

Steps towards a Future FMCG Supply Chain

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Riga, October 29th 2009



Collaboration between competing suppliers in the future Supply Chain

- Trends
- Solutions for the future
- Future role of players
- Collaborative warehousing: **DHL-Campus Concept**

Enhancing a Retail Supply Chain through RFID Technology

- RFID- How does it work?
- Main opportunities for RFID in the supply chain
- METRO-DHL RFID rollout in France

Deutsche Post DHL

<p>Mail</p>  <p>Deutsche Post </p>	<p>Global Forwarding, Freight</p>  <p></p>	<p>Express</p>  <p></p>	<p>Supply Chain</p>  <p></p>	<p>Corporate Center</p> 
<p>146,000 FTE Revenue € 14.4 bn</p>	<p>41,300 FTE Revenue € 14.2 bn</p>	<p>113,000 FTE Revenue € 13.6 bn</p>	<p>139,000 FTE Revenue € 13.7 bn</p>	<p>11,000 FTE Revenue € -1.5 bn</p>

Source: DPWN annual report 2008

Today's challenges in the FMCG supply chain

- Cost efficiency
- On shelf availability
- Stock efficiency
- Lead time reduction

Tomorrows additional challenges

- Demographic issues: greying and urbanisation
- Increase of home shopping
- Explosion of information: Internet
- Increasing regulations: Traceability, restriction on city distribution, etc.
- Rising transport costs
- Security issues : counterfeiting, pilferage
- Shoppers increasingly value sustainability impact
- Resource scarcity: water, fuel, energy and CO² emission

* Source for trends: 2016 Future Supply Chain

Information sharing

- Sharing of standardized data (based on GS1 keys): SGTIN, GLN, EPC

Collaborative Warehousing

- Capacity utilisation of the total warehouse
- Transport optimisation of inbound and outbound flows
- Security and process improvement through Auto-ID technology
- Simplification of infrastructure
- Reduction of traffic , energy and CO2

Collaborative City Distribution

Collaborative non urban Distribution

* Source: 2016 Future Supply Chain

How the Supplier, Retailer and LSP have to change their roles

Supplier

- Deliver transparency of goods and information flows
- Common processes with peers, common data standards
- Fair benefit sharing among peers and partners

Retailer

- Common data standards, common processes
- Cross-docking of store orders
- Increase of local sourcing

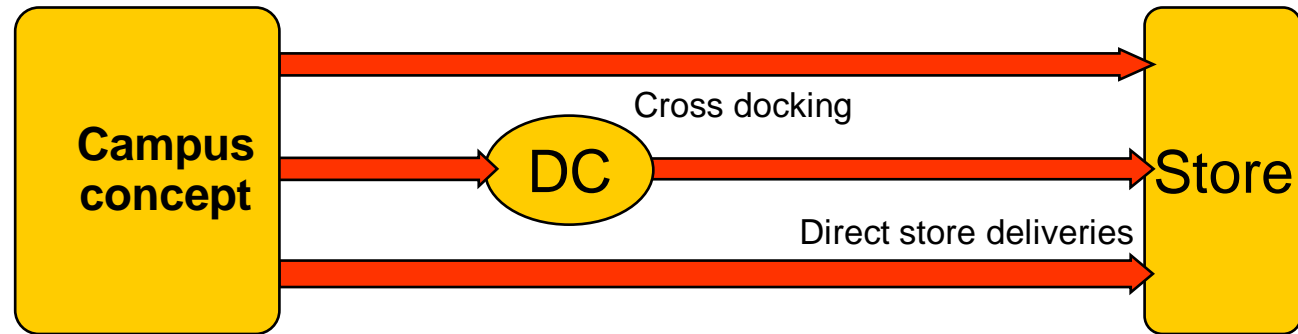
Logistics Service Provider (LSP)

- Proactive, facilitator
- Common data standards, common processes
- Greener assets
- Longer term contracts

DHL Campus-Concept is fulfilling the Shoppers "Green Aim"

Suppliers examples

- Colgate-Palmolive
- Johnson & Johnson
- ReckittBenckiser



Characteristics:

- Multi partner information sharing
- Collaborative warehousing
- Deployment of greener assets: buildings, trucks
- Coordinated picking
- Coordinated deliveries
- Full trucks
- Mutual trust

Benefits Suppliers:

- Less cost in warehousing, picking
- Capacity optimization
- Lead time reduction
- Less cost in transport
- Reduction of CO², energy and water consumption

Benefits Retailers:

- Simpler flow
- Less Storage at DC
- Crossdocking of store orders directly to outlet
- Direct deliveries to large stores
- Less trucks in his yard
- Reduction of CO₂

Reference case Campus: Cortoleona, Italy

Facts and figures

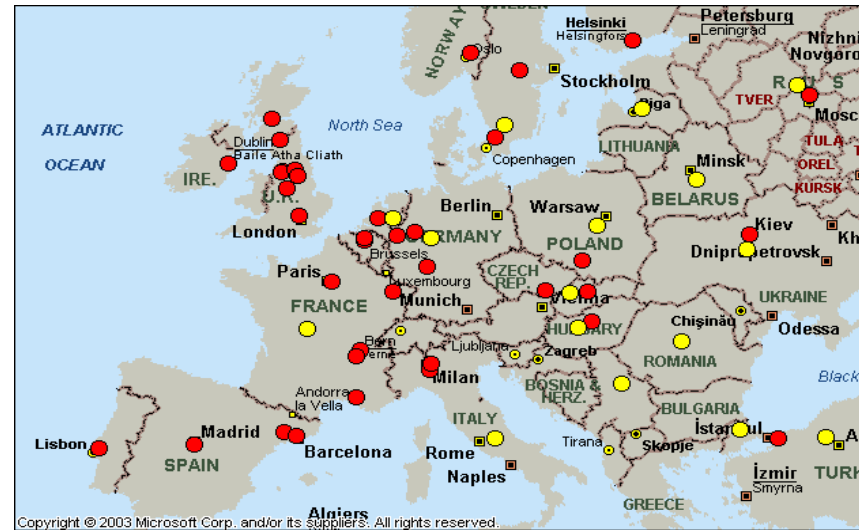
Current size	180,000 sqm
Number of Customers	8
Location	Cortoleona, Italy



Reference case Campus: Örebro, Sweden

Facts and figures

Current size	58,700 sqm
Number of Customers	11
Location	Örebro, Sweden



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Campus is a solid step to the Future Supply Chain

Concept

- Strengthen network with additional shared user sites in strategic locations
- Deployment of greener assets: buildings, trucks
- Focus on target sub-sectors to create industry platforms and capture transport synergies
- Standardized processes and warehouse design supported by standard IT systems
- Full range of Value Added Services available in all sites (e.g. co-packing)
- Warehouses modularly expandable

Value Delivered

On Shelf Availability

- Infrastructure simplification
- Category Standard solutions
- Value Added Services Integration
- Capacity Optimisation

Cost

- Reduced implementation time and set-up costs
- Reduced transport costs through synergies: Full trucks
- Strategic location: Less km

Lead Time

- Standardized IT & Operational processes across multiple geographies
- Direct Cross-docking of store orders

Sustainability

- Less water consumption, energy and CO²

Enhancing a Retail Supply Chain through RFID Technology

METRO Cash & Carry France / DHL Supply Chain France



RFID – How does it work?

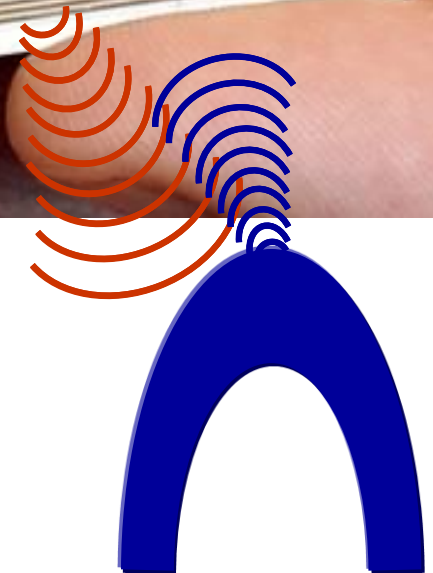
Microchip with antenna (Transponder / TAG) – receiving and transmitting data

