MEMORANDUM OF UNDERSTANDING

ON

THE HARMONISED REGULATIONS FOR SAFETY OF NAVIGATION AND POLLUTION PREVENTION ON THE MEKONG RIVER

BETWEEN

THE MARINE DEPARTMENT OF THE KINGDOM OF THAILAND AND THE DEPARTMENT OF WATERWAYS OF THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

Bangkok, 12 May 2026

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MEMORANDUM OF UNDERSTANDING ON THE HARMONISED REGULATIONS FOR SAFETY OF NAVIGATION AND POLLUTION PREVENTION ON THE MEKONG RIVER[1] BETWEEN THE MARINE DEPARTMENT OF THE KINGDOM OF THAILAND AND THE DEPARTMENT OF WATERWAYS OF THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

The Marine Department of the Kingdom of Thailand and the Department of Waterways of the Lao People's Democratic Republic (Lao PDR), hereinafter collectively referred to as the "Participants";

- Recognising the importance of the safety of navigation and the prevention of pollution on the Mekong River;
- Convinced of the need to harmonise regulations for the safety of navigation and pollution prevention on the Mekong River between the two countries;
- Convinced that such a harmonisation would contribute to the safeguarding of the safety of ships, human lives, and properties on the Mekong River and the prevention of water pollution;

Have reached the following understandings:

Section 1: General Provisions and Purpose

1.1. This Memorandum of Understanding is aimed at progressively harmonising regulations for the safety of navigation and pollution prevention on the mainstream Mekong River without creating any legal obligations between the Participants.

1.2. The Participants reaffirm that, on the basis of equality of right, freedom of navigation shall be accorded throughout the mainstream of the Mekong River without regard to the territorial boundaries in accordance with Article 9 of the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin.

1.3. To promote such freedom and enhance the safety of ships and navigation, the Participants will make their efforts to implement the following Regulations, which are contained in the Annexes to this Memorandum of Understanding:

- Annex 1: Regulations on Ship Traffic on the Mekong River.
- Annex 2: Technical Regulations on Ship Safety, Equipment, and Inspections on the Mekong River.
- Annex 3: Regulations on Emergency Response to Handle & Coordinate Navigation-Related Unexpected Incidents on the Mekong River.

[1] The Mekong River in this Memorandum of Understanding refers to the mainstream Mekong River. Thus, the application of this Memorandum of Understanding and its Annexes is only on the mainstream Mekong River.

- Annex 4: Regulations on Management of Search & Rescue, Salvage & Wreck Removal on the Mekong River.
- Annex 5: Regulations on the Certification of Lao and Thai Crew Members, Sailing on the Mekong River.

1.4. The Participants are encouraged to take all appropriate legislative, regulatory, and administrative measures to implement the above-mentioned Annexes and to progressively incorporate them into the national laws and regulations of the countries of the respective Participants.

Section 2: Specific Arrangements

2.1. Each Participant will endeavour to start implementing the Annexes referred to in Section 1.3 within 12 months from the date of the signature of this Memorandum of Understanding. The national laws and regulations of the countries of the respective Participants referred to in Section 1.4 should be aligned as closely as possible to the provisions of the Annexes of this Memorandum of Understanding.

2.2. Each Participant will designate the competent authorities to implement the Annexes of this Memorandum of Understanding and notify the other Participant of such designations and of any subsequent changes.

2.3. Each Participant will endeavour to progressively implement the appropriate measures to enable the full implementation of the annexed Regulations 1, 2, 3, 4, and 5 as mentioned in Section 1.3 by 2030 and any remaining additional Annexes mentioned in Section 3.1 by 2035.

Section 3: Additional Annexes and Amendments to this Memorandum of Understanding

3.1. The Participants will prepare and finalise the following additional Annexes to this Memorandum of Understanding by 31 December 2035:

- Annex 6: Regulations on the Protection of Passengers Travelling on the Mekong River.
- Annex 7: Contingency Plan for Oil Spills on the Mekong River.
- Annex 8: Regulations on Port Safety on the Mekong River.
- Annex 9: Regulations on Waste Management on the Mekong River.
- Annex 10: Regulations on a Ship and Waterway Classification in the Mekong River.
- Annex 11: Regulations for Emergency Response to Hazardous Substances Spills in Ports and Terminals.
- Annex 12: Mekong Tanker Safety Regulations.
- Annex 13: Regulations on the Transport and Handling of Dangerous Goods on the Mekong River.

3.2 An amendment to this Memorandum of Understanding and/or one of its Annexes and/or the addition of any further Annexes, including those referred to in Section 3.1, may be proposed

by any Participant. Such a proposal will be submitted to the other Participant for consideration and approval. Any amendment will take effect 60 days after the written communications of its acceptance by the Participants.

Section 4: Administrative Provisions

4.1. A bilateral Steering Committee will be established under the coordination of the National Mekong Committees of Lao PDR and Thailand, with support of the Mekong River Commission Secretariat, which will have the following key responsibilities:

a) To consult, cooperate, and exchange information with the Participants and the National Mekong Committees of Lao PDR and Thailand, with support of the Mekong River Commission Secretariat;
b) To ensure effective and efficient implementation of the Annexes to this Memorandum of Understanding; and
c) To prepare and propose new harmonised regulations to be added as an Annex to this Memorandum of Understanding;

4.2. The bilateral Steering Committee will hold its meeting at least once a year or whenever necessary upon the request of any Participant to coordinate and address matters specified in the Annexes to this Memorandum of Understanding.

4.3. This Memorandum of Understanding does not create, affect, limit, or extend any rights or obligations of the Participants under any international instruments or their respective national laws and regulations.

4.4. Either Participant may notify the other Participant in writing of its intention to terminate this Memorandum of Understanding. Such termination will take effect 60 days after the latter receives the written communication.

4.5 This Memorandum of Understanding will take effect from the date of its signature.

This Memorandum of Understanding was signed in Bangkok on 12 May 2026.

For the Marine Department of the Kingdom of Thailand

Mr Kritpetch Chaichuay
Director General

For the Department of Waterways of the Lao People's Democratic Republic

Mr Khamla Phommavanh
Director General

LIST OF ANNEXES:

ANNEX 1: REGULATIONS ON SHIP TRAFFIC ON THE MEKONG RIVER

Chapter I: General Provisions

Article 1
Purpose

These Regulations are formulated with a view to jointly strengthening the traffic control on the Mekong River, maintaining the order of waterborne traffic and ensuring the safety of ships between Lao PDR and Thailand.

Article 2
Application

These Regulations are applicable to all ships sailing, berthing or conducting operations on the section of the Mekong River between Lao PDR and Thailand.

Article 3
Ship's Name and Nationality

A ship shall fly the flag of her Flag State and shall be marked with the ship's registration number as well as the ship's name and port of registry in both local and English languages.

Article 4
Ship's Technical Conditions

A ship's technical conditions and her manning standard shall be in compliance with the regulations of her Flag State.

Article 5
General Definitions

For the purpose of these Regulations, except where the context otherwise requires:

a. The "competent authorities" means the authority or authorities designated by the Lao PDR and Thailand as competent for the matters regulated in these Regulations;
b. The word "ship" includes all types of ships, floating equipment, seaplanes and other waterborne transportation tools;
c. The word "floating equipment" means floating structures carrying machinery used for work on waterways or in harbours (dredgers, elevators, derricks, cranes, sand mining barges, floating docks, etc.);
d. The term "head-on situation" means a situation where an upward ship is meeting with a downward ship, including meeting on reciprocal or nearly reciprocal course, meeting from starboard side or port side and meeting in a bending fairway, but not including meeting of two crossing ships;
e. The word "crossing" means movement of a ship from one side of the river to the other at a right angle or nearly right angle to the mainstream of the river;

f. The term "fast ship" means a ship whose service speed is equal to or exceeds 35 kilometres per hour in calm water;
g. The word "fairway" means the water area of the river navigable for ships;
h. The term "restricted visibility" means any condition in which visibility is restricted by fog, mist, heavy rainstorms or any other similar causes;
i. The term "upward ship" means a ship moving to the upper reaches of the river;
j. The term "downward ship" means a ship whose course is opposite to that of an upward ship;
k. The word "underway" means that a ship is not at anchor, or made fast to the shore, or aground; and
l. The term "engineering ship" means a ship which is engaged in exploration, survey, construction, dredging, explosion, rescue, scientific experiments and other surface and underwater works.

Chapter II: Sailing and Avoiding

Part 1: General Conduct of Ships

Article 6
Look-out

Every ship shall at all times maintain a proper look-out by sight and hearing as well as by all available means and pay close attention to the prevailing circumstances and movements of approaching ships so as to make a full appraisal of the situation and/or the risk of collision.

Article 7
Safe Speed

Every ship shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision.

In determining a safe speed, a ship shall take into account such factors as visibility, traffic density, the ship's manoeuvrability, wind, wave, current, fairway conditions and other prevailing circumstances, and where a radar is used, the characteristics, efficiency and limitations of the radar equipment as well.

When passing by a ship or through an area where the reduced speed is required by the competent authorities, every ship shall control her speed in ample time and pass as far away from the ship or the area as required by the competent authorities.

The ship in the area requiring speed reduction cannot be relieved of its responsibility because of its insufficient anti-wave ability and/or measures.

Article 8

Principles of Sailing

An upward ship shall proceed along the slow stream or one side of the fairway, whereas a downward ship shall proceed along the mainstream or in the middle of the fairway.

