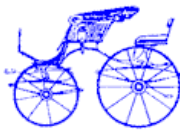


# 2nd BESTUFS II Workshop: « Last mile solutions

## Results from French Case studies

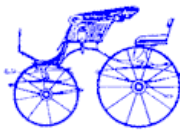
*D.PATIER, LET, France*

*Nürnberg, 22 April 2005*



# Urban Distribution centres economic results

	<b>La ROCHELLE</b>	<b>MONACO</b>
<b>Setting up</b>	<b>ELCIDIS European Project 2001</b>	<b>Monaco Principality 1989</b>
<b>Aim</b>	environmental	organisational
<b>Perimeter</b>	historical centre <b>220 Ha</b>	all the city <b>190 ha</b>
<b>Location</b>	near historical zone	inside the industrial quarter city centre
<b>PF</b>	700 m <sup>2</sup>	1300 m <sup>2</sup>
<b>Regulation</b>	no enter for >3,5T veh <i>imperfect control</i>	no enter for >8,5 T veh <i>strict control</i>
<b>Managing</b>	Private	Private
<b>Contract</b>	<i>juridic statue problem</i>	delegation of public service
<b>Contract</b>	subsidy : 0,7€/parcel 54 000 € in 2002 <i>juridic statue problem</i>	subsidy 86000 € in 2002
<b>Nb persons</b>	4	8
<b>Technical means</b>	<b>6 electric vehicles &lt;3,5t</b> 1 commercial elect veh. 1 thermic veh.	3 trucks 3,5 T 1 truck 7,5T 1 van 1T 1 electric <3,5T
		EDI + Software (stockage management + Transport)
<b>Offer</b>	day, Day +1 weight/position/services storage:reverse, deliveries at home	recipient has the choice to be delivered or to pick up
<b>in 2002</b>	72477 parcels	82563 parcels
<b>users</b>	80 carriers 7 for 95 % of parcels	14 carriers 6 for 80 % traffic



# Urban Distribution centres environmental results

<b>Saving</b>	<b>La Rochelle</b>	<b>Monaco</b>
<b>Consumption</b> in e.p./year	61%	26%
<b>POLLUTANTS</b>		
Nox	61%	25%
CO	61%	35%
SO2	63%	26%
<b>GREENHOUSE EFFECTS</b>		
CO2 equivalent (Kg/year)	61%	26%
<b>LAND USE</b> (m <sup>2</sup> .h.veh.km)	-33%	42%
<b>EXTERNAL COSTS</b>		
local atmospheric pollution	61%	23%
sound nuisance	61%	30%
urban congestion	-50%	38%
insecurity	-17%	50%

Nevertheless,  
a difficult transfer...

Source : Interface-Transport, 2004



# VAP (Vehicule Accommodation Point), Bordeaux

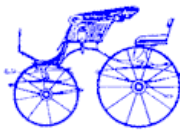
## Description

An innovated facilitating system for incoming goods



For the last mile  
City centre





# VAP results

## Quantitative and qualitative surveys (with and without the VAP)

stop following, time saving, energetic consumption and pollutant emission saving, congestion effects, access condition improvement

### environmental results:

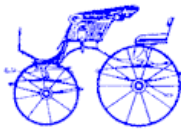
## congestion, consumption and pollutant saving with VAP /stop

Number	In gep	In gram equivalent petroleum					
		CO	CO2	NOx	HC	SO2	Particles
<b>Véhicule*km/stop</b>	<b>Consumption</b>						
1,44	661	20.2	843	10.6	3.35	1.19	1.18

Source : Gerardin Conseil, 2005

**Road occupancy** : the distance covered decreases about 5 km/VAP stop

**Qualitative surveys**: all the actors are satisfied



# 3. New concepts and new logistic organisations

## Final delivery of goods in Paris "La petite Reine"

→ Situation 12 months after initiation of experiments

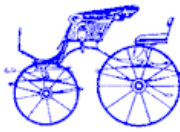
16 vehicles

78 208 km/one year

8160 stops and 11421 parcels



*Source : Mayor of Paris*



# "La petite Reine" results

## Economic results :

uses: proximity shops, from PF or cross docking warehouse to the delivery at home

Business involved: express freight, stationary, food products

Increase of the number of users (Chronopost and Coliposte)

Increase of the tray's capacity: 1 m<sup>3</sup>, 150 Kg loading capacity  
a range of 4 to 5 hours (20 km).

Increase of number of rounds: +80 % in 6 months

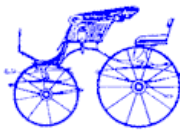
Increase of sales: + 8,7 % in one year

Environmental effects: The yearly consumption saving is 8,3 Tép  
yearly pollutant saving

In gram equivalent oil	CO <sub>2</sub>	NO <sub>x</sub>	CO	COVNM	particles
Decrease of yearly emissions in Kg	18958.6	49.2	250.9	48.6	7.8

*Source: ITEM, 2004*

**A concept transferable**



# Chronocity in Strasbourg and soon in the « Champs Elysées » quarter

- A Chronopost experiment
- A new concept of urban vehicle
- A new organisation for pick up and deliveries of parcels in a dense urban area
- A specific truck carries 2 electric trolleys
- A range of 12 h. 2 days without charge



The deliveryman realises the round on foot

## Environnemental effects

09/2002-09/2003	Consumpt	CO2	NOx	SO2	particles
Yearly saving in %	51%	51%	53%	51%	28%

Source : MAQASSAR Consulting

A faded background image of a street scene. On the left, a large truck is parked with its rear door open. A person is visible near the truck. In the foreground, a car is parked on a street. To the right, there is a building with many windows. A traffic light pole is visible in the middle ground. The overall image is semi-transparent, allowing text to be overlaid.

**Thank you for your attention**

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