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## 4 RADAR AND WEATHER MASTS

### 4.1 DESCRIPTION

Masts have been installed throughout the Belgian part of the North Sea. Only one of them is used as radar satellite. Two are situated on the dams of the harbour of Zeebrugge and are therefore not accounted for in this report (since they do not make part of the Belgian part of the North Sea). The other masts are used for weather monitoring and forecast.

### 4.2 SUBUSES AND DESCRIPTION

This user function can be divided in the actual installation of the masts on the one hand and the presence and maintenance of them on the other hand.

### 4.3 LEGISLATIVE FRAMEWORK

#### Competent authority

The competent authority for the installation and maintenance of masts at sea is the Waterways and Maritime Affairs Administration (AWZ) within the Department of the Environment and Infrastructure (LIN) of the Flemish Ministry.

#### Legislation

(Cliquet et al. 2004 ; Maes and Cliquet 2005)

#### **National legislation:**

There is no specific national legislation concerning the setting up of these constructions (Gert Dewilde, AWZ, *pers.comm.*). As is the case with all their construction projects, AWZ communicates its intentions with MUMM (the Management Unit of the North Sea Mathematical Models within the Royal Belgian Institute of Natural Sciences). The construction is subject to article 25 of the Law on the Protection of the Marine Environment in the Marine Areas under Belgian Jurisdiction of 20 January 1999. This means that article 28 of this Law demanding a permit and environmental impact assessment does not count for these constructions.

#### **International legislation and Belgian implementation:**

- United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982.
  - Implementation in Belgium:
    - Law of 18 June 1998 on the approval of the Convention on the Law of the Sea of 10 December 1982 and the Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 of 28 July 1994, *BS* 16 September 1999.

## **4.4 EXISTING SITUATION**

### **4.4.1 Spatial delimitation**

Exact coordinates of masts in the BPNS are indicated in "Overview of positions (WGS84) weather masts and radar mast Oost Dyck on nautical maps" (Table I.2.4a) (7 masts indicated) (AWZ). In Map II.2.4a, both buoys and masts are indicated. Buoys are either linked with shipping routes or with survey and monitoring but are not dealt with in this report. The map indicates 7 instead of 6 weather masts but MOW5 has been dismantled in 2004 (Maps I.2.4a-b).

#### **Source**

- Ir. Guido Dumon, head Hydrography and Hydrometeo, AWZ.

### **4.4.2 Type and intensity**

The masts consist of one radar mast on the Oost Dyck sand flat and six weather masts used for a monthly overview of weather (MOW). These all have a specific name and lable as indicated in the matrix (Table I.2.4a) (Maps I.2.4b-c).

#### **Source**

- Ir. Guido Dumon, head Hydrography and Hydrometeo, AWZ.

**Table I.2.4a: Overview of positions (WGS84) weather masts and radar mast Oost Dyck on nautical maps" (AWZ)**

Naam	Positie WGS84 (° ' ")	Positie WGS84 (° ' )
MOW 0 (Wandelaar)	51°23'40",21 N 03°02'44",97 E	51°23',67 N 03°02',75 E
MOW 1 (A2)	51°21'37",80 N 03°07'05",33 E	51°21',63 N 03°07',09 E
MOW 2 (Appelzak)	51°21'46",21 N 03°17'23",98 E	51°21',77 N 03°17',40 E
MOW 3 (Bol van Heist)	51°23'22",81 N 03°11'55",18 E	51°23',38 N 03°11',92 E
MOW 4 (Bol van Knokke)	51°25'06",01 N 03°17'54",57 E	51°25',10 N 03°17',91 E
MOW 7 (Westhinder)	51°23'18",57 N 02°26'16",13 E	51°23',31 N 02°26',27 E
Radartoren Oost Dyck	51°16'29",61 N 02°26'50",77 E	51°16',49 N 02°26',85 E

## 4.5 INTERACTIONS

### 4.5.1 Suitability for user

Details – if applicable – can be found in the chapter that is specifically dedicated to "Suitability".

### 4.5.2 Impact on other users

Details – if applicable – can be found in the chapter that is specifically dedicated to "Interaction among users".

### 4.5.3 Impact on environment

Details – if applicable – can be found in the chapter that is specifically dedicated to "Interaction between users and the environment".

#### **Biological**

There is no biological impact.

### **Geological/Physical**

The geological/physical impact is minimal within the entire BPNS scale and can therefore be neglected.

### **Hydrological**

The hydrological impact is minimal within the entire BPNS scale and can therefore be neglected.

## **4.5.4 Impact on socio-economy**

### **Economic**

The economic impact of the presence of masts is negligible.

### **Social**

The social impact of the presence of masts is negligible.

## **4.6 REFERENCES**

AWZ, personal communication Ir. Guido Dumon, head Hydrography and Hydrometeo (22 March 2005).

Cliquet, A., Lambrecht, J., and Maes, F., 2004. Juridische inventarisatie van de kustzone in België, 2<sup>e</sup> update, Studie in opdracht van de Administratie Waterwegen en Zeewezen, Afdeling Waterwegen Kust, (Departement Leefmilieu en Infrastructuur, Ministerie van de Vlaamse Gemeenschap), Gent, Maritiem Instituut/Vakgroep Internationaal Publiekrecht, 88 p.

Maes, F. and Cliquet, A., 2005. Codex wetgeving kustzone, Brugge, Vanden Broele, vol. 2.