Automatic and Remote Control of Machinery

Object of Amendment

Rules for the Survey and Construction of Steel Ships Part D Rules for Automatic and Remote Control Systems Rules for the Survey and Construction of Inland Waterway Ships Guidance for the Survey and Construction of Steel Ships Part D Guidance for the Survey and Construction of Inland Waterway Ships

Reason for Amendment

Although remote control devices are required for periodically unattended machinery spaces, they may also be provided for manned machinery spaces. IACS Unified Requirements (UR) M47 and M43 each specify safety requirements for main propulsion machinery remote control devices installed on navigation bridges: UR M43 specifies requirements for M0-ships (ships with unmanned machinery spaces), whereas UR M47 specifies requirements for non-M0-ships (ships with manned machinery spaces). IACS recently reviewed these UR to determine whether any of their requirements could be consolidated. As a result of its review, IACS decided to incorporate UR M47 into UR M43 and adopted UR M43(Rev.1) in February 2024 to amend relevant requirements so that they apply to remote control devices of main propulsion machinery installed on navigation bridges regardless of whether a ship is a M0-ship.

In addition to the above, the application of some requirements in the NK Rules related to the automatic and remote control of control systems, safety systems and alarm systems was unclear with respect to machinery type and machinery characteristics. The Society decided, therefore, to take advantage of the opportunity provided by the adoption of UR M43(Rev.1), and review general requirements related to the automatic and remote control of such systems.

Accordingly, relevant requirements are amended in accordance with UR M43(Rev.1) and the Society's internal review of its requirements for control and other systems related to the automatic and remote control of machinery.

Outline of Amendment

The main details of this amendment are as follows:

- (1) Amends requirements for the remote control devices of main propulsion machinery in accordance with M43(Rev.1) to specify they apply to even non-M0-ships.
- (2) Amends the following requirements related to automatic and remote control.
 - (a) Clarifies that override capability for overspeed protective devices for emergency generator engines is not required even for engines smaller than $220 \ kW$.
 - (b) Clarifies that low-temperature alarms for fuel using the burners for boilers and thermal oil installations are only required when fuel temperature (viscosity) control is carried out.
 - (c) Clarifies requirements for lubrication oil low-pressures only apply when lubrication pumps are installed.
 - (d) Deletes requirements related to the installation of alarm devices (lubrication oil low-pressure, etc.) necessary for remote control from navigation bridges for non-M0-ships.

Effective Date and Application

(1) Amendment (1) above

This amendment applies to ships for which the date of contract for construction is on or after 1 January 2025.

(Notwithstanding the above, this amendment may be applied in advance of the effective date upon shipowner request.)

(2) Amendment (2) aboveEffective date of this draft amendment is the date of establishment.

ID: DD24-07

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

Amended	Original	Remarks
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part D MACHINERY INSTALLATIONS	Part D MACHINERY INSTALLATIONS	
Chapter 18 AUTOMATIC AND REMOTE CONTROL	Chapter 18 AUTOMATIC AND REMOTE CONTROL	
18.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	18.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	
 18.3.3 Bridge Control Devices* Bridge control devices are to comply with the following (1) through (6) as well as requirements in 18.3.2. ((1) to (4) are omitted.) (5) Operations following any setting of the bridge control device including reversing from the maximum ahead service speed in case of emergency are to take place in an automatic sequence and with time intervals acceptable to the machinery. (6) For steam turbines, a slow-turning device is to be provided which operates automatically or manually to prevent any risk of rotor distortion due to propulsion turbines being stopped for long periods of time. Discontinuation of this automatic turning from the bridge must be possible. 	18.3.3 Bridge Control Devices* Bridge control devices are to comply with the following (1) through (<u>4</u>) as well as requirements in 18.3.2. ((1) to (4) are omitted.) (Newly added) (Newly added)	UR M43(Rev.1) M43.3 UR M43(Rev.1) M43.5 and Note

