



# Energy@home

ENERGY@HOME

## IP Working Group



# IP Working group

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## Mission:

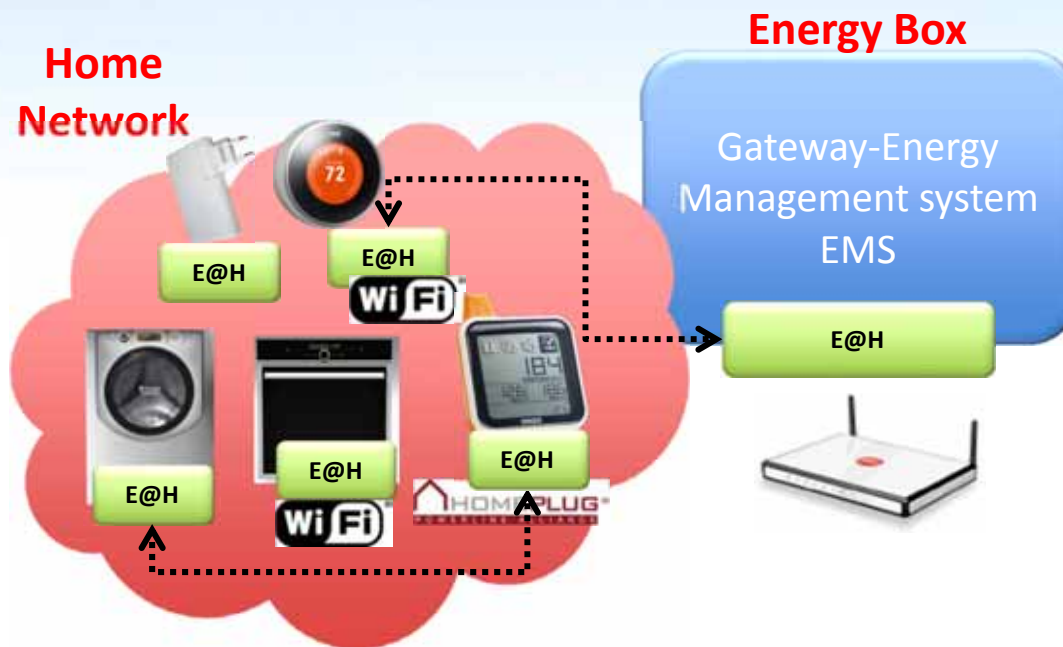
- Define a model for resources and devices in E@H system that is abstract and independent from a specific communication technology.
- Identify the communication interfaces of the E@H system and define a suitable IP based solution for these interfaces, considering already defined IP standards in the IoT domain;

## Expected Results:

- Abstract model of E@H System
- Specifications of an IP protocol for E@H system, possibly as an extension of a standard one

