following in order to keep the BWT systems on board in operable condition:  - maintain full inventory of manufacturer recommended spare parts list on board  - define & maintain safe-margin stock of consumables on board (such as chemicals with short shelf-																					0	5 10
	5700.6 5700.10 5700.11	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?  Does the company ensure that relevant ships voluntarily comply with D-2 ballast water management standard using a type-approved ballast water treatment system (BWTS)?  For ships required to follow D-2 standard (as per International Ballast Water Management Certificate (IBWMC))  Does the company develop ship-specific contingency plans taking into account system design limitations, for example,  - the UV-based BWTS cannot operate correctly in ports where the water is very muddy,  - when operating in low salinity ports, the crew should plan to carry enough salt water or brine in order for the electrochlorination BWTS to function effectively.  Does the company ensure the following in order to keep the BWT systems on board in operable condition:  - maintain full inventory of manufacturer recommended spare parts list on board  - define & maintain safe-margin stock of consumables on board (such as chemicals with short shelf-life, UV lamps, etc. as required by the installed system)  Does the company train relevant crew to operate ship-specific BWT systems, for example, by means of computer-based training, training at the makers facilities or on a simulation BWMS that																					0 0 0	5 10 10
	5700.6 5700.10 5700.11 5700.12	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))  Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?  Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?  Does the company ensure that relevant ships voluntarily comply with D-2 ballast water management standard using a type-approved ballast water treatment system (BWTS)?  For ships required to follow D-2 standard (as per International Ballast Water Management Certificate (IBWMC))  Does the company develop ship-specific contingency plans taking into account system design limitations, for example,  - the UV-based BWTS cannot operate correctly in ports where the water is very muddy,  - when operating in low salinity ports, the crew should plan to carry enough salt water or brine in order for the electrochlorination BWTS to function effectively.  Does the company ensure the following in order to keep the BWT systems on board in operable condition:  - maintain full inventory of manufacturer recommended spare parts list on board  - define & maintain safe-margin stock of consumables on board (such as chemicals with short shelf-life, UV lamps, etc. as required by the installed system)  Does the company train relevant crew to operate ship-specific BWT systems, for example, by means of computer-based training, training at the makers facilities or on a simulation BWMS that mimics real BWTS operations?  Does the company conduct on-board familiarization of relevant crew for the operation of the BWTS																					0 0 0 0	5 10 10 5

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	-RC	CA	RG	0 S	HIP	- V	ERS	SIO	N 2	)23										
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	алапт рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl. NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5801	Protection of fuel oil tanks, lube oil tanks and hull										_		_										
		For Owner / Managers only (Not applicable to 3rd-party ship managers)												•										1
	5801.4	Does the company require ship building yards to use advanced shipbuilding plates (highly ductile steel) or structural features to build (a part of) hull structure and/or fuel tanks of new ships (for example, sandwich plate structure)?																					0	30
					Min	imun	ı ranl	king s	score	regu			al sco leme		01 = 0	)							0	30
		Lubrication and Use of Oils (Element nr.: 5810, 5811 & 5812)			4			<u> </u>																
	5810	Stern tube lubrication					0								0									
	5810.1	Does the company install a class approved stern tube <u>water</u> lubricated system which uses <u>sea water</u> as a lubricant? (system includes water conditioning and monitoring equipment)																					0	60
	5810.6	Alternative for 5810.1 & 5810.3:  Does the company install a class approved stern tube water lubricated system which uses fresh water as a lubricant? (system includes water and conditioning and monitoring equipment)  *Additives used to maintain the condition of the water should be environmentally friendly.																					0	50
	5810.3	Alternative for 5810.1 & 5810.6: Is there a company policy to fit vessels with a class approved stern tube lubrication system with an air type or void space seal?																					0	25
					BA:			leine e			irod (	_	al sco		10 = 0								0	60
	5811	Mooring wire lubrication			IVIIII	IIIIuii	0	ang s	30016	requ	illed i	OI E	leme	11 30	0									
	5811.1	Is it company policy to use a mooring wire lubricant / grease that is certified according to the EEL?																					0	20
					BA:			kina s			irod (		al sco		11 = 0								0	20
	5812	Deck equipment lubrication (use of oils)			IVIIII	IIIIuii	O	King s	score	requ	iirea i	or e	leme	11 30	0	,								
	5812.1	Is it company policy to use grease that is certified according to the EEL (all deck equipment)?																					0	15
	5812.2	Is it company policy to use gear oil that is certified according to the EEL (all deck equipment)?																					0	10
	5812.3	Is it company policy to use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?																					0	10
	5812.4	Is it company policy to use hydraulic oil that is certified according to the EEL in crane appliances?																					0	10
	5812.6	Due to characteristics of environmentally friendly lubricants (EEL certified) are extra measures taken into account for the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)																					0	10
					Min	imur	ron	king s	coro	roa			al sco		12 = 0								0	55
	5820	Management of bilge water and sludge handling onboard			WIIN		o	king s	o		O	or e	o	11 38	12 = 0	,								
	5820.3	Is it company policy to familiarize engine room personnel with on board sludge and bilge water management procedures?									-		_										0	10
	5820.4	Is it company policy to ensure that all engine room personnel are familiar with the system layout, drawings and manuals?																					0	5
		Is it company policy to include Sludge/Bilge and Soot collection tanks in the PMS for regular cleaning																					0	5
	5820.5	/ inspection?																						
	5820.5 5820.6	/ inspection?  Is it company policy to build vessels with bilge and sludge handling system in accordance with the MEPC.1/Circ. 642 guidelines?											al sco										0	5 25

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO	CA	RG	) SI	HIP -	۷E	RSI	ON:	2023	3									
Revision Code	Norm item	RANKING Office - Ro-Ro	BENERAL MAN.	Joc. & Impl.	алапту рерт.	Joc. & Impl.	FECHNICAL DEPT.	Joc. & Impl.	VAUTICAL DEPT.	DEP SONNEL DEPT	Doc. & Impl.	OPER./CHART DEPT.	Joc. & Impl.	URCHASING DEPT.	Joc. & Impl.	INANCIAL DEPT.	Joc. & Impl.	T DEPT.	oc. & Impl.	NS- / CLAIM DEPT.	VOT APPLICABLE	RANKING SCORE	SANKING MAX. SCORE
	5821	Outfitting of bilge water system	Ŭ		0		0	Ĭ	0	(		0											
		A. Clean Drains (Drains that are <u>normally not</u> contaminated by oil)																					
	5821.1	Does the company have a policy that bilge water from the Clean drain tank (for the collection of "clean drains", as per MEPC.1/Circ.642) passes through 15 ppm oil content meter and alarm?																				0	5
	5821.17	Does the company have a policy of logging discharges from the Clean drain tank (tank used for the collection of "clean drains", as per MEPC.1/Circ.642) in the engine room logbook?																				0	5
		B. Soot Collection Tank arrangement			,																		
	5821.2	Are management instructions regarding disposal of soot and soot-water mixtures available onboard for ships equipped with Soot separation / collection tank?																				0	5
		C. Oily bilge water tank arrangement													.,				_				
	5821.4	Is it company policy to install Clean Water Tank (to enable Oily Bilge Water to be processed while in port and special areas)?																				0	10
	5821.5	Is it company policy to pump Oily bilge water from the Oily bilge water holding tank through the Oily Water Separator to the Clean water tank (rather than overboard discharge)?																				0	5
		D. Oily water separator / Oil content meter																	-				1
	5821.6	N/A for vessels keel laid after 2005  Is it company policy to install an oil content meter with an automatic stopping device capable of measuring the difference in emulsifying particles and oil, as per IMO resolution MEPC.107(49)																				0	5
	5821.7	Are instructions available in the management system to avoid that the Oil Content Meter is flushed/diluted with clean water during Oily Water Separator operation or is an equipment or a protection system installed (e.g. White Box) to prevent illegal discharges of bilge water from machinery spaces?																				0	10
	5821.8	N/A for vessels keel laid after 2005 Is it company policy to equip the Oily Water Separator with a re-circulating facility for testing purposes as per IMO resolution MEPC.107(49) 6.1.1.?																				0	5
		5821.9 is an alternative to 5821.1 - 5821.8 & 5821.17 (all the above)																					
	5821.9	Is it a company policy to always deliver all bilge water to reception facilities?																				0	50
					B4: *				core re			tal s		024	20							0	50
	5822	Outfitting of sludge handling system			WIINI	mun	o	_	ore re	quif	eu IUI	eiem	ent 3	021=	20								
	5822.1	Us it company policy to install a sludge collecting pump as per MEPC.1/Circ.642? (with the sole purpose of collecting the sludge from different ER tanks to the Oil Residue (Sludge) Tank)?																				0	5
	5822.2	Is it company policy to install a separate sludge discharge pump with the purpose of discharging the sludge to reception facility?																				0	5
	5822.3	Is it company policy to improve the efficiency and capacity of the sludge handling system by installing: - a tank or system with the sole purpose of removing large quantities of water from the sludge? - a separate tank or system with the sole purpose of evaporating water from the sludge? - a separate tank or system with the purpose of mixing the sludge while incinerated (in incinerator or boiler)																				0	5
	5822.6	Is it a company selection process to assign ships that always deliver all sludge to reception facilities?																				0	5
												tal s											

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		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO	CAI	RG	SH	IIP - \	/ER	SION	1 202	3									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT. Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5900	Ship Recycling - Inventory of Hazardous Materials	0		0		0															
		New buildings - For Owner / Managers and 3rd-party Ship Managers For 5900.1, 5900.12 and 5900.2																				
	5900.1	Does the company require the shipyard to develop an "Inventory of Hazardous Materials" (Part I) at the stage of design and/or construction? (requirement to be part of the building contract)																			0	40
	5900.12	Does the company require the shipyard to have procedures to require equipment-/machinery- suppliers to provide a "Material Declaration"? (used by the yard to develop the Inventory Part I) (requirement to be part of the building contract)																			0	10
	5900.2	Does the company require the shipyard to include in these procedures that the "Material Declaration" contains information on the safe removal of hazardous materials? (requirement to be part of the building contract)																			0	10
		Existing ships - For Owner / Managers and 3rd-party Ship Managers For 5900.10 and 5900.13	•											•								
	5900.10	Is each Green Award-certified company vessel in the possession of an "Inventory of Hazardous Materials" (Part I completed)?																			0	40
	5900.13	Alternative to 5900.10: Has the company started the process to prepare Part I of the "Inventory of Hazardous Materials" with a target completion date for each Green Award certified vessel in the fleet?																			0	20
N	5900.14	Does the company use a software tool on board its ships to support the IHM maintenance process, for example, for the collection of Material Declarations (MDs) & SDoCs for all purchased items that fall into the scope of IHM Part I?																			0	20
												score									0	120
			Ш.		Mini	mum	rank	ing sc	ore rec	uired	for ele	ement	5900 =	: 40								

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO	CA	RG	O SH	HP -	VER	SIC	N 20	23										
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT. Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.  Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	ІТ DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5910	Ship Recycling - Policy for ships due to be recycled	0	_	0		0																
		For Owner / Managers only (Not applicable to 3rd-party ship managers)												•									
	5910.8	Has a company policy been implemented within the Management System that end-of-life vessels will only be recycled at a recycling facility either compliant with the requirements of the Hong Kong Convention or on the EU-list? (regardless of being sold directly to a recycling facility or to a cash buyer)?																				0	20
	5910.2	Has a company procedure been implemented within the Management System to audit a recycling facility before concluding a "contract of sale"?																				0	10
	5910.4	Has a company policy been implemented that the "contract of sale" will include the requirement to develop a "Ship Recycling Plan" by the recycling facility (in consultation with the owner) or does the "contract of sale" with the cash buyer include the obligation to request such a plan upon sale to the recycling facility?																				0	20
	5910.5	Has a company procedure been implemented within the Management System that a Final Survey, by an independent organization, will be carried out on the "Inventory of Hazardous Materials" (Part I, Part II and Part III) before delivery to either the recycling facility or cash buyer?																				0	20
	5910.6	(Preparation of vessel before delivery) Has a company procedure been implemented to ensure that the vessel's cargo spaces & other compartments where possible, will be delivered to either the recycling facility or cash-buyer in a "gas-free & safe for entry and hot work" condition?																				0	20
	5910.7	(Preparation of vessel before delivery) Has a company procedure been implemented to clearly mark all compartments which could have an oxygen deficient or dangerous atmosphere? ( e.g. cofferdams, fuel oil tanks, waste oil tanks, black/grey water tanks, etc.)																				0	20
	5910.9	Does the company disclose it's ship recycling policy in a public domain (such as company website) or via an environmental initiative such as SRTI (Ship Recycling Transparency Initiative)?																				0	10
		Policy regarding monitoring the recycling of company vessels																					
	5910.10	Has a company procedure been implemented within the Management System to deploy a full-time personnel at the recycling facility for the entire duration of recycling of the company vessels (to monitor and report the recycling process)?																				0	20
	5910.11	Alternative to 5910.10 & 5910.12 Has a company procedure been implemented within the Management System to hire third-parties (consultants or cash buyers) for continuous monitoring and reporting of the recycling process employed by the recycling facility to dismantle the company vessels?																				0	10
	5910.12	Alternative to 5910.10 & 5910.11 Has a company procedure been implemented within the Management System to audit the recycling facility during the recycling of the company vessels?																				0	5
					Mini	mur	ronk	ing es	ore re	auiros		al sco		10 = 60								0	140

	6000 MAINTENANCE / SURVEYS 6100 Programme of Inspections 6100.1 Has the company developed an internal technical inspection programme? 6100.2 Does the company have relevant previous survey and internal technical inspection reports? 6100.3 Does the company have a repair history on each vessel? 6100.4 Does the company have procedures/instructions for hull / ship's construction condition-inspections to be carried out by ship's personnel?																					
Revision Code	Norm item		GENERAL MAN.	Doc. & Impl.	алапт рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT. Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	DOC: & IIIpi:	FINANCIAL DEPT. Doc. & Impl.	T DEPT	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOI APPLICABLE RANKING SCORE	RANKING MAX. SCORE
	6000	MAINTENANCE / SURVEYS																				
	6100	Programme of Inspections					0		0													
	6100.1	Has the company developed an internal technical inspection programme?																			0	10
	6100.2	Does the company have relevant previous survey and internal technical inspection reports?																			0	10
	6100.3	Does the company have a repair history on each vessel?																			0	10
	6100.4																				0	20
	6100.6	Does the company have information regarding the relevant maintenance level of the vessel?																			0	10
	6100.7	Is an owner's inspection report available?																			0	10
					B.0::-		1-1		core re			tal sco		00 0							0	70
	6110	Critical and Stand-by Equipment	0		0	num	O	ng si	core re	quire	u ior	elellle	111. 61	00 = 0	T							
		Is the risk assessment carried out in order to create a list of critical equipment for every ship after intermediate survey (at least every 2.5 years)?																			0	10
	6110.2	Does the list of critical equipment include and specify stand-by equipment for every ship?																			0	10
	6110.3	Is the feedback from the ship considered in the process of creating a list of critical equipment? (eg. PMS reports)																			0	10
	6110.5	Is it company policy to install a Computer Based Program to register failures, break downs and near misses in order to have a constant event report on the systems?																			0	10
	6110.6	Are those event reports considered in creating a list of critical equipment?													T						0	10
	6110.7	Is it company policy to install a Computer Based Program for spare parts management of critical equipment and stand-by equipment?																			0	10
	6110.8	Is it company policy to have safety stock inventory reports for critical equipment and stand-by equipment?					-											-			0	10
		·							core re			tal sco									0	70

	CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - RO-RO CARGO SHIP - VERSION 2023  RANKING ODC: 8 Imbi: ODC: 8 Im																					
Revision Code	Norm item		GENERAL MAN.	Doc. & Impl.	аиапту DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.  Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl. INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	6200	Mooring Equipment					0						0									
	6200.1	Does the company have instructions for carrying out winch brake tests (to be carried out at least once a year or after an excessive load)?																			0	10
	6200.2	Does the company provide the ship with a winch brake test kit?																			0	5
	6200.5	Are inspection, maintenance and discard criteria for mooring wires and tails / fibre ropes established and carried out by a competent person? (time interval for inspection should be in the PMS)																			0	10
	6200.8	Do these criteria take manufacturer's recommendations into account ?																			0	10
	6200.9	Does the company give guidance for an additional examination after unusual events such as long periods of inactivity, excessive loads, heat exposure, loading/discharge at swell ports, etc.?		'															-		0	5
	6200.10	Does the company give instructions for internal inspections and do these inspections take manufacturer's recommendations into account?																			0	10
	6200.11	Are the lubricants & cleaning products compatible with the wire and approved by the wire manufacturer?																			0	5
	6200.6	Is a log for "workingdays" of mooring wires and tails / fibre ropes maintained? (to predict the point of discard & for evaluation of wire/rope performance)																			0	10
	6200.7	Does the company provide the ship(s) with an automatic wire rope lubricator?																			0	10
	6200.12	Alternative for 6200.7: (for fibre ropes) Are there procedures for care of fibre ropes?																			0	10
					Mini	imun	rank	ina s	core rec	uired		l score lement 6	3200 =	45							0	75
	6300	Corrosion Prevention of Seawater Ballast Tanks					0															
	6300.8	Is it company policy that ballast tanks of vessels delivered after 01-07-2012, are coated with a hard coating of a light colour?																			0	20
	6300.1	For existing vessels: Are ballast tanks coated with a hard coating of a light colour?																			0	10
	6300.6	For existing vessels: Are ballast tanks coated with dark epoxy maintained with a modified epoxy coating of a light colour, after safety benefit assessment is carried out?																			0	5
	6300.7	Is the coating approved according to the IMO performance standard? (type approval or statement of compliance according to Res. MSC 215(82) in Coating Technical File)																			0	20
	6300.4	Does the company have a system which ensures an adequate level of corrosion prevention of the seawater ballast tanks? (Protective coatings provided in ballast tanks has to be in a GOOD condition)																			0	10
	6300.5	Does the company require the corrosion prevention system to be part of the vessel maintenance system?																			0	10
					BAire:	i.m.	. ron!-	ina -	core rec	univo-l		l score	200	40							0	75

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T -	RO-	RO	CA	RGC	) SI	HIP -	VE	RSI	ON 2	2023	}									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	PERSONNEL DEPT.		OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE	
	6700	Ro-Ro Cargo Ship Practice																					
	6700.6	Does the company ensure that an inspection and maintenance scheme is in place to determine and maintain the condition of cargo securing devices and to eliminate deteriorated devices (on board all GA-certified vessels)?																			0	10	
	6700.7	Does the company ensure that the inspection and maintenance criteria for emergency signage and markings in the cargo space (supporting way finding and orientation in case of fire, e.g. for deck, sections, zones and localities) is included in the planned maintenance system (PMS) of all GA-certified ships.																			0	10	
	6700.9	Does the company allow the shipboard personnel involved in cargo operations to reject (refuse to load) the cargo(es) deemed to be prone to present fire and safety hazards due to substandard installations and/or other possible issues?																			0	10	
					Mini	mum	ranki	ina sa	core re	auire		tal sc		700 – 1	^						0	30	-

