

SHIPYARD'S QUALITY SYSTEM INVOLVEMENT IN THE CLASSIFICATION PROCESS AT THE NEW CONSTRUCTION PHASE

BUREAU VERITAS MARINE & OFFSHORE

SHAPING A BETTER MARITIME WORLD

YOUR CLASSIFICATION PARTNER FOR TODAY AND TOMORROW

03 / 23



BUREAU
VERITAS



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VPM

IT Tool (Veristar Project
Management)

01

INTRODUCING BUREAU VERITAS

BUREAU VERITAS GROUP

Bureau Veritas helps its clients to improve their performance by offering services and innovative solutions to ensure that their assets, products, infrastructure and processes meet standards and regulations in terms of quality, health and safety, environmental protection and social responsibility.

**200
YEARS**

OF CLASSIFICATION
EXPERTISE

140

COUNTRIES

400,000

CLIENTS

80,000

EMPLOYEES

1,600

OFFICES AND
LABORATORIES

HELPING CLIENTS AND PUBLIC AUTHORITIES PROTECT CREW AND ASSETS

MISSION

To protect
clients' people,
assets,
passengers and
the marine
environment

100

FLAG STATE
ADMINISTRATIONS
Recognize Bureau Veritas
to approve ship security
plans, perform audits, and
issue international ship
security certificates

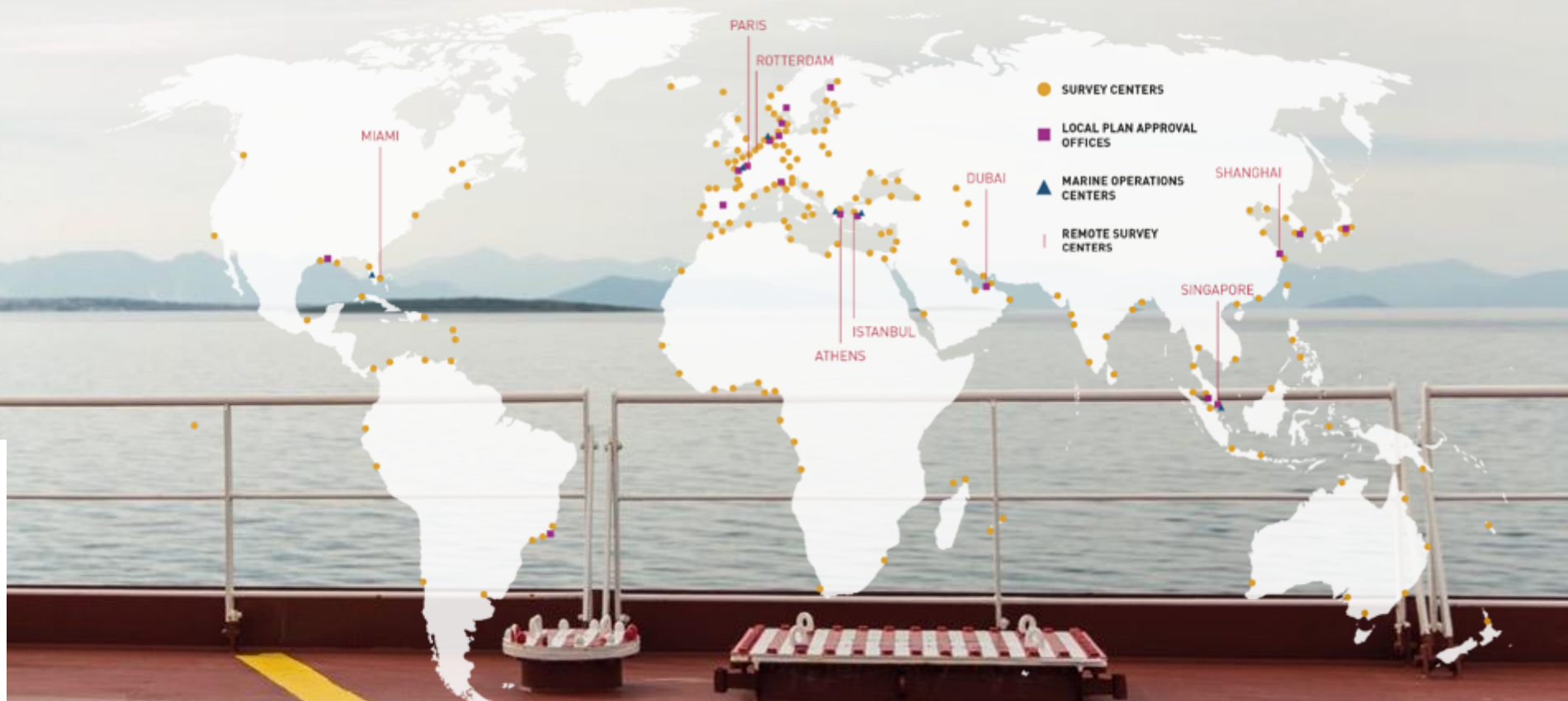
130

FLAG STATE
ADMINISTRATIONS
Delegate authority to
Bureau Veritas to verify
MARPOL and SOLAS
compliance

150

FLAG STATE
ADMINISTRATIONS
Trust Bureau Veritas to
perform statutory surveys
and audits on ships and
offshore units

MARINE & OFFSHORE ON HAND WORLDWIDE TO MEET OUR CLIENTS' CHALLENGES LOCALLY



KEY ASSETS

- Almost 200 years of **classification expertise** protecting lives and assets in challenging marine operating environments
- Leading expertise in the **complex marine LNG sector**
- Strong expertise in **smart ship technology and advanced services** for cyber security and resilience
- Committed to **minimizing impact** on oceans and atmosphere

2,650

M&O experts

180

Survey centers

18

Local plan
Approval offices

6

Marine
operations
Centers

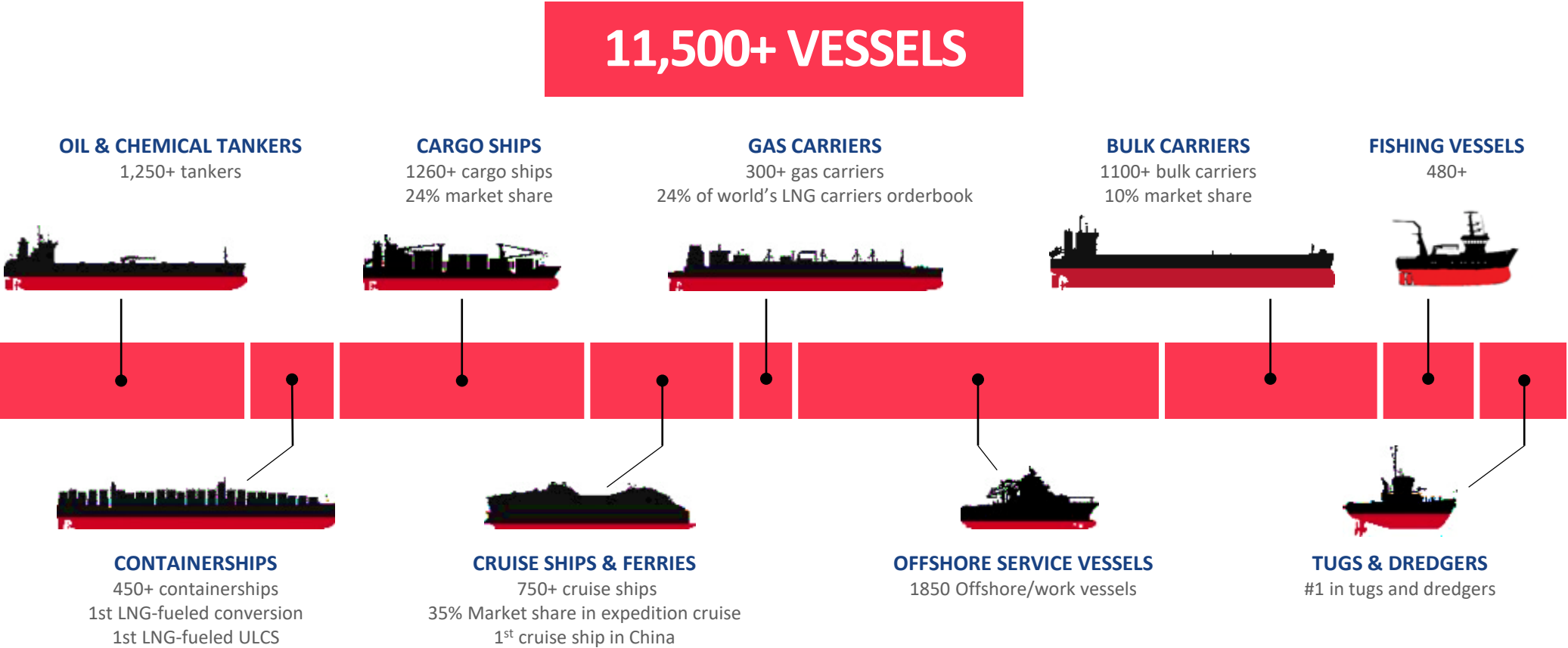
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Remote survey
Centers

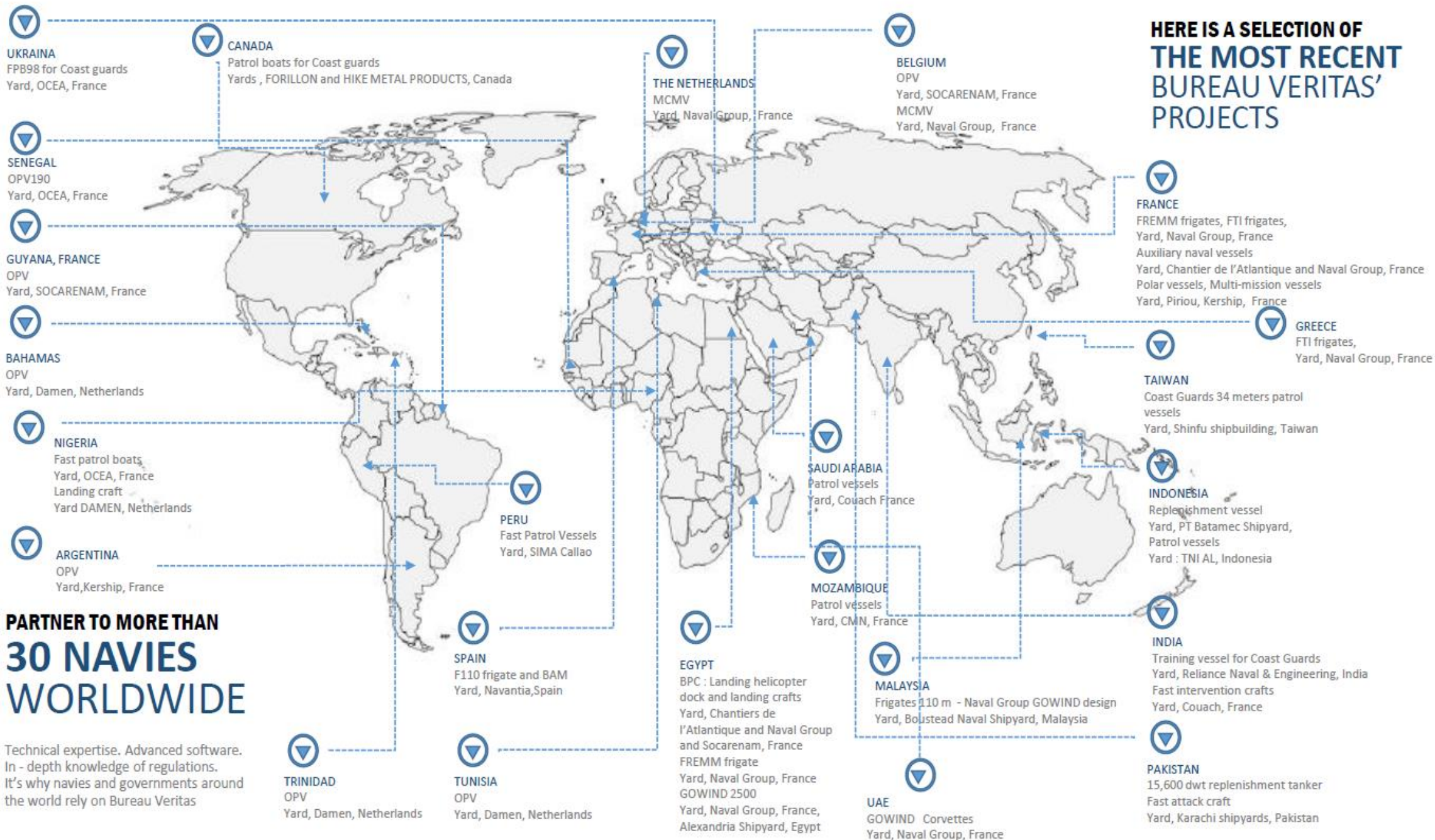
02

PROJECTS OF REFERENCE

A DIVERSE FLEET DEMONSTRATING EXPERTISE IN ALL TYPES OF VESSELS



Proportions shown reflect gross tonnage. Total GRT of BV classed fleet at 30.07.22: 142,250,000



HERE IS A SELECTION OF THE MOST RECENT BUREAU VERITAS' PROJECTS

PARTNER TO MORE THAN 30 NAVIES WORLDWIDE

Technical expertise. Advanced software.
In - depth knowledge of regulations.
It's why navies and governments around
the world rely on Bureau Veritas

REFERENCES FOR PRE-STUDIES

Preliminary review done for the French Frigates FDI (displacement 4460 tons), construction of the first one is starting (Naval Group)



Preliminary review done for the Egyptian Corvettes Gowind Egypt (displacement 2500 tons), construction of two last sisterships is going on (Naval Group)



Preliminary review done for the Spanish Frigates F110 MMPV (displacement 6100 tons), under construction (Navantia)



Preliminary review done for the Bulgarian Corvettes MMPV (displacement 1720 tons), project non continued on this basis (MTG Dolphin)



MILITARY PROJECTS - FRIGATES



→ Multi-Missions Frigate FREMM

- Naval Group, Lorient, France

- France:

Aquitaine, Provence, Languedoc, Auvergne & Bretagne, Normandie, + 2 FREDA

- Morocco:

FREMM Mohammed VI

- Egypt:

FREMM Tahya Misr (French frigate sold to Egypt)



→ FTI Frigate

- Naval Group, Lorient, France

- France (in construction)

- Greece (in construction)



→ F110 Frigate

- Navantia, Ferrol, Spain

- Spain

design in progress, construction of the 1st unit to be started

CORVETTES



→ GOWIND ® Egypt

- Naval Group (Fr), ASY (Egypt)
- Egypt:
 - El Fateh* delivered in 09/17 in Naval Group shipyard (ex DCNS, France)
 - 3 others to be built in Alexandria shipyard ASY (Egypt)



→ OPV 1900

- DAMEN Galati, Turkey
- Pakistan
 - Yarmook and Tabuk 2* Corvettes delivered in 2020



→ Fast Attack Craft

- Karachi Shipyard, Karachi, Pakistan
- Pakistan
 - 1 unit

AUXILIARY & AMPHIBIOUS VESSELS



→ 2 LHD

- STX France & Naval Group, Saint-Nazaire, France
- Egypt:
ENS ANWAR EL-SADAT & ENS GAMAL ABDEL NASSER
3 has been already done for the French Navy



→ 1 Replenishment Vessel

- Karachi Shipyard & Engineering Works Ltd, Karachi, Pakistan
- Pakistan:
PNS *MOAWIN* to be delivered soon



→ 1 Replenishment Vessel

- PT Batamec shipyard, Batam
- Indonesia
1 unit

MULTI-MISSIONS VESSELS



→ 4 BSAOM

- Piriou/Kership, Concarneau, France
- France:
 - B2M: D'Entrecasteaux, Champlain, Bougainville & Dumont D'Urville



→ 6 BAM

- Navantia, Ferrol, Spain
- Spain:
 - *Meteoro, Rayo, Relámpago, Tornado, Audaz, Furor*



→ 1 Polar Logistic Vessel

- Piriou, Concarneau, France
- France (TAAF & French Navy)
 - *L'Astrolabe* delivered in July 2017

