



Mekong River Commission Secretariat

Request for Proposal no. RFP10-064

**Installation of Aids to Navigation along the Dangerous Areas of the
Mekong River between Luang Prabang and Houei Sai
in the Lao PDR and Thailand**

Vientiane, March 2010

SECTION I

INVITATION FOR PROPOSALS

Installation of Aids to Navigation along the Dangerous Areas of the Mekong River between Luang Prabang and Houei Sai in the Lao PDR and Thailand

The Mekong River Commission Secretariat (hereinafter “the Employer”) hereby invites sealed Proposals from eligible Consultants for the consultancy services called “Installation of Aids to Navigation on the Dangerous Areas of the Mekong River between Luang Prabang and Houei Sai in Lao PDR and Thailand” in accordance with the terms and conditions mentioned in the Request for Proposal.

This Request for Proposal (RFP) includes the following documents:

Section I	Invitation for Proposals
Section II	Instructions to Bidders
Section III	Terms of Reference
Section IV	Draft Contract

The proposals shall be submitted in one outer sealed envelope containing two separate sealed envelopes, one envelope containing the Technical Proposal and one envelope containing the Financial Proposal. The outer envelope shall be clearly marked “Installation of Aids to Navigation on the Dangerous Areas of the Mekong River between Luang Prabang and Houei Sai in Lao PDR and Thailand ; RFP No. 10-064 - DO NOT OPEN BEFORE DEADLINE SUBMISSION DATE”. The two sealed inner envelopes shall be marked “Technical Proposal” and “Financial Proposal” respectively.

Deadline for submission of proposals is 30 April 2010, 15.00 hours local time.

All correspondence related to the tender shall be addressed to:

Mekong River Commission Secretariat

Finance and Administration Section

Procurement Unit (RFP 10-064)

P.O. Box 6101, Unit 18 Ban Sithane Neua,

Sikhottabong District, Vientiane 01000, Lao PDR.

Tel: (856) 21 263 263; Fax: (856) 21 263 264

Email: kiettisack@mrcmekong.org, ornchanh@mrcmekong.org

Nguyen Thu Mai
Chief, Finance and Administration Section

SECTION II

INSTRUCTION TO BIDDERS

1. Proposal to be considered

- a. **Eligibility:** Proposals which comply with the conditions and terms as stipulated in the Request for Proposal documents will be considered.
- b. **Conflict of Interest:** MRC considers a conflict of interest to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.
- c. **Amendment of RFP:** At any time before the submission of Proposals, MRC may amend the RFP by issuing an addendum in writing or by standard electronic means. Consultants having informed MRC about their intention to submit a proposal will be informed directly. Any changes will be posted on MRC's website. MRC reserves the right to extend the submission deadline if the amendment is substantial.

2. Procurement package

The RFP consists of single packages.

3. Clarification

Any additional information required in the preparation of the bid should be requested in writing to the address indicated in this RFP at or before 19 April 2010. The MRCS will reply in writing and all replies will be posted on the MRC's website: www.mrcmekong.org section "Tenders".

4. Language of the Proposal

The Proposals prepared by the bidders and all correspondence and documents relating to the Proposal exchanged by the bidders and the MRCS shall be written in the English language. Any printed literature furnished by the bidders may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purposes of interpretation of the Proposal, the English translation shall govern.

5. Proposal Currencies.

All prices shall be quoted in US dollars.

6. Period of Validity of Proposals

Proposals shall remain valid for 120 days after the date of Proposal submission prescribed by the MRC.

7. Submission of Proposals

7.1 Sealing and Marking of Proposals

The proposals shall be submitted in one outer sealed envelope containing two separate sealed envelopes, one envelope containing the Technical Proposal(s) and one envelope containing the Financial Proposal(s). The outer envelope shall be clearly marked “Proposal: RFP No. 10-064 Installation of Aids to Navigation on the Dangerous Areas of the Mekong River between Luang Prabang and Houei Sai in Lao PDR and Thailand; - DO NOT OPEN BEFORE DEADLINE SUBMISSION DATE”. The two sealed inner envelopes shall be marked “Technical Proposal(s)” and “Financial Proposal(s)” respectively. The sealed envelope shall be addressed to the Mekong River Commission Secretariat at the following address:

Mekong River Commission Secretariat

Finance and Administration Section

Procurement Unit (RFP 10-064)

P.O. Box 6101, Unit 18 Ban Sithane Neua,

Sikhottabong District, Vientiane 01000, Lao PDR.

Tel: (856) 21 263 263; Fax: (856) 21 263 264

Email: kiettisack@mrcmekong.org, ornchanh@mrcmekong.org

Alternatively, bidders/consultants are allowed to submit their proposal by email. Bidders/consultants who intend to submit electronic proposals must follow the submission instruction as follows:

- Bidders can submit proposals through email, the proposal shall consist of two separate files i.e. one technical proposal and one financial proposal.
- The file for the financial proposal shall be protected by a password which is retained by the bidder. If the technical proposal passes the minimum technical requirement (minimum 75 points), MRC will then request the password to open the financial file from the bidder. However, if the company loses the password, fails to submit within a period of 3 days, or in the case that the file does not open with the password provided, the MRC will not be responsible for this matter.
- The file shall be in the form of MS word or MS excel (MS Office 2003) or pdf version 7.
- Please send the electronic proposal to kiettisack@mrcmekong.org and copy to ornchanh@mrcmekong.org
- Please be aware that bids or proposals emailed to MRCS will be rejected if they are received after the deadline for bid submission. As an email may take some time to arrive after it is sent, especially if it contains a lot of information, we advise all bidders to send email submissions well before the deadline.

Please note that the proposal must arrive in the email box before the submission deadline.

7.2 Deadline for Submission of Proposals

The deadline for submission of the bids is **30 April 2010 15:00 pm** local time.

Proposals should contain details of the criteria for selection mentioned below. The bid shall be prepared in English and one (1) original and three (3) copies must be submitted. The sealed bid envelope must be received by the Mekong River Commission Secretariat on or before the hour and date fixed for receipt of bids, in accordance with the invitation for bids.

7.3 Confirmation of participation

The company who is willing to submit their proposal should confirm by fax/email to MRCS procurement unit no later than 16 April 2010.

8. Late Proposals

Any proposal received by MRCS's procurement unit after the deadline for submission of Proposals will be rejected.

9. Criteria for Selection.

After the deadline for submission of proposals (30 April 2010 15:00 pm) the Technical Proposals will be opened by the MRCS Procurement Office in the presence of members of the evaluation panel.

The evaluation panel will fully evaluate the Technical Proposals. The panel will determine which of the Technical Proposals pass the minimum agreed technical score.

- (a) Evaluation of Technical Proposal: The evaluation committee shall examine the Technical Proposals applying the evaluation criteria given in the table below. Each Technical Proposal will be given a technical score. **The minimum technical score for a Technical Proposal to be deemed responsive to the TOR is 75 points.**

No.	Description	Max Points
1	<u>Experience</u> - Having undertaken similar consultancies - Having undertaken consultancies in similar geographical conditions and same area	20
2	<u>Approach, method, and products</u> - Full understanding of objectives of consultancy - Methodology - Initiatives and improvements - Work programme (Time Frame) - Products (engineering standards, suitability of the methodology, quality control, etc) - Equipment used	50
3	<u>Personnel</u> - Leadership, experts, engineers and surveyors	30
	Total	100

After the evaluation of Technical Proposals has been completed, the MRCS will notify those Consultants whose proposals did not pass the minimum technical score or were considered to be non-responsive to the TOR.

- (b) Evaluation of Financial Proposal: The evaluation shall be based on the lowest price of those bidding firms which submitted responsive Technical Proposals. The formula for determining the financial scores is the following:
 $S_f = 100 \times F_m / F$, in which S_f is the financial score, F_m is the lowest price and F the price of the proposal under consideration.
- (c) Final evaluation and negotiations: The final ranking of the proposals will be based on the quality of technical proposals and lowest cost.

The total score will be calculated as the weighted sum of the technical and financial scores, with the weights given to the technical and financial scores being 75% and 25%, respectively.

With regard to contract negotiations the MRCS reserves the right to invite the next-ranked firm to negotiate, if negotiations with the first-ranked firm do not result in a contract.

Bidders who pass the minimum score, but are unsuccessful based on the calculation of the technical and financial scores, will be notified after the contract with the winner has become effective.

10. Association

Proposals submitted by an association of two or more firms as partners shall comply with the stipulations:

- (i) The Proposal shall be signed so as to be legally binding on all partners.
- (ii) One firm shall be nominated as the lead firm of the association.
- (iv) The lead firm shall be liable for the execution of the Contract in accordance with the Contract terms.
- (v) The lead firm shall receive instructions for and on behalf of any and all partners.

11. Rejection of proposals

Should any Proposal fail to comply with the terms and conditions stipulated in this Request for Proposals, or be incomplete, conditional or obscure, or contain additions not called for or irregularities of any kind, or does not respond to important aspects of the RFP, and particularly the Terms of Reference or if it fails to achieve the minimum technical score indicated in Section II-9 (a) above, it may be rejected as non-responsive.

MRCS reserves the right to accept or reject any proposal, and to annul the bidding process and reject all proposals at any time prior to contract award, without thereby incurring any liability to the bidders.

SECTION III

TERM OF REFERENCE

Consultancy Services for the Installation of Aids to Navigation along the Dangerous Areas of the Mekong River between Luang Prabang and Houei Sai in the Lao PDR and Thailand

1. BACKGROUND AND RATIONALE

1.1 Background Information

The Mekong Basin is comprised of six countries. The four nations of the Lower Mekong Basin – Cambodia, Lao PDR, Thailand, and Viet Nam – are members of the Mekong River Commission (MRC). China and Myanmar, located in the Upper Basin, are dialogue partners of the Commission. International cooperation on the Mekong dates back to 1926 when the first navigation agreement was signed. The MRC was established when the Agreement on Cooperation for the Sustainable Development of the Mekong River Basin was signed on April 5, 1995, although the four countries had been cooperating on basin development since 1957 within the looser framework of the Mekong Committee. Under the 1995 agreement, the MRC has the mandate “*to promote, support, cooperate and coordinate in the development of the full potential of sustainable benefits to all riparian States*” (Article 2).

The MRC has been implementing navigation projects since the mid-1990’s although earlier projects like the first Hydrographic Atlas date back to the 1960’s. Significant developments within the basin – and the lack of a strategic approach to navigation development and coordination – were the main justification for updating the policy documents that underpin navigation activities. In 2003 the commission formulated and approved the MRC Navigation Strategy Navigation Programme (NAP) in a highly-participatory process of national and regional consultation visits and workshops.

The Navigation Strategy identified significant opportunities as well as barriers to regional navigation development in the Lower Mekong Basin. It also identified institutional issues as the biggest barriers to overcome, providing preliminary suggestions for how to solve these issues. The five components of the Navigation Programme address issues as diverse as regional transport planning and the comparative advantages of waterborne transport, a new legal framework for Mekong navigation, measures to strengthen safety and environmental protection, improved information and coordination systems, and institutional development through capacity and partnership building within the navigation sector. Additionally, the programme seeks to develop national and regional management capacities, not only to ensure that it is implemented, but also to strengthen the voice and role of the navigation sector in national and regional development planning. Management capacities will be enhanced within the national line agencies as well as ports and waterways administrations. Decisive steps will be taken towards establishing close partnerships between public and private stakeholders.

The NAP has been formulated with due consideration of the MRC’s mandate and its capacities. The Commission applies a holistic and integrated approach to navigation development. Environmental, social, economic and technical aspects are well balanced to accommodate the strong call for development while ensuring that this development is sustainable.

The Governments of Belgium has recently extended its financial contribution to the Navigation Programme. Their contribution to several outputs of the five components aims: “*To promote freedom of navigation and increase international trade opportunities for the MRC member countries’ mutual*

benefit, and to assist in coordination and cooperation in developing effective and safe waterborne transport in a sustainable and protective manner for the waterway environment."

Several reaches of the Mekong River are currently used for commercial and passenger traffic with navigation capacity determined by local conditions. However, there are some river reaches where the discharge or available depth or width is not adequate throughout the year to provide suitable channel dimensions for year-round commercial navigation of vessels and barges. In the upper Mekong (Lao-PDR and Thailand) there are also geological factors which restrict open-river navigation including spots with high velocity currents, decreased depth in low-water periods, and reduced width restricted by rock outcrops. Along these reaches engineering measures are needed to improve navigation conditions and safety. Improvement measures may involve one or both of the following: (i) aids to navigation/markings of the waterway for safe navigation, and (ii) channel regulation (river-training, dredging, rectification and stabilization) to provide and maintain adequate channel dimensions for navigation. Because of its cost, actual channel regulation work is not included at this stage.

The Mekong River System is considered as presenting an excellent opportunity for waterborne transport and trade. This fact is clearly evident in the delta in Viet Nam, and on the Mekong stretches bound by the Quadrangle Navigation Agreement near the Golden Triangle. More research is being undertaken to determine how this potential can be put to optimal use. Recent changes in the river morphology favourable to international navigation, economic development and investment opportunities, rehabilitation of the most important ports, improvement of inland waterways, an improved system of aids to navigation, and fast growth of food production, water-related tourism and foreign trade will in the near future require a considerable expansion of the transport capacity of the river.

Although the natural potential of the Mekong River system is there, many physical and non-physical obstacles still exist. These obstacles could be alleviated if they are well-defined and if a proficient programme for improvement inducing regional benefits could be formulated, approved and executed. The aim of the programme is to assist in optimizing the inland waterway on the Mekong River in the Lao PDR and Thailand in order to reduce waterborne traffic accidents, and increase accessibility.

Not all reaches of the Mekong show the same "economical" river transport potential for increased ship size or for better and safer navigation; but as far as possible the MRC will assist in designing a common river transport infrastructure employing the natural potential of the Mekong River. Through previous production of a Hydrographic Atlas, the MRC has acquired knowledge of river navigation channel paths and depths which makes it possible to indicate the 'natural' navigation channel without the need for any physical channel improvement work. Following hydrographic chart updates, the next step to improve the quality and safety of Mekong River transport is to install a reliable system of standardized aids to navigation, such as shore marks, buoys, beacons, leading lines, and channel marks. The lack of proper signalization for day navigation and channel markers is causing traffic accidents. A single traffic accident on the river can have disastrous impacts on drinking water, aquatic habitation and irrigation throughout the entire Lower Mekong River.

Under the Agreement for Commercial Navigation signed by the Governments of China, Myanmar, Lao PDR and Thailand in 2000, a system of aids to navigation partly installed on the reach of the Mekong River between the ports of Jinghong in China and Luang Prabang in the Lao PDR.

In order to focus on quality work, and because of the complexity of the detailed design and mapping, the current focus of this upgrade is the installation of buoys and beacons between Houei Sai and Luang Prabang. The signalisation will be a combination of buoys and beacons. In certain stretches, the rocks are low-lying and therefore submerged at medium or high water. The beacons will be visible up until a certain level of the water, they will then become submerged as well. Buoys will then take over the role of indicating the safe channel.

Cross border passenger transport at the Mekong is currently thought to be very limited. At national level only in the Mekong delta a better-developed system of passenger transport system does exist. In the Lao PDR a regulated system is not really in place but passenger/tourism traffic by boats is becoming rapidly important. In the MRC member countries, however, there is little attention of policy makers for the role that passenger transport plays. It is often left out of transport planning and the need for this mode of transport to people in remote areas is forgotten. In the Upper Mekong in the Lao PDR and Thailand some regular passenger routes are plied. At some places (Cambodian-Vietnamese and Lao-Thai border/port) migration officers are present mainly to facilitate tourists. At some stretches in the river tourism and passenger transport seem to be combined, generating what is thought to be substantial traffic flows. Tourist routes could be developed to areas of cultural and natural interest creating local economic development, which will be beneficial to the poor.

There is a huge potential for waterborne tourism, even eco-tourism. The potential for the Lao PDR is certainly there but not so many ports or landing areas are adequate enough to accommodate tourism. And of course the tourist industry needs a high degree of reliability and safety – and this is also a matter of concern, especially regarding the jetties.

Major tourist sites are located close to a number of navigable channels and in reach of well equipped cruise ships. Cross border waterborne tourism in the region could add in a substantial way to the existing tourist offering. Tourism could prove to be a major force for social and economic development of all member countries. Water based tourism could play an important part in the diversification strategy to keep the tourism industry healthy and growing. Waterborne tourism has an added benefit that it creates a lot of jobs and if managed well the impact on the environment is small.

Tourism development has been identified as a significant driver for economic expansion on the river, based on the results of a 2008 study conducted by the NAP on the economic potential of waterborne transport on the Mekong. Tourist cruises have the potential to benefit many small regional towns located along the river that may not otherwise have had access to such a market. The introduction of modern and safe standards for passenger jetties at selected tourist sites along the river will therefore benefit both waterway-related tourism sector as well as improve the livelihood of the rural communities. This is also in line with the concerns from the Tourism Authorities who stressed the urgent need to enhance the safety and efficiency of passenger ports which presently pose substantial public health and safety risks for passengers disembarking. The sudden increase of ‘cruise shipping’ between the Golden Triangle and Luang Prabang is bringing thousands of tourists by boat into the Lao PDR and accidents are on the rise.

1.2 Condition Survey, Update Topo-hydrographic Map and Aids to Navigation Design

Mekong River Commission has carried out the project called condition survey of dangerous areas for navigation improvement from Houei Sai to Luang Prabang in Lao PDR and Thailand. Through an open bidding process, MRCS had contracted a Joint Venture company of AAM (Thailand) Co. Ltd and Vientiane GEOMATIC Services (Lao) to carry out a condition survey from September 2008 to May 2009.

This project was one of the most important outputs selected under the Programme Implementation Plan through funding by the Government of Belgium.

Before manufacturing and installing the new aids to navigation a complete analysis and survey had been carried out to make the waterway classification including description of navigation conditions of the entire Mekong river stretch between Houei Sai and Luang Prabang. Based on this, topo-hydrographic surveys were conducted on the selected dangerous areas. Detail Topo-hydrographic map

of the Dangerous Areas have been produced on scale 1/2000 and a detailed channel design as well as the aids to navigation design were then prepared accordingly. This channel and aids to navigation designs have been presented and discussed in a separate technical meeting with waterway and navigation experts of Lao PDR and Thailand respectively.

