

Addendum No. 2

to

Memorandum of Understanding

Dated 6th December 2008

Between

The Danish Ministry of Foreign Affairs
(Hereinafter referred to as 'DANIDA' and /or the 'Donor')

and

The United Nations Development Programme
(Hereinafter referred to as 'UNDP')

and

General Company for Ports of Iraq
(Hereinafter referred to as "GCPI")

Concerning the rehabilitation of a

Sustainable System of NAVIGATIONAL AIDS
for the approach channel to Umm Qasr and Az-Zubayr ports - Iraq

Whereas the General Company for Ports of Iraq (GCPI), the United Nations of Development Programme (UNDP) and the Danish Ministry of Foreign Affairs (DANIDA) on 6th December 2008 concluded a Memorandum of Understanding (MoU) for implementation of the project

Sustainable System of Navigational Aids

for the Approach Channels to Umm Qasr and Az-Zubayr ports – Iraq.

Whereas the General Company for Ports of Iraq (GCPI), the United Nations of Development Programme (UNDP) and the Danish Ministry of Foreign Affairs (DANIDA) on 26th November 2009 concluded an Addendum No.1 to Memorandum of Understanding (MoU) for addition of sub-component of the project

Technical Advices and Assistance for Development of AIS and VTS in Iraq

WHEREAS GCPI wishes to strengthen the scope of this project for introducing AIS (Automatic Identification System) and VTS (Vessel Traffic Services) as a means to improve safety of navigation in Iraqi waters

WHEREAS DANIDA hereby agrees to financially contribute to this strengthening by providing funds to Government of Iraq (GoI) through United Nations Development Programme (UNDP) for its support to the General Company for Ports in Iraq (GCPI),

NOW THEREFORE, GCPI, DANIDA and UNDP hereby agree as follows:

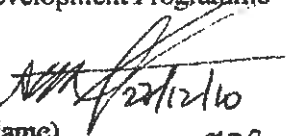
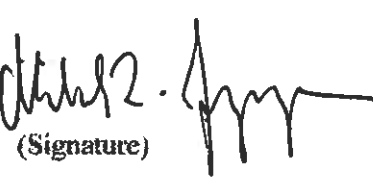
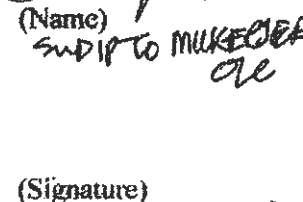

1. The Donor shall contribute to UNDP the amount of DKK2.4 million. Subject to prior agreement between the parties, the Donor shall at any time be at liberty to make additional contributions. The contributions shall be deposited in the UNDP Contributions Account within thirty days of signature of the agreement by the parties.

Bank name:	JP Morgan Chase Manhattan Bank 1166 Avenue of the Americas New York, NY 10036 – 2708
SWIFT address:	CHASUS33XXX
Routing/ABA number:	021000021
Account number:	015002284
Account title:	UNDP CONTRIBUTIONS ACCOUNT

2. This Addendum No.2 shall enter into force on the date of the last signature by the representatives of the Parties and shall remain in force by December 31, 2013 unless otherwise terminated in accordance with the Article VIII of the Memorandum of Understanding for the Sustainable System of Navigational Aids Project, signed by the Parties on 6th December 2008.
3. The Donor and GCPI acknowledge that the scope of the project as well as the additional resources are subject to further discussion among the parties concerned and be open for modification. The amendment is made in accordance with the Article IX of the Memorandum of Understanding for the Sustainable System of Navigational Aids Project, signed by the Parties on 6th December 2008.

This Addendum No.2 shall in all respects be governed by the provision of the Memorandum of Understanding for the Sustainable System of Navigational Aids Project, signed by the Parties on 6th December 2008, and be executed accordingly.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto, have signed the present Agreement in the English language in three copies, each of which shall be deemed an original as of the last date signed by the Partners.

For the Government of Denmark	For the United Nations Development Programme	For the Ministry of Transport (and/or GCPI)
MICHAEL LUND JEPPESEN		
(Name)	(Name)	(Name)
	SANDIP TO MUKERJEE	or AZIZ Mashim Shaniwer
		
(Signature)	(Signature)	(Signature)
(Title)	(Title)	(Title)
HEAD OF DEPARTMENT		Deputy of D.G
(Date)	(Date)	(Date)
28.12.2010		23 - 12 - 2010

ANNEX 1

Project Description

Technical Assistance for Strengthening of Automatic Identification System (AIS) and Vessel Traffic System (VTS) in Iraq

Context & Background

In October 2009, a high level delegation from the General Company for Ports of Iraq (GCPI), headed by the Director General, visited Denmark to seek guidance and advice from the Danish Maritime Safety Administration (DAMSA) for the development of a strategy for introduction of AIS and VTS in Iraq. The study visit was financed by DANIDA through a budget, channeled through UNDP Iraq, which also allows GCPI to seek additional ad-hoc technical assistance from DAMSA for implementation of the strategy.