	Amended	Original	Remarks			
	EFFECTIVE DATE A	ND APPLICATION				
1.	The effective date of the amendments is 1 January 2025.					
2.	Notwithstanding the amendments to the Rules, the curre	ent requirements apply to ships for which the date of contract				
	for construction is before the effective date.					
3.	Notwithstanding the provision of preceding 2., the ame	ndments to the Rules may apply to the surveys for which the				
	application is submitted to the Society before the effective	ve date upon request by the owner.				
		ersion of IACS Procedural Requirement (PR) No.29.				
	IACS PR No.29 (Re	ev.0, July 2009)				
1.	1. The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of					
2.	build the series is signed between the prospective owner and the shipbuilder.	ional vessels for which the option is ultimately exercised, is the date on which the contract to				
	For the purpose of this Procedural Requirement, vessels built under a single contract plans for classification purposes. However, vessels within a series may have design a (1) such alterations do not affect matters related to classification, or	et for construction are considered a "series of vessels" if they are built to the same approved alterations from the original design provided:				
	(2) If the alterations are subject to classification requirements, these alterations are	to comply with the classification requirements in effect on the date on which the alterations sence of the alteration contract, comply with the classification requirements in effect on the				
2	The optional vessels will be considered part of the same series of vessels if the option					
3.		onal options, the date of "contract for construction" for such vessels is the date on which the ilder. The amendment to the contract is to be considered as a "new contract" to which 1. and				
4	2. above apply.					
4.	or new contract for construction is amended to change the ship type, the date of "contra or new contract is signed between the Owner, or Owners, and the shipbuilder.	act for construction" of this modified vessel, or vessels, is the date on which revised contract				
Not	- -					
	e. s Procedural Requirement applies from 1 July 2009.					

Amended	Original	Remarks
 be provided. (2) Devices referred to in (1) are to provide alarms at both local and navigation bridge. Visual alarms at navigation bridge may be of group indication. (3) Each reciprocating internal combustion engine with a maximum continuous output of 220 kW or over is to be provided with an overspeed protective device specified in 2.4.1-4. (4) When devices, other than overspeed protective devices, are provided to shutdown reciprocating internal combustion engines, means are to be provided to override those devices automatically during navigation. (5) The silencing of the audible alarms from navigation bridge is not to cause the silencing of the audible alarms at local positions. 	 be provided. (2) Devices referred to in (1) are to provide alarms at both local and navigation bridge. Visual alarms at navigation bridge may be of group indication. (3) Each reciprocating internal combustion engine with a maximum continuous output of 220 kW or over is to be provided with an overspeed protective device specified in 2.4.1-4. (4) When devices, other than those referred to in (3), are provided to shutdown reciprocating internal combustion engines, means are to be provided to override those devices automatically during navigation. (5) The silencing of the audible alarms from navigation bridge is not to cause the silencing of the audible alarms at local positions. 	Clarification (Consistent with UR M63)
 18.6 Automatic and Remote Control of Auxiliary Machinery 18.6.3 Thermal Oil Installations Thermal oil installations arranged to be automatically 	 18.6 Automatic and Remote Control of Auxiliary Machinery 18.6.3 Thermal Oil Installations Thermal oil installations arranged to be automatically 	

Amended-Original Requirements Comparison Table (Automatic and Remote Control of Machinery)

Amended	Original	Remarks
 controlled are to comply with the following: Control devices Control devices are to comply with 18.4.2-1 and -2, also with 9.12.2-1 and -2. Safety devices Safety devices are to comply with 9.12.1 and 9.12.2-5. (3) Alarm devices Thermal oil installations are to be provided with alarm devices which operate in the following cases: (a) When the safety devices required in (2) have operated. (b) When the temperature of the fuel at the inlet of burner has fallen in cases where heated fuel is used. 	 controlled are to comply with the following: (1) Control devices Control devices are to comply with 18.4.2-1 and -2, also with 9.12.2-1 and -2. (2) Safety devices Safety devices are to comply with 9.12.1 and 9.12.2-5. (3) Alarm devices Thermal oil installations are to be provided with alarm devices which operate in the following cases: (a) When the safety devices required in (2) have operated. (b) When the temperature of the fuel at the inlet of 	Clarification (Added in consideration of the use of fuel oil)
EFFECTIVE DATE		
1. The effective date of this draft		