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - F	RO-	RO (	AR	GO S	SHIP	- VE	RSI	ON 2	2023	3									
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту рерт.	TECHNICAL DEPT	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT. Doc. & Impl.	T DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	KANKING SCOKE	RANKING MAX. SCORE
	7000	CREW																				
	7100	Employment of Personnel							•	•												
	7100.1	Is it company policy to employ all ship-personnel on a permanent basis?																			0	30
		Alternative for 7100.1 (7100.2, 7100.3, 7100.4)																				
	7100.2	Is it company policy to employ senior officers on a permanent basis?																			0	10
	7100.3	Is it company policy to employ officers on a permanent basis?																			0	10
	7100.4	Is it company policy to employ ratings on a permanent basis?																			0	10
					Minim		nkina		requir		otal sc		100 - 0					-			0	30
	7200	Extra Personnel, Additional Green Award Requirement			VIIII	uiii ia	Ť	SCOLE	<del>-</del>	eu 101	elellik	ent 7 i	100 = 0									
	7200.1	Is it company policy to employ extra deck officers onboard in addition to what is required by minimum safe manning document?																			0	10
	7200.7	Is it company policy to employ extra engine officers onboard in addition to what is required by minimum safe manning document?																			0	10
	7200.2	Is it company policy to employ extra deck ratings onboard in addition to what is required by minimum safe manning document?																			0	10
	7200.8	Is it company policy to employ extra engine ratings onboard in addition to what is required by minimum safe manning document?																			0	10
	7200.3	Is it company policy to have a ship administrator onboard ? (In addition to the standard complement and extra deck-officers and -ratings above)?																			0	10
	7200.4	Is it company policy to employ riding squads to carry out extensive maintenance jobs?																			0	10
	7200.9	Is it company policy that manufacturer service engineers routinely attend the vessel or provide remote monitoring assistance for maintenance/repair of technical equipment or systems ?																			0	10
	7200.6	Is it company policy to hire an electrical officer in addition to the engine officers required by the safe manning document?																			0	10
									requir		otal sc			_							0	80

						~~~					1010	N 20	J <b>Z</b> J										
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту рерт.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.  Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl. PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
730		Training / Courses for Personnel Additional Green Award Requirements & IMO Model Courses								0													
73		Is it company policy to provide a training for advanced fire fighting to the lower ranking deck officers (IMO 2.03) ?																				0	5
73		Is it company policy to provide a training for advanced fire fighting to the lower ranking engine officers (IMO 2.03) ?																				0	5
730		Does the company provide "onboard assessment/train the trainer" courses for the onboard management (IMO 1.30) ?																				0	10
73		Does the company provide simulator training /courses for officers involved in cargo and ballast handling ?																				0	15
73		Does the company provide "Marine Environmental Awareness" course (IMO 1.38) for all the ship personnel?																				0	10
730		Does the company provide "Marine Environmental Awareness" course (IMO 1.38) to the technical superintendents?																				0	5
73	300.22	Does the company provide "Marine Environmental Awareness" (IMO 1.38) to the HSQE manager?																				0	5
73		Does the company provide bridge team management/ bridge resource management training / course for all deck officers (IMO 1.22) ?																				0	5
73		Does the company provide engine room resource management training/courses for all engine officers?																				0	5
730		Alternative for 7300.8 & 7300.19  Does the company provide maritime resource management course for all officers?																				0	10
73		Does the company have a structured program for refresher and updated training of company related courses at suitable intervals for office and shipboard personnel?																				0	15
73		Is it company policy to employ cadets by providing training and education in order to recruit future officers?																				0	15
73	300.17	Is it company policy that all the officers are to complete Security Awareness Training?																				0	5
									ore re			al sco										0	100

		CHECKLIST - RANKING CRITERIA - OFFICE AUDI	T - I	RO-	RO	CA	ARG	o s	HIP	- VI	ERS	ION	1 202	3										
Revision Code	Norm item	RANKING Office - Ro-Ro	GENERAL MAN.	Doc. & Impl.	аиашту DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	OUC. & Impl.	OPER./CHAR I DEP I. Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	7400	Familiarization, Additional Green Award Requirements							0		0													
	7400.1	Is it company policy that the shipboard crew after a period of absence or leave has been provided with familiarization of changes with regard to the operations/machinery which is related to their position?									'		'		•								0	20
	7400.2	Is it company policy that newly employed personnel are provided with familiarization with regard to operations/machinery which is related to their position?																					0	20
	7400.9	Does the company have a method in which senior officers are deployed onboard within the company fleet? (eg. Senior officers returning to the same vessel)																					0	10
	7400.8	Does the company have a method in which junior officers are deployed onboard within the company fleet? (eg. Junior officers rotating among the companies fleet)																					0	10
	7400.10	In those cases when junior or senior officers are transferred to another class of ship that differ considerably from where their experience lie, is an onboard appropriate operational experience with previous off-signing officers implemented for a specific minimum period?																					0	10
	7400.4	Is it company policy that a company format handover report is requested from all off-signing officers onboard?																					0	10
					Mini	imun	n ran	kina	score	requi			score ment	7400 :	= 50								0	80
	7500	Safe Manning and Fatigue Management						ling		_	0													
		A. General - managing work/rest hours																						
	7500.1	Is it a company policy that the work/rest hours performed by the individual seafarer are recorded using a software program and such records are accessible and regularly updated?																					0	5
	7500.4	Are reports of work/rest hours reviewed on regular basis?																					0	10
	7500.2	Is there a company policy to monitor and address non compliance on STCW 2010 Manila amendments of work/rest hours?																					0	10
		B. Fatigue management																						
	7500.5	Is there a company specific fatigue mitigation and control strategy (or similar document) available within the Safety Management System (SMS) to ensure the health and wellbeing of the seafarers?																					0	30
	7500.9	Does the fatigue mitigation and control strategy consist of the following (both): - framework to assess the hazards associated with fatigue (hazard assessment) - strategies to mitigate the risk of fatigue (risk mitigation)																					0	15
	7500.10	Does the company ensure that any one of the following fatigue management tools (as described in IMO MSC 1/Circ1598) is used on board GA certified ships: - Sleep Diary - Self-monitoring through fatigue and sleepiness ratings - Fatigue self-assessment tool - Fatigue event reporting																					0	15
		C. Additional questions - reporting, training & awareness																						
	7500.7	Does the company have a system in which crew members are able to report to a designated person on fatigue related issues without fearing any action against them for such communication?																					0	5
	7500.11	Does the company conduct fatigue management training and awareness campaigns for shipboard crew on an initial and recurrent basis?																					0	5
							95																	
Minimum ranking score required for element 7500 = 60																								

CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - RO-RO CARGO SHIP - VERSION 2023																				
Revision Code	Norm item	RANKING Office - Ro-Ro  REQUIREMENTS ACCORDING TO ISO STANDARDS	GENERAL MAN.	Doc. & Impl.	EPT.		TECHNICAL DEPT.  Doc. & Impl.	EPT.		. DEPT.	Doc. & Impl.	G DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	RANKING SCORE	RANKING MAX. SCORE
	9421	ISO Certification																		
9	9421.1	Is the company certified for the latest edition of ISO 9001 (quality management systems)?																	0	10
:	9421.2	Is the company certified for the latest edition of ISO 10015 (quality management – guidelines for competence management and people development)?																	0	10
9	9421.3	Is the company certified for the latest edition of ISO 14001 (environmental management systems)?																	0	10
:	9421.4	Is the company certified for the latest edition of ISO 22301 (societal security – business continuity management systems)?																	0	10
9	9421.5	Is the company certified for the latest edition of ISO 27001 (information security management systems)?																	0	10
:	9421.6	Is the company certified for the latest edition of ISO 30401 (knowledge management systems – requirements)?																	0	10
!	9421.7	Is the company certified for the latest edition of ISO 45001 (occupational health and safety management systems)?																	0	10
9	9421.8	Is the company certified for the latest edition of ISO 50001 (energy management systems)?																	0	10
	9421.9	Does the company perform audits at planned intervals to demonstrate the conformity to the requirements of the EnMS (Energy management system) in accordance with ISO 50001:2011?																	0	10
,	9421.10	Has the company established an energy baseline using the methodology from ISO 50001:2011 with the aim to reduce the energy consumption of the organisation?																	0	5
					Minim	um :	ankin	n eccr	0 100		score	9421 = (	0						0	95

	CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - RO-RO CARGO SHIP - VERSION 2	2023			
Norm item	TOTAL SCORE REVIEW OFFICE AUDIT - RO-RO CARGO SHIP	OFFICE RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE
1000	GENERAL		•		
1200	Enclosed Space Entry & Hot Work	0	100	100	
1300	Compressor for the refilling of air cylinders for breathing apparatus or Alternative, Additional Green Award requirement	0	20	10	
1400	Control of drugs & alcohol onboard	0	45	20	
1500	Emergency Response System	0	45	25	
1510	Emergency Oil Recovery	0	10	0	
1550	Fire Safety Standards	0	85	40	
1600	Computer Systems, Networks, Data Security and Training. GA requirement	0	65	40	
1610	Cyber Risk Management	0	75	35	
1700	Noise and Vibration Management	0	65	25	
1710	Underwater Noise and Vibration Management	0	30	0	
1800	Social Dimension / Sustainability	0	85	15	
2000	NAVIGATION / BRIDGE OPERATIONS				
2100	Navigation	0	120	50	
2111	Electronic chart display & information systems / ECDIS	0	60	35	
2120	Fuel Change Over / Ballast Water Exchange	0	20	20	
2300	Mooring Operations	0	10	10	
3000	MACHINERY / ENGINE OPERATIONS		•		
3100	Bunker Operations	0	50	50	
3101	Bunker Operations - LNG	0	50	25	
3200	Fuel oil management	0	120	60	
4000	CARGOES / CARGO OPERATIONS		•		
4600	Cargo Operations	0	30	10	
4602	Cargo handling and operations	0	20	20	
4606	Safety precautions during cargo operations	0	20	20	
4900	Cargo Operations - Ro-Ro Cargo Ship	0	100	70	
5000	PREVENTION OF POLLUTION				
5100	Biofouling Management	0	30	5	
5200	Waste Management / Garbage Handling Onboard	0	80	30	
5410	NOx Emissions	0	95	35	
5420	SOx Emissions	0	120	20	
5421	Ships required to carry out Fuel Change Over to low Sulphur MARINE DIESEL OIL or low Sulphur MARINE GAS OIL (low Sulphur Distillates)	0	40	40	
5430	Particulate Matter (PM) Emissions	0	30	0	
5440	Greenhouse Gas (GHG) Emissions - CO2 Emissions	0	200	0	
5441	Greenhouse Gas (GHG) Emissions - Methane (CH4) Emissions - Main Propulsion	0	55	0	
5450	Newbuild policy	0	40	0	
5460	Environmental Ship Index (ESI)	0	50	0	

	CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - RO-RO CARGO SHIP - VERSION 2023										
Norm item	TOTAL SCORE REVIEW OFFICE AUDIT - RO-RO CARGO SHIP	OFFICE RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE						
5500	Sewage Management	0	50	20							
5510	Grey Water Management	0	25	0							
5700	Ballast Water Management	0	60	20							
5801	Protection of fuel oil tanks, lube oil tanks and hull	0	30	0							
5810	Stern tube lubrication	0	60	0							
5811	Mooring wire lubrication	0	20	0							
5812	Deck equipment lubrication (use of oils)	0	55	0							
5820	Management of bilge water and sludge handling onboard	0	25	15							
5821	Outfitting of bilge water system	0	50	20							
5822	Outfitting of sludge handling system	0	20	10							
5900	Ship Recycling - Inventory of Hazardous Materials	0	120	40							
5910	Ship Recycling - Policy for ships due to be recycled	0	140	60							
6000	MAINTENANCE / SURVEYS										
6100	Programme of Inspections	0	70	60							
6110	Critical and Stand-by Equipment	0	70	30							
6200	Mooring Equipment	0	75	45							
6300	Corrosion Prevention of Seawater Ballast Tanks	0	75	40							
6700	Ro-Ro Cargo Ship Practice	0	30	10							
7000	CREW										
7100	Employment of Personnel	0	30	0							
7200	Extra Personnel, Additional Green Award Requirement	0	80	40							
7300	Training / Courses for Personnel Additional Green Award Requirements & IMO Model Courses	0	100	50							
7400	Familiarization, Additional Green Award Requirements	0	80	50							
7500	Safe Manning and Fatigue Management	0	95	60							
9000	REQUIREMENTS ACCORDING TO ISO STANDARDS										
9421	ISO Certification	0	95	0							
	TOTAL SCORES	0	3420	1380							

## LEGEND

0	Indicates which crew/employee may be interviewed/questioned.
	Shows that a certain item is complied.
	Shows that a certain item is <i>not</i> complied.
0	Indicates that an alternative is used, hence the score for that item is a "0".
	The checklist was filled in incorrectly, thus shows "error".
0	Indicates that the whole element did not reach the minimum score, hence a finding is issued. The number shows the scores obtained.
	Shows which elements are minimum = maximum. Hence scores on all items is required to fully comply.
	Indicates that the minimum score for the relevant element is "0", hence a finding will not be issued.

<sup>\*</sup> for detailed interpretations of the colours and the usage of the checklist, please refer to the pdf-file named "Instruction Notes" located on www.greenaward.org under "Certification/ Download".

## **SUPPLEMENT TO 5440 GHG EMISSIONS - CO2**

GA Code:

## **ENERGY EFFICIENCY TECHNOLOGIES INFORMATION PORTAL**

TECHNOLOGY GROUPS Certificate Holder name:

IMO GLOMEEP Website Date of Office Audit:

# **MACHINERY TECHNOLOGIES**

This technology group includes measures that improve the energy efficiency of main and auxiliary engines. These include measures such as auxiliary systems optimization, optimizing heat exchangers, waste heat recovery systems, electronic autotuning, batteries and other solutions.

Υ?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Auxiliary systems optimization	Optimizing auxiliary systems to actual operational profiles, not design conditions	Semi-mature	All vessels
	Engine de-rating	De-rating an engine for reduction of the vessel's maximum speed to increase its efficiency by limiting the potential power output	Semi-mature	Vessels sailing 10- 15% slower than design speed
	Engine performance optimization (automatic)	Automatic increase of engine efficiency through testing and tuning according to actual operational load and conditions	Semi-mature	Mainly for two stroke engines
	Engine performance optimization (manual)	Manual increase of engine efficiency through testing and tuning according to actual operational load and conditions	Mature	All vessels
	Exhaust gas boilers on auxiliary engines	Exhaust gas boilers recover the heat from the exhaust gas of auxiliary engines to generate steam, hot water or heat for process heating	Semi-mature	Vessels without shaft generator
	Hybridization (plug-in or conventional)	Use of electricity to replace various modes of power consumption	Semi-mature	Vessels with large fluctuations in power output (ferries, offshore vessels, tugs)
	Improved auxiliary engine load	Increase of the auxiliary engines' load and efficiency by reducing the number of auxiliary engines running	Semi-mature	All vessels
	<u>Shaft generator</u>	Produce electricity from the main propulsion engine	Mature	All vessels with high power needs and long transits
	Shore power	Use of cold ironing in ports to reduce fuel consumption on power producing engines	Semi-mature	For smaller vessels and in ports with developed solutions for larger vessels
	Steam plant operation improvement	Improve operations and maintenance of steam plant system saving fuel on oil fired boiler	Mature	Mainly crude and product tankers
	Waste heat recovery systems	Recover thermal energy from the exhaust gas and convert it into electrical energy	Semi-mature	All vessels with engines above 10 MW

CKL ROR / VERSION 2023 / 1.0 43 of 97

## **SUPPLEMENT TO 5440 GHG EMISSIONS - CO2**

## PROPULSION AND HULL IMPROVEMENTS

Technologies in this group focus on improving the hydrodynamic performance of the vessel. This includes solutions that reduce the resistance of the vessel and/or also improve the propulsive efficiency of the vessel. Examples include measures such as propeller polishing, hull cleaning, PIDs (Propulsion Improving Devices), air lubrication and more.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Air cavity lubrication	Use of air injection on the wetted hull surfaces to improve a ship's hydrodynamic performance	Semi-mature	Most vessels in deep sea trade
	Hull cleaning	Removal of fouling on the hull to increase the vessel's hydrodynamic performance	Mature	All vessels
	Hull coating	Reduction of the hull's resistance through water	Mature	All vessels
	Hull form optimization	Optimizing the hull for lower resistance through water	Mature	All vessels
	Hull retrofitting	Retrofitting of the bulbous bow, optimizing thruster tunnels or bilge keel to reduce resistance	Mature	All vessels
	Propeller polishing	Removal of fouling on the propeller	Mature	All vessels
	Propeller retrofitting	Retrofitting the propeller to increase efficiency	Semi-mature	All vessels
	Propulsion Improving Devices (PIDs)	Installation of propulsion improving devices	Mature	All vessels

## **ENERGY CONSUMERS**

Consumers are equipment or devices that use energy when operated. Technologies in this group focus on minimizing the energy consumption by improving the device or optimizing the utilization of the device. Examples of measures in this group are frequency controllers, cargo handling systems, low energy lighting and more.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Cargo handling systems (Cargo discharge operation)	Reduction of energy consumption while discharging crude oil by use of model-based studies of the discharge operation	Semi-mature	Tankers
	Energy efficient lighting system	Use of energy efficient lighting equipment, such as LED light, to increase efficiency and remove heat loss from light devices	Mature	All vessels
	Frequency controlled electric motors	Regulating the frequency of the motors in order to adapt the motor optimized load	Mature	All vessels

CKL ROR / VERSION 2023 / 1.0 44 of 97

#### **SUPPLEMENT TO 5440 GHG EMISSIONS - CO2**

## **ENERGY RECOVERY**

Technologies in this group focus on capturing energy from the surroundings of the vessel and using or transforming this to useful energy for the vessel. This involves measures such as application of kites, fixed sails or wings, Flettner rotors, or solar panels.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Fixed sails or wings	Use sails or wings to replace some of the propulsion power needed	Not mature	Vessels with enough place on deck (general cargo, tankers, bulkers)
	<u>Flettner rotors</u>	Use Flettner rotors to generate power from wind energy	Not mature	Dependent on trading area and sufficient free deck-surface
	<u>Kite</u>	Use a kite to replace some of the propulsion power needed	Not mature	All vessels
	<u>Solar panels</u>	Install solar panels for conversion of solar energy to electricity	Not mature	Dependent on trading area and sufficient free deck-surface

## **TECHNICAL SOLUTIONS FOR OPTIMIZING OPERATION**

Technologies in this group focus on improving the operation of the vessel more than improving the vessel itself. The list of suggested measures includes both technologies and suggestions for best practice (without direct application of a technology). Measures in this group include trim and draft optimization, speed management, autopilot adjustment and use, combinator optimizing, and others.

Υ?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Autopilot adjustment and use	Use of an automatic system to control the vessel's rudder in a more energy efficient manner	Mature	All vessels
	Combinator optimizing	Use of optimized pitch settings and propeller speed for optimized efficiency of propulsion system	Mature	For vessels with controllable pitch propeller
	Efficient DP Operation	Optimize the operation in DP mode	Semi-mature	Vessels with DP mode
	Speed management	Management of the vessel's speed in the most efficient manner	Semi-mature	All vessels
	Trim and draft optimization	Optimizing the trim and draft to reduce the vessel's water resistance	Semi-mature	All vessels
	Weather routing	Including weather conditions when planning a voyage	Mature	All vessels

## Definitions of maturity levels according to uptake across the maritime industry, and degree of proven technology/principle

Mature Proven, new or existing technology/principle, with high uptake across the industry.

Semi-mature Proven, new or existing technology/principle, but with limited uptake across the

industry.

Not mature New unproven-, unproven existing- , or proven existing technology/principle but

with very few installations and little to no operational experience.

This Energy Efficiency Technologies Information Portal was developed in cooperation with DNV GL.

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View disclaimer

CKL ROR / VERSION 2023 / 1.0 45 of 97

<sup>\*</sup>This Information Portal is still under development and further images will be added.