The detailed design of aids to navigation has been finalized, the database of the aids to navigation shown in the Table below.

The first tender under the Aids to Navigation between Houei Sai and LuangPrabang was dealing with PROCUREMENT of the nav aids. THIS TENDER is only dealing with INSTALLATION.

**FROM LUANG PRABANG TO HOUEI SAI - AIDS TO
NAVIGATION DATABASE**

Nr.	Red buoy	White buoy	Red Marker	White Marker	other marker	other marker	Nearest km.	Section	Dangerous Area	Location	buoy Description	buoy mooring that require anchor	Structure Description	Lat/Long	CHART Nr.	Existing	Structure /buoy Height	Installation level wrt. chart datum
1	1						2323	LB_HS	DA-01	Hat Ngow	Floating buoy	1		WGS 84	2-009	-	1	-2.0
2		1					2323	LB_HS	DA-01	Hat Ngow	Floating buoy	1		WGS 85	2-009	-	1	-2.0
3		1					2323	LB_HS	DA-01	Hat Ngow	Floating buoy	1		WGS 86	2-009	-	1	-2.0
4		1					2323	LB_HS	DA-01	Hat Ngow	Floating buoy	1		WGS 87	2-009	-	1	-2.0
5	1						2323	LB_HS	DA-01	Hat Ngow	Floating buoy	1		WGS 88	2-009	-	1	-2.0
6		1					2323	LB_HS	DA-01	Hat Ngow	Floating buoy	1		WGS 89	2-009	-	1	-2.0
7			1				2301	LB_HS	DA-02	Khone Ian	Floating buoy		Marker on island	WGS 84	2-012	-	4	4.0
8		1		1			2301	LB_HS	DA-02	Khone Ian	Floating buoy	1	Marker on island	WGS 84	2-012	-	4	2.0
9	1		1				2301	LB_HS	DA-02	Khone Ian	Floating buoy	1	Marker on island	WGS 84	2-012	-	4	2.8
10	1		1				2301	LB_HS	DA-02	Khone Ian	Floating buoy	1	Marker on island	WGS 84	2-012	-	4	3.0
11				1			2301	LB_HS	DA-02	Khone Ian	Floating buoy		Marker on island	WGS 84	2-012	-	4	1.7
12	1		1				2290	LB_HS	DA-03	Keng Pak Nam Thin	Floating buoy	1	Shore Marker	WGS 84	2-014	-	4	2.9
13				1			2290	LB_HS	DA-03	Keng Pak Nam Thin			Marker on island	WGS 84	2-014	-	4	9.4
14			1				2290	LB_HS	DA-03	Keng Pak Nam Thin			Shore Marker	WGS 84	2-014	-	4	5.7
15				1			2290	LB_HS	DA-03	Keng Pak Nam Thin			Marker on island	WGS 84	2-014	-	4	7.3
16	1		1				2290	LB_HS	DA-03	Keng Pak Nam Thin	Floating buoy	1	Marker on island	WGS 84	2-014	-	4	2.3
17				1			2290	LB_HS	DA-03	Keng Pak Nam Thin	Floating buoy		Shore Marker	WGS 84	2-014	-	4	5.2
18		1	1				2290	LB_HS	DA-03	Keng Pak Nam Thin	Floating buoy	1	Marker on island	WGS 84	2-014	-	4	2.2
19			1		1		2289	LB_HS	DA-04	Keng Khone Kham			Marker + Horn signal	WGS 84	2-014	-	4	8.8
20				1			2289	LB_HS	DA-04	Keng Khone Kham			Shore Marker	WGS 84	2-014	-	4	6.2
21			1			1	2289	LB_HS	DA-04	Keng Khone Kham	Floating buoy		Marker + Horn Signal	WGS 84	2-014	-	4	4.7
22				1			2289	LB_HS	DA-04	Keng Khone Kham			Shore Marker	WGS 84	2-014	-	4	4.5
23		1	1	1			2287	LB_HS	DA-05	Keng Nhoy	Floating buoy		Shore Marker	WGS 84	2-014	-	4	2.3
24							2287	LB_HS	DA-05	Keng Nhoy			Marker on island	WGS 84	2-014	-	4	6.5
25			1	1			2287	LB_HS	DA-05	Keng Nhoy			Marker on island	WGS 84	2-014	-	4	6.8
26			1				2287	LB_HS	DA-05	Keng Nhoy			Shore Marker	WGS 84	2-014	-	4	6.5
27			1				2287	LB_HS	DA-05	Keng Nhoy			Marker on island	WGS 84	2-014	-	4	7.5
28			1				2287	LB_HS	DA-05	Keng Nhoy	Floating buoy		Shore Marker	WGS 84	2-014	-	4	7.0
29		1	1	1			2254	LB_HS	DA-05A	Keng Fak	Floating buoy	1	Shore Marker	WGS 84	1-006	-	4	2.0
30	1		1				2254	LB_HS	DA-05A	Keng Fak	Floating buoy	1	Shore Marker	WGS 84	1-006	-	4	2.5
31		1		1			2254	LB_HS	DA-05A	Keng Fak	Floating buoy	1	Shore Marker	WGS 84	1-006	-	4	3.0
32				1			2239	LB_HS	DA-06	Keng Beun			Shore Marker	WGS 84	1-008	-	4	7.0
33			1				2239	LB_HS	DA-06	Keng Beun			Shore Marker	WGS 84	1-008	-	4	7.5
34				1			2239	LB_HS	DA-06	Keng Beun	Floating buoy		Shore Marker	WGS 84	1-008	-	4	5.0
35			1				2239	LB_HS	DA-06	Keng Beun			Shore Marker	WGS 84	1-008	-	4	8.0
36	1		1	1			2223	LB_HS	DA-07	Keng Khon Din	Floating buoy		Shore Marker	WGS 84	1-009	-	4	4.0
37							2223	LB_HS	DA-07	Keng Khon Din	Floating buoy	1	Marker on island	WGS 84	1-009	-	4	0.5
38		1		1			2223	LB_HS	DA-07	Keng Khon Din	Floating buoy	1	Shore Marker	WGS 84	1-009	-	4	3.0
39			1				2223	LB_HS	DA-07	Keng Khon Din			Marker on island	WGS 84	1-009	-	4	8.0
40				1			2220	LB_HS	DA-09	Keng Pheo			Marker on island	WGS 84	1-010	-	4	10.0
41			1				2220	LB_HS	DA-09	Keng Pheo			Shore Marker	WGS 84	1-010	-	4	9.8
42				1			2208	LB_HS	DA-09B	Keng Lae			Shore Marker	WGS 84	1-011	-	4	10.0
43			1				2191	LB_HS	DA-09A	Keng Khone Sa Nak			Marker on island	WGS 84	1-012	-	4	8.0
44		1		1			2191	LB_HS	DA-09A	Keng Khone Sa Nak	Floating buoy		Marker on island	WGS 84	1-012	-	4	1.0
45	1		1				2191	LB_HS	DA-09A	Keng Khone Sa Nak	Floating buoy		Shore Marker	WGS 84	1-012	-	4	2.3
46		1	1	1			2189	LB_HS	DA-10	Keng Kep	Floating buoy	1	Marker on island	WGS 84	1-012	-	4	1.0
47		1		1			2189	LB_HS	DA-10	Keng Kep	Floating buoy	1	Marker on island	WGS 84	1-012	-	4	0.5
48			1				2189	LB_HS	DA-10	Keng Kep			Marker on island	WGS 84	1-012	-	4	11.0

Nr.	Red buoy	White buoy	Red Marker	White Marker	other marker	other marker	Nearest km.	Section	Dangerous Area	Location	buoy Description	buoy mooring that require anchor	Structure Description	Lat/Long	CHART Nr.	Existing	Structure /buoy Height	Installation level wrt. chart datum
49				1			2181.5	LB_HS	DA-11	Keng Sen khi Koa			Shore Marker	WGS 84	1-013	-	4	7.0
50			1				2141	LB_HS	DA-12	Keng En			Shore Marker	WGS 84	1-018	-	4	8.0
51				1			2141	LB_HS	DA-12	Keng En	Floating buoy		Shore Marker	WGS 84	1-018	-	4	5.0
52				1			2139	LB_HS	DA-13	Keng Xeik Khan	Floating buoy		Shore Marker	WGS 84	1-018	-	4	1.5
53			1				2139	LB_HS	DA-13	Keng Xeik Khan	Floating buoy		Shore Marker	WGS 84	1-018	-	4	4.5
54																		6.0
55		1		1			2138	LB_HS	DA-13A	Keng Xiek Ok	Floating buoy		Shore Marker	WGS 84	1-018	-	4	1.0
56				1			2109	LB_HS	DA-14	Keng Phouan			Shore Marker	WGS 84	1-020	X	-	12.0
57	1		1				2109	LB_HS	DA-14	Keng Phouan		1	Marker on island	WGS 84	1-020	X	-	3.6
58			1										Shore Marker				-	5.0
59	1		1				2109	LB_HS	DA-14	Keng Phouan	Floating buoy	1	Marker on island	WGS 84	1-020	-	4	3.0
60		1		1			2109	LB_HS	DA-14	Keng Phouan	Floating buoy	1	Shore Marker	WGS 84	1-020	-	4	2.0
61					1		2100	LB_HS	DA-15	Keng Hang Noy			Post for ship hoists	WGS 84	1-021	-	4	11.0
62					1		2100	LB_HS	DA-15	Keng Hang Noy			Post for ship hoists	WGS 84	1-021	-	4	11.0
63				1			2094	LB_HS	DA-16	Keng Hat Tei			Shore Marker	WGS 84	1-022	-	4	6.0
64			1				2094	LB_HS	DA-16	Keng Hat Tei	Floating buoy		Shore Marker	WGS 84	1-022	-	4	5.0
65				1			2081	LB_HS	DA-17	Keng Hang Nhay			Shore Marker	WGS 84	1-023	-	4	8.0
66	1		1				2081	LB_HS	DA-17	Keng Hang Nhay	Floating buoy	1	Shore Marker	WGS 84	1-023	-	4	1.0
67			1				2079	LB_HS	DA-18	Keng Lam Phay Nhay	Floating buoy		Shore Marker	WGS 84	1-023	-	4	4.0
68				1			2079	LB_HS	DA-18	Keng Lam Phay Nhay			Shore Marker	WGS 84	1-023	X	-	9.0
69			1				2079	LB_HS	DA-18	Keng Lam Phay Nhay	Floating buoy		Shore Marker	WGS 84	1-023	X	-	4.0
70				1			2058	LB_HS	DA-19	Keng Lam Phay Noy			Marker on island	WGS 84	1-025	-	4	7.0
71	1		1				2058	LB_HS	DA-19	Keng Lam Phay Noy	Floating buoy		Shore Marker	WGS 84	1-025	-	4	2.0
72				1			2052	LB_HS	DA-20	Keng Khen	Floating buoy		Shore Marker	WGS 84	1-026	-	4	5.0
73			1				2052	LB_HS	DA-20	Keng Khen			Marker on island	WGS 84	1-026	-	4	9.0
74			1				2052	LB_HS	DA-20	Keng Khen			Marker on island	WGS 84	1-026	-	4	10.0
75				1			2052	LB_HS	DA-20	Keng Khen			Shore Marker	WGS 84	1-026	-	4	7.0
76	1		1				2052	LB_HS	DA-20	Keng Khen	Floating buoy		Marker on island	WGS 84	1-026	-	4	2.0
77	1		1				2052	LB_HS	DA-20	Keng Khen	Floating buoy		Demolish existing	WGS 84	1-026	-	4	-
78							2037	LB_HS	DA-21	Keng Oy	Floating buoy		Shore Marker	WGS 84	1-028	-	4	4.0
79				1			2037	LB_HS	DA-21	Keng Oy	Floating buoy		Shore Marker	WGS 84	1-028	-	4	4.0
80		1		1			2037	LB_HS	DA-21	Keng Oy		1	Shore Marker	WGS 84	1-028	X	-	-
											Floating buoy		Shore Marker					
81				1			2031	LB_HS	DA-22	Keng Leuk	Floating buoy		Marker on island	WGS 84	1-028	X	-	5.0
82		1		1			2031	LB_HS	DA-22	Keng Leuk	Floating buoy	1	Marker on island	WGS 84	1-028	X	-	-
83	1		1				2031	LB_HS	DA-22	Keng Leuk	Floating buoy	1	Marker on island	WGS 84	1-028	X	-	-
84	1		1				2031	LB_HS	DA-22	Keng Leuk	Floating buoy	1	Marker on island	WGS 84	1-028	-	4	1.0
85		1		1			2031	LB_HS	DA-22	Keng Leuk	Floating buoy	1	Shore Marker	WGS 84	1-028	X	-	-
reserve	17	18	39	37	3	1						28						
spare	2	2	5	5														
Total	19	20	49	47	3	1												

2. BACKGROUND TO THE TYPES OF AIDS TO NAVIGATION THAT HAVE BEEN PROCURED FOR THE PLANNED INSTALLATION ON THE DANGEROUS AREAS OF THE MEKONG RIVER BETWEEN HOUEI SAI AND LUANG PRABANG IN LAO PDR AND THAILAND

2.1. Introduction

The manufacturing and the delivery of the aids to navigation to the project site is expected to be completed by May 2010. Installing should start as soon as they arrive.

2.2. Aids to Navigation and Landing Facilities being Procured

2.2.1. Buoy Requirements with chain and anchor

	For Use	Reserve	Spare	Total
White lateral	12	-	2	14
Red lateral	11	-	2	13
Total	23	-	-	27

2.2.2. Buoy Requirements with chain but no anchor

	For Use	Reserve	Spare	Total
White lateral	6	-	-	6
Red lateral	6	-	-	6
Total	12	-	-	12

2.2.3 Beacon Requirements

	For Use	Reserve	Spare	Total
White lateral	37	5	5	47
Red lateral	39	5	5	49
Total	76	10	10	96

2.2.4. Beacon Topsign Requirements

	For Use	Reserve	Spare	Total
White lateral	37	5	5	47
Red lateral	39	5	5	49
Total	76	10	10	96

2.2.5. Landing Facilities Requirements

	Amount	Remark
2 units of Floating pontoons total 2,5 to 3m wide/15m long, and 1 unit of Floating pontoon of 2,5 to 3 m wide/18m long including joint fittings	3	
Bolders/cleats	Per jetty every 2m	
railings	On ‘closed sides’ where boats are not moored	
fenders	Covering all sides	
Connections to shore	Per jetty	

2.2.6. Drive-on Boat Docking Facility Requirements

	Amount	Remark
Floating ‘dry’ dock total 4,5m wide/ 8m long, including joint fittings and docking facilities for hull	1	
railings	On ‘closed sides’ where boats are not moored	
Connections between parts	Per dock	

3. SCOPE OF WORK

3.1. Services under this TOR shall include the following installation activities

3.1.1. Installation of Buoys (No Light)

The detailed technical and engineering specifications, standards and bills of quantities for the installation of buoys (no lights) are described in ANNEX 1.

Installation methodologies

Output of the services: the buoys and moorings are fully assembled, installed in the correct river position in a safe and secure manner and buoys should be working according to the specified characteristics ready for employment by the waterway users.

Some of the buoys must be fixed by anchor, some of the buoys must be fixed in the rocks.

The following methodology should be followed to prepare for and implement the installation of the buoys:

1. Receive the transport documents from MRCS or NMC
2. Clear the consignment from the custom authority
3. Transport to, and store the goods in a dry, dust-free, safe and secure area
4. Make a full store list of all equipment and where it is stored
5. Prepare a plan for assembling the buoy structure, cable, chain, anchor or rock fixation tool, swivel
6. Separate the buoys that need to be fixed by anchor with the buoys that need to be fixed by rock fixation tool
7. Prepare a plan for loading the buoys on the barge or boat and installing the buoy at the correct location
8. Prepare adequate assembly location with modern tools available
9. Start assembly of buoy structure, cable, chain, anchor, swivel
10. Prepare barges/boats for deployment
11. Review and confirm river survey data, discuss carefully with pilots where exactly the nav aids and the anchors of fixation tools must come.
12. Use and apply the established numbering system
13. Establish a small scale public awareness campaign for pilots and local people
14. Load the barges/boats
15. Pilot to exactly determine the location for drop
16. Use echo-sounding equipment and GPS to verify position (two positions: one of the anchor, and one of the buoy). Some places may require more detailed surveys to find the best spot for dropping and positioning the anchor
17. Verify chain length according to location and river depth
18. Drop buoy and moorings and prepare for use
19. Fix buoys and moorings and prepare for use
20. Inspect and register exact location of the anchor
21. Monitor position and movement of the buoy
22. Check correct position of the buoy vis-à-vis channel
23. Inspect position of buoy after 1 day, after 1 week, after 2 weeks
24. Update the aids to navigation management system.
25. Stock checks and review - Spare AtoN tested commissioned
26. Spare parts to be brought to a site accepted by Mekong River Commission Secretariat

Acceptance of services and work

MRC has identified the following requirements regarding acceptance of work. The work will be deemed complete by MRC upon the approval of work by MRC project contact.

A site inspection of the completed work may be undertaken by MRCS or its representatives.

3.1.2. Installation of Beacons (with Topsigns)

The detailed technical and engineering specifications, standards and bills of quantities for the installation of beacons (with topsigns) are described in ANNEX 2.

Installation methodologies

The following methodology should be followed to prepare for and implement the installation of the beacons:

1. Receive the transport documents of the beacons and topsigns from MRCS or NMC
2. Clear the consignment from custom authority
3. Transport to, and store the goods in a dry, dust-free, safe and secure area
4. Make a full store list of all equipment and where it is stored
5. Prepare a plan for assembling the foundations, pile structure and fittings for the beacon topsign
6. Prepare a plan for installing the full beacons at the correct location
7. Prepare adequate assembly location with modern tools available
8. Start assembly of for the foundations, pile structure and fittings for the beacon topsign
9. Prepare barges/boats/cranes for deployment
10. Review and confirm river survey data, discuss with pilots
11. Establish a small scale public awareness campaign for pilots and local people
12. Load the barges/boats
13. Contractor to discuss with pilot to exactly determine the location for installation
14. Install the beacon – level uprightness
15. Inspect and register exact location of the beacon
16. Monitor position of the beacon
17. Check correct position of the beacon vis-à-vis channel
18. Inspect status and position of beacons after 1 day, after 1 week, after 2 weeks
19. Update the aids to navigation management system.
20. Stock checks and review - Spare AtoN tested commissioned
21. Spare parts to be brought to a site accepted by Mekong River Commission Secretariat

3.1.4. Installation of Floating Pontoons and Drive-on Boat Docking Facility

The detailed technical and engineering specifications, standards and bills of quantities for the installation of floating Pontoons and Drive-on Boat Docking are described in ANNEX 3.

