56 Internet of Radio Light Architecture for Buildings





Software Defined

5G Integrated VLC + mmW Remote Radio-Light

Network Function

Network provides

- Home Network, Admission Control, Routing and Mobility Management;
- Security DoS and Rogue Tx Monitoring.

Head (RRLH) system provides

- AV Streaming, Interaction and Location services;
- Immediate access to unlicensed spectrum;
- Bitrates potentially greater than 10Gbits/sec;
- Latencies of less than 1ms;
- Location accuracy of less than 10cm;
- Reduces EMF levels and interference;
- Lowers energy consumption at Tx/Rx;
- Increases User Equipment energy battery lifetime.



Virtualization:

- Off-loads the complexity of the 5G layer protocol processing required in the RRLH onto the Intelligent Home IPGateway;
- Invokes network functions to facilitate the provision of services to different types of user equipment.



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Project Coordinator: Adam Kapovits, Eurescom GmbHTechnical Project Manager: Prof. John Cosmas, Brunel University E-mail: loRL-Contact@5g-ppp.eu Follow us on twitter: @5G10RL