Amended	Original	Remarks
RULES FOR AUTOMATIC AND REMOTE	RULES FOR AUTOMATIC AND REMOTE	
CONTROL SYSTEMS	CONTROL SYSTEMS	
Chapter 3 CENTRALIZED MONITORING AND	Chapter 3 CENTRALIZED MONITORING AND	
CONTROL SYSTEMS FOR MACHINERY	CONTROL SYSTEMS FOR MACHINERY	
3.3 Additional Requirements for Safety Measures	3.3 Additional Requirements for Safety Measures	
3.3.2 Main Propulsion Machinery or Controllable Pitch Propellers	3.3.2 Main Propulsion Machinery or Controllable Pitch Propellers	
 -1. (Omitted) -2. Main propulsion machinery in ships in which steam turbines are used as main propulsion machinery (excluding electric propulsion ships) ((1) to (3) are omitted.) (Deleted) 	 -1. (Omitted) -2. Main propulsion machinery in ships in which steam turbines are used as main propulsion machinery (excluding electric propulsion ships) ((1) to (3) are omitted.) (4) Spinning devices Automatic spinning devices or other suitable measures are to be employed to prevent any risk of rater distortion due to propulsion turbines being 	Transfer to 18.3.3(6), Part D
 (<u>4</u>) Alarm devices Steam turbines used as main propulsion machinery are to be provided with alarm devices which activate in the event of any of those abnormal conditions given in Table 3.2. 	 rotor distortion due to propulsion turbines being stopped for long periods of time. (5) Alarm devices Steam turbines used as main propulsion machinery are to be provided with alarm devices which activate in the event of any of those abnormal conditions given in Table 3.2. 	

Amended Original Remarks EFFECTIVE DATE AND APPLICATION EFFECTIVE DATE AND APPLICATION EFFECTIVE DATE AND APPLICATION 1. The effective date of the amendments is 1 January 2025. Notwithstanding the amendments to the Rules, the current requirements apply to ships for which the date of contract for construction is before the effective date. Notwithstanding the provision of preceding 2., the amendments to the Rules may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner. * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. IACS PR No.29 (Rev.0, July 2009) IACS PR No.29 (Rev.0, July 2009) IACS PR No.29 (Rev.0, July 2009) 1. The date of "contract for construction" of a vessel is including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the versise signabet over mer and the shipbuilder. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to basification requirements, the same approved plans for classification purposes. However, vessels within a series may may have design alterations are to original design provided: (1) such alterations de on affect matters related to classification. (2) If the alterations are submited to the Society for approval. The date of "contract for construction" of a series of vessels if the option in is cererised not later than 1 year after the contract to
 The effective date of the amendments is 1 January 2025. Notwithstanding the amendments to the Rules, the current requirements apply to ships for which the date of contract for construction is before the effective date. Notwithstanding the provision of preceding 2., the amendments to the Rules may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner. * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. IACS PR No.29 (Rev.0, July 2009) The date of "contract for construction" of a vessel is the date on which the contract are to be declared to the classification society by the party applying for the assignment of class to a newholding. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the verse! Signal between the prospective owner and the shipbuilder. This date and the construction unmbers) of a life vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. The purpose of this Procedural Requirement, vessels will under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels will an aver design alterations are to comply with the classification requirements in effect on the date on which the alterations are subject to dessification. If the alterations are subject to besification requirements, these alteration contract, comply with the classification requirements in effect on the date on which the alterations are signal between the prospective owner and t
 Notwithstanding the amendments to the Rules, the current requirements apply to ships for which the date of contract for construction is before the effective date. Notwithstanding the provision of preceding 2., the amendments to the Rules may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner. "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. IACS PR No.29 (Rev.0, July 2009) The date of "contract for construction" of a vessel is the date on which the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective ower and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessel included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owerrand the shipbuilder. The date of "contract for construction or a series may have design alterations from the original design provided: (1) such alterations are subject to classification, or (2) If the alterations are subject to classification, or (3) If the alterations are submitted to the society for approval. (4) If the alterations are submitted to the society of the
 for construction is before the effective date. 3. Notwithstanding the provision of preceding 2., the amendments to the Rules may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner. * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. IACS PR No.29 (Rev.0, July 2009) 1. The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the contract to rootstruction "of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. This date and the series is signed between the prospective owner and the shipbuilder. This date and the series is signed between the prospective owner and the shipbuilder. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purposes. However, vessels whilm a series may have design alterations from the original design provide! (1) such alterations are submitted to the Society for approval. (2) If the alterations are subjuict to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are construction is exercised not later than 1 year after the contract to build the series was signed. 3. If a contract for construction is procedure and the shipbuilder. The amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which the a
 Notwithstanding the provision of preceding 2., the amendments to the Rules may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner. * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. IACS PR No.29 (Rev.0, July 2009) The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. This date and the same approved plans for classification purposes. However, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification proposes. However, vessels built under a single contract for construction requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are subject to classification requirements, these alteration contract, comply with the classification requirements in effect on the date on which the alterations are subject to class
 * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. IACS PR No.29 (Rev.0, July 2009) 1. The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. 2. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided: (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are submited to the Society for approval. The optional vessels will be considered part of the same series of vessels of the option, the date of "contract to reconstruction is later amended to include additional vessels or additional options, the date of "contract to be construction is later and he shipbuilder. The abmendment to the contract is to be considered as a "new contract," to which 1. and 2. above apply. If a contract for construction is amended to include additional vessels or additional options, the date of "co
 The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided: (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification, or (3) use a contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval. The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed. If a contract for construction is later annended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which 1. and 2. above apply.<!--</td-->
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 The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided: such alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are subject to the Society for approval. The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed. If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for constructor" for such vessels is the date on which the and the analytic additional vessels or additional options, the date of "contract for construction" to which 1. and 2. above apply. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, is the date on which revised contract
 date on which the alterations are submitted to the Society for approval. The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed. 3. If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which 1. and 2. above apply. 4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract
4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract
Note: This Procedural Requirement applies from 1 July 2009.
227 Other Mashinawa
3.3.7 Other Machinery3.3.7 Other Machinery1 Air compressors1 Air compressorsClarification
1Air compressors1Air compressorsClarificationAir compressors equipped with lubrication pumps are to be1Air compressors are to be arranged so as to automaticallyClarification(Specify the exclusion or pumps are to be1Air compressors are to be arranged so as to automaticallyClarification
arranged so as to automatically stop in the event of pressure stop in the event of pressure drops of lubricating oil. "Oil less" and "oil splash
drops of lubricating oil. (This requirement, however, does not
apply to oilless and oil splash lubricating systems)

