INDORESEAN SHIPPING ACT: LAW NO. 17 OF 2008 ON SHIPPING

- Vessel is water vehicle driven by wind power, mechanical power, or other energy, pushed or towed, including dynamically supported vehicle, under water surface vehicle and floating equipment or structure that is not moving.
- Chapter IX: Ship Safety
- Article 124 – 133
- Regarding Drawing approval, supervision during construction and conversion, survey and certification, safety certificates, obligation to be classed by recognized classification society, to have adequate equipment of navigation, communication etc.
REGULATION FOR LNG VESSEL

DIRECTOR GENERAL DECREE NO. HK.103/2/3/DJPL-12 ON THE ENFORCEMENT OF IGC CODE ON 12 JULY 2012

SUBJECT TO
REGULATION FOR LNG VESSEL

Keel Laying on July 1st 2016.
The Code provides the regulations for the construction and equipment of Liquefied Gas Carriers.
- 18 Chapters related to stability, ship arrangement, cargo containment systems, piping, materials, cargo & environmental control, fire protection and fire fighting, ventilation or the cargo area, instrumentation, personnel protection, filling limits of cargo tanks, use of cargo as fuel and some other special and operational requirements.
- Chapter 19 addresses the list of products with particular requirements for its transportation.
- IGC Code is applicable to all ships (regardless of size, inc. less than 500 GT) engaged in international voyages for the carriage in bulk of liquefied gases having a vapour pressure exceeding 2.8 bar at 37.8°C (does not cover compressed natural gas –CNG- ships).
- The Code provides the issuance of a Certificate of Fitness for the Carriage of Liquefied Gases in Bulk attached with a list of authorised products to be carried on board.

AMENDMENT OF IGC CODE WERE ADOPTED BY RESOLUTION MSC.370(93) ON 22 MAY 2014 AND EXPECTED TO ENTER INTO FORCE ON 1 JULY 2016.
REGULATION FOR LNG VESSEL

IGC CODE - CONTENTS

- Preamble -
- Chapter 1 General
- Chapter 2 Ship survival capability & location of cargo tanks
- Chapter 3 Ship arrangements
- Chapter 4 Cargo containment
- Chapter 5 Process pressure vessels and liquids, vapour and pressure piping systems
- Chapter 6 Materials of construction and quality control
- Chapter 7 Cargo pressure / temperature control
- Chapter 8 Vent systems for cargo containment
- Chapter 9 Cargo containment system atmosphere control
- Chapter 10 Electrical installations
- Chapter 11 Fire protection & extinction
- Chapter 12 Artificial ventilation in the cargo area
- Chapter 13 Instrumentation and automation systems
- Chapter 14 Personnel protection
- Chapter 15 Filling limits for cargo tanks
- Chapter 16 Use of cargo as fuel
- Chapter 17 Special requirements
- Chapter 18 Operating requirements
- Chapter 19 Summary of minimum requirements
REGULATION FOR LNG VESSEL

37 GASSES COVERED BY IGC CODE

- Vapour pressure exceeding 2.8 bar at 37.8°C

<table>
<thead>
<tr>
<th>Product name</th>
<th>Ship type</th>
<th>Independent</th>
<th>Material</th>
<th>Vapour Control</th>
<th>Venting</th>
<th>Fresh Air</th>
<th>Gauging</th>
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<td>Methane (LNG)</td>
<td>2G</td>
<td>-</td>
<td>-</td>
<td>F</td>
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<tr>
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<td>F</td>
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<tr>
<td>Ethylene</td>
<td>2G</td>
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<td>-</td>
<td>F</td>
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<tr>
<td>Chlorine</td>
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<td>Dry</td>
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<tr>
<td>Carbon Dioxide (high purity)</td>
<td>3G</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>R</td>
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</tbody>
</table>
REGULATION FOR LNG VESSEL

37 GASSES COVERED BY IGC CODE

- **Type 1 G ship**
  - Transport of products requiring maximum preventive measures to preclude their escape
  - Chlorine, Ethylene Oxide, Methyl bromide, Sulphur dioxide

- **Type 2 G ship**
  - Transport of products requiring significant preventive measures to preclude their escape
  - Methane, LPG (butane-propane), Ethane, Ethylene,…

- **Type 2 PG ship**
  - Length less than 150m, transport of products requiring significant preventive measures to preclude their escape, use of Type C tanks designed with MARVS (pressure setting) more than 7 bars and Cargo temperature more than – 55 deg C.

