

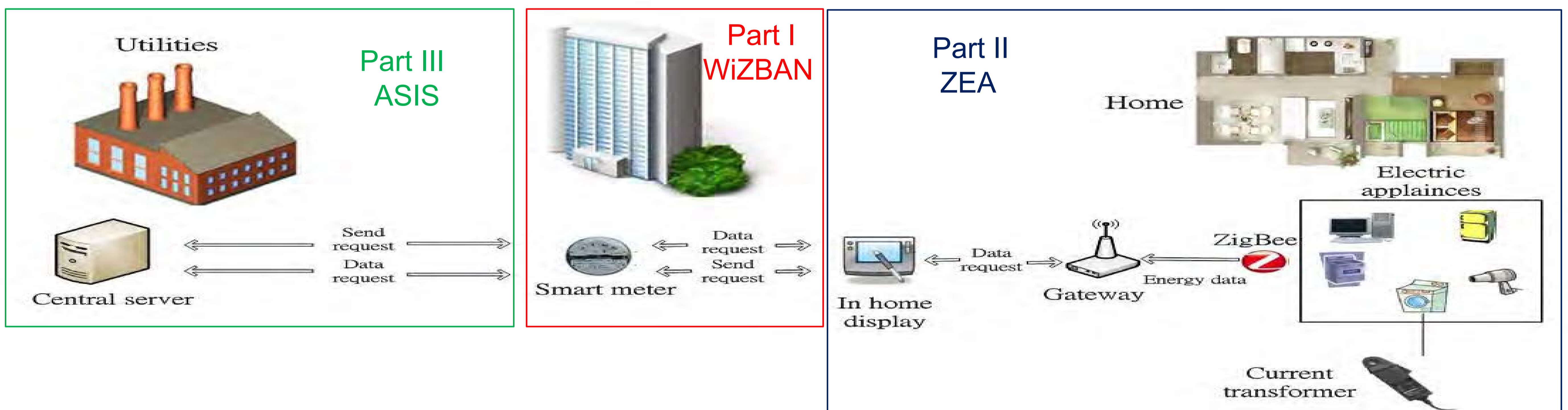
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**Programme: [BEngECE(BIM)]**

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## Objective/Background

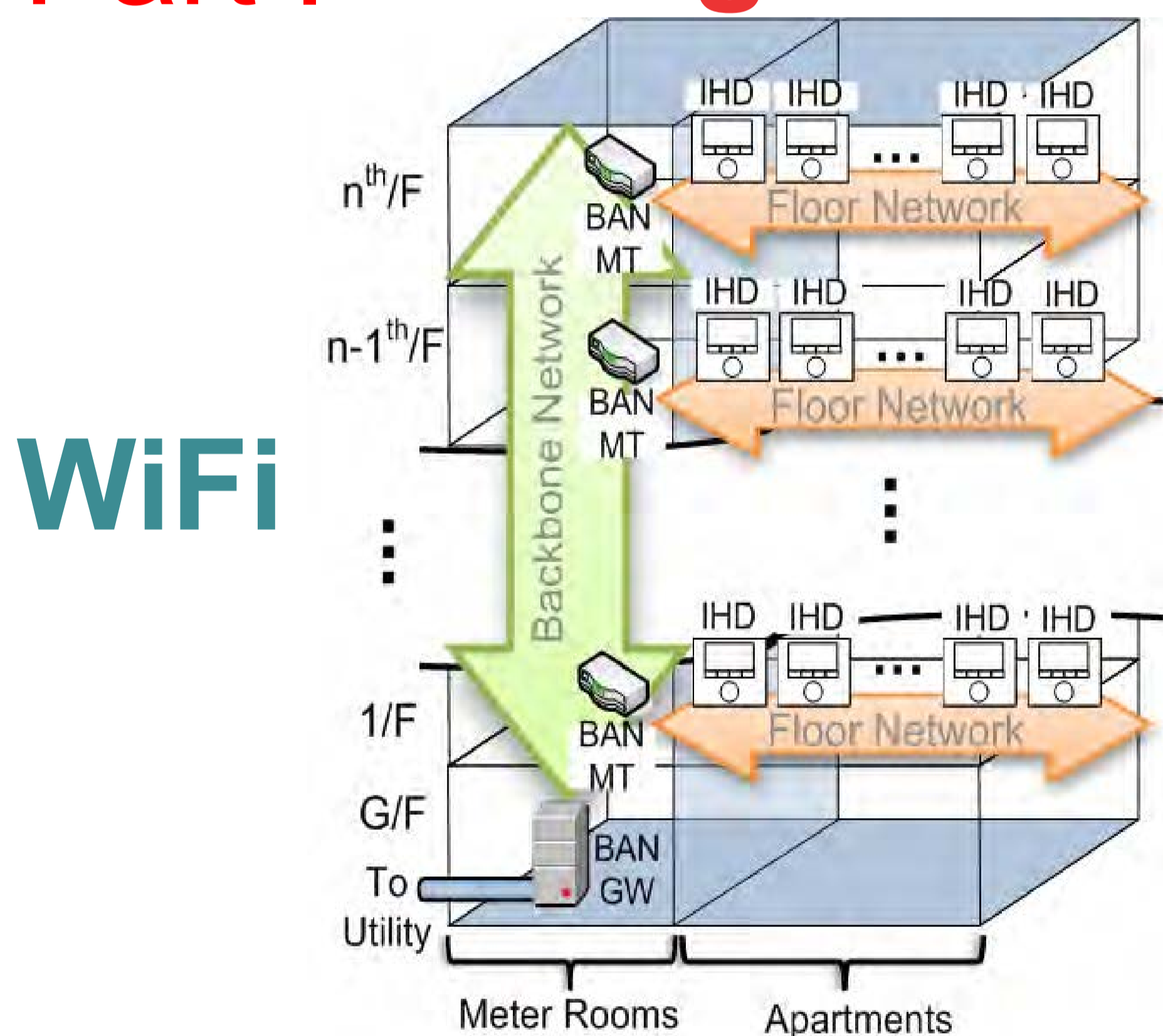
- To achieve Sustainability and Demand Response
- To propose Building Area Network, ZigBee Energy Auditor and Appliance Signature Identification