	Table 3	.3 Boiler	'S	
	Monitored Variables	Alarms	Remarks	Clarification
Temperature	F.O. to burners	L	applied to in case where heated fuel is used or F.O. heater outlets for aux. boilers	(Added in conside of the use of fuel of
	Gas air heaters or economizer outlets	Н	applied to main boilers	
	Superheater steam outlets	Н		
Pressure	Steam drums or superheater outlets	L	in cases where superheaters are fitted, superheater outlets are required	
	Forced drafts	L	or stoppage of driving units	
	F.O. to burners (atomizing press)	L	applied to water tube boilers with max. working	
	Atomizing mediums	L	pressures exceeding 1 <i>MPa</i> not used for only heating and general use	
Others	Water levels	ΗL		
	Stoppage of air preheater driving units	0	applied to main boilers	
	Feed water pressures at feed water pump outlets	L	applied to water tube boilers with max. working pressures exceeding $1MPa$	
	Salinity in feed water pump inlets	Н	applied to ships provided with steam turbine driving generators	

Thermal On Instantations

Monitored Variables	Alarms	Remarks		
Pressure, burner inlets	L			
Temperature burner inlets	L	applied to in case where heated fuel is used		Clarification
Temperatures	Н			(Added in consideration
Flows or pressure differences between outlets and inlets of heaters	L			of the use of fuel oil)
Levels in expansion tanks	L			
Flame failure	\bigcirc			
			_	
	Pressure, burner inlets Temperature burner inlets Temperatures Flows or pressure differences between outlets and inlets of heaters Levels in expansion tanks	Pressure, burner inlets L Temperature burner inlets L Temperatures H Flows or pressure differences between outlets and inlets of heaters L Levels in expansion tanks L	Pressure, burner inlets L Temperature burner inlets L applied to in case where heated fuel is used Temperatures H Flows or pressure differences between outlets and inlets of heaters L Levels in expansion tanks L	Pressure, burner inlets L Temperature burner inlets L applied to in case where heated fuel is used Temperatures H Flows or pressure differences between outlets and inlets of heaters L Levels in expansion tanks L

EFFECTIVE DATE AND APPLICATION

The effective date of this draft amendment is [the date of establishment]. 1.

