

SYSIASS

The Development of an Intelligent and Autonomous Powered Wheelchair

Interreg IVA 2 Seas

EU €2.4M

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Background

- What is Interreg IVA
 - crossborder cooperation
 - €5.4 billion – 52 programmes
 - Solving problems together across borders
 - Objective: National borders should not act as a barrier to socio-economic development



Background

- What is SYSIASS?
 - Interreg IVA 2 Seas
 - North East France & South East England
 - Team of
 - Five partners
 - One consultant hospital
 - Two companies
 - To develop an Intelligent and Autonomous Powered Wheelchair
 - Project Period: January 2011 – December 2013
 - Project Value € 2.4M



Goals

What is an Intelligent and Autonomous Powered Wheelchair ?

- Provides the user with assistance when driving
 - Collision Prevention
 - Slow down and stop
 - Collision Avoidance and Assisted Navigation
 - Avoid objects
 - Drive through doorways without collision
 - Drive up to tables and desks
 - Drive up to bookcases/shelving
 - Autonomous Navigation
 - Automatic driving from one location to another
 - Safely



Goals

Why develop an Intelligent and Autonomous Powered Wheelchair ?

- User with limited function
 - Physical Impairment
 - Changing fatigue levels
 - Cognitive Difficulties
 - Visual Impairment
 - Progressive conditions
 - » MND
 - » MS
- Maintain independence
- Reduce cognitive and physical load
- Increase quality of life for user and families
- Any User - Anywhere



EKHUFT Goals

- Improved quality of life for some of our most needy patients and their families
- Work with other Clinicians and Academics on an interesting and worthwhile project
- Provide Clinical and Technical Input
- Pilot Study of EKHUFT Interreg Involvement
 - Commitment required?
 - Risks and Benefits?



Partners

- Institute Superior Electronique et Numerique - ISEN
- Ecole Centrale de Lille
- University of Essex
- University of Kent
- East Kent Hospitals University NHS Foundation Trust - EKHUFT



Collaborators

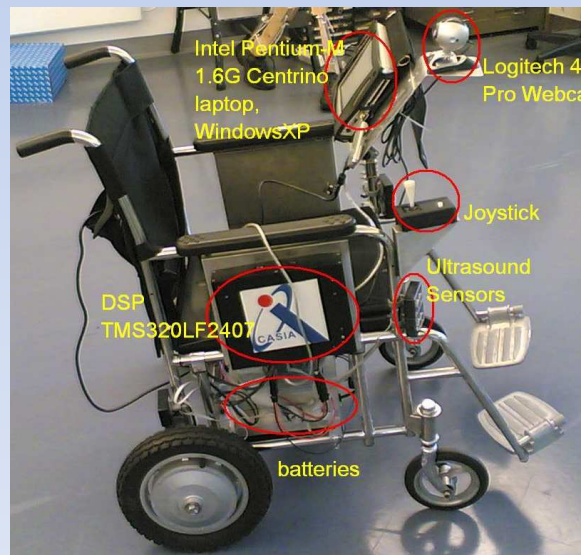
- Groupe Hospitalier, Lille
- Smile Rehab
- Dynamic Controls



Partner Roles

ISEN, Ecole Superior, University of Kent and University of Essex

- Design and development of the intelligent and autonomous wheelchair
- Essex – develop alternative input devices



Partner Roles

- East Kent Hospitals University Foundation Trust
 - Clinical and Technical Input
 - Clinical Evaluation
- Groupe Hospitalier – Lille
 - Clinical Input
 - Clinical Evaluation