# **APPENDIX 3**

CHECKLIST - BASIC CRITERIA - SURVEY -RO-RO CARGO SHIP (RMC-08)

		CHECKLIST - BASIC CRITERIA - SHIP SURVEY - RO-RO CAR	RGO	SH	IIP -	۷E	RSI	ON :	2023									
Revision Code	Norm item	BASIC Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOI APPLICABLE
	100	MANAGEMENT ELEMENTS																
	101	GENERAL	0															
	101.1	Are the Management System (MS) Manuals maintained and updated?																
	102	SAFETY AND ENVIRONMENTAL PROTECTION POLICY	0		0		0		0	0		0		0		0		
	102.1	Is the company policy concerning safety and the environment available, posted and implemented at all levels?							·									
	103	COMPANY RESPONSIBILITIES AND AUTHORITY	0		0		0		0	0		0		0		0		
	103.1	Are the responsibilities and authorities of all shipboard personnel clearly defined and implemented?							•								П	
	103.2	Are shore-ship communications, defined levels of authority and lines of communication documented and working effectively?																
	104	DESIGNATED PERSONS	0		0		0		0	0		0		0		0		
	104.2	Is (are) (a) designated person(s) known on board?																
	104.3	Is objective evidence available that safety and environmental aspects of the operation of the ship are monitored and that the required adequate resources and shore-based support is applied?																
	105	MASTER'S RESPONSIBILITY AND AUTHORITY	0															
	105.1	Is the responsibility of the master clearly defined and documented?																
	105.2	Does the master implement the Company's safety and environmental-protection policy on board?																
	105.3	Does the master motivate the crew in the observation of that policy?																
	105.4	Does the master verify that specified requirements are observed?																
	105.5	Does the master review the MS and are its deficiencies reported to the shore-based management?																
	106	RESOURCES AND PERSONNEL AND STCW	0							0								
	106.1	Does the company have a procedure for the Master to ensure that assigned sea staff are in possession of necessary certificates when joining the vessel?																
	106.4	Are shipboard personnel informed about new/revised rules, regulations, codes and guidelines?																
	106.6	Does ship's personnel receive training/courses which are required in support of the MS?																
	106.11	Is the working language between the office and the vessels defined?																
	106.12	Are all senior and deck officers conversant in the English language for maritime communication?																
	106.13	Is relevant information on the MS written in a working language or languages understood by officers and shipboard personnel?																
	106.14	Is the working language monitored and checked by the ship's staff?																
	106.15	Are new personnel and personnel transferred to new assignments, given proper familiarisation with their duties?																
	106.16	Are instructions, which are essential prior to sailing, identified, documented and given to the new personnel?																
	106.17	Is the Master fully conversant with the Company's Management Systems?															$\Box$	

		CHECKLIST - BASIC CRITERIA - SHIP SURVEY - RO-RO CAR	GO	SH	IP -	VEF	RSIO	N 202	3								
Revision Code	Norm item	BASIC Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl. DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE
	107	DEVELOPMENT OF PLANS FOR SHIPBOARD OPERATIONS	0	_	0	_				0		_		_		0	
	107.2	Are plans and instructions for key shipboard operations concerning safety of the ship and prevention of pollution, evaluated and reviewed?															
	107.3	Are tasks, qualifications and responsibilities defined in the manuals and in the job descriptions?															
	108	EMERGENCY PREPAREDNESS	0		0		0	0		0		0		0		0	
	108.1	Does the system cover the arrangements needed to ensure that the company, day and night, can be notified if a hazard, accident or emergency involving the ship occurs?															
	108.2	Are tasks, qualifications and responsibilities evaluated during drills and exercises as described in the emergency procedures?															Ш
	108.3	Is communication with media described in the emergency procedures and is shipboard personnel aware of these instructions?															Щ
	108.5	Is the shipboard personnel prepared to respond to emergency shipboard situations?															
	109	REPORTS AND ANALYSES OF NON-CONFORMATIES, ACCIDENTS AND HAZARDOUS OCCURENCES	0		0					0						0	
	109.1	Are safety and environmental inspections carried out, documented and reported?															Ш
	109.2	Does the ship have instructions/procedures for the reporting of non-conformities/ near misses?															Ш
	109.3	Are non-conformities, accidents and hazardous occurrences reported to the office?															Ш
	109.4	Are corrective and/or preventive actions taken?															
	109.5	Does the company have objective evidence to show their support of the shipboard personnel in reporting of non-conformities / near misses?															
	110	MAINTENANCE OF THE SHIP AND EQUIPMENT	0		0					0						0	
	110.1	Are ship inspections held at defined intervals? (minimum of twice a year or equivalent)															
	110.2	Are non-conformities reported including their possible cause?															
	110.3	Is appropriate corrective action taken?															Ш
	110.4	Are records of these activities maintained?															Ш
	110.5	Are ship-critical equipment and technical systems identified?															Ш
	110.6	Does the MS provide for specific measures aimed at promoting the reliability of critical equipment and systems?															
	111	DOCUMENTATION	0		0					0							
	111.1	Does the company have procedures to control documents and data relevant to the MS?															Ш
	111.2	Are valid documents available at all relevant locations?															
	111.3	Are changes to documents reviewed and approved by authorised personnel?															Ш
	111.4	Are obsolete documents promptly removed ?															

		CHECKLIS	T - BASIC CRITERIA - SHIP SURVEY - RO-R	O CAR	GO	SH	IP -	VE	RSI	ON 2	2023									
Revision Code	Norm item	GREEN AWARD	BASIC Ship - Ro-Ro		MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE
	112	COMPANY VERIFICATION, REVIEW AN	DEVALUATION		0		0					0								
	112.1	Are internal audits carried out to verify who procedures, comply with the MS?	ether safety and pollution-prevention activities, and other																	
	112.4	Are results of the audits and reviews broug in the area involved?	ght to the attention of all shipboard personnel having respo	nsibility																
		IMO ELEMENTS																		
	200	SOLAS 1974																		
	201	SOLAS General Provisions			0							0								
	201.1	Compliance with General Provisions									•									
	213	Certificates and documents on board			0							0								
	213.1	Are all regulatory certificates valid?																		
	216	Maritime security			0															
	216.1	Does the ship have a valid (interim) Interna	ational Ship Security Certificate?																	
	216.2	Is the ship's crew familiarised in general w	ith the principles of the ISPS Code (ship related)?																	

		CHECKLIST - BASIC CRITERIA - SHIP SURVEY - RO-RO CAR	GO	SH	IP -	VE	RSI	ON 2	2023							•	
Revision Code	Norm item	BASIC Ship - Ro-Ro	MASTER	Doc. & Impl.	ËR	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	9	Doc: & Impr.	CHIEF ENGINEER Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL Doc. & Impl.	NOT APPLICABLE
	217	Safety of Navigation / SOLAS chart carriage requirements	0				0										
		Alternative 1 (217.1 - 217.4): Compulsory carriage of ECDIS, with full official ENC coverage															
	217.1	Is the ECDIS type-approved according to Res A 817(19) as amended by MSC 64 (67) and MSC 86 (70) or MSC.232(82)?															
	217.3	Is an acceptable back-up arrangement in place? ( an independent type-approved ECDIS with an independent position fixing system using official Electronic Navigational Charts (ENC's), or a full / reduced folio of up-to-date paper charts as relevant to the ship's voyage )															
	217.4	Are all official ENCs up-to-date?															
		Alternative 2 (217.1 - 217.4): Compulsory carriage of ECDIS, Navigation with official ENCs where available and official RNCs where ENCs are not available															
	217.1	Is the ECDIS type-approved according to Res A817 (19) as amended by MSC 64 (67) and MSC 86 (70) or MSC.232(82)?															
	217.2	Is the supplementary folio of paper charts acceptable for that part of the voyage where official RNCs are used ?															
	217.3	Is an acceptable back-up arrangement in place? (an independent type-approved ECDIS with an independent position fixing system using official ENCs and Raster Navigational Charts where needed, or a full / reduced folio of up-to-date paper charts, as relevant to the ship's voyage)															
	217.4	Are all official ENCs and RNCs up-to-date?															
		Training & Onboard Use of ECDIS (Compulsory carriage of ECDIS)															
	217.5	Have all deck officers and the master completed generic training in the use of ECDIS based on the IMO model course 1.27?															
	217.7	Is a risk assessment carried out for the operation of ECDIS which identifies and controls the hazards when using ENCs and (if used) when ECDIS is in RCDS mode?															
	217.8	Are results from the assessment evident in the onboard procedures + instructions for ECDIS?															
	217.9	Is the risk assessment and relevant onboard procedures + instructions reviewed on a regular basis (at least once a year or if circumstances require a review) ?															
	218	Noise Levels On Board Ships															
		(Only applicable to new ships (ships contracted to build on or after 1st July 2014) of a gross tonnage of 1,600 and above.)															
	218.1	Is the noise survey report available onboard?															
	218.2	Are noise areas marked by placing relevant visible warning notices at the entrance to these areas? (IMO noise symbols)															

		CHECKLIST - BASIC CRITERIA - SHIP SURVEY - RO-RO CA	RGO	SH	IIP -	VE	RSI	ON	2023	3								
Revision Code	Norm item	BASIC Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE
	300	MARPOL 73/78																
	301	Provisions concerning Reports on Incidents Involving Harmful Substances (Protocol 1)	0		0													
	301.1	Does the Master have a procedure in order to report an incident to the nearest coastal state?																
	310	Prevention of pollution by oil	0		0		0		0		0		0		0		0	
	310.2	Is the shipboard oil pollution emergency plan maintained and updated?																
	310.5	Are updated contact lists of coastal States, port contacts and ship interest contacts available?																
	310.6	Does the company have a policy concerning the retention and disposal of oil residues (sludge)?																
	310.8	Are actions and responsibilities of the shipboard personnel clearly described in the SOPEP?																
	310.9	Does the plan provide procedures for the removal of oil spilled and contained on deck?																
	310.10	Does the plan provide guidance to ensure proper disposal of removed oil and clean-up materials?																
	310.11	Does the plan include a list of information required for making damage stability and damage longitudinal strength assessments?																
	350	Prevention of pollution by garbage	0		0		0		0		0		0		0		0	
·	350.2	Does the vessel have a ship specific garbage management plan detailing the specific ship's equipment, arrangements and procedures for the handling of garbage?		•				•										
	350.3	Are records kept according to the garbage management plan?																

# **APPENDIX 4**

CHECKLIST - RANKING CRITERIA - SURVEY - RO-RO CARGO SHIP

(RMC-09)

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	0 8	SHIF	- V	ERS	SIOI	N 20	)23									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	RANKING SCORE	RANKING MAX. SCORE
	1000	GENERAL																	
	1200	Enclosed Space Entry & Hot Work			0		0		0	1	0	0				Ш			
	1200.1	Is there an Enclosed Space Entry and Hot Work permit to work system, taking account of IMO and industry guidelines and where relevant local port / terminal requirements?											ļ					0	10
	1200.6	Is company approval of the Hot Work permit required before work can begin?																0	10
	1200.7	Does the Hot Work permit show the appropriate safety precautions to be taken relevant to the location of work?																0	5
	1200.2	Is crew on board provided with suitable personal protective equipment and suitable equipment for testing the atmosphere of an enclosed space? (e.g. breathing apparatus, protective clothing and approved + calibrated atmosphere testing equipment)																0	5
	1200.8	Are all personnel entering an enclosed space provided with a personal gas detector which can measure HC, oxyger and relevant toxic vapours?																0	10
	1200.9	Is a safety meeting, attended by all personnel involved, held prior to entering the space or commencement of hot work in order to review procedures and PPE (including those specific for the intended work)?																0	10
	1200.10	Is a responsible officer designated for all aspects of the operation?																0	5
	1200.3	Is ship's crew trained and drilled periodically according to enclosed space entry procedures?																0	5
	1200.4	Does training also include rescue and first aid?														<u> </u>		0	5
	1200.11	Is a rescue / back-up team assigned and ready for immediate action upon call?														<u> </u>		0	5
			-		Min	imum	rank	ina s			score	eleme	nt 12	00 =	70			0	70
	1300	Compressor for the refilling of air cylinders for breathing apparatus or Alternative, Additional Green Award requirement									0								
	1300.1	Does the vessel have a compressor for the refilling of air cylinders for breathing apparatus?																0	20
	1300.2	Alternative for 1300.1: sufficient number of air cylinders for the sole purpose of safety drills.																0	10
			$\vdash$		Min	imum	ronk	inac			score	eleme	nt 12	00 -	10			0	20
					IMILL	mum	rank	my s	core	equire	au (Or	elelile	III 13	000 = 1	IU				

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	io s	SHII	P - V	/ERS	SION	1 202	3									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	1400	Control of drugs & alcohol onboard	0						0			0				0			
	1400.2	Is evidence of an unannounced alcohol testing initiated by the office available on board? (Approved test equipment to be available on board)																0	10
	1400.1	Have all current crew members been subjected to shore-based drug and alcohol testing at least once in last 12 months?																0	15
	1400.5	Has the vessel been subjected to unannounced drug and alcohol testing at least once every year (not exceeding 18 months between two consecutive tests) by an external organisation?																0	10
	1400.6	Alternative to 1400.1 & 1400.5: In case crew members are not subject to shore-based drug and alcohol testing at least once in last 12 months, has the vessel been subjected to unannounced drug and alcohol testing at least twice in 12 months by an external organisation?																0	25
					laa:		1		ore red	otal s			-1.44	00 0	^			0	35
	1500	Emergency Response System	0		O		o rank	ing sc	ore rec	uirea		emer	nt 14	00 = 20	U				
	1500.4	Is the vessel in receipt of evaluation reports of the annual ERS drill(s) between company, (class) and vessel?																0	5
	1500.11	Is the evaluation report of the annual ERS drill discussed in a safety meeting?															-	0	10
	1500.5	Is an annual drill performed on board which includes ERS-procedures?			1			1							1			0	15
										otal s								0	30
		5			Mir	nimum	rank	ing sc	ore red	uired	for e	lemer	nt 15	00 = 1	5				
	1510	Emergency Oil Recovery																	
	1510.1	Is the vessel equipped with a system providing emergency access to cargo tanks and bunker tanks (for example, from the vessel deck), should the vessel be submerged?																0	5
	1510.2	Does the ship carry an oil skimmer or a similar device that can be used in an emergency situation of oil spill overboard?																0	5
			,,,,,,,,,		<i>w</i>					otal s								0	10
					Mir	nimum	ı rank	ing sc	ore rec	uired	for e	lemer	nt 15	10 = 0					

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- VI	ERS	ION	2023	3									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.  NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	1550	Fire Safety Standards			Ĭ		_				_	_							_
		Fire Prevention																	
	1550.1	Are all onboard fire patrols by designated shipboard personnel conducted with a <b>pre-defined frequency and quality aspects</b> ?																0	10
	1550.2	Are combined smoke and heat detectors capable of deactivating smoke detection only used on board?																0	5
	1550.3	Is it ensured that the ship provide and use only its own connectors and cables for providing electrical power to 'reefer' units during the voyage?																0	10
	1550.4	Is the vessel fitted with remote on/off system for connecting or disconnecting 'reefer' units to/from electrical power source?																0	10
	1550.5	Are the vessel's electrical circuits providing reefer connections fitted with a means of ground fault detection and an alarm to the engine control room.																0	10
		Fire Detection																	
	1550.7	Do the shipboard personnel ensure that during the voyage all vehicle decks are continuously monitored by means of combination of remote supervision (e.g., CCTV) and frequent crew patrols?																0	20
	1550.8	ALTERNATIVE to 1550.7 & 1550.9: Do the shipboard personnel ensure that during the voyage all vehicle decks are continuously monitored by means of adequate technical equipment such as CCTV?																0	10
	1550.9	ALTERNATIVE to 1550.7 & 1550.8: Do the shipboard personnel ensure that during the voyage all vehicle decks are continuously monitored by means of frequent crew patrols?																0	10
	1550.10	Is the vessel fitted with fire detection and alarm system capable of identifying the exact location of the detector that was triggered (e.g., addressable fire detectors with a central control panel)?																0	10
	1550.11	Are means for <u>FLAME DETECTION</u> , either conventional or by video stream analysis installed on <u>weather decks</u> ?																0	5
		Fire Suppression/Extinction																	
	1550.12	Is the frequency of flushing the deluge (sprinkler) system at least two times in a five-year period?																0	10
	1550.13	Do relevant shipboard personnel evaluate the fire drills conducted on board to improve their preparedness and effectiveness?																0	10
	1550.14	Are shipboard personnel trained and on board drills conducted striving towards minimizing the initial response time to a reported smoke/fire?														_		0	10
	1550.15	Is early activation of fixed-fire fighting system for cargo spaces included in ship fire management procedures?																0	5
	1550.16	Is it ensured that all shipboard officers have the knowledge and mandate for activation of fixed-fire fighting system for cargo spaces, without fear of negative consequences for the individual personnel?																0	10
									To ore req	otal so								0	125

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- VI	ERS	ION	1 202	3									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATEKING PERSONNEL Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	1600	Computer Systems, Networks, Data Security and Training. GA requirement	0							0									
	1600.1	Are arrangements for vessel systems documented ? (configuration scheme)																0	10
	1600.7	Are adequate system back-up's for vessel computer-based systems made (where applicable) and are procedures for this documented ?																0	5
	1600.8	Are adequate back-ups for administrative PC systems made and are procedures for this documented?																0	5
	1600.3	Is training provided at a level required to effectively operate and maintain the system and cover normal, abnormal and emergency conditions?																0	10
	1600.4	Is the internal audit scheme applicable to the IT elements and vessel computer-based systems?																0	10
	1600.5	Are computer systems, in relation to IMO MSC/Circ.891, certified by a recognised organisation?																0	10
	1600.6	Is a system administrator designated onboard for administrative PC systems on the ship?																0	10
					Mini	201122	ronkin	20.00	ore rec	otal sc		omoni	1600	0 – 20				0	60
	1610	Cyber Risk Management			IVIIII	IIIIIII	Talikii	ig sc	ore rec	uireu	loi ei	emen	1000	J = 30					
	1610.1	Is shipboard crew aware of plans and procedures of cyber risk management (as described in SMS) and their implementation on board?																0	10
	1610.4	Does the cyber risk policy focus on elements such as third-party access and bring your own device (BYOD) in the office?																0	5
	1610.5	Is there a designated shipboard crew member on board appropriately trained to identify and respond to cyber threats to the ship's information and operational technology systems?																0	5
	1610.8	Does the vessel undergo cyber risk assessment (at an interval deemed suitable by the company) by means of either of the following: - self-assessment followed by third party risk assessment - penetration tests of critical IT and OT infrastructure performed by external experts simulating cyber attacks?																0	5
	1610.9	Does the vessel have access to contingency plans and related information in a non-electronic form that need to be followed in the event of a cyber attack?																0	5
	1610.12	Are on-board systems forbidden to be remotely accessed by technicians and manufacturers without authorization by the vessel's senior leadership team (For example, by following a two-step digital authorization process)?																0	5
					India:		wa misi :-		ore rec	otal sc			. 404	0 45				0	35
					MILLI	mum	rankin	ıy sc	ore rec	<sub>luired</sub>	ior ei	emen	וסונ	υ = 15	1				

	·			name.														Date 0	i Ship S	arvey.	
		CHECKLIST -	RANKING CRITERIA - SHIP SURV	YEY - RO-RO CA	RG	o s	HIP	- VE	ERSI	ON 2	2023										
Revision Code	Norm item	GREEN AWARD	RANKING Ship - Ro-Ro		MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl. NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE	
	1700	Noise and Vibration Management																			
		Noise/Vibration Monitoring and Measures																			
	1700.2	Is the crew wearing hearing protectors which meet the 4869-2:1994) when entering spaces where noise lever the spaces where		ow) method (ISO														na	0	0	
	1700.3	Does the PMS have the routine to inspect and rectify machinery equipment?	any abnormalities in terms of noise and vib	ration from a															0	5	
	1700.4	Are appropriated measures implemented onboard in if the noise exceeds 85db(a) (by taking into account		ng equipment noise															0	10	
		Noise Mitigation and Health Hazards																	_		
	1700.8	Is the noise exposure limit of each rating/officer reco	rded and available onboard?																0	5	
	1700.9	Is the crew restricted towards prolonged exposure in	spaces where noise limits exceed 110 db(a	n)?															0	5	
	1700.10	Are all engine exhaust pipes insulated with ship spec	cific suitable silencers to attenuate noise?																0	5	
	1700.11	Is the ship installed with noise cancelling equipment dampers where practically possible?	such as active mufflers/mounts, resilient mo	ounts, vibration															0	10	
	1700.12	Are noise cancelling measures such as mineral woo reduce the noise level?	l/silencers being installed in the ventilation of	lucts or fan rooms to															0	10	
							100					al scor			200 4				0	50	
	1710	Underwater Noise and Vibration Management					IVIINII	mum I	rankin	scor	e requ	ired fo	eieme	ent 1/	υυ = 1	13					
	1710.1		use equitation from propeller?																0	5	
		Were any measures implemented periodically to red Does the ship opt for re-routing or slow steaming wh	<u>-</u>	o consitivo orogan				$\dashv$		-			+		-			+	0	5	
	17 10.4	Does the ship option re-routing or slow steaming wh	ere possible and practicable to protect what	e sensitive areas?	-						Tot	al scor	 e		<u> </u>				0	10	
							Minir	mum i	rankin	scor		ired for		ent 17	'10 = 0	)					