OPV – OFFSHORE PATROL VESSELS



→ 3 PLG

- SOCARENAM, Boulogne/Mer, France
- France:
*La Confiance, La Résolue
La Combattante*



→ 1 STAN PATROL 5509

- DAMEN Shipyards Gorinchem, Netherland
- Hellenic CG:
 - *GAVDOS – ΛΣ 090*



→ 4 OPV

- Naval Group, Kership
- Argentina
 - *4 ships*

LANDING SHIPS



→ 4EDAR + 2LCAT

- CNIM & SOCARENAM, France
- France:
4 units
- Egypt:
2 units



→ 4 CMT

- STX France, Saint-Nazaire, FR
- Egypt:
- *4 units*



→ 1 LST 100

- DAMEN Schelde, The Netherlands
- Nigeria :
- *1 unit*

03

CLASSIFICATION

Classification rules

- NR467

Rules For the classification of steel ships

For ships designed close to merchant ships

(Jan 2023)

- NR483

Rules For the classification of Naval ships

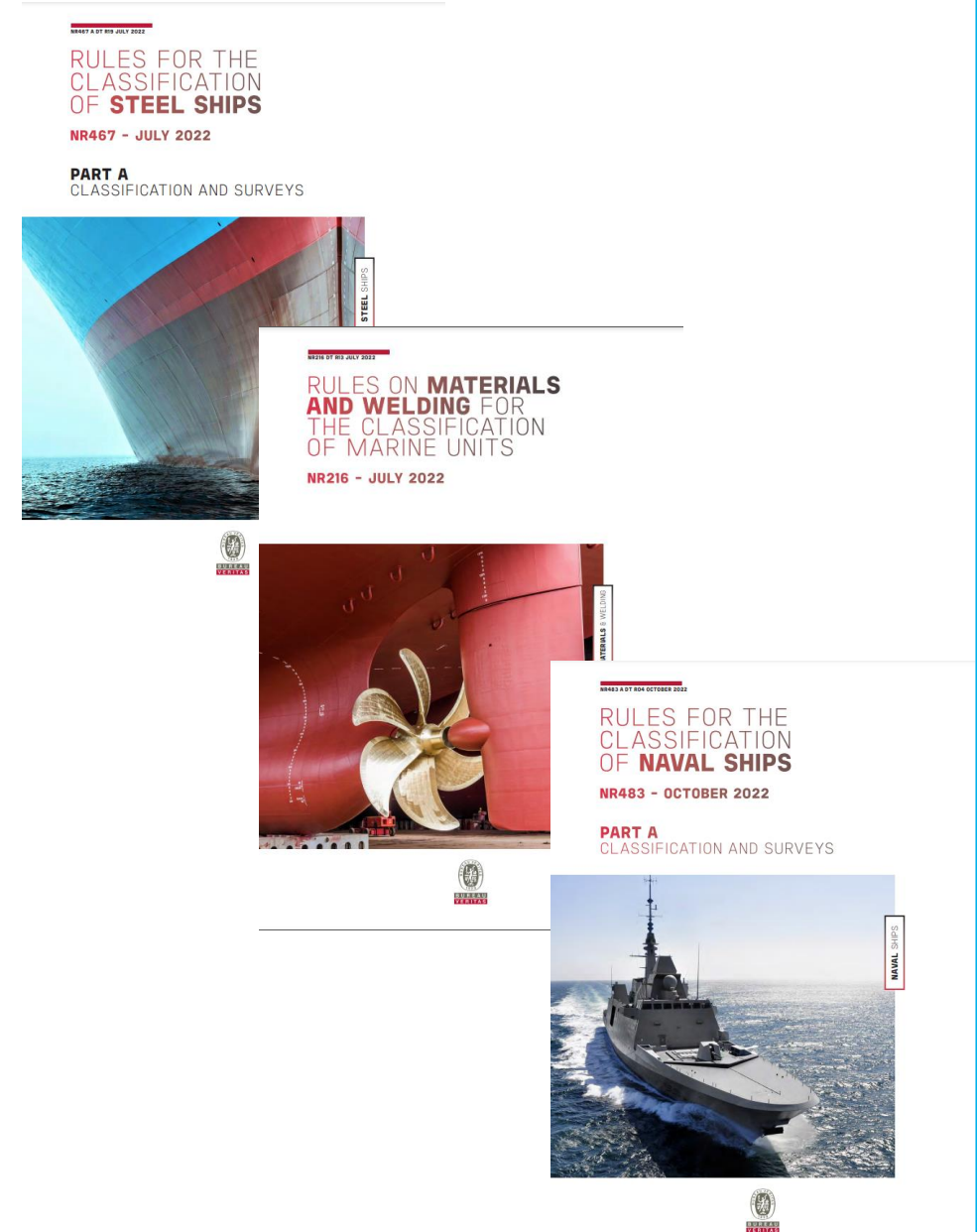
Last edition 2022

- NR217

Rules For the classification of inland navigation vessels

(Jun 2021)

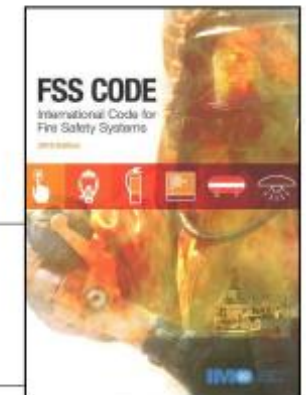
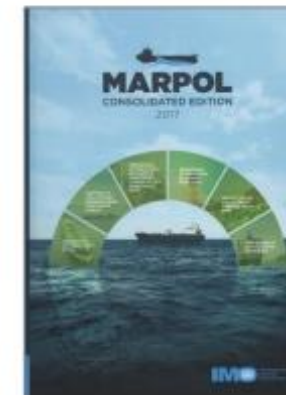
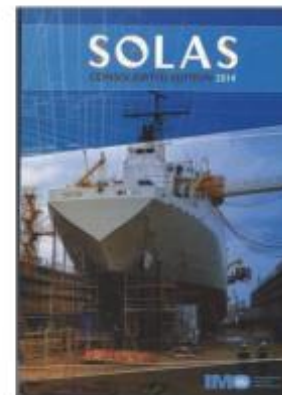
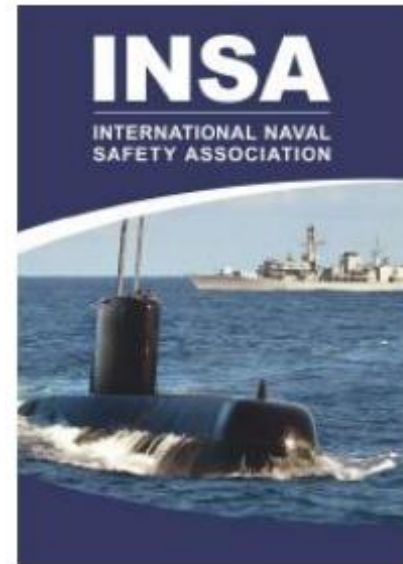
More than 140 technical publications
(Rules and guidance notes)



External references

Conformity to National and international regulations

- Delegations given by flags
- Compliance with IMO codes, SOLAS, MARPOL...
- BV is an IACS notified body recognized by 130 flags



BUREAU VERITAS CLASSIFICATION



DESIGN

- | Approval In Principle
- | Design Assessment
- | Joint Development Project
- | Advise On Imo Regulations
- | Advise On Notations
- | Advise On Approved Equipment

CONSTRUCTION

- | Request For Certificate
- | Plan Approval
- | Yard Inspection
- | Issue Compliance Certificates
- | Equipment Certification
- | Support Throughout The Construction Process
- | Surveys And Plan Approval Upon Delivery

IN SERVICE

- | Annual And Class Surveys
- | Unplanned Surveys
- | Issuance Of Certificates
- | Advise On Regulation Compliance Throughout Service Life

END OF LIFE

- | Administration Procedures To Withdrawn Class And Flag Certificates
- | Testing And Certification Of Materials