Article 9

Principles of Avoiding

Every ship shall navigate with caution. Any action to avoid collision shall be clear, effective and taken in ample time, and with good seamanship until the other ship is finally past and clear.

The give-way ship shall actively keep out of the way of the given-way ship; the given-way ship shall pay attention to the actions taken by the give-way ship and take action to assist in collision avoidance under the prevailing circumstances.

When two ships are meeting, their actions to avoid collision shall not be changed once their avoiding intentions have been confirmed by their sounding signals.

Part 2: Conducts of Ships in Sight of One Another

Article 10

Head-on Situation

Except otherwise specified in this Part, when two ships are meeting on reciprocal or nearly reciprocal courses:

a. The upward ship shall give way to the downward ship;
b. When approaching rapids, shoals, bending fairways or narrow channels where ships cannot pass each other, a ship shall give sound signals as required to draw the attention of other ships, and when meeting an approaching ship, shall take avoiding actions under paragraph (a) of this Article. Additionally, the upward ship shall wait for the passing of the downward ship at the lower reaches to the rapids and shoals, bending fairways or narrow channels where ships cannot pass each other;
c. A ship not provided with the equipment for sound signals, if not the downward ship described in paragraph (a) of this Article, shall give way to the ships having given signals for passing as required. Two ships, neither of which is provided with equipment for sound signals, shall, when meeting, take avoiding actions according to the Articles of this Part.

Article 11

Overtaking

A ship shall be deemed to be overtaking when coming up with another ship from a direction more than 22.5 degrees abaft her beam so as to involve risk of collision, and shall comply with the following provisions:

a. Overtaking or proceeding side by side with another ship is prohibited in narrow or bending channels, shoals, bridge areas and leading channels of a lock;

b. In a fairway where overtaking is permitted, the overtaking ship shall give sound signals as required and obtain agreement from the ship to be overtaken before starting to overtake;
c. During overtaking, the overtaking ship shall give way to and keep clear of the ship to be overtaken. The overtaking ship shall not block the way of the overtaken ship;
d. The ship to be overtaken shall, on hearing the sound signals for overtaking from the overtaking ship, respond by sound signals as required to indicate whether she agrees to be overtaken. If the fairway conditions and circumstances of the case admit, the ship should agree to be overtaken and, as far as practicable, take such actions as to give a part of the fairway or reduce speed to assist in avoiding collision.

Article 12

Crossing

Before crossing, a ship shall take into account the fairway conditions and prevailing circumstances and make sure that the crossing does not impede navigation of the ship, and sound signals have been given as required.

Except otherwise specified in this Part, the crossing ship shall, when meeting with upward or downward ships, keep out of the way and pass astern of the upward or downward ships.

Article 13

Following

When ships are in a following situation, the following ship shall keep a safe distance away from the forward ship so that she can take actions in ample time to avoid collision in case of emergency.

Article 14

Turning Round

A ship shall, before turning round, take into account the fairway conditions and prevailing circumstances and make sure that sound signals have been given as required.

Article 15

Fast Ship

A fast ship underway shall keep well clear of all other ships. Two fast ships in a meeting situation shall take avoiding actions in accordance with the requirements set out in the Article of this Part. Fast ships are prohibited from navigating at night.

Article 16

Ship Meeting with an Engineering Ship Working Underway

Notwithstanding anything contained in this Part, a ship shall, while meeting with an engineering ship working underway, give way to the engineering ship.

Article 17
Berthing Alongside, Casting off and Anchoring

Before berthing alongside or casting off, a ship shall take into account the fairway conditions and prevailing circumstances, and make sure that such conduct does not impede the navigation of other ships and that sound signals have been given as required.

Ships are prohibited from anchoring or mooring in narrow or bending channels or other water areas where such conduct may impede the navigation of other ships.

Part 3: Conduct of Ships in Restricted Visibility and Other Matters

Article 18
Conduct of Ships in Restricted Visibility

A ship in restricted visibility shall choose in ample time a safe place for anchoring and shall not continue her voyage at risk.

Article 19
Navigation at Night

Navigation of ships at night shall only be permitted in those sections of the fairway which are navigable at night.

A ship not provided with lights and equipment for sound signals or unable to indicate her intention or movement is prohibited from navigating at night.

Chapter III: Lights and Shapes

Article 20
General provisions

The articles concerning lights shall be complied with in all weathers from sunset to sunrise. The relevant lights may also be exhibited in restricted visibility in the daytime. During the period when the lights are exhibited, no other lights which may be mistaken for the lights specified or impair their exhibiting character shall be exhibited.

The articles concerning shapes shall be complied with during the daytime.

Lights and shapes shall be exhibited where they can be seen easily and in compliance with the technical requirements set out in Appendix 1 of these Regulations. Except otherwise specified in these Regulations, several lights or shapes, when forming a group, shall be exhibited in a vertical line.

Article 21

Single Ship Underway

Except otherwise specified in this Part, a single ship, when underway, shall exhibit a white masthead light, a red and a green sidelight, and a white stem light.

A fast ship when underway shall, in addition to exhibiting the lights prescribed in the above paragraph, exhibit a yellow flashing light in the daytime.

In the daytime, a fast ship without a cabin arrangement, when underway, is exempted from exhibiting the lights prescribed in this Article but shall hoist an orange flag at the masthead. A ship not provided with a mast, when underway, shall hoist one white flag in the daytime, at a height of not less than 3 metres.

Article 22

Engineering Ship

An engineering ship on the work site shall exhibit the following lights and shapes:

a. An engineering ship with a fixed working location shall exhibit three all-round lights at night. The connecting lines of the three lights form an equilateral triangle with one angle pointing upward. The all-round light on the top of the triangle shall be red, while at the two ends of the bottom line of the triangle, the light on the navigable side shall be white and that on the non-navigable side red. While in the daytime, a shape shall be exhibited at each end of the mast yard, i.e. a ball on the navigable side and a cross on the non-navigable side;
b. An engineering ship driven by its own propulsion power, when working underway, shall, in addition to exhibiting masthead light and sidelight as prescribed in Article 21, exhibit:
   i. Two all-round red lights at night, two balls in a vertical line in the daytime to indicate the side on which the obstruction exists;
   ii. Two all-round green lights at night, two diamonds in a vertical line in daytime to indicate the side on which another ship may pass.
c. An engineering ship with extended mud pipes shall exhibit at night all-round white lights at either end of the pipe and at every fifty metres.

Article 23

Turning Round

Ships of more than 30 metres in length shall, 5 minutes prior to turning round, exhibit two all-round lights in a vertical line at night, the upper being red and the lower white, and a shape consisting of a ball and an answer flag underneath in the daytime. After having turned round, the ship shall turn off the two lights or lower the shape.

Article 24

Anchoring

Ships at anchor shall exhibit an all-round white light at night and a ball in the daytime.

Article 25

Carriage of Dangerous Goods

During berthing, loading and unloading or navigating, a ship carrying dangerous goods shall, in addition to exhibiting signals as generally prescribed, exhibit an all-round red light at the mast yard at night and the International Code Flag "B" in the daytime.

Article 26

Ship Not Under Command

A ship not under command shall choose in ample time a safe place for anchoring. Before anchoring, the ship shall, in addition to exhibiting the sidelights and stem light, exhibit two all-round red lights at night, and two balls in the daytime.

Article 27

Requiring Reduction of Speed

A ship or an area which requires the other ships to reduce speed shall, at the mast yard of the ship or the upward and downward ends of the area, exhibit an all-round green light and an all-round red light at night, and the International Code Flag "RY" in the daytime. Ships not provided with lights and shapes may wave up and down in the air a white light lamp or a white light torch at night, and a white code flag in the daytime.

Chapter IV: Sound Signals

Article 28

Equipment for Sound Signals

A ship shall be provided with a whistle and a bell. If the conditions do not permit, a ship must be provided with a bell or one other effective sounding device.

Whistles and bells shall comply with the technical requirements set out in Appendix 2 of these Regulations.

Article 29

Meanings of Sound Signals

A ship shall use the whistle to give the following sound signals under the provisions of these Regulations in order to indicate her intentions and actions and to draw the attention of other ships:

a. One short blast means "I am altering my course to starboard"; when meeting with another ship on a reciprocal or nearly reciprocal course, "Pass on my port side";
b. Two short blasts means "I am altering my course to port"; when meeting with another ship on a reciprocal or nearly reciprocal course, "Pass on my starboard side";
c. Three short blasts means "I am operating astern propulsion or intending to do so";
d. Four short blasts means "I do not agree to your request";

e. A prolonged blast means "I am casting off", "I am crossing" and requesting the attention of approaching ships or ships in the vicinity;
f. Two prolonged blasts mean "I am berthing alongside";
g. Three prolonged blasts mean "man overboard";
h. One prolonged blast followed by one short blast means "I am turning to starboard";
i. One prolonged blast followed by two short blasts means "I am turning to port";
j. Two prolonged blasts followed by one short blast means "I intend to overtake you on your starboard side";
k. Two prolonged blasts followed by two short blasts means "I intend to overtake you on your port side";
l. One prolonged, one short, one prolonged and one short blast means "I agree to our request";
m. One short, one prolonged, one short and one prolonged blast means "I request you to reduce your speed or stop your engine"; and
n. One short blast followed by one prolonged blast means "I have reduced my speed or stopped my engine".

The term "short blast" in the above paragraphs means a blast of about one second's duration. The term "prolonged blast" means a blast of from four to six seconds' duration. The intervals between blasts in one group are about one second, and those between groups are about six seconds.