Project Management

JTS of INTERREG IVA 2 Mers Seas Zeeën
Elodie Villeneuve, Edouard Gatineau

Project Manager
Annemarie Kokosy

Project
management
JTS Interreg
Interface

Activity coordinators
Thierry Floquet, Gareth
Howells, Huosheng Hu

Coordination and facilitation role

Steering Committee

- Activity coordinators
- 1 person/partner or consultant
- Communication Manager

Strategic role



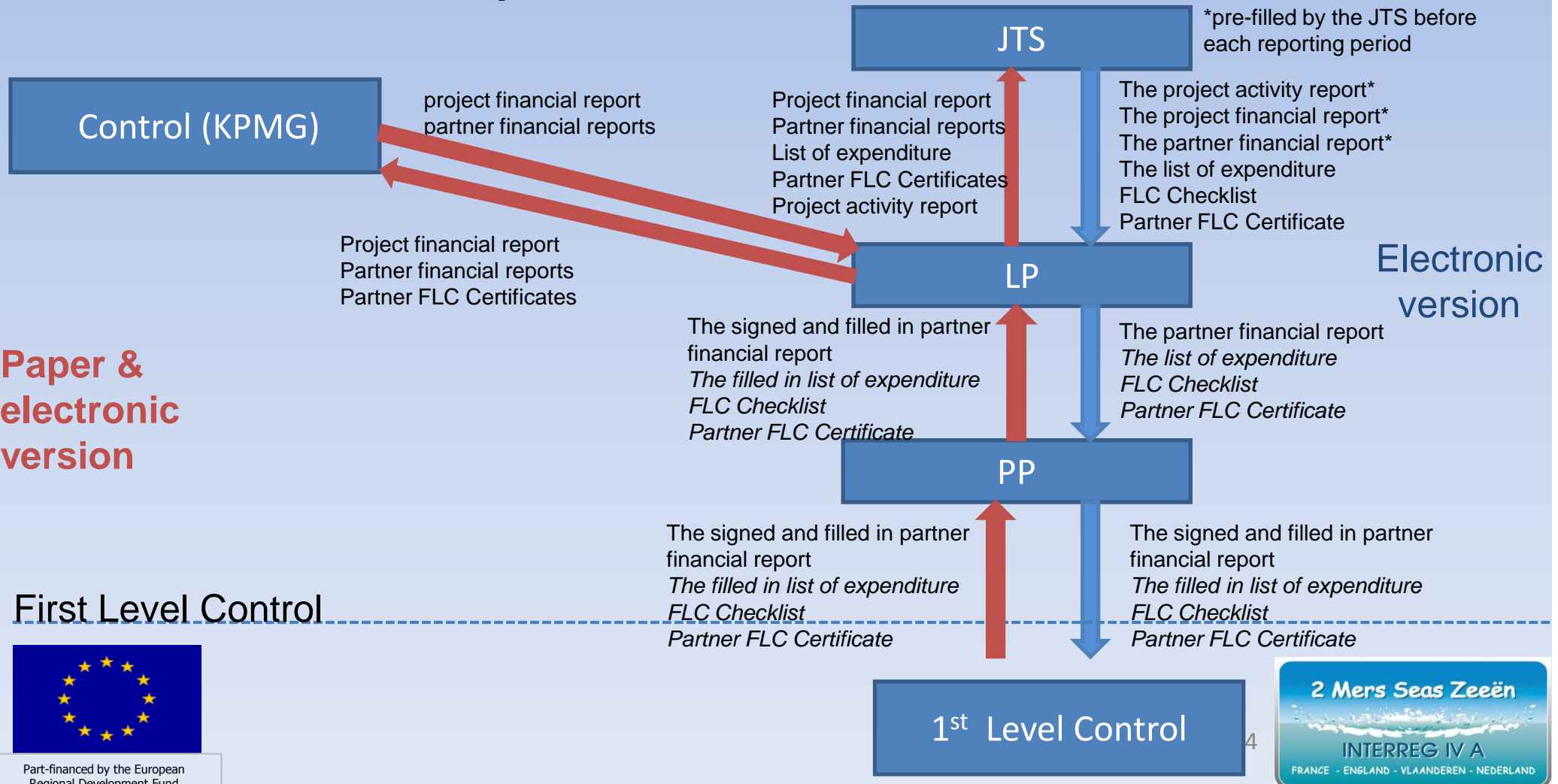
Project Management

- **Financial aspects**
 - 2 Progress Reports /year
 - **Important**
 - **Project activity report:** *filled in by the LP with all partner contributions*
 - **Filled in and signed by each partner and his FLC**
 - Partner financial report
 - List of expenditure
 - FLC checklist
 - Certificate of validation of the expenditure
 - **Filled in and signed by LP**
 - Project financial report controlled by the LP FLC
 - **Timesheets**



Project Management

➤ Financial aspects



EKHUFT Reflections

Financial

- Didn't read the fine print!
- Not Full Economic Costing.
 - 50% of bid
 - Claims must be fully documented
 - Claims for time, staff and other expenses are retrospective
 - Payment of claims up to 6 months after expense
 - The only 100% funding is to pay First Level Controller [Financial Claim Auditor]



EKHUFT Reflection

- Administrative Support
 - Essential
 - EKHUFT use Health Europe Centre
 - No admin support - no project
 - Pay for through Investigator claims
- Financial System
 - Adds additional stress to project
 - Affects Attitude – time sheet oriented?
- Project– only 9 months in
 - Well Worthwhile
 - Improve Quality of life of patients
 - Very beneficial and enjoyable to be able to work with other research groups.
 - Look forward to developing the system
- Would we get involved in future Interreg projects?



Thank You

