



EUROPEAN  
COMMISSION

Community research

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SEVENTH FRAMEWORK  
PROGRAMME

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UNIVERSITY OF BONN  
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UNIVERSITY OF NEWCASTLE  
NATIONAL UNIVERSITY OF IRLAND



**Peces**  
Pervasive computing  
in embedded systems

**Contract:  
FP7- 224342-ICT-2007-2**

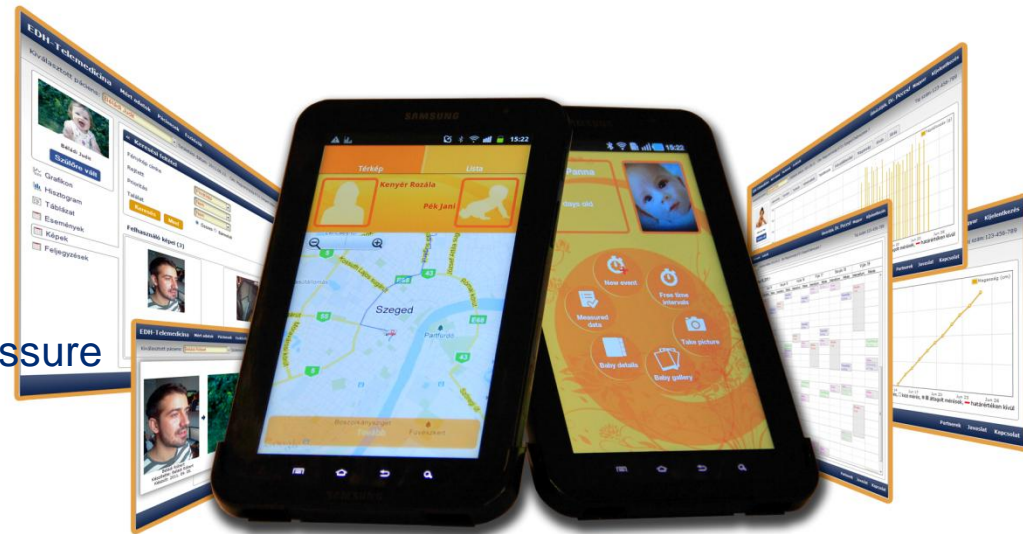


# System introduction

## • eHealth:

### ○ Nursling Care

- 2 Android APKs:
  - PECES Nursling Monitor
  - PECES Nurse Assistant
- 1 Enterprise/Web Application
  - Doctor
  - Nurse
- Present sensors: Weight, Bloodpressure
- Further sensor(s): Thermometer





## Concept

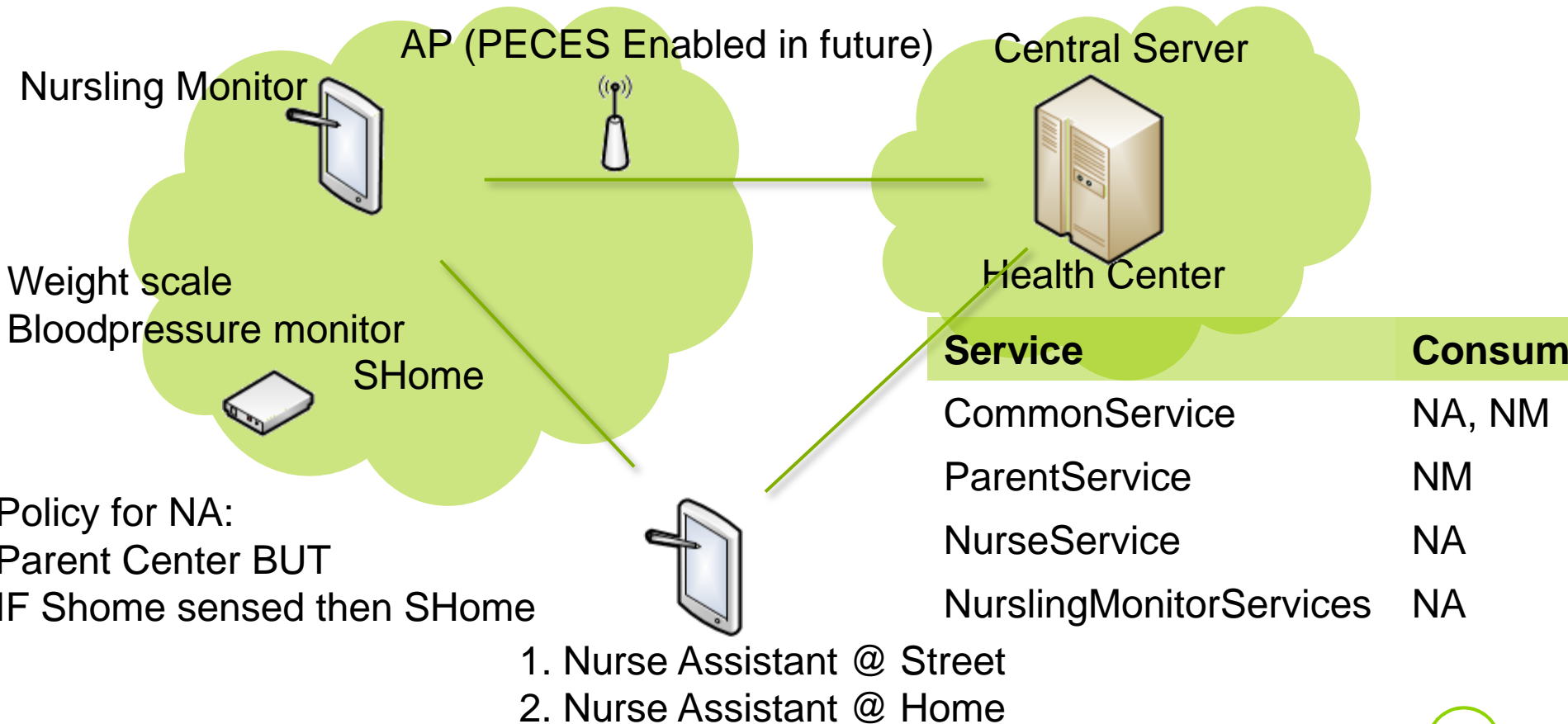
- **Nursling care – Recognized Unique benefits**
  - Integration of the Enterprise World with Embedded Gadgets
  - Android vs JavaEE both running PECES
  - Standardized patterns to connect PECES with the EE
- **Nursling care – Actors**
  - Doctor -> WEB Application / Remote Monitoring
  - Nurse -> WEB Application / Remote Monitoring + Android / @Home Monitoring + Android / @ Street
  - Parent + Nursling -> Android / @Home Nursling Tracking