- Chip
- Antenna
- Transformer

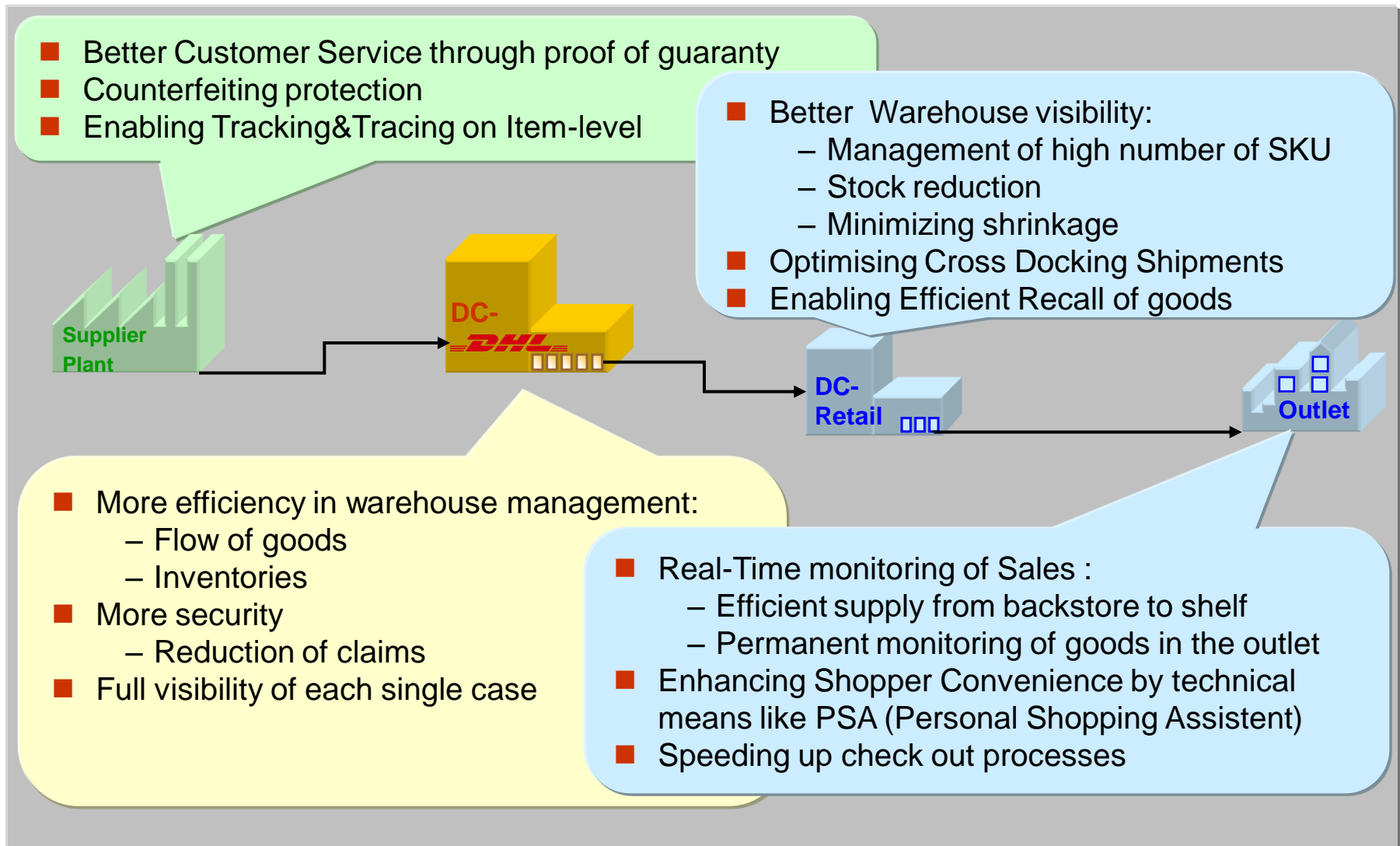
↪ Transmitting data to the sender

Identification-Number written on the chip

– Radio Frequency Identification



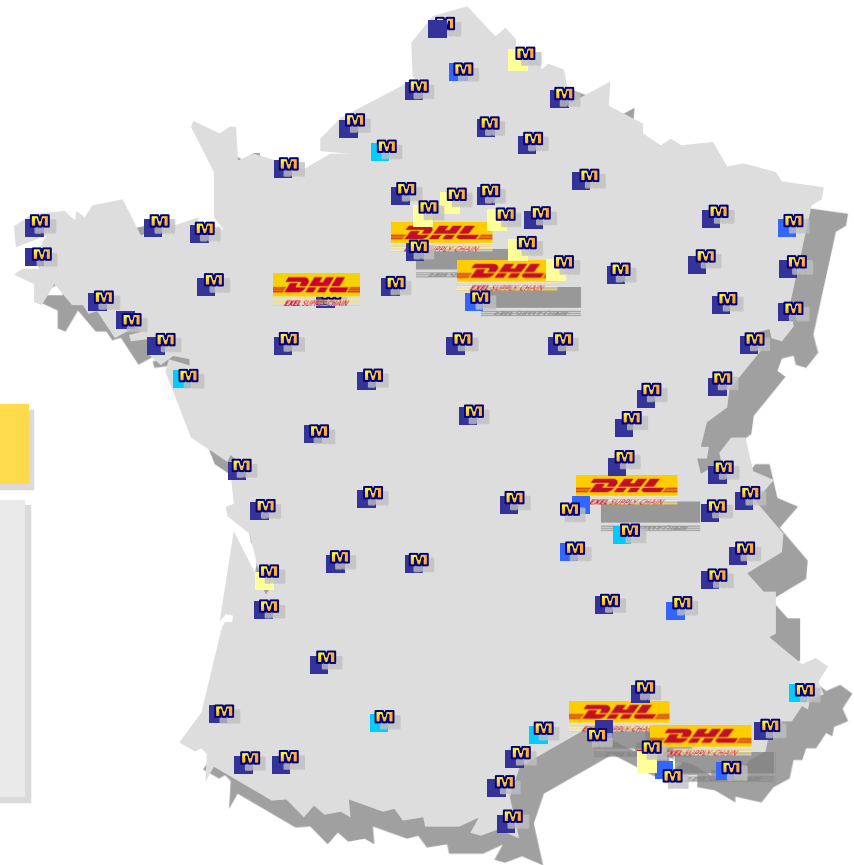
Main Opportunities for RFID in the Supply Chain



DHL provides to METRO France Dry and Beverage Logistics

Key figures

- 6 Grocery and Beverages DC
- 1,3 Million pallets per year
- 89 Stores



Vision

- Enhance METRO France Supply Chain with an integrated RFID service
- Focus on a single part of the supply chain to get an immediate and operational result