		<u> </u>																	
		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIF	• - V	ERS	1018	202	3									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	1800	Social Dimension / Sustainability																	
		A. Good Health & Well-Being																	
	1800.1	Does the vessel have an ITF or similar agreement in place?																0	10
	1800.3	Is an electronic device available on board specifically to access digital platform (web or app) subscribed by the company for seeking medical advice?																0	5
	1800.4	Has the shipboard staff been familiarized with platforms (online/offline) providing access to emotional support networks to tackle mental health issues?																0	5
	1800.5	Do all shipboard personnel have access to the internet at all times?																0	5
		B. Reduced Inequalities / Equal Opportunities / Diversity																	
		B.1 General																	
	1800.7	Have all ship board personnel been made aware of confidential reporting procedures to report harassment & discrimination?																0	5
	1800.8	Have steps been taken to create awareness among shipboard staff and to ensure effective implementation of policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?																0	5
		B.2 Gender-specific																	
	1800.10	Does the vessel have women seafarer(s) working either as officers or ratings?																0	10
	1800.11	Is the ship equipped with the following specific facilities for women seafarers:  – feminine hygiene items (in bonded stores) & separate disposal facilities  – separate washrooms with sanitary facilities  – suitable sized (gender specific) safety and protective clothing  – access to medical supplies without having to consult male colleagues																0	5
			▙		Inn:					otal s		lames:	-4 400	0 40				0	50
					win	mum	ranki	ng sc	ore rec	quired	TOT 6	iemer	II 180	v = 10	J				

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- V	ER:	SIO	N 20	23										
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	2000	NAVIGATION / BRIDGE OPERATIONS																		
	2100	Navigation	0		0		0													
	2100.3	Does the voyage or passage plan include contingency planning?									•								0	10
	2100.6	Is the vessel automatically supplied with new hydrographic publications?																	0	10
	2100.7	Is the vessel electronically updated for hydrographic publications? (eg. Temporary and Preliminary NtM)																[	0	10
	2100.8	Is navigational equipment included in the electronic Planned Maintenance System?																[	0	10
	2100.9	Are masters entitled to use non-compulsory pilot services? (must be stated in a company procedure)																	0	20
	2100.13	Is the vessel using weather routing services while on long haul voyage?																	0	10
	2100.18	Is the vessel enrolled in a meteorological & oceanographic service in a form of a software application?																	0	10
	2100.19	<u>Alternative to 2100.18</u> : Does the vessel have a capability to receive comprehensive weather information from the office or from coastal stations / platforms?																	0	5
	2100.15	Is the vessel equipped with the multi constellation GNSS receiver?																	0	10
	2100.16	Is the vessel equipped with the eLoran receiver?																	0	10
	2100.17	Is the position for all stages of voyage compared with a different method of positioning than GPS?																	0	20
					Mini	mum	ronk	dna c	20000		score ed for		nt 21	00 -	40				0	120
	2111	Electronic chart display & information systems / ECDIS			IVIIIII	mun	ITAIIR	ding s	core	equire	eu ioi i	eleme	ent Zi	00 = 4	40					
	2111	Applicable to ships for which carriage of ECDIS is compulsory																		
	2111.4	Is ECDIS hardware maintained and software updated?					1					T		1					0	5
	2444 5	Is ECDIS tested according to the IHO ECDIS data presentation and performance check with a use of test data set after every update of the software (including back up)?																	0	5
	2111.6	Is the crew regardless of the generic training familiarized with the ECDIS unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?											_						0	15
	2111.7	Have all the officers completed structured ECDIS training(s) on top of the generic training (besides the familiarization onboard in R2111.6)?																	0	5
	2111.10	Does the voyage planning include checking if all needed charts are up-to-date (latest edition official chart updated an corrected to the latest available updates and NtM)?																	0	5
	2111.11	Does the ECDIS procedure suggest display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?																	0	10
	2111.12	Does the vessel have a basic folio of paper charts (in case second ECDIS is a back up system)?																	0	10
			_		Mini	mum	rank	cina s	core		score ed for		ent 21	11 = 1	30				0	55

GA COO		эпр паше.																Date	oi Silip	Survey	
		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO	RO CA	RG	o s	HIF	P - V	ERS	SION	1 20	23										
Revision Code	Norm item	RANKING Ship - Ro-Ro		MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE RANKING SCORE	RANKING MAX. SCORE	
	2120	Fuel Change Over / Ballast Water Exchange		0		0		0													
	2120.1	Does the voyage plan (checklist) include when fuel change over should be carried out?																	0	10	)
	2120.2	Does the voyage plan (checklist) include when ballast water exchange can be carried out?																	0	10	)
						la a :						score	1	-1.040					0	20	)
		Haliaantaa / Ohin Ouanatiana				IVIIN	ımum	ranki	Ť	ore r	equire	d for e	elemer	nt 212	20 = 2	20					
	2200	Helicopter / Ship Operations						U		U										4	
	2200.1	Are crew members who are involved in helicopter/ship operations trained in standards and procedures?																	0	_	
	2200.2	Is an action plan in case of a helicopter accident available?									T-1-1								0		
						Min	imum	ranki	ina sa			score ed for e	elemer	nt 220	00 = 2	20			U	20	<u>,                                    </u>
	2300	Mooring Operations		0		0			Ť	0											
	2300.1	Does the company give procedures/instructions for mooring/unmooring operations?																	0	10	)
	2300.2	Is new crew familiar with the operation and capabilities of the ship's mooring equipment?																	0	10	)
	2300.3	Are specific mooring plans which have been used at certain terminals recorded?																	0	20	)
	2300.4	Is a drawing of the mooring arrangement readily available on the bridge?																	0	10	)
												score							0	50	)
						Min	imum	ranki	ing so	ore r	equire	ed for e	elemer	nt 230	00 = 3	30					

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARG	O S	HIF	) - V	ERS	NOI	2023	3								
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	3000	MACHINERY / ENGINE OPERATIONS																
	3100	Bunker Operations					0			0		0	0					
	3100.1	Does the company MS specify a safe-maximum percentage fill for bunker tanks? (max. limit 95%)															0	10
	3100.2	Is a checklist used for bunker operations (company format) ?															0	10
	3100.3	Does the bunker procedure include a bunker plan (company format) ?															0	10
	3100.4	Are there procedures/instructions for the internal transfer of fuel oil between main storage tanks?															0	10
	3100.5	Is there an instruction that all persons involved are to be familiar with the intended bunker operation and/or internal transfer operation and their duties?															0	10
					Min	imum	ranki	na sc	To ore req	tal sco		ment '	3100 -	50			0	50
	3101	Bunker Operations - LNG				III	Taliki	ilg 30	ore req		or ele	, mont	3100 =	1				
	3101.1	Is the ship mandated to use only a relevant IAPH LNG bunkering checklist - either by company SMS or by instructions from charterer / port authority?															0	10
	3101.2	Do shipboard personnel make use of LNG specific PPEs such as protective cryogenic gloves and safety goggles with side protection during LNG bunkering operations?															0	10
	3101.3	Are ship's LNG bunker stations equipped with CCTV for the purpose of observing the bunkering operation from the bridge or operation control room?															0	10
	3101.4	Does a designated shipboard personnel provide a dedicated watch (from a safe location) on bunker station during the entire duration of the LNG bunkering?															0	5
	3101.5	Does the ship use thermal imaging camera/equipment for leakage detection of LNG during bunkering?															0	5
	3101.6	Have relevant shipboard personnel completed a shore-based training on LNG bunkering?															0	10
					Ing:		nami:			tal sco			2404	25			0	50
		I .			IVIIII	mum	ranki	ng sc	ore req	un ea re	or ele	ment .	3101 =	20				

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARG	<b>SO</b> S	SHIF	) - V	ERS	SION	202	3									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	3200	Fuel oil management																	
		B.Sampling & Testing																	
		B.1 MARPOL delivered fuel oil sampling																	
	3200.11	Is all fuel oil sampling (during bunkering) carried out using an automatic sampler (time or flow proportional) in accordance with MARPOL Annex VI?																0	10
		B.2 In-use fuel oil sampling																	
	3200.16	Are fuel oil samples drawn from the following designated sampling points at least once every four months for testing of catalytic fines & separator efficiency at a recognized fuel analysis organization ashore?  1. at engine inlet 2. before separator 3. after separator																0	10
		B.3 Testing																	
	3200.1	Is bunkered fuel oil <u>always</u> tested (before use onboard) by a recognized fuel analysis organization ashore in accordance with the requirements of ISO 8217 standard?																0	40
		C. Operational procedures																	
	3200.17	Is the commingling of two different bunkers (even of the same grade of fuel) prohibited?																0	10
	3200.18	For the situations where commingling of two different fuels is unavoidable, does the relevant ship crew implement the company prescribed <u>commingling procedure</u> to determine the compatibility of two bunkers (including the reference test methods)?																0	5
		D. Additional questions						-							-		-		
	3200.19	Are the copies of valid certificate of quality (COQ) and associated laboratory analysis reports for the recently bunkered fuel oil available on board?																0	5
										otal sc								0	80
					Min	ımum	ranki	ng sco	re req	uired	tor el	emen	t 3200	0 = 40	)				

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- VE	RSI	ON 20	)23							·	·
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	DECK RATING	Doc. & Impl.	CHIEF ENGINEER Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	CATERING PERSONNEL	Doc. & Impl.	NOI APPLICABLE RANKING SCORE	RANKING MAX. SCORE
	4000	CARGOES / CARGO OPERATIONS															
	4500	Hull Stress Monitoring System	0		0												
	4500.1	Does the vessel have a hull stress monitoring system which provides real-time information with readouts both in the CCR and on the bridge?														0	20
					Ina::					score			00 0			0	20
	4601	Dranaustian of loading / unloading plan	0		O	mum r	anking	score	require	ea for e	eieme	nt 450	00 = 0				
	4601.1	Preparation of loading / unloading plan  Does the company distribute relevant cargo instructions to the vessel? (e.g. stowage plan during loading														0	20
	4001.1	onerations)							Total	score						0	20
					Mini	mum r	anking	score				nt 460	01 = 20				
	4602	Cargo handling and operations	0		0		0	0	-	0							
	4602.1	Is it company procedure that the ship shore safety checklist for loading or unloading has to be used before loading/unloading operations?														0	20
	4602.2	Does the company give procedures/instructions in relation to the entire cargo operations?														0	20
	4602.3	Is ship's stability and loading information readily available, accurate and easy for the officers to use?														0	10
					India:		a misima			score		mt 401	02 = 50			0	50
	4603	Cafe week facilities duving source analyticals	0		O		anking	score	require	ea for e	eieme	nt 460	02 = 50				
	4003	Safe work facilities during cargo operations	٠		U	_	U										
	4603.1	Are potentially hazardous objects or objects which are likely to damage the cargo during loading or discharging, indicated? (e.g. construction elements such as pillars, stanchions, position and type of vehicle deck ladders, position of projecting pipes)														0	10
	4603.2	Are stevedores informed about the potentially hazardous objects which are indicated?														0	10
					laur -					score		4.45	00 00			0	20
	4606	Cafaty manageritians desiring access an exactions	0			mum r	ankıng	score	require	ed for (	eieme	nt 460	u3 = 20				
	4606	Safety precautions during cargo operations	0		0												
	4606.1	Does the company provide instructions / procedures to control the access of unauthorized persons on board?  Are there procedures to ensure that a sufficient number of personnel is available in case of emergency during port	$\vdash$		<del>                                     </del>	-		-	-		1					0	20
	4606.2	stav?	$\vdash$		<del>                                     </del>	-		-	-		1					0	10 10
	4606.4	Is a terminal emergency plan available on board? (Deck office)	$\vdash$						Total	score						0	10 40
			$\vdash$		Mini	mum r	anking	score			eleme	nt 460	06 = 20			•	-40

RANKING Ship - Ro-Ro  4900 Cargo Operations - Ro-Ro Cargo Ship  Preparation  Do the shipboard personnel ensure that before loading and unloading, decks and ramps are freed of all loose equipment and lashings are secured or stored and are not left hanging from the bulkheads/stanchions without being secured.  4900.1  Are procedures in place for safe stowage and securing of specialised vehicles and cargo? (For example - tank vehicles, tank containers, track laying vehicles including bulldozers and cranes, low-loader trailers, flat-bed trailers, high-freight vehicles, refrigerated freight vehicles carrying livestock)  Ventilation of Cargo Spaces  4900.3 Is the inspection and maintenance criteria for the ventilation systems of the cargo spaces included in the ship's planned maintenance system (PMS)?  Cargo Securing Manual  4900.4 Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?  Does the ship's cargo securing manual mandate that relevant shipboard personnel inspect and correct (re-tension)	CATERING PERSONNEL Doc. & Impl. NOT APPLICABLE	0 0 RANKING SCORE	10 RANKING MAX. SCORE
4900. Cargo Operations - Ro-Ro Cargo Ship  Preparation  Do the shipboard personnel ensure that before loading and unloading, decks and ramps are freed of all loose equipment and lashings are secured or stored and are not left hanging from the bulkheads/stanchions without being secured.  Are procedures in place for safe stowage and securing of specialised vehicles and cargo? (For example - tank vehicles, tank containers, track laying vehicles including bulldozers and cranes, low-loader trailers, high-freight vehicles, refrigerated freight vehicles and freight vehicles carrying livestock)  Ventilation of Cargo Spaces  4900.3 Is the inspection and maintenance criteria for the ventilation systems of the cargo spaces included in the ship's planned maintenance system (PMS)?  Cargo Securing Manual  Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?		0	20
Do the shipboard personnel ensure that before loading and unloading, decks and ramps are freed of all loose equipment and lashings are secured or stored and are not left hanging from the bulkheads/stanchions without being secured.  Are procedures in place for safe stowage and securing of specialised vehicles and cargo? (For example - tank vehicles, tank containers, track laying vehicles including bulldozers and cranes, low-loader trailers, high-freight vehicles, refrigerated freight vehicles and freight vehicles carrying livestock)  Ventilation of Cargo Spaces  Is the inspection and maintenance criteria for the ventilation systems of the cargo spaces included in the ship's planned maintenance system (PMS)?  Cargo Securing Manual  Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?		0	20
4900.1 equipment and lashings are secured or stored and are not left hanging from the bulkheads/stanchions without being secured.  Are procedures in place for safe stowage and securing of specialised vehicles and cargo? (For example - tank vehicles, tank containers, track laying vehicles including bulldozers and cranes, low-loader trailers, flat-bed trailers, high-freight vehicles, refrigerated freight vehicles and freight vehicles carrying livestock)  Ventilation of Cargo Spaces  Is the inspection and maintenance criteria for the ventilation systems of the cargo spaces included in the ship's planned maintenance system (PMS)?  Cargo Securing Manual  Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?		0	20
4900.2       vehicles, tank containers, track laying vehicles including bulldozers and cranes, low-loader trailers, flat-bed trailers, high-freight vehicles, refrigerated freight vehicles and freight vehicles carrying livestock)         Ventilation of Cargo Spaces         4900.3       Is the inspection and maintenance criteria for the ventilation systems of the cargo spaces included in the ship's planned maintenance system (PMS)?         Cargo Securing Manual       Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?			
4900.3 Is the inspection and maintenance criteria for the ventilation systems of the cargo spaces included in the ship's planned maintenance system (PMS)?  Cargo Securing Manual  Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?		0	10
planned maintenance system (PMS)?  Cargo Securing Manual  Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?		0	10
4900.4 Is the approved (by the Administration) cargo securing manual up-to-date and readily available to shipboard personnel involved in cargo operations?			
personnel involved in cargo operations?			
Does the ship's cargo securing manual mandate that relevant shipboard personnel inspect and correct (re-tension)	$\bot$	0	20
4900.5 cargo lashings at least every day during the first three days and then every third day and are records of such checks been performed kept on board?		0	5
4900.6 Does the ship's cargo securing manual mandate that relevant shipboard personnel establish daily checks on cargo lashings, if heavy weather is expected and are records of such checks been performed kept on board?		0	5
4900.7 Does the ship's cargo securing manual recommend that the vehicles should be secured by two lashings at each end from the vehicle's points specifically designed for the purpose and recommended by the manufacturer?		0	10
4900.8 Does the ship's cargo securing manual recommend that vehicles stowed transversely or on ramps must be lashed with a minimum of three lashings at each end (two belts per wheel in case of lashing on wheel rims) and also additionally secured with wheel chocks (non-slip wedge)?		0	10
During Loading/Unloading			
4900.9 Does the ship crew ensure that internal and external connecting and access ramps remain set at sufficiently low angle (not more than 8 degrees from horizontal) during loading/unloading operations?		0	10
4900.10 Is an adequate distance maintained between vehicles (as recommended by ECG Quality Manual or any other internationally recognized standard or as recommended by the customers)?		0	10
4900.11 Does the ship's crew maintain the angle between the lashings and the horizontal and vertical planes between 30° and 60°?		0	10
4900.12 Is the movement, stowage and securing of vehicles on vehicle decks and ramps supervised by the duty officer assisted by at least one other relevant (familiar with cargo operations) shipboard personnel?		0	20
Personnel Protection			
ls there a system in place to achieve and maintain the segregation of vehicles and pedestrians on internal and external ramps?		0	10
4900.14 Do the personnel working on vehicle decks wear suitable personal protective equipment including high visibility garments having clearly recognizable letters showing the officer's designation?		0	10
Total score  Minimum ranking score required for element 4900 = 100		0	160

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		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARG	o s	SHIF	- V	/ER	SIOI	1 20	23		·		_			_				
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	5000	PREVENTION OF POLLUTION																			
	5100	Biofouling Management																			
		Are there ship-specific procedures/instructions (according to IMO guidelines) for the control and management of ship's biofouling to minimize the transfer of invasive aquatic species?																	0	10	
		Does the ship undergo in-water inspections and proactive hull cleanings as per the frequency and timing defined in consultation with coatings manufacturer and/or coatings consultant?																	0	5	
	5100.7	Does the ship communicate to the office data points that are pre-defined as indicators for reactive hull cleaning (Folexample, based on performance monitoring or other relevant datasets such as increased drag or increased friction)?																	0	5	
	5100.9	Is the vessel's hull coated with non-toxic hard coating to mitigate bio-fouling?																	0	10	
											score								0	30	
L					Min	imum	n rank	ing s	ore re	equire	ed for	eleme	ent 51	00 = 5	5						