Article 30

Use of Sound Signals by Ships in a Head-on Situation

When in a head-on situation, ships shall use the sound signals in accordance with the following provisions:

a. When two ships are meeting on reciprocal or nearly reciprocal course, the downward ship shall, at a distance of more than 1,000 metres away from the upward ship, have due regard to the fairway conditions and prevailing circumstances and give in ample time sound signals for passing. On hearing the sound signals, the upward ship shall, if conditions permit, promptly respond with appropriate sound signals. No change shall be made to the sound signals once they have been agreed upon; and
b. When meeting an engineering ship working underway on a reciprocal or nearly reciprocal course, a ship shall, at a distance of more than 1,000 metres away from the engineering ship, give one prolonged blast, and may, on hearing the sound signals given by the engineering ship, respond with appropriate sound signals and pass the engineering ship with caution.

Article 31

Sound Signals in Restricted Visibility

Ships underway or at anchor in restricted visibility shall give sound signals in accordance with the following provisions:

a. A ship underway shall give one prolonged blast at intervals of about one minute.
   A ship not provided with sound signal equipment shall, when underway, ring in a rapid manner the bell or other effective sound devices for five seconds at intervals of about one minute;

b. A ship at anchor shall, on hearing the sound signals from an approaching ship, ring the bell or other effective sound devices uninterruptedly and in a rapid manner until it is determined that the approaching ship will not pose any danger to herself.

Article 32

VHF Radio Telephone

Ships of 50 gross tonnage or more shall be provided with a VHF radio telephone and keep watch on the specified channel. The language used for VHF communication shall be brief and clear.

When approaching the bending or narrow parts of the fairway or navigating in restricted visibility, a ship shall use VHF radio telephone to announce her position and movement at regular intervals.

Article 33

Distress Signals

A ship in distress and in need of assistance shall use or exhibit either together or separately the sound signals as prescribed in Appendix 3.

Chapter V: Exemption

Article 34

Exemption

Ships of less than 50 gross tonnage may be exempted from installing on board the lights as specified in Chapter III.

Chapter VI: Other Provisions

Article 35

Appendix

The attached appendices form an integral part of these Regulations.

The term "more than" used in these Regulations includes the number itself, whereas the term "less than" does not include the number itself.

Article 36

Duties and Responsibilities of the Ship Master

Every ship or assembly of floating material shall be placed under the authority of a person having the necessary qualifications and having followed the necessary training. This person is hereinafter referred to as the ship master. Ship masters are considered to possess the necessary qualifications if they hold a valid ship master's certificate.

When a ship is underway, the ship master shall be on board. In addition, the ship master of floating equipment shall always be on board when the equipment is in operation.

The ship master is responsible for ensuring compliance with these Regulations on his or her ship, convoy or assembly of floating material. In a towed convoy, the ship masters of the towed ships shall obey the orders of the ship master of the convoy. However, even without such orders, they shall take all steps required by the circumstances for the proper handling of their ships.

Every floating establishment shall be placed under the authority of a designated person who shall be responsible for the observance of the provisions of these Regulations on the floating establishment.

The faculties of the ship master shall not be impaired as a result of a state of fatigue or intoxication.

Article 37

Crew members and other persons on board

Crew members shall carry out the orders given to them by the ship master in the performance of his or her duties. They shall assist in complying with the requirements of these Regulations and of any other applicable provisions .

All other persons on board, including passengers, are required to comply with the orders given to them by the ship master in the interest of safe navigation or of good order on board.

Crew members who are under navigating duty, such as an officer in charge, shall also be responsible in that respect for ensuring compliance with the requirements of these Regulations.

The faculties of crew members who are under navigating duty shall not be impaired as a result of a state of fatigue or intoxication.

Article 38

Rescue and assistance

In the event of an incident endangering persons on board, the ship master shall use every means at his disposal to save them and notify in time the nearest competent authorities of the rescue progress and the result thereof.

Every ship master who is close to a ship or assembly of floating material which has suffered an incident endangering persons or threatening to obstruct the fairway is required to give immediate assistance as far as is consistent with the safety of his or her own ship.

Article 39

Inspection and Enforcement

Ship masters and persons in charge of floating establishments shall give officials of the competent authorities the necessary facilities for verifying compliance with these Regulations and any other applicable provisions, and in particular, facilitate immediate boarding by them.

Authorised officials of the competent authorities may, except in special cases when the provisions of other legislation are applicable, by means of a special decision, prohibit the navigation of a ship and, in particular,

(a) When the ship does not have a ship's certificate or national navigation permit, or these documents have expired;

(b) When the capabilities of the ship master or on-duty crew members have been diminished due to a state of fatigue or intoxication.

Article 40

National Flag

Crewed ships underway shall fly their national flag at the stern.

Article 41

Passage through Locks

1. Ships approaching lock basins shall reduce speed.
2. Ships shall inform the lock operator in advance by VHF radio of their arrival and listen on the channel allotted to the lock.
3. Passage through locks shall be in the order of arrival in the lock basins. Small craft shall not be entitled to demand separate locking. They shall not enter the lock until invited to do so by the lock staff. Furthermore, when small craft are passing through at the same time as other ships, they shall enter the lock only after the latter.
4. Overtaking in or near locks, especially in lock basins, is prohibited.
5. In locks, anchors shall be in the fully raised position; the same shall apply in lock basins, unless the anchors are in use.
6. Upon entering locks, ships shall reduce speed so as to avoid bumping against the gates, protective devices, other ships, assemblies of floating material, or floating establishments. While the lock is being filled or emptied and until they are allowed to leave, ships shall be made fast, and the mooring ropes shall be so handled as to prevent bumping against the walls, gates or protective devices or against other ships or assemblies of floating material. Fendering devices shall be used.
7. The use of mechanical means of propulsion is prohibited from the time the ship is made fast until she is allowed to leave.
8. The competent authorities or the lock operator may prohibit the use of the lock by small craft. If small craft are allowed, they shall keep away from other ships.
9. In order to ensure safe and orderly navigation, quick passage through locks or their full use, the lock staff may give instructions supplementing or departing from the provisions of this Article. Ships in locks and lock basins shall comply with such instructions.
10. The ship master may request the lock operator to make available a lock pilot to provide assistance during the passage through the lock.

Article 42

Berthing and Anchoring

Without prejudice to the other provisions of these Regulations, ships and assemblies of floating material shall choose their berths as near the bank as their draught and local conditions permit and, in any case, so as not to obstruct navigation.

Except under special conditions laid down by the competent authorities, floating establishments shall be so placed as to leave the fairway clear for navigation.

Ships, assemblies of ships and of floating material and floating establishments shall, when stationary, be anchored or made fast in such a way that they cannot change position and thus constitute a danger or obstruction to other ships, taking into account, in particular, the wind, changes in the water level, suction and wash.

The competent authorities may designate the places where ships are allowed to berth or anchor. Every ship master shall immediately notify the competent authorities of the ship's position at a berth or anchorage and its departure from that berth or anchorage.

Article 43

Watch and Surveillance

1. An efficient watch shall be kept continuously on board of ships that lie in the fairway or are stationary. However, the competent authorities may exempt ships berthed in harbour basins from this requirement. Such an exemption shall not prevent the competent authorities from taking or ordering emergency measures.
2. An efficient watch shall be kept continuously on board passenger ships while passengers are on board.
3. All other berthed ships, assemblies of floating material and floating installations shall be kept under surveillance by a person capable of acting quickly if the need arises, unless such surveillance is rendered unnecessary by local conditions or is waived by the competent authorities.
4. When the ship has no ship master, the responsibility for setting up such a watch or surveillance shall lie with the ship operator and, in case the ship operator is not identifiable, with the ship owner.

Article 44

Prevention of Pollution

The ship master, other crew members and other persons on board shall exercise every care required by the circumstances in order to avoid polluting the waterway and to restrict to the maximum the amount of waste generated on board and to avoid as far as possible any mixing of the various categories of waste.

Article 45

Discharging

1. From the ship, it shall be prohibited to throw, discharge or allow to run into the waterway oily or greasy wastes generated from the operation of the ship; slops, household refuse, sludge or other special waste; portions of the cargo or cargo-related waste.
2. Exceptions to this prohibition are admissible only if consistent with the provisions on water protection and disposal of waste generated on board ships in effect for the

waterway concerned, and on condition that the competent authority has granted permission.

3. Without prejudice to the provisions on water protection and disposal of waste generated on board ships in effect for the waterway concerned, in the event of the incidental discharge of waste referred to in paragraph 1 of this Article or the threat of such discharge, the ship master must notify the nearest competent authority without delay and, as far as possible, ships located in the vicinity of the position of the discharge, indicating as precisely as possible the position, quantity and nature of the wastes, and measures taken.