DESIGN

FROM CONCEPT TO CLASS APPROVAL

**DESIGN
ASSESSMENT**

**APPROVAL
IN PRINCIPLE**

**JOINT
DEVELOPMENT
PROJECT**

**ADVICE ON
EQUIPMENT
APPROVAL**

**ADVICE ON
STATUTORY
REGULATIONS**

**ADVICE ON
CLASS RULES
AND NOTATIONS**



CONSTRUCTION

FROM CONTRACT AWARD TO SHIP DELIVERY

PLAN APPROVAL

EQUIPMENT
CERTIFICATION

SURVEY AT YARD



IN SERVICE FROM DELIVERY TO END OF LIFE

ADVISE ON REGULATION
COMPLIANCE THROUGHOUT
SERVICE LIFE

PERIODICAL
CLASS SURVEYS

EQUIPMENT
CERTIFICATION

END OF LIFE

FROM END OF LIFE TO DISPOSAL

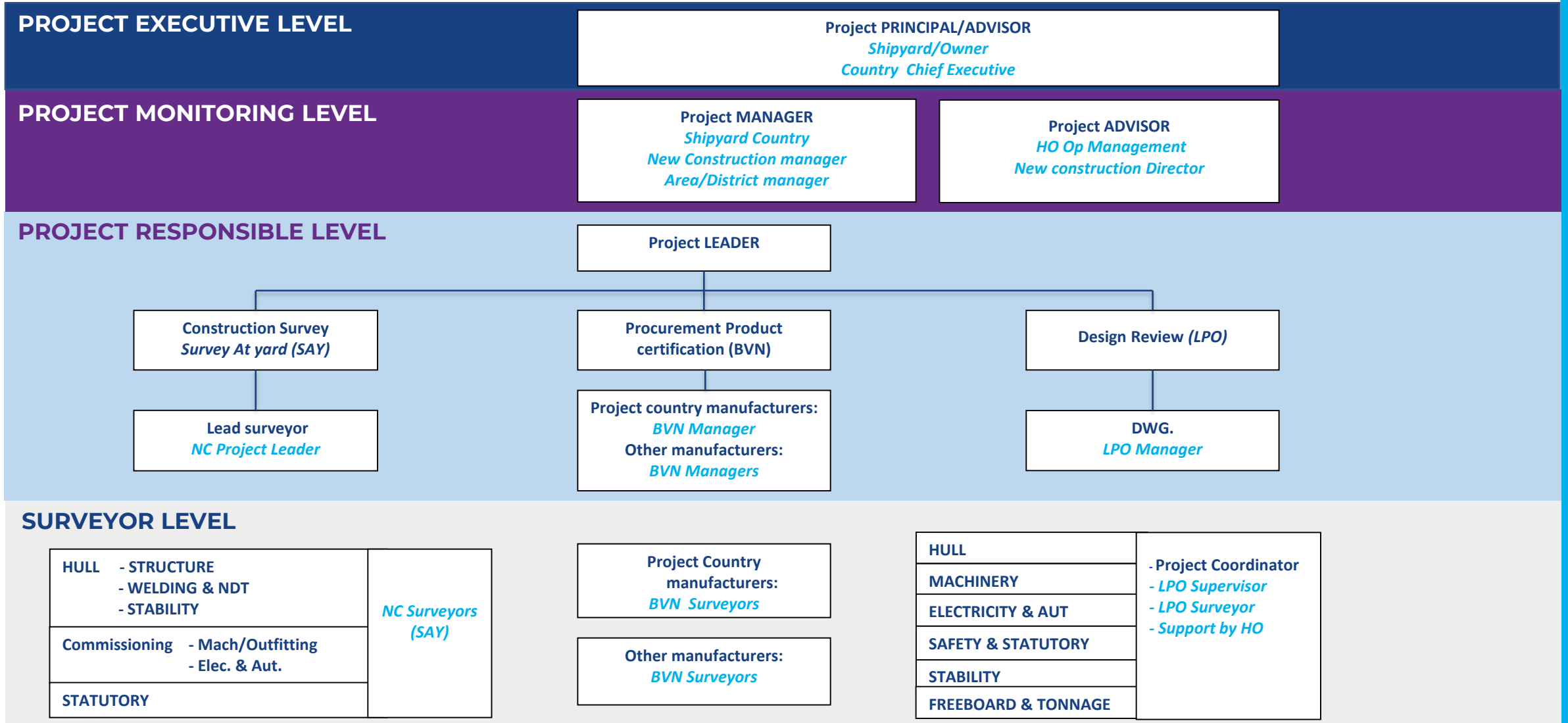
**ADMINISTRATION
PROCEDURES TO
WITHDRAW CLASS AND
FLAG CERTIFICATES**

**TESTING AND
CERTIFICATION
OF MATERIALS**

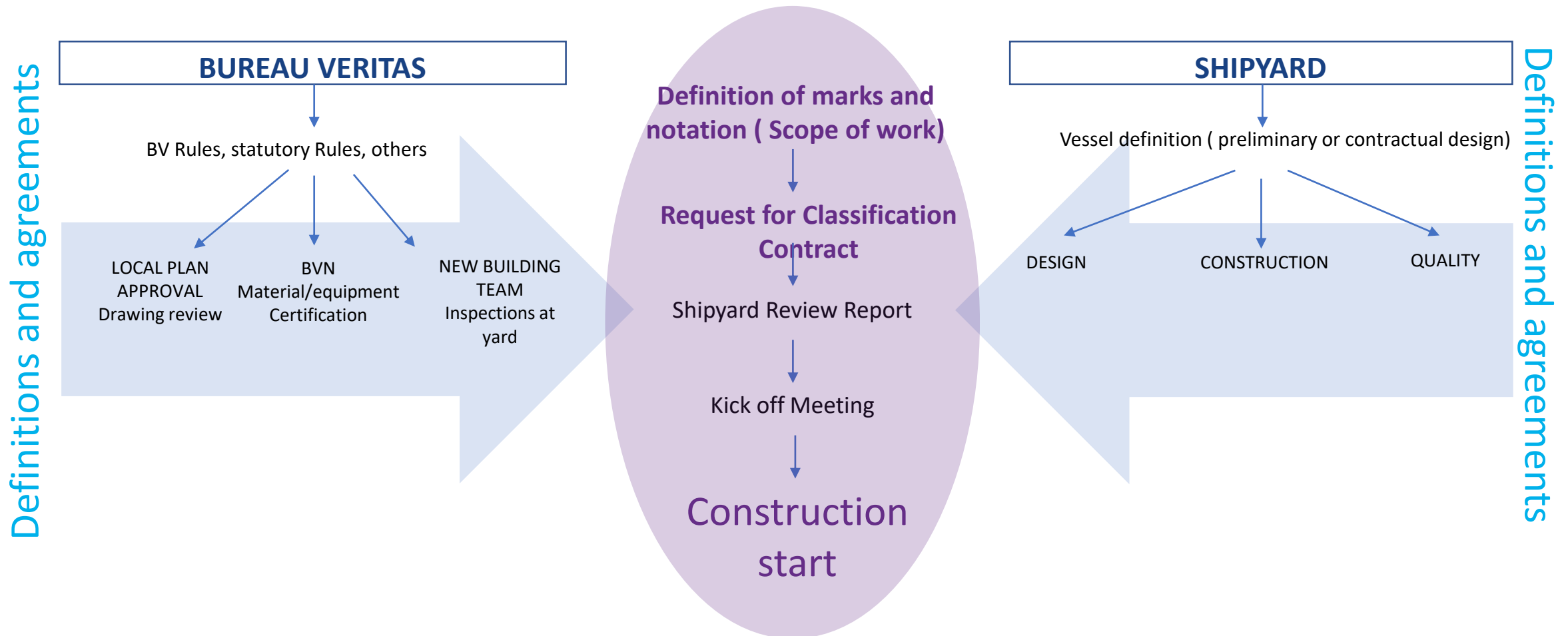
04

NEW CONSTRUCTION PROCESS

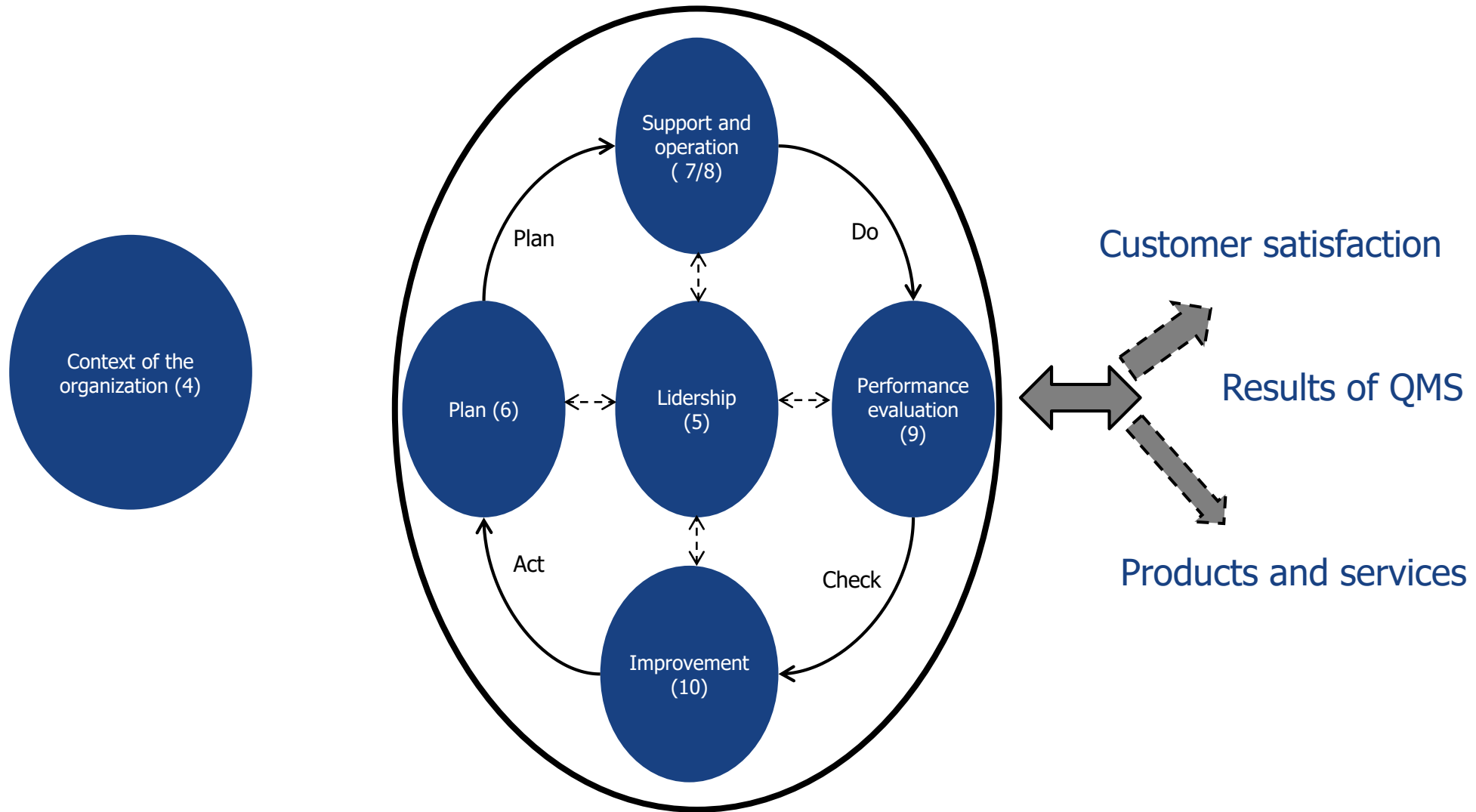
TYPICAL PROJECT ORGANIZATION



WORKFLOW AT PRE-PROJECT PHASE BETWEEN SHIPYARD AND BV



QUALITY MANAGEMENT SYSTEMS – ISO 9001



REQUEST FOR CLASSIFICATION



BUREAU
VERITAS

International Register for Classification of Ships - Established 1828

REQUEST FOR CLASSIFICATION

Newbuilding

REGISTER NB :

requests Bureau Veritas Marine & Offshore to proceed with the operations requi
classification of the hull and of the propelling machinery of the ship :

Shipbuilder :

Hull Nb : **H1844A** Ship Name :

with the following contemplated class :

Classification Symbol : **I**
Construction marks : **⊗ HULL ⊗ MACH**
Service notations : **Container ship LNGfuel dualfuel**
Navigation notation : **Unrestricted navigation**
Operating area notation(s) :
Special navigation notation :

Additional class notations and respective construction marks :

⊗ ESA	⊗ VeriSTAR-HULL CM
⊗ CPS(WBT)	⊗ GREEN PASSPORT EU
⊗ AUT-UMS	⊗ AUT-PORT
⊗ SYS-NEQ-1	⊗ MON-SHAFT
⊗ BWT	⊗ CLEANSHIP
⊗ ALP	⊗ ERS-S
⊗ HVSC	⊗ LASHING-WW
⊗ LI-LASHING	⊗ WhiSp2
⊗ INWATERSURVEY	⊗ SDS
⊗ LI-HG-S2	

Other classification society, if dual class :

Type and Service : **Container ship**

Shipbuilder :

Leadership : **41305Y**

Registered Owner :

Flag : **FRANCE**

BV District : **SHANGHAI**

The class notations are assigned according to the type, service, operating area of the ship and other criteria which have been provided by the interested party, when applying for classification.

Class symbol indicates the degree of compliance of the ship with the rule requirements as regards its construction and maintenance.

Construction marks identifies the procedure under which the ship and its main equipment or arrangements are to be surveyed for initial assignment of the class. It is assigned separately to the hull of the ship and its appendages, to the machinery installation, and to some other installations for which an additional classification notation can be added.

Service notation defines the type and/or service of the ship which it is considered for its classification.

Additional service features gives further precision regarding the type of service of the ship (as applicable).

Navigation notations and operating area notations are assigned to limit operational zone (as applicable).

Additional class notations specify the classification of additional equipment or specific condition/installation (as applicable).


REQUEST FOR CLASSIFICATION

Other topics:

- Definition of applicable rules (date of contract)
- Series, pure/quasi sisterships

Technical contract

- Scope of service (Marks and notations)
- General conditions
- Statutory Certificates/ Attestations
- General description vessel characteristics



Bureau Veritas Marine & Offshore


ANNEX TO REQUEST FOR CLASSIFICATION

REQUEST FOR STATUTORY SURVEYS AND OTHER SERVICES

Shipbuilder :
Hull Nb : **H1844A** Ship Name :

Statutory certificates

	Yes	No
Load Line	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With the special marks for the stowage of timber deck cargo :	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diving System Safety Certificate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOC For Non-Convention Ship - French regulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Safety Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Safety Equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Safety Radio	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Passenger Ship Safety Certificate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Safety Construction Harmonized	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Safety Equipment Harmonized	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Safety Radio Harmonized	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Special purpose ship safety certificate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOLAS Cargo Ship Safety Certificate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SOLAS Dangerous goods	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Korean Ship Survey Certificate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Polar Code Safety Cargo Ship Certificate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Polar Code Safety Passenger Ship Certificate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MARPOL Annex I	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MARPOL Annex II Noxious Liquids	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MARPOL Annex IV Sewage certificate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MARPOL Annex V Garbage Statement of Compliance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MARPOL Annex VI Prevention Air Pollution Certific.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MARPOL Annex VI IEE Certificate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
International Ballast Water Management Certificate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IMO Fitness IGC Code	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hong Kong Convention	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IMO Fitness IBC Code	<input type="checkbox"/>	<input checked="" type="checkbox"/>
EU Certificate on Inventory of Hazardous Materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marpol Annex VI SEEMP Pt II Confirm. of Compliance	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Bureau Veritas Marine & Offshore

ANNEX TO REQUEST FOR CLASSIFICATION

GENERAL DESCRIPTION OF THE HULL (1)

Shipbuilder
Hull Nb : **H1844A** Ship Name :

SCHEDULE (Day Month Year)

Steel Cutting :	27 / 02 / 2023	Launching :	07 / 02 / 2024
Keel Laying :	10 / 10 / 2023	Delivery :	30 / 06 / 2024
Declared date of contract prospective owner x shipbuilder : 30 / 04 / 2021			

HULL

Length (BP) :	330.36 m	Length (overall) :	336.00 m
Breadth Moulded :	51.00 m	Maximum Draft :	15.50 m
Freeboard :	mm		

Depth (Moulded) top of keel to top of :

upper deck beam at side :	26.80 m
freeboard deck :	m
upper most deck covering at least 70% of LPP :	26.80 m

LBC : **459245**

Gross Tonnage (69) estimated : **123996**

Hull material : **Steel**

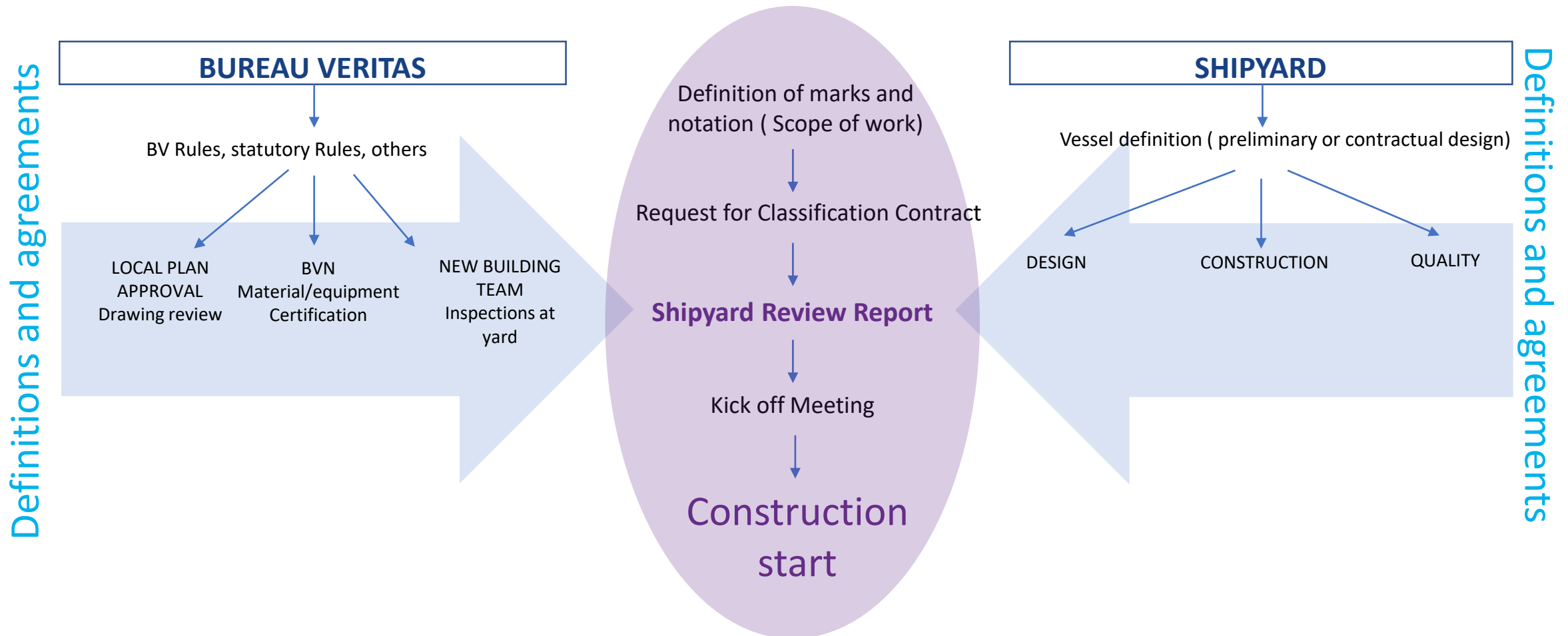
CARGO CAPACITY AND HANDLING

Containers dimensions :

Deadweight : **145650**

(1) For information only and without prejudice

WORKFLOW AT PRE-PROJECT PHASE BETWEEN SHIPYARD AND BV



SHIPYARD REVIEW REPORT

- ▶ Detail of any management systems : ISO standards or others
- ▶ Construction facilities : identification
 - ✓ Building Berth or Dock (name, dimensions, capacity (GT), cranes)
 - ✓ Outfitting quays (name, dimensions, berthing capacity (GT), cranes)
 - ✓ Main fabrication and erection facilities
- ▶ Shipyard control of qualified welders for shipyard workers and/or subcontracted workers (certification, traceability, supervision, maintenance of qualification)
- ▶ Feature of construction procedure
 - ✓ Subcontract of hull blocks (weight):
 - ✓ Method of plate block assembly
 - ✓ Pre-erection outfitting carried out, grand block/mega block adopted & method of erection at building berth/dock: max weight of loading block (tons)
 - ✓ Final dock
- ▶ Quality Control System
 - ✓ Organization chart
 - ✓ Quality control organization
 - ✓ Pre-inspection system of shipyard
 - ✓ Record of inspections and test
 - ✓ Condition at the time of surveys with class society

SHIPYARD REVIEW REPORT

- ▶ Measures for safety and health
 - ✓ Conditions of scaffolding, nets
 - ✓ Radiographic examinations

- ▶ Control system of Non-Destructive Examinations (NDE)
 - ✓ Number of NDE supervisor
 - ✓ Any subcontractor (employers, qualifications)
 - ✓ Grade of qualifications at yard (radiography, ultrasonic, surface detection)
 - ✓ Equipment for NDE (if any)

- ▶ Quality control on Production Line
 - ✓ Preventing measures for misuse of materials
 - ✓ Shot blasting/primer coating
 - ✓ Marking and cutting (assembly work)
 - ✓ Control welding procedure
 - ✓ Treatment of resinous NC
 - ✓ Hydrostatic and watertight test

SHIPYARD REVIEW REPORT

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Bureau Veritas Marine & Offshore

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Report number: SRM 2859-REV.2

SHIPBUILDER REVIEW REPORT

The undersigned J. Ma Marine surveyor to Bureau Veritas Marine & Offshore visited the facilities of above mentioned shipbuilder on 21 Feb 2022, to perform a general review. The result is included in the attached Record, supplemented by the following information:

1. General situation

No additional information.

2. Summary of facilities

No additional information.

3. Welder / WPS / NDT

No additional information.

4. Method of construction/launching

No additional information.

5. Management system

No additional information.

6. Material treatment and storage

No additional information.

7. Technical support

No additional information.

Above review is not an audit of Quality System Management of the shipbuilder. Based on IACS URZ23 related to review of shipbuilder's construction facility, it is intended to assist BV to deal with the surveys of the new building project as stipulated in the Request for Classification signed by the Shipbuilder.

Attachment: The attached Record, IACS URZ23 Appendix1 for Shipbuilder Review, is part of this report.

