|  |  |
| --- | --- |
| From: ENG Committee | ENG5-11.1.17 |
| To: ENAV Committee | 13th October 2016 |

LIAISON NOTE

Application of AIS / VHF in hot and humid climates

# Introduction

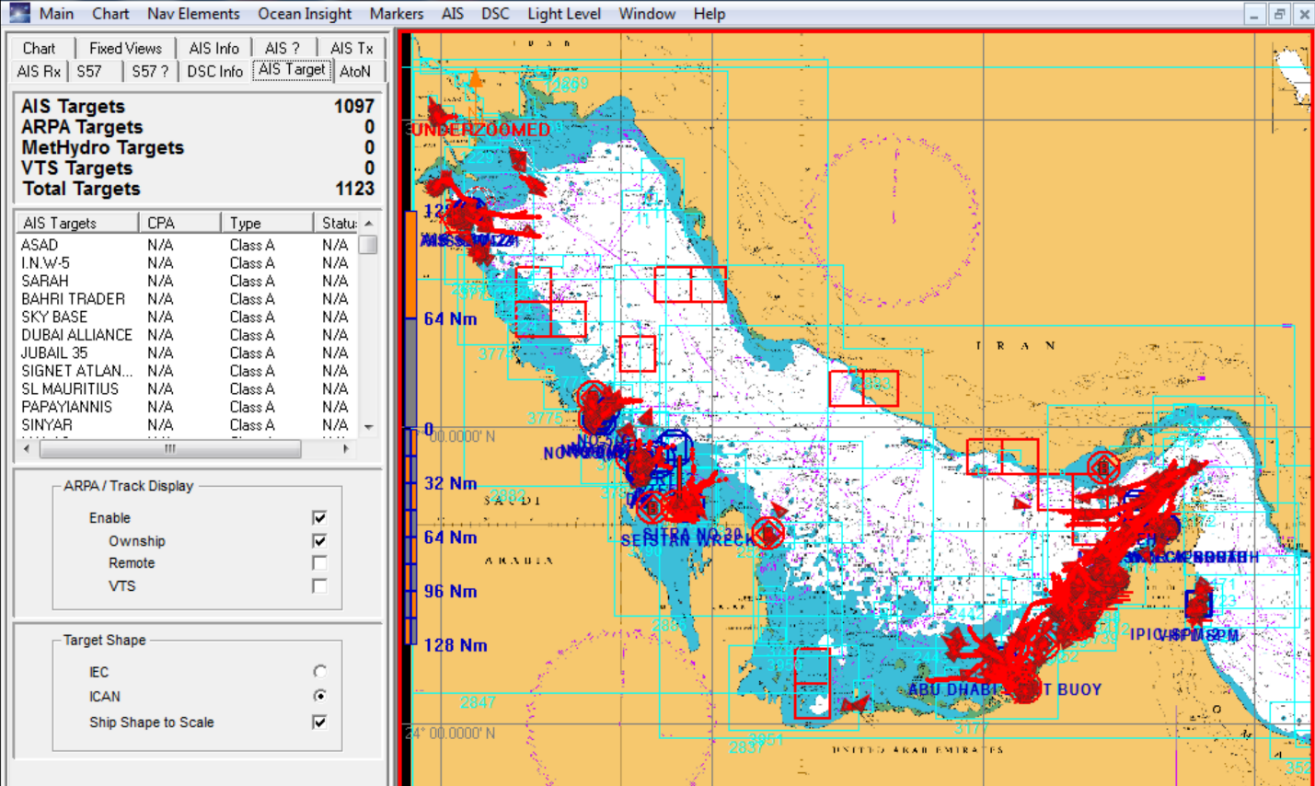
During the IALA workshop on AtoN Services in Extremely Hot Climate held in Doha, Qatar in September 2016, it was identified that further information was needed on AIS/VHF coverage in different climatic conditions. Some work on the item was forwarded to ENG5 for consideration.

# Details

A case study regarding AIS/VHF coverage in Bahrain during winter and summer was provided. Case-1 shows the AIS/VHF range in low humidity whilst Case-2 shows the AIS/VHF range in high humidity. Data was taken from MENAS historic & daily AIS monitoring records. Meteorological information was provided by the Bahrain Civil Aviation, Metrological Directorate - Ministry of Telecommunication & Transportation – MTT.