Appendix 1: Technical Requirements for Lights and Shapes

a. Lights:

i. "Masthead light" means a white light placed over the mast of a ship on the fore and aft centre line of the ship showing an unbroken light over an arc of horizon of 225 degrees and so fixed as to show the light from light ahead in 22.5 degrees abaft the beam on either side of the ship;

ii. "Sidelights" means a red light on the port side and a green light on the starboard side placed on the left and right sides of the highest deck of a ship, each showing an unbroken light over an arc of the horizon of 112.5 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on its respective side.
The inboard screens for sidelights shall be painted matt black, the height of which shall be at least equal to that of the lights;

iii. "Stem light" means a white light placed at the stem centre showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to show the light 67.5 degrees from right abaft on each side of the ship. The height of the stem light shall be such that the stem light is as far as possible at the same horizontal level as the sidelights, but shall not be higher than the sidelights;

iv. "All-round light" means a light showing an unbroken light over an arc of the horizon of 360 degrees;

v. "Yellow flashing light" means an all-round yellow flashing light placed over the mast of a fast ship, whose flashing frequency is not less than 70 per minute;

vi. "Range of visibility" means the luminous range of the prescribed lights to be seen by normal eyesight at night when the atmospheric transmissivity is 0.8;

vii. For technical requirements of the lights, see Table 1.

b. Shapes and Code Flags:

i. Except otherwise specified, the shapes shall be black;

ii. The vertical distance between shapes shall be not less than 1.5 metres. However, such a distance between shapes can be reduced as appropriate for ships of less than 30 metres in length;

iii. The red-white code flag shall be 0.6-metre-wide and 0.4-metre-high;

iv. The code flags in these Regulations shall be in compliance with the International Code of Signals, 1969;

v. For technical requirements of the shapes, see Table 2.

Table 1

Length of ship	Distance between masthead lights or lights in a group	Length of screen for side lights	Range of visibility (Kilometres)				
			Mast head light	Side light	Stem light	All-round light	Flashing light
More than 50 metres	1.5 metres (the lowest light shall be not less than 4.5 metres above the highest deck)	0.91 metre	6	4	4	4	4
30 metres to less than 50 metres	1 metre (the lowest light shall be not less than 3 metres above the highest deck)	0.91 metre	5	3	3	3	3
less than 30 metres	0.6 metres (the lowest light shall be not less than 0.6 metres above the highest deck)	0.6 metre	3	2	2	2	2

Table 2

Unit: meter

Length of ship	Ball	Cross		Cylinder		Cone		Diamond
	Diameter	Length	Width	Diameter	Height	Diameter of the bottom ring	Height	
More than 30 metres	0.6	0.6	0.6	0.6	1.2	0.6	0.6	Comprising two cones with a common base
Less than 30 metres	0.3	0.3	0.3			0.6	0.6	

Appendix 2: Technical Requirements for the Equipment for Sound Signals

a. The whistle shall be able to give sound signals as required by these Regulations. The range of audibility of whistles fitted on board ships of more than 30 metres in length shall be not less than 2,000 metres; and for ships of less than 30 metres in length, the range shall be not less than 1,000 metres;
b. A whistle shall be placed as high as practicable on board the ship in order to reduce interception of the emitted sound by obstructions, especially in the direction straight ahead or particularly prescribed;
c. The sound pressure level of bells or other devices with similar sound characteristics shall be not less than 110 dB at a distance of 1 metre;
d. A bell shall be made of corrosion-resistant material and designed to give a clear tone. The diameter of the mouth of the bell fitted on board ships of more than 30 metres in length shall be not less than 300 mm, and for ships of less than 30 metres in length shall be not less than 200 mm. The mass of the striker shall be not less than 3 percent of that of the bell.

Appendix 3: Distress Signals

a. A ship in distress and in need of assistance shall use the following signals either together or separately:
    i. Continuous and rapid short blasts given by whistles, bells or any other effective devices;
    ii. A signal made by radiotelegraphy or by any other signalling method consisting of the group-(SOS) in the Morse Code;
    iii A signal sent by radiotelephone consisting of the spoken word "Mayday";
    iv. Flames made on board the ships;
    v. For sailing ships and man-powered ships in distress, waving red code Hags in the daytime and red-light torch at night.
b. Any ship finding another ship in distress may send the above-described distress signals instead, but shall indicate the name and position of the ship in distress.
c. Unless a ship is in distress and in need of assistance, the use of any other signals which may be confused with the above signals is prohibited.

ANNEX 2: TECHNICAL REGULATIONS ON SHIP SAFETY, EQUIPMENT AND INSPECTIONS ON THE MEKONG RIVER

Chapter I: General Provisions

Article 1
Purpose

These Technical Regulations are formulated with a view to safeguarding the safety of ships, people's lives and properties on the Mekong River and preventing the River from being polluted.

Article 2
Application

These Regulations shall apply to all ships which navigate, moor, anchor and operate in the Mekong River.

These Regulations do not apply to fishing ships and related activities and to Government ships.

Article 3
Recognised Organisations

The ship survey organisations authorised or recognised by the competent authorities of the State where the ship is registered are responsible for the surveys of their national ships according to the rules and regulations promulgated or recognised by them, which must satisfy the technical requirements of these Regulations.

Article 4
Recognition of Ship Certificates or Documents

Relevant ship certificates or documents duly issued or recognised by the competent authorities of the State where the ship is registered, in compliance with the technical requirements of these Regulations, shall be accepted. These certificates include the Tonnage Certificate, Load Line Certificate, Passenger Certificate, Oil-Pollution Prevention Certificate and the relevant technical documents.

Chapter II: Ship Construction

Article 5
Construction of Ships

The ship construction shall be in conformity with the technical regulations or standards issued or recognised by the competent authorities of the State where the ship is registered. The ships shall be constructed according to the design plans and technical documents approved by the competent authorities or their authorised agencies. In the process of construction, the competent authorities or the ship survey organisations shall carry out a new building survey so as to ensure the ship's quality.

Article 6

Structural Strength

Ships shall be built with sufficient structural strength. No matter what type of framing is adopted, the longitudinal members shall keep fine structural continuity. The framing of the deck, side and bottom shall be connected effectively to form a rigid integral. The arrangement and scantling of hull structure members should be checked and calculated according to the relevant regulations of the State where the ship is registered.

Article 7

Engines and Equipment

The main and auxiliary engines, shafting and machinery equipment relating to the safety of ships shall be designed, type selected and arranged to ensure the normal operation when the list is up to 10° and trim up to 5°.

The main propulsion machinery shall be capable of producing sufficient astern power to ensure proper control of the ship in all normal conditions.

Article 8

Protection and Emergency Communication

The engine room shall have a doorway for entry, exit, inner aisle, ventilation, lighting and other protective facilities to prevent persons from being hurt. Appropriate means of communication shall be provided to any position from which an engine may be controlled. Emergency communication devices shall also be fitted for the ships in accordance with the relevant regulations of the State where the ship is registered.

Article 9

Pumping and Piping System

The pumping and piping system shall be of a design and construction adequate for the service. Pipes, valves and fittings shall be made of steel, cast iron, copper, copper alloy, or other approved materials suitable for the intended service. Materials sensitive to heat, such as aluminium, aluminium alloy, and plastics, etc., shall not be used in systems essential to the safe operation of the ship.

Article 10

Boilers

The boilers, boiler components, mountings and fittings, and pressure vessels shall withstand hydraulic tests and conform to the safety requirements. Boilers shall be adequately insulated. The insulation shall have a metallic sheathing.

Article 11

Main Engines

Main engines shall be capable of running for an hour at a power of 110 percent of their rated output and producing sufficient astern power to ensure proper control of the ship in all normal conditions.

The time required for reversing main engines and main propulsion machinery shall not exceed 15 seconds.

A safety interlocking device shall be fitted between the turning gear and the starting arrangements of the main engine. Devices for quickly cutting off fuel oil supply or other effective arrangements for emergency stopping shall be provided near the main engine control station.

Article 12

Gearing

For reversible gearing, the speed at free clutching and declutching shall not be less than 60 percent of the rated speed of main engines, and the time required for reversal shall not be more than 15 seconds.

The structural strength and model of the gearing selected shall meet the relevant regulations of the State where the ship is registered.

Article 13

Shaft and Propeller

The materials, structural dimensions, surface quality of the shaft and its parts and propeller shall meet the relevant regulations of the State where the ship is registered. Where the couplings are separated, provision shall be made for couplings to resist the astern pull so that no axial displacements of the couplings relative to the shafts may occur.

The temperature of the sliding bearing in the main propulsion shafting and their transmission gearing shall not exceed 65°C, and not exceed 80°C if a roller bearing is fitted.

Article 14

Steering Gear

The basic performance and arrangement of the steering gear shall conform to the relevant regulations of the State where the ship is registered and to the following requirements;

a. Where the power steering gear is installed, the gear shall be capable of driving the rudder over from 35° port to 30° starboard or vice versa with the ship at its full loaded draft and running ahead at maximum designed speed.

   Where an electric or electro-hydraulic steering gear is installed, two sets of electric motors or two sets of electro-hydraulic pump groups shall be provided respectively so that they can be operated alternately. The alternation shall be rapid and reliable, and the time required for the alternation shall not exceed 10 seconds.

b. Where the main steering gear is driven by a manual mechanism or manual hydraulic pressure,

another stand-by steering gear is not required unless the gear is capable of driving the rudder over from 35° port to 30° starboard or vice versa with the ship at its full loaded draft and running ahead at maximum designed speed.

Article 15

Windlasses

Windlasses shall be driven by independent prime movers or motors. For hydraulic windlasses, the hydraulic pipes may be connected with the pipes for other deck machinery, provided that there is no interference with the normal operation of windlasses.

Manual-operated windlasses may be accepted for ships having anchors, with each not exceeding the weight of 400 kgs. Provisions shall be made for manually operated windlasses to avoid personal injuries from the handles.

All power-operated windlasses shall be reversible.

Article 16

Electrical Equipment

The electrical equipment shall be capable of being safely operated, and the passengers, crew and ship shall be protected from electrical hazards.

The design, manufacture and installation of electrical equipment shall conform to the relevant regulations of the State where the ship is registered.

