



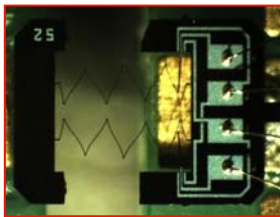
FP7 Coordination and Support Action to fund 50 technology transfer projects (TTP) in computing systems. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement n° 609491.

## Contactless smart MEMS-based piezo-resistive sensor (COSMOS)

Marin Marinov – European Polytechnical University, Pernik, Bulgaria  
Vladimir Stavrov – AMG-T, Botevgrad, Bulgaria

### TTP Problem

#### MEMS sensor



#### Wired communication



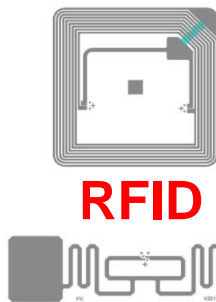
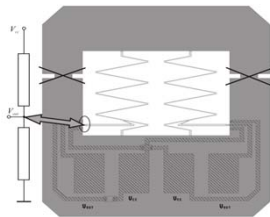
- NEEDS:**
- Bulky and space-demanding electric wiring
  - Power consuming components
- RESULTS IN:**
- No wireless communication
  - No energy harvesting
  - No identification/personalization
  - High materials consumption

### TTP Solution

W

#### Radio-Frequency Identification

#### MEMS sensor

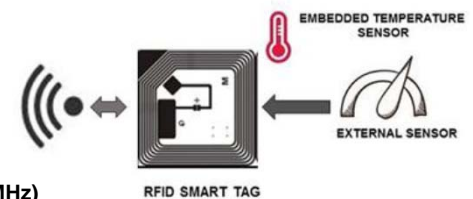


NFC (13.56MHz)

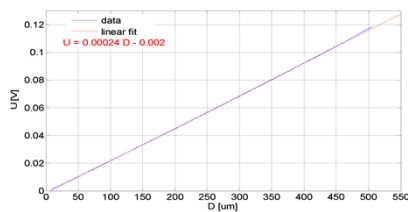
**RFID**

UHF (868/950MHz)

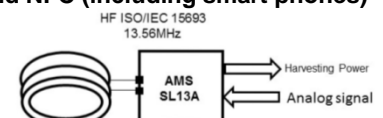
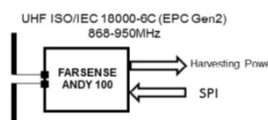
#### Smart RFID sensing



#### MEMS-based Load cell characteristic

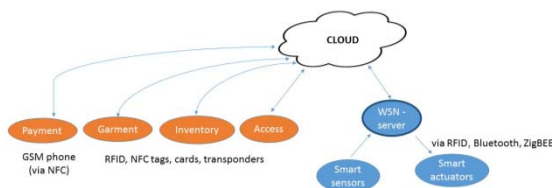


#### Reading units for UHF and NFC (including smart phones)

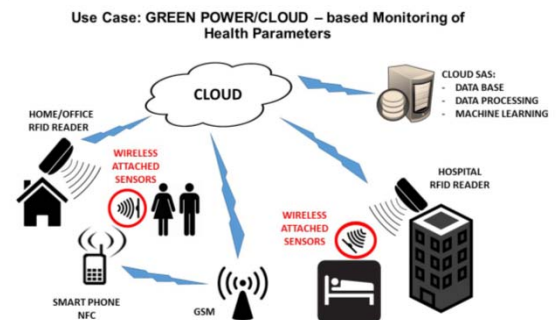


### TTP Impact

#### Global System for Tag Management (GSTM)



#### IOT (Internet Of Things)



### TTP Facts

Contact: Marin Marinov  
E-mail: marin.marinov@epu.bg  
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