

**16th CHRIS MEETING
28-31 May 2004, Ottawa, Canada**

STATUS REPORT ON VIRTUAL RENC DEVELOPMENT IN THE MBSHC AREA

<i>Submitted by:</i>	Lt. Cdr. Massimiliano NANNINI, Italy
<i>Executive summary:</i>	Report on the work undertaken and progress made on virtual RENC development in the Mediterranean and Black Seas area, since CHRIS/15, and future plans.
<i>Actions to be taken:</i>	CHRIS to note the report and future plans.
<i>Related documents:</i>	CHRIS letter No. 2/2004 (call for reports)
<i>Related Projects:</i>	Not applicable

Background

- In 1999 (XI MBSHC), Italy proposed the establishment of a Virtual RENC for the MBS region.
- The XI MBSHC Conference decided to consider the suggestion and adopted the Recommendation 2 that tasked Italy to prepare a detailed technical proposal for the establishment of a Mediterranean Virtual RENC as an operational alternative solution to the NE-RENC.
- An MBS VRENC ad hoc meeting was arranged (Trieste, 9/11/00) with the participation of 18 Nations. It was agreed a list of actions.
- One action was to set up a North Adriatic VRENC Pilot Project between Croatia, Italy and Slovenia. Two meetings has been arranged (Trieste, 23-24/04/01 and 2-3/07/01).
- July 2001, Italy redrafted the proposal and prepared a Memorandum of Understanding to be considered by MS wishing to participate on the establishment of the MBS VRENC.
- The XII MBSHC Conference decided (Decision n° 5) to ask Member States and Associate Members for comments on the proposed VRENC MoU and to ask Members interested to join Italy and Greece in the drafting Working Group. MBSHC CL 03/2001 addressed this task and as a result only a new comment was received by the United Kingdom HO in addition to the previous already received from Greece, Croatia and Slovenia. As anticipated on the above mentioned MBSHC CL 03/2001, provision for a meeting of the MoU drafting Working Group has been made and a Notice of this meeting is therefore given as follows:

“Notice is given of a MBS VRENC MoU Drafting Working Group meeting for MBSHC Member States and Associate members who wish to consider the comments received on the VRENC MoU and to produce the final draft. The Meeting will be held at the Italian HO, in Genoa at 09:00, on 22 January 02.”

MBSHC XII - DECISION 5

Italy will send a letter to all Member States and Associate Members asking for comments on the proposed VRENC MoU by 15th December 2001. Italy, Greece and any other Country willing to participate, taking into consideration the comments received, must provide Member States of MBSHC a final draft of the VRENC MoU by the end of February 2002, and distribute

it to Member States and Associate Members for consideration. Acceptance of the text is expected at the next IHO Conference (April 2002).

Therefore an extraordinary meeting of the Commission should be convened during the IHO Conference in Monaco (April, 2002). IHB will organise the meeting.

- With MBSHC 06/2002, March 12 2002, we sent the “Final draft” of MBS VRENC MoU, prepared during the meeting held in Genoa, on 22 January 2002, by the MBS VRENC MoU Working Group.
- During the MBSHC meeting held in Monaco, 19th April 2002 it was agreed to circulate the final draft version (dated 19 April 2002) of the MBS VRENC MoU. This MoU version includes some minor changes received in the last two months, after the 22nd January 2002 release sent with MBSHC CL 6/2002. At the end of the meeting Italy asked the Participant if they were ready for the acceptance of the MBS VRENC MoU, the reply was positive with the exception of France. All interested participants were required to submit comments to this final draft version by the 31st of May 2002.
- At the beginning of June Italy received a letter from Spanish HO regarding his temporary exclusion to MBS VRENC for internal problems.
- During the kick off meeting of MEDCHARTNET Project, held in Trieste (IMA), on June 11-12 2002 we asked the participant if they were ready for the signature of the MBS VRENC MoU, the reply was positive for most of the Participant.
- With MBSHC CL 11/2002 June 20 2002, we sent the MBS VRENC MoU for the signature.
- April 9 2003, kick off meeting of the MBS VRENC, held in Trieste, Italy, at IMO-IMA premises with the attendance of : Italy, Greece, Croatia, Slovenia, Republic of Serbia and Montenegro, Malta and Ukraine who already signed the MBS VRENC MoU; Algeria, Turkey, Tunisia, Morocco that are ready to sign in a short time.
- With MBSHC CL 01/2003 April 28, we sent the minute of the first MBS VRENC Meeting and a voting paper for the election of the MBS VRENC Directing Board President.
- Formal election of the President has been done in Brest during the XIII MBSHC Conference , June 2003.
- A draft of technical and administrative policies is going to be distributed to the MBS-VRENC Participants

SUMMARY OF THE PROPOSAL

Presupposes

The VRENC proposal is in line with the WEND Committee evaluation of the problems and its recommendations and resolutions.

