

WELCOME FROM SLOVENIA!

MEIS environmental consulting d.o.o.



Networking for Communications Challenged Communities:
Architecture, Test Beds and Innovative Alliances
Grant Agreement: 223994

Experimentation and user involvement - future needs based on past experiences

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N4C project &

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Future Internet Assembly Workshop, BUDAPEST

Wednesday, May 18, 2011 10:30-12:30

Session I.4 Smart cities and FIRE



Goal: DTN test bed

Living laboratory methods

- Experiments within the project were done in 2 test beds
- **Creating test bed:**
 - Nature, remote areas, missing infrastructure
 - Innovative technological solutions
- Living laboratory methods:
 - Include users in the r&d process

Test beds: Sweden & Slovenia

Testing of DTN on real life applications

- Applications for people living in remote areas:
 - Email using DTN
 - Web caching
- Meteorological and environmental data collection (climate watch)
- **Wild animals watching / hunting Tourism / navigation support**

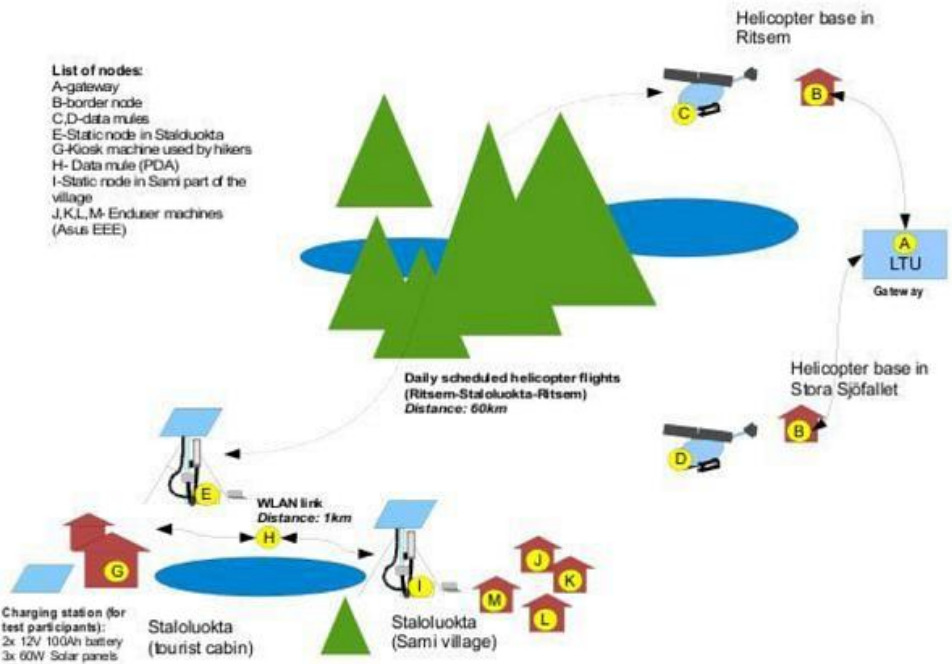
Test beds: Sweden & Slovenia

The road to success?