Subsequently, it has been agreed among GCP, DANIDA and UNDP in December 2009 for the additional funding for the technical assistance of AIS/VTS.

By 2010, the general atmosphere that surrounds situation of ports has been progressed as follows:

1. The number of ships calling Iraqi ports had increased from approximately 500 in 2005 to more than 8000 ships expected in 2010;
2. GoI has decided to construct a major new port, the Faw Port, on the banks of the Al Faw peninsula; a development with high impact on the future traffic density and thus safety of navigation in the area;
3. Two new oil loading pipelines are under construction;
4. Three new SBM (Single Buoy Mooring) for loading of tankers will be established near the Al Basra Oil Terminal; and
5. Draft legislation for the establishment of a Maritime Authority in Iraq has been approved by the Prime Minister and will be presented to the Parliament, once functional. It is proposed that the head of the MA will have rank of Deputy Minister.

Under such circumstances, the GCPI delegation met with DAMSA again in October 2010. The main purpose was to seek technical advice on implementation of the strategy paper approved by the Ministry of Transport and to develop a plan for a phased implementation of the AIS/VTS project within the limits of the approved budget. Major activities for AIS/VTS over the last 12 months as well as the plan for next year were highlighted as follows:

1. The strategy paper on AIS/VTS, prepared jointly by DAMSA and the GCPI delegation, was approved in October 2010 by the Ministry of Transport (MOT). The draft strategy incorporates a detailed action plan for phased implementation of AIS and VTS in Iraq, as and when demand justifies cost.
2. On the strength of the MOT's approval, GCPI has been granted a GoI funded budget of USD 8 million over three years (USD 2.4 million in 2011) for implementation of a VTS system in Iraq. Hence, the main purpose of the meeting in October 2010: To develop a plan for a phased implementation of the AIS/VTS project within the limits of the approved budget.

3. **AIS Network:** Based on a GoI allocation of USD 280,000, GCPI floated a tender earlier in 2010 for procurement of two AIS transceivers and an AIS base station with associated software, computers and licenses. GCPI now request DAMSA support for tender evaluation, choice of a suitable electronic chart system and advice and support regarding required training in association with the supplier. In preparation for the latter, GCPI has appointed the required AIS staff, which is now undergoing courses in English and computer technology. The two AIS transceivers will be positioned on the Al Basra Oil Terminal and in Umm Qasr Port. The two receivers received from DAMSA as a donation in 2009 will provide back-up. In addition, GCPI has intentions to establish a land based reference station for DGPS coverage of Iraqi waters. As a temporary measure, GCPI has with internal funding constructed a new building, 6 x 10 m, in Umm Qasr Port to house the AIS base station. The intended permanent solution is an airport style port control tower to be constructed in Umm Qasr South Port to accommodate the AIS/VTS central control centre, a coastal radio station and a SARCC (Search and Rescue Coordination Centre). GCPI's technical department is presently working on design and specifications for the tower. It is anticipated that the first draft of the design will be presented to DAMSA for review and comments during the second half of November 2010.
4. **Microwave Links:** Earlier in 2010, GCPI launched a tender locally in Iraq for a project which will inter-connect the GCPI Head Office in Basrah by high performance microwave links with the ports in Abu Floos, Faw, Khor al Zubair, Umm Qasr and with the Al Basra Oil Terminal. The system will provide capacities for 1,000 lines at the GCPI H.O. and 250 lines at each of the ports with full back-up systems. Estimated cost: The equivalent of approximately USD 1.2 Million. Tender evaluation is now on-going. Implementation time is estimated at 6 months from effectiveness of contract.
5. **Search and Rescue Coordination Centre:** To fulfill one of Iraq's coastal state obligations, as defined by the IMO, GCPI further launched a tender for radio equipment aimed at establishing a coastal radio station, which will in due course include the establishment of a Land Earth Station (LES) for communication with ships via the Inmarsat satellite communication system. The three bids received for this project, which has a budget of approximately USD 300,000, are now under evaluation in GCPI.

