



Dourges - Nord Pas de Calais multimodal and logistics hub

Presentation file



## TABLE OF CONTENTS

<b>INTRODUCTION.....</b>	<b>3</b>
<b>1) DELTA 3, CHOOSING THE SITE.....</b>	<b>4</b>
<b>2) DELTA 3, TRI-MODAL HUB.....</b>	<b>5</b>
<b>A - LINK TO THE THREE MODES OF TRANSPORT.....</b>	<b>5</b>
<b>B - COMBINED TRANSPORT TERMINAL.....</b>	<b>5</b>
1 - <i>Container terminal facilities</i> :.....	5
2 - <i>Terminal operator</i> .....	8
3 - <i>Services</i> .....	9
<b>3) LOGISTICS AREAS AND SERVICE CENTER.....</b>	<b>11</b>
<b>A - EAST LOGISTICS AREA :</b> .....	11
<b>B - WEST LOGISTICS AREA :</b> .....	12
<b>C - BUILDING DEVELOPMENT :</b> .....	13
<b>D - THE SERVICE CENTER :</b> .....	13
<b>4) A PROJECT RESPECTFUL OF ITS ENVIRONMENT.....</b>	<b>14</b>
<b>A - HUB LANDSCAPING AND ARCHITECTURAL PLANNING.....</b>	<b>14</b>
1 - <i>Green area planning</i> .....	14
2 - <i>Mound creating</i> .....	14
<b>B – THE WORK SITE.....</b>	<b>15</b>
1 - <i>Cleaning an industrial site</i> .....	16
2 - <i>Material Reutilisation</i> .....	16
3 - <i>Limiting the nuisance to neighbouring populations</i> .....	16
<b>C - SITE HISTORY.....</b>	<b>16</b>
<b>5) AN APPROACH FOR JOB CREATION AND TRAINING.....</b>	<b>17</b>
<b>A- RECOGNIZING THE PROFESSIONAL EXPERIENCE OF THE SITE WORKERS.....</b>	<b>17</b>
<b>B- PREPARING FOR HUB JOBS.....</b>	<b>17</b>
<b>APPENDICES.....</b>	<b>19</b>
<b>THE SYNDICAT MIXTE AND THE DELTA 3 SAEM.....</b>	<b>20</b>
<b>MEMBERS OF THE SYNDICAT MIXTE.....</b>	<b>20</b>
<b>THE DELTA 3 SAEM.....</b>	<b>20</b>
<i>Shareholders</i> .....	20
<i>Board of Directors</i> .....	20
<b>BUILDING SITE FIGURES.....</b>	<b>21</b>



## INTRODUCTION

DELTA 3, the only European scale tri-modal hub, has been operating since 15 December 2003.

The combined transport terminal was inaugurated on 5 December 2003 by Michel DELEBARRE, President of DELTA 3, in the presence of Michel BARNIER, European Regional Policies and Institutional Reforms Commissioner, Jean-Paul DELEVOYE, Fonction Publique, Réforme de l'Etat and l'Aménagement du Territoire Minister, and Dominique BUSSEREAU, Transport and Sea Secretary of State.

The hub was named DELTA 3 thus referring to its tri-modality and its role as a gathering place upstream from the North European seaports.

DELTA 3 was an ambitious challenge which was successfully carried out within the given budget and time limits through cooperation and initiative.

In 2003 DELTA 3 received the logistics innovation award in the "Infrastructure and logistics sites" category. This was awarded by a panel of professionals in recognition of the innovative concept of DELTA 3: combining on a single site a multi-modal transport hub with the very latest in warehousing.

Having been recognized by professionals it also received from Jean-Paul DELEVOYE, Territorial Development Minister, the Territorial and Urban development award set up by Christian PONCELET President of the Senate.

Mr Philippe KEMEL has been Chairman of DELTA 3 since January 2009.

## 1) DELTA 3, CHOOSING THE SITE

The Lille St Sauveur combined transport Terminal, which has been closed since the opening of the Dourges hub, was nestled at the heart of the urban mesh less than 200 metres from the Lille town hall.

In the early nineties the St Sauveur terminal was considered to be saturated. The search for a new site was therefore carried out along 3 criteria :

- Top quality access through rail, road and waterways networks,
- A location at the heart of the traffic flows to and from the Nord Pas de Calais region,
- An area large enough to accommodate a tri-modal terminal as well as logistics areas for European scale distribution centers.