Amended	Remarks
Chapter 4 MONITORING AND CONTROL SYSTEMS FOR PERIODICALLY UNATTENDED MACHINERY SPACES	
4.2 Monitoring and Control Systems for Periodically Unattended Machinery Spaces	
 4.2.2 Bridge Control Devices or Centralized Monitoring and Control Systems for Machinery Installed in Bridge 1 Bridge control devices specified in 18.3.3, Part D of the Rules for the Survey and Construction of Steel Ships or centralized monitoring and control systems for machinery are to be provided on bridges. <u>However, the manual slow- turning devices specified in 18.3.3(6), Part D of the Rules for the Survey and Construction of Steel Ships are not permitted.</u> 	UR M43(Rev.1) M43.5
EFFECTIVE DATE .	
 The effective date of the amendments is 1 January 202 Notwithstanding the amendments to the Rules, the cu for construction is before the effective date. Notwithstanding the provision of preceding 2., the an application is submitted to the Society before the effect * "contract for construction" is defined in the latest IACS PR No.29 (
 The date of "contract for construction" of a vessel is the date on which the contra the construction numbers (i.e. hull numbers) of all the vessels included in the con class to a newbuilding. 	

	Amended	Original	Remarks
3. 4. Note:	 build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contplans for classification purposes. However, vessels within a series may have desig (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification requirements, these alterations are contracted between the prospective owner and the shipbuilder or, in the date on which the alterations are submitted to the Society for approval. The optional vessels will be considered part of the same series of vessels if the op If a contract for construction is later amended to include additional vessels or add amendment to the contract, is signed between the prospective owner and the ship 2, above apply. If a contract for construction is amended to change the ship type, the date of "contor or new contract is signed between the Owner, or Owners, and the shipbuilder." 	optional vessels for which the option is ultimately exercised, is the date on which the contract to tract for construction are considered a "series of vessels" if they are built to the same approved gn alterations from the original design provided: are to comply with the classification requirements in effect on the date on which the alterations absence of the alteration contract, comply with the classification requirements in effect on the otion is exercised not later than 1 year after the contract to build the series was signed. litional options, the date of "contract for construction" for such vessels is the date on which the builder. The amendment to the contract is to be considered as a "new contract" to which 1. and ntract for construction" of this modified vessel, or vessels, is the date on which revised contract	

Amended	Original	Remarks
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND	
CONSTRUCTION OF INLAND WATERWAY	CONSTRUCTION OF INLAND WATERWAY	
SHIPS	SHIPS	
Part 7 MACHINERY INSTALLATIONS	Part 7 MACHINERY INSTALLATIONS	
Chapter 14 AUTOMATIC AND REMOTE CONTROL	Chapter 14 AUTOMATIC AND REMOTE CONTROL	
14.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	14.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	
14.3.3 Bridge Control Devices* Bridge control devices are to comply with the following (1) through (<u>6</u>) as well as requirements in 14.3.2. ((1) to (4) are omitted.)	 14.3.3 Bridge Control Devices* Bridge control devices are to comply with the following (1) through (<u>4</u>) as well as requirements in 14.3.2. ((1) to (4) are omitted.) 	
(5) Operations following any setting of the bridge control device including reversing from the maximum ahead service speed in case of emergency are to take place in an automatic sequence and with time intervals acceptable to the machinery.	(Newly added)	Same as 18.3.3(5), Part D
 (6) For steam turbines, a slow-turning device is to be provided which operates automatically or manually to prevent any risk of rotor distortion due to propulsion turbines being stopped for long periods of time. Discontinuation of this automatic turning from the bridge must be possible. 	(Newly added)	Same as 18.3.3(6), Part D

	Amended	Original	Remarks	
	EFFECTIVE DATE AND APPLICATION			
1.	The effective date of the amendments is 1 January 2025	5.		
2.	Notwithstanding the amendments to the Rules, the curr for construction is before the effective date.	rent requirements apply to ships for which the date of contract		
3.	application is submitted to the Society before the effect	1 1 1		
	contract for construction is defined in the latest	version of IACS Procedural Requirement (PR) No.29.		
	IACS PR No.29 (F	Rev.0, July 2009)		
1.		t to build the vessel is signed between the prospective owner and the shipbuilder. This date and ract are to be declared to the classification society by the party applying for the assignment of		
2.	The date of "contract for construction" of a series of vessels, including specified or build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contra- plans for classification purposes. However, vessels within a series may have design	ptional vessels for which the option is ultimately exercised, is the date on which the contract to act for construction are considered a "series of vessels" if they are built to the same approved a alterations from the original design provided:		
	are contracted between the prospective owner and the shipbuilder or, in the a date on which the alterations are submitted to the Society for approval.	re to comply with the classification requirements in effect on the date on which the alterations absence of the alteration contract, comply with the classification requirements in effect on the		
3.	If a contract for construction is later amended to include additional vessels or addit	ion is exercised not later than 1 year after the contract to build the series was signed. tional options, the date of "contract for construction" for such vessels is the date on which the builder. The amendment to the contract is to be considered as a "new contract" to which 1. and		
4.		ract for construction" of this modified vessel, or vessels, is the date on which revised contract		
Not Thi	e: s Procedural Requirement applies from 1 July 2009.			