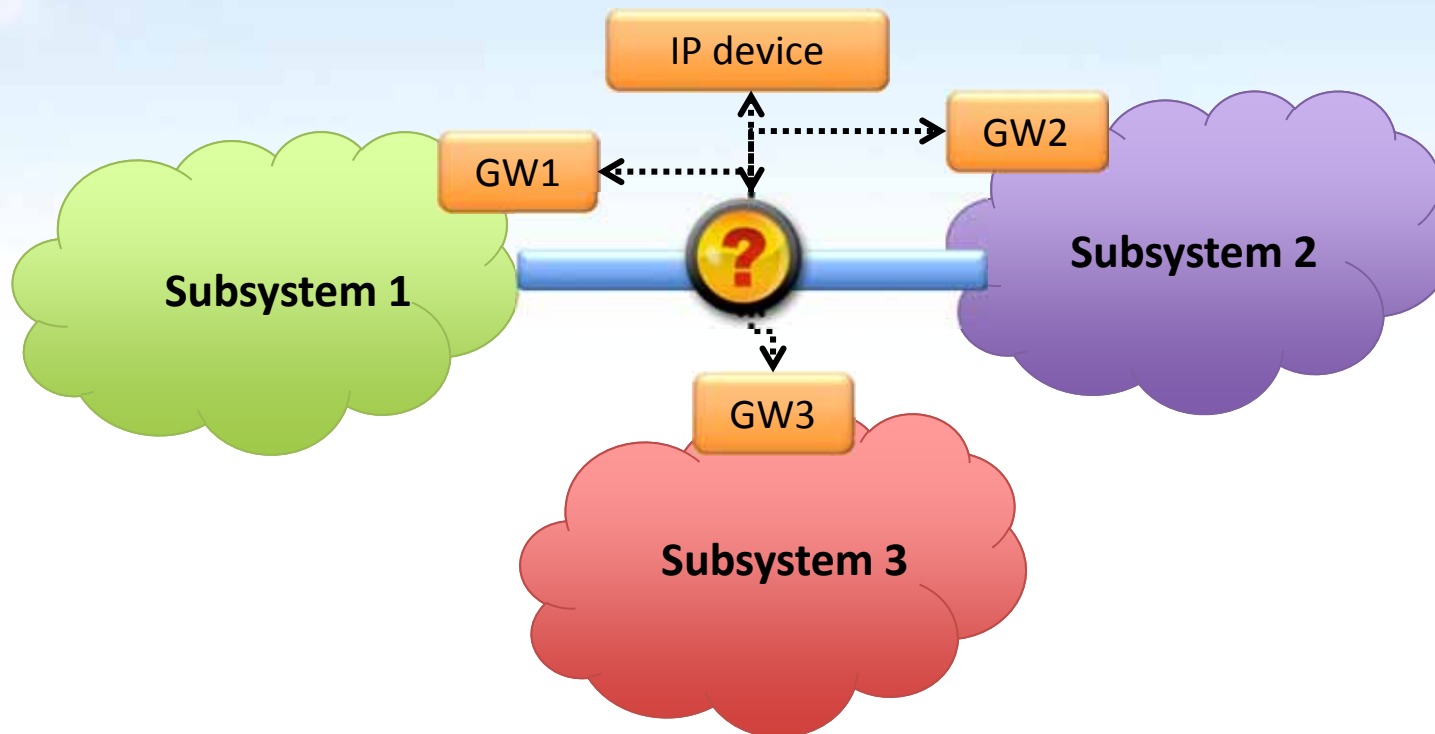
# IP WG Scope 1/3: E@H over IP

Define a suitable IP based solution for the communication interfaces of the HAN in the current E@H system.



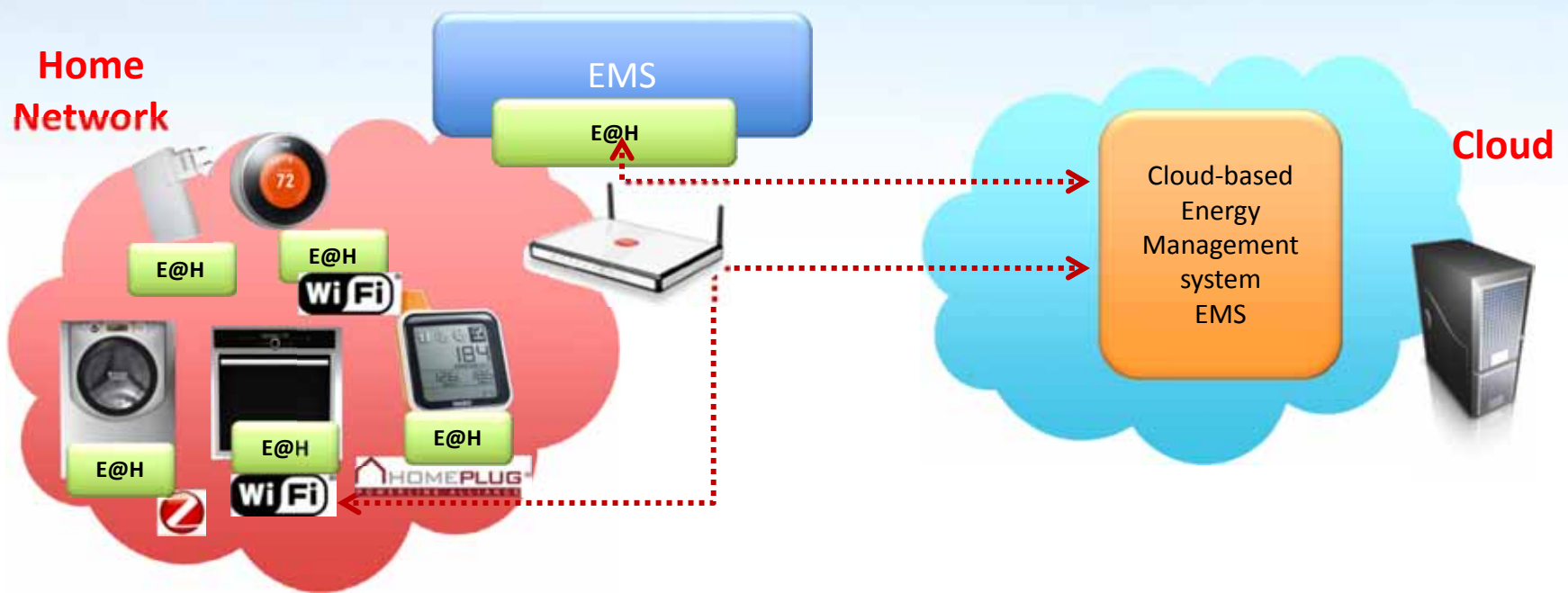
## IP WG Scope 2/3: Interaction with other system

- Identify an IP-based technology for communication among subsystems.
- Extension of the devices is in the mission of the E@h Association.



