INSTITUTO TECNOLÓGICO DE ARAGÓN

ECITL 2013 Zaragoza, SPAIN

Logistics Research-Solutions-Innovation through cooperation

ITA - Aragon Institute of Technology ZLC - Zaragoza Logistic Center



ECITL: Smart Freight to enable sustainable logistics solutions 7 - 9 NOVEMBER 2012 GOTHENBURG, SWEDEN

ZARAGOZA. LOGISTICS CENTER



Zaragoza & Logistics





Largest logistics premises on the European continent



KEYS FOR CREATION

Strategic geographic situation of Zaragoza

Public commitment

Impact of industrial outsourcing

Dependence on automotive sector



ZARAGOZA. LOGISTICS CENTE



Intermodality





•Intermodal Transport Centre: road, rail, air, port

•Surface: 1,300 Ha. High quality/price ratio

•Training and Research: ZLC

•Knowledge transfer to industry through technology: ITA

•Growth of logistics activity :14.000 jobs, 4.000 millions investment



ZARAGOZA. LOGISTICS CENTE



Spanish Center of knowledge (*) Generation, adaptation, transfer and diffusion of knowledge Applying ICT to solve logistical problems To develop a collaborative and sustainable logistics



GOBIERNO

INES Iniciativa Española de Software y Servicios



Iogistop



(*) Funded by Avanza Contenidos subprogramme: Knowledge Centres (REF TSI-070200-2008-76)

ITA - National Demostrator Centre of ICT4Logistics: Our Lab^{DEMOSTRADOR} TIC LOGÍSTICA

- Space to demonstrate how ICT can help to create solutions in the field of logistics.
- It will be as well our R&D Lab
- Opening in January 2013

















UNIÓN EUROPEA PROYECTO COFINANCIADO POR EL FONDO EUROPEO DE DESARROLLO REGIONAL (FEDER)







Facility: The national ICT4LOG Demo center (Point of Sale Module)

OBJECTIVES

- Technologies for the identification and collection of products with unique customer support: target small businesses vs. large supermarkets
- Innovative technologies at the point of sale pursuing more efficient logistics and procurement process more user friendly
- Technologies for real-time information about the existing stock of each product on the shelf
- Technologies to replace product according to claim efficiently

EQUIPMENT

- · Point of Sale Terminal
- Debit system
- Smart shelving for automatic inventory control
- Mobile terminal assisted sales
- Vending telemetry systems



Facility: The national ICT4LOG Demo center (Smart Store Module)

OBJECTIVES

- Technologies for receiving, picking, shipping, storage and characterization methods of automatic goods
- Create a real operational scenario of an intelligent warehouse space featuring test different products and processes

EQUIPMENT

- Configurable automatic picking
- Manual preparation system orders: PTL and PTV
- Arch automatic reading of pallets using RFID and vision cameras
- Material handling system with integrated RFID reader homing
- Shelves with automatic stock management using sensors









Facility: The national ICT4LOG Demo center (Supply Chain Module)

OBJECTIVES

- Show different identification technologies, control and monitoring of products in the SC
- Model, simulate and evaluate the interaction between ICT solutions and different configurations of dynamic and complex SC
- Show the exchange of information between agents of the SC (manufacturers, warehouse and customers)
- Show applications of electronic invoicing in the SC

EQUIPMENT

- Physical model with points of automatic identification, RFID, vision systems
- · Virtual model: simulation and optimization system integrated with the physical model
- Automatic terminal identification for traceability in the SC
- E-commerce solutions: EDI, electronic invoicing, connections (FTP, web services, etc)







Facility: The national ICT4LOG Demo center (Transport Module)

OBJECTIVES

- Technologies for route planning and fleet management
- · Technologies for optimal filling of vehicles and license plate recognition
- · Show geographic information systems analysis tools for locating and trip generation
- · Technologies for simulation and analysis of traffic congestion

EQUIPMENT

- Fleet Management
- Board equipment and GPS
- License Plate Recognition Systems
- Geographic Information System
- Optimal Solutions for filling vehicle
- Solution for routing and transport real applications
- Tool for planning, forecasting and traffic simulation



ABOUT ZLC

Education & Research Institute established by the Government of Aragon in collaboration with MIT and the UZ. A model of cooperation between industry, goverment and academia.



MISSION

To create an international center of excellence for research and education in logistics and supply chain management that actively engages with industry and the public sector to develop and disseminate knowledge



ZARAGOZA. LOGISTICS CENTE

ZLC. TO ACCOMPLISH THIS MISSION

Established partnership with MIT



Designated to lead the National Center of Excellence in Logistics and the Spanish Technology Platform on Logistics





ZARAGOZA. LOGISTICS CENTER





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SEE YOU IN ZARAGOZA











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