Amended	Original	Remarks
14.6 Automatic and Remote Control of Auxiliary Machinery	14.6 Automatic and Remote Control of Auxiliary Machinery	
 14.6.3 Thermal Oil Installations Thermal oil installations arranged to be automatically controlled are to comply with the following: Control devices Control devices are to comply with 14.4.2-1 and -2, also with 7.3.2-1 and -2. Safety devices Safety devices are to comply with 7.3.1 and 7.3.2-5. Alarm devices Thermal oil installations are to be provided with alarm devices which operate in the following cases: When the safety devices required in (2) have operated. When the temperature of the fuel at the inlet of burner has fallen in cases where heated fuel is used. 	 14.6.3 Thermal Oil Installations Thermal oil installations arranged to be automatically controlled are to comply with the following: (1) Control devices Control devices are to comply with 14.4.2-1 and -2, also with 7.3.2-1 and -2. (2) Safety devices Safety devices are to comply with 7.3.1 and 7.3.2-5. (3) Alarm devices Thermal oil installations are to be provided with alarm devices which operate in the following cases: (a) When the safety devices required in (2) have operated. (b) When the temperature of the fuel at the inlet of burner has fallen. 	Same as 18.6.3(3)(b), Part D
EFFECTIVE DATE A	AND APPLICATION	
1. The effective date of this draft a	mendment is [the date of establishment].	

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part D MACHINERY INSTALLATIONS	Part D MACHINERY INSTALLATIONS	
D18 AUTOMATIC AND REMOTE CONTROL	D18 AUTOMATIC AND REMOTE CONTROL	
D18.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	D18.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	
 D18.3.2 Remote Control Devices for Main Propulsion Machinery or Controllable Pitch Propellers 1 The wording "alarm devices necessary for the control" specified in 18.3.2-1(6), Part D of the Rules means the following (1) and (2). In addition, visible alarm devices are to be capable of not only distinguishing machinery and equipment affected but also and the kind of abnormal condition. However, in cases where such distinction can be readily made by other instruments in engine rooms, this requirement may be dispensed with. Furthermore, in cases where it is possible to remotely control main engines from more than one position, alarm devices only need to be installed in one normally attended position. (1) Alarm systems activating in the following cases: (a) Pressure drops of lubricating oil (b) Pressure drops of cooling water, or temperature rises of cooling water or the stopping of cooling 	 D18.3.2 Remote Control Devices for Main Propulsion Machinery or Controllable Pitch Propellers 1 The wording "alarm devices necessary for the control" specified in 18.3.2-1(6), Part D of the Rules means the following (1) to (3): (1) Alarm systems activating in the following cases: (a) Pressure drops of lubricating oil (b) Pressure drops of cooling water, or temperature rises of cooling water or the stopping of cooling 	Clarification (The exclusion rules are arranged to be easy to understand.)
water pumps(c) Pressure drops of hydraulic oil or compressed air,	water pumps(c) Pressure drops of hydraulic oil or compressed air,	
	15/20	1

Amended-Original Requirements Comparison Table (Automatic and Remote Control of Machinery)			
Amended	Original	Remarks	
or failures of the electric power for remote controls (d) Activation of emergency stopping devices (2) Alarm devices activating in the following cases in addition to those specified in (1), in the case of ships which have propulsion motors as their main propulsion machinery: (a) Electric insulation resistance drops in power supply circuits (b) Abnormal stopping of the cooling fans of semiconductor converters (c) Pressure drops of cooling water, temperature rises or the stopping of the cooling water pumps of semiconductor converters (d) Activation of the semiconductor protection devices of semiconductor converters (Deleted)	 or failures of the electric power for remote controls (d) Activation of emergency stopping devices (2) Alarm devices activating in the following cases in addition to those specified in (1), in the case of ships which have propulsion motors as their main propulsion machinery: (a) Electric insulation resistance drops in power supply circuits (b) Abnormal stopping of the cooling fans of semiconductor converters (c) Pressure drops of cooling water, temperature rises or the stopping of the cooling water pumps of semiconductor converters (d) Activation of the semiconductor protection devices of semiconductor converters (3) Visual alarms capable of distinguishing the machinery and equipment and the kinds of abnormal conditions specified in (1) and (2) above However, in the case of ships capable of remote control from bridges and other places, the requirements may be dispensed with for visual alarms on bridges. Furthermore, in cases where such distinction can be readily made by other instruments in engine rooms, the requirements may be also dispensed with. 		
EFFECTIVE DATE A	AND APPLICATION		
1. The effective date of this draft a	amendment is [the date of establishment].		