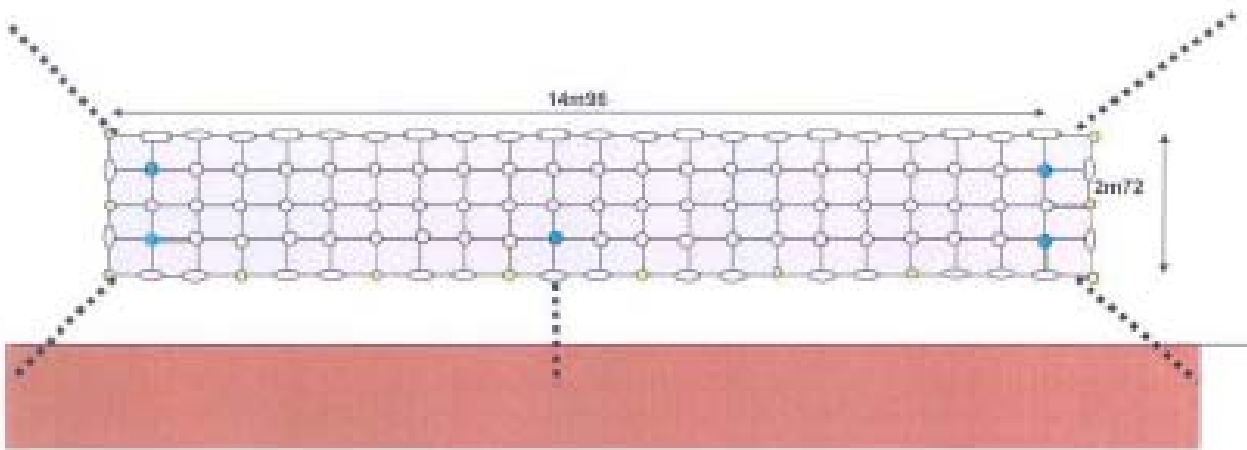
Installation methodologies

Output of the services: the pontoons and drive-on boat docking facility are fully assembled, installed at the selected locations in a safe and secure manner according to the specified characteristics ready for employment by the MRC.

The following methodology should be followed to prepare for and implement the installation of the light and panel:

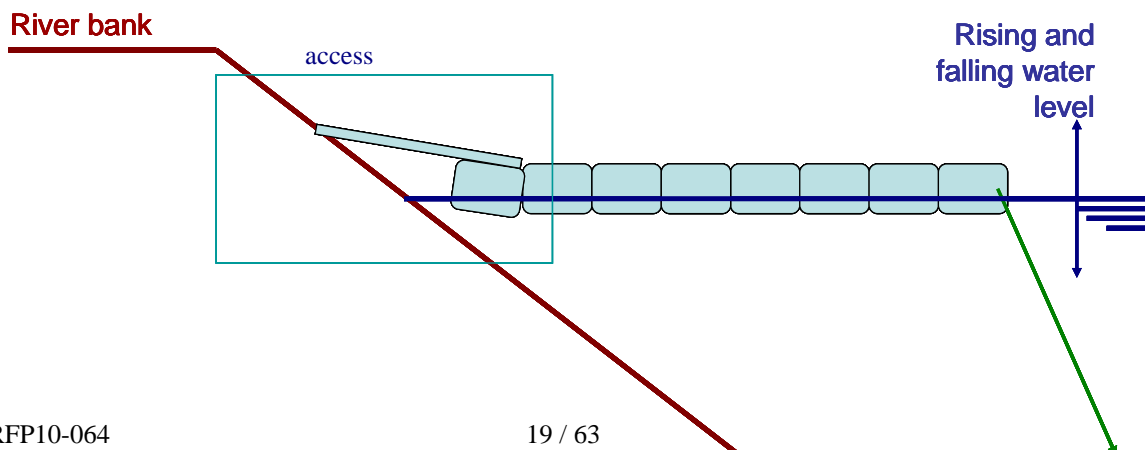
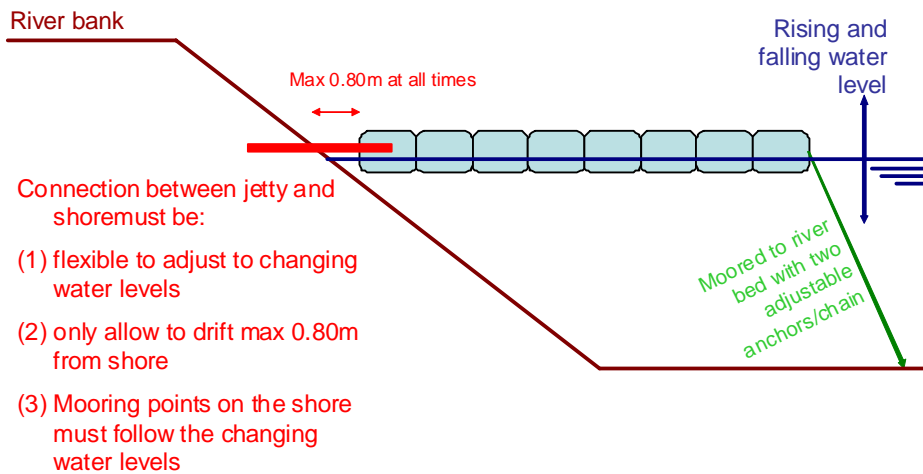
1. Receive the transport documents of the pontoons and drive-on boat docking facility from MRCS or NMC
2. Clear the consignment from custom authority
3. Transport to, and store the goods in a dry, dust-free, safe and secure area
4. Obtain permission to install the jetty
5. Make a full store list of all equipment and where it is stored
6. Visit the riverside and prepare the technical engineering drawings for the compilation, fittings and mooring of the docking facility
7. Prepare a plan for assembling and installing the facility at the correct location
8. Prepare a plan and build a solid ramp with railings to access the floating pontoon and the drive-on boat jetty. This ramp should be made of slip free aluminium or highest quality wood with slip free surface that can be fitted to the pontoon.
9. Assembly should be done at the premises. The location of the two 15m pontoons should be Nakasang Port and Tham Ting whilst the 18m pontoon should be fixed at Pak Beng Port. The drive-on boat jetty will be moored within the Vientiane area, to be decided before contracting. Make sure modern tools are available
10. Prepare barges/boats/cranes for deployment
11. Start installation
12. Monitor position of the jetty
13. Inspect status and position of the facility after 1 day, after 1 week, after 2 weeks

FLOATING PONTOON

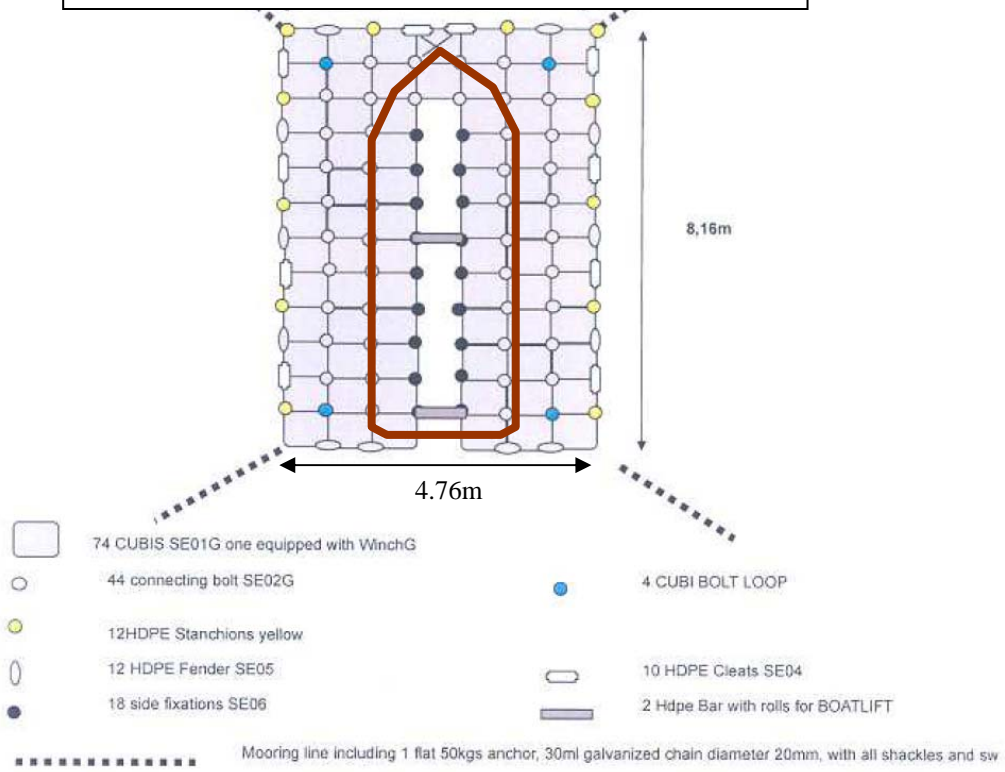


This pontoon includes:

-  88 units HDPE
-  58 Connecting flat HDPE
-  8 HDPE cover boards
-  32 Feeders HDPE boards
-  12 Stanchions HDPE Yellow
-  5 QUERQUETLOOP Mooring point
-  Mooring line including 1 flat 50kgs anchor, 30m galvanised chain diameter 20mm, with all shackles and links



Connect to river bank in a flexible way so that the jetty follows the rising and falling river levels whilst ensuring that the jetty does not float more than 0.80m from the river bank



4. IMPLEMENTATION ARRANGEMENTS

4.1. Executive functions

The **MRC Secretariat (MRCS)** will, on behalf of the Mekong River Commission (MRC) serve as Executive Agency of the project. The MRCS will be responsible over all project activities including the recruitment of consultants, financial and technical supervision and monitoring of project implementation, and reporting to donor. The data and results (in digitized format) obtained will also be utilized during and after the project by the MRCS.

4.2. Coordination

The Lao and Thai National Mekong Committee (LNMC & TNMC) will serve as the Coordinating Agencies. Through the National Navigation Coordinators (NCC), the agencies will assist the MRCS in liaising with the governments to obtain any other additional information necessary and will assist MRCS to inform, with regular intervals, the related line agencies about the progress of project implementation and the results of the study. LNMC and TNMC will be asked to make arrangements for importation procedures including custom clearances of all project equipment purchased and other government formalities.

ANNEX 1: THE DETAILED TECHNICAL AND ENGINEERING SPECIFICATIONS, STANDARDS AND BILLS OF QUANTITIES FOR THE INSTALLATION OF BUOYS (NO LIGHTS)

Introduction

A system of aids to navigation aids will adhere to a combined standard of the International Association of Lighthouse Authorities and the system recommended by the Economic and Social Commission for Asia and the Pacific / Mekong River Commission document dated June 2002.

For the time being, MRC is in the process of procurement of the following specialized buoys to be installed on the Dangerous Areas of the Mekong River between Luang Prabang and Houei Sai in Lao PDR and Thailand (Detailed characteristics of the buoys are shown in the Database of Aids to Navigation from Luang Prabang to Houei Sai):

Buoy Requirements with chain and anchor

	For Use	Reserve	Spare	Total
White lateral	12	-	2	14
Red lateral	11	-	2	13
Total	23	-	-	27

Buoy Requirements with chain but no anchor

	For Use	Reserve	Spare	Total
White lateral	6	-	-	6
Red lateral	6	-	-	6
Total	12	-	-	12

Performance Requirements of the Buoys being procured by the MRC

This section defines the environmental conditions under which the above specialized Buoys must function as aids to navigation.

Buoy Type	Small Size Buoy	Small Size Buoy
Environmental Conditions	Operational	Survival
Maximum Water Temperature Range	+5 to +30 C	
Maximum Air Temperature Range	+5 to +45 C	
Maximum Current ¹ (kn)	8.0 knots	8.0 knots
Minimum Water Depth (m)	2 m	

Maximum Wave Height ^{3, 12} (m)	1.0m	1.0m
Maximum Wind Speed (kn)	40knots (74km/hr)	40knots (74km/hr)
Maximum Marine Growth (kg)	3	3
Exposure to Debris ⁴	Very frequent by heavy logs and very frequent and large amounts of smaller “but sticking” debris such as bamboo	Very frequent by heavy logs and very frequent and large amounts of smaller “but sticking” debris such as bamboo
Minimum Visual Rang (nm)	1.0	
Minimum Freeboard Height (m)	1m	
Can Top for the RED BUOYS	Yes	
Conical Top for the WHITE BUOYS	Yes	
Maximum Buoy Weight (kg)	100.0	
Equipment Requirements		
Radar Reflector ⁸	If possible	
Lantern Mount ⁹	No	
Min/Max Hull Diameter (mm)	600	
Maximum Buoy Draft (mm)	900	

The buoy must remain visible in the wave heights specified.

1. Exposure to debris, light exposure indicates that sometimes these buoys may be left in areas where there is no debris movement. Occasional exposure indicates that these buoys will come in contact with heavy and/or much debris during the high water season.
2. The maximum buoyancy force is obtained by submerging the buoy.
3. The weight of chain does not into consideration any counterweights or ballasting. If these are present then the weight of chain is reduced by there amounts.
4. Maximum wave height for a period of 2 to 4 seconds.
5. This does not include the weight of the adaptor plate or any interface to the buoy top.
6. Reserve Buoyancy Force is when you reach zero freeboard. These values assume no ballasting.

Specification for Installation

A system of aids to navigation aids will adhere to a combined standard of the International Association of Lighthouse Authorities and the system recommended by the Economic and Social Commission for Asia and the Pacific / Mekong River Commission document dated June 2002.

System Composition

The contractor will assume responsibility for loading and transport of all buoys, structures, and associated equipment to the proposed sites. Equipment and sites are listed in the attached aids to navigation database. The system will be composed of small and small / medium buoys, and beacons.

Installation

Positioning

The contractor will install all buoys and beacons at the sites indicated in the aids to navigation database. Tolerances for positions are indicated in the appropriate sections below.

Cross-check and Endorsement Surveys.

The detailed surveys of the dangerous areas, conducted in 2008, have been subject to some delays. This meant that some of the surveys had to be carried out after the lowest low water period resulting in a situation where some of the rocks may not be well represented on the maps. Moreover, there may be obstacles (mainly rocks) present in the fairway that MRC is not aware of. In any case, before installing all beacons and buoys, verification and endorsement of the existing maps will be required. In particular, the fairway needs to be thoroughly checked to ensure that no rocks or obstacles are impeding safe navigation here. The Contractor should also use his own experience in assessing the correct position of the navaid.

Final positions will be reported after final installation and will be to the same horizontal and vertical datum as in the used maps.

Confirmation of Position

Positions of all aids to navigation will be confirmed by DGPS. The locations will be provided by the client. Any differences in the two GPS readings should be noted and applied to final positions as a correction.

When geographic features are sufficient to provide adequate angular separation (at least 45°) the contractor will position the aid to navigation with horizontal sextant angles and a three arm protractor. This information will be supplied to the client as backup for the GPS information.

IALA Standard for Positioning

The GPS Recorded position shall be provided to IALA Recommendation 0-118 for the positioning of aids to navigation which includes the following:

- Positions shall be in WGS 84 Datum and local Indian Datum
- Positions of floating aids should be determined from the position of the sinker. In a river situation with a constant omnidirectional current a position at the centre of the watch circle is acceptable
- Positions should be recorded for latitude and longitude in degrees, minutes and decimals of a minute, to three units of decimal.
- Date and time of recording of position should be noted.
- Any objects used for horizontal sextant angles should be recorded.

ASSEMBLY OF EQUIPMENT AND INSTALLATION

Buoys

Buoys will be fabricated of lightweight material and will be fairly easy to handle but in this respect, they cannot be handled as roughly as steel buoys. Care must be taken when moving the buoy that it does not strike anything. The use of at least one tag line at all times is recommended.

Numbering

Buoys will be numbered consecutively with increasing numbers from Vientiane proceeding upstream. This information is also found in the aids to navigation database and buoys should be placed in positions according to number and position. The contractor shall provide and install appropriate numbers on two opposite sides of all buoys, as per aids to navigation database.

Bridle and Mooring attachment

Each buoy that is fitted with a bridle chain or cable will be of adequate size. The bridle will be attached on opposite sides of the counterweight should not be required in such a buoy. Some large buoys and all small buoys will not be fitted with a bridle but will be provided with more than one mooring point each for different current speeds.

Shackles and Swivels

An appropriate size shackle (per manufacturer's recommendations) should be installed to join the two bridle pieces or on the mooring point of the buoy. After the shackle, a swivel will be connected and then another shackle. This second shackle connects to the mooring chain. A final shackle connects the mooring chain to the mooring at the lifting eye. All shackles shall be swaged with stainless steel wire and all swivels will be well lubricated with high-grade water resistant grease.

Chain/cable and sinker/anchor

The mooring chain/cable for each buoy should be of an adequate length according to the Contractor's own expertise. Such a deviation from the requirements will have to be justified and guaranteed for proper functioning and durability (see text on Guarantee). The chain / cable should be flaked out in manageable lengths and at no time should any kinks be allowed to form in the chain.

Positioning Float

When the buoy is let go, if the position is recorded from the bridge of the vessel, an offset on the real position will occur. In sophisticated, computer buoy laying programs this offset is calculated and an allowance is made. In this case however, the buoy should be positioned by the use of a marker float which launched from a small craft from which the position can be determined. The marker float should have an anchor of sufficient size to hold it on a position but not so large that it cannot be retrieved by hand.

Positioning the Buoy.

The position listed in the aids to navigation database shall be the charted position of the buoy or the new position after the bathymetric survey.