Issuance date: 03 Mar 2022



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U010RM1 - June 2017

Z23
(cont)

2.3 Main Fabrication and Erection Facilities

(1) Marking and cutting of steel plates (including internal members)	
- Marking method	(Manual, Photo x __, EPM x __, NC x __ others __)
- NC cutting machine	(Gas x __, Plasma x __, Laser x __)
	Control procedure of NC (On-line, __ other)
- Cutting equipment	(Edge planer x __, Roll-shear x __)
(2) Marking and cutting of section bar	
- Marking method	(Manual, NC)
- Marking of reference curved line	(Manual, NC)
- Cutting method	(Manual, NC)
- In case of NC	(Gas x __, Plasma x __)
(3) One-side automatic welding machine (Yes, No)	
- Type of welding machine	(Flux Backing x __, Flux and Copper Backing x __ other __)
- Existence of special surface plate for plate welding	(Yes, No)
(4) Fillet welding machine (Gravity, Automatic) Percentage of automatization except gravity: about __%	
- Line Welder	(No, Yes: submerged arc x __ heads, CO ₂ x __ heads)
- Small automatic fillet welding machine	(No, Yes: Name: __ x __)
- Welding robot	(No, Yes: Portal x __, Rectangular x __, Articulated x __)
(5) Painting equipment	
- Plate shot blasting/primer coating machine	(No, Yes: Max. Width __ m, Length __ m)
- Section bar shot blasting/primer coating machine	(No, Yes: Max. Length __ m)
- Special coating factory	(No, Yes: __ m x __ m x __ sections)
(6) Vertical automatic welding machine (No, Yes: EG x __, SEG x __, ES x __)	
EG: Electrogas SEG: Simplified Electrogas ES: Electroslag	
(7) Other main fabrication facilities	

SHIPYARD REVIEW REPORT

Z23
(cont)

3. Shipyard Control of Qualified Welders

(1) Normal steel

		certification	traceability	supervision	maintenance of qualification
Shipyard workers	confirm system in place	Yes / No	Yes / No	Yes / No	Yes / No
Subcontracted workers	confirm system in place	Yes / No	Yes / No	Yes / No	Yes / No

4. Feature of Construction Procedure

<p>(1) Subcontract of hull blocks (weight)</p> <ul style="list-style-type: none"> - Sub members (No, Yes: Ratio of subcontracted works ____ %, No., of subcontractors ____) - Blocks (No, Yes: Ratio of subcontracted works ____ %, No., of subcontractors ____)
<p>(2) Method of plate block assembly</p> <ul style="list-style-type: none"> - Method fitting and welding longitudinals and transverse webs on jointed panels - Method welding longitudinals on jointed panels prior to fitting and welding transverse webs - Method fitting and welding a frame consists of longitudinals and transverse webs on jointed panels - Method jointing panels with pre-assembled longitudinals by welding prior to fitting and welding transverse webs - Other (please specify in (5) below)
<p>(3) - pre-erection outfitting carried out</p> <p>grand block/mega block adopted</p> <p>Method of erection at building berth/dock</p> <ul style="list-style-type: none"> - Max. weight of loading block: ton - Construction method in building dock/berth/land construction etc. (1 ship, 1.5 ships: Semi-tandem, dual entrance) - Block loading process (single starting block, multi starting blocks, inserting block: No, Yes)
<p>(4) Final dock (No, Yes: In-house, Other place of the same company, Use other company)</p>
<p>(5) Other feature of construction procedure</p>

Z23
(cont)

5. Quality Control System: (Refer to Quality Manual, if available.)

Item and description	Result	Remarks
<p>(1) Existence of the organization chart including the departments of design, purchasing, manufacturing and quality assurance</p> <ul style="list-style-type: none"> - Are the function, responsibility and competence of the organization clear? 		
<p>(2) Quality control organization</p> <ul style="list-style-type: none"> - Existence of quality control organization - Number of employees in this organization - Existence of procedures or plans related to tests and inspections 	<p>_____ persons including the chief</p>	
<p>(3) Pre-inspection system of shipyard</p> <ul style="list-style-type: none"> - Is pre-inspection carried out prior to Class inspection? - Are pre-inspectors assigned? (Check the list.) - Number of pre-inspectors (related to hull only) - Are inspection results marked on the object and/or recorded in the checklist? 	<p>_____ persons</p>	
<p>(4) Records of inspections and tests</p> <ul style="list-style-type: none"> - Are records made and kept properly? - Does the responsible person verify the records? - Can the adoption of necessary corrective actions against non-conformity happened be checked? 		
<p>(5) Condition at the time of the surveys in the presence of class surveyors</p> <ul style="list-style-type: none"> - Is the schedule of the surveys changed often? - Are pre-inspection, shipyard inspection and repairs completed beforehand? - Are the sufficient preparations for surveys such as scaffoldings, lighting, cleaning made? 		
<p>Note: Above-mentioned (3) and (4) include the acceptance inspection of subcontracted items.</p>		

SHIPYARD REVIEW REPORT

Z23
(cont)

6. Measures for Safety and Health

Item and description	Result	Remarks
(1) Are conditions of scaffolding, nets, safety belt, lighting and ventilation good?		
(2) Does sufficient attention paid for radiographic examination and operation of cherry picker?		
Note:		

7. Control System of Non-Destructive Examination (NDE)

Item and description	Result	Remarks
(1) Number of NDE supervisors in shipyard (including persons responsible for judging results)	____ persons	
(2) Dependence on subcontracted NDE work <ul style="list-style-type: none">Number of shipyard employeesNumber of sub-contractors	____ persons ____ persons	
(3) NDE sub-contractor company's name and official technical qualifications	Name _____ (approved by) _____ Name _____ (approved by) _____	
(4) Grade and number of NDE employees with official technical qualifications in shipyard <ul style="list-style-type: none">Specialized in radiographySpecialized in ultrasonicSpecialized in surface detection	____ Grade ____ persons ____ Grade ____ persons ____ Grade ____ persons	
(5) If non-destructive examinations are subcontracted, the grade and number of officially qualified persons <ul style="list-style-type: none">Specialized in radiographySpecialized in ultrasonicSpecialized in surface detection	____ Grade ____ persons ____ Grade ____ persons ____ Grade ____ persons	
(6) Non-destructive examination equipment (in house) <ul style="list-style-type: none">Number of radiographic equipmentNumber of ultrasonic equipment	_____ _____	
Note: Even if all works are subcontracted, it is recommendable to attach the qualified person(s) who can verify the works.		

Z23
(cont)

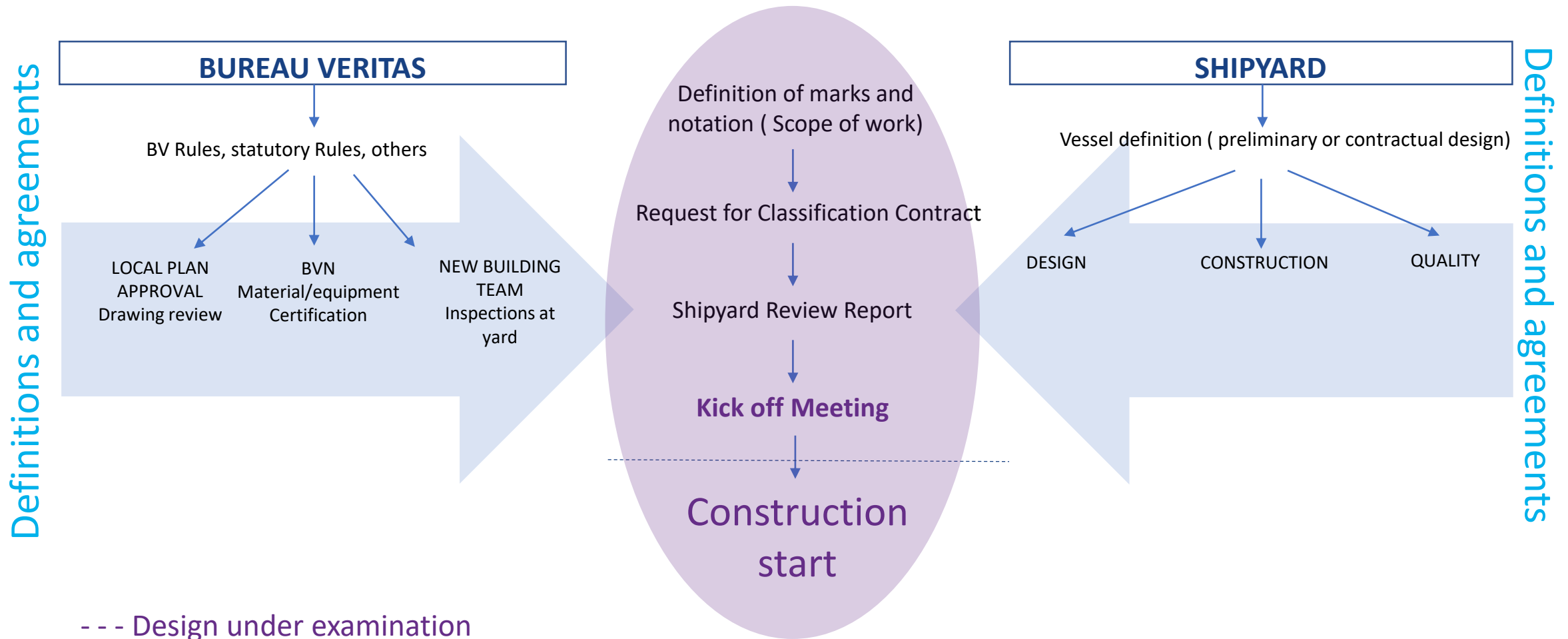
8. Quality Control on Production Line

Item and description	Result	Remarks
8.1 Preventative measures for misuse of materials		
(1) Job title of supervisor and person in charge of collating ordered steel and received steel, and checking of mill sheet	Title of supervisor: _____ Title of person in charge: _____	
(2) Are means for checking the material grade in hand prescribed for high-grade steels		
(3) Are regulations prescribed for checking the material grade for high-tensile steel for low-temperature applications? Are there regulations for inscribing high tensile steel on the surface of the high tensile steel and special indication for steel for low temperature applications?		
(4) Are procedures for re-using of remaining cut-off mild steel?		
(5) Are there procedures for re-using of remaining cut-off high-tensile steel?		
(6) In the case of (4) and (5) above, can a collation be made with the mill sheet?		
(7) Section of controlling the lists of remaining cut-off steel	Name of section: _____	
Note: <ul style="list-style-type: none">In case of high tensile steel, are means identifying different gradesIn the case of (3) and (4) above, are the materials approved by other classes controlled similarly?		
8.2 Shot blasting/Primer coating		
(1) Existence of surface preparation standards		
(2) Existence of coating thickness control standards <ul style="list-style-type: none">Existence of thickness measurement records		
Note: <ul style="list-style-type: none">The standard is to include the description related traceability after shot blasting and primer coating.		
8.3 Marking and cutting (Assembly work)		
(1) Existence of standards for accuracy and periodical inspection of tape measures, tapes, stencils, etc.		
(2) Existence of standards for accuracy of cut dimensions and edge preparation		
(3) Existence of standards for finish of cutting face		
(4) What is the frequency and extent of maintenance and inspection carried out for ensuring accuracy of NC cutter and/or flame planer?		

Z23
(cont)

Item and description	Result	Remarks
(5) In case of NC, are the disks, tapes etc. maintained in good condition?		
(6) What are the measures adopted and guidance given to make the worker fully conversant with cutting work standards for maintaining accuracy?		
Note: <ul style="list-style-type: none">In case of (2) and (3) above, check items are to include confirmation of edge preparations free from piercing hole.NC for section bars is also to be in accordance with the above.		
8.4 Bending and strain free		
(1) Existence of standards for maximum heating temperatures during water cooling and at the time of bending and distortion removal of steel by quick heating and cooling		
(2) Existence of regulations for plate thickness and bending radius for flange processing		
(3) What are the measures adopted and guidance given to make the worker fully conversant with maintaining quality and accuracy during the bending process?		
Note:		
8.5 Control of welding procedure		
(1) Are all welding procedures applied to the ships approved by the Society or other IACS members?		
Note:		
8.6 Treatment of serious non-conformities		
(1) Are repair plans submitted to the Society when serious non-conformities happened?		
(2) Were the NDE (RT/UT) plans submitted at appropriate timing?		
(3) Was the extent of tests extended considering the results of the test?		
Note:		
8.7 Hydrostatic and watertight tests		
(1) Is the test plan submitted to the Society?		
(2) Are vacuum tests applied to?		
(3) Are local air injection tests during sub-assembly works applied to?		

WORKFLOW AT PRE-PROJECT PHASE BETWEEN SHIPYARD AND BV



KICK OF MEETING

KICK OFF MEETING RECORD					
SHIP NAME		BV Reg. N°		LEADER SHIP BV N°	
SHIP BUILDER		SHIPYARD		HULL N°	
OWNER		FLAG		MEETING DATE	
NAME & POSITION	SIGNATURE	NAME & POSITION	SIGNATURE	NAME & POSITION	SIGNATURE
Contract date (PR29)		(To be documented by Shipyard declaration)			
Scheduled Steel Cutting	Scheduled Keel Laying	Scheduled Launching	Scheduled Sea Trial	Scheduled Delivery Date	
Item	Description RFC / Contract review		Agreement		Remark
Class symbol and Construction marks					
Service notations and Navigation notations					Survey and class Requirements
Additional service feature SMART(), SW-Registry, CBM.					Software registry and compliance with UR E22. Survey requirements
Additional class notations (i.e. if ALM/ALP list of covered items to be agreed)					Survey and class requirements
Additional following class notations CYBER, BIORISK, GREEN PASSPORT (EU), CONF-NOISE, CONF-VIB					Survey and class requirements

KICK OF MEETING

KICK OFF MEETING RECORD					
SHIP NAME		BV Reg. N°		LEADER SHIP BV N°	
SHIP BUILDER		SHIPYARD		HULL N°	
OWNER		FLAG		MEETING DATE	
Statutory Surveys as per RFC within the scope of the following certificates (verify flag authorization)				Survey requirements , Statutory Check Lists	
Additional requirement for following Flag: CANADA (See BV Canada) FRANCE (See DO-NCM)				Survey requirements , Compulsory involvement of BV Canada at early stage for CANADA Flag.	
Other Surveys for issuance of the following attestations				Survey requirements	
Items / Agenda	Description or Detail of discussion, BV Proposal	Agreement, Reply or Action by		Remark / Conclusion Follow-up / Due date	
Applicable rules: BV Rules, Statutory Rules, Flag Rules (to be available at the Shipyard).	Documents to be enclosure: list of applicable rules and regulation according to contract date and or statutory milestones. Copy of Flag instructions (i.e. TNS 18)				
List of drawings and documents to be submitted (drawings as per rules, list available in VPM)	To be submitted to PL for follow up				
List of Materials and Equipment to be certified by the Society (List available in VPM or NR266)	Separate list preparation according to the project equipment				

KICK OF MEETING

KICK OFF MEETING RECORD					
SHIP NAME		BV Reg. N°		LEADER SHIP BV N°	
SHIP BUILDER		SHIPYARD		HULL N°	
OWNER		FLAG		MEETING DATE	
Statutory Materials and Equipment to be certified (list available in VPM or NR266)					
Review of the construction facilities. (to be updated if necessary in VPM)					
List of Subcontractors with contacts to be provided by the Builder (design, hull construction, NDT, machinery, electricity, etc)					
Builder to provide Surveyor's contact during the construction (address, mobile, fax, e-mail, organization chart, etc)					
Circulation and distribution of drawings and documents between Builder/Shipyard and the Society to be agreed upon					
Society intervention procedure to be agreed upon: Intervention form, notification time. Shipyard is to perform their own inspection prior to Society survey. Safety during survey					

KICK OF MEETING

KICK OFF MEETING RECORD					
SHIP NAME		BV Reg. N°		LEADER SHIP BV N°	
SHIP BUILDER		SHIPYARD		HULL N°	
OWNER		FLAG		MEETING DATE	
Inspection plan (Witness and notified points etc.) to be submitted by the Builder for Society consideration					
Unscheduled or Patrol inspections (the Society may perform patrol inspections at any time during the construction). Shipyard is to give free access on board and in workshops to Surveyor. The Society is to inform of likely intervals for patrol activities	Patrol Plan				
Process to issue and clear non-conformities on reviewed drawings and those raised during surveys is to be agreed upon					
Shipyard fabrication standard IACS recommendation 47 or a recognized fabrication standard (RFS) accepted by the Society					

KICK OF MEETING

KICK OFF MEETING RECORD					
SHIP NAME		BV Reg. N°		LEADER SHIP BV N°	
SHIP BUILDER		SHIPYARD		HULL N°	
OWNER		FLAG		MEETING DATE	
Quality meetings with the Builder/Shipyard when deemed necessary. Subjects such as (but not limited to): additional survey, missing drawings or certificates, pending remarks etc. Minutes to be recorded					
Documents given to the Builder during the kick-off meeting: any documents deemed necessary such as (but not limited to): The list of drawings and materials to be certified or NR476, Approval Testing of Welders					
Documents requested from the Builder during the kick-off meeting such as (but not limited to): Block plan. Inspection plan, NDT plan and reports, WPS and WPQR, Tank test list					

KICK OF MEETING

KICK OFF MEETING RECORD					
SHIP NAME		BV Reg. N°		LEADER SHIP BV N°	
SHIP BUILDER		SHIPYARD		HULL N°	
OWNER		FLAG		MEETING DATE	
Documents requested from the Builder before ship delivery such as (but not limited to): Commissioning and test records, dock trial records, sea trials records					
Documents issued to the Builder/Client at ship delivery such as (but not limited to): class and statutory certificates, attestations					
Plan approval locations					
Miscellaneous: - PSPC - Asbestos attestation - Steering gear test - Tank test plan - Greenpassport - Others					