To respond to the needs of proper implementation of long term strategy, GCPI requested DANIDA the additional funding and Dania agreed to contribute in strengthening preparation of AIS/VTS system.

Project Approach

The lack of effective traffic monitoring in the fairways and more than 80 km if navigable channel leading to the offshore oil terminals and to the main ports of Umm Qasr and Az Zubayr presents potential threats to the safety navigation in Iraqi waters.

This was the overall conclusion expressed by four experienced sea pilots from GCPI, who attended a VTS Course in Denmark in 2008. In the process, they were introduced to the vast potential embedded in AIS for traffic monitoring as a means to improve safety of navigation. Upon their return to Basrah, the Director General of GCPI established a working group tasked with preparing a proposal for introduction to AIS, and perhaps ultimately VTS, in Iraq.

GCPI acknowledges that the Danish Maritime Safety Administration (DAMSA) is at an international forefront concerning operation and management of AIS and VTS systems. As DAMSA has a declared policy of international knowledge sharing aimed at improving safety

of navigation globally, Danish knowledge is readily available to any coastal state in need of assistance or technical advice on navigational safety issues.

Key Objectives

The principal objective of the Iraq government is to fulfil its international obligations regarding safety of navigation and protection of the marine environment and being a proactive member of the international maritime community. The main objective of this additional funding is to assist GCPI in their efforts to implement the agreed AIS/VTS strategy for ensuring that the government of Iraq complies with its Coastal State Obligations as defined by the International Maritime Organisation (IMO).

Key Outputs

In order to ensure full compliance with international rules and regulations, GCPI wish to establish a long-term relationship with DAMSA for technical advice and guidance until the VTS is fully operational, and until GCPI is fully conversant with all aspects of operation and maintenance of the VTS. GCPI will be responsible for implementation of the agreed project activities and will sign the required agreement(s) with DAMSA, reflecting the mutually agreed scope and extent of the technical advice and guidance to be provided. UNDP will provide assistance and guidance, as required, and monitor progress on delivery of output.

1. Guidance and advice for selection and commissioning of AIS equipment for which GCPI is presently undertaking bid evaluation (**Key Output 4-1**)
2. A 3-year program to assist with implementation of the agreed AIS/VTS strategy for which GCPI has been granted a GoI budget of approx USD 8 Million over three years for procurement of the relevant hardware and systems; approx USD 2.5 Million will be available for 2011. Tentative program (to be finalized during Feb 2011 meeting in Copenhagen): (**Key Output 4-2**)

2011:

- (1) Assistance to the newly appointed GCPI Project Manager (PM) with preparation of draft technical specifications and draft bidding documents for phased implementation of the complete VTS system, which will integrate the AIS equipment. (PM to visit DAMSA early January 2011)
- (2) Workshop in Copenhagen in February 2011 for GCPI AIS/VTS Committee to agree on tech specs, bidding docs and phases of implementation (Anticipated that VTS base station in the Umm Qasr Port and one radar can be procured with year 1 budget)
- (3) Assistance to PM with bid evaluation and contract negotiations with successful supplier
- (4) Planning of training programs for VTS operators and technicians for system maintenance
- (5) Advice and guidance concerning lay-out of new Umm Qasr Port port control tower, which will house the VTS base station and operational control function
- (6) Assistance with planning and execution of a navigational aids compliance survey for Iraq conducted by IALA
- (7) Assistance with inspection and commissioning of VTS equipment, including integration of AIS

2012-2013:

- (8) Assistance to PM for expansion of VTS coverage with establishment and integration of up to 6 additional radar sites
- (9) Follow-up on training, operating procedures etc.
- (10) Ad-hoc TA, as required/requested by GCPI

3. **Develop institutional and management capacity (Key Output 3)**

The sub-components included under this heading include, but will not necessarily be limited to:

- (1) Enrollment of GCPI students for M.Sc. courses at the WMU, initially focusing on:
 - Port Management (2011)
 - Maritime Law and Policy (2012)
 - Maritime Safety and Environmental Administration (2013)
- (2) Training of 5 Hydrographic Surveyors

The mentioned sub-components may at any time be amended, deleted, replaced or supplemented by additional components by mutual consent between GCPI and DANIDA.