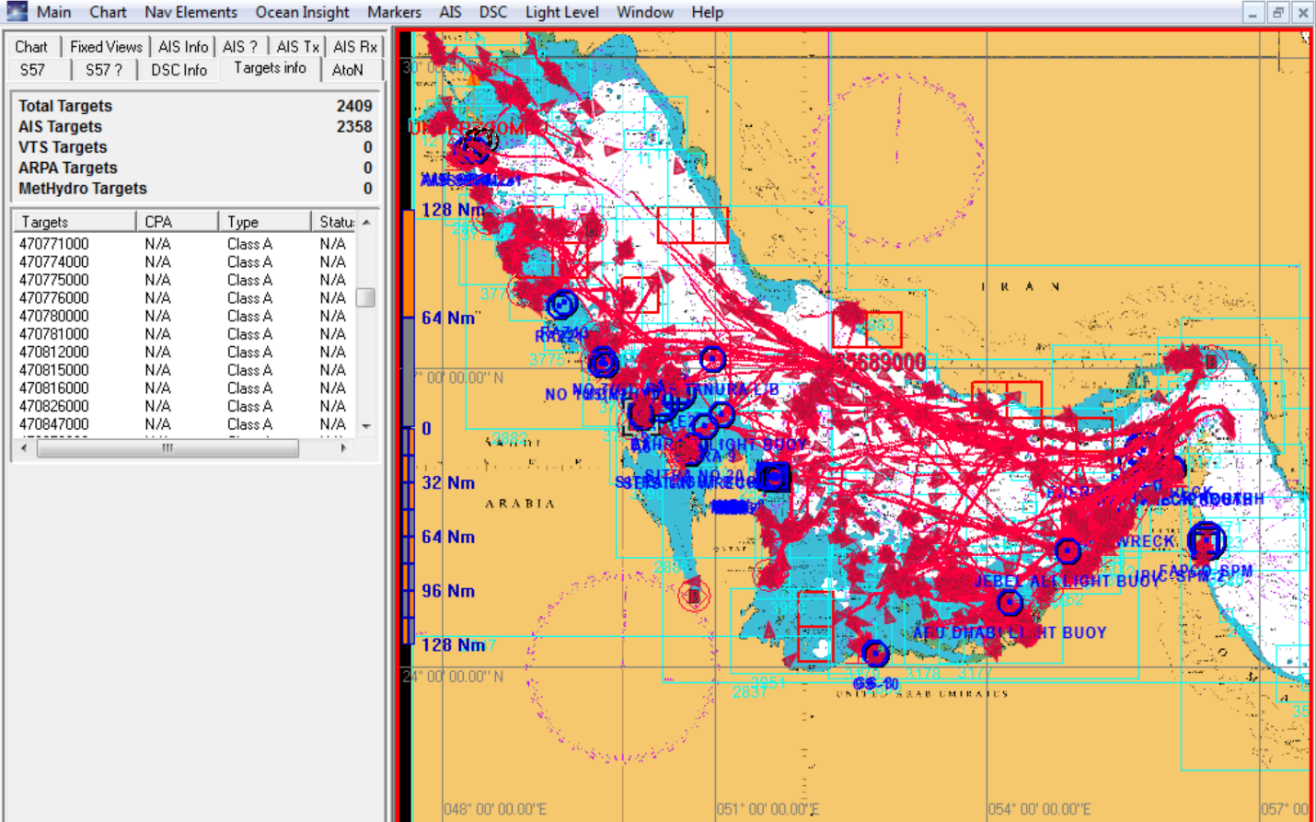
## Effects of climate on AIS/VHF ranges Case-1 poor range:

* **MONTH:** JANUARY
* **AIS TARGETS:** 1097
* **CLIMATE:** WEATHER: PARTLY CLOUDY TO CLOUDY WITH CHANGES OF RAIN SHOWERS AT TIMES. WIND, NW’LY 15 TO 20KT REACHING 20 TO 25KT AT TIMES. HUMIDITY, MAX. 60% MIN. 20%



## Effects of climate on AIS/VHF ranges Case-2 Good Range:

* **MONTH:** SEPTEMBER
* **AIS TARGETS:** 2358
* **CLIMATE:** WEATHER: HUMID AND HAZY WITH SOME CLOUD. MAINLY SE'LY 08 TO 13KT REACHING 15 TO 20KT AT TIMES. HUMIDITY, MAX. 85% MIN. 65%

****

# Action requested

The ENAV Committee is requested to review and comment on the results of the VHF propagation tests carried out in Bahrain and provide any additional information on VHF propagation in different climate conditions, for possible inclusion in the Draft Guideline on Providing Aton Services in Extremely Hot and Humid Climates.