KICK OF MEETING

► Description of RFC

- ✓ Class symbols and construction marks (which define the scope of the work to be performed from BV for drawing review and inspections at yard)
- ✓ Service notations and navigation notations
- ✓ Additional service features /Additional class notations
- ✓ Statutory surveys as per agreed in RFC within the scope of the required certificates (verification of flag authorization/delegation, if applicable)
- ✓ Other surveys for issuance of the specific attestations

► Agreements to be done between Shipyard and BV

- ✓ **Applicable rules: BV rules, statutory/flag rules (to be available at the Shipyard)**
- ✓ **List of drawings and documents.**
 - ✓ List of pending Design Review comments
 - ✓ Main & revision drawings will be reviewed by BV (HO and LPOs).
 - ✓ All test procedures to be reviewed by Project Leader
- ✓ **List of Materials and Equipment to be certified**
 - ✓ List of materials and equipment to be certified by BV and/or Administration.
 - ✓ BV will check at least 1-2% of all steel plates and pipes materials and equipment which are going to be used for this project for certification of the material.
 - ✓ Material / equipment certificates to be available before each concerned survey.
 - ✓ BV will check 100% of the submitted certificates for validity and consistence

KICK OFF MEETING

- ✓ **Statutory materials and equipment to be certified**
- ✓ **Review of the construction facilities. (if update need to be done)**
- ✓ **List of Subcontractors with contacts to be provided**
 - ✓ List of outside subcontractors involved in hull/outfitting fabrication for the project (including their work scope to be submitted to BV)
- ✓ **Society intervention procedure to be agreed**
 - ✓ Shipyard is asked to perform their own verifications before official inspection to avoid any failures during inspection.
 - ✓ Notifications timing from Shipyard to BV for inspection shall be agreed
- ✓ **Shipyard main contacts for BV Team**
- ✓ **Circulation and distribution of drawings/documents between Builder/ Shipyard and BV**
- ✓ **BV intervention procedure to be applied: Intervention form, notification time, shipyard inspections prior to BV survey, safety conditions during surveys**
- ✓ **Inspection & Test Plan (ITP) to be submitted by the Builder**
 - ✓ Notification, Hold, Witness, Review, etc...
 - ✓ Surveys will be carried out according to the ITP agreed on with the builder
 - ✓ Statutory surveys will be carried out using the checklists as delegated by the flag. (SOLAS, MARPOL, ADN, ESTRIN,etc)

KICK OFF MEETING

✓ **Unscheduled or Patrol inspections (Second part of KoM)**

- ✓ BV surveyors shall perform unscheduled inspections at any time during the construction
- ✓ Shipyard once informed is to give the surveyor free access onboard / Workshops, etc...
- ✓ BV will perform the following types of patrol survey (list not exhaustive):
 - ✓ Welding process, welding consumables, welder qualification, welding procedures, welding equipment, welding environment, welding supervision, welding surface discontinuities, welding embedded discontinuities)
 - ✓ Survey of Surface preparation, Fit-up, Alignments and so on
 - ✓ Steelwork process, e.g. sub assembly, block
 - ✓ NDE conformity verification
 - ✓ Machinery, piping and accessories installation on board
 - ✓ Electrical installation on board
 - ✓ Passive fire protection, penetrations of fire boundaries and fire draft stops
 - ✓ Corrosion protection systems (antifouling systems, application of protective coating for dedicated seawater ballast tanks)
 - ✓ Patrol survey for confirmation of compliance with the statutory check lists for the items not included in the ITP

✓ **Process to issue and clear non-conformities on reviewed drawings and result of inspections**

✓ **Shipyard fabrication standard**

- ✓ Structural fabrication is to be carried out as per shipyard standard or national standards accepted by the Society

✓ **Quality meetings with the Shipyard when deemed necessary**

- ✓ Quality meeting will be held by the request of one of the parties when ever it is necessary.
- ✓ Minutes of meetings will be recorded and agreed between both parties.

KICK OFF MEETING

✓ Documents requested from the Shipyard during the kick-off meeting

1. Project schedule and milestones
2. Inspection and Test Plan
3. NDT plan with procedure
4. Block division plan with detail
5. List of Welder & NDT Operator (every 6 months)
6. List of applicable WPS(WPQR) inc. Welding consumables
7. NDE Equipment Calibration records
8. General arrangement drawing
9. Shipyard Organization charts(Design/QM/HSE)
10. On board Test Procedure inc. Mooring,Sea & Gas trials

✓ Documents requested from the Builder before ship delivery , such as (but not limited to): commissioning and test records , dock trial records , sea trial records

✓ Documents issued to the Builder/Client at ship delivery , such as (but not limited to): class and statutory certificates , attestations

✓ Plan Approval office

✓ Miscellaneous as PSPC ,Asbestos attestation, Steering gear test, Tank test plan, Green passport, Ship Construction File, Others

RESULT OF PRE-PROJECT PHASE

Quality Management Systems

Context of the organization (4)

Needs and expectations of interested parties (4.2)

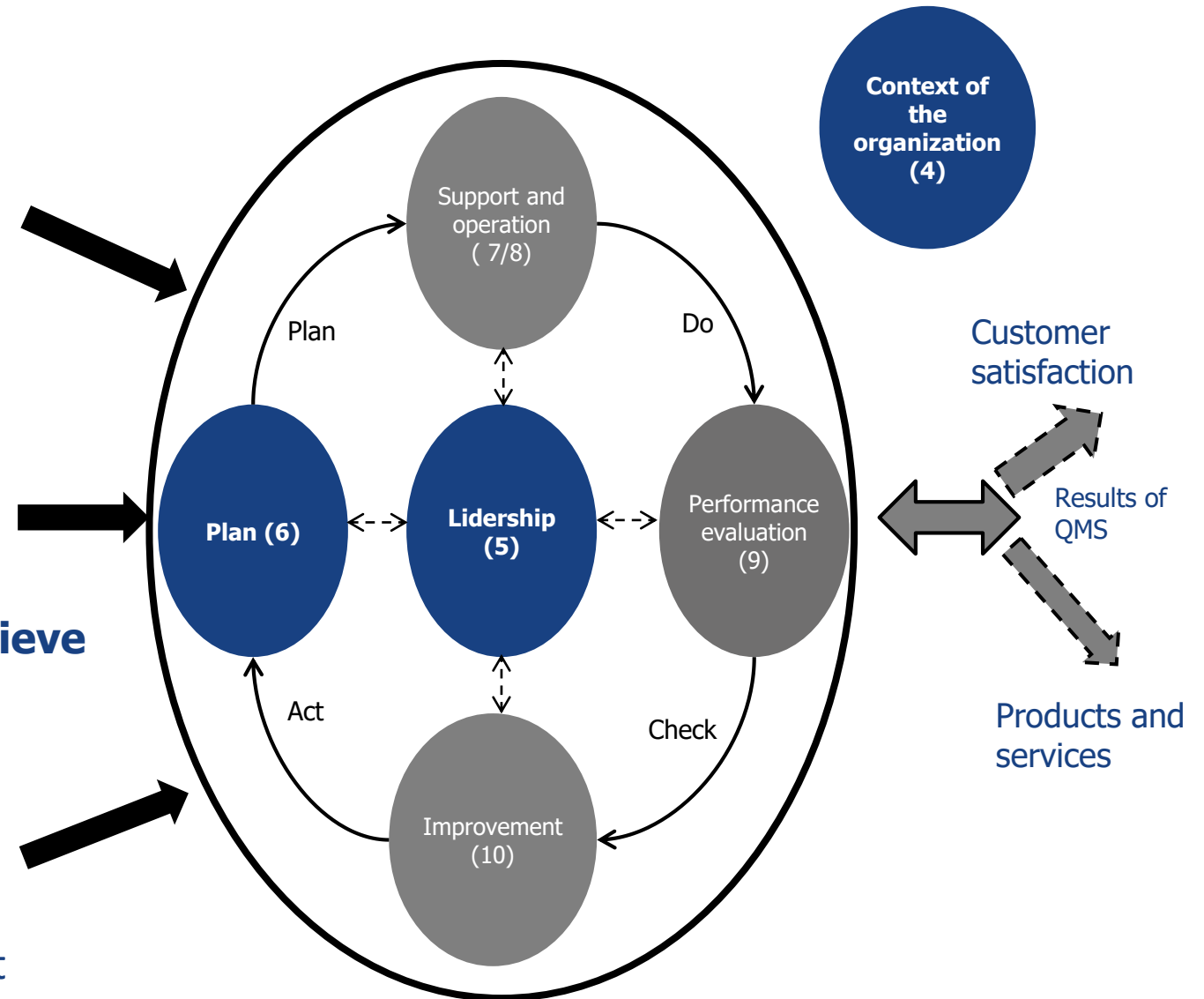
Quality management system and its processes (4.4)

Customer focus (5.1.2)

Quality policy (5.2.1/2)

Quality objectives and planning to achieve them (6.2)

- ✓ Definition scope of work
- ✓ Understanding of the shipyard organization
- ✓ Agreement between client and BV about how to proceed to classification process



05

VERISTAR PROJECT MANAGEMENT

VERISTAR PROJECT MANAGEMENT

Web-based platform

- BV tool for drawing & comments follow-up
- Dedicated access for designer, shipyard & ship-owner
- **Real-time access to all drawings & related comments**
 - Direct upload of drawings
 - Access to stamped reviewed drawings
 - Direct reply to Class comments
 - Live status of comments (pending / answered / cleared...)

VPM ACCESS available for:

Design office

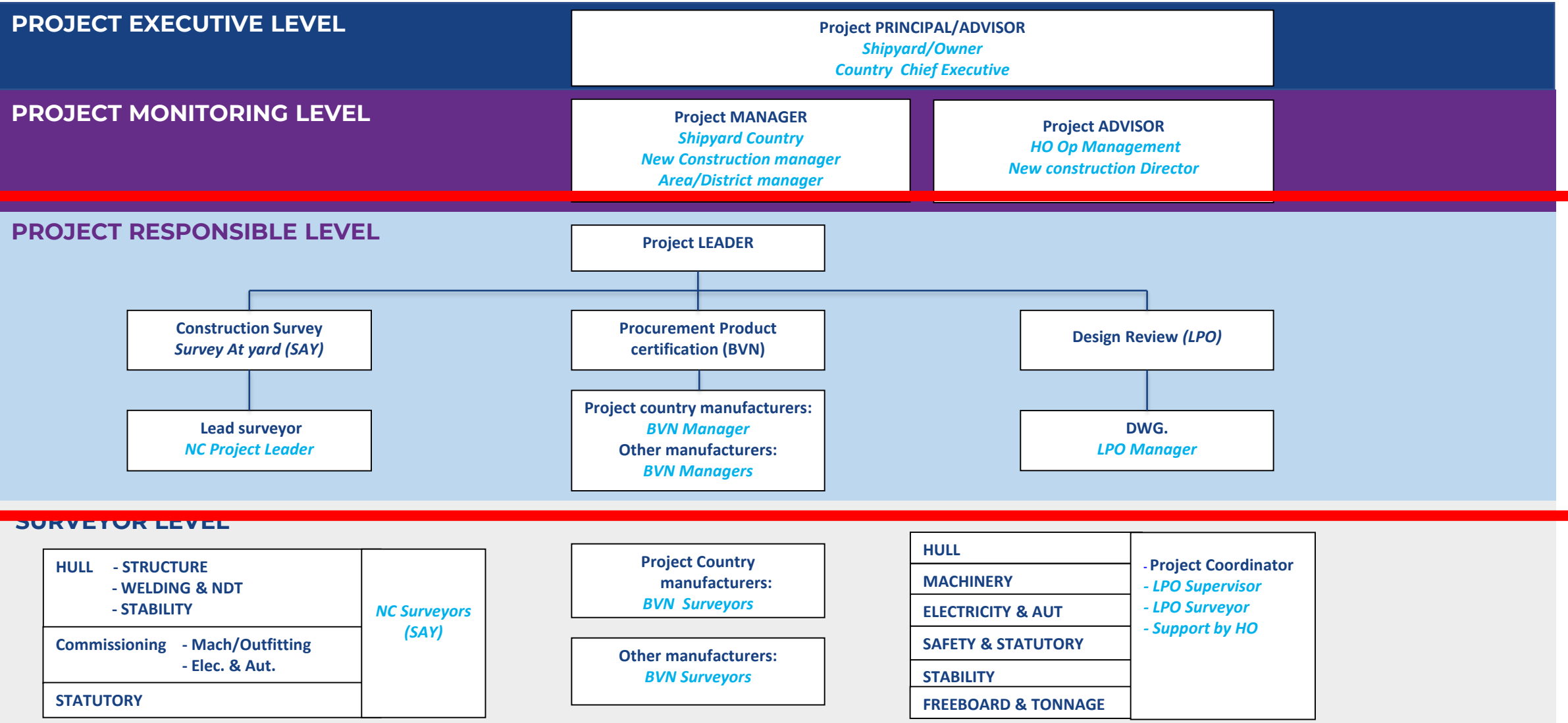
Shipyard

Subcontractors

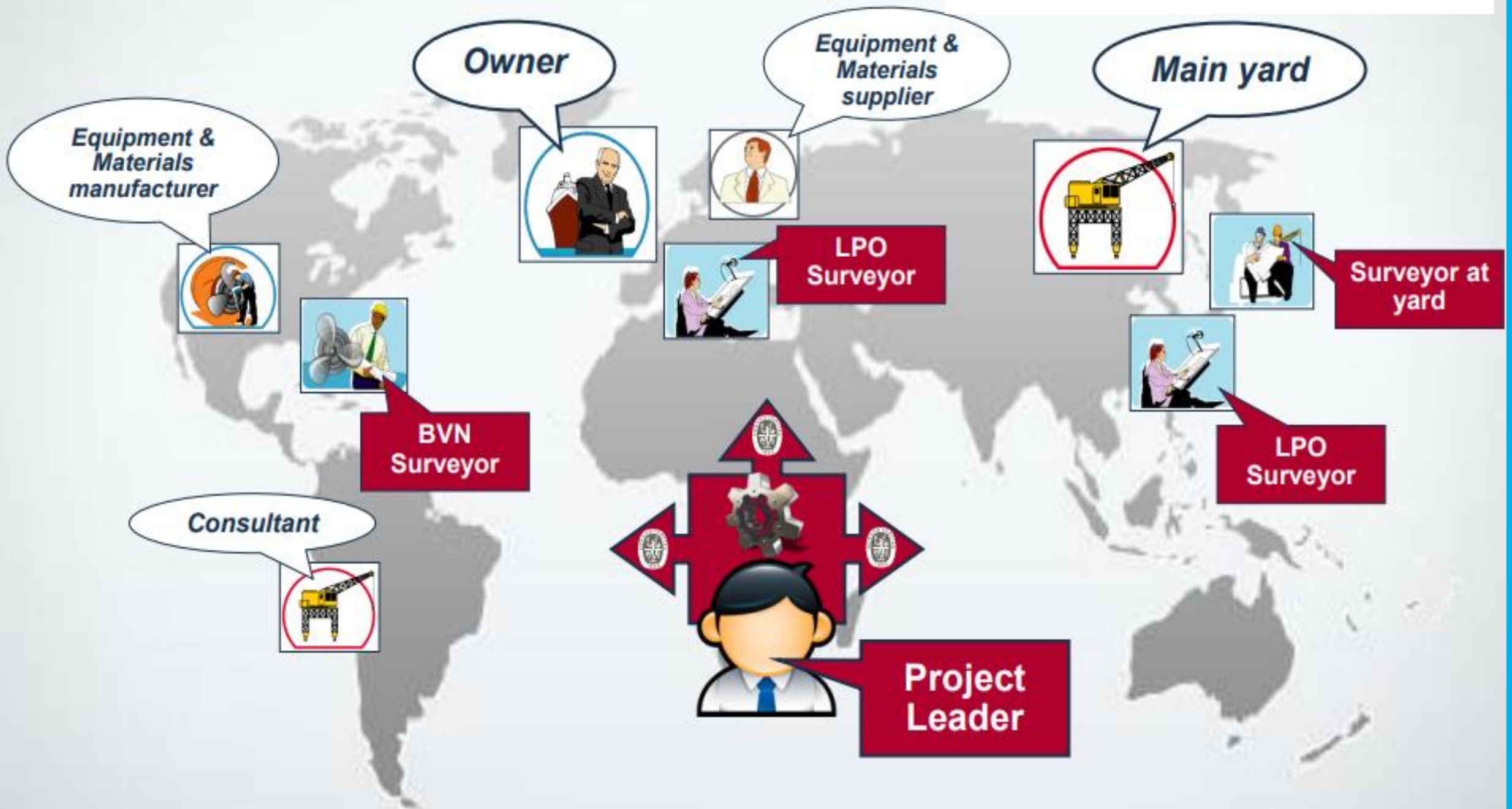
Ship owner



TYPICAL PROJECT ORGANIZATION



STAKEHOLDERS



Desktop - Projects with Project Leader > Project data view

Project:
Quasi Sistership of: [27115A](#) Hull Number: N93 Main shipbuilder:

GRANTED

Project data
Class data
Statutory
Actors
Linked projects
Calendar
Progress
NRS
NPSS

Project type	New Construction
Project identifier	27934Q
IMO Number	

RFC


Request For Classification status / date	Project Signed - 22 May 2016
Request signed by Shipbuilder on	12 May 2016
Classification amended on / date	Project Signed - 15 Jun 2016
Classification signed by Shipbuilder on	15 Jun 2016
Ship's In/Out code	Class contemplated (01)
Contract Frozen	No
MOU	No
Genesis/Neptune update	17 Aug 2021

VPM Project created on 03 Aug 2014
Last checklist update 22 Jul 2021





Project name	
NC manager	
NC manager delegate	
Project Leader	
Main shipbuilder	
Construction Centre	
Construction MOC	
Construction MO Contacts	
NC project coordination center	
NC project coordinator	

 Project general data

 Design review

 Product certification

 Survey at Shipbuilder

-  Project general data
-  Design review
-  Product certification
-  Survey at Shipbuilder

► Desktop - My Favorite Projects > Project data view

 Project:  **Quasi** Sistership of: [27115A](#) Hull Number: N93 Main shipbuilder: [Add to favorites](#)
 **SHIPBUILDER ACCESS GRANTED**

[Tree](#) [Project data](#) [Unit data](#) [Class data](#) [Statutory](#) [Actors](#) [Linked projects](#) [Calendar](#) [Progress](#) [NRS](#) [NPSS](#) [Historic](#)

► Desktop - My Favorite Projects > Drawings

 Project:  **Quasi** Sistership of: [27115A](#) Hull Number: N93 Main shipbuilder: [Add to favorites](#)
 **SHIPBUILDER ACCESS GRANTED**

[Tree](#) [General](#) [Drawings / Comments](#) [Checklist](#) [Documents](#) [Correspondences](#)
[Expected](#) [Posted](#) [Summary](#) [Drawings](#) [Comments](#) [Linked projects](#) Subfile

Drawings - (no filter)  [Export](#)



 Project:  **Quasi** Sistership of: [27115A](#) Hull Number: N93 Main shipbuilder: [Add to favorites](#)
 **SHIPBUILDER ACCESS GRANTED**

[Search certificates](#) | [Search comments](#)



[Export all product certification folders for shipbuilder](#) | [Export all certificates \(as filtered\)](#) Display by

Certificates - (no filter) 

► Desktop - My Favorite Projects > Say tree view

 Project:  **Quasi** Sistership of: [27115A](#) Hull Number: N93 Main shipbuilder: [Add to favorites](#)
 **SHIPBUILDER ACCESS GRANTED**

[Search comments](#) | [Export Progress report](#)

[Tree](#) [Interventions](#) [Surveys](#) [Comments](#) [BV record of construction](#) [Shipbuilder documents](#) [BV documents](#)
 Tree view - (no filter)  [Export Patrol Plan](#) | [Guidelines check list for initial survey](#) 

ITEM TEST PLAN

The screenshot displays the VeriSTAR PM New Building software interface. The top navigation bar includes links for 'My desktop', 'Search project', 'Info', 'Profile', and 'Disconnect', along with a 'Select tool' button. Below this, a search bar for documents and a certificate number field are visible. The main content area features a project tree on the left, listing various systems and tests such as 'M42 - List of shipboard tests and test report', 'Kick-Off meeting (C000)', 'Quay trials (S026)', 'Sea trials (S039)', 'Cargo Handling System', 'Communication System', 'Deck Equipment And Hull Systems', 'Distribution and Comfort System', 'Electrical Power Supply And Distribution System', 'Environment Protection System', 'Hull Structure and compartments', 'Machinery Auxiliaries And Supply System', 'Navigation System', 'Propulsion And Manoeuvring System', 'Radio Installation System', 'Safety And Fire Protection System', '[Onboard Documentation]', and '_PATROL'. A right-hand panel shows a diagram titled 'Ensembles et Jonctions' with a legend and a 'Show/hide legend' button. The bottom status bar indicates 'Data copied from model after RFC status in Genesis has reached 'Validated''. The interface also includes a 'Non Located Items' section and a 'Checklists : Status - Checklists : Export' link.

VeriSTAR PM
New Building

Project

Search documents | Cert. n°

► Desktop - My Favorite Projects > Tree view

Project: **Quasi** Sistership of: 27115A Hull Number: N93 Main shipbuilder: [Add to favorites](#)

SHIPBUILDER ACCESS GRANTED

Tree Project data Unit data Class data Statutory Actors Linked projects Calendar Progress NRS NPSS

Checklists : Status - Checklists : Export

Non Located Items

Ismalia (Applicable items)

- M42 - List of shipboard tests and test report
- Kick-Off meeting (C000)
- Quay trials (S026)
- Sea trials (S039)
- Cargo Handling System
- Communication System
- Deck Equipment And Hull Systems
- Distribution and Comfort System
- Electrical Power Supply And Distribution System
- Environment Protection System
- Hull Structure and compartments
- Machinery Auxiliaries And Supply System
- Navigation System
- Propulsion And Manoeuvring System
- Radio Installation System
- Safety And Fire Protection System
- [Onboard Documentation]
- _PATROL

SAY : FOS3

Ensembles et Jonctions

Panning : Alt+drag Zooming(+/-) : Ctrl+click / Ctrl+Shift+click

Data copied from model after RFC status in Genesis has reached 'Validated'.

The tree created in VPM use marks & notations and applicable regulations.
Created to follow up of drawing/document review, inspection, comment results of review/ inspections, test plan, quality documentation.

DRAWING/DOCUMENT REVIEW

[My desktop](#) [Search project](#) [Info](#) [Profile](#) [Disconnect](#) [Select tool](#)

Project

Search documents | Cert. n°

[Desktop - My Favorite Projects > Drawings](#)

Project: **OWNER & SHIPBUILDER ACCESS GRANTED**

Hull Number: 2255 Main shipbuilder

[Add to favorites](#)

Last RFC amendment on 25 Mar 2019

[Add drawing](#) | [Search drawings](#) | [Search comments](#)

[Tree](#) [General](#) [Drawings / Comments](#) [Checklist](#) [Documents](#) [Correspondences](#)

[Expected](#) [Posted](#) [Summary](#) [Drawings](#) [Comments](#) [Linked projects](#)

Subfile **H - Hull**

[Multiselect](#) | [Print / Export](#) | [Create correspondence](#)

Drawings - (no filter)

(58 records) Page : 1 on 2

	Subfile	Box	No.	Applicant desc.	Drawing nbr.	Rev.	Title	CAD	Pending comm.	Stamp	Approval Date								
<input type="checkbox"/>	H	1	1		CF10310	C	LIST OF DRAWINGS FOR APPROVAL		0	0 (?) Class	13 Mar 2020								
	H	1	1 S		PB30310	-	TRIM & STABILITY BOOKLET (PRELIMINARY)		0	01 (01) Class / - (02) Statutory	27 Jul 2018								
	H	1	2		DB00510	-	ANCHOR HANDLING & MOORING ARRANGEMENT		0	02 Class	18 Jul 2018								
<input type="checkbox"/>	H	1	2 S		PB10110	-	GENERAL ARRANGEMENT(PRELIMINARY)		0	0 (0) Class	27 Jul 2018								
	H	1	3		PB30510	-	EQUIPMENT NUMBER CALCULATION		0	01 Class	03 Aug 2018								
	H	1	4		SF01130	A	STERN FRAME		0	01 Class	27 Nov 2018								
	H	1	5		SF01220	A	RUDDER CONSTRUCTION		0	01b Class	27 Nov 2018								
	H	1	6		SF01230	A	RUDDER STOCK/		0	01 Class	27 Nov 2018								
	H	1	7		DF00970	A	DETAIL OF HULL		0	01 Class	02 Apr 2019								
	H	1	8 F		AF18210	-	ARRANGEMENT & DETAIL OF DOOR/WINDOW(INCLUDING WIPER)		0	01 (01b) Class	25 Oct 2018								
	H	1	8 S		PF30301	-	TRIM & STABILITY CALCULATION(PROVISIONAL)		0	(?)									
	H	1	8		SF09120	B	STRUCTURAL DETAIL FOR HULL		0	01 Class	16 Apr 2019								
	H	1	9		DF38110	-	STEEL OUTFITTING ARRANGEMENT FOR DECK-HOUSE		0	02 Class	29 Oct 2018								
<input type="checkbox"/>	H	1	10		DF38120	-	RADAR & SIGNAL MAST		0	0 Class	22 Oct 2018								
	H	1	11		SB00710	A	SHELL EXPANSION		0	01b Class	08 Jan 2019								
	H	1	12		SF05110	C	CARGO HOLD CONSTRUCTION(MID/AFT)		1	01b Class	06 Sep 2019								
	H	1	13 F		DF38150	-	ARRANGEMENT OF LIFE BOAT HANDLING(INCLUDING PROVISION CRANE)		0	01b (01b) Class	17 Jan 2019								
	H	1	13			C	CARGO HOLD CONSTRUCTION(FORE)		1	01b Class	06 Sep 2019								
	H	1	14			C	AFT END CONSTRUCTION		1	01b Class	11 Sep 2019								
	H	1	15			C	ENGINE ROOM CONSTRUCTION(MACH. SPACE CONSTRUCTION LOWER, 1/2)		0	01 Class	06 Sep 2019								
	H	1	16		SF02111	C	ENGINE ROOM CONSTRUCTION(MACH. SPACE CONSTRUCTION UPPER, 2/2)		1	01b Class	06 Sep 2019								
	H	1	17		SF07110	C	FORE END CONSTRUCTION		1	01b Class	11 Sep 2019								
	H	1	18		SF08110	A	DECKHOUSE CONSTRUCTION(INCL. E/CASING & FUNNEL)		0	01b Class	20 May 2019								
	H	1	19		DF35110	-	OUTFITTING ARRANGEMENT IN COFFERDAM		0	01 Class	11 Jan 2019								
	H	1	20		DF36310	-	OUTFITTING ARRANGEMENT ON UPPER DECK		0	01 Class	11 Jan 2019								
					DF31110	-	OUTFITTING ARRANGEMENT OF AFT DECK		0	01 (01b) Class	14 Jan 2019								

Not reviewed

Review to be validated

Reviewed with pending comments

Reviewed without pending comment

Reviewed only for information

Not last

Deadline passed and still not reviewed

Drawing processed by several subfiles

WFI→ Waiting For Information (To be validated)

WFI Waiting For Information

Electronic drawing available for download

Drawing status

Instant access to all comments related to each drawing

- Check status
- Easily answer

FOLLOW UP OF COMMENTS DRAWING REVIEW



My desktop Search project Info Profile Disconnect **Select tool**

Project

Search documents | Cert. n°

► Desktop - My Favorite Projects > Drawings > Drawing revision detail

 Project: Hull Number: 2255 Main shipbuilder: [Add to favorites](#)






 **OWNER & SHIPBUILDER ACCESS GRANTED**

[Last RFC amendment on 25 Mar 2019](#)

Drawing Number: **SF05110** Revision no: **C** Drawing Name: **CARGO HOLD CONSTRUCTION(MID/AFT)** Approval stamp: **01b Class** Status: **Reviewed with pending comments** Shipbuilder: **SAMSUNG HEAVY INDUSTRIES CO., LTD. - GEOJE**

Job n°: Zig/FLEX n°: Invoicing status: **Waiting for job**

[New revision](#) | [New drawing](#) | [New subfile](#) | [Create correspondence](#) | [Customer access](#)

Drawing revision detail			Job/Invoicing Drawing historic Edit Back to In Progress	
Project ID	35190C	Order No.	12	clear Modify
Subfile	H - Hull reviewed by KPO (BV PUSAN) 	Box No.	1	
	No other subfile	Other centres		
Drawing Number	SF05110	Incoming mail		
Title	CARGO HOLD CONSTRUCTION(MID/AFT)	Date		
Revision Number	C last - Other	Outgoing mail		
Revision Date		Date		
Categories	H4 (NC) , H5 (NC) , H7 (NC) , H10 (NC) , H30 (NC) , H39 (NC) , H47 (NC) , H49 (NC)			
Zones				
Document Type	3 - Drawing	Sent to HO	No	
Approval Stamp	01b Class	Action	for review	
Approval Date	06 Sep 2019	Surveyor in charge	M. Choo (Level 1 or trainee)	
Input made by	M. Choo	Registration info	Posted by U. Interface Shi (SAMSUNG HEAVY INDUSTRIES C...) on 02 Sep 2019 Registered by BV PUSAN on 04 Sep 2019 Last status update: 06 Sep 2019	
e-Drawing	 <input type="text"/> Scale <input type="text"/> Format <input type="text"/>	Deadline		
e-Drawing to be stamped	 (Based on e-drawing)			
e-Drawing reviewed	 (Generated by stamping tool)	Start of review	End:	
Shipbuilder/Consultant	SAMSUNG HEAVY INDUSTRIES CO., LTD. - GEOJE	Other Reference		
Created for operation	NC	Remark		

Comments									
ID	«	»	Last Event	Title	Type	Status	Created on	All subfiles <input type="checkbox"/>	Display all details 
LPO1463286			16 May 2019	Under reinforcements for permanent mooring equipme...	To be re-submitted	Pending - Ans...	-	- B C-P1 C	
LPO1463283			08 May 2019	3D Hold FEA Results (No.4)	To be re-submitted	Cleared	-	- B	
LPO1463284			08 May 2019	Deterministic fatigue analysis(No.4) : LNGC mode	To be re-submitted	Cleared	-	- B	
LPO1463285			08 May 2019	Spectral fatigue analysis (FSRU mode)	To be re-submitted	Cleared	-	- B	
LPO1463287			13 Jun 2019	Under reinforcements for normal towing and mooring...	To be re-submitted	Cleared	-	- B	
LPO1463288			08 May 2019	Permissible SWBM and SWSF	To be re-submitted	Cleared	-	- B	
LPO1463289			08 May 2019	See drawing(Rev.-)	To be re-submitted	Cleared	-	- B	

Comments result of review

FOLLOW UP OF DRAWINGS/DOCUMENTS

Tree General Drawings / Comments Checklist Documents Correspondences

Categories by subfile - Y (filtered) Export checklist | Subfile All

Status of category ☐ Open ☐ Closed ☒ Any
Drawings received ☐ All ☐ None ☐ Partly
Category code
Statutory certificate
Created for operation

Show only applicable ☒
Reviewed by
Category name
Additional class notation

Apply Reset

(258 records) P

Type

- H - Hull
- M - Machinery
- E - Electricity & Automation
- F - Fire & Safety
- C - Cargo
- S - Stability
- O - Offshore
- CCS - French Central Safety Commission
- RMC - Refrigerating
- TF - Tonnage & Freeboard
- X - Other
- CYB - Cyber
- All