4. **IALA Navigational Aids Compliance Survey for Iraq (Optional)**

GCPI's Visit to DAMSA

Although the key activities are specified above, the detailed implementation needs further discussion between GCPI and DAMSA. Therefore, GCPI's AIS/VTS delegation, headed by the Director General, will visit DAMSA in Copenhagen in February 2011. The main objectives are as follows:

1. Make final decision on the contents of the VTS bidding documents (The tentative target for launching of GCPI's VTS tender: March 2011);
2. Make final decision on scope, venue and duration of training activities for operators and technicians;
3. Make final decision on the scope and duration of further technical assistance from DAMSA and the Process Consultant until completion of the AIS/VTS project (Danida to be consulted regarding financial support to ensure the required technical assistance).
4. Meet with DANIDA for presentation of GCPI's plans and the desired co-operation with DAMSA, including the financing of DAMSA's support;
5. Consult with the World Maritime University (WMU) regarding further port related M.Sc. studies for GCPI staff;
6. Visit to the firm of Thrane & Thrane for presentation of LES-equipment for maritime communication via Inmarsat satellites;
7. Visit to Sound VTS and/or Great Belt VTS for presentation of equipment, operations, procedures and operator training; and
8. Visit to the Admiral of the Danish Fleet for study of the Danish SARCC (Search and Rescue Coordination Centre).

In addition to the GCPI's visit to DAMSA in February 2011, in order to accelerate the above project implementation, the following initiatives will be taken by Director General of GCPI as immediate action:

1. The Director General will appoint a GCPI Project Manager to work full time on the AIS/VTS Project. The nominated Project Manager will visit DAMSA in Copenhagen during the first week of January 2011 jointly with the Process Consultant:
 - (1) To review and finally select AIS equipment for GCPI;
 - (2) To discuss and prepare draft technical specifications and bidding documents for the VTS; and
 - (3) To discuss and plan training activities for AIS/VTS operators and technicians.
2. Design and technical specifications for the intended Port Control Tower in Umm Qasr Port will be finalized in draft format and submitted to DAMSA for review and comments. The contents of technical part will be discussed between DAMSA and GCPI during PM's visit to DAMSA in January 2011 and the PM will present findings and draft documents to GCPI's AIS/VTS Committee by the end of January 2011;
3. The Director General will select and appoint 10 potential AIS/VTS operators and enroll them for courses in English and computer skills in preparation for further AIS/VTS operator training;
4. The Director General will select and appoint 5 technicians and enroll them for courses in English and computer skills in preparation for further specialized technical training by the suppliers of AIS and VTS equipment; and
5. The Director General will consult with the Iraqi Navy/Coast Guard for expression of interest in joint use of output from radars.

Budget

The direct cost of the interventions will be dictated by a number of issued such as the detailed scope and duration of each activity and not least an assessment of the number of GCPI staff that needs to be trained/coached in each discipline. These details, and the associated planning, would have to be worked out in a closed dialogue between GCPI, DAMSA and other institutions involved, if any.

It should be noted that while DAMSA is fully prepared to render all required technical advice to GCPI, the organization does not for the moment have the capacity to assist GCPI with secretariat assistance for drafting of technical specification, bidding documents, contract format etc. It is assumed in the following that GCPI provides the necessary personnel resources for drafting of documentation in the Arabic as well as in the English language; either through use of in-house personnel or through the hiring of consulting support for any or all of these tasks.

Based on past experience with the DANIDA sponsored course activity, and assuming GCPI with appoint Dania Fellowship Centre to assist with the logistics concerning visa, travel, accommodation etc., it may be realistic to assume the following (very tentative) all-in budget figures including translation, lecturing material etc.:

Contingency can be utilized upon the agreement among Parties hereto.

Main Budget Line	DKK	USD equivalent (Approx. Value)
1. Additional NavAids TA	1,487,700.00	261,000.00
2. Fellowship - WMU	1,999,476.44	350,785.00
3. Training, 5 Hydrographic Surveyors	313,500.00	55,000.00
Sub-Total (1. to 3.)	3,800,676.44	666,785.00

4.UNDP Project Management	585,242.83	102,674.00
(1) Personnel	205,200.00	36,000.00
(2) Travel	17,100.00	3,000.00
(3) Audit (2%)	76,013.53	13,336.00
(4) Agencies support cost (7%)	286,929.30	50,338.00
Sub-Total (4)	585,242.83	102,674.00
5. Contingency	162,450.00	28,500.00
Total (1. to 5.)	4,385,919.27	797,960.00
Remaining Amount of MOU (Addendum No. 1)	2,166,000.00	380,000.00
Contribution from DANIDA (Addendum No.2)	2,400,000.00	421,053.00
Total available budget	4,566,000.00	801,053.00