DELTA 3 is therefore more than the transplanting of the combined transport Lille St Sauveur work site, as it went from a rail/road terminal to a tri-modal one (rail/ road/ waterways), together with a 330 000 m<sup>2</sup> logistics area set up on a 300 hectare area.

The site of Dourges was selected for DELTA 3. Located 22 kms from Lille, 97 kms from Dunkirk, 115 kms from the Channel Tunnel, 130 kms from Brussels, 199 kms from Paris, Dourges is at the crossroads of the European corridor from The United Kingdom to Eastern Europe and that from the North Western seaports to Southern Europe.



## 2) DELTA 3, TRI-MODAL HUB

DELTA 3 is unique in its concept and size, as nowhere else can you find the combination of three facilities: a combined rail – road – waterways transport terminal, logistics buildings and a service center.

### A - LINK TO THE THREE MODES OF TRANSPORT

The A1 motorway interchange was designed for the hub. Its size, worked out by the Direction Départementale de l'équipement, will enable it to handle the increase in traffic.

A 250-metre inland water quay on the Haute Deûle Canal and a 250-metre waiting quay. Barges up to 78 TEU capacity can dock in Dourges. DELTA 3 is thus connected to the main North Western container seaports: Dunkirk, Antwerp, Zeebrugge, Rotterdam, Amsterdam.

There is a main railway link is to the Lens-Ostricourt railway track and a secondary one to the Paris-Lille railway track. DELTA 3, in agreement with RFF, carried out the earthwork, the ballast and the laying of the tracks. Rff put up the catenaries and the signals while the SNCF helped them with contracting and project management.

The interface between the computerized signalling system, set up in this case by RFF (PAI), and the systems set up to run the hub and the rail network, ordered by DELTA 3, is controlled by Certifer, the French railway certification center, located in Valenciennes with the help of the Regional Council. This ensures the compatibility of the systems and the coherence of the interfaces between DELTA 3 and RFF installations, token of safety.

### B - COMBINED TRANSPORT TERMINAL

#### *1 - Container terminal facilities :*

The terminal is equipped as follows :

#### **Rail facilities :**

- 7x 750 m-railway tracks

4 railway spreaders span over 5 of these railway tracks making it possible to handle swap bodies and containers without moving trains. The other 2 railway tracks can be reached with mobile cranes.

- 4 railway spreaders

This equipment can handle sea containers and swap bodies. With their maximum load they can lift 30m/mn and move horizontally 120m/mn. They are also fitted with a 180° swap body rotation device. The spreaders can handle 20 loads per hour. They can move over a distance of 750 m.

- The marshalling yard

Property of DELTA 3, it is linked to the Paris-Lille and Lens-Ostricourt tracks of the national network. It includes 12 tracks and has two main functions:

- Receiving arriving trains with a 60km/h access speed (whereas speed is limited in the combined transport terminal).
- A dynamic management of the hub to optimise its use : Electric engine trains come to the yard, they are then pulled by the hub diesel engines to the combined transport terminal; from this terminal, the trains can be electrically pulled to the RFF network.

It includes tracks to put cars in the order they will be unloaded in the logistics area warehouses equipped with private sidings.

- STCS

The STCS (service track computer station) allows one to control the hub switches from a computer station. This tool improves train movement productivity and guarantees optimum safety on the site.

### **Inland waterways facilities**

- 1x250m-inland water quay

2 or 3 container barges can dock there simultaneously.

- 1 tri-modal gantry crane (waterways/ rail/ road)

The waterways gantry crane can move over a distance of 250 m. It can handle about 20 movements per hour. It can also work on trains as it spans 2 rail tracks.





### **Container storage area**

With a capacity of 2,500 TEU, this area is equipped with “reefer” plugs for the storage of goods requiring temperature control. The area is also authorized to store dangerous goods.

### **Extension**

The container terminal has potential for extension

- The capacity of the storage area can be doubled
- Rail tracks and gantry cranes can be added.

### *2 - Terminal operator*

As DELTA 3 does not wish to run the combined transport terminal, it is run by a private company: Lille Dourges Container Terminal (LDCT), open to any operator committed to bringing traffic to the hub.

LDCT shareholders are:

- NAVILAND CARGO (subsidiary of SNCF),
- NOVATRANS (subsidiary of SNCF and FNTR),
- TRANSFESA (Spanish rail operator),
- NCS (GIE of Dunkirk and Lille ports),
- CCES

Other European combined transport operators should soon join them.

Operating the combined transport terminal has been entrusted to LDCT through a long term commercial lease.