Article 17

Power Source of Steering Gears

Ships fitted with electrical or electro-hydraulic steering gears, when navigating, shall be equipped with an emergency power source in addition to the main power source. The main power source of ships shall be sufficient to ensure the supply of all electrical services necessary for normal operation and habitability from the main switchboard. The emergency power source shall be sufficient to ensure the supply of the emergency electrical devices necessary for the emergency conditions from the emergency switchboard.

Chapter III: Tonnage Measurement, Load Line and Stability

Article 18

Tonnage Measurement

Tonnage measurement is used to determine the ship's gross tonnage and net tonnage through measurement and calculation. Ship survey organisations authorised by the competent authorities of the State where the ship is registered are responsible for the tonnage measurement. The Ship's Tonnage Certificate duly issued or recognised by the ship survey organisations shall be accepted without the necessity of re-measuring the ships concerned.

Article 19

Freeboard

Minimum freeboard shall be determined, and a load line shall be marked for all commercial ships other than hydro gliders, hydrofoil crafts, aircushion crafts and floating docks. The determination of the ship minimum freeboard, the load line mark and marking methods shall be carried out according to the relevant regulations of the State where the ship is registered.

Article 20

Ship's Stability

The ship's stability calculation documents shall be checked and approved by the ship survey organisations authorised or recognised by the competent authorities of the State where the ship is registered.

Article 21

Weather or Loading Conditions

The ship shall comply with all restrictions related to weather or loading conditions, without prejudice to specific instructions from the competent authorities of the Port States.

Article 22

Summarising Stability

The ship shall have a table of summarising stability to enable operators to know well the stability of the ship under all loading conditions. The table summarising the stability of ships shall be prepared according to the stability calculation after building. The methods of stability calculation and the tables shall be approved by the competent authorities of the State where the ship is registered.

Chapter IV: Fire Fighting and Life-saving Appliances

Article 23

Fire Protection Measures

Fire protection measures shall be taken into consideration in the design, construction and installation of ships. The principal materials, equipment and installations used for fire protection shall conform to the relevant regulations of the State where the ship is registered.

Article 24

Fire Extinguishing System

Fire extinguishing system and appliances shall ensure that any part of the ship can be under control effectively in case of fire. The fire extinguishing system and appliances shall be kept in good order and available for immediate use at any time.

Article 25

Life-Saving Appliances

Life-saving appliances shall be provided sufficiently onboard for passengers and crew. Materials, specifications and performances of life-saving appliances shall conform to the relevant regulations of the State where the ship is registered.

Article 26

Lifejackets and Life Buoys

The number of lifejackets and life buoys shall meet the following requirements:

Life jackets:

The lifejackets used for crew and passengers shall be provided in a quantity of not less than 110 percent of the total number of passengers onboard. In addition, lifejackets for children shall be provided for at least 5 percent of the total number of passengers onboard.

Life buoys:

Type of ship / Life buoys / Ship length	Cargo ship (for each deck at least)	Passenger ship (for each deck at least)
L<10m	1	2
10≤L<30m	2	4
30≤L<60m	3	6

Article 27

Readily Accessible Lifejackets and Life Buoys

Lifejackets shall be so placed as to be readily accessible for passengers and crew. Lifebuoys shall be rationally placed on board where they can be reached readily.

Chapter V: Equipment for Navigation, Signal and Radio Communication

Article 28

Navigational Equipment

Navigational equipment onboard shall be provided respectively depending on the number of passengers, gross tonnage and total rated power of the ship in accordance with the requirements of the following table:

No.	Name of navigation equipment	Minimum amount required							
		Passenger ship (number of passengers)			Cargo ship (GT)			Pusher (Tugs) (KW)	
		⩾150	⩾50 <150	<50	⩾150	⩾50 <150	<50	⩾368	<368
1	Search light	2	1	1	2	1	1	2	1
2	Sounding pole	4	3	2	2	2	1	2	2
3	Sounding lead	2	1		2	1		2	1
4	Binoculars	2	1	1	2	1	1	2	1
5	Inclinometer	2	1		2	1		2	1
6	Ship's clock	3	2	1	3	2	1	2	1
7	Thermometer	2	1	1	2	1	1	2	1
8	Aneroid Barometer	1	1		1	1		1	1
9	Stopwatch	2	1		2	1		2	1

Article 29

Lights, Shapes, Flags and Sound Signal

Lights, shapes, flags and sound signal appliances shall be provided in accordance with the requirements of the Regulations on Ship Traffic on the Mekong River in respect of the type, amount, specifications, performance and installation.

Article 30

Minimum Appliances

The minimum amount required for lights, shapes, flags and sound signal appliances shall be provided in compliance with Tables 30-1,30-2,30-3, and 30-4.

Amount Required for Lights

Table 30-1

Type of light / Amount required / Type of ship	white mast head light	Green mast-head light	Red side light	Green side light	Bow light	White stem-light	All-round white light①	All-round red light②	All-round green light	Flashing yellow light
Power-driven ship	1③		1	1		1	1	2	1	
Ferry	1		1	1		1	1	2	3④	
Tug	3⑤	1⑥	1	1		2	1	2	1	
Barge			1	1	1	1	1	2	1	
Engineering ship	1		1	1		1	1	2	2	
Fast ship	1		1	1		1	1	2		1
Buoy tender	1		1	1		1	1		2	
Pontoon							1	2	1	
Sailing ship							1			

Note:

① Except for pontoon ships and sailing ships, two all-round white lights provided for a ship of 50 metres and above in length are regarded as fore and aft anchor lights, and the fore anchor light shall be higher than the aft anchor light.

② The ship intended for carrying dangerous goods shall be provided with an additional all-round red light.

③ Power-driven ships of 50 metres and above in length shall be provided with an additional white masthead light at the aft mast.

④ Two of the all-round green lights shall be located on the yard of the mast.

⑤ Pushers and tugs shall be provided with three white masthead lights. Tugs for towing raft or towing raft and pushing shall be provided with two white masthead lights.

⑥ To apply to tug for towing raft.

Amount Required for Shapes

Table 30-2

Type of ship / Name of shape	Engineering ship	Ferry across river	Others
Ball	3	3	3
Cross	1	1	
Diamond	2		1
Double Arrowheads		1	

Amount Required for Flags

Table 30-3

Length of ship (m) / Quantity / Name of flag	50>L≥30	L<30	Fast ship	Wooden ship L<20
National Flag	To be provided according to relevant regulations of the flag states.			
International Code Flag 4#	1 set	1 set	1 set	1 set
500mm×350mm Orange Flag			1 flag	
500mm×350mm White Flag		1 flag		1 flag
350mm×350mm Hand Flag	1 pair			

Amount Required for Sound Signal

Table 30-4

Length of ship (m) / Quantity / Name of flag	50>L≥30	L<30	Fast ship	Wooden ship L<20
Whistle	1	1	1	one audible appliance capable of making effective audible signals
Bell	1	1	1	
Gong	1		1	

Article 31

Radio Communication

Radio communication facilities shall be provided for the ship of 50 gross tonnage and above, and fast ship (service speed ≥ 35km/h) carrying 5 passengers or more. The design, manufacture and installation of ship radio communication facilities shall conform to the relevant requirements of the State where the ship is registered.

Article 32

Radio Communication Facilities

Amount required for radio communication facilities is as follows:

VHF radiotelephone (156.0 - 174MHz)	1
Portable VHF radiotelephone apparatus	1
Outward broadcast apparatus	1
MF/HF radio installation (1605 - 27500kHz), if necessary	1
Radio	1

Chapter VI: Ship Pollution Prevention

Article 33

Ship Design

The construction and equipment for the prevention of pollution from ships shall conform to the relevant requirements of the State where the ship is registered. The construction and equipment shall be designed, constructed and tested in accordance with the requirements approved by the competent authorities of the State where the ship is registered.

Article 34

Prevention of Oily Water

In order to prevent oily water from polluting the Mekong River, ships shall be equipped with oily water separators, or slop tanks or any other means.

Article 35

Prevention of Sewage Pollution

In order to prevent sewage pollution, the competent authorities shall encourage the installation of sewage treatment units on board passenger ships.

Article 36

Prevention of Garbage

The container shall be installed on a ship for the storage of garbage. It is forbidden to discharge garbage into the Mekong River.

Chapter VII: Number of Passengers and Accommodation Equipment

Article 37
Passenger Ship Certificates

Passenger ship or passenger-cargo ship means ships carrying 5 passengers or more. Passenger ships and passenger-cargo ships shall have the relevant certificates issued by ship survey organisations authorised or recognised by the competent authorities of the State where the ship is registered.

Article 38
Passenger Ships

Passenger ships and passenger-cargo ships shall meet the following requirements:

a. Passenger cabins of various classes shall be equipped with sleeping berths or seats. Specifications and conditions of sleeping berths and seats shall conform to the relevant regulations of the countries of the respective Participants;
b. Passenger cabins shall have passageways and means of access which are convenient for passengers to enter and exit;
c. Food and service facilities shall be provided for passengers on long -distance passenger ships;
d. Lavatories and communal bathrooms (if necessary) shall be provided sufficiently for passengers on the passenger ship;
e. Passenger cabins shall be provided with a medical kit for passengers;
f. Firefighting, ventilation, illumination and air conditioning, etc. shall conform to the relevant regulations of the countries of the respective Participants.
g. Passenger cabins and cargo hold shall be separate, and entry and exit ways shall not pass through the cargo hold, and gangway width shall not be less than 0.5 metres.

