ICT for Transport and Logistics

Véronique Corduant, Corporate Representation Brussels
Brussels, 10 June 2009
Deutsche Post DHL: a worldwide leader in mail and logistics services

Operating globally in 220 different countries and territories

Managing approximately 5% of global trade through our networks

Employing more than 450,000 people

Serving more than 1 million customer interactions every hour
With the GoGreen program we respond to the needs of our top customers; we will decrease our dependency on fossil fuels and reduce costs over the long term. We must strive to reduce carbon emissions for every letter we mail, every package we ship and every square meter of space we use by almost one-third. GoGreen is a key strategic priority for our business.

(Dr. Frank Appel, CEO Deutsche Post DHL in: Sustainability Report 2008)
Information and Communications Technologies are key to sustainable logistics and transport. It is however important to take note that ICT are enablers for solutions rather than solutions in themselves!

Some possible contributions of ICT to energy efficiency in the domain are illustrated in the following examples.
Enabling efficiency

- Efficient operations of vehicles also demand optimised routing and capacity use planning
- Advanced algorithms for tour planning exist but are often constrained by poor quality of traffic and network input data
- ICT can support more efficient tour planning with differentiated network and statistical traffic data

The SmartTruck project

Deutsche Post DHL is preparing to fit trucks and taxis with GPS loggers to obtain first-hand traffic data from delivery areas and key approach ways. These will be used to better reflect e.g. peak congestion in the existing tour planning.
Enabling accessibility

- Efficient logistics schemes often depend on access to suitable infrastructure controlled by third parties
- Especially problematic in urban areas where freight is disadvantaged against other traffic participants
- ICT can provide solutions for active and efficient use management of critical infrastructures, e.g. priority lanes, selective access or pre-gating

Environmental Loading Zone

Deutsche Post DHL partnered with Bremen City Council in the *Parfum* project to establish the first loading zone in Germany reserved for commercial clean vehicles. Authorised vehicles are identified through RFID tags to ensure compliance.
Enabling connectivity

- Logistics networks aim for seamless integration of the respective best combination of transport modes
- Logistics management aims for seamless tracking and tracing of items at different hierarchy levels
- ICT can provide frameworks and technical solutions for data and information exchange across modal, organisational or geographical boundaries

Smart and secure supply chains

Deutsche Post DHL has teamed up with industrial partners and customs in the projects Smart-CM and Integrity to pioneer integrated solutions for door-door visibility and pre-clearance of ocean freight using smart eSeals for containers.
Enabling transparency

- Energy efficient operations of buildings and vehicles require knowledge of consumption
- Benchmarking of sites and drivers impaired by out-of-time and undifferentiated data
- ICT can support the widespread and timely availability of qualified energy consumption data to optimise installations and operations

**eCO₂500 and eco-driving**

Deutsche Post DHL is considering the installation of smart meters to improve energy efficiency in its main sites around the globe. It is also testing various driver assistance systems aiming at optimising drivestyle and fuel consumption.
Thank you for your kind attention!