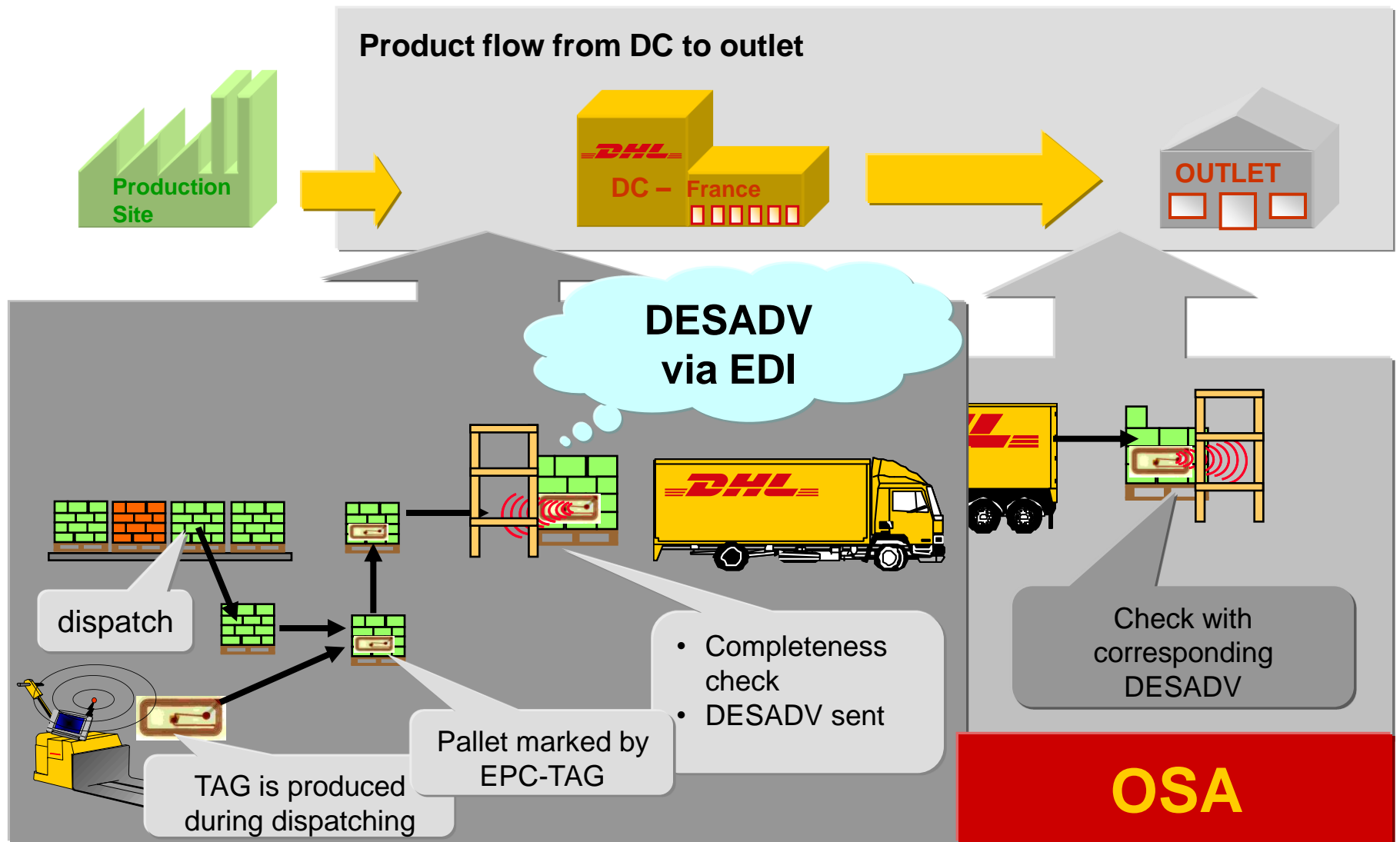
Objectives

- Enhanced “Track and Trace” solution at pallet level
- Improve productivity and quality for inbound in Metro stores and for outbound in DHL Distribution Centers
- Promote a short term RFID open solution

Proposed Components

- Work in respect of DHL & METRO Group RFID Initiative and share results

Scope of RFID-Project in France



Installations in DHL warehouse and METRO store



DHL Portal



METRO Portal

Process Monitoring in DHL warehouse: Tracking of pallets

Loading Managers View

The screenshot displays the 'Chargement SEC' interface for a DHL warehouse. It features a grid of 12 loading docks, each with a specific status and associated location. The interface includes a top navigation bar with tabs for 'Affectation des Chargeurs', 'Visu Portes', 'Chargement Palettes', 'Gestion PAQ', 'Validation des Restants à Quai', and 'Editions'. Below the navigation bar, there are filters for 'Porte' (Toutes), 'Entrepôt' (Tous), 'Etat' (Tous), and a time range from 9 to 10. The date is set to 04/09/2007.

Porte	Origine/Destination	Statut	Temps
Porte 8	DHL ARLES	Chargement en cours	09h12 à 10h01
Porte 9	AVIGNON	Chargement en cours	09h07 à []
Porte 10	[]	Porte affectée inactive	[] à []
Porte 11	ST ETIENNE	Chargement en cours	09h00 à 10h00
Porte 12	NICE	Chargement en cours	09h00 à 10h00
Porte 13	TOULOUSE	Chargement en cours	09h01 à []
Porte 14	GRENOBLE	Chargement en cours	09h08 à []
Porte 15	NARBONNE	Chargement en cours	09h00 à 10h00
Porte 16	[]	Porte non affectée	[] à []
Porte 17	TARBES	Chargement en cours	09h15 à []
