

Delivering high quality in public transports



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Bougeons Mieux. Goed op Weg. Let's Move Together



- Context
- Mega trend to change
- Innovation

Context



Belgium = 3 Regions → 3 regional public transport companies + SNCB (Train)



↪ Flemish region = VVM - De Lijn



↪ **Brussels = STIB-MIVB**



↪ Walloon region = SRWT - TEC

Every company has its own tarification policy but on the territory of the Brussels-Capital region, some tariff integration exists between trains, trams, metro and bus.



STIB-MIVB in few figures



STIB = « Société des Transports Intercommunaux de Bruxelles »

MIVB = « Maatschappij voor het intercommunale vervoer te Brussel »

- Brussels-Capital Region = stakeholder of the STIB (100 %)
- The first Belgian urban public transport company. It is responsible for an integrated network of 700 km on a territory of 242 km².
 - 4 metro lines
 - 19 tram lines
 - 50 bus lines
 - 11 night bus lines
- Extends its activities to the 19 municipalities of the Brussels-Capital Region as well as to 11 nearby municipalities.
- 2009: 290 million journeys
- More than 6500 employees



Mega trends drive PT challenges...



Customer needs

- Mobility
- Personalization/ simplicity
- Cost management/ productivity
- Safety and security

Trends

- Going green
- Information society
- Ageing population
- Communities/ network
- Globalization/ partnership

Public Transport challenges

- Improve and expand multimodal transport
- Increase value for money
- alleviate traffic congestion,
- reduce fuel consumption and carbon emissions
- improve safety



This lead to Innovation



Passenger information (adaptive timetable, tariff, disruptions, ...)

Eco drive

Vehicles for PMR

Access gates in Metros

T2K

Tramstore

Car sharing

Public Transport challenges

- Improve and expand multimodal transport
- Increase value for money
- alleviate traffic congestion,
- reduce fuel consumption and carbon emissions
- improve safety

Payment & validation

Warning systems (video monitoring, eCall,...)

Driver assistance (connected GPS,...)

Fleet and tracks management (vehicle maintenance)

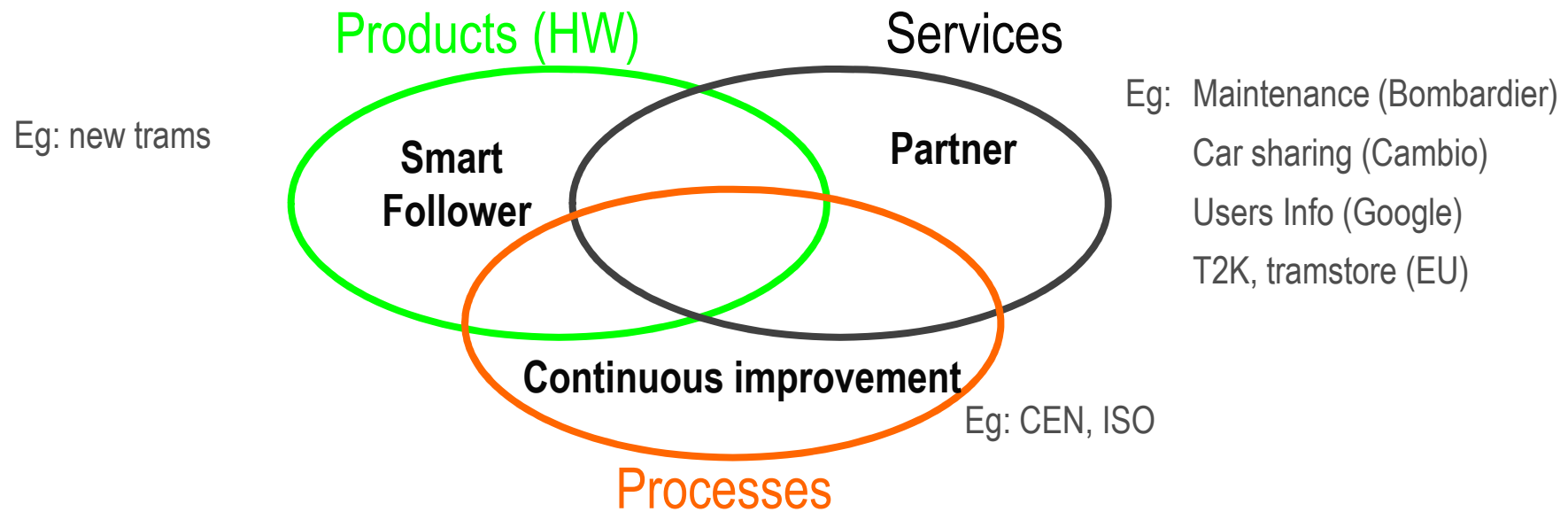


How can we do this?