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	0 5	SHIF	- V	'ER	SIO	N 2	023										
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5200	Waste Management / Garbage Handling Onboard			0						0						0			
		A. General procedures																		
	5200.31	Are all collection garbage receptacles for all categories of garbage labelled/marked and color coded?																	0	5
	5200.9	Is there a designated space for long term stowage of garbage (except food waste)?																	0	10
	5200.4	Is the vessel equipped with compactor to reduce the volume of garbage?																	0	5
	5200.37	Is the vessel equipped with a waste shredder?																	0	5
М	5200.22	Are all recyclable material such as paper, plastic, metal (for example, tin cans), glass, bottles, crockery & similar refuse, and dunnage always delivered to the port reception facilities?																	0	5
		B. Garbage types																		
		B.1 Food waste																		
	5200.11	Is the vessel equipped with grinder/comminutor for food waste?																	0	5
	5200.32	Is the grinder / comminutor also used beyond 12 nautical miles (and operating outside special areas) from the nearest shore as they hasten assimilation into the marine environment?																	0	10
	5200.33	Is the discharge from comminutors directed to a dedicated holding tank while the vessel is operating in special areas?																	0	5
	5200.34	Is the vessel equipped with a refrigerated sack compactor or freezer space for food waste storage?																	0	5
	5200.35	Is the vessel equipped with a grease interceptors (grease traps)?																	0	5
		B.3 Ashes and clinkers																		
	5200.25	Are all incinerated ashes and clinkers always delivered to the port reception facilities?																	0	10
		B.4 Cleaning agents & additives																		
	5200.28	Are <u>non harmful</u> (MARPOL Annex V compliant) cleaning agents and additives used for cleaning the deck / external surfaces?																	0	10
		B.5 Plastics																		
	5200.20	Are the crew aware that plastic should not be incinerated?																	0	10
	5200.39	Are plastic cutlery, dishes & straws banned on board?																	0	5
	5200.40	Are beverages and mineral water bottles in bonded store replaced by better sustainable alternatives such as beverages in tin cans and large water barrels in a dispenser?																	0	5
	5200.41	Are single food servings in small plastic pots not used on board (for example, small yoghurt pots are replaced with decanted supplies in large containers)?																	0	5
	5200.42	Is fine filtering mesh installed to the ship's washing machine's outlets to prevent micro-plastic fibres reaching the ocean?																	0	5
М	5200.43	Is the crew <u>aware</u> that old ropes and mooring lines are forbidden to be dumped at sea and must be retained on board until landed ashore for correct disposal?																	0	5
		C. Additional questions																		
	5200.16	Has the crew completed training / education programme in relation to garbage management?																	0	5
			_		Ing:	imu	ron	king :	20012		al sco		omort	E20	0 – F0				0	120
		I .	1		iviin	ımum	ı ranı	king s	score	requ	irea f	or ele	ement	<b>320</b>	0 = 50					

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- VI	ERS	SIOI	N 20	23										
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5410	NOx Emissions									0									
		A. Emission Monitoring																		
	5410.10	Does the ship use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording NOx emissions?																	0	10
		B. Emission Reduction																		
		For ships keel laid between 01-01-2000 and 31-12-2010 (Tier I mandatory ships)																		
	5410.11	Does the ship reach the NOx tier 2 limits on the <u>main engines</u> ?												_		1		_	-	10
	5410.12	Does the ship reach the NOx tier 2 limits on the <u>auxiliary engines</u> ?																	0	10
		For ships keel laid on / after 01-01-2011 (5410.13 - 5410.18)			1											1				
	5410.13 5410.15	Does the ship reach NOx emissions 15% below the tier 2 limits on their main engine?  ALTERNATIVE 1 to 5410.13										+							0	10
	5410.17	Does the ship reach NOx emissions 30% below the tier 2 limits on their main engine?  ALTERNATIVE 2 to 5410.13  Does the ship reach NOv emissions 50% below the tier 2 limits on their main engine?										+							0	15
	5410.14	Does the ship reach NOx emissions 50% below the tier 2 limits on their <u>main engine</u> ?  Does the ship reach NOx emissions 15% below the tier 2 limits on their <u>auxiliary engine</u> ?												+					0	5
	5410.16	ALTERNATIVE 1 to 5410.14  Does the ship reach NOx emissions 30% below the tier 2 limits on their <u>auxiliary engine</u> ?																	0	10
	5410.18	ALTERNATIVE 2 to 5410.14  Does the ship reach NOx emissions 50% below the tier 2 limits on their auxiliary engine?																	0	15
		For ALL ships (5410.19)			•	•		•						-						
	5410.19	Do all the ship's engines (main and auxiliary) ALWAYS operate at NOx Tier 3 levels in all ports and contiguous zones (24 nm from the nearest land)?																	0	30
		C. Additional Questions																		
		Exhaust Gas Recirculation (EGR)																		
	5410.22	Does the ship communicate negative test results from the continuous monitoring of exhaust gas recirculation bleed- off discharge water to the company?  * The guidelines set out in MEPC.259 (68) are applicable to EGR bleed-off discharge water as well.																	0	10
	5410.23	Is the treated wash water discharged from the EGR unit as bleed-off water collected for sampling periodically and communicated communication made to the company for the below parameters?  1. Heavy metals 2. Wash water additives.  *Above two values are on top of the mandatory monitoring of pH, PAH, turbidity values set by IMO.																	0	15
	5410.24	Is appropriate PPE being used by the crew during the handling of caustic soda which is used as an additive for EGR?																	0	5
		Selective Catalytic Reduction (SCR)																		
	5410.26	Does the shipboard crew monitor the catalyst condition continuously to make sure injected urea is fully utilized to avoid ammonia slip?																		20
											l scor		ment 5						0	140

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- VI	ERS	ION	202	3									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5420	SOx Emissions								0									
		A. Emission Monitoring																	
	5420.11	Does the ship use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording SOx emissions?																0	10
		B. Emission Reduction																	
	5420.12	Main and auxiliary engines: Does the ship voluntarily burn low sulphur fuel (max. 0.10% sulphur) or use equivalent methodology during the ship's stay at every port? (If exhaust gas cleaning system is used, sulphur content is measured with SO2:CO2 ratio. Ratio of max 4.3 is equal to 0.10% sulphur content)																0	30
		C. Additional Questions																	
		Exhaust Gas Cleaning System (EGCS)																	
	5420.13	Is the ship fitted with an EGC system which is tested, surveyed, certified and verified under the requirements of Scheme B* (continuous emission monitoring with parameter checks)?  * Under scheme B, the SOx emissions compliance plan (SECP) should present how the continuous monitoring of ship exhaust gas emissions will demonstrate that the total SO2(ppm)/CO2(%) ratio is comparable to the requirements of 14.1 and/or 14.4 of MARPOL Annex 6.  * The ship should be in possession of EGC technical manual, scheme B (ETM-B).																0	10
	5420.14	Does the ship communicate negative test results from the continuous monitoring of wash water discharge to the company?  *The wash water discharge criteria have been set out in MEPC.259 (68).																0	10
	5420.15	Is the treated wash water discharged from the EGC unit collected for sampling periodically and communication made to the company for the below parameters?  1.Heavy metals 2.Wash water additives *Above two are on top of the mandatory monitoring of pH, PaH, turbidity values set by IMO.																0	15
	5420.18	Does the ship have an EGC unit that is capable of operating only in closed-loop mode?																0	10
	5420.17	ALTERNATIVE TO 5420.18 Does the ship have an EGC unit that is capable of operating both in open and closed-loop mode (hybrid)?																0	5
	5420.19	Is the EGC unit capable of operating in zero discharge mode*? *Applicable only for vessels fitted with EGCS capable of operating in closed-loop mode.																0	15
	5420.20	Is appropriate PPE being used by the crew during handling of caustic soda which is used as an additive for closed-loop scrubbers?																0	5
										otal so				0 = 15				0	105

			·																	
		CHECKLIST	- RANKING CRITERIA - SHIP SURV	'EY - RO-RO CAI	RG	o s	HIP	- VE	RSIC	ON 20	)23									
Revision Code	Norm item	GREEN AWARD	RANKING Ship - Ro-Ro		MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5421	Ships required to carry out Fuel Change Over (low sulphur Distillates)	to low sulphur Marine Diesel Oil or low sulp	hur Marine Gas Oil								0	0							
	5421.1	Has the company carried out a <b>safety assessme</b> to the vessel's boilers & each fuel system onboard		essary modifications															0	20
	5421.2	Are <b>updated</b> fuel change over procedures (comp boilers? (procedures should be available for each		uxiliary engines &															0	10
	5421.3	Are crew familiarised with updated fuel change ov	er procedures?																0	10
	5421.4	If modifications to fuel system are required, are <b>u</b> available?	odated detailed fuel system diagrams for fuel o	change over															0	10
	5421.5	Is an additional inspection carried out according to fuel operation?	documented instructions, to check for leakage	es during distillate															0	10
	5421.6	Is there an agreed procedure to manage related p	roblem areas? (e.g. spares, maintenance due	wear & tear)															0	10
	5421.7	For cases where the vessel must use low sulphur manufacturer, for use of appropriate (cylinder) lub		ons from the engine															0	5
							Mini	mm. r	ankina	coore		score		nt EA'	21 – EI				0	75
	5430	Particulate Matter (PM) Emissions			0		·VIIII	um I	anking	30016		0	sienne.	J42	-1-5					
	5430.7	Does the ship have a Diesel Particulate Filter (DP	F) for both main and auxiliary engines?																0	10
	5430.8	Does the ship have a Diesel Oxidation Catalyst (I	<u> </u>							1	$\dashv$		T					$\top$	0	10
	5430.9	Does the ship have an Electrostatic Precipitator (I	· · · · · · · · · · · · · · · · · · ·								$\top$		1						0	10
										-		score							0	30
							Mini	mum r	anking	score	requir	ed for e	eleme	nt 543	30 = 0					

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARG	0 5	SHIP	- VI	ERS	SION	202	3								•	
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5440	Greenhouse Gas (GHG) Emissions - CO2 Emissions								0									
		A. Emission Monitoring																	
	5440.10	Does the ship use flow meters for monitoring and recording of fuel consumption? (Flow meter is to be calibrated and certified by for example a classification society)																0	10
	5440.11	Applicable to ships contracted for building on or after 1st January 2013, or delivered on or after 1st July 2015: Is the "attained EEDI" data for the ship available onboard?																0	5
		Attained EEDI of the ship =	=																
	5440.14	Does the ship use a ship performance monitoring software to monitor and reduce energy consumption by operational measures on-board?																0	5
		B. Emission Reduction										-					,		
		Short term goals (CO₂ reduction through energy efficiency measures)																	
	5440.15	(Design and operational based measures) Energy efficiency measures implemented on-board the vessel?																0	20
		For ease of use, measures are grouped according to the GLOMEEP Energy efficiency technologies information portal.	If Y	ΈS,	choc	se fr	om k	below	optic	ons ai	nd fi	ill-in s	supp	oleme	ent C	O <sub>2</sub> - G	IoME	EP tal	o
		Measures related to Machinery																	$\overline{}$
		Measures related to Propulsion and Hull Improvements																	
		Measures related to Energy Consumers																	
		Measures related to Energy Recovery															╛,	/	
		Measures related to Technical Solutions for optimizing the operations															$\angle$		

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARGO	SHIP -	VE	RSIC	N 20	23									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER Doc. & Impl.	П	Doc. & Impl.		9	Doc. & Impl.	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
		Mid term goals (CO <sub>2</sub> reduction through the use of low carbon fuels)															
	5440.18	Main engines: Does the ship burn low carbon fuels such as:														0	15
		Low carbon fuels	If YES,	choos	e fro	m bel	ow op	tions									
		LNG (Liquefied Natural Gas)															7
		LPG (Liquefied Petroleum Gas)															/
		GTL (Gas to liquid fuel)														/	′
		Bio-diesel														/	
		Bio-LNG (Bio-methane)														/	
		Methanol														/	
		Ethanol													,	/	
		Dimethyl Ether			_										/		
		Other: *fill during survey*													//		
		If Other=	-	1	<u> </u>		ı			1					/		
	5440.19	Auxiliary engines:  Does the ship burn low carbon fuels such as:														0	15
		Low carbon fuels	If YES,	choos	e fro	m bel	ow op	tions									
		LNG (Liquefied Natural Gas)															7
		LPG (Liquefied Petroleum Gas)															/
		GTL (Gas to liquid fuel)														/	/
		Bio-diesel														/	
		Bio-LNG (Bio-methane)														/	
		Methanol			_											/	
		Ethanol			_		<u> </u>	4					_		,	/	
	ļ	Dimethyl Ether	1	1	_		<u> </u>	$\perp$		_			$\perp$		/		
		Other: *fill during survey*	1												/		
		If Other:	=[												/		

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	SHIF	) - V	/ER	SIO	N 2	023	<b>,</b>																
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE							
		Long term goals (CO₂ neutral operation through zero carbon fuels)																									
	5440.20	Main engines: Does the ship use zero carbon fuels such as:																	0	25							
		Zero carbon fuels	If Y	ES, o	cho	ose f	rom	belo	ow o	ption	ns																
		Anhydrous Ammonia																									
		Hydrogen																									
		Fuel Cells (Powered by ammonia or hydrogen)																		/							
		Batteries																1									
		Nuclear																									
		Other: *fill during survey*																] /	/								
		If Other=																									
	5440.21	Auxiliary engines: Does the ship use zero carbon fuels such as:																	0	25							
		Zero carbon fuels	If YES, choose from below options																								
		Anhydrous Ammonia																									
		Hydrogen																									
		Fuel Cells (Powered by ammonia or hydrogen)																	,	/							
		Batteries																									
		Nuclear																									
		Other: *fill during survey*																] /	/								
		If Other=			,													$\angle$									
	5440.22	Does the ship use renewable energy sources for energy production such as:																1	0	25							
		Renewable Energy source	If Y	ES, (	cho	ose f	rom	belo	ow o	ptio	ns																
	1	Wind: *fill during survey*	<u> </u>															1									
	1	Solar			_											_		4	,								
	1	Other: *fill during survey*																4		ļ							
	1	Wind=	_															4 /	/								
	1	If Other=	$\vdash$															$\angle$									
	<del> </del>	C. Additional Questions	<u> </u>				1		1		1		1														
	5440.23	Have shipboard personnel received training for energy efficiency measures and related monitoring systems on board?								_									0	10							
			_		Min	imum	ı ranl	ring :	score		tal so		leme	at 5/4	40 = 15	5			0	155							

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	0 S	HIP	- VE	RSI	ON :	2023	3									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Joc. & Impl.	CHIEF OFFICER	Joc. & Impl.	DECK OFFICER	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Joc. & Impl.	ENGINEER RATING	Joc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5441	Greenhouse Gas (GHG) Emissions - Methane (CH <sub>4</sub> ) Emissions - Main Propulsion	_		Ŭ					Ĭ									, i
		B. Emission Reduction						•											
		Alternative 1 - Gas Turbine or High Pressure Dual Fuel Engine																	
	5441.2	Is the ship powered by low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?																0	20
		Alternative 2 - Other Engine Types																	
	5441.3	Has the ship achieved annual reduction in Methane Slip on its LNG-fuelled engines?																0	10
		A. Emission Monitoring																	
	5441.1	Does the ship use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?																0	10
		C. Additional questions																	
	5441.4	Have shipboard personnel received awareness training on methane emissions from LNG-fuelled engines?																0	5
					Minir	num r	anking	1 SCO	To re requ	tal so		emen	t 544	1 = 0				0	35
	5460	Environmental Ship Index (ESI)				- I	u III.	1	1	0		Cilicin		1					
	5460.2	Does the ship participate in the Environmental Ship Index (ESI) and are ESI points above 30?																0	20
	5460.3	Does the ship participate in the Environmental Ship Index (ESI) and are ESI points above 40?						T										0	20
	5460.4	Does the ship participate in the Environmental Ship Index (ESI) and are ESI points above 50?																0	20
			<i></i>							tal so								0	60
	5500	Sewage Management			Mini	num r	ankınç	scor	re requ	urea	tor el	emen	t 546	0 = 0					
	3300	Sewage Treatment Plant																	
	5500.1	Is the sewage treated with a sewage treatment plant which uses minimal or no harmful chemicals?						Т		Π			1		Т			0	10
	5500.2	Are samples of treated discharged effluent from the sewage treatment plant collected periodically (at least annually) for lab testing ashore to check the compliance with relevant MEPC standards?																0	10
	5500.3	Is the ship in possession of the periodical sample testing report/certificate from a laboratory ashore confirming the compliance with the relevant MEPC standards?																0	10
	5500.8	Is the sewage treatment plant regularly checked and maintained as per manufacturer's guidelines?																0	5
N	5500.10	Alternative for 5500.1, 5500.2, 5500.3 & 5500.8 (applicable ONLY for short-haul vessels)  Does the ship deliver all its sewage / sewage sludge (regardless of treated or untreated) to port reception facilities (where available)?																0	35
		For all ships: Sewage Holding Tank																	
	5500.7	Is the sewage holding tank regularly checked and maintained?																0	20
	1		1 -						To	tal sc	oro -							<u> </u>	55

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- VE	RSIC	)N 2	023										
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5510	Grey Water Management																	
	5510.1	Is the sewage treatment plant capable of treating grey water before being discharged?					•					•						0	15
	5510.2	Is the grey water never discharged within the coastal and port areas?																0	10
					India:		anking			al sco			EEA	0 0				0	25
	5700	Ballast Water Management	0		0	_	o o	score	requ	irea 10	or ele	ement	3311	) = U					
	3700	For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))																	
	5700.5	Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled?																0	5
	5700.6	Is the master aware of cases where the ship cannot reasonably be expected to carry out ballast water exchange?																0	5
	5700.10	Does the ship voluntarily comply with D-2 ballast water management standard using a type-approved ballast water treatment system (BWTS)?																0	10
		For ships required to follow D-2 standard (as per International Ballast Water Management Certificate (IBWMC))																	
	5700.11	Does the ship carry and implement ship-specific contingency plan prepared taking into account system design limitations, for example,  - the UV-based BWTS cannot operate correctly in ports where the water is very muddy,  - when operating in low salinity ports, the crew should plan to carry enough salt water or brine in order for the electrochlorination BWTS to function effectively.																0	10
	5700.12	Does the ship undertake (both of) the following in order to keep the BWTS in operable condition:  - maintain full inventory of manufacturer recommended spare parts list  - maintain safe-margin stock of consumables (such as chemicals with short shelf-life, UV lamps, etc. as required by the installed system)																0	5
	5700.13	Does relevant shipboard personnel make use of suitable personal protective equipment (PPE) for handling chemicals used to operate BWTS?																0	10
	5700.14	Is relevant crew trained to operate specific BWT system installed on board, for example, by means of computer- based training, training at the makers facilities or on a simulation BWMS that mimics real BWTS operations?																0	10
	5700.15	Is the relevant crew familiarized with the operation of the BWTS installed on board?																0	10
		For all ships																	
	5700.7	Are sediment volumes monitored & recorded ?																0	10
	5700.8	Does sediment disposal take place in port (to sediment reception facility) or at sea (more than 200nm from land and at depth greater than 200m) ?																0	10
			_		Minir	num r	anking	score		al sco		ement	570	0 = 50				0	85
	5800	Accidental Bunker Oil Pollution Prevention Measures (overflow prevention systems)						1	. oqu	0									
	5800.5	Are all fuel oil bunker tanks fitted with a high-high level alarm?																0	15
	5800.6	Are <u>all</u> fuel oil bunker tanks fitted with an overflow line that is connected to an overflow tank?				-							T					0	5
	5800.7	Are overflow lines of <u>all</u> fuel oil bunker tanks arranged with a flow alarm?									T		T		_			0	5
	5800.8	Are high level alarms and/or (over) flow alarms given on the location where the person in charge of the bunkering or transfer operation will normally be located?													0	5			
			Total score  Minimum ranking score required for element 5800 = 5											0	30				
					Mınir	num r	anking	score	requ	ired fo	r ele	ement	580	υ = 5					