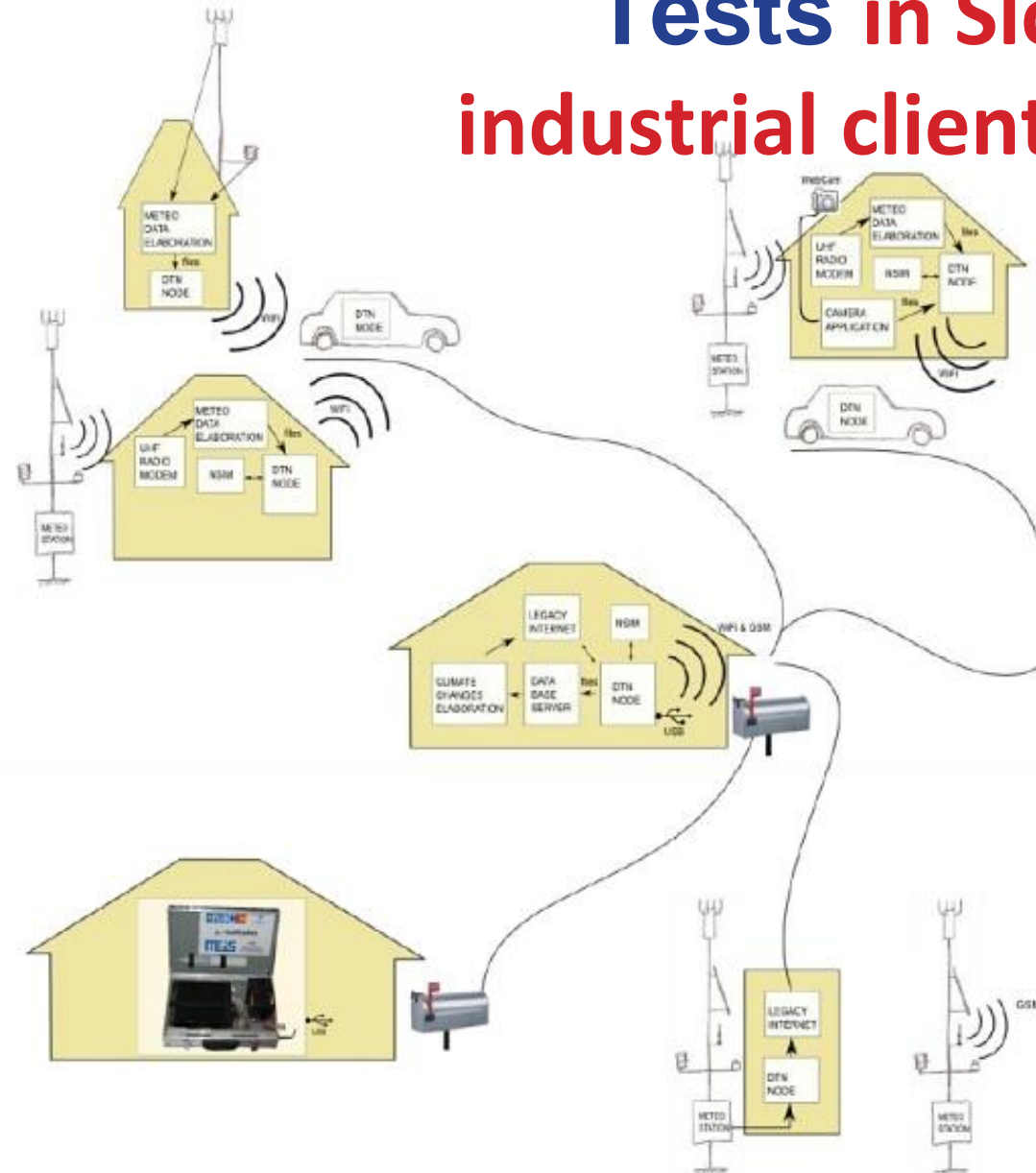
Summer tests in Sweden with user involvement

- email, podcast and web caching for Sámi population in remote areas



Tests in Slovenia industrial clients as users

- Meteorological and environmental data collection (climate watch)
- Permanent test bed, environmental nodes
- long-run tests of HW and SW solutions
- enhanced radiological DTN node



**LIVING LABORATORY PRINCIPLES
HOW TO FIND VOLUNTEERS???**

WRONG!

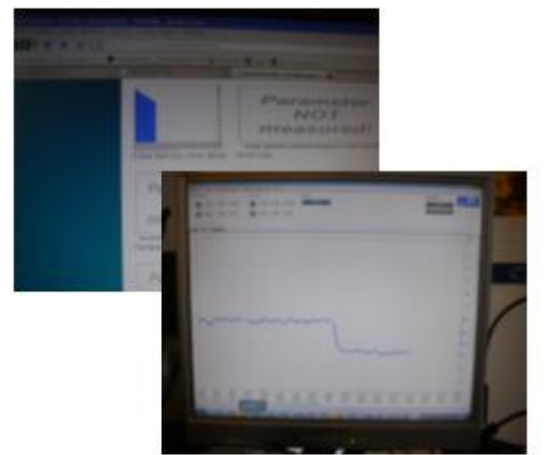
HOW TO MAKE USEFULL APPLICATION FOR PEOPLE TO USE!!

TECH. DEVELOPMENT FOR REMOTE, SPARCE POPULATED AREAS:

WHAT PEOPLE NEED → → → → NO “ADVERTISING” NEEDED!!!

Constraints: NATURE, ENVIRONMENT, PEOPLE, CULTURE, LIFE HABITS

HOW TO MAKE USEFULL APPLICATION FOR PEOPLE!!



Collection of radiological data using DTN and standard postal services

Other type of “users”

- **Two meteo stations for NPP, using Cambria HW platform**
- **Station for cave-climate ready to be installed in July in Karst will use DTN data transfer**





Experimental relevance of the work

**real life applications &
problems recorded, pitfalls and
SUCCESSFULL OPERATION**

N4C has proven:

**for more inovative aproach –
experimentation in real life**

and

user involvement

are basic constraints

What FIRE should provide:

More flexible umbrella for
more “diverse” projects

Financing for
collaboration between projects

SMART CITIES

and

question of inclusiveness

EUROPE - 21st century

E-inclusion



**Thank you
for your attention!**



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A vibrant rainbow arches across a dramatic, cloudy sky. Below the rainbow, a dense forest of trees is in full autumn foliage, displaying a mix of orange, red, and green. The overall scene is a beautiful natural landscape.

Thank you!