Because the mooring chain may be up to four times the depth of water and the position of the buoy is constantly affected by wind and current, the buoy will wander slightly from its charted position. The buoy must at all times be within the watch circle and should it be outside this allowance, it will be considered "off position"

Appendices

IALA Standard for Position Recording

Recommandation pour l'enregistrement des positions des aides à la navigation

(traduction française en cours)

Recommendation for the Recording of Aids to Navigation Positions

IALA Recommendation O-118
June 2000

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Telephone : +33 1 34 51 70 01 Telefax : +33 1 34 51 82 05
E-mail : aismiala@orange.fr Internet : <http://www.iala-aism.org>



**IALA Recommendation for the Recording of Aids to Navigation Positions
June 2000**

THE COUNCIL

RECOGNIZING that GPS and DGPS services define positions in terms of the WGS84 datum, have the potential to cause plotting errors when using paper charts that use a different datum,

RECOGNIZING ALSO the responsibilities of National Authorities to inform Hydrographic Authorities of the position of aids to navigation,


HAVING CONSIDERED the proposals by the IALA Operations Committee

RECOMMENDS THAT:

1. Where an Authority has operational DGPS stations, a program should be implemented to determine the WGS84 positions of each aid to navigation (fixed and floating) within the coverage area, and for this information to be passed to the national hydrographic authority for future use. It is anticipated that the information would assist the hydrographic authority in checking the accuracy of charts, planning future survey requirements and for updating List of Lights.
2. In the case of lighted fixed aids to navigation the WGS84 position should be measured close to the focal centre of the light so that the WGS84 elevation is also determined. Alternatively, several positions around the optic or lantern house could be measured and a central position computed.
3. In the case of unlighted fixed aids to navigation the WGS84 position should be the base of the structure 4. In the case of floating aids to navigation the WGS84 position should be that of the sinker or mooring.
5. Each position should be recorded to three decimal places of a minute and include the time, date and details of the measuring equipment.
6. Where an Authority has to refer to charts of different datums, positions are communicated with the appropriate datum reference. For example 51° 04.372'N, 100° 26.794'E (WGS 84).

**ANNEX 2: DETAILED TECHNICAL AND ENGINEERING SPECIFICATIONS,
STANDARDS AND BILLS OF QUANTITIES FOR THE
INSTALLATION OF BEACONS (NO LIGHT)**

See pdf files



**ANNEX 3: DETAILED TECHNICAL AND ENGINEERING SPECIFICATIONS,
STANDARDS AND BILLS OF QUANTITIES FOR THE
INSTALLATION OF FLOATING PONTOONS AND DRY DOCK**

See pdf files

PART 2. TECHNICAL AND FINANCIAL FORMS

Technical and Financial Forms to be used in the bidding documents are:

- Technical Form 1: Experiences of Tenderer Qualifying for Participation in the Tender
 - Technical Form 2: Solutions or General Methodology
 - Technical Form 3: Curriculum Vitae of each Specified Staff Member that will Participate
 - Technical Form 4: Schedule and Manpower Plan
 - Technical Form 5: Specific Equipment Proposed
 - Technical Form 6: Warranties and Warranty Conditions Proposed
-
- Financial Form 2: Summary of Financial Offer
 - Final Report Format

TECHNICAL FORM 1

EXPERIENCES OF TENDERER

Overview of Similar Projects Undertaken During Past Five Years by the Bidder

Each relevant project should include at least the following:

- Name of owner and name of project
- Location
- Investor
- Experts involved in project (numbers of experts and man-months)
- Period of time for which services were provided (from...*date*..to ...*date*..)
- Estimated value of consultancy services provided, specifying whether work was as an independent Bidder, in partnership or as a sub-Bidder
- Detailed description of consultancy service performed
- Regional or country experience
- History of claims / arbitration

TECHNICAL FORM 2

SOLUTIONS OR GENERAL IMPLEMENTATION METHODOLOGY

Project Concept, Methodology, Local Knowledge

The Consultant will describe for each component individually:

- a) A conceptual approach
- b) Methodology: how will the work be conducted, how well the company can and will cope with the installation works, local purchases, tests, quality assurance, etc
- c) Experience in the related countries is a strong advantage, please describe

TECHNICAL FORM 3

CURRICULUM VITAE OF EACH SPECIFIED STAFF MEMBER THAT WILL PARTICIPATE IN THE TERMS OF REFERENCE OF THIS TENDER

- 1) Full name
- 2) Date of birth
- 3) Nationality
- 4) Proposed position - indicating for which component
- 5) Tertiary education (name and address of institution, official title of degree, diploma or certificate and year of graduation)
- 6) Other training
- 7) Other skills
- 8) Overseas working experience
- 9) Working background (clearly stating time period, names of organizations, positions and delegated tasks)
- 10) Undertaking to ensure sufficient time to implement the consultancy

TECHNICAL FORM 4

SCHEDULE AND MANPOWER PLAN

Manpower Plan and Schedule

This must be completed in Excel and should be in FULL ACCORDANCE WITH THE PLAN IN TECHNICAL FORM 5

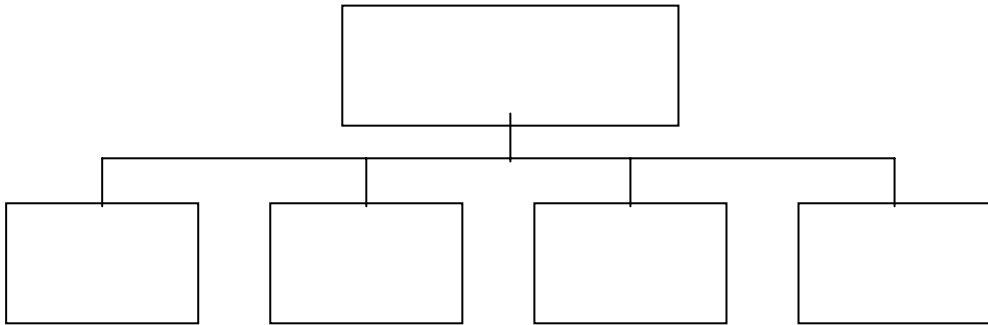
Must be detailed FOR EACH COMPONENT INDIVIDUALLY over whole period

IMPORTANT NOTE:

THE GOODS WILL ARRIVE IN THE LAO PDR NOT BEFORE WEEK 23 OF THE YEAR 2010. CLEARING WILL ALSO TAKE SOME TIME SO THERE IS A RISK THAT NOT ALL NAVAIDS (ESPECIALLY BEACONS AND BUOYS) CAN BE INSTALLED DURING THIS DRY SEASON. SOME OF THE NAVAIDS THAT REQUIRE VERY LOW WATER LEVELS MAY HAVE TO BE INSTALLED DURING THE NEXT LOW WATER SEASON, SUCH AS DECEMBER 2010 OR JANUARY 2011. SO A SPLIT OF TASKS IN TIME MAY BE REQUIRED (FOR EXAMPLE APRIL – JUNE & DECEMBER 2010 – FEBRUARY 2011)

Full Name	Position	WEEKS (+schedule of works)												Activity
		1	2	3	4	...	10	11	12	1	2	3	...	
1. Buoys, including mooring and anchors														
2. Beacon topsign set: body + topsign														
3. Floating pontoons														
4. Drive-on Boat Docking Facilities														
Total														

Organization Chart of Field Work Responsibilities



TECHNICAL FORM 5

SPECIFIC INSTALLATION AND EQUIPMENT PROPOSED

Per activity	Tools and equipment used (crane type, ...)	Design and Installation	Material
1. Buoys, including mooring and anchors			
2. Beacon topsign set: body + topsign			
3. Floating pontoons	<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p style="color: #8B4513; text-align: center;">Add technical drawings of the structures and connections to the shore</p> </div>		
4. Drive-on Boat Docking Facilities			

TECHNICAL FORM 6

WARRANTIES AND WARRANTY CONDITIONS PROPOSED

What guarantees can the Contractor give for the installation

FINANCIAL FORM 1

SUMMARY OF INSTALLATION, MANPOWER, MATERIALS AND EQUIPMENT PLAN

Activity	Quantity	Unit Price	Total Price
1a. Price for installation of buoys			
1b. Materials to be used besides the delivered buoys, including mooring and anchors such as kind of chemicals for anchoring, etc.			
2a. Price for installation of beacons			
2b. Materials to be used outside the delivered Beacon topsign set: body + topsign such as kind of grout, chemicals, etc.			
3a. Price for installing floating pontoon			
3b. Floating pontoons materials			
4a Price for installing drive-on boat			
4b. Materials to be used outside the delivered Drive-on Boat Docking Facilities			
Other costs for installation and material			

FINAL REPORT FORMAT

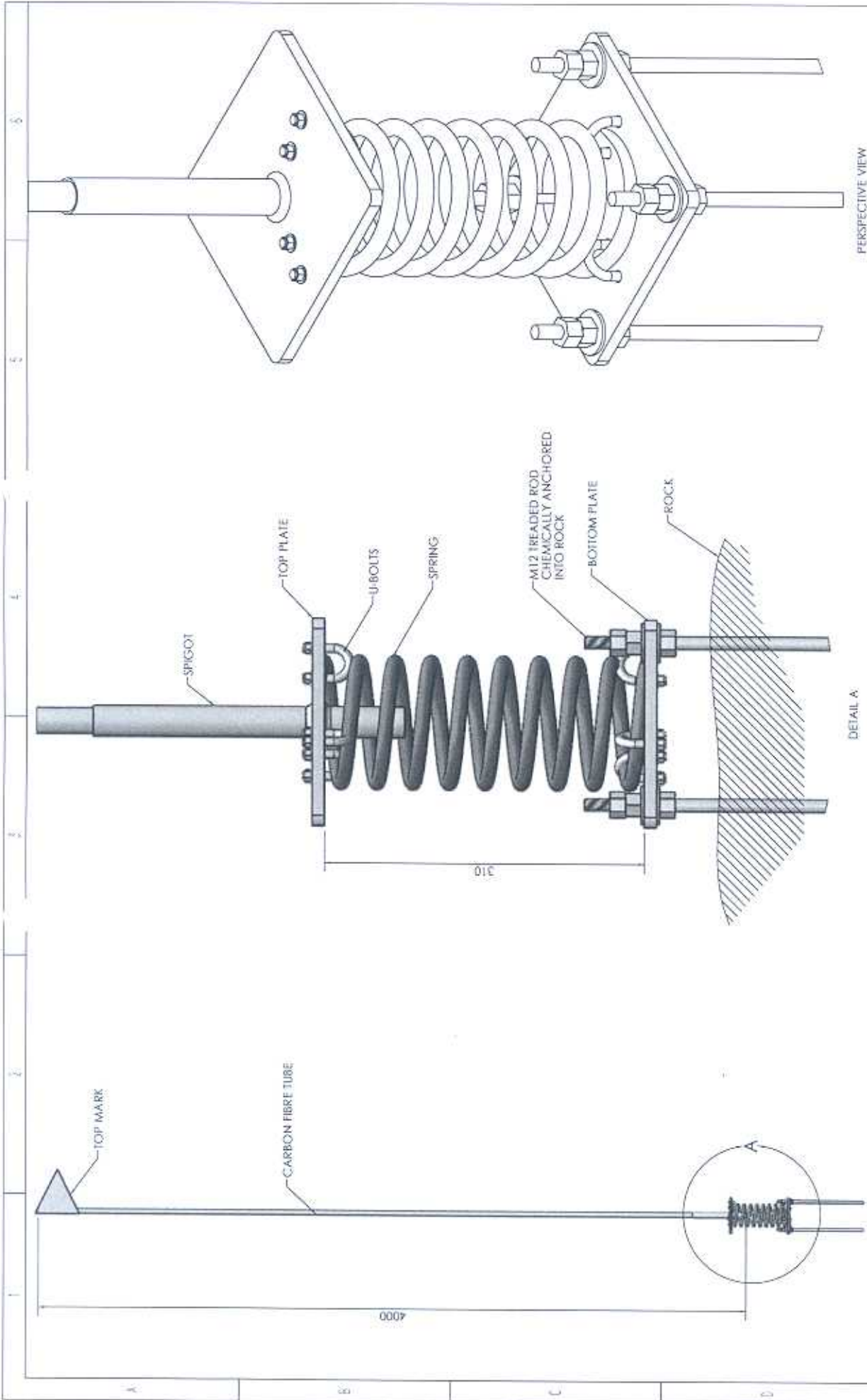
INSTALLATION OF AIDS TO NAVIGATION ON THE DANGEROUS AREAS OF THE MEKONG RIVER BETWEEN LUANG PRABANG AND HOUEI SAI IN LAO PDR AND THAILAND

CONTENTS

- 1 Executive summary
- 2 Introduction
 - 2.1 Project Description
 - 2.2 Context and Background
- 3 Objectives, Outputs
 - 3.1 Objectives
 - 3.2 Detail Outputs
- 4 Institutional Setting
 - 4.1 Staffing
 - 4.2 Organizational chart, Project Implementation Team (PIT)
 - 4.3 Sub-contracts, if any
- 5 Implementation Procedures
 - 5.1 Logistics and Transport
 - 5.2 Purchase Orders
 - 5.3 Survey Revision
 - 5.4 Detailed design of components
 - 5.5 Engineering drawings
 - 5.6 Technical specifications of the components
 - 5.7 Product assembly
 - 5.8 Installation
 - 5.8.1 Buoy and Lights
 - 5.8.2 Fixed structured
 - 5.8.3 Bridge Panels and Lights
 - 5.9 Hand-over Certificate
 - 5.10 Problems and Issues encountered
- 6 Approaches to the problems and Issues encountered
 - 6.1 Strategy for Corrective Actions
 - 6.2 Work Plan revision and Manning Table
- 7 Assessment of the Achievements
 - 7.1 Quantitative and Qualitative Achievements
 - 7.2 Final Certificate of Completion
 - 7.3 Assessment of the Suitability of the Institutional Arrangement for hand-over
- 8 Key Factors Affecting Project Progress
 - 8.1 Lessons Learned

