UbiFLOOD project

SINGAPORE | BANGKOK | MUMBAI

UBIQUITOUS COMPUTING FOR FLOOD WARNING AND FORECASTING SYSTEMS

DEVELOPED UNDER THE FRAMEWORK OF STIC-ASIE

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Introduction

Implementation of ubiquitous computing in flood warning and forecasting systems in different Asian background.

Challenges:

- Growing urbanization and land use changes
- The most flood prone area in the world, size of catchments and rivers
- Extreme rainfall events, monsoon

Vision:

- Rethink the warning systems & SCADA architectures with the Ubiquitous approach

Objectives:

PROMOTE New middleware research for ubiquitous computing emerging in France and Europe

EXPLORE Explore development of new devices adapted to the different Asian environments (mobile devices, communication network, data acquisition disposals, real time data treatment and means for public awareness)

DEVELOP Develop and structure collaboration between France and Asian partners on ubiquitous computing for flood warning and forecasting systems

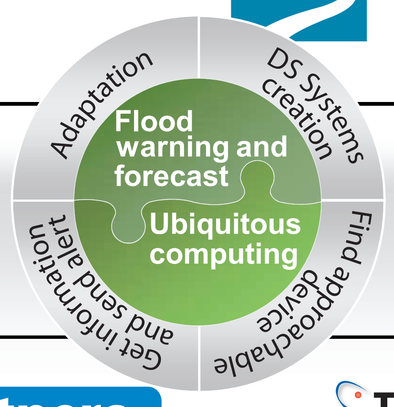
Implementation of ubiquitous based warning systems

Implementation of RFID wireless water level sensors

Role of ubiquitous computing in flood warning systems with independent warning rules (rule based processes):

- offline rules production with pre existing scenarios,
- real time flood warning processes based on simple rules.

Use of dedicated and non dedicated devices and services to warn population



Outcomes

1. Societies have to adapt and develop new organization able to assess flood situations
2. Modeling tools are able to provide an accurate representation of physical processes
3. Finding the solution for alert with minimal time spend on decision making
4. Use different devices to send flood warning messages to population

Project partners