LDCT operates the terminal under its own responsibility and runs in particular the reception, the management of the technical equipment, train traffic within the terminal, final handling and storage.

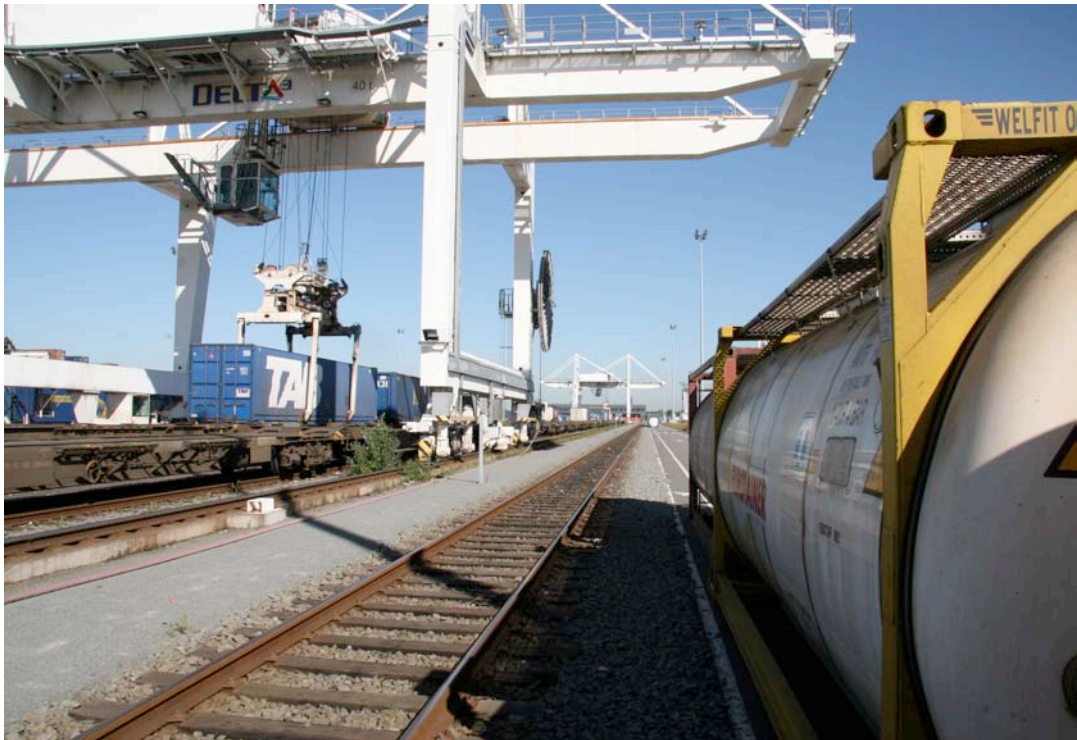
LDCT sets its own pricing policy. LDCT has equipped the terminal with mobile cranes and carries out the rail traction within the hub: Rail traction companies pull trains to the hub marshalling yard (property of DELTA 3). They are then taken over by LDCT which owns diesel engines.

Handling of containers and swap bodies is done by the staff of this company.

### *3 - Services*

#### **Rail services**

From 8 to 10 trains are managed daily in Dourges. Following rail operators have direct trains to/from Dourges: Novatrans, Froidcombi, Naviland Cargo, Raillink, Transfesa, IFB.



DELTA 3 is thus connected on a daily basis to the South of France: Lyon, Marseille, Avignon, Toulouse, Perpignan, Bordeaux, Bayonne.

Two international lines are also run: to Antwerp and to Novare (Torino) in Italy.

Other links should soon widen the range of rail service proposals from Dourges.

#### **Inland waterways services**

Today two inland waterways operators dock in Dourges : CFNR and RSC.

DELTA 3 is thus linked to the main North Western container ports: Rotterdam, Antwerp, Zeebrugge, Dunkirk and Amsterdam.

Inland waterways transport times are about 30 H to Rotterdam, 20 H to Antwerp and Zeebrugge and 15 H to Dunkirk.

Barges from 20 to 78 TEU dock in Dourges.



### **LDCT traffic**

Up to October 2011 there were more than 74,100 transport and handling jobs in the terminal which means that 74,100 trucks were taken off the road.

In the same period, more than 3,440 trains went through DELTA 3.

Dangerous goods traffic has been increasing steadily and reached 12,900 swap bodies up to October 2011.

### 3) LOGISTICS AREAS AND SERVICE CENTER

Three logistics areas provide shippers and logistics service providers with a total 330 000 m<sup>2</sup> of warehouses at DELTA 3.