# PECES Aspect

- Technical information

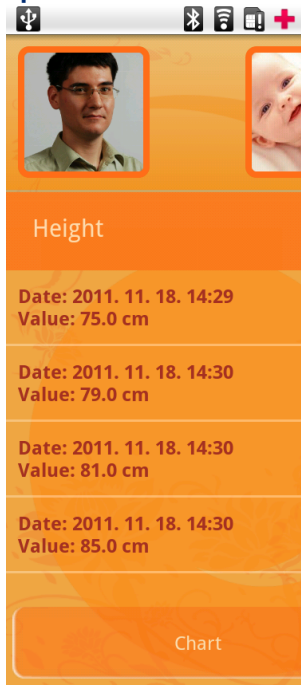
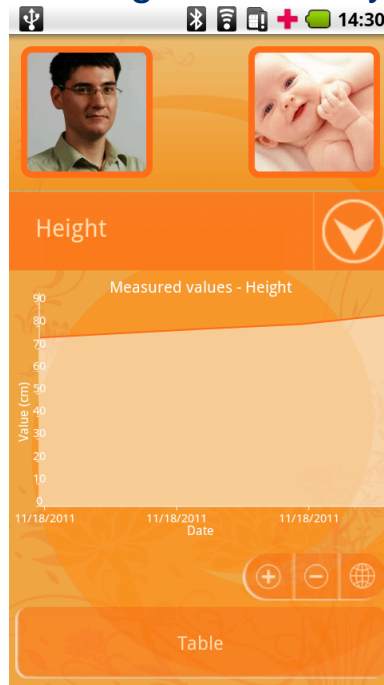




# Smart Home

## • PECES Nursling Monitor

- Details of baby and parent
- Table and Chart visualization
- Event handling – Eating/Drinking, Temperature, Height, Weight
- Free interval handling for nurse visiting
- Picture taking of critical symptoms



Free time Proposed  
2011.11.18.  
Zádori. free  
Zádori Oliver - 18:37 -

Record event  
Eaten  
Drink  
Slept  
Cried  
Measured temperature

Zádori Panna  
158 days old  
Take picture  
Gallery  
Free time intervals  
Baby details  
New event  
Measured data



# Nurse and Smart Home

## • PECES Nurse Assitant

- Assigned nursling listing
- Immediate indication of critical states
- Route planning during visits
- Free interval handling, real-time visit negotiation

## • Additional features (SHome)

- Direct photo taking
- In place synchronzation of photos, (measurements, events, notes...)
- Context based UI functionality



# Medical Center

- **PECES Health Center**
  - Doctor and Nurse accounts for data monitoring
  - Real-time tracking of several vital attributes
  - Pictures, Charts, Tables, Events

The screenshots illustrate the EDH-Telemedicina interface for monitoring a patient named Zádori Panna. The top view displays a line chart for weight tracking. The middle view shows search filters for patient photos. The bottom view provides a detailed timeline of medical events such as food intake, weight measurements, temperature checks, and sleep periods.