Subfile	Code	Category name	Applicable	Auto/ manual	Drawings received	Number of drawings received	Wa pe comment	comment	
H									
	H0	Plans for the Hull	Yes	auto	None	0	0	0	Open
	H1	General arrangement	Yes	auto	None	0	0	0	Open
	H2	Midship section	Yes	auto	None	0	0	0	Open
	H3	Details of equipment - Anchors and chain cables	Yes	auto	None	0	0	0	Open
	H4	Decks and profiles	Yes	auto	None	0	0	0	Open
	H5	Transverse sections	Yes	auto	None	0	0	0	Open
	H6	Transverse bulkheads	Yes	auto	None	0	0	0	Open
	H7	Details of structural discontinuities	Yes	auto	None	0	0	0	Open
	H8	Deep tank and ballast tank bulkheads, wash bulkheads - Bilge keel	Yes	auto	None	0	0	0	Open
	H9	SHELL EXPANSION	Yes	manual	Partly	1	1	0	Open
	H9	Shell expansion	Yes	auto	None	0	0	0	Open
	H10	Double bottom	Yes	auto	None	0	0	0	Open
	H11	Machinery space structures	Yes	auto	None	0	0	0	Open
	H12	Foundations of propulsion machinery and boilers	Yes	auto	None	0	0	0	Open
	H13	Superstructures and deckhouses	Yes	auto	None	0	0	0	Open
	H14	Fore part structure	Yes	auto	None	0	0	0	Open
	H15	Aft part structure - Sternframe or sternpost, sterntube	Yes	auto	None	0	0	0	Open

Categories drawings

Status

MATERIAL AND EQUIPMENT CERTIFICATE




VeriSTAR PM
New Building


[My desktop](#)[Search project](#)[Info](#)[Profile](#)[Disconnect](#)[Select tool](#)

Project [go](#)

Search documents | Cert. n° [go](#)

► [Desktop - My Favorite Projects](#) > [Product certification view](#)


 Project:

 **Quasi** Sistership of:

Hull Number: N93

Main shipbuilder:

[Add to favorites](#)

 **SHIPBUILDER ACCESS GRANTED**

[Search certificates](#) | [Search comments](#)

[Export all product certification folders for shipbuilder](#) | [Export all certificates \(as filtered\)](#)

Display by [Certificate](#)

Certificates - (no filter) 

(402 records) Page : 1 on 9  [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#)

		Nature of expected document - To be checked by	Certificate N° - Status	Generic product	Location	Applicant	Purchase Order N°	
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PROPELLER	Propulsion And Manoeuvring System / Propulsor / Screw Propeller System / CONTROLLABLE PITCH PROPELLER			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PROPELLER	Propulsion And Manoeuvring System / Manoeuvring System / Transverse Tunnel Thruster System / THRUSTER for transverse tunnel thruster system / PROPELLER for tranverse tunnel thruster			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PROPELLER BLADE	Propulsion And Manoeuvring System / Propulsor / Screw Propeller System / CONTROLLABLE PITCH PROPELLER / PROPELLER BLADE			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PROPELLER BOSS	Propulsion And Manoeuvring System / Propulsor / Screw Propeller System / CONTROLLABLE PITCH PROPELLER / PROPELLER BOSS			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PROPELLER SHAFT LINER	Propulsion And Manoeuvring System / Propulsion Mechanical Transmission System / Shafting System / PROPELLER SHAFT / PROPELLER SHAFT LINER			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Machinery Auxiliaries And Supply System / Bilge And Ballast System (Machinery Spaces) / BALLAST PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Machinery Auxiliaries And Supply System / Bilge And Ballast System (Machinery Spaces) / BILGE PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Safety And Fire Protection System / Fire Fighting System / Fixed pressure water-spraying fire extinguishing system / EMERGENCY FIRE PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Machinery Auxiliaries And Supply System / Refrigerating Machinery / BRINE PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Cargo Handling System / Cargo Refrigeration And Heating System / Cargo Refrigerating System / BRINE PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Cargo Handling System / Cargo Refrigeration And Heating System / Cargo Refrigerating System / Cargo Refrigerating Piping / CIRCULATING PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Machinery Auxiliaries And Supply System / Refrigerating Machinery / CONDENSER / CIRCULATING PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Machinery Auxiliaries And Supply System / Anti-Heeling System / ANTI-HEELING PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Deck Equipment And Hull Systems / Bilge System (Spaces other than Machinery Spaces) / BILGE PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Deck Equipment And Hull Systems / Ballast System (Spaces other than Machinery spaces) / BALLAST PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Machinery Auxiliaries And Supply System / Cooling Water System (Sea water & fresh water) / Sea Water / SEA WATER PUMP			
<input type="checkbox"/>		Refer to Rules / NR266	(Created)	PUMP	Machinery Auxiliaries And Supply System / Cooling Water System (Sea water & fresh water) / Fresh Water / FRESH WATER PUMP			

Certification of material
certification under process


Detail of each certification

Follow up comments for LPO
surveyor, certificate surveyor
and Surveyor at yard










































FOLLOW UP OF COMMENTS SURVEYS

Tree Interventions **Surveys** Comments BV record of construction Shipbuilder documents BV documents

[Export excel](#) | [Print Report](#)

(368 records) Page : 1 on 25  1 2 3 4 5 6 7

[Show survey details](#) [Show comments](#)

<input type="checkbox"/>	Location	Attending Date	Status - Survey Item - Sort by type	
<input type="checkbox"/>	Naval 2011 →	18 Jun 2022	  230V 60HZ UNINTERRUPTED POWER SUPPLY NETWORK -TEST PROCEDURE 32010	[]
<input type="checkbox"/>	Naval 2011 →	30 Dec 2021	  440V 60 HZ MAIN SWITCH BOARD TEST PROCEDURE	[]
<input type="checkbox"/>	Compartments →	13 Apr 2022	  Air Leak Test for Block 1	[]
			  SAY318222 - Air Leak Test for Block 1 (Cleared) Author : M. SALAH ELDIN - To be dealt with  Last event date : 07 Aug 2022 Leakage out of tolerance found, Test to be repeated after rectification	[]
<input type="checkbox"/>	Compartments →	05 Apr 2022	  Air Leak Test for Block 2 Fr 9 to 16	[]
<input type="checkbox"/>	Compartments →	24 May 2022	  Air Leak Test for Block 3	[]
<input type="checkbox"/>	Compartments →	07 Mar 2022	  Air Leak Test for Block 31M	[]
<input type="checkbox"/>	Compartments →	15 May 2022	  Air Leak Test for Block 4	[]
<input type="checkbox"/>	Compartments →	10 Mar 2022	  Air Leak Test for Block 4 FR 33 to 40.5	[]
<input type="checkbox"/>	Compartments →	30 Apr 2022	  Air Leak Test for Block 5	[]
<input type="checkbox"/>	Compartments →	01 Jun 2022	  Air Leak Test for Block 6	[]
<input type="checkbox"/>	Compartments →	14 Mar 2022	  Air Leak Test for Block 7	[]
<input type="checkbox"/>	Compartments →	21 Mar 2022	  Air Leak Test for Block 8 FR 72 to 82	[]
<input type="checkbox"/>	Compartments →	20 Feb 2022	  Air Leak Test for Block 8 Z000170	[]
<input type="checkbox"/>	Compartments →	20 Feb 2022	  Air Leak Test for Block 9	[]
<input type="checkbox"/>	Bilge and ballast piping →	01 Feb 2022	  Ballast System piping (52990) seal Test 1	[]

[Print Report](#)

(368 records) Page : 1 on 25  1 2 3 4 5 6 7

Comments result of survey

Records of survey

CONSTRUCTION SCHEDULE

Tree Project data Unit data Class data Statutory Actors Linked projects **Calendar** Progress NRS NPSS

Edit

Contractual Dates





Steel Cutting	01 Sep 2021
Keel Laying	10 Mar 2022
Launching	09 Sep 2022
Sea Trial	03 Mar 2023



Forecast Dates



Steel Cutting	01/09/2021	 
Keel Laying	10/03/2022	 
Launching	09/09/2022	 
Sea Trial		 
Delivery	03/03/2023	 

☐ Not applicable

Actual Dates

Steel Cutting	01/09/2021	 
Keel Laying		 
Launching		

Sea Trial		 
-----------	--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------

Delivery		 
----------	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Comment

Attending Surveyor(s)
(Ctrl+Click to select/deselect several users)

D. Titkov
A. Huang
W. Yang
S. Skoblykov

Save Cancel

NEW CONSTRUCTION OVERVIEW BY COUNTRY

Internal NC Process to ensure compliance with class and statutory requirements from Quality point of view

VeriSTAR Project Management My desktop Search project Info Profile Disconnect Select tool

Project Search documents | Cert. n°

Desktop - Projects without Project Leader

Comment library | Search drawing | Search comment | Create project | Set default tab

All NC projects NC Delegates My Favorite Projects Comments Reports Received Drawings

Projects without Project Leader Projects with Project Leader NRS/NPSS requests

List of project(s) - (filtered) [Export excel](#)

Country / Geographical Area **COLOMBIA** Project Status SOLAS appliance Steel cutting First RFC Status date

Apply

(0 records) Page : 0 on 0 OK

Status	RFC Status Date	Shipbuilder	Hull Number	Service notation	Owner	Steel Cutting	BV Centre	Action
(0 records) Page : 0 on 0 OK								

Show/hide legend

Status	Project ID	Project Leader	Main Shipbuilder	Owner	Steel cutting	Keel laying	Launching	Sea trial	Delivery	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	PSG Nb.	PSW Nb.	
Project Registered	43984L	P. Arabadzhiev	DAEWOO SHIPBUILDING & MAR...		31 Jan 2024	31 Jul 2024			30 Jun 2025																	0	0		
Project Registered	43369S	H. Lee	HYUNDAI HEAVY INDUSTRIES ...		16 Oct 2023	26 Mar 2024	14 Jun 2024		20 Jan 2025																	0	0		
Project Registered	43370T	H. Lee	HYUNDAI HEAVY INDUSTRIES ...		27 Nov 2023	07 May 2024	26 Jul 2024		04 Mar 2025																	0	0		
Project Registered	43371U	H. Lee	HYUNDAI SAMHO HEAVY INDUS...		16 Feb 2024	01 Jul 2024	27 Sep 2024		21 Apr 2025																	0	0		
Project Registered	43372V	H. Lee		<div><p>C1 : Checklist has not been generated.</p><p>C2 : Concerned data (indicated with a blue *) has been modified and checklist has not been updated.</p><p>C3 : Provisional date(s) missing.</p><p>C4 : Provisional date(s) passed and actual date(s) missing.</p><p>C5 : Steel cutting* within 15 days or already started and surveyor(s) not assigned. (*) for composite projects: start of lamination</p><p>C6 : Steel cutting* within 5 days or already started and kick-off meeting not registered. (*) for composite projects: start of lamination</p><p>C7 : Kick-off meeting held more than 15 days ago and kick-off meeting document not attached.</p><p>C8 : Review of Welding* procedures specification and WPQR* not recorded. (*) for composite projects: Bonding procedure</p><p>C9 : Review of NDT* not recorded. (*) for composite projects: result of panel test</p><p>C10 : Delivery within 15 days and Statutory Survey checklist not transmitted to the Ship's file.</p><p>C11 : Sea trial within 5 days or carried out and attending surveyors not identified.</p><p>C12 : Shipbuilder review record is missing or should be validated. Please contact a Shipbuilder Report Manager.</p><p>C13 : Exists pending comments (percentage of cleared comments on drawing(s) or subfile).</p><p>C14 : Shipbuilder reminders of outstanding items to be sent within 15 days period before provisional Launching, Sea trial and Delivery dates.</p><p>C15 : NRS has not been sent and delivery within 15 days.</p></div>																									
Project Registered	43106G	J. Kwon																											
Project Registered	43107H	J. Kwon																											
Project Registered	43108J	J. Kwon																											
Project Registered	43109K	J. Kwon																											
Project Registered	43110L	J. Kwon																											
Project Registered	43111M	J. Kwon																											
Project Registered	25342X	K. Lesnov																											
Project Registered	29229X	K. Lesnov																											
Project Registered	40568X	K. Woo																											
Project Registered	40569Y	K. Woo																											
Project Registered	40570A	K. Woo																											
Project Registered	40571B	K. Woo																											

- C1** : Checklist has not been generated.
C2 : Concerned data (indicated with a blue *) has been modified and checklist has not been updated.
C3 : Provisional date(s) missing.
C4 : Provisional date(s) passed and actual date(s) missing.
C5 : Steel cutting* within 15 days or already started and surveyor(s) not assigned. (*) for composite projects: start of lamination
C6 : Steel cutting* within 5 days or already started and kick-off meeting not registered. (*) for composite projects: start of lamination
C7 : Kick-off meeting held more than 15 days ago and kick-off meeting document not attached.
C8 : Review of Welding* procedures specification and WPQR* not recorded. (*) for composite projects: Bonding procedure
C9 : Review of NDT* not recorded. (*) for composite projects: result of panel test
C10 : Delivery within 15 days and Statutory Survey checklist not transmitted to the Ship's file.
C11 : Sea trial within 5 days or carried out and attending surveyors not identified.
C12 : Shipbuilder review record is missing or should be validated. Please contact a Shipbuilder Report Manager.
C13 : Exists pending comments (percentage of cleared comments on drawing(s) or subfile).
C14 : Shipbuilder reminders of outstanding items to be sent within 15 days period before provisional Launching, Sea trial and Delivery dates.
C15 : NRS has not been sent and delivery within 15 days.
C16 : Patrol plan not recorded.
C17 : SCF Version not received or reviewed and delivery within 15 days.

USE OF IT TOOL DURING CONSTRUCTION

Quality Management Systems

People, infrastructure, environment for the operation of processes, monitoring and measuring resources, organization knowledge (7.1)

Competence (7.2)

Awareness (7.3)

Communication (7.4)

Documented information (7.5)

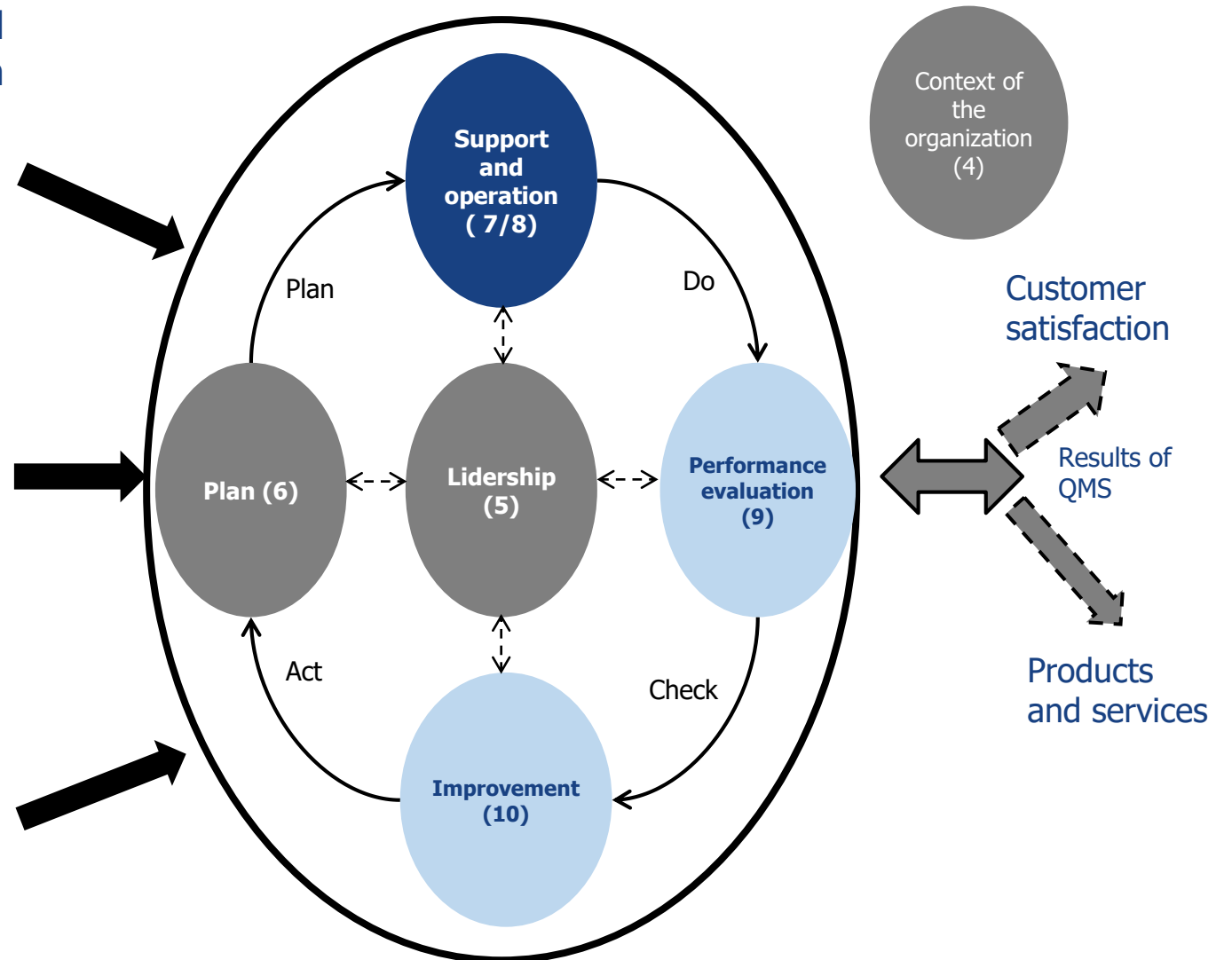
Operational planning and control (8.1)