An adjoining service area brings additional services to hub users.

#### A - East logistics area :

The DELTA 3 Distirail project consists of two 35 000 m<sup>2</sup> buildings with private siding.

Each building can be accessed by road at the front and rail at the back.

These buildings can be rented by companies receiving bulk traffic by rail.

The first 35 000 m<sup>2</sup> building was delivered for KIABI in Mai 2006.

The second 35 000 m<sup>2</sup> is to be built :

- Building can be divided into independant modules of 11,000 sqm, with 600 sqm of living premises and offices, and equipped forklift premises.
- Building licence and authorization to use under 1510, 1530, 2662, 2663, 2910 and 2925 are obtained. Delivery of the building can be done within 9 - 12 months.



## **B - West logistics area :**

Located between the canal and the motorway, there will eventually be 270,000 m<sup>2</sup> of warehouses. Two projects are available:

### **- Delta 3 Distripole project :**

Made up of 4 buildings which will, when completed, cover a total surface area of 135 000 m<sup>2</sup>. These buildings will be rented to shippers and logistics service providers who use the combined transport terminal.

All the buildings have been delivered to the following clients: Gefco (47,000 m<sup>2</sup> building), Oxybul Eveil & Jeux (36,000 m<sup>2</sup> building), Dachser (22,000 m<sup>2</sup> building), Rexel (22,000 m<sup>2</sup>), Oxylane Decathlon (16,000 m<sup>2</sup>), Holder (6,000 m<sup>2</sup>).



### **- LA Nord area :**

This area will welcome shippers and logistics service providers wishing to acquire their warehousing facilities. A total surface area of 130 000 m<sup>2</sup> is available.

Leroy Merlin has acquired a 70 000 m<sup>2</sup> building delivered in the beginning of 2007.

Oxylane Decathlon set up in 2009 its European dispatch center in a 51,000 m<sup>2</sup> building.

### **C - Building development :**

DELTA 3, builder of the public works and shared equipment of the hub, has set up 2 companies *en nom collectif* with private developers, DISTRIPOLE DELTA 3 and DISTRIRAIL DELTA 3 to ensure the sale of the logistics buildings.

### **D - The service center :**

Located at the entrance of the hub the service center includes:

- A TOTAL service station with restaurant,
- 2 office buildings for ancillary services for transport and logistics companies built by the Artois CCI
- A training center for transport and logistics jobs, built also by the Artois CCI, will open on 2012.
- A 90-place lorry parking lot
- Another restaurant will open at the end of 2012.

Delta 3 will extend on 115 hectares which will represent 300,000 m<sup>2</sup> of additional building (for sale or for rent) as from 2013-2014.



## **4) A PROJECT RESPECTFUL OF ITS ENVIRONMENT**

### **A - HUB LANDSCAPING AND ARCHITECTURAL PLANNING**

To integrate the Dourges multi-modal hub in its natural urban surrounding, particular care was given to landscaping the site. Thus architectural and landscaping recommendations were drawn with the buildings and major plantations being set along axes parallel and perpendicular to the canal.

#### **1 - Green area planning**

There will be large planted areas along the motorway. Shrubs and grass will be planted around and between the logistics buildings, leaving an open view of slag heap 116/117, a strong historical landmark.

Some areas have been set up to recover the humid natural environment and help plants from a dry environment cover deposit areas.

#### **2 - Mound creating**

Excess rubbles from the site were used to create landscape mounds, also called « merlons », as soon as work started.

Along road 160, a merlon creates a phonic barrier for the inhabitants of Oignies.

A landscape merlon, on which each species planted was chosen by the local population at a consultation organised by DELTA 3, separates the town of Dourges from the hub. This consultation



was greatly appreciated and each concerned member of the local population was allowed to have his say.

## **B – The work site**

The hub is located on:

- land vacated by the closing down of the Agglonord coal factory
- the east flank of slag heap 116/117
- agricultural land.

Three objectives were set when building the hub:

- Clean polluted land
- Reuse waste material from the mining site and the hub site to limit the nuisance caused to the neighbouring inhabitants.
- Avoid creating new quarries

### 1 - Cleaning an industrial site

In order to avoid any risk for the hub workers and future users' health, and any pollution of underground water, a cleaning method was designed under the supervision of the Pas de Calais Préfet, with the help of an hydrogeologist, the Centre Hospitalier Régional de Lille anti-poison Center manager, the DRIRE and the Nord Pas-de-Calais Etablissement Public Foncier, to enable Charbonnages de France to carry out the required land cleaning.