Problem related to the establishment of the WEND System

ENC production situation is unsatisfactory. Additional efforts are necessary to cover congested areas/harbour approaches in various parts of the world. This problem can only be solved if additional capacity for the ENC production is accomplished.

WEND Committee solutions and recommendations

- encourage Member States to give higher priority to the production of ENC data, and the provision of adequate ENC services.
- request that RHCs report annually to the WEND Committee about the progress made on the establishment of the WEND system.

- request that RHCs should address the needs for and promotion of ENC production in their regions.
- Promotion of ENC production
 - a. regional IHO bodies should intensify their efforts to promote the production of ENCs in their region. This should not be left to individual Member States to do.
 - b. a better overview about the needs and priorities of ENC production is necessary to identify the existing gaps and discuss possibilities how to fill them.
 - c. The Regional Hydrographic Commissions, where they exist, should form RENC Committees to promote ENC production and the formation of a RENC.

The Virtual RENC proposal for the Mediterranean area

The main aim of the VRENC project is to produce a prototype delivery service which is capable of being expanded into a full commercial network supporting the three actors involved in the overall process:

- Producers (HOs),
- Distributors (private manufacturers, HOs, etc),
- Users (Mariners, land based VTS, etc).

Approach

To provide a firm basis for real future operations the planned development is based on commonly available transmission media, and international standards wherever they exist. Details of how this can be done will be defined by the relevant VRENC working groups.

The proposed delivery system is in harmony with IHO/WEND principles, in which HOs provide ENC data and updates to the regional database, in this case virtual because established through a digital network link of HO's single databases, which can then serve as the basis for distributors to provide data to ships. In this regional instance it shall be defined and developed under the aegis of the MBSHC, taking advantage of the established cohesion and synchrony derived from successful regional hydrographic programs.

VIRTUAL to emphasize that it's aim IS NOT the creation of independent physical infrastructures, but rather to extend and strengthen cooperation within the regional hydrographic community, dedicated to coordinating and assisting participating HOs in the field of ENC related activities.

VRENC North Adriatic Pilot project

The pilot project began with:

- The definition of the prioritised ENC portfolio for the area.

List of the paper nautical charts that will constitute the first source lot for the Electronic Nautical Chart (ENC) coverage.

Country	Number	Scale
Croatia	5	1:100000
	2	1:50000
	1	1:10000
Italy	1	1:250000
	3	1:100000
	1	1:50000

	2	1:25000
	3	1:7500
Slovenia	1	1:12000

- Identification and set up of the requirements for ENC and update coverage (sources material digitisation, hardware/software tools, training and technical support).

Time schedule

End July 2001	Software delivery for ENC/S57 production and quality control.
End 2001	S57 data digitalisation
August/September 2001	ENC Production Course at IMA (1 month) (one Student fm Croatia and one fm Slovenia)
November 2001	Croatian and Slovenian Personnel Training on the job (Harmonisation, quality control and validation on the first priority chart of the Project) at the Italian Hydrographic Office (two weeks course)
Spring 2004	Software delivery for ENC update and archive/distribution
Summer 2004	Implementation of the ENC's distribution network

MEDCHARTNET Project

MEDCHARTNET Project can be considered as preliminary component of MBS VRENC and one of the main instruments of funding (as reported on article VI of the MBS VRENC MoU).

MEDCHARTNET has the objective to provide a Regional (Mediterranean) Network and policy infrastructure, interconnecting Mediterranean Hydrographic Offices and Distribution Outlets, for the exchange and facilitated dissemination of hydrographic information. This initiative will pave the way for the long term production, updating and commercial distribution to users of Electronic Navigational Charts (ENCs) of the Mediterranean Area.

Tasks:

- Enhancement of each HO's internal data management infrastructure.
- Establishment of a regional network (VPN) between HOs for exchange of data.
- Supply of Official navigation products to distributors.

Project State of Advance:

HW & SW Technical Specification for international tender	DONE
Digitalisation Technical Specification tender	DONE
Draft of ENCs Portfolio	DONE