## Methodology

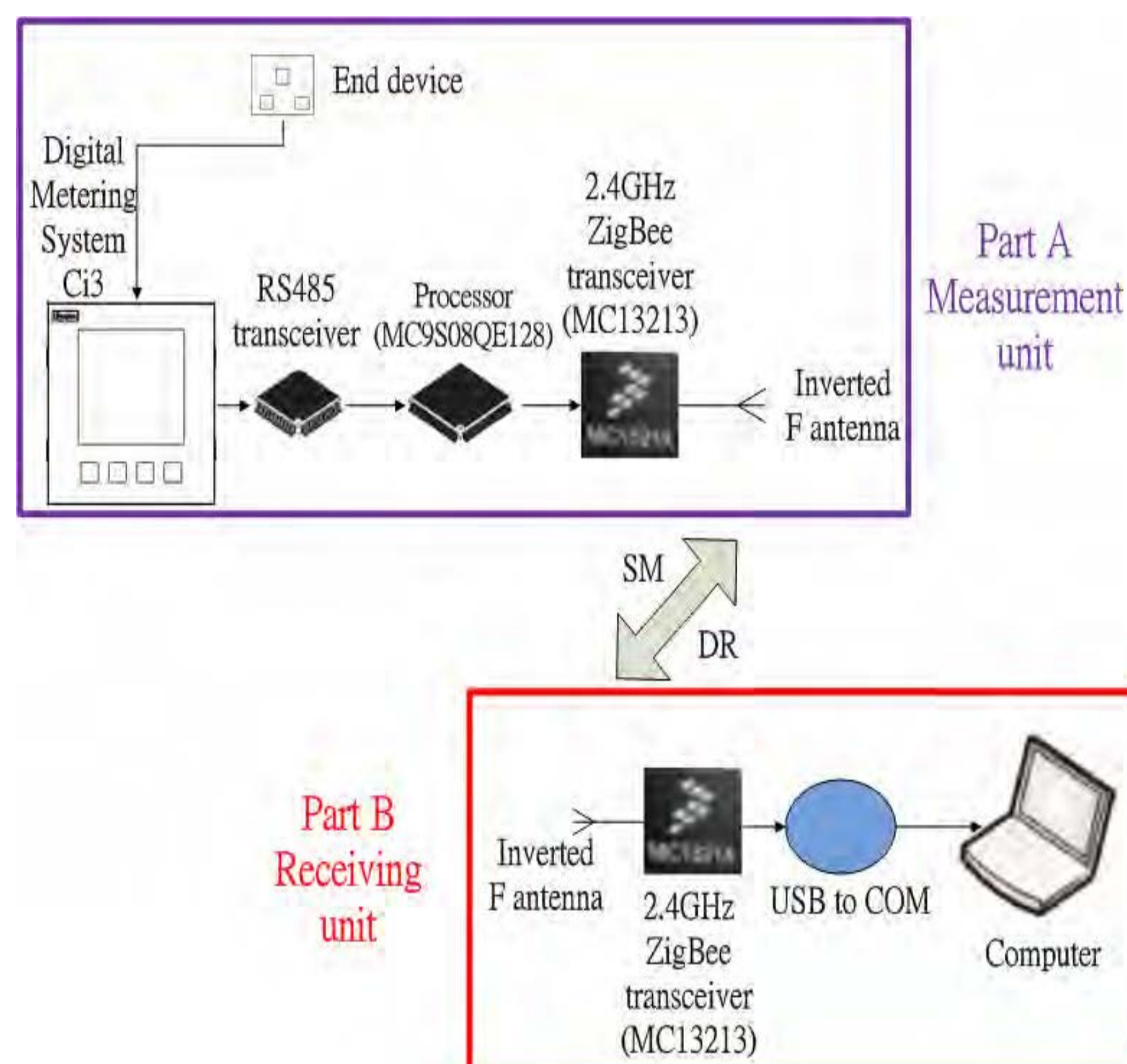
**Part I**

**ZigBee**



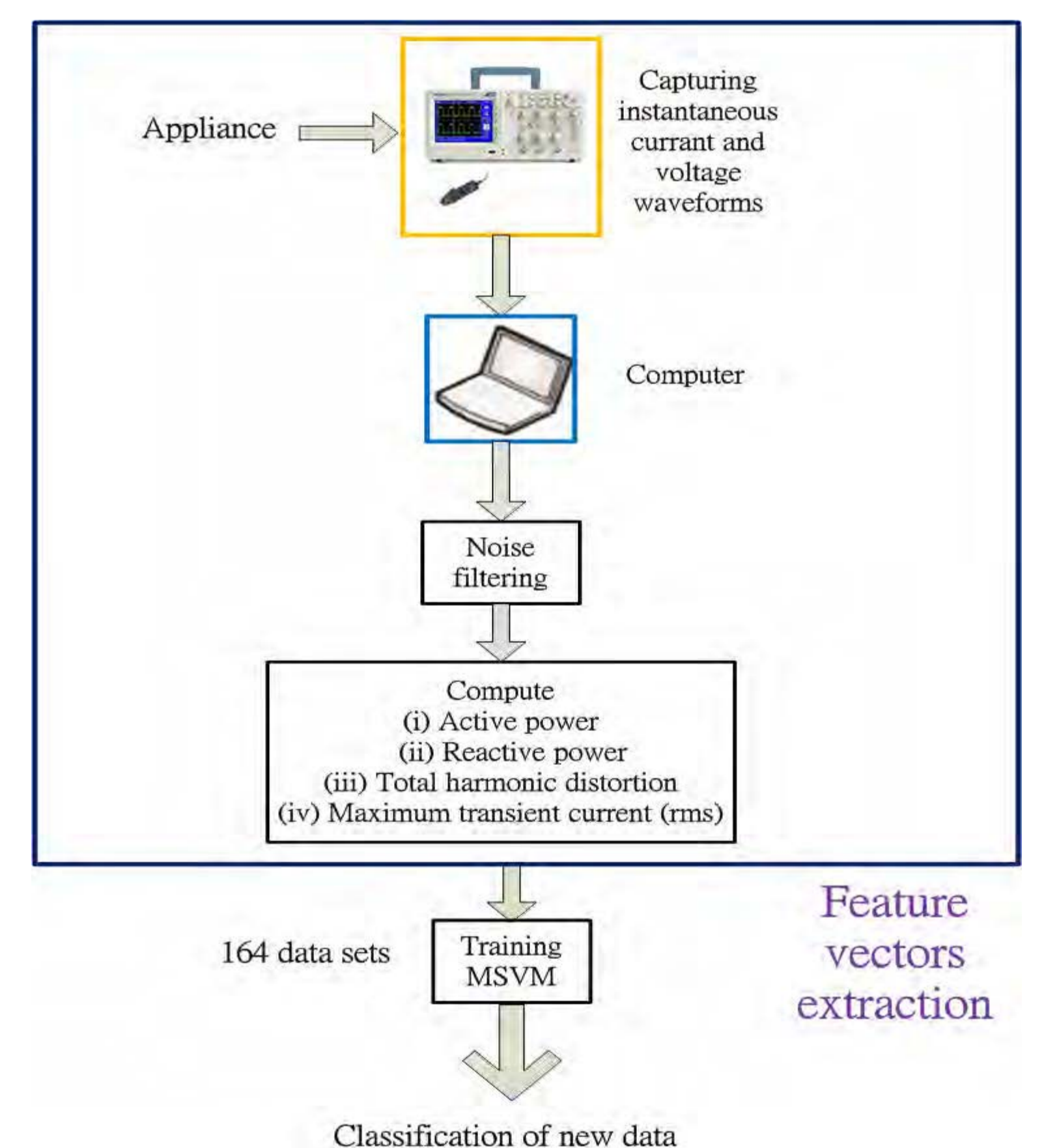
WiFi-ZigBee  
Building Area Network

