

Belgium – Wallonia

Liege Airport: the wings of success

1. INTRODUCTION

Liege-Bierset Airport was built in the thirties with the aim of installing the main Belgian Air Force Base.

In 1976, the civil air terminal of Liege-Bierset is inaugurated at the same time as the opening of the Liege-Gosselies-London route.

As a result of the third state reform (1988), Flanders and Wallonia obtained the management of the airports located with their territories (Brussels Airport remains a federal airport).

The Walloon Government seized the opportunity and places the two airports at the heart of its economic conversion policy (the region was hit by the decline of its industries).

At that time the following question arises: “how to develop the two main Walloon airports (Liege and Charleroi) without putting them in competition?”

In 1990, Wallonia decides to develop each airport in a different way: Liege is dedicated to freight and Charleroi to passenger transportation.

In 1996, Cargo Airlines (CAL), an Israeli company, becomes the first major full cargo operator to locate in Liege. The same year, the contract with the integrator TNT is signed.

Today, thanks to the mobilisation of the Walloon authorities and to the use of the European funds, Charleroi-Gosselies (called “Brussel South Charleroi Airport”) and Liege-Bierset (called “Liege Airport”), developed to become the World third best terminal for low-cost passenger transportation for one, and the seventh cargo airport in Europe for the other.

2. STRATEGIC PLANNING

At the time of the ratification of Liege area plan (regional land use plan with statutory value introduced in 1987), Liege Airport was still used as the Belgian Air Force Base (acknowledged as a NATO base).

According to Liege area plan, the Airport related lands were listed as “public services and community equipment zone”. The lands adjacent to the Airport were mainly listed as “agricultural zone”.

In order to allow a redeployment of the airport as freight airport and make possible the establishment of logistics companies (“first line” and “freight forwarders”), a **modification of the area plan** was mandatory.

In 2003 and 2012, changes were made in order to pursue three goals:

- the extension of the public services and community equipment zone with the aim of expanding the airport (extensions of the runways, various technical infrastructures and buildings, etc.);
- the creation of economic activity zones around the airport to facilitate the establishment of logistics companies in connection with the airport;
- the management the residential zones close to the airport where the noise pollution are or will be significant.

Following the creation of the new economic activity zones, the SOWAER, the Walloon public company in charge of the management of the airport infrastructures, commissioned international spatial planners to elaborate a masterplan designed to plan the short, mid and long term development of these economic zones.

This **masterplan for the development of the economic zones surrounding the airport platform** intends to define the types of possible activities and the degree of proximity of each activity in relation with the airport and its economic platform, whether it is in the logistic or passenger field.



Area plan and masterplan

This study allowed the SOWAER to assert a business location policy, to plan the construction of new roads, and to develop a phasing for the implementation of these 466 hectares.

Then, the **studies and procedures requested for the implementation** of each subzones identified by the masterplan have been ordered to various engineering consulting firms.

For the implementation of the economic activity zones located at the North end of the airport (120 ha), the following steps had to be carried out.

The first step was the development of a **technical draft plan** related to the whole 120 ha with the intention of identifying and validating the location and the dimensioning of the infrastructures such as storm water tank, drainage, buffer zone, levelling, etc. This step required, amongst others, visiting other European freight airport facilities and meeting actors related to air cargo operations.

Then, **subsidy applications** for construction works were addressed to the regional authorities on the basis of the draft plan, the purpose being to allow the regional authorities to budget the mid and long term implementation of each subzones and avoid an unexpected shutdown of the project for lack of funds.

At the same time, an **expropriation plan** regarding lands and real-estate properties was established. This plan allows public authorities, on the one hand, to include the costs of acquiring these properties and, on the other hand, to anticipate these acquisitions by starting negotiations with the owners upstream enough before constructions began.

The applications for authorisation were addressed to the competent authorities: **planning permits**, applications for new public roads, etc.

Finally, when the necessary acquisitions were made and the general contractors designated (procurement contract with European advertising), the site servicing works (road links) could start.

The commercialisation can start and the first companies can construct their buildings and settle down and, doing so, create new jobs.



North and south economic activity zones

3. SUSTAINABLE DEVELOPMENT

Sustainable development was integrated by the Walloon Government from the outset of the regional airports development policy and is now included in all phases of the process up to the concrete implementation of development projects.

The Government wished from the start to minimize the impacts of airports on the local residents and the residential zones overflowed during the take-off and landing trajectories.