Chapter VIII: Certificates, Manning, Control and Enforcement

Article 39
Ship Registered and Identification Marks

Ships shall carry the ship safety, crew and other certificates required by the laws and regulations of the State where they are registered.

Every ship shall bear the following identification marks on its hull or on fixed boards or plates:

(a) Its name, which can also be an abbreviation or a number;

(b) Its home port or place of registry;

(c) Its registration identification number.

Article 40
Minimum Safe Manning

The competent authorities may impose minimum safe manning standards, which may vary according to the characteristics of the ship.

Article 41

Survey Status

The competent authorities of the Flag State and Port State are authorised to conduct initial, periodic, special, and voluntary inspections of ships.

The competent authorities of the Flag State and Port State may authorise recognised organisations to perform inspection activities on their behalf.

Article 42

Valid Certificate

The competent authorities of the State where the ship is located may at any time control whether a ship is carrying a valid certificate and whether it satisfies the requirements for the issuance of such a certificate.

In the case of failure to comply with the requirements, the competent authorities shall take appropriate measures as mentioned in the provisions below. They shall also request that the owner of the ship or its representative take all necessary measures to remedy the situation within a time limit set by the competent authorities.

The competent authorities which issued the certificate carried on the ship and the recognised organisation shall be informed of such failures as soon as possible, but not later than five working days after the control.

Article 43

Ship Detention

Where a valid certificate is not being carried, the ship may be detained.

If, during the control, the competent authorities find that the ship constitutes a manifest danger for the persons onboard, the environment or the safety of navigation, they may detain the ship until the necessary steps have been taken to remedy the situation.

Detention measures shall be based on the professional judgment of the competent authorities and shall not unduly delay the departure of the ship.

The competent authorities may also prescribe proportionate measures which will enable the ship to proceed safely, where appropriate, on termination of its transport operations, to a place where it will either be inspected or repaired.

The competent authorities that have detained a ship or have notified the owner of the ship or its representative of its intention to do so if the defects found are not corrected, shall inform the competent authorities which issued or last renewed the ship's certificate and the recognised organisation as soon as possible.

The competent authorities may agree on guidelines on inspection criteria and targets in relation to control and detention measures.

Any decision to detain a ship in the implementation of these Regulations shall state in detail the reasons on which it is based. Such a decision shall be notified without delay to the State where the ship is registered, the recognised organisation and the ship owner or operator, who shall, at the same time, be informed of the complaint and appeal procedures available under the laws in force in the State concerned and of their time limits.

ANNEX 3: REGULATIONS ON EMERGENCY RESPONSE TO HANDLE & COORDINATE NAVIGATION-RELATED UNEXPECTED INCIDENTS ON THE MEKONG RIVER

Chapter I: General Principles

Article 1
Purpose

These Regulations on an emergency response are hereby established in order to deal with any navigation-related unexpected incident, improve the emergency disposal and coordination response of both Participants, maximally control the damage caused by unexpected incidents and safeguard the people's lives and property

Article 2
Basis

The Regulations on an emergency response are made in accordance with the Memorandum of Understanding on the Harmonised Regulations for the Safety of Navigation and Pollution Prevention on the Mekong River between the Marine Department of the Kingdom of Thailand and the Department of Waterways of Lao PDR.

Article 3
Scope

The Regulations on an emergency plan are applicable to any navigation-related unexpected incident within the navigation channel on the Mekong River.

Article 4

Definition and Classification of Navigation-related Unexpected Incidents on the Mekong River

The navigation-related unexpected incident refers to any emergency incident that suddenly happens within the navigation section stipulated on the Mekong River, that is related to navigation, that causes or may cause any personnel casualty, property damage, ecological and environmental destruction, serious social disruption, that threatens the economic and social stability along the River and that jeopardises public security.

Unexpected incidents are classified into four types:

1. **Natural disaster**. It mainly includes geological disasters, meteorological disasters, seismic disasters, etc., that affect navigation.
2. **Incidental disaster**. It mainly includes various waterborne traffic incidents such as ship capsizing and collisions, striking reefs and getting stranded, fires, port safety incidents, oil spills from tankers, hazardous chemical leaks, etc., that threaten people's lives and property safety or any incidents or incidents that pollutes environment and destroy ecology in terms of international shipping.
3. **Public health incident**. It mainly includes serious infectious epidemic situations, groups of unidentified diseases and epidemic situations of animals and plants that happen on the navigation section or on the transport ship along the Mekong River, including other incidents

that seriously affect public health and life safety.

4. **Public security incident**. It mainly includes the navigation-related criminal incidents such as kidnapping, shootings, hijackings, as well as economic security incidents, etc.

Article 5

Classification of Unexpected Incidents

Based on the degree and effect of personnel casualties, property damage and ecological destruction caused by unexpected incidents, they are classified into two grades namely ordinary and serious incidents:

Grade	Situation of danger
Ordinary incident	1. An unexpected incident that has not caused personnel death or missing; 2. An unexpected incident that has caused an economic loss below USD 100,000; 3. An unexpected incident that has not caused ecological environment destruction and has not affected the normal production and life of the people along the river; 4. An unexpected incident that has not affected social stability.
Serious incident	1. An unexpected incident that has caused personnel death or missing; 2. An unexpected incident that has caused an economic loss above USD100,000; 3. An unexpected incident that has caused ecological environment destruction and affected the normal production and life of the people along the river; 4. An unexpected incident that has posed a threat to social stability.

Note: Among the four-item judgment standard between ordinary incident and serious incident, only one item is enough to be decided to put it into that grade.

Article 6

Emergency Handling Principle

Each Participant shall follow the principal norms of mutual respect of sovereignty, equality and friendship in dealing with unexpected incidents and keep to the following basic principles in work:

1. Put people first and reduce damage. Take it as the primary task to guarantee the public health and safety and maximally reduce the personnel casualty caused by unexpected incidents.
2. Quick response and effective handling. Think of danger in times of peace, make preparation, intensify management, ascertain responsibilities, standardise the response and handling work, perfect emergency teams and facilities construction, and gradually increase emergency dealing capacity to make sure that any unexpected incident can be dealt with in a timely and effective manner.
3. Strengthen coordination and cooperation. Each Participant shall give full consideration to the coordination and liaison of their relevant departments, which shall also strengthen their cooperation and standardise the emergency handling and coordination procedures.

Chapter II: Emergency Coordination and Organisation System

Article 7
Leading Organisation

The Participants are the administrative organisation to take charge of directing the work in dealing with any navigation-related unexpected incident on the Mekong river and the local governments along the river are responsible for the specific unexpected incident emergency handling work.

Article 8
Emergency Response and Handling Organisation

The local provincial government or local working organisation dispatched by the central government of each Participant shall determine the grade of response, initiate emergency measures and specifically implement emergency handling work for any unexpected incident according to the incident's nature, seriousness, controllability, effective range, etc.

Article 9
Coordination and Liaison Organisation

The Participants are the coordination and liaison organisation to mutually deal with any unexpected incident.

Chapter III: Operating Mechanism

Article 10
Information Report

1. Upon finding the above unexpected incidents, crew members of the ship sailing within the navigation channel on the Mekong River, the people and the governmental public officials along the river shall report it within a minimum time to the local government or the port administration near the navigation channel of the incident.
2. Upon finding or receiving the incident information report, the port administration or the local government along the River shall immediately report it to the provincial navigation or maritime authorities after initially checking and taking definitive measures in advance to contain the development of the incident.
3 Upon finding an unexpected incident, a ship crew member may report it to the ship owner through a wireless communication device or other effective means on board. After receiving the report, the ship owner shall immediately report it to the navigation or maritime administration at the ship registration place. After receiving the report, the maritime or navigation administration shall verify the incident, take emergency measures in advance and immediately report it to the provincial navigation or maritime authorities.

Article 11

Emergency Handling and Coordination

1. After receiving the report, the provincial navigation or maritime authorities in the place of the incident or ship registration shall immediately mobilise all available resources, take further emergency measures, assess the incident's nature and effect, and determine the grade of seriousness.
2. **Ordinary incident**

   The provincial navigation or maritime authorities in the place of incident or ship registration shall be responsible for the emergency handling and mutual coordination. They shall require the other parties and local government to give support if necessary, and report the situation of the incident and the handling measures to the competent authorities of that country within 24 hours after receiving the incident report. A summary report shall be formulated and reported to the competent authorities of that country after the incident has been handled.
3. **Serious incident**

   (1) The provincial navigation or maritime authorities in the place of incident or ship registration shall report the incident to the office of the competent authorities in the place of incident or ship registration and the provincial government of that country within 2 hours after receiving the incident report.

   (2) The office of the competent authorities in the place of the incident or ship registration shall report it to the competent authorities of that country within 2 hours after receiving the incident report and, at the same time, notify the office of the relevant authorities within 4 hours and request assistance from other relevant parties, if necessary.

   (3) The competent authorities of the Participants shall direct the emergency response.

   (4) After receiving the incident report, the provincial government shall instruct the emergency response handling organisation to initiate the emergency response procedures within 2 hours.

   (5) Once the emergency response procedures are initiated, the office of the competent authorities in the place of incident shall track the handling process and development of the unexpected incident and circulate a notice to the relevant offices of the competent authorities every 24 hours until the end of the emergency work.