Open innovation



→ Innovate for the customer while getting a dynamic image



Example: Innovation through ICT



ICT and Intelligent Transport Systems (ITS) will:

- increase attractiveness of public transport by enabling multi-modal travel and public transport through tailor-made information, such as adaptive timetables, route-planning, ...



Line	Destination	Arrival Time
1A	Gare de l'Ouest Stoessel	5 min.
1A	Gare de l'Ouest Stoessel	10 min.
1A	Gare de l'Ouest Stoessel	14 min.
Autres lignes		
2	Herman-Debrous Nerode	10 min.
2	Herman-Debrous Nerode	14 min.

- Improve efficiency of public transport exploitation



Innovation In Information

My day in 20 years...



9am: I surf on my mobile phone on the STIB website to organize a visit to the Magritte Museum with my mother

9.05 am: I'm advised to take a combination of car, metro and tram as cheapest journey. Road charging has become quite expensive!

9.06 am: Still on the STIB mobile website, I reserve a parking at the entrance of Brussels and I buy a combined ticked parking /PT

10.05 am: I access the parking with my MoBIB card.

10.15am: As I'm too early, I go to an internet



11 am: I arrive close to the museum and I'm directed with augmented reality on my phone to the entry

10.40 am: I look at a location based advertising in the tram

10.35 am: I'm waiting at a tram station. I see on the real time information board that my tram is arriving.

longer than expected, I receive on my phone an alternative (Villo) to join the closest tram. I receive a extension for Villo on my MoBIB card



Source: <http://www.metroparisiphone.com/>



Technology is ready ...



- Smart phone with GPS (blackberry, HTC, iPhone...)
- Connected GPS with adaptive time table (Be-Mobile real time traffic info)
- Augmented reality (layar,...)
- mediascreen with 3G
- In car camera/ CCTV
- Social network (facebook, twitter, coyote,...)
- Route planning tool (Google transit)
- NFC card/tag (MoBIB, PingPing, EdenRed, Interparking...)

But,

- Internet and smart phones penetration are too low to make a breakthrough today
- Although some intermodality between networks exists, tariff and hardware integration just starting



Current STIB-MIVB projects



- Passenger info:
 - Mobile websites (m.stib.be – m.mivb.be) with personalized passenger info on iPhone, Windows Mobile and Android (Sept '10)
 - Route and timetable info accessible to 3rd parties ex: google maps (Sept '10)
 - New route planning system (Dec '10)
 - Link with Route to Point of Interest (POI API in 2011)
- Exploitation info:
 - VICOM project (traffic light command with priority to PT)
 - Synchronization of metro for energy re-use
 - Greasing of the rails based on location





2002 : internet

- Sector reference
- Refresh every 20 sec

4 Noordstation Gare du Nord

Temps d'attente à l'arrêt: **HCRTA**
Ces temps d'attente sont calculés toutes les 20 secondes.

Liens de plus d'infos sur les horaires et les lignes à l'arrêt de 2002

Ligne: **11** Noordstation Gare du Nord

	Arrêt	Destination
Prochain passage	03	GARE DU NORD
Prochain passage	03	GARE DU NORD

Temps les lignes qui passent l'arrêt Noordstation Gare du Nord

Ligne	Arrêt	Destination
11	01	ESPLANADE
11	03	GARE DU NORD
11	06	ESPLANADE
11	18	GARE DU NORD
11	17	HEUSEL
11	23	HOYDEL

2011 : new ergonomomy

- Localisation and waiting time in real time

Arrêt Albert A

Prochain passage à l'arrêt Albert A

Ligne	Arrêt	Destination
11	01	ESPLANADE
11	03	GARE DU NORD
11	06	ESPLANADE
11	18	GARE DU NORD
11	17	HEUSEL
11	23	HOYDEL



New displays

Bus-tram



Metro



In-vehicles



Summary



- **Delivering high quality in public transports will come from innovation**
- **Open innovation is key**



I thanks for your attention