9 Recommendation for Future Project

Picture of Equipment



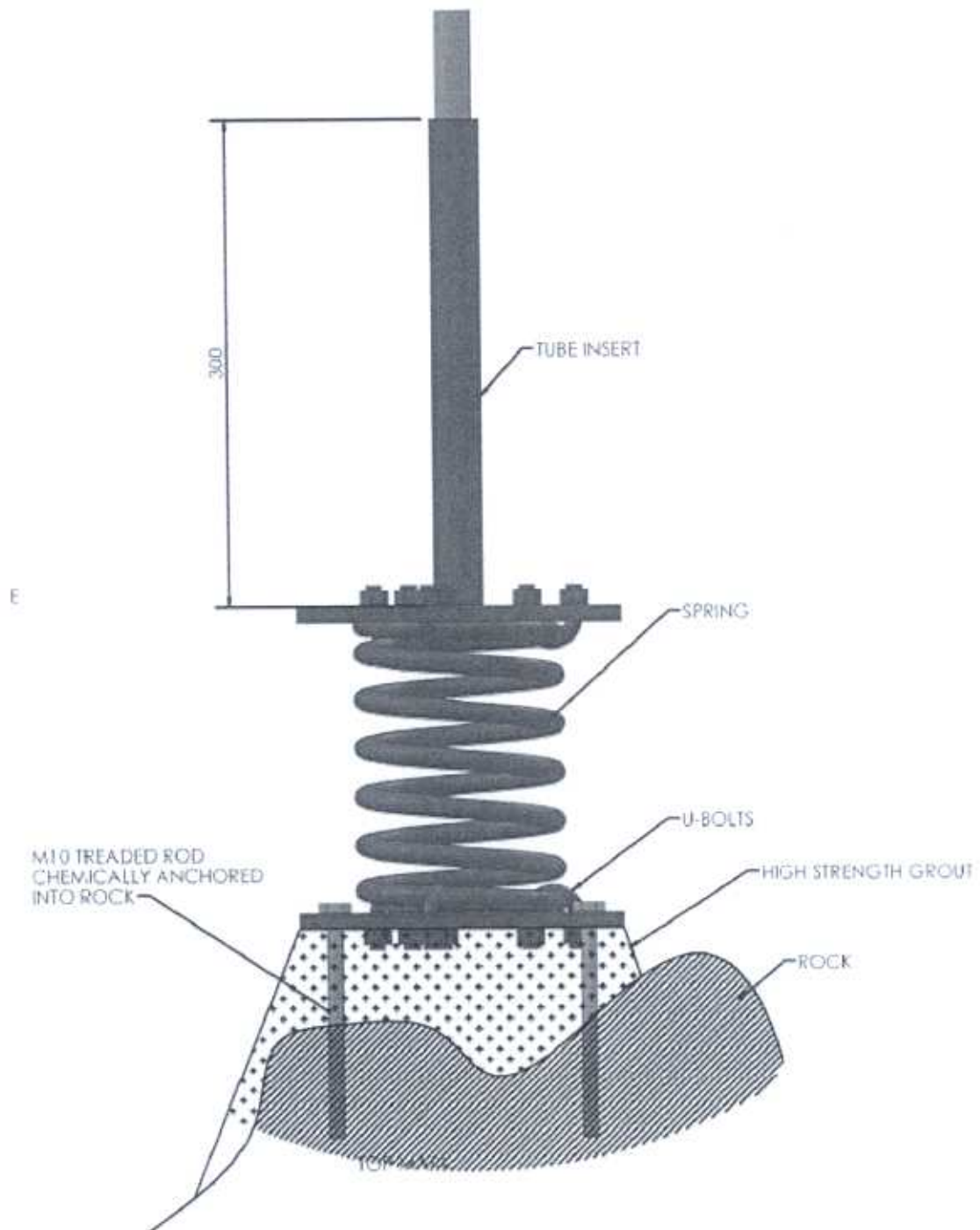
PERSPECTIVE VIEW

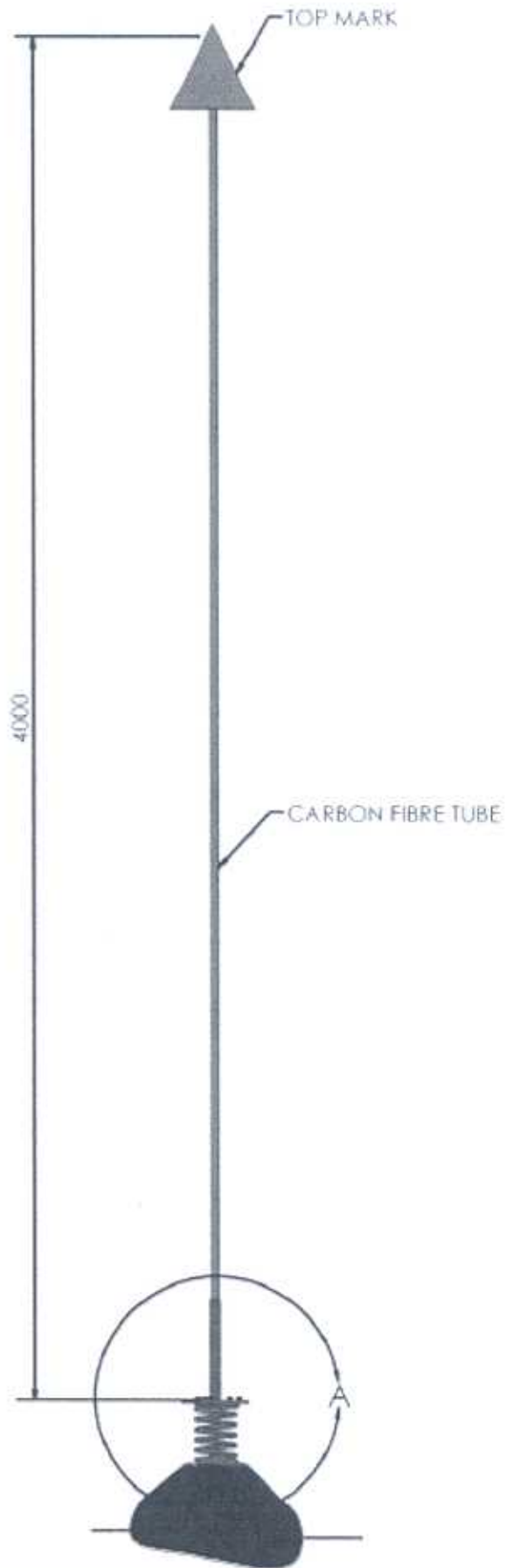
DETAIL A

The Drawing Description		S. No.		Date		JMS DISK 3010		DRW		E. HANCOCK		Australian Maritime Systems		50 WT SOLE	
A INITIAL ISSUE		EEM PLS		19/02/09		UNCLASSIFIED DISK/DWG		REV		G. HARRINGTON		15/04/09		P. N. TOLE	
D CHANGES MADE TO DAYMARK		EEM DWN		15/04/09		3/8 INCH 7E UNITS 3MM		APPROV		P. SATCHEL		STARBOARD SIDE SPRING POLE BEACONS		ASK	
						FORMAL SR		DATE SR?		19/02/09		LAOS		15/02/09	
						MACHING		TOL. SR?		N.T.S.		DRAFT		15/02/09	
						FABRICATION		SCALE				LAOS			
						ASSEMBLY						A3		AMSD-ABP-GA-01D	
												D			

ASME
 THE MARKING OF THIS DRAWING IS THE PROPERTY OF AUSTRALIAN MARITIME SYSTEMS. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

AMS – River Marker Series One





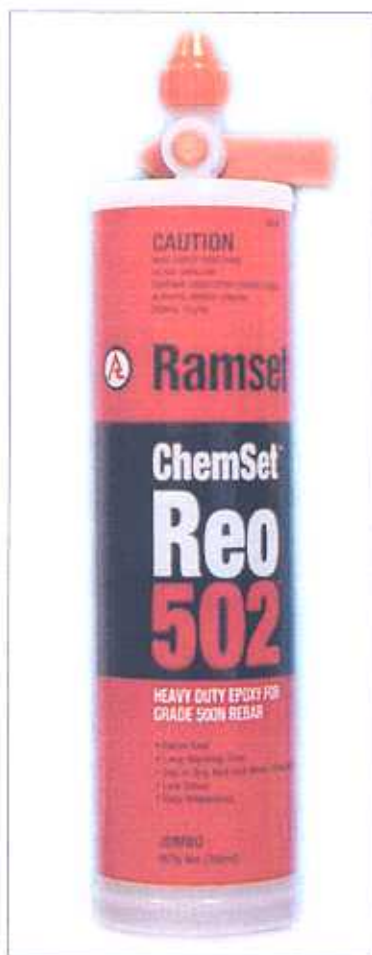


Series Two Modifications



CHEMSET™ Reo 502™

Extra Heavy Duty Epoxy Anchoring Adhesive



Substrates

- Solid Concrete
- Stone

Applicable Standards

- AS3600 - 2001



Chemset Reo 502 is a high performance Epoxy anchoring adhesive specially designed for concrete structural connections

Overview

Chemset Reo 502 is suitable for dry, damp, wet and flooded holes, is quick setting for improved productivity and has long working time to reduce nozzle wastage.

Bar development lengths comply with AS3600

For structural reinforcing bar connections in slabs, columns, beams and walls, structural steel columns, raker angles and seating.

Product Advantages

- Quick Cure
 - 3 hours at 20°C for improved productivity
- No weather delays
 - Suitable for dry, damp, wet and flooded holes
- High bond strength
 - Delivers bar yield at minimum lengths, which saves drilling time and drill bit wear
 - Suitable for core drilled and carbide drilled holes
 - Suitable for 500 grade reinforcing bar
 - Improved security
- Long working time
 - 15 to 20 minutes at 20°C
 - Longer nozzle life
 - More time to insert bars into deep holes
- Easy to dispense and sag resistant
- User friendly
 - Low odour and not flammable
- Tap Valve
 - Essential to preserve contents between uses

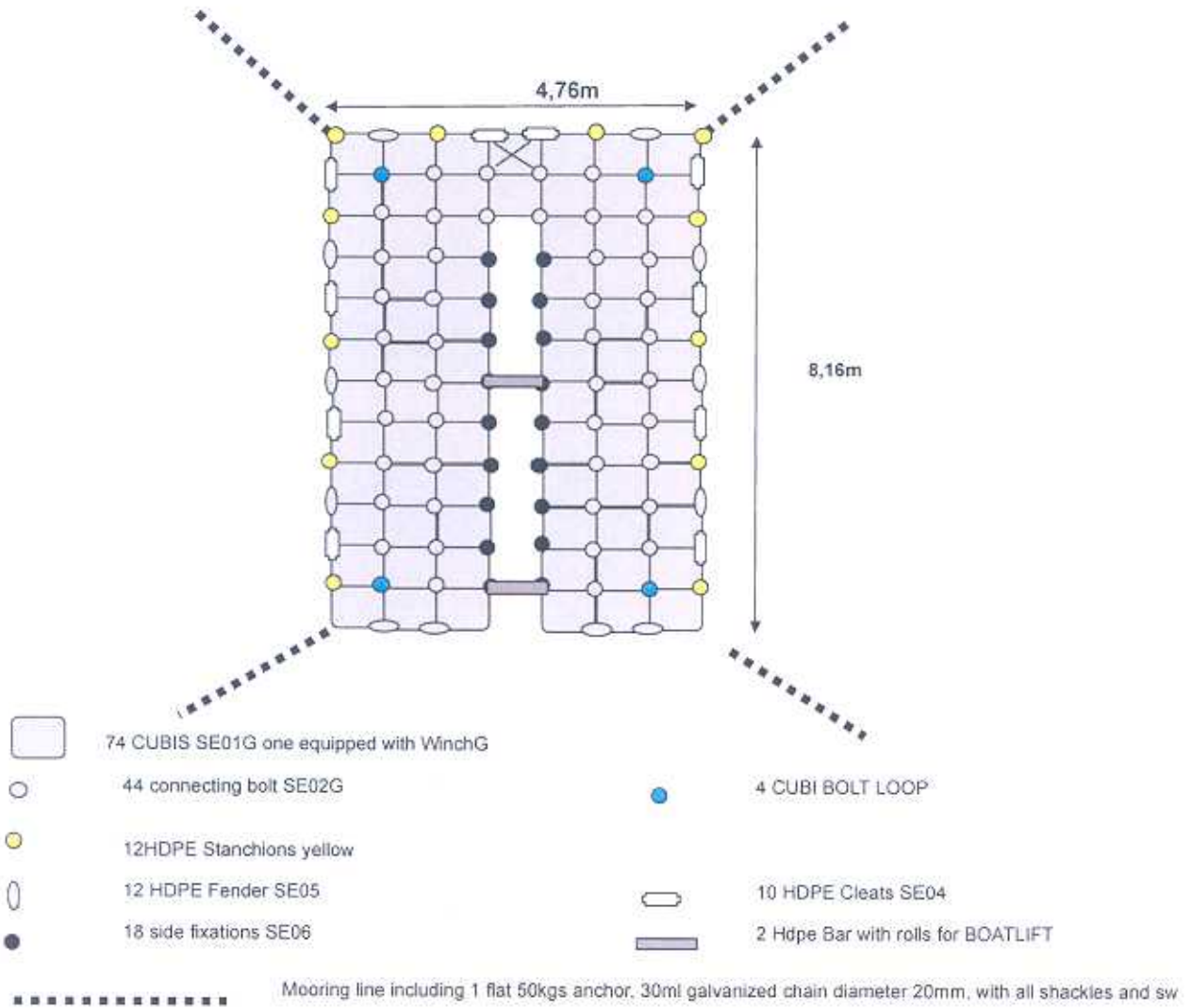
Applications

- Post installing Grade 500 reinforcing bar connections for concrete walls, slabs, columns and beams
- Starter bars
- Structural Steel connections

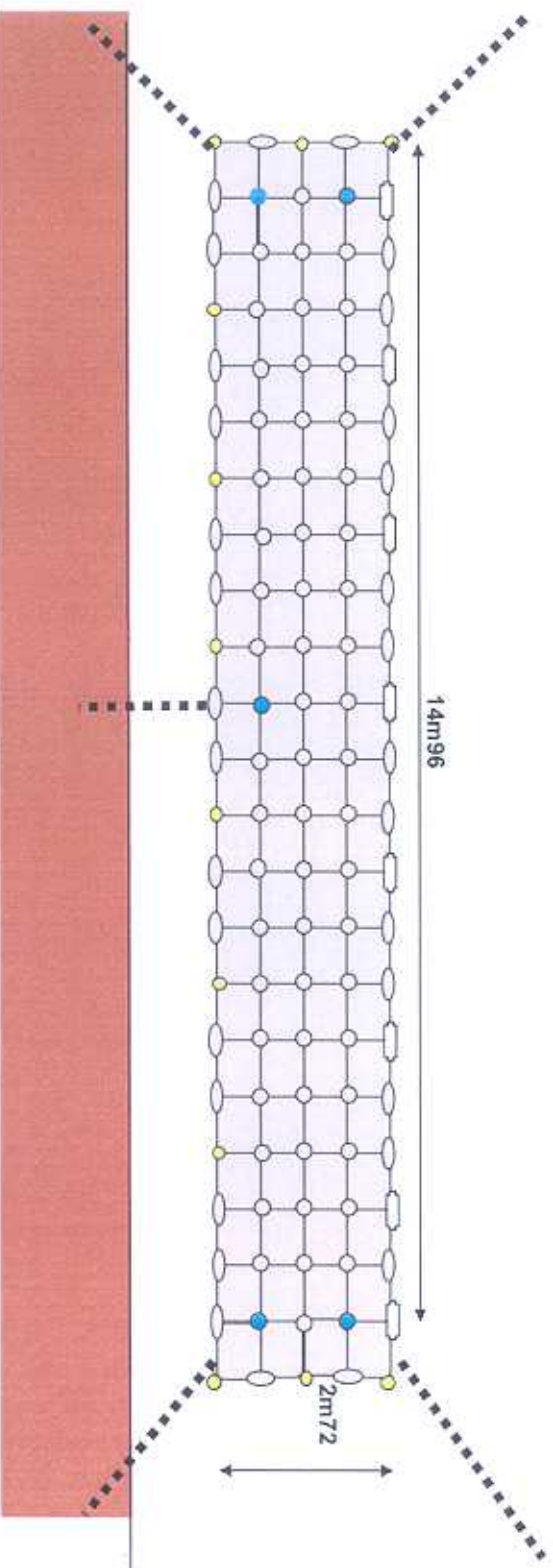


Ramset™

Dry dock



LAOS project



This portoon includes:

 88 cubis SE01G

 58 Connecting Bolt SE02G

 8 HDPE Cleat SE04G

 32 Fenders HDPE SE05G

 12 Stanchions HDPE Yellow

 5 CUBIBOLT LOOP Mooring point

 Mooring line including 1 flat 50kgs anchor, 30ml galvanized chain diameter 20mm, with all shackles and swivels.



MEKONG RIVER COMMISSION ES 450 MOORING SCHEDULE

- Shackle DN18
- Shackle DN20
- Flat anchor 50 Kg



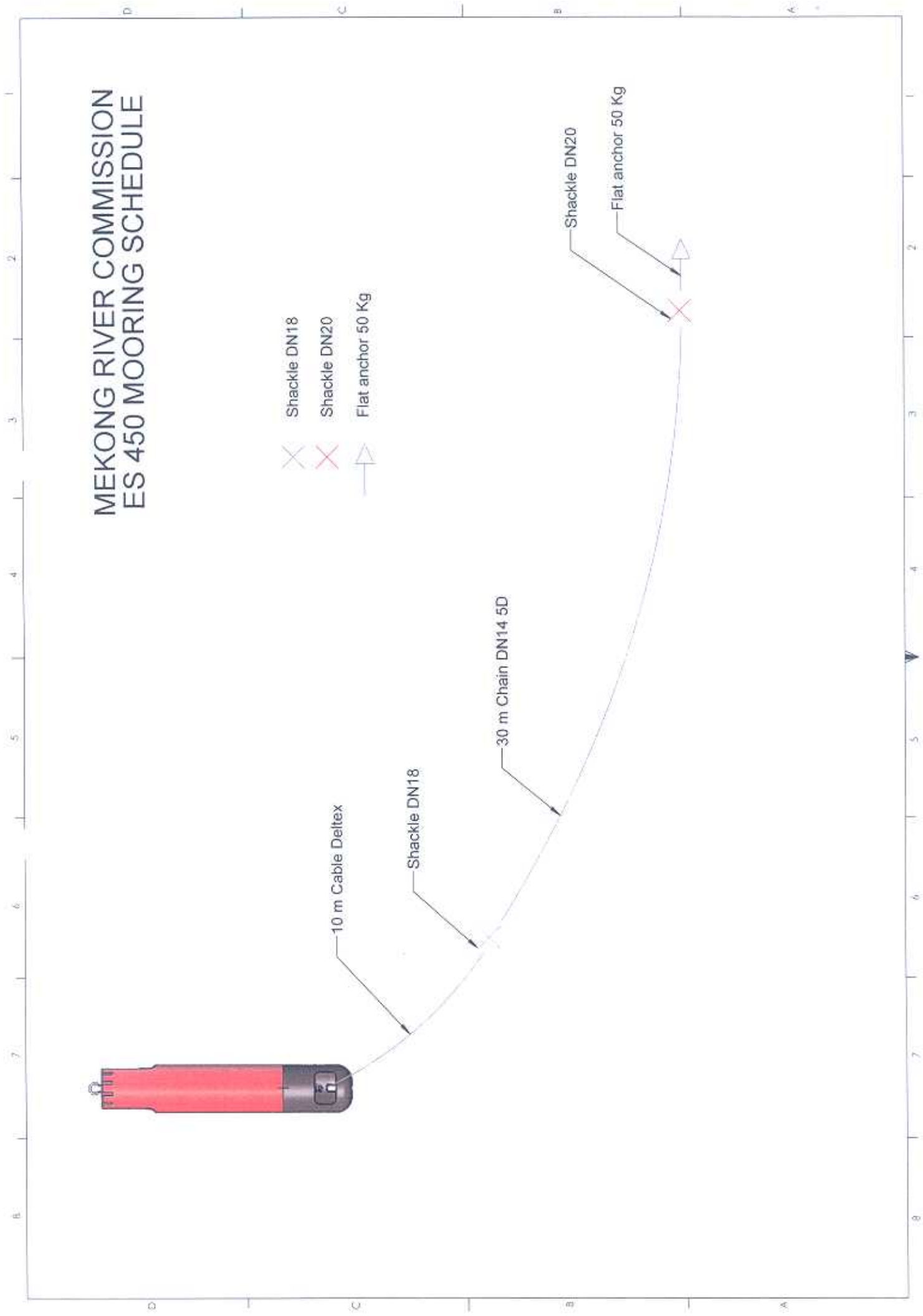
10 m Cable Deltex

Shackle DN18

30 m Chain DN14 5D

Shackle DN20

Flat anchor 50 Kg



STANDARD MOORING LINE



Double bolted security shackle



Chain



Nail shackle



Swivel



Nail shackle



Chain



Kenter link



Drag chain



Shackle



Sinker



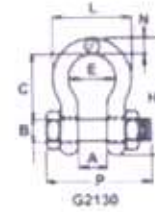
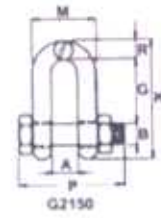
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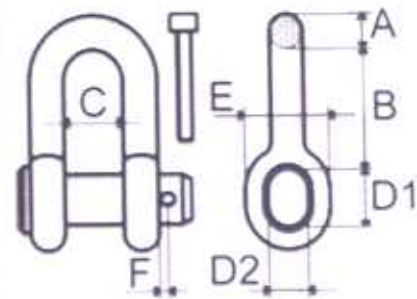
HIGH RESISTANCE SHACKLES

MINIMAL INCHES SIZE	1" 1/4	1" 3/8	1" 3/4	2" 1/2	3
MINIMAL SIZE MM	31.8	34.9	44.5	63.5	76.2
CMU TONS	12	14	25	55	85
A MM	51.1	57	73	105	127
B MM	35.1	38.1	51.0	70.0	82.5
C MM	119	133	178	267	330
D MM	31.8	35.1	44.5	66.5	76.0
E MM	82.5	92	127	184	200
F MM	76	85	106	154	165
G MM	100	111	146	203	216
H MM	210	233	313	453	546
K MM	191	210	279	377	429
L MM	146	162	225	327	365
M MM	115	127	162	238	279
N MM	33.1	38.1	57.0	79.5	92.0
P MM	165	183	230	344	419
R MM	35.1	38.1	54.0	66.5	89.0
WEIGHT 2130 KG	5.31	7.18	15.4	44.6	70
WEIGHT 2150 KG	4.9	6.24	14.2	38.6	56