   (6) After confirming that the relevant dangerous factors have been eliminated or the emergency work has come to an end, the office that initiated the emergency procedures shall report it to the supervising authorities and the office of the competent authorities in the place of incident or ship registration of that country as soon as possible, and then that office of the competent authorities shall formulate its summary report, reporting to the competent authorities of that country and circulating a notice to the relevant offices of the Participants.

Article 12

News Release

Each Participant shall inform and coordinate with the other before issuing information to the public to ensure consistency.

Article 13

Contents of the Information

The incident information circulation or report given by each Participant shall include the following details: the incident's time, place, cause, nature, process, consequence, development tendency, effective range, site emergency handling measures, suggestions for the next step, name and reporter of the circulating or reporting organisation, way of liaison and other appropriate information.

Article 14

Method of Information Circulation

Incident information shall be communicated between the Participants in English or their local languages by fax, email or telephone.

Chapter IV: Final Provisions

Article 15

Interpretation

Any divergence or dispute arising from the implementation or interpretation of this Annex shall be resolved through friendly consultation between the competent authorities of the Participants.

Article 16

Execution and Valid Period

To implement these Regulations, a joint Contingency Plan for Emergency Response will be part of these Regulations.

ANNEX 4: REGULATIONS ON MANAGEMENT OF SEARCH & RESCUE, SALVAGE & WRECK REMOVAL ON THE MEKONG RIVER

Chapter I: General Provisions

Article 1
Purpose

These Regulations are formulated with a view to jointly strengthening management of the safety of navigation on the Mekong River, safeguarding lives, vessels and properties, coordinating, organising and commanding search & rescue and salvage operations in a unified manner, ensuring timely rescue and salvage of persons and vessels in distress for avoiding or reducing loss, protecting environment and preventing pollution and enhancing management on wreck removal in accordance with the Memorandum of Understanding on the Harmonised Regulations for the Safety of Navigation and Pollution Prevention on the Mekong River between the Marine Department of the Kingdom of Thailand and the Department of Waterways of Lao PDR.

Article 2
Application

These Regulations apply to persons and vessels in distress as well as sunken vessels, including the hull, vessel articles and cargoes within the navigable waters of the Mekong River.

Article 3
Competent Authorities

The Participants are the competent authorities responsible for implementing these Regulations in respect of coordinating, organising and commanding search & rescue and salvage of persons and vessels in distress, as well as management operations on wreck removal.

Chapter II: Search & Rescue and Salvage

Article 4
Measures for Search and Rescue

Persons and vessels in distress shall take any possible effective measures and means to conduct self-rescue and report promptly to the nearest competent authorities and the vessel's owners and operators on the time, location, loss, preliminary cause of the incident, as well as their requests for rescue and salvage.

Article 5
Vessels' Duty

The vessels involved in the incident shall, without endangering themselves, make every effort to rescue persons in distress and not leave the site, and notify in time the nearest competent authorities of the rescue progress and the result thereof.

The vessels in the vicinity of the incident site shall, without endangering themselves, make every effort to rescue the persons in distress, and notify in time the nearest competent authorities of the rescue progress and the result thereof.

Article 6

Distress Alert

Upon receiving a distress alert, the nearest competent authorities shall verify the information on the distress and take immediate actions to organise a rescue operation and, at the same time, notify the competent authorities of the distressed vessel's Flag State of the information on the incident.

Article 7

Unified Command

All vessels participating in the rescue and salvage shall be subject to the unified command of the competent authorities.

Article 8

Cooperation

The Participants shall enhance their cooperation in search, rescue and salvage operations, and notify each other of the relevant information.

Chapter III: Wreck Removal

Article 9

Enhancement

The competent authorities shall enhance the management of wreck removal for the purposes of maintaining the safety of operation spots, protecting navigational conditions and preventing pollution from vessels.

Article 10

Sunken Vessels

Sunken vessels shall be removed if they:

a. are hindering navigation of vessels or regulation of waterways; or
b. have caused or will probably cause pollution; or
c. are threatening the security of either Participant; or
d. are considered by the competent authorities as necessary to be removed.

Article 11

Notification

The competent authorities with jurisdiction should notify the owners of sunken vessels to remove the wrecks within a specified timeframe if they hinder navigation of vessels and

regulation of waterways or threaten the security of either Participant .

Article 12

Removal

If a sunken vessel seriously hinders the safety of navigation and causes pollution in the water areas, the competent authorities with jurisdiction have the right to ask the owners of the sunken vessels or their authorised agents to execute a compulsory wreck removal in due course.

The owners of sunken vessels or their authorised agents shall set up marks in the area of the sunken vessels hindering the safety of navigation in accordance with the requirements of the competent authorities. They shall issue the navigation warning through the competent authorities.

The owners of sunken vessels or their authorised agents should submit the wreck removal application to the competent authorities together with the wreck removal plan. Having been approved by the competent authorities, the owners or their authorised agents should complete the wreck removal and clean-up within the specified timeframe.

As for the sunken vessels which have not been removed and cleaned up by their owners or their authorised agents within the specified timeframe, the competent authorities have the right to execute a compulsory wreck removal, with all the expenses arising therefrom being borne by the owners or their authorised agents.

In the event of a sunken vessel obstructing the traffic and the owner is not able to remove the sunken vessel, the competent authorities where the sunken vessel is located must negotiate with the ship owner and other participants or the Flag State on how to remove the sunken vessel as soon as possible.

Article 13

Expenses

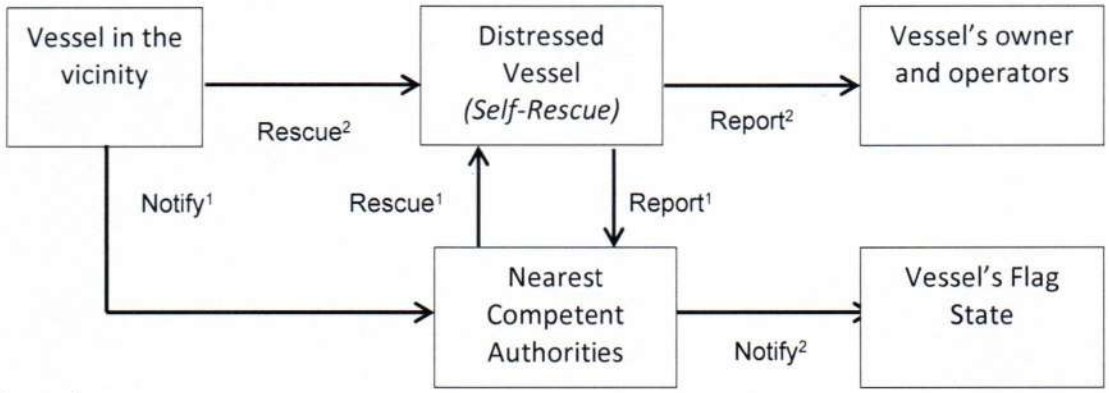
If the competent authorities cannot find the owner of a sunken vessel, they may sell or auction off the removed derelict wrecks to pay the expenses for the removal and clean-up. Such competent authorities can consult and discuss with the other Participant to seek budget and technical assistance.

Article 14

Removal Prohibition

Without the approval of the competent authorities, no one shall remove or clean up the wrecks.

A Unified Search & Rescue Coordination Flow Chart



Remarks

Report[1]: The time, location, loss, preliminary causes of incidents, request for rescue and salvage, as well as rescue progress and result

Report[2]: The time, location, loss, preliminary causes of incidents, request for rescue and salvage.

Notify[1]: The rescue progress and result

Notify[2]: Information on the incident

Rescue[1]: Verify the information on the distress and take immediate, effective actions to organise a rescue operation.

Rescue[2]: Make every effort to rescue the persons in distress without endangering itself.

ANNEX 5: REGULATIONS ON THE CERTIFICATION OF LAO AND THAI CREW MEMBERS, SAILING ON THE MEKONG RIVER

Chapter I: General Provisions

Article 1
Purpose

These Regulations are formulated with a view to jointly strengthening the management of certification and competency of crew members working on the Mekong River, in accordance with the Memorandum of Understanding on the Harmonised Regulations for the Safety of Navigation and Pollution Prevention on the Mekong River between the Marine Department of the Kingdom of Thailand and the Department of Waterways of Lao PDR.

Article 2
Application

These Regulations apply to all crew members on Thai and Lao ships navigating in the Mekong River. The Regulations shall not apply to the government ships with official security assignments.

Article 3
Competent Authorities

The Participants are the competent authorities responsible for implementing these Regulations concerning the training, examination and certification of crew members on their ships.

Article 4
Definitions

For the purpose of the Regulations, the meaning of terms are as follows:

"Certificate" means a certificate of knowledge and abilities issued by the competent authorities.

"Deck Department" means the department responsible for supervising and monitoring navigation, stability, cargo handling, lifesaving appliances, firefighting equipment, and the maintenance of upper hull structure.

"Engine Department" means the department responsible for the ship's propulsion engine, machinery and all types of electrical machines on the ship.

Chapter II: Deck Department

Part 1: Classification of Competency

Article 5
Classification of Certificates

Classes of Certificate of Knowledge and Abilities in the Deck Department, from the highest to the lowest level, are as follows:

(1) Skipper of Power-Driven River Vessel
(2) First-Class Helmsman of Power-Driven River Vessel
(3) Second-Class Helmsman of Power-Driven River Vessel

Article 6
Proficiency Level

Holders of a higher certificate class can work in positions which require a lower certificate class.

Part 2: Method of Competency Examination

Article 7
Examination

Each Participant shall conduct crew examinations in accordance with the respective laws and regulations of its country.