# IP WG Scope 3/3: E@H in the Cloud

Expose the devices in the E@H System to the Cloud (WAN)

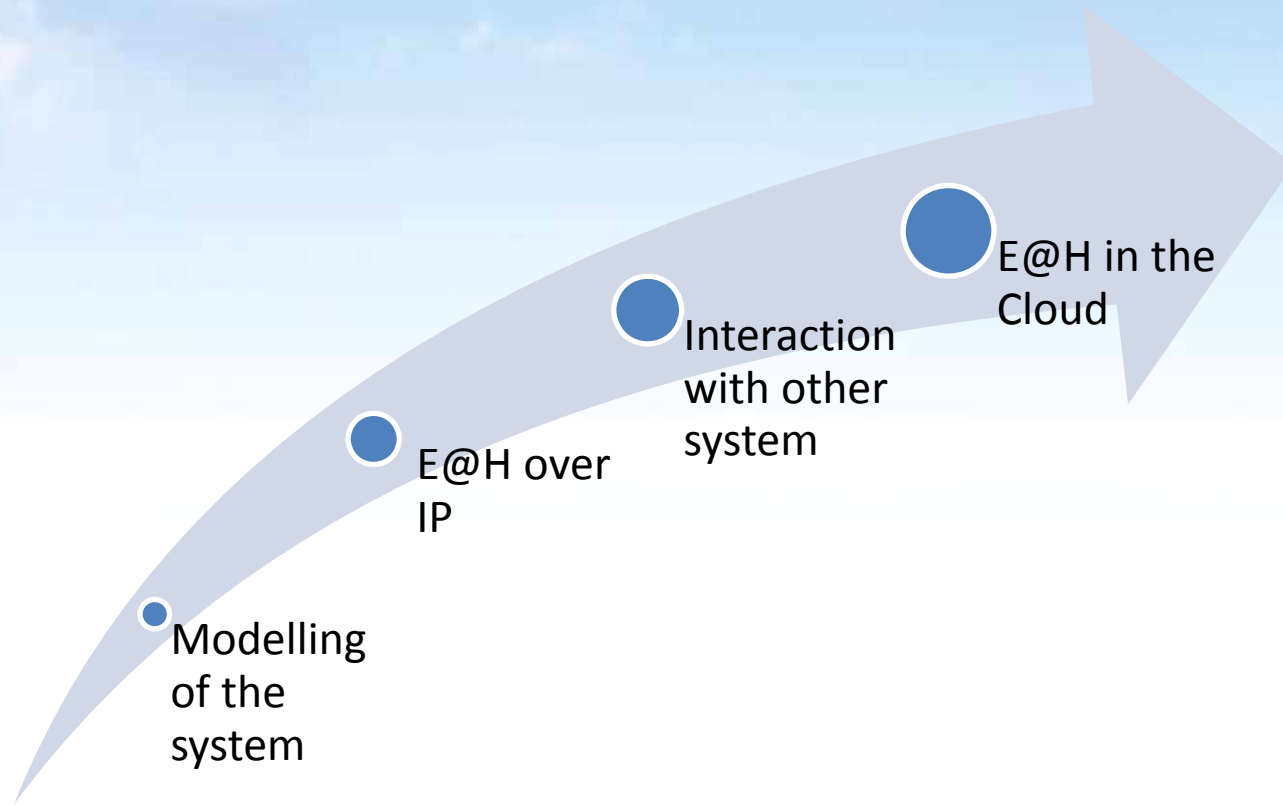


# Standards under evaluation

Standard group	Application Protocols	Communication Protocols
Smart Energy Profile 2.0	REST, HTTP, COAP	Wifi, Zigbee IP, HomePlug
ECHONET - Energy conservation and Homecare network	Echonet	IrDA Bluetooth, WiFi, PLC, IPv6, LonTalk
ZigBee Alliance	ZigBee PRO	ZigBee
AGORA'	TBD	TBD
UPnP HEMS/ DLNA	UPnP, SOAP	WiFi/Eth
EEBUS	XML, KNX, UPnP, ZigBee	KNX, ZigBee, WiFi/Eth
HOMELAB (OpenWebNet)	TCP/IP, UPnP, HTTP	WiFi/Eth

# IP Protocol Roadmap

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# Activity Planning

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Standard Model Scouting	█											
E@H Model Definition				█								
Standard Protocol Scouting – Preliminary Selection	█											
Standard Protocol Scouting - Finalization					█							
Mapping E@H Model to the selected Standard IP Protocol							█					
E@H over IP Prototype											▶ Start	





**Thanks for your attention**