ESSENTIAL SHACKLES FOR BUOYS

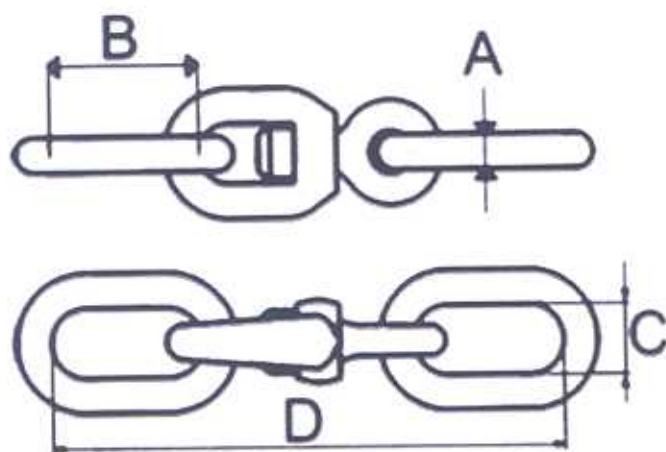
DN	A	B	D1 X D2	E	F	(SWL)	(PL)	
MM	INCHES	MM	MM	MM	MM	kN	kN	
14	9/16	42	18	32x22	62	124	77	154
16	5/8	48	21	38x25	80	160	101	202
18	11/16	54	23	44x32	104	209	131	262
20	13/16	60	26	55x38	132	264	165	330
22	7/8	66	29	67x45	152	304	190	380



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SWIVELS

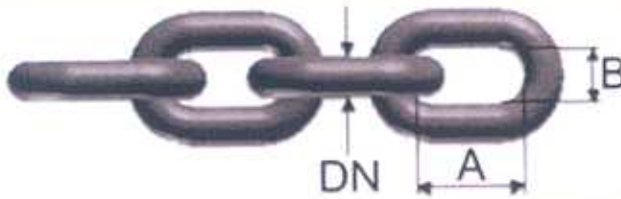


DN		A	B	C	D	WEIGHT
mm	inches	mm	mm	mm	mm	kg
14	9/16	42	18	62	124	3,67
16	5/8	17-févr	21	80	160	5,4
18	11/16	54	23	104	209	9,85
20	13/16	60	26	132	264	16,48
22	7/8	66	29	152	304	26,6
20	13/16	60	26	132	264	38
22	7/8	66	29	152	304	65



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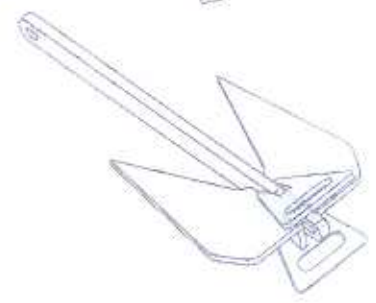
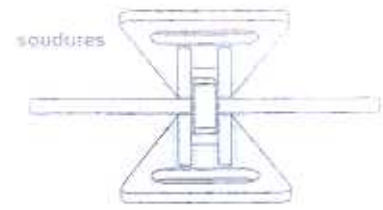
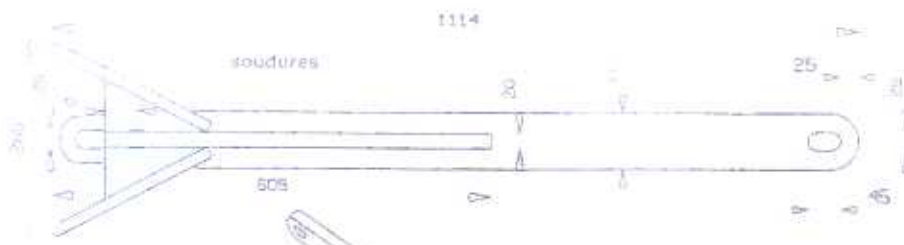
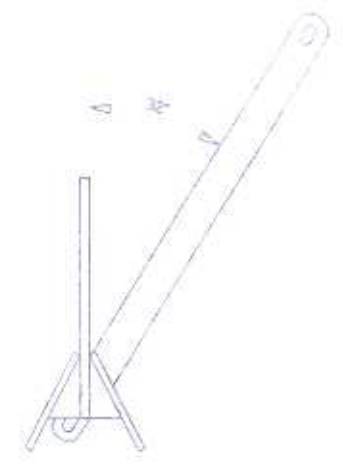
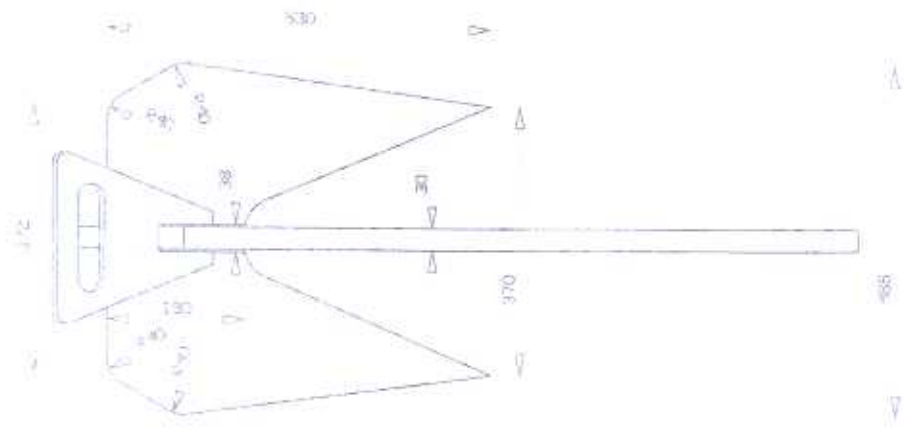


SPECIFICATIONS

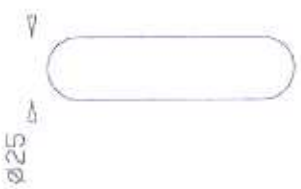
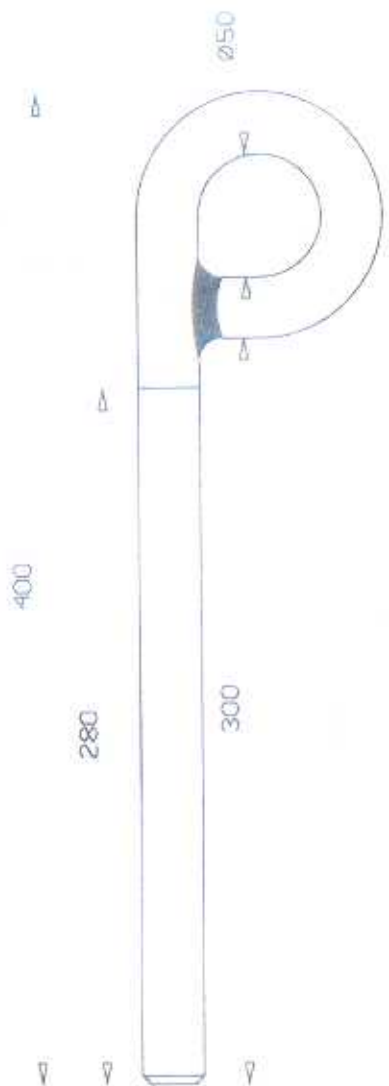
DN		A	B	WEIGHT Kg/m	QUALITY SL1		QUALITY SL2		QUALITY SL3	
MM	INCHES	mm	mm		CE (PL)	CR (BL)	CE (PL)	CR (BL)	CE (PL)	CR (BL)
3XD										
14	9/16	42	18	4,3	48	96	62	124	77	154
16	5/8	48	21	5,6	63	126	80	160	101	202
18	11/16	54	23	7,3	82	160	104	209	131	262
20	13/16	60	26	9	104	208	132	264	165	330
22	7/8	66	29	11	120	240	152	304	190	380
25	15/16	75	33	14	155	310	197	393	246	491
28	1" 1/8	84	36	17,2	194	388	246	492	308	616
30	1" 3/16	90	39	19,7	223	446	283	566	353	706
32	1" 1/8	96	42	22,5	253	506	322	644	402	804
35	1" 3/8	105,8	46	26,8	304	607	385	770	482	964
38	1" 1/2	114	49	31,7	357	714	454	900	656	1130
40	1" 9/16	120	52	35	396	792	505	1010	630	1260
45	1" 3/4	135	59	44,4	502	1004	638	1275	795	1590
50	1" 15/16	150	65	54,8	620	1240	785	1570	980	1960
55	2" 1/8	165	72	66,3	750	1510	940	1900	1190	2380
60	2" 3/8	180	78	78,9	900	1800	1130	2260	1420	2770

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CARLIER CHAINES SA. 59733 St-AMAND	Date de création: 15/02/2006	Page n°: 1
	Date de révision:	
Désignation fabricant: Ancres chaîne 50 kg	Échelle: 1:1	Ét. de: 10/06
	DA12: révision 1	



CARLIER CHAINES SA.		Date de création : DA-C1/2001	Créé par : J. J.
59733 St-AMAND		Date de révision : Rev. 1	
Designation composant : pilon à sceller Ø25 galvanisé à chaud		Code composant :	
		Lg. biléteil : 532 mm	
		Echelle : 1/2 A3	Poids : 2.1 kg
		DA/15 Inceca 2	
		<small> Fabriqué en France Imprimé en France Dessiné en France </small>	

Le câble DELTEX, le premier câble non métallique

Les principales qualités

- 1— Stabilité dimensionnelle.
- 2— Résistance à la traction élevée par mm^2 .
- 3— Capacité à absorber les chocs par un allongement limité.
- 4— Insensible à la corrosion.
- 5— Résistance élevée au frottement.
- 6— Résistance élevée à la compression 1 Tonne par cm^2 .
- 7— Faible poids dans l'eau.
- 8— Mémoire élastique après l'effort de traction.
- 9— Économie d'achat importante par rapport à la chaîne.
- 10— Durée de vie deux fois supérieure à celle de la chaîne.
- 11— Hydrodynamisme: dans les mouillages de grande profondeur permet de diviser par deux les forces de frottement par rapport aux cordages polyamide ou polypropylène.
- 12— Les câbles DELTEX[®] n'abîment pas les fonds marins.




Important : les chiffres et les dessins contenus dans cette documentation sont donnés à titre d'exemple, et chaque installation doit prendre en compte les conditions locales et les particularités de la bouée.




Les câbles DELTEX® sont expédiés, soit en caisses carton avec des cônes de type RM 20, RM 30 ou RM 35 installés en atelier à la longueur commandée (de 7 à 50 mètres), soit en touret pour les longueurs plus importantes (de 50 à 2000 m).

Câbles DELTEX[®] gamme maritime



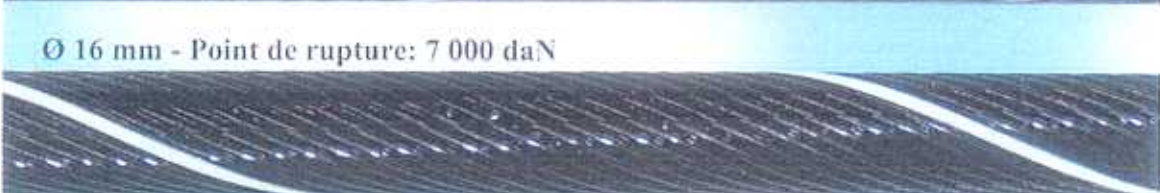
Ø 5 mm - Point de rupture: 940 daN




Ø 8 mm - Point de rupture: 2 500 daN




Ø 11mm - Point de rupture: 4 000 daN




Ø 16 mm - Point de rupture: 7 000 daN



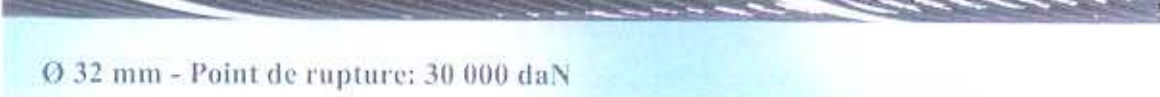
Ø 19 mm - Point de rupture: 11 000 daN



Ø 22 mm - Point de rupture: 14 000 daN



Ø 27 mm - Point de rupture: 21 000 daN

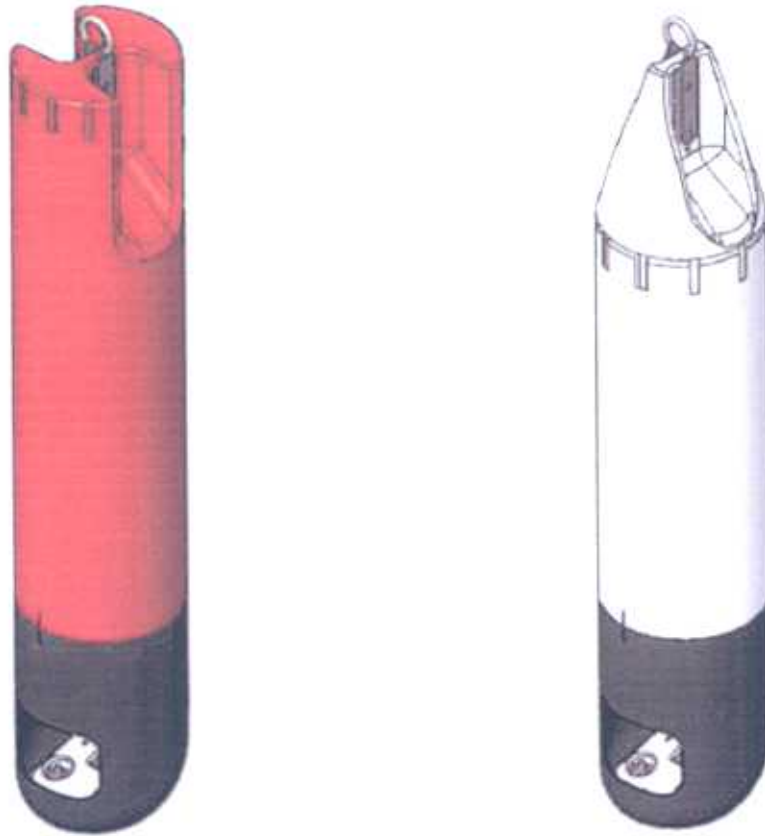


Ø 32 mm - Point de rupture: 30 000 daN



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ES 450



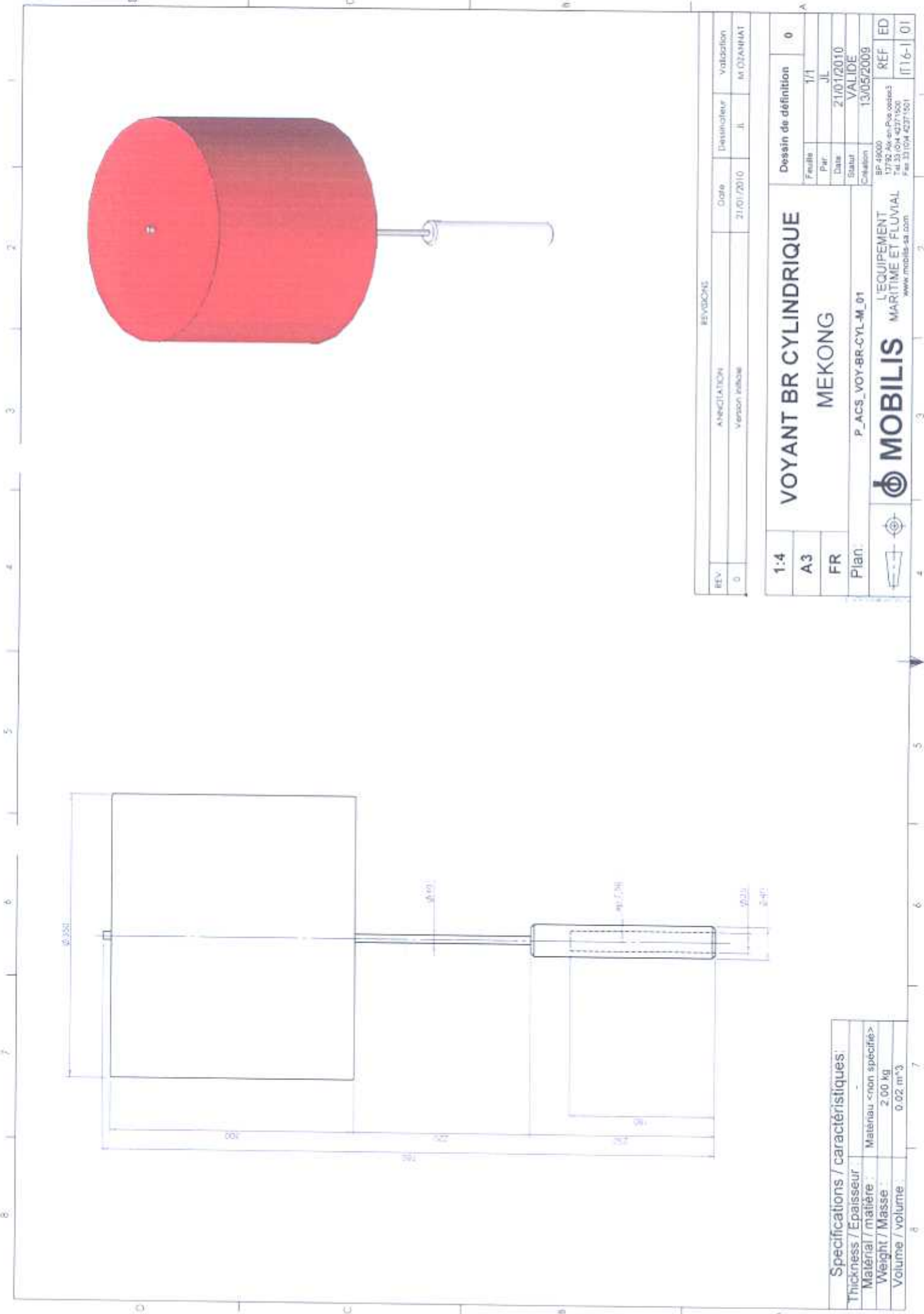
The ES450 is specially designed for rivers like MEKONG. This buoy is a modular one, composed with standard elements.