- **Type 3 G ship**
  - Transport of products requiring moderate preventive measures to preclude their escape
  - Carbon dioxide, Nitrogen, Refrigerant gases
REGULATION FOR LNG VESSEL

SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS

Refer to the International Code on Intact Stability (2008 IS Code)

- **New requirements:**
  - Freeboard and stability (e.g. operations at sea (loading/unloading and ballast water operations
  - Location of cargo tanks (0.76m increase to 0.80m)
  - Survival requirements

- **Section modified:**
  - Damage assumptions (e.g. increase of bottom damage longitudinal extent (5m to 14.5 m)
  - Standard of damage

- **Clarification of the measurement of protective distances with respect to moulded lines and introduction of sketches (Ref. IGC: 2.1.5)**
REGULATION FOR LNG VESSEL
SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS

New definition of protective locations:
- for \( V_c \leq 1,000 \text{m}^3 \), \( d = 0.80 \text{ m} \)
- for \( 1,000 \text{ m}^3 < V_c \leq 5,000 \text{ m}^3 \), \( d = 0.75 + V_c \times 0.20/4,000 \)
- for \( 5,000 \text{ m}^3 < V_c \leq 30,000 \text{ m}^3 \), \( d = 0.8 + V_c/25,000 \)
- for \( V_c > 30,000 \text{ m}^3 \), \( d = 2 \text{ m} \),

"d" is the minimum clearance from the outer hull shell plating in meters and \( V_c \) is the individual cargo tank volume in \( \text{m}^3 \).
3.24 Having considered the report of the working group (CCC 3/WP.3), the Sub-Committee approved it in general and took action as described in paragraphs 3.25 to 3.

[to be prepared by the Secretariat in consultation with the Chair after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]
“IACS thanks the working Group for its consideration of the draft IACS UIs to the IGF Code and the guidance on how best to proceed. IACS notes that the WG acknowledged that there are areas of the IGF Code, in particular all the issues referred to the WG in CCC 3/10/1, that require interpretation in order to facilitate the consistent and global application of the Code and also that there was recognition and support for many of the technical issues raised in these papers.

Regardless of the format and content of the UIs or whether they should be pointing to a functional requirement, or different parts of the Code, the practical difficulties of applying such vague provisions of the IGF Code remain.

Noting that the IGF Code will take effect on 1 January 2017, IACS Members will now face significant challenges in verifying compliance with some of the provisions of this mandatory Code, on which the Sub-Committee has been unable to reach a common understanding as to what the Code is intended to require. In this regard, IACS would take this opportunity to reiterate paragraph 2 of CCC 3/10/1 i.e. ‘IACS seeks the views of the Sub-Committee on these draft UIs before proceeding with their finalisation and subsequent application by IACS Members when verifying the implementation of the IGF Code on behalf of Administrations on whose behalf they are authorized to act as a recognized organizations’.”
REGULATION FOR LNG SHIPPING

LAW NO. 17 OF 2008 ON SHIPPING
SPECIAL SHIPPING: marine transportation activities conducted by enterprises to support the main business for its own using Indonesian-flagged vessels that meet the sea worthiness requirements and manned by Indonesian crews.

MINISTER DECREE NO. 10 OF 2014 ON CABBOTAGE PRINCIPLE
Foreign flagged vessel can only be used when availability of certain type of vessel is limited, proven by INSA recommendation

MINISTER DECREE NO. 93 OF 2013 ON IMPLEMENTING SEA TRANSPORTATION
Minister approval for Indonesian shipping co. w/ SIOPSIS, applying irregular and non fixed routes, submitting voyage report & plan every 3 months, vessel specification,
REGULATION FOR LNG SHIPPING

- Having SIOPSUS
- Using irregular and non fixed routes
- Core business: mining, industry, forestry, tourism, agriculture, fishing, salvage, dredging, construction and research
- Transporting raw material, production tools or products for own use
- Obliged to give report and plan every 3 (three) months
- Able to add additional port of call and additional cargoes
- Might use foreign flagged ship
REGULATION FOR LNG PORTS

LIMITED AMOUNT OF PORTS BUILT BY GOVERNMENT

BUSINESS ENTITY ARE ALLOWED TO BUILD THEIR OWN PORT TO SUPPORT THEIR BUSINESS

SPECIAL PORT (TERSUS) :
PORTS BUILT BY PRIVATE SECTOR WHOSE LOCATION ARE OUTSIDE PORT AUTHORITY AREA

PORT FOR OWNED PURPOSE (TUKS) :
PORTS BUILT BY PRIVATE SECTOR WHOSE LOCATION ARE INSIDE PORT AUTHORITY AREA
REGULATION FOR LNG PORTS