### 2 - Material Reutilisation

Its strong will to limit the impact of the work on the environment led DELTA 3 to innovate. It was able to use the deads to build platforms after mixing the slate coal with a binder. This new method was developed with the help of the main contractor Scetauroute, the company Razel and the know-how of the Laboratoire Central de Ponts et Chaussées.

The 1 500 000 m<sup>3</sup> of rubbles and excavated earth needed to build the hub came from the flank of slag heap 116/117. The earth excavated when digging the rain water catchment basins was used to build the interchange access roads and the Deûle bridge access ramps.

### 3 - Limiting the nuisance to neighbouring populations

Reusing the deads diminished the nuisance to neighbouring populations as 200 000 truck trips were avoided. Furthermore tracks and cranes were delivered by rail and waterways.

### C - Site history

Archeological digs carried out by the A.F.A.N. (Association pour les Fouilles Archéologiques Nationales), as early as December 1999 revealed that human beings have been present on the site from the Bronze age (800 years BC) onwards. Remains were unearthed, bone harpoons, fragments of cervid antlers assegais, aurochs carcass, carved flints as well as pieces of pottery and coins revealing that goods were being traded at that time.

## 5) An approach for job creation and training

This approach consists of 2 parts:

- recognizing the professional experience of the site workers
- Preparing for hub jobs

### A- Recognizing the professional experience of the site workers

A procedure to recognize the professional experience of the site workers was set up experimentally for the duration of the work by the DDTEFP (Direction Départementale du Travail, de l'Emploi et de la Formation Professionnelle) before the law was passed. The objective was to give employees a professional diploma that proved the skills acquired through their work over a period of 5 years. This diploma was obtained through the successive validation of Certificats de Compétences Professionnels (CCP).

Through the duration of the work, 25 employees benefited from this procedure for earth work, road work, network and civil engineering.

### B- Preparing for hub jobs

The ANPE, the Mission Locale, the Conseil Régional, the DDTEFP, the Conseil Général, the DRDFE (Délégation Régionale aux Droits des Femmes et à l'Égalité) and the PLIE (Plan Local pour l'Insertion et l'Emploi) set up and financed a program to help under-qualified unemployed people.

The ANPE d'Hénin-Beaumont and the Mission Locale of l'agglomération d'Hénin Carvin pilot and run the program.

Companies which will come to the site and 110 job seekers with no or very little qualification who will be trained to logistics jobs will both benefit from the program.





This program will train people to become lorry drivers, industrial truck drivers, warehouse clerks, commissioners, handling clerks. It will prepare job seekers for the logistics work environment, validate their professional project, and prepare and accompany them in their training.

After a stringent selection, job seekers follow a 2.5-month course which might lead to an aptitude certificate for some. A first group of 15 people has already followed this path.

Eight courses have taken place for the terminal operator. Among the first people recruited by LDCT, four ex-employees of Métalleurop were selected.

## **APPENDICES**



## THE SYNDICAT MIXTE AND THE DELTA 3 SAEM

### Members of the Syndicat Mixte

- The Région Nord Pas-de-Calais,
- The Département du Nord,
- The Département du Pas de Calais,
- Lille Métropole Communauté Urbaine,
- The Communauté d'Agglomération of Hénin-Carvin,
- The Communauté d'Agglomération of Lens-Liévin
- The Communauté d'Agglomération of Douaisis
- The Communauté de Communes du Sud-Pévélois.

### The DELTA 3 SPLA

Created on 21st November 2000 by the syndicat mixte, The Delta 3 SAEM has become a SPLA in March 2011.

#### *Shareholders*

- The Syndicat Mixte for 83 %
- The Région Nord Pas-de-Calais for 17 %

#### *Board of Directors*

The Directors are:

- The Syndicat Mixte (9 representatives)
- The Région Nord Pas-de-Calais (2 representatives)

## **BUILDING SITE FIGURES**

- Up to 300 people during the heaviest months of the works
- 60 earth-moving machines
- 500 000 m<sup>3</sup> of in situ rubbles and deads
- 1 000 000 m<sup>3</sup> of backfill
- 50 000 tons of ballast
- 150 000 m<sup>3</sup> of treated deads to do the track formation
- 40 000 m<sup>3</sup> of roads
- 32 km of railway tracks
- 24 km of mains
- 24 km of trenches for electrical and telecommunication networks

**Started in April 2001,  
the hub has been operating since  
15 December 2003.**