The polyethylene daymark, the integrated aluminium marine grade radar reflector (RES 10m²) give a perfect high visibility to the ES450 buoy.

The ES 450 is specially shapped to resist at very frequent exposure by heavy logs and lare amounts of smaller and sticking debris such as bamboos. This buoy is keeping up to survive to tidal flow, water level variations experienced on the MEKONG River troughout the year.

Life expectancy 15 years.

This buoy has been tested successfully in hard conditions on MEKONG RIVER



REVISIONS			
REV.	ANNEXIATION	Date	Validation
0	Version initiale	21/01/2010	JL M'OUANPHAT

1:4		Dessain de definition		0
A3		Feuille		1/1
FR		Par.		JL
Plan:		Date		21/01/2010
		Statut		VALIDE
		Creation		13/05/2009
		BP 48000		REF ED
		17790 Av. du Parc industriel 3		REF ED
		Tel 33 (0)4 43711500		REF ED
		Fax 33 (0)4 43711501		REF ED
		www.mobilis-sa.com		REF ED
		L'EQUIPEMENT		REF ED
		MARITIME ET FLUVIAL		REF ED
		MOBILIS		REF ED
		P_ACS_VOY-BR-CYL-M_01		REF ED
		MEKONG		REF ED
		VOYANT BR CYLINDRIQUE		REF ED

Specifications / caracteristiques:	
Thickness / Epaisseur	-
Matériau / matière	Matériau <non spécifiés>
Weight / Masse	2.00 kg
Volume / volume	0.02 m ³

SECTION IV

Draft Contract



Mekong River Commission

P.O. Box 6101, 184 Fa Ngoum Road, Unit 18,
Ban Sithane Neua, Sikhottabong District, Vientiane 01000, Lao PDR
Telephone: (856-21) 263 263 Facsimile: (856-21) 263 264
Email: mrcs@mrcmekong.org

DD/MM/YY

MEKONG RIVER COMMISSION CONTRACT FOR SERVICES # [Insert Contract Number/Current Year]

Dear Sir/Madam,

The Mekong River Commission (hereinafter referred to as "the Employer"), wishes to engage your [Insert company/organization/institution], duly incorporated under the Laws of [Insert the name of the country] (hereinafter referred to as the "Contractor") in order to perform services in respect of [INSERT SUMMARY DESCRIPTION OF THE SERVICES] (hereinafter referred to as the "Services"), in accordance with the following Contract:

1. Contract Documents

- 1.1 This Contract is subject to the Employer General Conditions for Professional Services attached hereto as Annex I. The provisions of such Annex shall control the interpretation of this Contract and in no way shall be deemed to have been derogated by the contents of this letter and any other Annexes, unless otherwise expressly stated under section 4 of this letter, entitled "Special Conditions".
- 1.2 The Contractor and the Employer also agree to be bound by the provisions contained in the following documents, which shall take precedence over one another in case of conflict in the following order:
 - a) This letter including Annex I;
 - b) The Terms of Reference [ref.dated.....], attached hereto as Annex II;
 - c) The Contractor's technical proposal [ref....., dated], as clarified by the agreed minutes of the negotiation meeting¹ [dated.....], both documents not attached hereto but known to and in the possession of both parties.

¹ If there are updates to the technical proposal or correspondence exchanged in clarification of certain aspects, reference them too, provided that they are fully acceptable to the Employer. Otherwise, aspects which resolution is pending should be dealt with in this letter itself or in the Terms of Reference, as appropriate.

1.3 All the above shall form the Contract between the Contractor and the Employer, superseding the contents of any other negotiations and/or agreements, whether oral or in writing, pertaining to the subject of this Contract.

2. Obligations of the Contractor

2.1 The Contractor shall perform and complete the Services described in Annex II with due diligence and efficiency and in accordance with the Contract.

2.2 The Contractor shall provide the services of the following key personnel:

Name	Specialization	Nationality	Period of Service

2.3 Any changes in the above key personnel shall require prior written approval of **[Insert Name], Chief Executive Officer**, the Employer.

2.4 The Contractor shall also provide all technical and administrative support needed in order to ensure the timely and satisfactory performance of the Services.

2.5 The Contractor shall submit to the Employer the deliverables specified hereunder according to the following schedule:

List of Deliverables	Delivery Dates
[Insert e.g. Progress Report]	[Insert Date]
[Insert e.g. Final Report]	[Insert Date]

2.6 All reports shall be written in the English language, and shall describe in detail the services rendered under the Contract during the period of time covered in such report. All reports shall be transmitted by the Contractor by **[MAIL, COURIER AND/OR FAX]** to the address specified in 9.1 below.

2.7 The Contractor represents and warrants the accuracy of any information or data provided to for the purpose of entering into this Contract, as well as the quality of the deliverables and reports foreseen under this Contract in accordance with the highest industry and professional standards.

OPTION 1 (FIXED PRICE)

3. Price and Payment²

3.1 In full consideration for the complete and satisfactory performance of the Services under this Contract, the Employer shall pay the Contractor a fixed contract price of **[INSERT CURRENCY & AMOUNT IN FIGURES AND WORDS]**.

² This version of section 3 is to be used for fixed price contracts. Fixed price contracts should normally be used when it is possible to estimate with reasonable accuracy the costs of the activities which are the subject of the Contract.

- 3.2 The price of this Contract is not subject to any adjustment or revision because of price or currency fluctuations or the actual costs incurred by the Contractor in the performance of the Contract.
- 3.3 Payments effected by the Employer to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by the Employer of the Contractor's performance of the Services.
- 3.4 The Employer shall effect payments to the Contractor after acceptance by the Employer of the invoices submitted by the Contractor to the address specified in 9.1 below, upon achievement of the corresponding milestones and for the following amounts:

MILESTONE³	AMOUNT	TARGET DATE
After contract signed	30 percent of the contract value in USD. The payments shall be adjusted for deductions for retention by withholding 10% of this payment	Within thirty (30) days after the Effective Date
Upon installation of the fixed navigation aids (beacons, and buoys with no chain) and positive test acceptance	30 percent of the contract value. The payments shall be adjusted for deductions for retention by withholding 10% of this payment	
Completing the installation of all the floating nav aids (buoys, floating pontoon, Floating Drive Dock) and acceptance of positive test results	40 percent of the contract value. The payments shall be adjusted for deductions for retention by withholding 10% of this payment	
The final payment, being the total of the withholding amounts (US\$, in words) to be paid when all deliverables have been accepted by client (MRCS) including satisfactory completion of the final report		

Invoices shall indicate the milestones achieved and corresponding amount payable.

OPTION 2 (COST REIMBURSEMENT)

3. Price and payment⁴

³ If an advance payment is granted, define the first milestone as "upon signature of the contract by both parties". Please note that advance payments should be granted only in exceptional cases, and that they must comply with the Employer policies and procedures.

- 3.1 In full consideration for the complete and satisfactory performance of the Services under this Contract, the Employer shall pay the Contractor a price not to exceed [***INSERT CURRENCY & AMOUNT IN FIGURES AND WORDS***].
- 3.2 The amount contained in 3.1 above is the maximum total amount of reimbursable costs under this Contract. The Breakdown of Costs in Annex [***INSERT ANNEX NUMBER***] contains the maximum amounts per cost category that are reimbursable under this Contract. The Contractor shall reflect in his invoices the amount of the actual reimbursable costs incurred in the performance of the Services.
- 3.3 The Contractor shall not do any work, provide any equipment, materials and supplies, or perform any other services which may result in any costs in excess of the amount under 3.1 or of any of the amounts specified in the Breakdown of Costs for each cost category without the prior written agreement of [***NAME and TITLE***], the Employer.
- 3.4 Payments effected by the Employer to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by the Employer of the Contractor's performance of the Services.
- 3.5 The Contractor shall submit invoices for the work done every [***INSERT PERIOD OF TIME OR MILESTONES***].

OR

- 3.5. The Contractor shall submit an invoice for [***INSERT AMOUNT AND CURRENCY OF THE ADVANCE PAYMENT IN FIGURES & WORDS***] upon signature of this Contract by both parties and invoices for the work done every [***INSERT PERIOD OF TIME OR MILESTONES***].⁵
 - 3.6 Progress and final payments shall be effected by the Employer to the Contractor after acceptance of the invoices submitted by the Contractor to the address specified in 9.1 below, together with whatever supporting documentation of the actual costs incurred is required in the Breakdown of Costs or may be required by the Employer. Such payments shall be subject to any specific conditions for reimbursement contained in the Breakdown of Costs.
4. Special conditions⁶

⁴ This version of section 3 is to be used for cost reimbursement contracts. Normally, cost reimbursement contracts should be used when it is not possible to estimate with reasonable accuracy the total costs of the activities which are the subject of the Contract.

⁵ This clause should be used if an advance payment is granted. Please note that advance payments should be granted only in exceptional cases, and that they must comply with the Employer policies and procedures. Any advance which represents 30% or more of the proposed total contract value must be cleared by the Office of Finance and Administration prior to contract signature, with the exception of contracts below \$20,000.

⁶ Under this Section, you may propose special clauses in order to adapt the model contract to the specific situation. In this sample clause 4, several clauses of common use are given. If they are not required, they should be deleted. If there are no special conditions, please choose the alternative version of 4 in order to conform to clause 1.1.

- 4.1 The advance payment to be made upon signature of the contract by both parties is contingent upon receipt and acceptance by the Employer of a bank guarantee for the full amount of the advance payment issued by a Bank and in a form acceptable to the Employer.
- 4.2 The amounts of the payments referred to under section 3.6 above shall be subject to a deduction of **[INSERT PERCENTAGE THAT THE ADVANCE REPRESENTS OVER THE TOTAL PRICE OF THE CONTRACT]** % (... percent) of the amount accepted for payment until the cumulative amount of the deductions so effected shall equal the amount of the advance payment.⁷
- 4.3 Owing to [...], Article(s) [...] of the General Conditions in Annex I shall be amended to read/be deleted.⁸

OR

- 4.1 No special conditions shall apply.
- 5. Submission of invoices
 - 5.1 An original invoice shall be submitted by mail by the Contractor for each payment under the Contract to the office of the Employer as mentioned in clause 9.
 - 5.2 Invoices submitted by fax or copies of invoices shall not be accepted by the Employer.
- 6. Time and manner of payment
 - 6.1 Invoices shall be paid within thirties (30) days of the date of their acceptance by the Employer. The Employer shall make every effort to accept an invoice or so advise the Contractor of its non-acceptance within a reasonable time from receipt.
 - 6.2 All payments shall be made by the Employer to the following Bank account of the Contractor:

[Insert NAME OF THE BANK]

[Insert ACCOUNT NAME/NUMBER]

[Insert ADDRESS OF THE BANK]

- 7. Entry into force. Time limits.

⁷ This clause must be used when an advance payment is granted (whatever the amount) in a cost reimbursement contract. A payment upon signature is considered an advance payment.

⁸ This is a sample clause for the rare cases where there is a conflict with a provision of the General Conditions which does not involve privileges and immunities, arbitration or some other fundamental aspects of the Employer legal status.

- 7.1 The Contract shall enter into force upon its signature by both parties.
- 7.2 The Contractor shall commence the performance of the Services not later than **[INSERT DATE]** and shall complete the Services within **[INSERT NUMBER OF DAYS OR MONTHS]** of such commencement.
- 7.3 All time limits contained in this Contract shall be deemed to be of the essence in respect of the performance of the Services.

8. Modifications

- 8.1 Any modification to this Contract shall require an amendment in writing between both parties duly signed by the authorized representative of the Contractor and **[NAME OF CEO], Chief Executive Officer**, the Employer.

9. Notifications

- 9.1 For the purpose of notifications under the Contract, the addresses of the Employer and the Contractor are as follows:

For the Employer:

Mekong River Commission Secretariat
Procurement Office
P.O. Box 1112
364 Monivong Boulevard, Phnom Penh, Cambodia
Tel. 855 23 720979, Fax. 855 23 720972
Email: mrcs@mrcmekong.org

For the Contractor:

[INSERT COMPANY NAME, ADDRESS AND TELEX, FAX AND CABLE NUMBERS]

If the above terms and conditions meet with your agreement as they are typed in this letter and in the Contract Documents, please initial every page of this letter and its attachments and return to this office one original of this Contract, duly signed and dated.

Yours sincerely,

[INSERT NAME OF CEO]
Chief Executive Officer
Mekong River Commission Secretariat

For **[INSERT NAME OF THE COMPANY/ORGANIZATION]**

Agreed and Accepted:

[Insert name, title, company name and address]

Date:

Clearance by:

[Insert Programme Officer Name and Title]

Funds are available and obligated:

Nguyen Thu Mai

Chief, Finance and Administration Section

Project Code: *[Insert Project Code, Budget Line and Activity Code]*

ANNEX I
GENERAL CONDITIONS OF CONTRACT
FOR PROFESSIONAL SERVICES

Article 1 - Independent Contractor

Nothing contained in this Contract shall be construed as establishing or creating between the Employer and the Contractor the relationship of master and servant, principal and agent or employer and employee; it being understood that the Contractor is an independent Contractor in relation to the Employer. No person engaged by the Contractor in connection with the performance of any obligation under this Contract shall be regarded as an agent, servant, employee of the Employer, and the Contractor shall be solely responsible for all claims by such persons arising out of or in connection with their engagement by the Contractor. The Contractor shall inform such persons of the foregoing.

Article 2 - Contractor's General Responsibilities

1. The Contractor shall perform its obligations under this Contract with due diligence and efficiency and in conformity with sound professional, administrative and financial practices.
2. The Contractor shall act at all times so as to protect, and not be in conflict with, the interests of the Employer, and shall take all reasonable steps to keep all costs and expenses at a reasonable level.
3. The Contractor shall be responsible for work or services performed by its agents, servants, employees, subcontractors and independent contractors in connection with this Contract. To this end, and without limiting the generality of the foregoing, the Contractor shall select reliable persons who will perform effectively, respect local customs and conform to the highest standards of professional, moral and ethical conduct.
4. The Contractor shall respect and abide by all applicable laws, regulations and ordinances of Cambodia and shall take all reasonable measures to ensure that its agents, servants, employees, subcontractors and independent contractors do.

Article 3 - Assignment of Personnel

Other than persons specifically named in this Contract, no person shall be assigned by the Contractor to work or perform services in connection with this Contract until after the Contractor has notified the Employer of the identity of such proposed persons and has provided the Employer with their curricula vitae, and the Employer has notified the Contractor that the Employer approves of such assignments.

Article 4 - Removal of Personnel

1. Upon notice by the Employer, the Contractor shall forthwith withdraw any person assigned to work or perform services in connection with this Contract and shall assign new persons in accordance with the provisions of Article 3. Such withdrawal or replacement shall not be a cause for suspension of the contract.
2. Any costs or expenses resulting from any withdrawal or replacement of persons pursuant to paragraph 1 of this Article 4 shall be borne by the Contractor.

Article 5 - Employee's Compensation and other Insurance

1. The Contractor shall take out and maintain:
 - (a) All applicable employee's compensation and liability insurance with respect to its agents, servants and employees performing work or services in connection with this Contract;
 - (b) Liability insurance in an appropriate amount for death, bodily injury or damage to property arising from the operation of any vehicles, boats or airplanes or other equipment owned or leased by the Contractor or its agents, servants, employees, subcontractors and independent contractors performing work or services in connection with this Contract;
 - (c) Comprehensive general liability insurance in an appropriate amount for all claims for death, bodily injury or damage to property, including, but not limited to, products liability, arising from acts performed or omissions committed by the Contractor, its agents, servants, employees, subcontractors and independent contractors in connection with this Contract; and
 - (d) Such other insurance as may be agreed upon between the Employer and the Contractor.
2. Upon request by the Employer, the Contractor shall provide evidence, to the reasonable satisfaction of the Employer, of the insurance referred to above and shall give the Employer reasonable advance notice of any proposed changes related to such insurance.
3. The Employer undertakes no responsibility to provide life, health, accident, travel or any other insurance coverage, which may be necessary or desirable in respect of any persons performing services in connection with this Contract.

Article 6 - Encumbrances

The Contractor shall not cause or permit any lien, attachment or other encumbrance by any third party to be placed on file or to remain on file in any public office or on file with the Employer against any money due or to become due for any work done or services rendered in connection with this Contract, or by reason of any claim or demand against the Contractor.

Article 7 - Source of Instructions

The Contractor, its agents, servants, employees, subcontractors and independent contractors, shall neither seek nor accept instructions from any authority external to the Employer in connection with the performance of their obligations under this Contract, and shall refrain from any action which may adversely affect the Employer. The Contractor shall take all reasonable measures to ensure that its agents, servants, employees, subcontractors and independent contractors comply with the Provisions of this Article.

Article 8 - Prohibition of Conflicting Activities

The Contractor and its personnel shall not engage in any business or other activity that conflicts with performance of duties under this Contract.

Article 9 - Officials not to Benefit

The Contractor warrants that no Employer official has been or will be, directly or indirectly, offered or given any inducement or benefit in connection with this Contract or the award thereof.

Article 10 - Subcontracting

The Contractor shall engage no subcontractor to perform any work or services in connection with this Contract unless the Contractor shall have notified the Employer of the identity of the proposed subcontractor and the Employer shall have notified the Contractor of its approval of the engagement of the subcontractor. The approval by the Employer of the engagement of a subcontractor shall not relieve the Contractor of any of its obligations under this Contract or from its responsibility for the work or services performed by the subcontractor.

The terms of any subcontract shall be subject to and in conformity with the provisions of this Contract. The term “subcontractor” includes any independent contractor or other person or entity with which the Contractor enters into an association, affiliation or relationship of any form for the purposes of performing work or services in connection with this Contract, other than an agent, servant or employee of the Contractor.

Article 11 - Assignment

The Contractor shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof or of any of the Contractor’s rights, claims or obligations under this Contract except after obtaining the prior written approval of the Employer.