Requirements for products and services (8.2)

Control and service provision (8.5)

Release of products and services (8.6)

- ✓ Access to project (all parties involved)
- ✓ Qualifications controlled (BV, shipyard and subcontractors)
- ✓ Documentation/drawings reviewed
- ✓ Follow-up of comments/NCs
- ✓ Monitoring, whiteness, survey records
- ✓ Item test plan



CLASSIFICATION CERTIFICATE ISSUANCE AT DELIVERY



VeriSTAR PM
Ship in Service

My desktop Search project Info Profile Disconnect Select tool

Project:

Desktop - My Favorite Projects > Certificates

Project: Main shipbuilder:

SHIPBUILDER ACCESS GRANTED

Status Reports Certificates

Active certificates

Type	Group	Name
CLASS	Certificate of Classification	Certificate of Classification
STATUTORY	Load-Line	International Load Line Certificate
STATUTORY	Safety Equipment	Five-yearly Attestation of Periodic Servicing of Launching Appliances
STATUTORY	Safety Equipment	Lifeboat/Tender Certificate 1 (Multiple)
STATUTORY	Safety Equipment	Lifeboat/Tender Certificate 2 (Multiple)
STATUTORY	Safety Equipment	Lifeboat/Tender Certificate 3 (Multiple)
STATUTORY	Safety Equipment	Attestation of test of means of embarkation / disembarkation
STATUTORY	Safety Equipment	Attestation of test of means of embarkation / disembarkation
STATUTORY	Safety Equipment	Attestation of test of means of embarkation / disembarkation
STATUTORY	Marpol Annex VI - SEEMP	CII - SEEMP Part III Confirmation of Compliance
STATUTORY	Marpol Annex VI - SEEMP	Confirmation Of Compliance - SEEMP_PartII
STATUTORY	Passenger Safety	Document of Approval of Alternative design and Arrangements
STATUTORY	Passenger Safety	Passenger Ship Safety Certificate & Form P
STATUTORY	Passenger Safety	Limitations on Operation
STATUTORY	Passenger Safety	Lifeboat/Tender Certificate
STATUTORY	Marpol Annex I - Oil	IOPP Certificate and Form A
STATUTORY	Marpol Annex IV - Sewage	ISPP Certificate
STATUTORY	Marpol Annex V - Garbage	Garbage Pollution Prevention Statement of Compliance
STATUTORY	Marpol Annex VI - Air	IAPP Certificate
STATUTORY	Marpol Annex VI - IEE	IEE Certificate (Definitive)
STATUTORY	Ballast Water Management	International BWM Certificate
STATUTORY	Anti-Fouling System	International AFS Certificate (IMO)
STATUTORY	Cargo Gear	Attestation of Cargo Gear Survey


BUREAU VERITAS
INTERNATIONAL CLASSIFICATION SOCIETY
PROVISIONAL CERTIFICATE OF CLASSIFICATION
Nr CAG0/NLI/20221102142329

MSC WORLD EUROPA **32764Q**
Ship's Name Register No
Malta VALLETTA
Flag Port of Registry
COMPANIA NAVIERA WORLD 1 S.A.
Owners

The above named ship has been surveyed at Saint-Nazaire, on 24 October 2022
Further to the surveys, a report is sent to the Head Office of Bureau Veritas proposing to grant the classification symbols and notations

I HULL MACH
Passenger ship **dualfuel (LNG) SRTP**
Unrestricted navigation

AUT-CCS, AUT-PORT, SYS-NEQ, REF-STORE
COMF-NOISE-Pax 1, COMF-NOISE-Crew 2, COMF-VIB-Pax 1PK, COMF-VIB-Crew 2PK,
BWT, CLEANSHIP, AWT-A/B, NDO-2 days, NOX-25.00%, ERS-S,
INWATERSURVEY, SDS, MON-SHAFT, URN - controlled vessel

This document is issued within the scope of Bureau Veritas Marine & Offshore General Conditions.

At Cagliari, ITALY on 02 November 2022
Limit date of validity 24 April 2023
(maximum 6 months from the date of issuance)

The hull of the ship is surveyed under normal survey system
The machinery of the ship is surveyed under normal survey system

 This document is electronically signed and does not require a manual signature as defined in IMO guideline FAL-5-Circ.39.
[Click here for the verification website](#)


BUREAU VERITAS
MARINE & OFFSHORE
Nicola LICCIARDI

By Order of the Secretary

Conditions and endorsements overleaf.
Any person not a party to the contract pursuant to which this certificate is delivered may not assert a claim against Bureau Veritas Marine & Offshore SAS for any liability arising out of errors or omissions which may be contained in said certificate, or for errors of judgment, fault or negligence committed by personnel of the Society or of its Agents in the establishment or issuance of this certificate, and in connection with any activities which it may provide for.

USE OF IT TOOL DURING CONSTRUCTION

Quality Management Systems

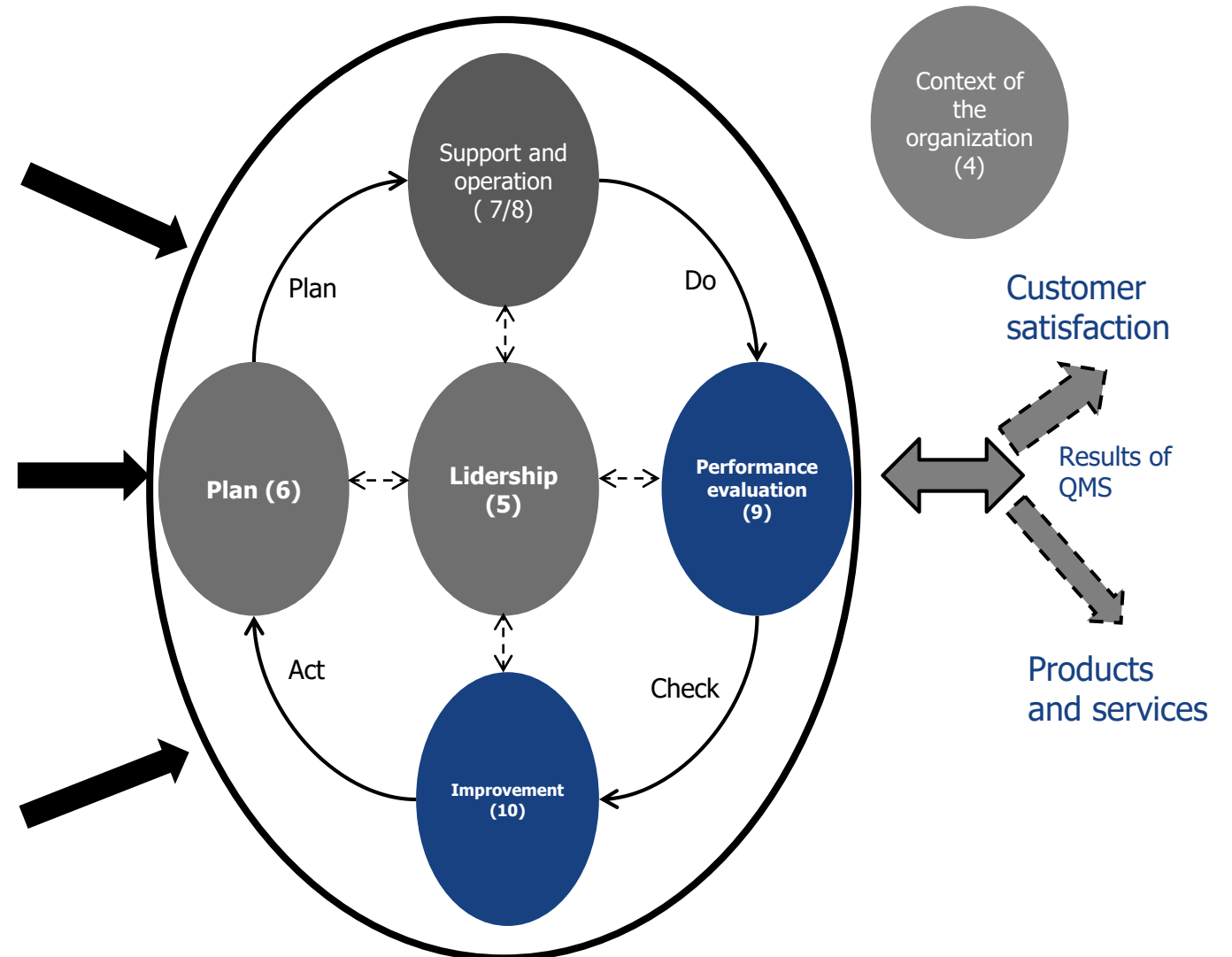
Monitoring, measurement, analysis and evaluation (9.1)

Internal audit (9.2)

Management review (9.3)

- ✓ Customer satisfaction
- ✓ Internal and external Audits
- ✓ Evaluation during vessels in service
- ✓ Continuous improvement (Updates of regulations, procedures, implementation of new IT tools)

What	Who	When	Where	How
<ul style="list-style-type: none"> ship designers, engineering companies, marine equipment manufacturers, ship yards ship owners, charterers, ship management companies 	<ul style="list-style-type: none"> Local sales person Local Marine manager Local Surveyor/auditor Sales and Marketing Management (DCM) M&O HO LC&R_STAT 	<ul style="list-style-type: none"> Permanently Complaints Appeals Satisfaction surveys Management review 	<ul style="list-style-type: none"> At local level + HO level as necessary At HO Level 	<ul style="list-style-type: none"> Local procedures Local customer satisfaction M&O procedures procedure MPG_0017 MPG_0018
<ul style="list-style-type: none"> National Administrations and European Commission underwriter, cargo interest or the public at large 	<ul style="list-style-type: none"> Local Marine manager Local Surveyor/auditor M&O HO LC&R_STAT 	<ul style="list-style-type: none"> Permanently Request Appeals Management review 	<ul style="list-style-type: none"> At local level + HO level as necessary At HO Level 	<ul style="list-style-type: none"> Local procedures M&O procedures TNS_0018 procedures MPG_0018





**BUREAU
VERITAS**

Shaping a world of trust

THANK YOU

DIGITALLY SHAPING THE FUTURE OF CLASS

AI & DATA ANALYTICS

Built with the latest digital
survey technology

DIGITAL TWIN TECHNOLOGY

Developed and updated by BV
for all vessels

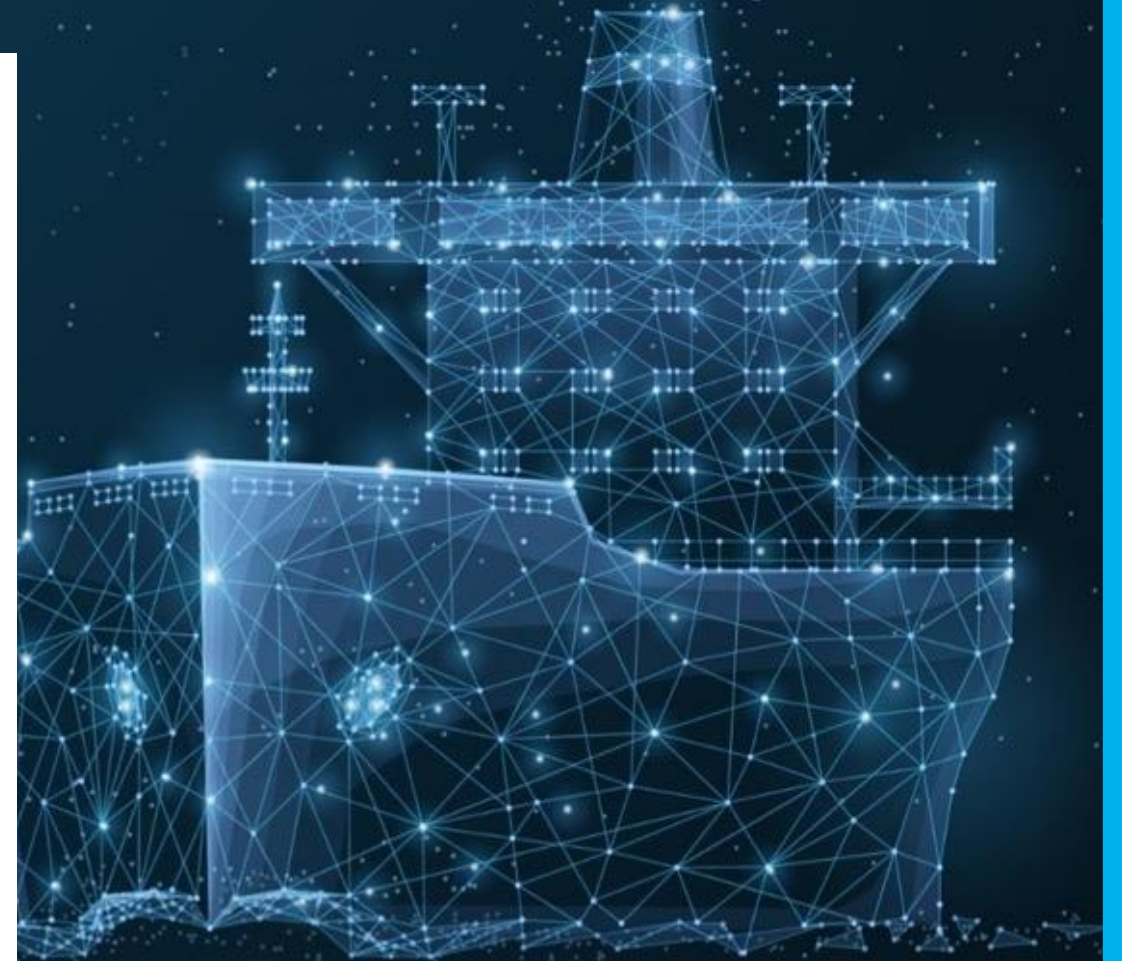
—
Increased classification
efficiency and added value

A NEW COLLABORATIVE PLATFORM

To be delivered in 2023

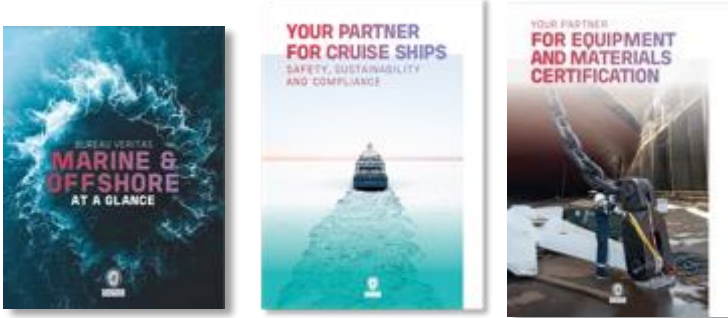
—
All stakeholders can connect
and access data

—
Linked directly to clients'
systems and equipment for
real time updates

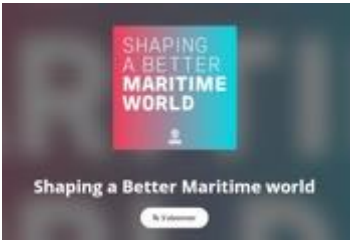


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Podcasts



On-demand webinars



Infographics



LNG bunkering

Well-to-Wake

CCUS

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Trust Maker Stories



Machinery Maintenance