**Part II**



ZigBee  
Energy Auditor

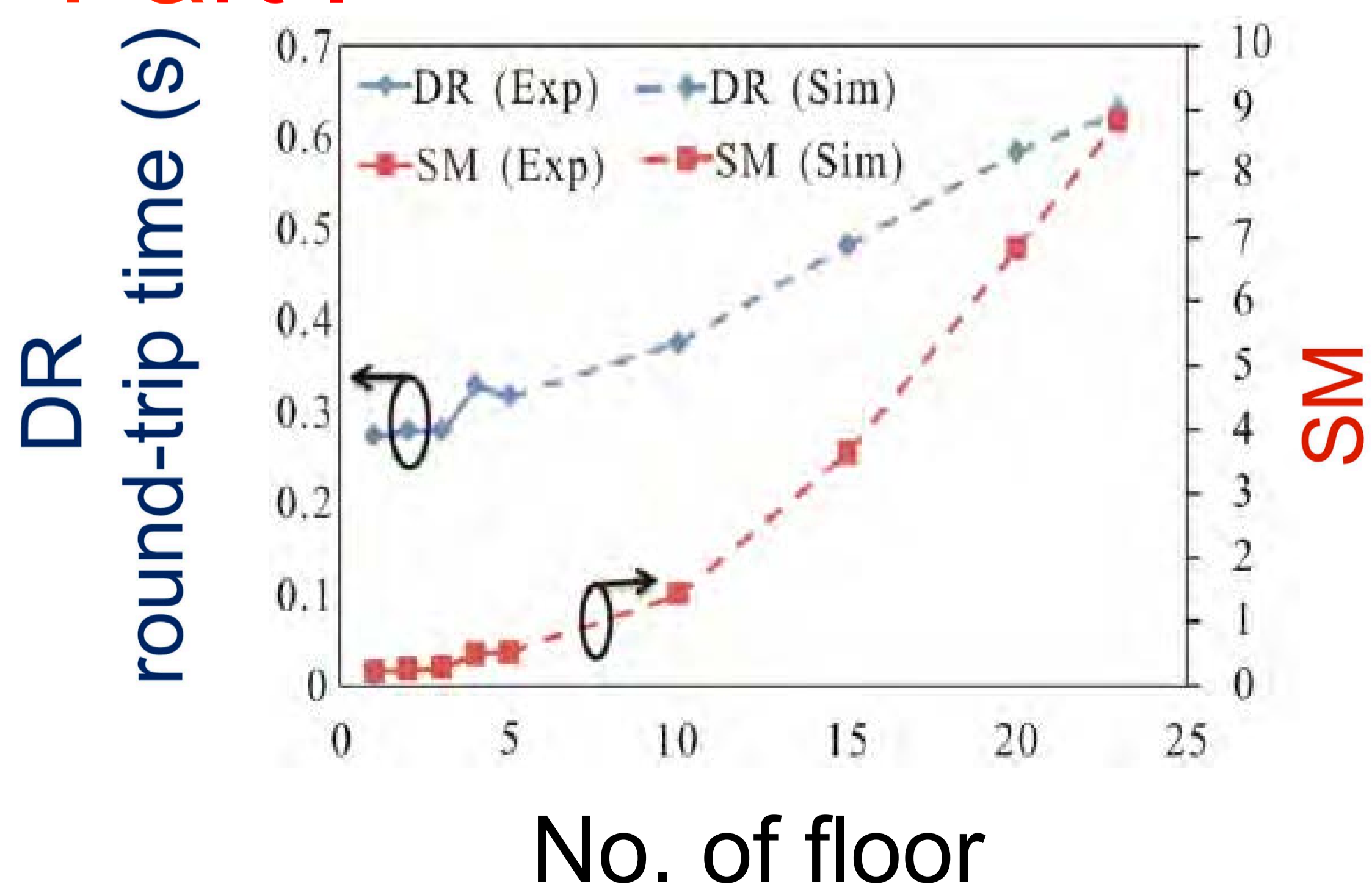
**Part III**



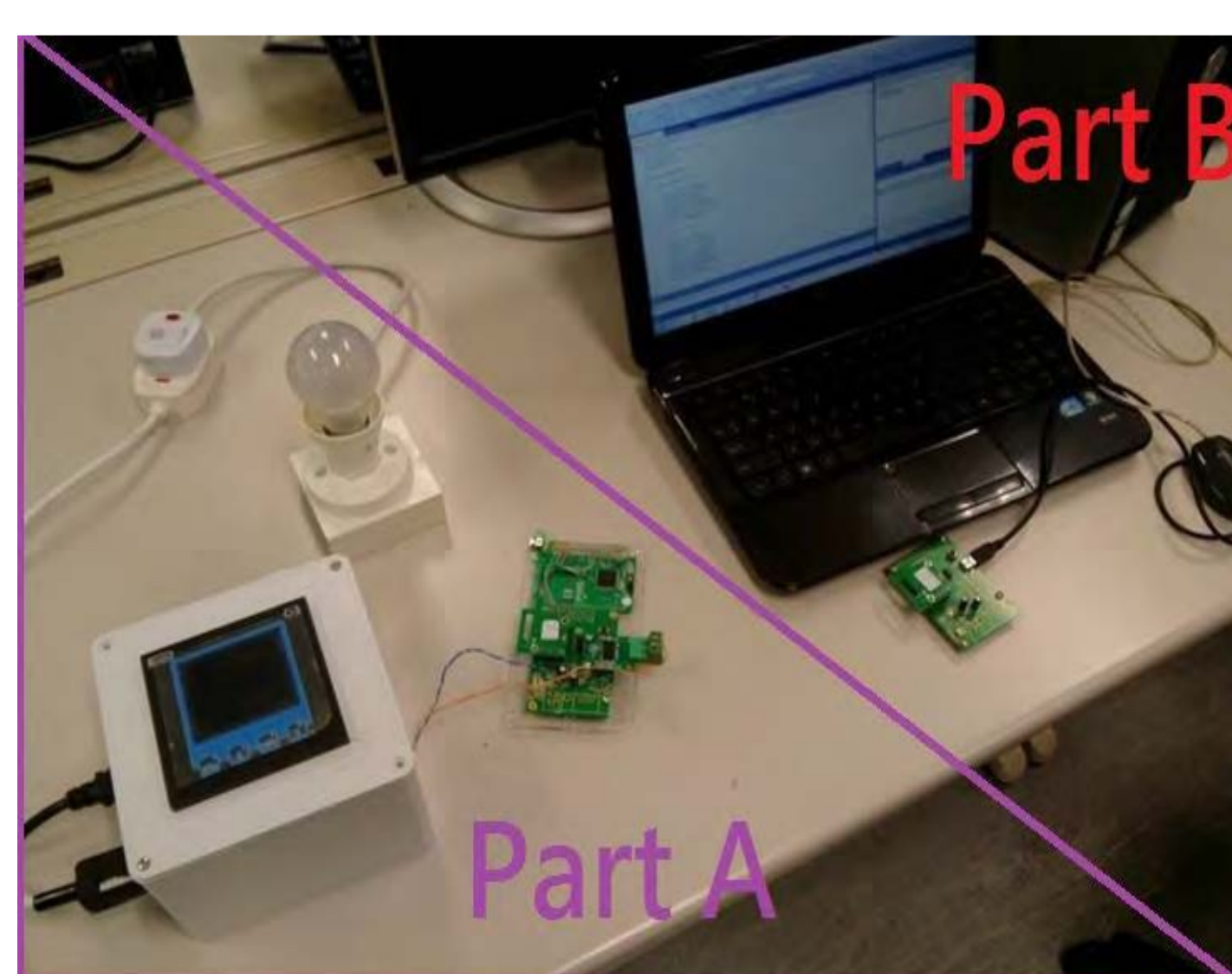
Appliance Signature  
Identification Solution

## Results and applications

**Part I**



**Part II**



Hardware for  
energy monitoring

**Part III**

Classification  
rate 95%

- Mobile charger
- Stove
- Notebook
- Hair dryer
- Fan
- Light bulb
- Iron brush
- Vacuum cleaner

Improved accuracy  
by 40%