Amended-Original Requirements Comparison Table (Automatic and Remote Control of Machinery)	
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	Amended	Original	Remarks
(-1 t) <u>4</u> <u>accept</u>	.3.3 Bridge Control Devices o -3 are omitted.) In applying 18.3.3(5), Part D of the Rules, it is able to confirm main engines are good condition when ng out the astern tests specified in 2.3.1-1(2), Part B of les.	D18.3.3 Bridge Control Devices (-1 to -3 are omitted.) (Newly added)	UR M43 (Rev.1) M43.3 Describe specific survey requirements.
	EFFECTIVE DATE A	AND APPLICATION	
1. 2. 3.	for construction is before the effective date. Notwithstanding the provision of preceding 2., the arr the application is submitted to the Society before the e	current requirements apply to ships for which the date of contract nendments to the Guidance may apply to the surveys for which	
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 The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels with a series may have design alterations from the original design provided: (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the assesses of vessels of vessels of vessels if the option is exercised not later than 1 year after the contract to build the series was signed. If a contract for construction is later amended to include additional vessels or additional options, the date of "contract is to be considered as a "new contract" to which 1, and 2, above apply. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the			
Not			
Thi	s Procedural Requirement applies from 1 July 2009.		

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF INLAND WATERWAY	CONSTRUCTION OF INLAND WATERWAY	
SHIPS	SHIPS	
Part 7 MACHINERY INSTALLATIONS	Part 7 MACHINERY INSTALLATIONS	
Chapter 14AUTOMATIC AND REMOTE CONTROL	Chapter 14AUTOMATIC AND REMOTE CONTROL	
14.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	14.3 Automatic and Remote Control of Main Propulsion Machinery or Controllable Pitch Propellers	
 14.3.2 Remote Control Devices for Main Propulsion Machinery or Controllable Pitch Propellers 1 The wording "alarm devices necessary for the control" specified in 14.3.2-1(6), Part 7 of the Rules means the following (1) and (2). In addition, visible alarm devices are to be capable of not only distinguishing machinery and equipment affected but also and the kind of abnormal condition. However, in cases where such distinction can be readily made by other instruments in engine rooms, this requirement may be dispensed with. Furthermore, in cases where it is possible to remotely control main engines from more than one position, alarm devices only need to be installed in one normally attended position. (1) Alarm systems activating in the following cases: 	 14.3.2 Remote Control Devices for Main Propulsion Machinery or Controllable Pitch Propellers The wording "alarm devices necessary for the control" specified in 14.3.2-1(6), Part 7 of the Rules means the following (1) to (3): (1) Alarm systems activating in the following cases: 	Clarification (The exclusion rules are arranged to be easy to understand.)
(a) Pressure drops of lubricating oil(b) Pressure drops of cooling water, or temperature	(a) Pressure drops of lubricating oil(b) Pressure drops of cooling water, or temperature	