RANKING Ship - Ro-Ro  298  Protective location of fuel and abstrication oil stanks  890-11  Sept. 20  A protective location of fuel and abstrication oil stanks  890-12  Sept. 30  A protective location of fuel and abstrication oil stanks  890-13  Sept. 30  A protective location of fuel and abstrication oil stanks  890-13  Sept. 30  A protective location of fuel and abstrication oil stanks  890-13  Sept. 30  A protective location of fuel and abstrication oil stanks  890-13  Sept. 30  A protective location of fuel and abstrication oil stanks  890-13  Sept. 30  Se			CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	SHIF	P - V	ERS	ION:	2023	3									
Selicit of the samp tanks intended for fuel of an other substances, with a minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 15 minimum capacity of 20m³, constructed at least 8/15 and 20m², constructed 20m², construc	Revision Code	Norm item		MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl. DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	MAX.
Self. 2 meters above the keel level?  Self. 2 meters above the keel level?  Self. 3 meters for fuel of protected by a double side? (for ships below 20,000gt, width of double side to be at least 0,07m; for 20,000gt and above, width to be at least 2 meters)  Self. 3 meters for fuel or protected by a double side? (for ships below 20,000gt, width of double side to be at least 2 meters)  Self. 4 les the ship's hull and/or fuel tanks constructed at least 0,75 meters above the keel line?  Self. 4 les the ship's hull and/or fuel tanks constructed at least 0,75 meters above the keel line?  Lubrication and Use of Oils (Element nr.: 5810, 5811 & 5812)  Stern tube lubrication  Self. 5 stern tube lubrication  Self. 6 les the vessel filted with a class approved stern tube water lubricated system which uses sea water as a lubricant?  (so the vessel filted with a class approved stern tube water lubricated system which uses fees water as a lubricant?  (system includes water conditioning and monitoring equipment)  Alternative for \$510.1, \$510.3, \$510.4 and \$510.6.5  Self. 5 les the vessel filted with a class approved stern tube water lubricated system which uses fees water as a lubricant?  (system includes water conditioning and monitoring equipment)  Alternative for \$510.1 and \$510.6.5  Self. 5 les the vessel filted with a class approved stern tube lubricant system with an air type or yord space seal?  Self. 6 les the vessel filted with a class approved stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system in needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)  Mooring wire lubricant of les less than the condition of the water should be environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system in needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)  Self. 1 les the crow wave of characteristics of the environmentally friendly bubicants (EEL c		5801	Protective location of fuel and lubrication oil tanks								0									
Are tanks for fuel oil protected by a double side? (for ships below 20,000gt, width of double side to be at least 5991.3 Are all lubrication oil tanks constructed at least 0.70 meters above the keel line?  5991.4 The ship's hill and/or feel tanks are built of advanced shipbuilding plates (highly ductile steel) or structural features (for example, sandwich plate structure)?  5991.4 Lubrication and Use of Oils (Element nr.: 5810, 5811 & 5812)  5919.5 Shm tube lubrication  5910.1 Is the vessel litted with a class approved stem tube water fubricated system which uses see water as a lubricant?  5910.1 Is the vessel litted with a class approved stem tube water fubricated system which uses see water as a lubricant?  5910.5 Shm tube lubrication  5910.5 Alternative for 5810.1, 5910.3, 5910.4 and 5910.5  5910.6 Alternative for 5810.1, 5910.3, 5910.4 and 5910.5  5910.6 Alternative for 5810.1, 5910.3, 5910.4 and 5910.5  5910.6 Alternative for 5810.1 and 5910.5  5910.6 Alternative for 5810.1 and 5910.5  5910.7 Alternative for 5810.1 and 5910.5  5910.7 Alternative for 5910.1 an		5801.1																	0	10
Serit. A real flubrication oil tanks constructed at least 0.75 meters above the keel line?  Serit. In the ship's hull and/or five lanks are sold to the keel line?  Serit. In the ship's hull and/or five lanks are sold to the keel line?  Lubrication and Use of Oils (Element n.r.: \$10, \$811 & \$812)  Serit. Lubrication and Use of Oils (Element n.r.: \$10, \$811 & \$812)  Serit.		5801.2	Are tanks for fuel oil protected by a double side ? (for ships below 20,000gt, width of double side to be at least																0	40
features (for example, sandwich plate structure)?    Internation and Use of Oils (Element nr.: 5810, 5811 & 5812)   Stern tube lubrication   Stern		5801.3																	0	20
Lubrication and Use of Oils (Element nr.: 5810, 5811 & 5812)  Stern tube flubrication  Shouldes water conditioning and monitoring equipment)  Shouldes water conditioning and monitoring equipment (system includes water conditioning and monitoring equipment)  Shouldes water conditioning and monitoring equipment (system includes water conditioning and monitoring equipment)  Shouldes water conditioning and monitoring equipment (system includes water conditioning and monitoring equipment)  Shouldes water conditioning and monitoring equipment (system includes water conditioning and monitoring equipment)  Shouldes water conditioning and monitoring equipment (system includes water conditioning and monitoring equipment)  Shouldes water conditioning and monitoring equipment (system which uses fresh water as a lubricant? (system includes water conditioning and monitoring equipment)  Shouldes water conditioning and monitoring equipment (system which uses fresh water as a lubricant? (system includes water conditioning and monitoring equipment (system water as a lubricant? (system includes water conditioning and monitoring equipment (system which uses fresh water as a lubricant? (system includes water conditioning and monitoring equipment (system water as a lubricant? (system includes water as a lu		5801.4																	0	30
Lubrication and Use of Oils (Element nr.: 5810, 5811 & 5812)  Stern tube lubrication  Ston.1  Ston.1  Ston.2  Stern tube lubrication  Ston.3  Stern tube lubrication  Ston.4  Strant use includes water conditioning and monitoring equipment)  Ston.5  Stern tube substitute with a class approved stern tube water lubricated system which uses sea water as a lubricant? (system includes water conditioning and monitoring equipment)  Ston.5  Stern tube lubrication  Ston.5  Stern tube lubrication  Ston.6  Sto																	•		0	100
Set of Stern tube lubrication  Set of Stern tube lubrication tube water conditioning and monitoring equipment)  Additives used to maintain the condition of the water should be environmentally friendly.  Set of Stern tube lubrication be environmentally friendly.  Set of Stern tube lubrication be environmentally friendly.  Set of Stern tube lubrication system which uses fresh water as a lubricant? (cystem includes water conditioning and monitoring equipment)  Additives used to maintain the condition of the water should be environmentally friendly.  Set of Stern tube lubrication system with an air type or yold space seal?  Set of Stern tube lubrication system with an air type or yold space seal?  Set of Stern tube lubrication system tube lubrication system tube lubricant?  Set of Stern tube lubrication system tube lubricant (EAL/EEL certified or equivalent?)  Set of Stern aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent?)  Set of Stern aware of characteristics of the environmentally friendly stern tube lubricant of seals & filters,  Set of Stern aware of characteristics of the environmentally friendly stern tube lubricant of seals & filters,  Set of Stern aware of characteristics of the environmentally friendly stern tube lubricant of seals & filters,  Set of Stern aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or element 5\$10 = 15  Set of Stern aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or element 5\$11 = 0  Set of Stern aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or element 5\$11 = 0  Set of Stern aware of characteristics of				1		Min	imum	ranki	ng sco	re requ	uired f	or el	ement	580	1 = 20					_
Site   1.5 the vessel fitted with a class approved stem tube water lubricated system which uses sea water as a lubricant? (system includes water conditioning and monitoring equipment)   0   60																				
Setup. System includes water conditioning and monitoring equipment)  Alternative for 5810.1, 5810.8, 5810.8 approved stem tube water lubricated system which uses fresh water as a lubricant? (system includes water conditioning and monitoring equipment)  Alternative for 5810.1 and 5810.6:  Setup. Alternative for 5810.1 and 581		5810				0					0		0							
Set 0.4 Is the vessel littled with a class approved stem tube water lubricated system which uses fresh water as a lubricant? (system includes water conditioning and monitoring equipment) (*Additives used to maintain the condition of the water should be environmentally friendly.  Set 0.3 Alternative for 5810.1 and 5810.6: Is the vessel littled with a class approved stem tube lubrication system with an air type or void space seal?  Set 0.4 Alternative for 5810.1 and 5810.6: Is the vessel littled with a class approved stem tube lubricant that is certified according to the EAL/EEL or equivalent?  Set 0.5 Alternative for 5810.1 and 5810.6: Is the crew aware of characteristics of the environmentally friendly stem tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system if needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)  Total score 0.5 Set 1.1 Does the vessel use a mooring wire lubricant / grease that is certified according to the EEL?  Set 1.1 Does the vessel use gearse that is certified according to the EEL (all deck equipment)?  Set 2.2 Does the vessel use gearse that is certified according to the EEL (all deck equipment)?  Set 2.3 Does the vessel use parase that is certified according to the EEL (all deck equipment)?  Set 2.4 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)		5810.1																	0	60
st the vessel littled with a class approved stern tube lubrication system with an air type or void space seal?  Sation.4 Alternative for 5810.1 and 5810.6:  Sation.5 Settle the vessel use a stern tube lubricant that is certified according to the EAL/EEL or equivalent?  Sation.5 Alternative for 5810.1 and 5810.6:  Is the crew aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system if needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)  Total score  In the crew aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system if needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)  Total score  In the crew aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent)?  Settle the crew aware of characteristics of environmentally friendly stern tube lubricant (EAL/EEL certified) or equivalent)?  Settle the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)		5810.6	Is the vessel fitted with a class approved stern tube water lubricated system which uses <u>fresh water</u> as a lubricant? (system includes water conditioning and monitoring equipment)																0	50
Does the vessel use a stern tube lubricant that is certified according to the EAL/EEL or equivalent?  Alternative for 5810.1 and 5810.6:  Is the crew aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system if needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)  Total score  Total score  O 60  Minimum ranking score required for element 5810 = 15  S811.1 Does the vessel use a mooring wire lubricant / grease that is certified according to the EEL?  S812 Deck equipment lubrication (use of oils)  S812.1 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  S812.2 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  S812.3 Does the vessel use para oil that is certified according to the EEL in mooring and anchor appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)		5810.3																	0	25
Is the crew aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system if needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)  Total score  Minimum ranking score required for element 5810 = 15  S811 Mooring wire lubrication  S811.1 Does the vessel use a mooring wire lubricant / grease that is certified according to the EEL?  S812 Deck equipment lubrication (use of oils)  S812.1 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  S812.2 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  S812.3 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  S812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)		5810.4																	0	15
Minimum ranking score required for element 5810 = 15		5810.5	Is the crew aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system if needed? (e.g. condition of seals & filters,																0	Ů
Sal1   Mooring wire lubrication				-		Min	imum	ranki	na scoi				oment	581	0 – 15				0	60
5811.1 Does the vessel use a mooring wire lubricant / grease that is certified according to the EEL?  5812 Deck equipment lubrication (use of oils)  5812.1 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  5812.2 Does the vessel use gear oil that is certified according to the EEL (all deck equipment)?  5812.3 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  5812.4 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  5812.5 Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)		5811	Mooring wire lubrication							J. 540	1 1	J. <b>U</b>								
Total score  Deck equipment lubrication (use of oils)  S812. Dees the vessel use grease that is certified according to the EEL (all deck equipment)?  S812. Does the vessel use gear oil that is certified according to the EEL (all deck equipment)?  S812.2 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  S812.3 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  S812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  S812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  S812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  S812.6 Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)  Total score  Total score  Total score  Total score														7					0	20
5812.1 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  5812.2 Does the vessel use gear oil that is certified according to the EEL (all deck equipment)?  5812.3 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  5812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)			g	t			_	<u> </u>		То	tal sc	ore		1						
5812.1 Does the vessel use grease that is certified according to the EEL (all deck equipment)?  5812.2 Does the vessel use gear oil that is certified according to the EEL (all deck equipment)?  5812.3 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  5812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)  Total score  7 10 15  15 20 10 10  10 10 10  10 10 10 10  10 10 10 10 10  10 10 10 10 10 10 10 10 10 10 10 10 10 1						Min	imum	ranki	ng sco	re requ	_	or el	ement	581	1 = 0					
5812.2 Does the vessel use gear oil that is certified according to the EEL (all deck equipment)?  5812.3 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  5812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)  Total score  0 10  10  10  10  10  10  10  10  10											0		0							
5812.3 Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?  5812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)  Total score  0 10  10  10  10  10  10  10  10  10		5812.1									1					$\perp$				
5812.4 Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?  Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)  Total score  0 15		5812.2									1			┙		1		_	0	10
Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)  Total score  0 55											1			┙		1				10
5812.6 maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & 0 10 condition of oil, prevention of humidity ingress etc.)  Total score 0 55		5812.4														$\perp$			0	10
		5812.6	maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature &																0	10
				,,,,,,,,,,		Ø													0	55

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- V	ERSI	ON 2	2023									
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	2		NEER	DOC: A IMPL.	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5820	Management of bilge water and sludge handling onboard			0		0	0		0	•	0						
	5820.3	Are engine room personnel familiarized with on board sludge and bilge water management procedures?										•					0	10
	5820.4	Are engine room personnel familiar with the system layout, drawings and manuals?															0	5
					laar r					tal scor		. 50		-			0	15
	5821	Outfitting of bilge water system			Mini	mum	ranking	scor	_	ired for		nent 58	20 = 1	5				
	3021				U		U	U		U	•							
		A. Clean Drains (Drains that are <u>normally not</u> contaminated by oil)			ı								1	1				$\blacksquare$
	5821.1	Does the bilge water from the Clean drain tank (for the collection of "clean drains" As per MEPC.1/Circ.642) pass through 15 ppm oil content meter and alarm?									$\perp$						0	5
	5821.17	Does the engine room logbook logs discharges from the Clean drain tank (tank used for the collection of "clean drains", as per MEPC.1/Circ.642)?															0	5
		B. Soot Collection Tank arrangement																
	5821.10	Is washwater from the economizer/boilers collected in a Soot separation / collection tank?															0	5
	5821.18	Is soot separation / collection tank decanted, remaining water transferred to bilge holding tank and solid soot particles collected for garbage disposal (reception facility)?															0	10
	5821.11	Is an independent pump arrangement available for the discharge from the Soot separation / collection tank to overboard?															0	5
	5821.2	Are management instructions regarding disposal of soot and soot-water mixtures available onboard?															0	5
		C. Oily bilge water tank arrangement																
	5821.12	Is all Oily bilge water from the bilge wells/drains transferred to the Bilge Primary Tank or pre-separation system for pre-separation of oil and water?															0	5
	5821.5	is Oily bilge water from the Oily bilge water holding tank pumped through the Oily Water Separator to the Clean water tank (rather than overboard discharge)?															0	5
		D. Oily water separator / Oil content meter																
	5821.6	N/A for vessels keel laid after 2005 Is the oil content meter with an automatic stopping device capable of measuring the difference between emulsifying particles and oil installed , as per IMO resolution MEPC.107(49)?															0	5
	5821.7	Is there an equipment or a protection system (e.g. White Box) installed that stops the Oily Water Separator from discharging overboard when the Oil Content Meter is flushed/diluted with clean water to prevent illegal discharges of bilge water from machinery spaces?															0	10
	5821.15	Is the authority for operating and maintaining the Oily Water Separator and Oil Content Meter with the master or this is automatically logged in the system?															0	5
	5821.16	Is the ship equipped with a system which would ensure that operation and maintenance of the Oily Water Separator and Oil Content Meter can only be started with the Master's permission (for example, Main/Master Switch on bridge)?															0	5
	5821.8	N/A for vessels keel laid after 2005 Is the Oily Water Separator equipped with a re-circulating facility for testing the device with the closed overboard discharge (As per IMO resolution MEPC.107(49) 6.1.1.)?															0	5
N	5821.19	Does the ship have in operation a Class-approved equipment that ensures that the oil content of the bilge water effluent without dilution does not exceed 5 parts per million?															0	10
		5821.9 is an alternative to 5821.1 - 5821.19 (all the above)																
	5821.9	Is all the bilge water from machinery spaces always delivered to reception facilities?															0	80
					laar -					tal scor			04 -				0	80
					Mini	mum	ranking	scor	e requ	iired foi	elen	nent 58	21 = 2	20				

		· · · · · · · · · · · · · · · · · · ·																		
		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO C	ARG	<b>30</b> S	SHIF	2 - V	ER:	SIO	N 2	023										
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	5822	Outfitting of sludge handling system			0		0		0		0	-	0							
		ls a sludge collecting pump installed (with the sole purpose of collecting the sludge from different ER tanks to the C Residue (Sludge) Tank)?	li																0	5
	5822.2	ls a sludge discharge pump installed with the purpose of discharging the sludge to reception facilities (with sufficien capacity to discharge the sludge within 8 hrs)													0	5				
	5822.8	ls a tank or system installed with the sole purpose of removing large quantities of water from the sludge?																	0	5
	5822.9	Is a separate tank or system installed with the sole purpose of evaporating water from the sludge?																	0	5
	5822.10	is a separate tank or system installed with the purpose of mixing the sludge while incinerated (in incinerator or																	0	5
	5822.6	Alternative to 5822.8 - 5822.10 Is all the ship sludge always delivered to reception facilities?																	0	20
					Ing:						al sco			5000	40				0	30
	5900	Ship Recycling - Inventory of Hazardous Materials	0	v	Min		rank	ung s	core	requi	red fo	or elen	nent :	36 <u>2</u> 2 =	= 10					
			_		+						•		_						0	110
	3900.TU	Does the vessel have an "Inventory of Hazardous Materials" (Part I completed)?			+									+					U	110
		Alternative to 5900.10: Has the process been started to prepare Part I of the "Inventory of Hazardous Materials" with a target completion date?																	0	40
N		Is a software tool used to support the IHM maintenance process, for example, for the collection of Material Declarations (MDs) & SDoCs for all purchased items that fall into the scope of IHM Part I?																	0	20
					la a:						al sco			5000	- 10				0	130
	Minimum ranking score required for element 5900 = 40																			

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARG	o s	HIF	) - V	ER	SIO	N 2	2023	3										
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	6000	MAINTENANCE / SURVEYS		_				_	_												
	6100	Programme of Inspections	0								0										
	6100.1	Does the ship have an internal technical inspection programme?																		0	10
	6100.2	Are relevant previous survey and internal technical inspection reports available on board?																		0	10
	6100.3	Does the ship have a repair history?																		0	10
	6100.4	Does the company issue procedures/instructions for hull / ship's construction condition inspections to be carried out by the ship's personnel?																		0	20
			-		Min	imum	rant	cina c	score		otal so uired		leme	nt 610	00 = 5	50				0	50
	6110	Critical and Stand-by Equipment	0		0		0	ang :		req	an eu	.0. 6	31110	010							
	6110.5	Is a Computer Based Program installed to register failures, break downs and near misses in order to have a constant event report on the systems?																		0	10
	6110.7	Is a Computer Based Program installed for spare parts management of critical equipment and stand- by equipment?	1																	0	10
	6110.8	Is a safety stock available for critical equipment and stand-by equipment?																		0	10
											otal so									0	30
	6200	Mooring Equipment	0		Min	imum	rani	ting s	score		uired	tor el	leme	nt 611	10 = 1	0					
	6200.1	Are winch brake tests carried out and recorded at least once a year or after an excessive load?			_				_											0	10
	6200.2	Is a winch brake test kit on board?	-		1						-									0	5
	6200.3	Is an overview available with all details of mooring wires / fibre ropes, winches, inspections, maintenance, tests etc.?																		0	10
	6200.4	Is the ship provided with information on the design of the mooring system? (with examples to show the loads likely to be experienced under particular conditions and to illustrate those situations under which the limit of the system is likely to be reached)																		0	10
	6200.5	Are inspection, maintenance and discard criteria for mooring wires and tails / fibre ropes established and carried out by a competent person? (time interval for inspection should be in the PMS)																		0	10
	6200.8	Do these criteria take manufacturer's recommendations into account ?																		0	10
	6200.9	Does an additional examination take place after unusual events, such as long periods of inactivity, excessive loads,																		0	5
		heat exposure, loading/discharge at swell ports, etc.?																			
	6200.10	Are internal inspections for wires + fibre ropes carried out & do these inspections take manufacturer's recommendations into account?						_												0	10
	6200.10 6200.11	Are internal inspections for wires + fibre ropes carried out & do these inspections take manufacturer's recommendations into account?  Are the lubricants & cleaning products compatible with the wire and approved by the wire manufacturer?																		0	10 5
		Are internal inspections for wires + fibre ropes carried out & do these inspections take manufacturer's recommendations into account?																			
	6200.11	Are internal inspections for wires + fibre ropes carried out & do these inspections take manufacturer's recommendations into account?  Are the lubricants & cleaning products compatible with the wire and approved by the wire manufacturer?  Is a log for "workingdays" of mooring wires and tails / fibre ropes maintained? (to predict the point of discard & for																		0	5
	6200.11 6200.6	Are internal inspections for wires + fibre ropes carried out & do these inspections take manufacturer's recommendations into account?  Are the lubricants & cleaning products compatible with the wire and approved by the wire manufacturer?  Is a log for "workingdays" of mooring wires and tails / fibre ropes maintained? (to predict the point of discard & for evaluation of wire/rope performance)									otal so									0	5