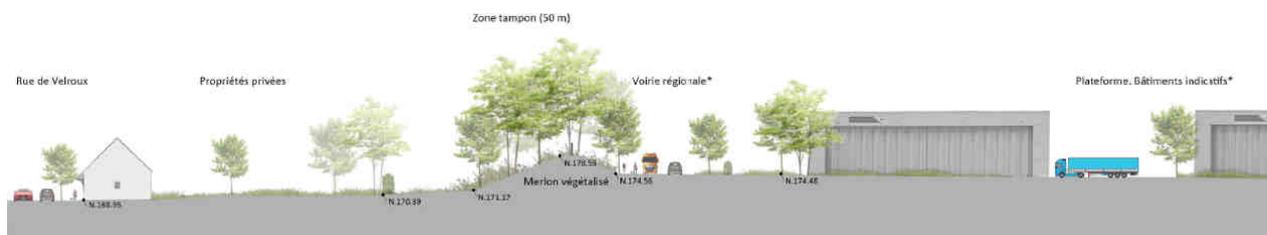
To do so, Wallonia defined a **noise exposure plan** (called PEB) intended to objectify the sound impact of the airport activities for the local residents. This plan identifies 4 distinct areas within which various actions were and are still led today: in zones A' and B', the closest to the airport, several solutions were considered from residential soundproofing solutions to the repurchase of the houses by public authorities; in zones C' and D' residential soundproofing solutions apply. Today, the measures taken regarding this issue concern more than 11.000 buildings around Liege Airport.

In parallel, **fixed and mobile permanent sound level meters** were installed in the closest residential zones to verify that the sound levels correspond to the standard. The collected data are integrated into a management software called "DIAPASON" allowing to improve the aeronautical procedures and to inform the local authorities and the local residents.

To **open up access to information**, information desks regarding all aspects of the compensation program were opened in the airports to answer questions of the local residents and assist them through the various formalities.

Wallonia environmental program is now considered as one of the most complete in Europe and the authorities are regularly consulted by their European counterparts to help them solving similar problems.

In order to guarantee the preservation of green areas and natural zones between the residential zones and the economic activity zones, the area plan requires **50 meters wide buffer zones** planted with trees (at least 5 rows) and flowering meadows, and a 4 meters height protective landscape barriers topped with an 2 meters height noise barrier (the plant pallet consists of native ligneous trees and shrubs, without berry fructification to minimize the attraction of birds and thus bird hazard).



Buffer zones

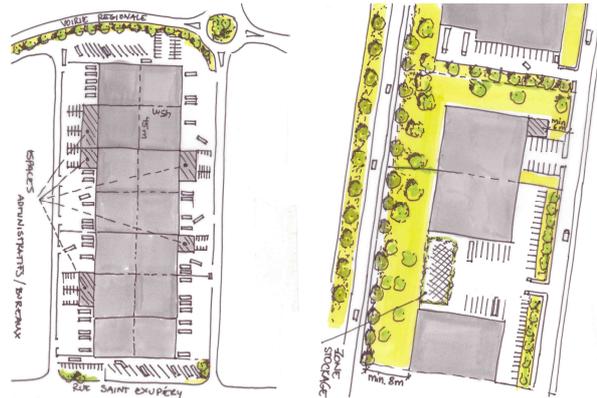
Ecological surveys are also carried out prior to the construction works to verify the impact on **protected species and habitats**. When an infrastructure impacts a species or habitat and cannot be moved, accompanying and compensation measures are implemented in accordance with the Nature Conservation Act. A **Nature development plan** covering all lands around Liege Airport is also envisaged.

Special attention was given to **water management**. The economic activity zones being close to important galleries of underground harnessing of drinking water, arrangements to prevent any infiltration of polluted waters were set up and imposed on companies: no infiltration of runoff water from roads and manoeuvre zones, strict quality control of all the dirt needed for levelling, individual purification systems for industrial and domestic wastewater, storm water tank which can be closed in the event of accidental pollution, etc. To avoid flooding, several storm water tanks are located in the economic zones.

Economic activity zones being partially located on former lands of the Belgian Army Force (building of aircrafts and helicopters maintenance, generator set, oil station, pipeline, etc.), **soil pollution** related investigations were conducted and clean-ups were and will still be led. If necessary, the work to be performed will be phased.

An **urban planning, energy and environmental charter** is submitted to all companies settling down around the airport. Besides the purely architectural and statutory aspects, the charter imposes a certain compactness of the building and a densification of the area, the valorisation of the runoff from

roofs, the treatment of industrial water, etc. It also encourages the installation of renewable energy systems.



Charter: business location policy

Regarding citizen participation, several **public consultations** took place during the various stages of the project (see section 2). In terms of **governance**, an important **dialogue** between the local and regional public authorities was established. This dialogue allows finding innovative and consensual solutions in spite of the divergent interests and objectives (e.g.: bird hazard reduction by the elimination of attractive water bodies for birds versus preservation of protected habitats and species among them water bodies).

Eventually, the implementation of the 466 gross hectares of economic activity zones should allow the creation of **11.000 direct and indirect jobs** supported by the airport activities.

Finally, it is important to note the Government's desire to connect Liege Airport to **the European high-speed rail freight network** (EURO CAREX). In addition to the modal shift from air freight currently transported by trucks on high-speed trains, the project will increase the catchment area of the airport.