

**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**

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**MarCom / WG 161**

**Interaction between offshore wind farms and maritime navigation**

**Interactions entre les parcs éoliens en mer et la navigation maritime**

**Subject:** 1<sup>st</sup> 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. ACCSEAS<sup>2</sup> 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 OREI<sup>3</sup>s 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 21<sup>st</sup> to 24<sup>th</sup> 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

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<sup>2</sup> ACCSEAS: accessibility for shipping, efficiency advantages and sustainability

<sup>3</sup> 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 MCA<sup>4</sup> 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.

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<sup>4</sup> 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<br>Willem HOEBEE<br>Mike PINKNEY<br>Björn ANDREASSON | Discontinue because of a new structure of the report                            |
| A2         | To <i>draft the table of content</i> for chapter 4   | Gonzalo MONTERO<br>Ràul ATIENZA                                    | April 2014  |
| A3         | To <i>draft</i> chapter 5  | Jean-Charles CORNILLOU   | 1 <sup>st</sup> 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<br>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  |

## ANNEX 2 Member List

### Chairman:

Jean Charles Cornillou  
CETMEF  
Technopôle Brest-Iroise  
BP 5 – 155, rue Pierre Bouguer  
29280 Plouzane  
Email: [jean-charles.cornillou@developpement-durable.gouv.fr](mailto:jean-charles.cornillou@developpement-durable.gouv.fr)  
Phone: +33 2 98 05 67 41

### France

### Member :

Mr. W. Hoebee  
Senior consultant  
Postbus 6622  
3002 AP Rotterdam  
Port of Rotterdam  
Phone : 0031 10 2521698  
Email: [w.hoebee@portofrotterdam.com](mailto:w.hoebee@portofrotterdam.com)

### The Netherlands

### Member :

Mr. Dipl.-Ing. Hans-Heinrich Callsen-Bracker  
Bundesministerium für Verkehr, Bau und Stadtentwicklung  
Referat WS 23  
Robert-Schuman-Platz 1  
D-53175 Bonn  
Phone: +49 228 300 4636  
Fax: +49 228 300 807 4636  
Email: [hans.callsen@bmvs.bund.de](mailto:hans.callsen@bmvs.bund.de)  
Web: <http://www.bmvbs.de/EN/>

### Germany

### Member:

Geert Mertens  
NV Baggerwerken Decloedt en Zoon  
Baggerwerken & Waterbouw  
Slijkensesteenweg 2  
B-8400 Oostende  
Phone: +32 (0)59.24.21.40  
Fax: +32 (0)59.24.21.80  
e-mail: [Mertens.Geert@poweratsea.com](mailto:Mertens.Geert@poweratsea.com)  
Web : [www.decloedt.be](http://www.decloedt.be)

### Belgium

### Member :

Mr. George Detweiler  
Marine Transportation Specialist  
Navigation Standards Division (CG-5533)  
Office of Navigation Systems  
US Coast Guard  
2100 2nd ST SW STOP 7580  
Washington, DC 20593-7580  
Phone : 202-372-1566  
Fax : 202-372-1991  
Email : [George.H.Detweiler@uscg.mil](mailto:George.H.Detweiler@uscg.mil)

### USA

### Member :

Mike Pinkney  
Associate Director  
Ove Arup and Partners  
13 Fitzroy Street  
London W1T 4BQ  
Email: [mike.pinkney@arup.com](mailto:mike.pinkney@arup.com)  
Tel : 020 7755 3294

### United Kingdom

### Member:

Jarkko Hirvelä  
Finnish Transport Agency  
Fairway Unit Vaasa Office  
PO BOX 20  
FI-651101 VAASA FINLAND  
Phone: +358 400 961 338

E-mail: [jarkko.hirvela@fta.fi](mailto:jarkko.hirvela@fta.fi)

### Finland

### Alternate Member :

Mr. Ron Heffron  
Vice President  
Moffatt & Nichol  
3780 Kilroy Airport Way  
Suite 600  
Long Beach CA 90806  
Phone : 562 590 6500  
Email : [rheffron@moffattnichol.com](mailto:rheffron@moffattnichol.com)

### USA

### Member: ?

### Sweden

**Secretary :**

Mr. Montero Gonzalo  
ICA – Ingeniería Civil y Ambiental  
Hidráulica, SL  
C/ Arrastaría, 21 Módulo A 2ª planta  
Madrid-28022  
Phone: 34-91 660 18 67  
Email: [gmonteror@incosa.es](mailto:gmonteror@incosa.es)

**Spain****Alternate Member & deputy  
secretary :**

[Mr. Raul Atienza](#)  
SIPORT XXI, S.L  
C/ Chile, 8 Edificio Azasol. Oficina 208  
28290-Las Matas (MADRID)  
Phone: 34-696488741  
Email: [raul.atienza@siport21.com](mailto:raul.atienza@siport21.com)

**Spain****MarCom Mentor :**

Dominique Etienne  
Head of Multimodality Department  
CETMEF (Technical Institute in  
charge of Maritime Ports and  
Waterways)  
Tel: + 33 3 44 92 60 16  
Mob: + 33 6 63 37 46 61  
Email:  
[dominique.etienne@developpement-  
durable.gouv.fr](mailto:dominique.etienne@developpement-durable.gouv.fr)

**France**