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARG	o s	SHII	P - \	/ER	SIC	)N 2	2023	3										
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE RANKING SCORE		RANKING MAX. SCORE
	6300	Corrosion Prevention of Seawater Ballast Tanks			0	1					0										
	6300.1	Are ballast tanks of double-hulled vessel, coated with a hard coating of a light colour?																	0	J	20
	6300.6	Alternative to 6300.1 Are ballast tanks coated with dark epoxy maintained with a modified epoxy coating of a light colour, after safety benefit assessment is carried out?															<u></u>		0		10
	6300.7	Is the coating approved according to the IMO performance standard? (type approval or statement of compliance according to Res. MSC 215(82) in Coating Technical File)															<u></u>		0	,	20
	6300.2	Are ballast tanks maintained in a good condition?																_	0		20
	6300.3	Are manufacturer's technical product data sheets and job specifications of the coatings on board?			1						<u> </u>						<b></b>	$\perp$	0	_	5
	6300.5	Is the corrosion prevention system, other than coating, included in the maintenance system?																丄	0		5
					Mir	nimur	n ran	kina	ecor		tal sc		emen	+ 630	10 - 4	10			0		70
	6500	Certificates for Cargo Gear	0		0		II ran	King	SCORE	requ	O	ioi ei	emen	11 030	JU = 4					Т	
	6500.1	Is a register of cargo handling gear and lifting appliances issued? (CG1)			Ť													+	0	+	10
	6500.2	Is a certificate of test and thorough examination of lifting appliances issued? (CG2)			1		+									$\dashv$		+	0	_	10
	6500.3	Is a certificate of test and thorough examination of loose gear issued? (CG3)														$\dashv$		$\dashv$	0	,	10
	6500.4	Is a certificate of test and thorough examination of wire rope issued? (CG4)														$\dashv$		_	0	,	10
											tal sc					_	_		C		40
					Mir	nimur	n ran	king	score	e requ	ired f	for el	emen	t 650	00 = 4	.0					
	6700	Ro-Ro Cargo Ship Practice																_		4	
	6700.1	Does the ship's crew ensure that the following measures are taken on decks and ramps to minimise the probability of serious damage to the cargo? - adequate lighting, - all obstacles (obstructions, stanchions, etc.) are painted or marked in safety colours and - the construction elements most likely to be accidentally run into with cars are padded.																	0	)	5
	6700.2	Does the ship's crew ensure that all internal and external ramps are set at a sufficiently low angle (not more than 8 degrees ramp angle) and offer good grip to the transported vehicles?															<u></u>		0	,	5
	6700.3	Are the ship's driveways in the turning points equipped with antiskid tapes/painting?			1		1										<u> </u>	$\perp$	0		5
	6700.4	Are metal parts of vehicle lashings protected to preclude damage?			1						<u> </u>						<b></b>	$\perp$	0	)	5
	6700.5	Is it ensured (by means of periodic inspection and certificate issued by relevant organization) that the strength and elongation characteristic of mobile chains/lashings is not less than 120 kN?															<u> </u>		0	,	5
	6700.6	Is an inspection and maintenance scheme in place to determine and maintain the condition of cargo securing devices and to eliminate deteriorated devices?															<u> </u>		0	,	10
	6700.7	Is the inspection and maintenance criteria for emergency signage and markings in the cargo space (supporting way finding and orientation in case of fire, e.g. for deck, sections, zones and localities) included in the ship's planned maintenance system (PMS).															<u> </u>	$\perp$	0	<u>,                                    </u>	10
		Annual bear and the same and an arrive and an arrive and the same and at the land ten planets and arrive to all	1		1		1				I							- 1	1		5
	6700.8	Are sand boxes, drip trays and mopping up equipment provided on board sufficient for cleaning of minor fuel spillage/leaks on all vehicle decks?									tal sc							$\perp$	0		50

																		arvey.
		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	RG	o s	HIP	- VI	ERS	ION	202	3								
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	FIGURER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl. NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	7000	CREW																
	7200	Extra Personnel, Additional Green Award Requirement	0							0								
	7200.1	Are there extra deck officers onboard in addition to what is required by minimum safe manning document?															0	10
	7200.7	Are there extra engine officers onboard in addition to what is required by minimum safe manning document?															0	10
	7200.2	Are there extra deck ratings onboard in addition to what is required by minimum safe manning document?															0	10
	7200.8	Are there extra engine ratings onboard in addition to what is required by minimum safe manning document?															0	10
	7200.3	Is there a ship administrator onboard (In addition to the standard complement and extra deck-officers and -ratings above) ?															0	10
	7200.6	Is there an electrical officer onboard in addition to the engine officers required by the safe manning document?															0	10
										otal sc							0	60
	7000				Minii	num	rankıı	ng sc	ore req	uired f	or ele	ement 7	7200 :	= 20				
	7300	Training / Courses for Personnel, Additional Green Award Requirements & IMO Model Courses	0										-		ш			_
	7300.4	Have the lower ranking deck officers completed advanced fire fighting (IMO2.03) ?						+					+		₩		0	5
	7300.18	Have the lower ranking engine officers completed advanced fire fighting (IMO2.03) ?								-			+		₩		0	5
	7300.5 7300.6	Has the onboard management completed the onboard assessment/train the trainer course (IMO 1.30)?	-			-		+		+	-		+		$\vdash$		0	5
	7300.6	Have the officers involved in cargo and ballast handling completed a simulator based training/course ?  Have the ship personnel completed "Marine Environmental Awareness" course (IMO 1.38)?	<del>                                     </del>			$\dashv$		+		+	$\dashv$		+		+-	-	0	5
	7300.7	Have all the deck officers completed bridge team management/bridge resource management training course (IMO 1.38)?  1.22) ?															0	5
	7300.19	Have all the engine officers completed engine room resource management training course?													1		0	5
	7300.20	Alternative to 7300.8 & 7300.19 Have all the officers completed maritime resource management course?													1		0	10
	7300.10	Is there a cadet currently onboard or has there been any in the last 6 months?															0	10
	7300.17	Have all the officers completed Security Awareness Training?															0	5
										otal sc							0	55
					Minir	mum	rankiı	ng sc	ore req	uired f	or ele	ement 7	7300 :	= 20				

		CHECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO CA	ARG	SO S	SHII	P - V	ERS	SIOI	N 20	23											
Revision Code	Norm item	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impr.	ENGINEER OFFICER	Joc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOI AFFLICABLE		RANKING MAX. SCORE
	7400	Familiarisation, Additional Green Award Requirement	0		0	)	0	_	0		0		0		0		0				
	7400.1	Have all the ship board crew after a period of absence or leave has been provided with familiarization of changes with regard to the operations/machinery which is related to their position?																		0	20
	7400.2	Have all newly employed/engaged shipboard crew (first ship for that specific company) been provided with familiarization with regard to operations/machinery which is related to their position?																		0	20
	7400.10	In those cases when junior or senior officers are transferred to another class of ship that differ considerably from where their experience lie, is an onboard appropriate operational experience with previous off-signing officers implemented for a specific minimum period?																		)	10
	7400.4	Are the company format handover reports from all off - signing officers available onboard?																		)	10
	7400.7	Are the on-signers aware of the content of the hand-over reports?																	-	)	10
					Mir	nimum	rank	ina s			l scor		ment 7	7400	0 - 50	1				)	70
	7500	Safe Manning and Fatigue Management	0	)			Tank	ing 3	COTO	,quii	lea loi		inent i	1	0 = 30	, 					
		A. General - managing work/rest hours																			
	7500.1	Are work/rest hours performed by the individual seafarer recorded with the use of a software programme and the reports generated accessible for the office?																		0	5
	7500.2	Is the master provided with instruction/procedure to monitor and address non compliance on STCW 2010 Manila amendments on work/rest hours onboard?										Ì							(	0	10
		B. Fatigue management																			
	7500.5	Does the ship have fatigue mitigation and control strategy (or similar document) available within the Safety Management System (SMS) to ensure the health and well being of the seafarers?																		0	30
	7500.9	Does the fatigue mitigation and control strategy consist of the following (both): - framework to assess the hazards associated with fatigue (hazard assessment) - strategies to mitigate the risk of fatigue (risk mitigation)																		0	15
	7500.10	Does the Master implement the use of any one of the following fatigue management tools (as described in IMO MSC.1/Circ1598) by shipboard crew on board: - Sleep Diary - Self-monitoring through fatigue and sleepiness ratings - Fatigue self-assessment tool - Fatigue event reporting																		o	15
		C. Additional questions - reporting, training & awareness																-			
	7500.7	Does the ship have a procedure in which crew members are able to report to a designated person on fatigue related issues without fearing any action against them for such communication?	i																	)	5
	7500.11	Do all shipboard crew members undergo company fatigue management training and awareness campaigns on an initial and recurrent basis?										İ								0	5
					_						l scor									0	85
					Mir	nimum	rank	ing s	core r	equir	red for	ele	ment 7	7500	0 = 60	)					

			Only hame.															Jun	or Orinp	- u. voy	
		СНЕ	ECKLIST - RANKING CRITERIA - SHIP SURVEY - RO-RO	CARG	o s	HIF	- V	ERS	SIOI	N 20	)23										
Revision Code	Norm item	GREEN AWARD	RANKING Ship - Ro-Ro	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE RANKING SCORE	RANKING MAX. SCORE	
	9000	REQUIREMENTS ACCORDING TO IS	SO STANDARDS																		
	9421	ISO Certification																			
	9421.1	Is the ship certified for the latest edition	n of ISO 9001 (quality management systems)?																0	10	
	9421.2	Is the ship certified for the latest edition management and people development	n of ISO 10015 (quality management – guidelines for competence )?																0	10	
	9421.3	Is the ship certified for the latest edition	n of ISO 14001 (environmental management systems)?																0	10	
	9421.4	Is the ship certified for the latest edition systems)?	n of ISO 22301 (societal security – business continuity management																0	10	
	9421.5	Is the ship certified for the latest edition	n of ISO 27001 (information security management systems)?																0	10	
	9421.6	Is the ship certified for the latest edition	n of ISO 30401 (knowledge management systems – requirements)?																0	10	
	9421.7	Is the ship certified for the latest edition	n of ISO 45001 (occupational health and safety management systems)?																0	10	
	9421.8	Is the ship certified for the latest edition	n of ISO 50001 (energy management systems)?																0	10	
												score			104	^			0	80	4
						IVIIN	ımum	rank	ung s	core r	requir	ed for	eieme	ent 94	121 =	U					

	CHECKLIST - RANKING CRITERIA - SURVEY - RO-RO CARGO SHIP - VERSION	2023			
Norm item	TOTAL SCORE REVIEW SHIP SURVEY - RO-RO CARGO SHIP	SHIP'S RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE
1000	GENERAL				
1200	Enclosed Space Entry & Hot Work	0	70	70	
1300	Compressor for the refilling of air cylinders for breathing apparatus or Alternative, Additional Green Award requirement	0	20	10	
1400	Control of drugs & alcohol onboard	0	35	20	
1500	Emergency Response System	0	30	15	
1510	Emergency Oil Recovery	0	10	0	
1550	Fire Safety Standards	0	125	50	
1600	Computer Systems, Networks, Data Security and Training. GA requirement	0	60	30	
1610	Cyber Risk Management	0	35	15	
1700	Noise and Vibration Management	0	50	15	
1710	Underwater Noise and Vibration Management	0	10	0	
1800	Social Dimension / Sustainability	0	50	10	
2000	NAVIGATION / BRIDGE OPERATIONS				
2100	Navigation	0	120	40	
2111	Electronic chart display & information systems / ECDIS	0	55	30	
2120	Fuel Change Over / Ballast Water Exchange	0	20	20	
2200	Helicopter / Ship Operations	0	20	20	
2300	Mooring Operations	0	50	30	
3000	MACHINERY / ENGINE OPERATIONS				
3100	Bunker Operations	0	50	50	
3101	Bunker Operations - LNG	0	50	25	
3200	Fuel oil management	0	80	40	
4000	CARGOES / CARGO OPERATIONS				•
4500	Hull Stress Monitoring System	0	20	0	
4601	Preparation of loading / unloading plan	0	20	20	
4602	Cargo handling and operations	0	50	50	
4603	Safe work facilities during cargo operations	0	20	20	
4606	Safety precautions during cargo operations	0	40	20	
4900	Cargo Operations - Ro-Ro Cargo Ship	0	160	100	
5000	PREVENTION OF POLLUTION				
5100	Biofouling Management	0	30	5	
5200	Waste Management / Garbage Handling Onboard	0	120	50	
5410	NOx Emissions	0	140	35	
5420	SOx Emissions	0	105	15	
5421	Ships required to carry out Fuel Change Over to low sulphur Marine Diesel Oil or low sulphur Marine Gas Oil (low sulphur Distillates)	0	75	55	
5430	Particulate Matter (PM) Emissions	0	30	0	
5440	Greenhouse Gas (GHG) Emissions - CO2 Emissions	0	155	15	

	CHECKLIST - RANKING CRITERIA - SURVEY - RO-RO CARGO SHIP - VERSION 2	2023			
Norm item	TOTAL SCORE REVIEW SHIP SURVEY - RO-RO CARGO SHIP	SHIP'S RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE
5441	Greenhouse Gas (GHG) Emissions - Methane (CH4) Emissions - Main Propulsion	0	35	0	
5460	Environmental Ship Index (ESI)	0	60	0	
5500	Sewage Management	0	55	20	
5510	Grey Water Management	0	25	0	
5700	Ballast Water Management	0	85	50	
5800	Accidental Bunker Oil Pollution Prevention Measures (overflow prevention systems)	0	30	5	
5801	Protective location of fuel and lubrication oil tanks	0	100	20	
5810	Stern tube lubrication	0	60	15	
5811	Mooring wire lubrication	0	20	0	
5812	Deck equipment lubrication (use of oils)	0	55	0	
5820	Management of bilge water and sludge handling onboard	0	15	15	
5821	Outfitting of bilge water system	0	80	20	
5822	Outfitting of sludge handling system	0	30	10	
5900	Ship Recycling - Inventory of Hazardous Materials	0	130	40	
6000	MAINTENANCE / SURVEYS				
6100	Programme of Inspections	0	50	50	
6110	Critical and Stand-by Equipment	0	30	10	
6200	Mooring Equipment	0	95	65	
6300	Corrosion Prevention of Seawater Ballast Tanks	0	70	40	
6500	Certificates for Cargo Gear	0	40	40	
6700	Ro-Ro Cargo Ship Practice	0	50	20	
7000	CREW				
7200	Extra Personnel, Additional Green Award Requirement	0	60	20	
7300	Training / Courses for Personnel, Additional Green Award Requirements & IMO Model Courses	0	55	20	
7400	Familiarisation, Additional Green Award Requirement	0	70	50	
7500	Safe Manning and Fatigue Management	0	85	60	
9000	REQUIREMENTS ACCORDING TO ISO STANDARDS				
9421	ISO Certification	0	80	0	
	TOTAL SCORES	0	3370	1445	
-					

#### LEGEND

0	Indicates which crew/employee may be interviewed/questioned.
	Shows that a certain item is complied.
	Shows that a certain item is <i>not</i> complied.
0	Indicates that an alternative is used, hence the score for that item is a "0".
	The checklist was filled in incorrectly, thus shows "error".
0	Indicates that the whole element did not reach the minimum score, hence a finding is issued. The number shows the scores obtained.
	Shows which elements are minimum = maximum. Hence scores on all items is required to fully comply.
	Indicates that the minimum score for the relevant element is "0", hence a finding will not be issued.

<sup>\*</sup> for detailed interpretations of the colours and the usage of the checklist, please refer to the pdf-file named "Instruction Notes" located on www.greenaward.org under "Certification/ Download".

# **SUPPLEMENT TO 5410 - NOX EMISSIONS**

DATA FROM "SUPPLEMENT TO ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE -- RECORD OF CONSTRUCTION,
TECHNICAL FILE, AND MEANS OF VERIFICATION"

Keel Laid (DD/MM/YYYY) (available on supplement to IAPP certificate)
Vessel assigned to NOx Tier-3 ECA route (Y/N)
Main propulsion type
Electricity generation
TIER
NA
Questions applicable (from 5410.11 - 5410.18)
NA

Questions applicable (from 5  For DIESEL-ELECTRIC & DUAL FUEL (LNG / LPG) data, use "OTHEF				
WAIN ENGINE 1	NA->	alco bolow	RPM	
	7	Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
<u>-</u>	GA Compliand	ce		
MAIN ENGINE 2	NA X		RPM	
WAIN ENGINE Z	NA→	Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)		i lei i	Tiel 2	Tiel 3
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
- Stocking Country	GA Compliand		147.	100
AUXILIARY ENGINE 1	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
	GA Compliand	ce		
AUXILIARY ENGINE 2	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
	GA Compliand	ce		
AUXILIARY ENGINE 3	NA X		RPM	
AUXILIART ENGINE 3	NA→	Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)		i iei i	Hei Z	Tiel 3
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
or contago roudonon	GA Compliand		INA	INA
AUXILIARY ENGINE 4	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
	GA Compliand	ce		

CKL ROR / VERSION 2023 / 1.0 85 of 97

# **SUPPLEMENT TO 5410 - NOX EMISSIONS**

DATA FROM "SUPPLEMENT TO ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE -- RECORD OF CONSTRUCTION,
TECHNICAL FILE, AND MEANS OF VERIFICATION"

Keel Laid (DD/MM/YYYY) (available on supplement to IAPP certificate)
Vessel assigned to NOx Tier-3 ECA route (Y/N)
Main propulsion type
Electricity generation
TIER
Questions applicable (from 5410.11 - 5410.18)
NA

#### For DIESEL-ELECTRIC & DUAL FUEL (LNG / LPG) data, use "OTHER ENGINE" modules below

OTHER ENGINE	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
	GA Compliance			
OTHER ENGINE	NA→		RPM	
	NA 7	Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
	GA Compliance			
OTHER ENGINE	INA X		RPM	
JIHER ENGINE	NA→	Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)		Tier i	TIEL Z	Tier 3
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
	GA Compliance			

CKL ROR / VERSION 2023 / 1.0 86 of 97

### **SUPPLEMENT TO 5440 GHG EMISSIONS - CO2**

# **ENERGY EFFICIENCY TECHNOLOGIES INFORMATION PORTAL**

GA Code: **TECHNOLOGY GROUPS** Ship name:

**IMO GLOMEEP Website** Date of Ship Survey:

# **MACHINERY TECHNOLOGIES**

This technology group includes measures that improve the energy efficiency of main and auxiliary engines. These include measures such as auxiliary systems optimization, optimizing heat exchangers, waste heat recovery systems, electronic autotuning, batteries and other solutions.

