

# A Port Authority and Environmental NGO collaborate to conserve Nature during port expansion in a Natura 2000 area – BE

## 1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space

## 2. Key Approaches

- Participation
- Socio-economic
- Technical

## 3. Experiences that can be exchanged

A formal relationship between public and private enterprises, who are not natural allies of each other, to realise habitat creation or restoration to fulfil the demands the Habitats and Birds Directives.

## 4. Overview of the case

The Port of Antwerp agreed, through a formal arrangement with Belgium's biggest NGO, to realise several habitat creation schemes as compensation for the expansion of the port.

## 5. Context and Objectives

### a) Context

Antwerp is a thriving container port, one of the main ports of Europe. To cope with its exponential growth, a new tidal container dock, the Deurganck dock, has been built on the left bank of the Scheldt. However, the Schelde Estuary is designated as both an Specially Protected Area and Special Area of Conservation. Natura 2000 areas are in coastal and estuarine areas and contain, amongst others, nature reserves, docks, industrial areas and agricultural areas.

The decision to build the Deurganck dock was taken by the Flemish government in 1998. The initial planning permission was, however, suspended in 2000 by the Council of State following objections from i.a. the European Commission. In 2001, the Council of State further suspended the construction permit for the new dock as it considered that a new public enquiry was necessary. It found that the Environmental Impact Assessment (EIA) was not detailed enough, and that there were not enough nature compensation areas to comply with the EU Birds and Habitats Directives. Work on the dock had to stop, and the project was postponed. A new EIA was produced which examined the usefulness of the project and the need for such a dock, the impact on people and the environment, the most environment-friendly alternative and possible mitigating measures. Eventually, in 2002, the Council of State suspended the revised version of the regional plan.

### b) Objectives

The undertaking aimed at creating a network of ecological infrastructure in and around the Port of Antwerp in order to preserve the long term integrity of the SPA overlapping with the port area.

## 6. Implementation of the ICZM Approach (i.e. management, tools, resources)

### a) Management

Since 1997, the Antwerp Port Authority is an autonomous municipal authority although there remains a political control, through the board, by the city of Antwerp. The Authority owns the docks and the sites used by port operators and industries on the right and left bank areas and also some of the port's equipment. Moreover, it is responsible for the management of the port on both banks thus ensuring the application of uniform policies on both sides of the river. The responsible authority for the designation of SPAs and SACs is the Flemish region.

### b) ICZM tools

In 2001, an agreement was reached between the Antwerp Port Authority and Natuurpunt - the largest Nature NGO in Flanders. The goal of this agreement was to realise +/- 5% ecological infrastructure in the Antwerp harbour on the left- and right banks of the river Schelde. The two organisations worked under the banner "The Antwerp port More Naturally" (de Antwerpse Haven natuurlijker). The most important role of the network consists of supporting the wider network of large nature areas that surround and will surround the port area in the immediate future including Natura 2000 sites. This goal is directly derived from the Flemish Spatial Structure Plan. This states that 5% of seaport areas have to be kept free of economic activity for ecological infrastructure.

Natuurpunt defined the areas and prepared an inventory of all the as yet economically not used surfaces looking at actual and potential nature values. Special attention was given to birds that had colonised the port area, and the replacement of their original habitats that disappeared. Extensive discussions with stakeholders were held at the end of 2004-2005 leading to a preferred mapped solution. In 2006 a joint agreement was signed with the University of Antwerp to develop quantitative conservation objectives for the network of ecological infrastructure, taking into account the legal obligations and the potential for nature conservation and development in the port area. These objectives had to reflect the sustainable contribution that the port area can make to conservation of those species that use the port area as habitat.

The projects implemented were:

- An 8 ha. gull breeding site on the left bank of the Scheldt: It was especially valuable for the rare Mediterranean Gull (*Larus melanocephalus*). It involved removal and disposal of ligneous vegetation to create a more open grassland and digging a canal around the area. The material excavated from the site was used to create a dyke surrounding the area.
- A second gull breeding site, transformed from agricultural land, within the loop of the highway intersection A12/R2.
- A mud flat/salt marsh at Paardenschor close to the Belgian-Dutch border: From the 1900s through to 2003 the Paardenschor was a meadow created as a polder. It was also used for the deposit of dredged sediments resulting in its elevation by some 5 to 6 meters. The Paardenschor is now a newly created mudflat of approximately 15 ha. It is predicted that through natural succession and natural processes like sedimentation, the mudflat will evolve to become a salt marsh. It involved building a new dyke landwards of the old one which was removed and dredging the sediments between the new and the old dykes. The land was expropriated from the nuclear power plant located nearby.
- A fish spawning area for common bream (*Abramis brama*), roach (*Rutilus rutilus*), redfin perch (*Perca fluviatilis*) and eventually rudd (*Rutilus rutilus*) or ide (*Leuciscus idus*) was created on the right bank of the Scheldt. It functioned as a buffer area between different (petro)chemical factories and road infrastructure. The pond has a variable depth (better for spawning habitat) with a maximum of 1.5 m. It is linked to the canal dock through 4 pipes, each of 60 cm diameter and 25 m long. The Provincial Fishery Commission of the Antwerp Province, provided the practical knowledge
- The plain of Zwijndrecht, bordered by an industrial (chemical) complex, is now a breeding habitat for the sand martin (*Riparia riparia*). The implementation of the habitat restoration scheme improved the quality of the site by removing ligneous vegetation and creating more relief and a more 'open' landscape. The project was initiated and carried out by the Flemish Government and the Antwerp Port Authority.

Monitoring of all the sites is performed via an agreement with the Flemish Institute for Nature Conservation.

## 7. Cost and resources

The two gull breeding sites cost approximately € 94,000 and were financed by the Port of Antwerp and European co-funding. Paardenschor cost approximately €6.5 million and was carried out by the Flemish Government and the Antwerp Port Authority (which paid the cost). The estimated cost of the spawning grounds was €200.000, financed by the Antwerp Port Authority with EU co-funding. The cost of the Zwijndrecht restoration was approximately € 15.000, financed by the Antwerp Port Authority.

## 8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

Construction work on the Deurganck dock was held up for more than a year because of an EIA which did not satisfy the needs of habitat compensation. The direct losses have been estimated at €40m to which the commercial losses caused by commitments not being met must be added. The various habitats created have shown substantial increases in the number of target species: the gull breeding scheme was implemented in spring 2004 with 37 pairs of breeding Mediterranean Gull present in the first season; in Zwijndrecht, in 2000 (reference date) there were 2 Avocet (*Recurvirostra avosetta*) and 1 Bluethroat (*Luscinia svecica*) as Annex I species and ca. 30 other waterfowl bred. However, in 2003 there were 43 Avocet, 12 Bluethroat and 1 Common tern (*Sterna hirundo*) as Annex I species breeding and 85 other waterfowl breeding.

## 9. Success and Fail factors

Stakeholder communication and acceptance were crucial elements in the planning process and in the demonstration project that was more time consuming than initially assumed. There was also political willingness to proceed with both the project and a mutually accepted compensation package. Creation or restoration of the natural areas was realised from the outset in 2001, parallel to the whole process because it was felt necessary to show that nature could indeed co-exist with port activity. The pilot projects in the field thus provided valuable learning opportunities for the rest of the programme.

Many of the habitats were easy to create because they were pioneer habitats. They were low cost and highly effective. The long term success of Paardenschor is more difficult to guarantee and it is predicted that natural accumulation of sediment will transform the newly created mudflat into a salt marsh. In this case, the scheme was not very cost efficient but its realisation was important from a strategic point of view.

There was tension with the farmers (with support from the local community): taking their land to create Nature is more difficult than taking the same land and building a port. They felt that first their land was taken to create the new port and that when part of the port area had then to be used to create Nature, those natural areas were established again on agricultural land.

## 10. Unforeseen outcomes

None to date.

## 11. Prepared by

A. H. Pickaver, Coastal & Marine Union (EUCC), The Netherlands

## 12. Verified by


It has not been possible to verify this case.

## 13. Sources

- Creation and restoration of coastal and estuarine habitats A review of practical examples and a description of sequential guidelines for habitat creation and restoration in port areas (2007) S. Bracke, T. Bucx, N. Frost, H. Jaspers, J. de Groot, G. Quemeneur, F. Sahin, P. Slim, H. Slootweg, H. Smit, E. de Swart, T. Tessier, L. Vermeersch, T. Vanoutrive. New Delta
- <http://www.antwerpennoord.be/overons/projecten/havennatuurlijker.html>

- <http://www.havenvanantwerpen.be>
- <http://www.natuurpunt.be>
- <http://www.portofantwerp.com>



Creation\_and\_restoration\_of\_coastal\_and\_estuarine\_habitats (7.89 MB) 

a\_Managed\_Realignment\_in\_the\_Humber\_Estuary (705.08 KB) 