Article 8
Recognition of Examination

If crew members of other nationalities wish to apply for a competency examination for a certificate from the Deck Department, they must obtain approval and recognition from each Participant.

Article 9
Remedial Exam

Any subject which fails the passing measure may retake examinations under the following conditions:

(1) An examination for a Helmsman of Power-Driven River Vessel Certificate, or higher certificates, may be retaken no more than 2 times within a two-year period from the date of the first examination.
(2) Remedial exam of each subject must be taken later than the previous exam for at least 1 month.

Article 10

Certificate Comparison

Each Participant shall have the authority to compare teaching and training curriculums of institutes with the qualifications of examination application for certificates according to these Regulations.

Upon application for the same level of certificate comparison for foreign certificate holders, they shall have the authority to individually consider for approval.

Part 3: Curriculum

Article 11

Curriculum

Curriculum relating to competency examination of the Deck Department shall be conducted in accordance with national laws and regulations. The knowledge topics of each certificate level are as follows:

(1) **Skipper of Power-Driven River Vessel**;
Ship type and equipment, aids to navigation, ship handling, anchor and rope operation, cargo handling, ship business, passenger handling, ship communication, navigation rules and regulations, handling of emergency situations, lifesaving appliances, firefighting equipment, protection of the water environment.

(2) **First-Class Helmsman of Power-Driven River Vessel**;
Ship type and equipment, aids to navigation, ship handling, cargo and passenger handling, navigation rules and regulations, handling of emergency situations, lifesaving appliances, fire fighting equipment, protection of the water environment.

(3) **Second-Class Helmsman of Power-Driven River Vessel**;
Ship type and equipment, cargo and passenger handling, navigation rules and regulations, and handling of emergency situations.

Part 4: Qualifications of Examination Applicants

Article 12

Qualifications

Examination applicants must have the following qualifications:

(1) Have nationality of application.
(2) No record of terrible or bad behaviour which may cause unsafe or troublesome issues on board.
(3) No insanity or mental infirmity.
(4) No handicap or physical disability which results in the inability to work on duties.
(5) No contagious disease.
(6) Have good eyesight and hearing.

(7) For qualifications (3), (4), (5), and (6) above, applicants must submit a medical certificate as evidence for consideration.

Article 13

Skipper of Power-Driven River Vessel

Applicants for Skipper of Power-Driven River Vessel Certificate must have further qualifications, apart from those specified in Article 12, as follows:

(1) No less than the age of 20.

(2) Minimum graduation from middle school or other equivalent curriculums.

(3) Examination applicants for controlling ships of no more than 100 gross tonnage must have controlled power-driven ships larger than 15 gross tonnage or have been a skipper assistant on power-driven ships larger than 30 gross tonnage for at least 1 year.

(4) Examination applicants for controlling all sizes of ships must have worked as a Skipper on power-driven ships larger than 100 gross tonnage or a skipper assistant on power-driven ships larger than 100 gross tonnage for at least 1 year; or

(5) Have qualifications according to (1) above and pass the occupational curriculum examination and the special training curriculum of the Deck department approved by the competent authorities.

Article 14

First-Class Helmsman of Power-Driven River Vessel

Applicants for First Class Helmsman of Power-Driven River Vessel Certificate must have further qualifications, apart from Article 12, as follows:

(1) No less than the age of 18.

(2) Capability of literacy.

(3) Holders of Second-Class Helmsman of Power-Driven River Vessel Certificate, or Second-Class Helmsman of Power-Driven Sea-going Vessel Certificate, who have used to control a ship for at least 1 year; or

(4) Have working experience on a ship larger than 15 gross tonnage for at least 3 years; or

(5) Pass the competency examination according to the general occupational curriculum of Helmsman of Power-Driven Vessel.

Article 15

Second-Class Helmsman of Power-Driven River Vessel

Applicants for Second Class Helmsman of Power-Driven River Vessel Certificate must have further qualifications, apart from those specified in Article 12, as follows:

(1) No less than the age of 18.

(2) Capability of literacy.

(3) Have working experience on a ship of less than 15 gross tonnage for at least 1 year; or

(4) Pass the competency examination according to the general occupational curriculum of the Helmsman of Power-Driven Vessel.

Article 16

Additional Trainings

Examination applicants for Skipper of Power-Driven River Vessel Certificate shall show a certificate of training from the approved institutes by competency as follows:

(1) Firefighting Course

(2) First Aid Course

(3) Efficient Lifeboatman Course

Chapter III: Engine Department

Part 1: Classification of Competency

Article17

Classification of Certificates

Holders of Certificates of Knowledge and Abilities in the Engine Department can work on ships powered by main propulsion machinery.

Classes of Certificate of Knowledge and Abilities in the Engine Department, from the highest to the lowest level, are as follows:

(1) Special First-Class Engine Operator for Self-propelled River Vessel

(2) First-Class Engine Operator for Self-propelled River Vessel

(3) Second-Class Engine Operator for Self-propelled River Vessel

Part 2: Curriculum

Article 18

Curriculum

Curriculum for the competency examination in the Engine Department shall be conducted according to the respective law and regulations of the countries of the Participants. The knowledge topics of each certificate shall be as follows:

(1) Special First-Class Engine Operator for Self-propelled River Vessel

Laws and regulations, emergency response, ship propulsion engine, auxiliary engine, all types of electrical machinery, maintenance of all machinery, ship fuel, protection of the water environment.

(2) First-Class Engine Operator for Self-propelled River Vessel

Ship propulsion engine, auxiliary engine, all types of electrical machinery, maintenance of all machinery, ship fuel, and protection of the water environment.

(3) Second-Class Engine Operator for Self-propelled River Vessel

Ship propulsion engine, auxiliary engine, all types of electrical machinery, maintenance of all machinery, and protection of the water environment.

Part 3: Qualifications of Examination Applicants

Article 19
Qualifications

Examination applicants must have the following qualifications:

(1) Have nationality of application.

(2) No record of terrible or bad behaviour which may cause unsafe or troublesome issues on board.

(3) No insanity or mental infirmity.

(4) No handicap or physical disability which results in the inability to work on duties.

(5) No contagious disease.

(6) For qualifications (3), (4), and (5) above, applicants must submit a medical certificate as evidence for consideration.

Article 20
Special First-Class Engine Operator for Self-propelled River Vessel

Applicants for Special First-Class Engine Operator for Self-propelled River Vessel Certificate must have further qualifications, apart from those specified in Article 19, as follows:

(1) No less than the age of 20.

(2) A holder of First-Class Engine Operator for Self-propelled River Vessel Certificate who has working experience as an engine operator of more than 250 kW on River Vessels for at least 2 years; or

(3) Have a qualification according to (1) above and pass the special training curriculum of the Engine Department at the training institute approved by the competent authorities.

Article 21
First-Class Engine Operator for Self-propelled River Vessel Certificate

Applicants for First-Class Engine Operator for Self-propelled River Vessel Certificate must have further qualifications, apart from those specified in Article 19, as follows:

(1) No less than the age of 18.

(2) A holder of Second-Class Engine Operator for Self-propelled River Vessel Certificate who has working experience as an engine operator of more than 125 kW on River Vessels for at least 1 year; or

(3) Have a qualification according to (1) above and pass the special training curriculum of the Engine Department at the training institute approved by the competent authorities.

Article 22
Second-Class Engine Operator for Self-propelled River Vessel Certificate

Applicants for Second-Class Engine Operator for Self-propelled River Vessel Certificate must have further qualifications, apart from those specified in Article 19, as follows:

(1) No less than the age of 18.

(2) Have working experience as an engine operator of less than 125 kW on a river vessel for at least 1 year; or

(3) Have a qualification according to (1) above and pass the special training curriculum of the Engine Department at the training institute approved by the competent authorities.

Chapter IV: Certificates

Article 23
Recognition of Certificates

Whoever does not have the nationality of the country of the competent authority, if they want to work on the flagged vessel of the competent authorities, shall submit their request to the competent authorities to issue a Certificate of Endorsement (COE) on their knowledge and competency to control the engine according to the holders' certificate class. The Certificate of Endorsement Form shall be in accordance with the form which agreed upon by both competent authorities. Each competent authority shall appoint a committee to proceed with an examination of the qualifications, knowledge, and competency.

Article 24
Seagoing Service

Period calculation of working onboard shall be counted according to the period of the working year in the Deck and Engine Departments.

Article 25
Confirmation Document

Accreditation of examination applicants' working-onboard period to receive certificates shall be recognised by evidence of working- onboard with the ship owner' s confirmation. The confirmation document shall specify the applicant's onboard duties, duties performed during watchkeeping, and working period, which can also be counted by onboard evidence which appears in the employment agreement or the ship's license.

Article 26
Form of Certificate

The form of the certificate shall be according to the respective laws and regulations of the countries of the Participants.

Article 27
Certificate of Competency

Receivers of a certain certificate class must pass the required examination program for that class.

Article 28

Return of the Previous Certificate

Receivers of any certificate must return the previous certificate in their possession (if any).

Article 29

Replacement of Certificate

Replacement Certificate shall be issued under the following conditions:

(1) If certificates were lost or damaged, the certificate holders shall provide the evidence of a police report.

(2) If certificates were blurred or decaying in a significant part.

Article 30

Special Courses

All ships sailing on the Mekong River that are transporting dangerous goods in quantities greater than the limit should have at least one dangerous goods certified crew member on board. These certificates shall be given by the competent authorities to crew members who have followed a short course on the "Transport, Handling and Storage of Dangerous Goods".