rises of cooling water or the stopping of cooling water pumps (c) Pressure drops of hydraulic oil or compressed air, or failures of the electric power for remote controls (d) Activation of emergency stopping devices (2) Alarm devices activating in the following cases in addition to those specified in (1), in the case of ships which have propulsion motors as their main propulsion machinery: (a) Electric insulation resistance drops in power supply circuits (b) Abnormal stopping of the cooling mater, temperature rises or the stopping of the cooling water, temperature rises or the stopping of the cooling water pumps of semiconductor converters (d) Activation of the semiconductor protection devices of semiconductor converters (Deleted) EEFECTIVE DATE AND APPLICATION EEFECTIVE DATE AND APPLICATION		arison Table (Automatic and Remote Control of Machin	
 water pumps (c) Pressure drops of hydraulic oil or compressed air, or failures of the electric power for remote controls (d) Activation of emergency stopping devices (2) Alarm devices activating in the following cases in addition to those specified in (1), in the case of ships which have propulsion motors as their main propulsion machinery: (a) Electric insulation resistance drops in power supply circuits (b) Abnormal stopping of the cooling fans of semiconductor converters (c) Pressure drops of cooling water, temperature rises or the stopping of the cooling water pumps of semiconductor converters (d) Activation of the semiconductor protection devices of semiconductor converters (d) Activation of the semiconductor converters (e) Pressure drops of soling water, temperature rises or the stopping of the cooling water pumps of semiconductor converters (f) Activation of the semiconductor protection devices of semiconductor converters (g) Visual alarms capable of distinguishing the machinery and equipment and the kinds of abnormal conditions specified in (1) and (2) above However, in the case of ships capable of remote control from bridges and other places, the requirements may be also dispensed with. 	Amended	Original	Remarks
	 water pumps (c) Pressure drops of hydraulic oil or compressed air, or failures of the electric power for remote controls (d) Activation of emergency stopping devices (2) Alarm devices activating in the following cases in addition to those specified in (1), in the case of ships which have propulsion motors as their main propulsion machinery: (a) Electric insulation resistance drops in power supply circuits (b) Abnormal stopping of the cooling fans of semiconductor converters (c) Pressure drops of cooling water, temperature rises or the stopping of the cooling water pumps of semiconductor converters (d) Activation of the semiconductor protection devices of semiconductor converters 	 water pumps (c) Pressure drops of hydraulic oil or compressed air, or failures of the electric power for remote controls (d) Activation of emergency stopping devices (2) Alarm devices activating in the following cases in addition to those specified in (1), in the case of ships which have propulsion motors as their main propulsion machinery: (a) Electric insulation resistance drops in power supply circuits (b) Abnormal stopping of the cooling fans of semiconductor converters (c) Pressure drops of cooling water, temperature rises or the stopping of the cooling water pumps of semiconductor converters (d) Activation of the semiconductor protection devices of semiconductor converters (3) Visual alarms capable of distinguishing the machinery and equipment and the kinds of abnormal conditions specified in (1) and (2) above However, in the case of ships capable of remote control from bridges and other places, the requirements may be dispensed with for visual alarms on bridges. Furthermore, in cases where such distinction can be readily made by other instruments in engine rooms, the requirements may be also 	
1 The effective late of this looft encounties [4] a date of establishment]	EFFECTIVE DATE A	AND APPLICATION	
1. The effective date of this draft amendment is [the date of establishment].	1. The effective date of this draft a	mendment is [the date of establishment].	

Amenucu-Originar Kequitements Comp	parison Table (Automatic and Remote Control of Machin	
Amended	Original	Remarks
 14.3.3 Bridge Control Devices (-1 to -3 are omitted.) 4 In applying 14.3.3(5), Part 7 of the Rules, it is acceptable to confirm main engines are good condition when carrying out the astern tests specified in 2.3.1-1.(1), Part 2 of the Rules. 	14.3.3 Bridge Control Devices (-1 to -3 are omitted.) (Newly added)	Same as D18.3.3-4 of the Guidance
EFFECTIVE DATE	AND APPLICATION	
 The effective date of the amendments is 1 January 2025. Notwithstanding the amendments to the Guidance, the current requirements apply to ships for which the date of contract for construction is before the effective date. Notwithstanding the provision of preceding 2., the amendments to the Guidance may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner. * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. 		
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 the construction numbers (i.e. hull numbers) of all the vessels included in the conclass to a newbuilding. 2. The date of "contract for construction" of a series of vessels, including specified build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single conplans for classification purposes. However, vessels within a series may have desi (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification requirements, these alterations are contracted between the prospective owner and the shipbuilder or, in the date on which the alterations are submitted to the Society for approval. The optional vessels will be considered part of the same series of vessels if the optional vessels will be attended to include additional vessels or ad amendment to the contract, is signed between the prospective owner and the ship 2, above apply. 	act to build the vessel is signed between the prospective owner and the shipbuilder. This date and ntract are to be declared to the classification society by the party applying for the assignment of optional vessels for which the option is ultimately exercised, is the date on which the contract to tract for construction are considered a "series of vessels" if they are built to the same approved gn alterations from the original design provided: are to comply with the classification requirements in effect on the date on which the alterations e absence of the alteration contract, comply with the classification requirements in effect on the ption is exercised not later than 1 year after the contract to build the series was signed. ditional options, the date of "contract for construction" for such vessels is the date on which the pbuilder. The amendment to the contract is to be considered as a "new contract" to which 1. and intract for construction" of this modified vessel, or vessels, is the date on which revised contract	
Note: This Procedural Requirement applies from 1 July 2009.		