

**The World Association for Waterborne Transport Infrastructure
Maritime Navigation Commission - MarCom**

**Association Mondiale pour des Infrastructures de Transport Maritimes et Fluviales
Commission de la Navigation Maritime - MarCom**

MarCom / WG 161

Interaction between offshore wind farms and maritime navigation

Interactions entre les parcs éoliens en mer et la navigation maritime

Subject: 1st report of WG 161 to MarCom

Date: 18

MONA LISA 0.2 is an e-navigation project and should include the planning passage close to Wind Farms. ACCSEAS² is another e-navigation project in the North Sea that includes the study of radio navigation signal and the planning of ship routeing in conjunction with the development of wind farms in the North Sea.

Chairman will contact him and ask if there is no alternative way Sweden to continue participation to the WG. If nobody is available in the Swedish Administration, Chairman will suggest Sweden to sponsor Mr John Ohlson from Kalmar Maritime Academy (Linnaeus University -Sweden) to participate in the Working Group.

Matthieu Zekar, Ph.D. student in France, is actually under a contract with the Merchant Marine Academy in Le Havre for 2 years. He has been assigned a task to identify emergency procedures in wind farms. Matthieu Zekar has already performed some study on the maritime traffic in the Channel on the base of coastal VTS data. Chairman is considering also his participation to the WG.

2) Works development

The purpose of the kick-off meeting was first to make a presentation of each members' experience, organisation and view on the subject. The second purpose was, on the base of the terms of references (TOR), to draft a first general table of content of the final output of the WG 161.

TOR has been deeply examined in order to have a common overview on the subject. It rised up that the TOR could be seen in a very narrow way and limited to MSP for the purpose of wind farms (paragraph 1 of TOR) and the evaluation of sufficient manoeuvring space and distance from wind farms for merchant ships (paragraph 2 of TOR). But the final product of the WG should be recommendations appropriate for the maritime spatial planning in countries in transition (paragraph 7 of TOR).

Hence other OREI³s should be considered, as well as all activities that can be expected within or surrounding wind farms. There was an idea that the recommendations should be open to future systems no yet under test bed but that can generate the same kind of interaction with the maritime navigation. But the core of the WG report should concentrate on wind farms, evaluation of sufficient manoeuvring space and distance from wind farms for merchant ships and then recommendation for Maritime Spatial Planning (MSP).

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Chairman liaised with IALA, in particular during the IALA workshop on Marine Spatial Planning (MSP), from 21st to 24th May 2013, where he met Phil Day, chairman of IALA Aid to Navigation Requirement & Management Committee (AMR) who was also in charge to chair the workshop. The report of the IALA workshop is an input document as well as the working documents on MSP. These documents are internal IALA documentation, but agreement with Chairman of IALA ANM Committee affords WG 161 members to use them for their work. IALA is also looking for MSP guidelines, then exchange of info between sisters association are welcome. Chairman joined WG1 during the workshop. WG 1 was Planning process/legislation (step by step process) of MSP, and opportunity was given to explain to IALA members the work carry out by WG161. WG2 was dedicated to The use of GIS with regard to Marine Spatial Planning from a Safety of Navigation perspective, and WG3 on Risk assessment, risk control etc. The draft

² ACCSEAS: accessibility for shipping, efficiency advantages and sustainability

³ OREI : Offshore Renewal Energy Instalation

reports of these WGs of IALA workshop on MSP are posted on the ftp server as well.

Chairman met Paul Townsend, in charge of MCA⁴ Safety of Navigation division. Paul Townsend agrees on the use of MCA documentation.

There is no indication of SAR operation in wind farms in the IAMSAR manual. Chairman met David Edwards, USCG and chairman of ICAO/IMO JWG who is interested to have any input on SAR in wind farms.

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A draft of the table of contents of the final report is provided enclosed as an indication of the situation of the WG 161 works in spring 2014. The draft table of contents general arrangement is for the main chapters as follows:

Chapter 1 – General aspects: has been created in line with other PIANC reports.

Chapter 2 – Identification of interactions & difficulties.

Chapter 3 – Legal background: main material has been brought by Wim Hoebee.

Chapter 4 – Navigation constraints, collision & marine navigational marking: Raul ATIENZA and Gonzalo MONTERO presented their research and analyses; i.e. navigation constraints, collision avoidance & marine navigational marking.

Chapter 5 – Electromagnetic radiations (EMR) interferences: Jean-Charles Cornillou presented a first draft of chapter 5 of the WG final report, i.e. interaction with communication (VHF), radar, AIS, D/F... and navigation systems. The different radar operators are identified: civil aviation, national defense, weather office and VTS.

Chapter 6 – Emergency procedures: will be prepared by Matthieu Zekar in liaison with Chairman.

Chapter 7 – Marine Spatial Planning (MSP): will cover Marine Spatial Planning (MSP). WG considered too ambitious to provide recommendations for Marine Spatial Planning (MSP) which is already a task that will be carried out by IALA in Aids to Navigation Requirements and Management (ARM) committee. Nevertheless, an explanation on MSP is important to cover our subject. WG 161 should anyway explain which part of MSP is covered in their report. For this reason chairman will continue to keep in touch with Phil Day, chairman of ARM Committee at IALA.

Chapter 8 – Guidelines & recommendations to assess the required safety distances in vicinity of offshore wind farms: will be the recollection of previous chapter to elaborate guidelines and recommendations to assess the required safety distance in vicinity of offshore wind farms.

⁴ MCA : United Kingdom Maritime Coast Guard Agency

Annex 1
List of WG161 actions to be taken

Action ref	What?	Who?	When?
A1	To detail chapters 1 & 2 <i>and start a first draft</i>	Geert MERTENS Willem HOEBEE Mike PINKNEY Björn ANDREASSON	Discontinue because of a new structure of the report
A2	To draft the table of content for chapter 4	Gonzalo MONTERO Ràul ATIENZA	April 2014
A3	To draft chapter 5	Jean-Charles CORNILLOU	1 st draft open to review by e-mail correspondence to all WG members
A4	To detail table of content chapter 6	Jean-Charles CORNILLOU	April 2014
A5	To detail table of content chapter 8 (to liaise with other action to be taken)	WG161	April 2014
A6	To prepare a draft of a detailed table of content of the final report of the WG161	WG161	April 2014
A7	To draft a head-on paragraph in chapter 1 (now chapter 3) with general consideration on the legal aspect of activities at sea including legal (international) references	Willem HOEBEE	OK
A8	To request IALA the possibility to include IALA recommendation O-139 on the marking of man made offshore structure	Jean-Charles CORNILLOU	OK
A9	To request MCA the possibility to use the MGN 371 as reference document and structure and any other relevant document on the subject.	Jean-Charles CORNILLOU	OK
A10	To check with IMO if SAR operation in wind farms are included in the International Aeronautical & Maritime SAR manual (IAMSAR manual) or if there is any work carried on that subject.	Jean-Charles CORNILLOU	OK
A11	To collect any relevant document for the WG, in particular on the state of the art, and to send it to the WG secretary	All WG161 members	Any time
A12	To liaise with PIANC WG 49	Ràul ATIENZA	OK + the new relevant WG is now WG 121
A13	Draft chapter 4	Gonzalo MONTERO Ràul ATIENZA	Next meeting
A14	Review chapter 5	Jean-Charles CORNILLOU	Next meeting
A15	Draft chapter 6	Jean-Charles CORNILLOU	Next meeting
A16	Draft chapter 3	Willem HOEBEE	Next meeting
A17	Draft chapter 2	Mike PINKNEY	Next meeting
A18	To detail table of content chapter 7	WG161	April 2014

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