SPECIAL PORTS CHARACTERISTIC (TERSUS)

- THE LOCATION IS OUT OF PORT AUTHORITY AREA
- MANAGED BY GOVERNMENT OR PRIVATE SECTOR AND SERVING ITS OWN BUSINESS
- APPROVAL OF THE LOCATION GIVEN BY MINISTER
- APPROVAL OF THE CONSTRUCTION AND OPERATION GIVEN BY DGST
REGULATION FOR LNG PORTS

CONSIDERATIONS IN DETERMINING THE SPECIAL PORT LOCATION

COMPATIBILITY WITH CITY / PROVINCE PLAN

ECONOMICAL AND OPERATIONAL CONSIDERATION

SAFETY AND SECURITY OF SHIPPING
REGULATION FOR LNG PORTS

REQUIREMENTS FOR DETERMINING SPECIAL PORT LOCATION

- MAIN BUSINESS LICENSE FROM RELATED INSTITUTION
- GEOGRAPHICAL COORDINATE IN NAUTICAL CHART
- HARBOUR MASTER RECOMMENDATION REGARDING SAFETY AND SECURITY OF SHIPPING
- RECOMMENDATION FROM GOVERNOR REGARDING THE COMPATIBILITY WITH THE PROVINCE PLAN
- RECOMMENDATION FROM REGION HEAD REGARDING THE COMPATIBILITY WITH THE CITY PLAN
- AUDITED FINANCIAL REPORT
- BANK REFERENCE
- FEASIBILITY STUDY
REGULATION FOR LNG PORTS

REQUIREMENTS FOR CONSTRUCTION AND OPERATING THE SPECIAL PORT

ADMINISTRATIVE
- NOTARY COMPANY ACT
- MAIN BUSINESS LICENSE
- TAX ID NUMBER (NPWP)
- CERTIFICATE OF LAND OWNERSHIP
- HARBOUR MASTER RECOMMENDATION
- BANK REFERENCE
- AUDITED FINANCIAL REPORT

TECHNICAL
- FEASIBILITY STUDY
- TIDE SURVEY REPORT
- HYDROGRAPHICAL AND TOPOGRAPHY DRAWING
- PIER LAY OUT
- CALCULATION AND CONSTRUCTION DRAWING
- SOIL CONDITION SURVEY REPORT
- MASTER PLAN, INCLUDING WATER AND LAND BOUNDARIES
- SOP OF SERVICES GIVEN IN SPECIAL PORT
- CERTIFICATES OF HUMAN RESOURCES
OBLIGATION OF SPECIAL PORT MANAGER DURING CONSTRUCTION PROCESS:

1. Execute the construction work based on schedule
2. Responsible for the side effect arising from the construction process
3. Execute the construction work for maximum 2 years from the date of construction approval granted
4. Reporting the construction process to the nearest harbour master
5. Obeying the law and regulation applied
REGULATION FOR LNG PORTS

PORTS FOR OWN PURPOSE CHARACTERISTIC (TUKS)

- THE LOCATION IS IN THE AREA OF LOCAL FEEDER PORT
- THE LOCATION IS IN THE AREA OF REGIONAL FEEDER PORT
- THE LOCATION IS IN THE AREA OF MAIN PORT OR HUB PORT
- MANAGEMENT PARTNERSHIP WITH PORT AUTHORITY
REGULATION FOR LNG PORTS

REQUIREMENTS OF MANAGEMENT
PORT FOR OWN PURPOSE

- NOTARY COMPANY ACT (AKTA PENDIRIAN PERUSAHAAN)
- TAX ID NUMBER (NPWP)
- MAIN BUSINESS LICENSE FROM RELATED INSTITUTION
- GEOGRAPHICAL COORDINATE IN NAUTICAL CHART
- HARBOUR MASTER RECOMMENDATION
- COOPERATION AGREEMENT WITH PORT OPERATOR
- PIER LAY OUT
- CALCULATION AND CONSTRUCTION DRAWING OF THE PIER
- AUDITED FINANCIAL REPORT
- BANK REFERENCE
- FEASIBILITY STUDY INCLUDING PORT ENVIRONMENTAL STUDY
MAPPING FOR SPECIAL PORTS & PORTS FOR OWN PURPOSE

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Thank you