Article 12 - Records, Accounts, Information and Audit

1. The Contractor shall maintain accurate and systematic records and accounts in respect of the performance of its obligations under this Contract.
2. The Contractor shall furnish, compile and make available at all reasonable times to the Employer any records, accounts or other information, oral or written, which the Employer may reasonably request in respect of the performance by the Contractor of its obligations under this Contract.
3. The Contractor shall allow the Employer or its authorized agents to inspect and audit such records, accounts or other information upon reasonable notice.

Article 13 - Language, Weights and Measurers

Except as may otherwise be specified in this Contract, the English (UK) language shall be used by the Contractor in all written communications to the Employer with respect to the performance of the obligations under this Contract and with respect to all documents procured or prepared by the Contractor pertaining to such obligations. The metric system of weights and measures shall be used in respect of all work and services performed in connection with this Contract.

Article 14 - Title to Equipment or Property

1. Title to all equipment and property furnished by the Employer for the purpose of this Contract shall rest with the Employer. The Contractor shall be responsible and accountable to Employer for all equipment or property purchased with funds provided or to be reimbursed by the Employer. The Contractor shall take all reasonable measures, including maintaining appropriate insurance, necessary to preserve such equipment or property from loss or damage until returned to the duly authorized office of the Employer upon completion of the work or services or termination of this Contract, or when no longer needed by the Contractor for the purposes of this

Contract. Such equipment or property shall be returned to the Employer in the same condition as when made available to the Contractor, subject to normal wear and tear. The Contractor shall be liable to the Employer for the loss of or damage to such equipment or property, except to the extent that the Contractor proves that it took all reasonable measures to avoid the loss or damage.

2. The Contractor shall maintain an up-to-date and complete list of all equipment and property purchased by the Contractor in connection with this Contract.

Article 15 - Confidential Nature of Documents

1. All maps, drawings, photographs, plans, manuscripts, records, reports, recommendations estimates, documents and all other data (referred to hereinafter in this Article as “documents” compiled by or received by the Contractor or its agents, servants, employees, subcontractors or independent contractors in connection with this Contract shall be the property of the Employer shall be treated as confidential and shall be delivered only to duly authorized Employer officials on completion of work or services under this Contract or termination of the Contract, or as may otherwise be required by the Employer.
2. In no event shall the contents of such documents or any information known or made known to the Contractor by reason of its association with the Employer be made known by the Contractor or its agents, servants, employees, subcontractors or independent contractors to any unauthorized person without written approval of the Employer.
3. Subject to the provisions of this Article, the Contractor may retain a copy of documents produced by the Contractor.
4. The Contractor shall take all reasonable measures to ensure that its agents, servants, employees, subcontractors and independent contractors comply with the provisions of this Article.
5. The obligations in this Article do not lapse upon termination of this Contract.

Article 16 - Use of Name, Emblem or Official Seal of the Employer

The Contractor, its agents, servants, employees, subcontractors and independent contractors shall not advertise the fact that it is performing, or has performed, work or services for the Employer or, or use the name, emblem or official seal of the Employer or any abbreviation of the name of the Employer in connection with its business for advertising purposes or for any other purposes. The Contractor shall take all reasonable measures to ensure compliance with this provision by its agents, servants, employees, subcontractors, and independent contractors. This obligation does not lapse upon termination of the Contract.

Article 17 - Copyright, Patents and Other Proprietary Rights

1. All intellectual property and other proprietary rights, including but not limited to patents, copyrights and trademarks, in all countries, with regard to maps, drawings, photographs, plans, manuscripts, records, reports, recommendations, estimates, documents and other materials, (referred to hereinafter in this Article as “materials”) except pre-existing materials, publicly or privately owned, collected or prepared in

consequence of or in the course of the performance of this Contract, shall become the sole property of the Employer, which shall have the sole right to publish the same in whole or in part and to adapt and use them as may seem desirable, and to authorize all translations and extensive quotations there from. If the Contractor incorporates in its materials any previously published or unpublished materials, it shall obtain permission for the publication, use and adaptation in any language free of cost to the Employer from the persons in whom any existing copyrights therein may be vested and produce evidence to the Employer of such permission.

2. The Contractor agrees that it will forthwith disclose and assign to the Employer all discoveries, processes, or inventions, made or conceived in whole or in part by it alone or in conjunction with others relating to or arising out of this Contract, and the said discoveries, processes, or inventions, shall become and remain the property of the Employer, whether or not patent applications are filed thereon
3. Upon request of the Employer and at its expense, the Contractor shall take all necessary steps, execute all necessary documents and generally assist the Employer in securing such proprietary rights and transferring them to the Employer in compliance with the requirements of the applicable law.
4. The obligations in this Article do not lapse upon termination of the Contract.

Article 18 - Amendments

No modification of or change in this Contract, waiver of any of its provisions or additional contractual provisions shall be valid or enforceable unless previously approved in writing by the parties to this Contract or their duly authorized representatives in the form of an amendment to this Contract duly signed by the parties hereto.

Article 19 - Force Majeure

1. “Force majeure” as used herein means acts of God, natural disasters, invasion or war (whether declared or not) and other hostilities, revolution, rebellion, industrial disturbance, except where solely restricted to employees of the Contractor, insurrection or riot, commotion or other disorder, ionising radiation or contamination by regular activity from any nuclear fuel or waste, radio-active toxic explosives or other hazardous properties of any explosives, nuclear assembly or nuclear components thereof, or other act, event or circumstance of a similar nature or force arising from circumstances beyond the control of the parties or which the parties could not reasonably be expected to have taken into account at the time of the conclusion of this Contract and which or the consequences of which the parties could not reasonably be expected to have avoided or overcome.
2. In the event of and as soon as possible after the occurrence of any cause constituting force majeure, which renders the Contractor unable, wholly or in part, to perform his obligations and meet his responsibilities under this Contract, the Contractor shall give notice and full particulars of such force majeure to the Employer. The notice shall include steps proposed by the Contractor to be taken, subject to the written approval of the Employer, including any reasonable alternative means for performance that is not prevented by force majeure. Subject to acceptance by the Employer of the

existence of such force majeure, which acceptance shall not be unreasonably withheld, the following provisions shall apply:

- (a) The obligations and responsibilities of the Contractor under this Contract shall be suspended to the extent of its inability to perform them and, subject to the provisions of Para. (e) hereof, for as long as such inability continues. During such suspension and in respect of work suspended, the Contractor shall be reimbursed by the Employer for the Contractor's substantiated reasonable costs of maintenance of any of the Contractor's equipment and for reasonable per diem for the Contractor's permanent personnel rendered idle by such suspension, subject to Para. (d) hereof;
- (b) The Contractor shall within fifteen (15) days after the notice to the Employer the occurrence of the force majeure submit to the Employer a statement of estimated costs referred to under sub-paragraph (a) above during the period of suspension. Within thirty (30) days after the end of the suspension, the Contractor shall submit to the Employer a complete statement of the Contractor's actual costs;
- (c) The term of this Contract shall be extended for a period equal to the period of suspension taking, however, into account any special condition, which may reasonably justify the period of extension to be different from the period of suspension;
- (d) Where the Contractor's equipment or permanent personnel referred to in sub-paragraph (a) are idle on site as a result of the suspension for a period exceeding thirty (30) days, the Contractor shall confer with the Employer in good faith with a view towards agreeing upon a reasonable reduction of the costs incurred with respect to such equipment and personnel and a reasonable apportionment between the parties of such costs. If the parties fail to agree upon such reduction or apportionment within seven (7) days after the initial thirty (30) days of suspension, the matter will be resolved in accordance with Article 29 hereof;
- (e) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure, to perform its obligations and meet its responsibilities under this Contract, the Employer shall have the right to terminate this Contract on the same terms and conditions as are provided for in Article 22, Termination by the Employer, except that the period of notice shall be seven (7) instead of fourteen (14) days; and
- (f) The Employer may consider the Contractor permanently unable to perform in case of any suspension period of more than ninety (90) days.

Article 20 - Suspension by the Employer

1. The Employer may suspend, for a specified period of time not exceeding thirty (30) days, in whole or in part, payments to the Contractor and/or any of the Contractor's obligations under this Contract, if, in the Employer's sole determination:

- (a) Any condition arises which interferes, or threatens to interfere, with the successful carrying out of the work or services under this Contract, the Employer Project or the accomplishment of the purpose thereof, or with the performance by either party of its obligations under this Contract: or
 - (b) The Contractor shall have failed, in whole or in part, to perform any of its obligations under this Contract.
- 2. Notice of such suspension shall be given by the Employer to the Contractor, specifying the duration of the suspension. The suspension shall take effect seven (7) days after such notice.
- 3. If, by the expiry of the period of suspension, the Employer has not notified the Contractor to resume the performance of a suspended obligation, the Contractor may request permission of the Employer to resume such performance. If the Employer does not within 7 days after its receipt of the request, notify the Contractor to resume the performance, either party may terminate the portions of this Contract relating to the suspended obligation by giving the other party seven (7) days prior notice of such termination. If it is not possible or reasonably practicable for only those portions of the Contract to be terminated, the entire Contract may be terminated upon seven (7) days prior notice. The provisions of paragraph 2 of Article 22 shall apply in the event of any such termination.
- 4.
 - (a) The Contractor shall be reimbursed by the Employer for the Contractor's substantiated reasonable extra costs, occasioned by the suspension, of necessary measures to maintain any of the Contractor's equipment and personnel assigned to the performance of this Contract, while such equipment and personnel are idle as a result of the suspension. However, such reimbursement shall not be paid if the Contractor could reasonably re-assign such equipment or personnel to other tasks or to other contracts of the Contractor;
 - (b) As a condition for reimbursement under this paragraph 4, the Contractor shall:
 - (i) Within fifteen (15) days after a suspension takes effect, notify the Employer of the Contractor's good faith estimate of the anticipated extra costs; and
 - (ii) Within thirty (30) days after the end of the suspension, notify the Employer of the Contractor's actual extra costs.
 - (c) The Contractor shall not be entitled to the reimbursement provided for in this paragraph 4 where the Employer has suspended an obligation of the Contractor for reasons attributable to the fault or neglect of the Contractor, its agents, servants, employees, subcontractors or independent contractors, or to a failure by the Contractor to perform an obligation under this contract

Article 21 - Additional Rules relating to Suspension

- 1. Except as otherwise provided in this Contract, the rules set forth in this Article apply in the event of any suspension under Article 19 or Article 20.
- 2. During the period of suspension, the Contractor shall provide such information as may reasonably be requested by the Employer concerning the preservation and protection of the work and services performed by the Contractor and the results thereof, and of all property of the Employer, and shall take all reasonable measures to provide for such preservation and protection. Except as provided in paragraph 4 of

this Article, the Contractor shall be reimbursed by the Employer for substantiated reasonable costs incurred by the Contractor in providing such information and taking such measures, provided that an estimate of such costs shall have previously been notified to and approved by the Employer.

3. The Contractor shall produce such reports as may reasonably be requested by the Employer covering the work executed or services performed up to the time of suspension. The reports shall conform to any reasonable requirements by the Employer as to nature, structure and content. Except as provided in paragraph 4 of this Article, the Contractor shall be reimbursed for its reasonable and substantiated costs in preparing the reports, provided that an estimate of such costs shall have been previously notified to and approved by the Employer.
4. The Contractor shall not be entitled to the reimbursement provided for in paragraphs 2 and 3 of this Article where the Employer has suspended an obligation of the Contractor pursuant to Article 20 for reasons attributable to the fault or neglect of the Contractor, its agents, servants, employees, subcontractors or independent contractors, or to a failure by the Contractor to perform an obligation under this Contract.

Article 22 - Termination by the Employer

1. Notwithstanding the provisions of Articles 19 and 20, the Employer may terminate this Contract for any reason upon not less than fourteen (14) days (in the case of Contracts initially for a period of sixty (60) days or more) or seven (7) days (in the case of Contracts initially for a period of less than sixty (60) days) notice to the Contractor.
2. Upon termination of this Contract:
 - (a) The Contractor shall take immediate steps to terminate the work and services in a prompt and orderly manner and, to that end, shall provide such information as may reasonably be requested by the Employer concerning the preservation and protection of the work or services performed by the Contractor and the results thereof and all property of the Employer, and to minimize losses and further expenditures; the Contractor shall also take all reasonable measures to provide for such prevention and protection and for minimization of losses and expenditures;
 - (b) The Contractor shall be entitled, against appropriate vouchers, to be compensated in accordance with this Contract for work or services performed satisfactorily and in accordance with this Contract prior to its receipt of the notice of termination;
 - (c) Unless the termination has been occasioned by any fault or neglect on the part of the Contractor, its agents, servants, employees, subcontractors or independent contractors, or by any failure of the Contractor to perform an obligation under this Contract, the Contractor shall also be entitled, against appropriate vouchers, to be reimbursed for such reasonable costs and expenses as shall have been duly and properly incurred in accordance with this Contract prior to the date of such notice of termination, including such forward commitments as could not with diligent effort be cancelled or reduced, and for reasonable costs incident to the orderly termination of the services, the return travel of Contractor's personnel and the return shipment of their personal effects and of the equipment of the Contractor, to

the extent that the same are not otherwise covered by any fees, reimbursements or other compensation paid or payable to the Contractor;

(d) The Contractor shall produce such reports as may reasonably be requested by the Employer covering the work and services performed up to the time of termination. The reports shall conform to any reasonable requirements by the Employer as to nature, structure and contents. The Contractor shall be reimbursed for its reasonable and substantiated costs in preparing the reports, provided that an estimate of such costs shall have previously been notified to and approved by the Employer; and

(e) The Contractor shall not be entitled to receive any payments other than those provided for in this paragraph 2.

Article 23 - Termination by the Contractor

The Contractor may terminate this Contract in accordance with Articles 19.2(e) and 20.3 above.

Article 24 - Other Rights and Remedies of the Employer

1. Nothing in or relating to this Contract shall be deemed to prejudice or constitute other rights or remedies of the Employer.
2. The Employer shall not be liable for any consequence of, or claim based upon, any act or omission the part of the Employer.

Article 25 - Bankruptcy

Should the Contractor be adjudged bankrupt, or become insolvent or should control of the Contractor change by virtue of insolvency, the Employer may, without prejudice to any other right or remedy, terminate this Contract immediately by giving the Contractor notice of such termination.

Article 26 - Facilities, Exemptions, Privileges and Immunities of Contractor and Contractor's Personnel

1. The compensation, reimbursement, remuneration and payment provided for in this Contract do not include any taxes, duties, fees or levies which may be imposed in the recipient country on salaries or wages earned by the Contractor's personnel (except the Employer nationals employed locally) in the performance of the Contract or on any equipment, materials or supplies which the Contractor may bring into that country in connection with the contract or which after having been brought into that country may be subsequently withdrawn there from. If any authority of the Employer refuses to recognize exemption from or reimbursement for such taxes duties, fees or levies, the Employer shall in no event be liable beyond the amount of said taxes, duties, fees and levies or for any failure or delay in obtaining such exemption or reimbursement.
2. The Employer will use its best efforts to obtain for the Contractor and its personnel (except the Employer nationals employed locally) such additional facilities, exemptions, privileges and immunities as the Employer has generally agreed to grant to the Contractors performing services for the Employer within the country and to their personnel. An information copy of the provisions relating to such facilities, exemptions, privileges and immunities that are contained in the Operational

Agreement, may be obtained from the Employer. However, the Employer shall in no event be liable for any consequences of, or any claim based upon, any failure on the part of the Employer to carry out such undertakings.

3. Any Provisions whether in an Agreement, Project Document, or any other instrument to which the recipient Employer is a party, by which the recipient Employer confers benefits upon the Contractor and its personnel in the form of facilities, exemptions, privileges and immunities by reason of the performance of services for the Employer on this Project, may be waived by the Employer where, in its opinion, such immunity would impede the course of justice and can be waived without prejudice to the successful completion of the project or to the interests of the Employer.

Article 27 - Indemnification

The Contractor shall indemnify, hold and save harmless and defend at its own expense the Employer and its officials, agents, servants and employees from and against all suits, claims, demands and liability of any nature or kind, including costs and expenses associated therewith, arising out of acts or omissions of the Contractor or its officers, agents, servants, employees subcontractors or independent contractors in the performance of any work or services in connection with this Contract. Without limiting the generality of the foregoing, this Article shall extend to suits, claims, demands and liability in the nature of workmen's compensation, products liability, and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the Contractor, its officers, agents, servants, employees, subcontractors or independent contractors and or others responsible to the Contractor, as well as by the Employer. The obligations in this Article do not lapse upon termination of the Contract.

Article 28 - Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

Article 29 - Arbitration

Any dispute, controversy or claim arising out of or relating to this Contract, or the breach, termination or invalidity thereof, shall, unless it is settled amicably by direct negotiation, be settled by arbitration in Vientiane accordance with the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL) as at present in force. The appointing authority shall be the Chairman or Deputy Chairman of the Singapore International arbitration Centre ("SIAC"). The number of arbitrators shall be one. The language to be used in the arbitral proceedings shall be English. The Parties agree to be bound by the arbitration award rendered in accordance with such arbitration, as the final adjudication of any such disputes controversy or claim.

Article 30 - Privileges and Immunities

Nothing in or relating to this Contract shall be deemed a waiver of any of the privileges and immunities of the Employer.

Article 31 - Tax Exemption

The Operational Agreement provides, inter alia, that the Employer including its subsidiary organs, is exempt from all direct taxes and from customs duties in respect of articles imported or exported for its official use. Accordingly, the Contractor authorizes the Employer to deduct from the Contractor's invoice any amount representing such taxes or duties. Payment of such corrected invoiced amount shall constitute full payment by the Employer. In the event any taxing authority refuses to recognize the Employer exemption from such taxes, the Contractor shall immediately consult with the Employer to determine a mutually acceptable procedure.

Article 32 - Form of Notice, Request, Statement or Approval

Any notice request, statement or approval provided for in these General Conditions shall be effective if it is given in writing either by letter, facsimile or email.

Article 33 - OBSERVANCE OF THE LAW

The Consultant shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of this Contract. The Governing Law of this contract is the law of Lao PDR.

ANNEX II

TERMS OF REFERENCE (TOR)

[Insert TOR texts]

ANNEX [*INSERT ANNEX NUMBER*]

BREAKDOWN OF COSTS⁹

⁹ A Breakdown of Costs must be inserted only for cost reimbursement contracts.