Porte 18	LOIRE/RHONE	Chargement en cours	[] à []
Porte 19	ROGNAC	Chargement en cours	09h00 à 09h34

Legend at the bottom of the interface:

- Chargement en cours (Green arrow)
- Porte affectée inactive (Yellow arrow)
- Déchargement en cours (Blue arrow)
- Porte non affectée (Red X)

- Strengthen the partnership with METRO
- Facilitate the changes in the transport scheme through the tracking of pallets throughout the shipping / transport process (cross docking, shared loading...)
- Reduction of the claims
- Possibility to spot missing pallets upon truck loading
- Productivity gain for the control of the unloading in the MCCF stores
- Productivity gain for the truck loading process in the DHL DCs

Learnings from DHL-METRO France Roll Out

- **Challenges:**

- Collaboration between central Head offices and local country organization
- Use of TAGs (passive vs. semi-active solutions for beverages)
- Discrepancies on Hardware selection

- **Positive Effects:**

- Excellent collaboration between METRO and DHL
- Strong involvement and support of DHL staff during implementation
- Business Case exceeded due to reduction of claims

AVEC LA **RFID**, NOUS APPORTONS
DE LA TRANSPARENCE
À LA LOGISTIQUE.



www.dhl.fr

Le projet pilote a été mené à bien. DHL lance, en tant que leader de la logistique, l'identification par radio fréquence (RFID) dans toute la France: des processus de chargement plus rapide, un contrôle des composants plus précis, une plus grande transparence, une efficacité accrue. Retrouvez tous les avantages de RFID sous: www.dhl-innovation.com/RFID



Thank you for your attention