Υ?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Auxiliary systems optimization	Optimizing auxiliary systems to actual operational profiles, not design conditions	Semi-mature	All vessels
	Engine de-rating	De-rating an engine for reduction of the vessel's maximum speed to increase its efficiency by limiting the potential power output	Semi-mature	Vessels sailing 10- 15% slower than design speed
	Engine performance optimization (automatic)	Automatic increase of engine efficiency through testing and tuning according to actual operational load and conditions	Semi-mature	Mainly for two stroke engines
	Engine performance optimization (manual)	Manual increase of engine efficiency through testing and tuning according to actual operational load and conditions	Mature	All vessels
	Exhaust gas boilers on auxiliary engines	Exhaust gas boilers recover the heat from the exhaust gas of auxiliary engines to generate steam, hot water or heat for process heating	Semi-mature	Vessels without shaft generator
	Hybridization (plug-in or conventional)	Use of electricity to replace various modes of power consumption	Semi-mature	Vessels with large fluctuations in power output (ferries, offshore vessels, tugs)
	Improved auxiliary engine load	Increase of the auxiliary engines' load and efficiency by reducing the number of auxiliary engines running	Semi-mature	All vessels
	Shaft generator	Produce electricity from the main propulsion engine	Mature	All vessels with high power needs and long transits
	Shore power	Use of cold ironing in ports to reduce fuel consumption on power producing engines	Semi-mature	For smaller vessels and in ports with developed solutions for larger vessels
	Steam plant operation improvement	Improve operations and maintenance of steam plant system saving fuel on oil fired boiler	Mature	Mainly crude and product tankers
	Waste heat recovery systems	Recover thermal energy from the exhaust gas and convert it into electrical energy	Semi-mature	All vessels with engines above 10 MW

CKL ROR / VERSION 2023 / 1.0 87 of 97

### **SUPPLEMENT TO 5440 GHG EMISSIONS - CO2**

### PROPULSION AND HULL IMPROVEMENTS

Technologies in this group focus on improving the hydrodynamic performance of the vessel. This includes solutions that reduce the resistance of the vessel and/or also improve the propulsive efficiency of the vessel. Examples include measures such as propeller polishing, hull cleaning, PIDs (Propulsion Improving Devices), air lubrication and more.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Air cavity lubrication	Use of air injection on the wetted hull surfaces to improve a ship's hydrodynamic performance	Semi-mature	Most vessels in deep sea trade
	Hull cleaning	Removal of fouling on the hull to increase the vessel's hydrodynamic performance	Mature	All vessels
	Hull coating	Reduction of the hull's resistance through water	Mature	All vessels
	Hull form optimization	Optimizing the hull for lower resistance through water	Mature	All vessels
	Hull retrofitting	Retrofitting of the bulbous bow, optimizing thruster tunnels or bilge keel to reduce resistance	Mature	All vessels
	Propeller polishing	Removal of fouling on the propeller	Mature	All vessels
	Propeller retrofitting	Retrofitting the propeller to increase efficiency	Semi-mature	All vessels
	Propulsion Improving Devices (PIDs)	Installation of propulsion improving devices	Mature	All vessels

### **ENERGY CONSUMERS**

Consumers are equipment or devices that use energy when operated. Technologies in this group focus on minimizing the energy consumption by improving the device or optimizing the utilization of the device. Examples of measures in this group are frequency controllers, cargo handling systems, low energy lighting and more.

Υ?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Cargo handling systems (Cargo discharge operation)	Reduction of energy consumption while discharging crude oil by use of model-based studies of the discharge operation	Semi-mature	Tankers
	Energy efficient lighting system	Use of energy efficient lighting equipment, such as LED light, to increase efficiency and remove heat loss from light devices	Mature	All vessels
	Frequency controlled electric motors	Regulating the frequency of the motors in order to adapt the motor optimized load	Mature	All vessels

CKL ROR / VERSION 2023 / 1.0 88 of 97

#### **SUPPLEMENT TO 5440 GHG EMISSIONS - CO2**

### **ENERGY RECOVERY**

Technologies in this group focus on capturing energy from the surroundings of the vessel and using or transforming this to useful energy for the vessel. This involves measures such as application of kites, fixed sails or wings, Flettner rotors, or solar panels.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Fixed sails or wings	Use sails or wings to replace some of the propulsion power needed	Not mature	Vessels with enough place on deck (general cargo, tankers, bulkers)
	<u>Flettner rotors</u>	Use Flettner rotors to generate power from wind energy	Not mature	Dependent on trading area and sufficient free deck-surface
	<u>Kite</u>	Use a kite to replace some of the propulsion power needed	Not mature	All vessels
	<u>Solar panels</u>	Install solar panels for conversion of solar energy to electricity	Not mature	Dependent on trading area and sufficient free deck-surface

### **TECHNICAL SOLUTIONS FOR OPTIMIZING OPERATION**

Technologies in this group focus on improving the operation of the vessel more than improving the vessel itself. The list of suggested measures includes both technologies and suggestions for best practice (without direct application of a technology). Measures in this group include trim and draft optimization, speed management, autopilot adjustment and use, combinator optimizing, and others.

Υ?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Autopilot adjustment and use	Use of an automatic system to control the vessel's rudder in a more energy efficient manner	Mature	All vessels
	Combinator optimizing	Use of optimized pitch settings and propeller speed for optimized efficiency of propulsion system	Mature	For vessels with controllable pitch propeller
	Efficient DP Operation	Optimize the operation in DP mode	Semi-mature	Vessels with DP mode
	Speed management	Management of the vessel's speed in the most efficient manner	Semi-mature	All vessels
	Trim and draft optimization	Optimizing the trim and draft to reduce the vessel's water resistance	Semi-mature	All vessels
	Weather routing	Including weather conditions when planning a voyage	Mature	All vessels

# Definitions of maturity levels according to uptake across the maritime industry, and degree of proven technology/principle

Mature Proven, new or existing technology/principle, with high uptake across the industry.

Semi-mature Proven, new or existing technology/principle, but with limited uptake across the

industry.

Not mature New unproven-, unproven existing- , or proven existing technology/principle but

with very few installations and little to no operational experience.

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CKL ROR / VERSION 2023 / 1.0 89 of 97

<sup>\*</sup>This Information Portal is still under development and further images will be added.

# **APPENDIX 5**

CHECKLIST - VISUAL INSPECTION - SURVEY - RO-RO CARGO SHIP

(RMC-10)

	Green Award Visual Inspection - Ro-Ro Cargo Ship				
Check Box	Norm item	GREEN AWARD	Inspection Focus	Remarks	
	10100	Machinery			
	10101	Reports			
		Classification reports	Survey reports with recommendations and conditions of class, repairs		
	10101.2	State Authority reports	Survey reports, recommendations		
	10101.3	Company Reports	Inspection, repair, maintenance, planning, dry-dock reports by ship's staff and superintendents		
		Inspection guidelines	Guidelines on the means of access to structures for inspection and maintenance of bulkers		
	10101.5	Other reports	Vetting reports by chartering companies and independent surveyors		
	10102	Engine Room			
	10102.1	Overall tidyness of E.R. space	Unsecured and loose material, tools and E.R. spare-parts		
		General cleanliness of E.R.	Oil- & gas-free enviroment		
	10102.3	Storage E.R. equipment	Equipment stored at designated places		
	10102.4	Handling of general E.R. waste	General waste stored & handled properly		
	10102.5	Indication of E.R. emergency escapes	Clearly visible and not obstructed		
		Save-alls	Oil, liquid and dirt free		
	10102.7	Workshop	Safety instructions near machinery (Grindstone, Lathe etc)		
	10103	Main Propulsion			
	10103.1	Exhaust gas lines	Leakage / condition of lagging, black spots and stripes / loose lagging		
	10103.2	Fuel lines H.P. & L.P.	H.P. pipes condition of protecting pipe/cover, L.P. pipes check leakage and heating tracings		
	10103.3	Cleanliness of cylinder heads	Fuel oil, cooling water, lub. Oil and exhaust gas leaks		
	10103.4	Instructions on emergency stand	Are there clear instructions available for changing over from normal to emergency conditions		
	10103.5	Condition of controllers / thermo couples & wiring	Loose wires, open doors of controllers		
	10103.6	Fuel oil system	Filters for leakage, purifiers cleanliness, area around purifiers		
	10103.7	Lub. Oil system	Filters and save-alls, purifiers condition		
	10103.8	Starting air system	Condition of starting air lines and valves		
	10103.9	Cooling water system	Condition of expansion bellows		
	10104	Auxiliary Engines			
	10104.1	General performance			
	10104.2	Leakage, condition of fuel oil, lub. oil lines	Cracks, corrosion and / or pipes connections not tight		
	10104.3	Auxiliary Engine bilge	Oil-, water-, corrosion- and dirt-free		
	10104.4	Emergency Generator	Condition and date last tested		
	10105	Boilers			
	10105.1	Steam or Thermal oil			
	10105.2	Condition of burner front	Oil leakage, and air leakage		
	10105.3	Lagging / isolation of fuel and steam lines	Condition of lagging		
	10105.4	Thermal Oil	Check possible leakages bellows / quick closing valves		
	10105.5	Boiler bilge / Save-all	Oil-, water-, corrosion- and dirt-free		

	Green Award Visual Inspection - Ro-Ro Cargo Ship				
Check Box	Norm item	GREN AWARD	Inspection Focus	Remarks	
	10100	Machinery			
		Bilge System			
		Cleanliness of bilges on every platform	Presence of oil, water, corrosion and / or dirt		
		Bilge separator, position of all valves			
		In port overboard valve sealed			
		Condition and record regarding oily-bilge separator	Check Oil Record Book - Machinery Space Operations		
		Bilge alarms	Alarms high level & high-high level in good condition		
		Emergency Bilge Suction valve	Check condition / last time tested		
		Double bottom sounding pipes	Check functioning self closing valves		
		Ballast Pumps			
		Condition of pumps	Check functioning of pumps		
		Condition ballast-system	Functioning of all pumps combined		
		Condition supports	Corrosion, cracks, deformation of pump-supports		
		Piping Systems			
		General condition	Check for leakage and / or temporary repairs		
		Condition of piping supports	Check for corroded, broken and / or missing supports		
		General Service Air Systems			
		Condition of air and oil drains	Check good working		
		Condition of pipe lines	Check for leakage and / or temporary repairs		
		Condition of safety valves	Check free movement		
		Chemicals			
		Sufficient Personal Protecting Equipment available	Near storage place and users place		
		Sufficient signboards available	Near storage place and users place		
		Storage of chemicals according safety rules	According makers safety instructions		
		Electrical			
		Generator inspections during operation max. load			
		Examination of cables without attachments	Cable supports bulkhead and deck penetrations		
		Electrical equipments in acc. with danger zones	Zeners barriers etc.		
		Inert Gas Plant (optional)			
		Inert Gas system fully operational	On what OO made a		
		Condition of all instrumentation	Special O2 meter		
		Condition of all alarms and trips	High and low level alarms etc.		
		Sewage Plant	Alama hardarétakan at		
		Sewage Plant fully operational	Alarms, level switches etc.		
	10113.2	Position of valves correct	Check if the by-pass valves are closed		

	Green Award Visual Inspection - Ro-Ro Cargo Ship				
Check Box	Norm item	GREEN AWARD	Inspection Focus	Remarks	
	10100	Machinery			
	10114	Fire Pumps			
	10114.1	Position of firepump valves	Are instructions available for position of valves		
	10114.2	General check of emergency firepump	Position of Fuel valve, Content of fuel tank etc.		
	10114.3	Operating instructions of firepump and drive-unit	Clear instruction board available		
	10115	Emergency Electrical Stops			
	10115.1	Emergency stops of general service pumps	Last time tested		
	10115.2	Emergency stops of steering gear pumps	Last time tested		
	10115.3	Emergency stops of fans	Last time tested		
	10116	Quick Closing Valves			
	10116.1	Condition of closing valve station	Check for clear instructions		
	10116.2	Condition of closing valves E.R.	Check for obstructions or other objects		
	10117	Gauge Glasses			
	10117.1	Condition of gauge glasses closing valves	Check proper working and if they are normal closed		
	10117.2	Condition gauge glasses lub. oil tanks	Check proper working and if they are normal closed		
	10117.3	Condition gauge glasses chemical tanks	Check proper working and if they are normal closed		
	10117.4	Condition gauge glasses fuel tanks	Check proper working and if they are normal closed		
	10118	Ventilation			
	10118.1	Fire flaps in trunks engine room	Check markers open/close and proper working		
	10118.2	Fire flaps	Check proper working		
	10119	Exhaust gases of machinery			
	10119.1	Emission of main engines	Content NOX en SOX		
	10200	Steering Gear			
	10201	SOLAS requirements			
	10201.1	Steering gear unit complies with SOLAS			
	10201.2	Steering gear room complies with SOLAS			
	10201.3	Steering gear unit - and room cleanliness	Check for hydraulic leaks, presence of water and / or oil in drip-trays		
	10202	Change over procedures			
	10202.1	Emergency steering gear change over procedures	Signs posted with instructions for emergency change-over		
	10202.2	Procedures for emergency change-over visible	Clearly visible near controls of steering gear unit		
	10203	Testing			
	10203.1	Emergency-steering tested recently	Check records in engine / deck logbook		
	10203.2	Steering Gear	Check records in engine / deck logbook. Testing before arrival and departure.		

		Green	Award Visual Inspection - Ro-Ro Cargo Ship	
Check Box	Norm item	GREEN AWARD	Inspection Focus	Remarks
	10200	Steering Gear		
	10204	Charging emergency header tank		
	10204.1	Emergency header tank fully charged		
	10204.2	Fixed storage tank installed		
	10205	Compass		
	10205.1	Compass present in steering gear room		
	10205.2	Compass clearly visible from control-station		
	10206	Bridge Communications		
	10206.1	Satisfactory communications with bridge		
	10206.2	Telephone availabel and working		
	10206.3	Sound powered telephone available and working		
	10207	Visibility of Rudder Angle Indicator		
		Rudder angle indicator present		
		Rudder angle indicator visible at steering position		
	10208	Access to Steering Gear		
	10208.1	Entrance door to steering gear room closed	Door to be kept closed at all times and not lashed or blocked in open position	
	10208.2	Access to steering gear unit unobstructed	Steering gear room should be uncluttered with easy access to all components of the system	
	10208.3	Safety and protection measures fitted	Vessels > 10.000 GT should have railings around the steering gear and deck non-slip surface	
	10208.4	Bilge alarms	Alarms high level & high-high level in good condition	
	10300	Ballast System		
	10301	Drawings / Diagrams Layout in Control Room		
	10301.1	All relevant drawings and diagrams available	Pipe Line diagrams, mimic diagrams etc should be available	
	10301.2	Drawings visible	Drawings clearly visible and understandable for operation	
	10302	Functioning of Ballast Pumps		
		Is every separate pump working		
	10302.2	Ballast pumps with temperature sensors		
	10302.3	Is all equipment combined working		

	Green Award Visual Inspection - Ro-Ro Cargo Ship						
Check Box	Norm item	GREN AWARD	Inspection Focus	Remarks			
	10400	Structural					
	10401	Drawings					
	10401.1	Review of all relevant structural drawings	Overview structural design and scantlings				
	10402	Reports					
	10402.1	Classification reports	Survey reports with thickness readings, recommendations and conditions of class, repairs				
	10402.2	State Authority reports	Survey reports, recommendations				
	10402.3	Company Reports	Inspection reports, repair, maintenance and dry-dock reports by ship's staff and superintendents				
	10402.4	Inspection guidelines	Guidelines on the means of access to structures for inspection and maintenance of oil tankers				
	10402.5	Other reports	Vetting reports by chartering companies and independent surveyors				
	10407	10407 Double Bottom Ballast Tanks (including hopper)					
		Condition structural integrity	Check main-strength members and general condition				
		Condition bulkhead-, bottom-plating, web, stiffeners	Check for deformations, fractures, damages, leakages				
		Condition girders and transverse web-frames	Check intersection with longitudinal girders and transverse webs (focus area outer-shell)				
		Condition girders and corrugated bulkheads	Check longitudinal girder under hopper and transverse stool under corrugated bulkhead				
		Condition brackets	Check bracket-ends and toe-ends of stringers, webs and girders				
		Condition webs	Check connection of webs with longitudinals at shell and bulkheads				
		Corrosion protection	Check coating, sacrificial anodes				
		Corrosion pattern	Locate corrosion near bulkhead stools, plating, surfaces and areas with sediment				
		Void Spaces / Cofferdams / Pipe duct					
		Condition structural integrity	Check main-strength members, any non-continous structural material and general condition				
		Condition brackets, stringers, webs and girders	Check for deformations, fractures, damages, leakages				
		Corrosion pattern	Locate corrosion in deckhead-, bulkhead ( near bunkers ) areas, bottom- and longitudinal-plates				
		Condition pipelines and valves	Check for leakages and corrosion, temporary repairs and patches, hyraulic leaks overhead-area				
<u> </u>		Condition access platforms, walkways and ladders	General condition of all supports, corrosion, cracks etc.				
		Bunker Oil Tanks					
<u> </u>		Condition structural integrity	Check main-strength members, any non-continous structural material and general condition				
		Condition brackets, stringers, webs and girders	Check for deformations, fractures, damages, leakages				
	10409.3	Corrosion pattern	Locate corrosion in deckhead-, bulkhead areas, bottom- and longitudinal-plates				
		Condition pipelines and valves	Check for leakages and corrosion , temporary repairs and patches, hydraulic leaks overhead-area				
<u> </u>	10409.5	Condition access platforms, walkways and ladders	General condition of all supports, corrosion, cracks etc.				

	Green Award Visual Inspection - Ro-Ro Cargo Ship						
Check Box	Norm item	GREEN AWARD	Inspection Focus	Remarks			
	10400	Structural					
	10410	Main Deck & Fittings					
	10410.1	Deck plating - deformations	May indicate problems from underneath, stiffeners or underneath deck-plating				
	10410.2	Deck plating - fractures	May indicate substantial corrosion and / or local stress areas				
	10410.3	Deck plating - damages	Caused by collissions and / or grab damage				
	10410.5	Tank entrances and deck openings	Condition check covers and closing devices				
	10410.6	Pipeline couplings, flanges, branches and supports	Condition check, deformation, cracks, corrosion, tightness				
	10410.7	Closing appliances for ventilation	Condition check covers and closing devices				
	10410.8	Bunker and oil tank derating pipes	Check flame screens and coamings				
	10411	Accomodation & Machinery Spaces					
	10411.1	Structural integrity	General condition, damages & defects				
	10411.2	Doors, windows, ventilation ducts, closing devices	Condition check and water tightness				
	10411.3	Stairs and platforms	Condition check, corrosion / deformations				
	10411.4	Pipelines, valves, couplings, overboard connection	Condition check				
	10411.5	Safety equipment	Condition check CO2, Halon system, extinguishers, fire hoses, alarms etc.				
	10411.6	Certificates for safety equipment					
	10412	Mooring equipment					
	10412.1	Mooring lines	Condition mooring lines				
	10412.2	Winches	Foundation bolts firm, casing crack-, corrosion-free, no leakages and save-all				
	10412.3	Condition winch-brakes	Check last test report and thickness linings				
	10413	Anchoring equipment					
	10413.1	Anchors, anchor shackles and chain	Wear, corrosion, clearances inside hawser pipe				
	10413.2	Anchor winch and associated gear	Foundation, no leakages, condition of brakes, hinges and hinge plates				
	10413.3	Anchor securing	Condition and workable	<u> </u>			

	Green Award Visual Inspection - Ro-Ro Cargo Ship						
Check Box	Norm item	GREEN AWARD	Inspection Focus	Remarks			
	10500	Safety / Rescue					
	10501	Safety equipment					
	10501.1	Certificates	Check certificates, reports and safety drills				
	10501.2	Safety plan	Check available and clearly visible				
	10502	Rescue equipment					
	10502.1	Life boat + davits	Check condition (incl. Kathodic wear) and working order				
	10502.2	Rescue boat + davits	Check condition (incl. Kathodic wear) and working order				
	10502.3	Life rafts + release system	Check condition (incl. Kathodic wear) and working order				
	10502.4	Accommodation ladders, pilot ladders and gangway	Check condition and working order				
	10502.5	Life jackets	Check condition and working order				
	10502.6	Life bouys	Check condition (incl. Kathodic wear) and working order				
	10503	Fire fighting					
	10503.1	CO2 / Halon system	Pressure gauges / indicators on bottles / pipelines / nozzles				
	10503.2	Foamtank	Content / Filling				
	10503.3	Fire control plans	Check available and clearly visible				
	10503.4	Portable fire extinguishers	Check ready for use				
	10503.5	Fireman's outfit	Check ready for use, easily accessable				
	10503.6	Breathing Apparatus charging compressor	Check ready for use, easily accessable				
	10503.7	International Ship/Shore Fire connection	Check available both sides				
	10503.8	Fire alarm system and detectors	Check test records, condition in accommodation, ER and boiler room				
		Fire flaps and vent stops	Check condition on deck, accommodation, ER and boiler room and clearly marked				
		Fire lines	Check condition on deck, accommodation, ER and boiler room				
	10503.11	Fire hoses	Check condition on deck, accommodation, ER and boiler room				
	10503.12	Fire system for scavenging air receiver and boiler front	Check condition and working order separate fire fighting system				
	10504	Escape routes					
	10504.1	Free access	Check free access without obstructions				
	10504.2	Indicators	Check clear markers / positioning				
	10304.2	maioators	Check clear markers / positioning				