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Overview of IEEE-SA Industry Connections (IC) Program

An efficient, economical, safe-harbor environment for building industry consensus

- Facilitate collaboration
- Produce shared results

Minimal effort, time and expense to begin collaborative work
Respected, neutral, third-party home for activities and results
Efficient path toward prestigious IEEE publication/standardization
Flexible options for evolution, transition & conclusion of activities

http://standards.ieee.org/develop/indconn/

Complements IEEE-SA "formal" standards activities



Overview of Convergence of Smart Home and Building

Architectures

There are striking similarities among the communications network architectures of smart home and building environments as they relate to applications including electric vehicle, home or building energy management, infotainment, etc. However, a gap exists for interworking among these various domains.



Although today users are able to access many domains through their TVs, smart phones and tablets, an effort is needed to enable seamless user experience that spans multiple application domains.

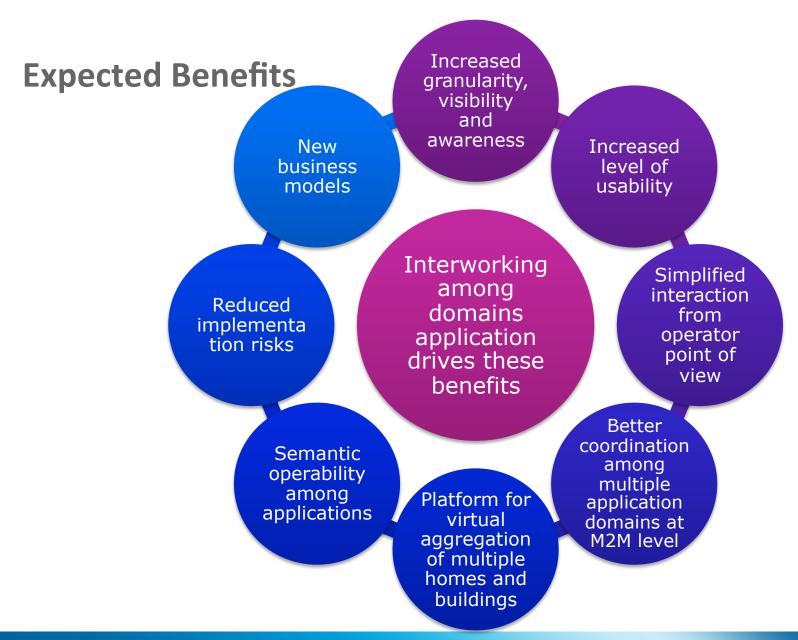




Domains under consideration

Comfort Home/ Fire Safety Energy **Appliance** and Building Management Building (ehealth, (heat, A/C, hot Elements: ambient Security, water, appliance assisted Maintenance Privacy energy living, management and Safety and and EV charging. infotainment, Diagnostics Access Energy sources light, such as fossil fuel, Control temperature, electricity, "Renewables" air quality, including etc) photovoltaics/ solar collectors/ gray water management) Inter-domain Communication **Association and Admission Control Network Security and Privacy** System and Device Maintenance







Related Work

Many bodies address this area from the industry specific point of view. Examples of such work include:

- Home Gateway Initiative
- Artemis IoE (<u>www.artemis-ioe.eu</u>)
- •ISO/IEC 15118
- •DKE committee K716, K STD 1711
- •CEN/TC 247 "Building Automation, Controls and Building Management"
- •RASSA
- •ETSI OneM2M and M2M
- •CEN/CENELEC ETSI Smart Grid Coordination Group
- •CEN/CENELEC SSCC-CG
- •ITU-T JCA-SG&HN Joint Coordination Activity on Smart Grid and Home Networking, ITU-T SG-13 and ITU-T SG-16
- Open Geospatial Consortium
- •IPSO

There is no known dedicated standardization activity that addresses the convergence of these multiple domains.



Member Companies





























Beneficiaries







End users, owners, and operators

Manufacturers
of products for
the Smart
Home and
Building
market

Service
Providers,
Utilities, and
EV
manufacturers

Other Activities of the CSHBA group

Our activities are intended to be complimentary to existing activities on IoT, electric mobility, and IoE

Workshops and roundtables providing a platform for industry collaboration

Analysis of existing activities and standardization gaps

An Implementation
Guide White Paper on
the Convergence of
Smart Home and
Building Architectures



Join us!

Join our IEEE-SA
Industry Connections
group on Convergence
of Smart Home and
Building Architectures

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