
dect

wireless technology



DECT WORLD 2025

NR+ Buildings Interest Group

Wireless for Smart Buildings



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Overview of the NR+ Buildings Interest Group

Collaboration among leading companies in commercial building automation

Driving adoption of secure, interoperable NR+ as transport for the industry

Defining certification program.

What are the standard values for the Device Manufacturers and the intended final users?



"A strong certification program that ensures integrity and interoperability is essential to the success of any standard".



The NR+ logo gains value through a strong certification program.



A technology is qualified as a standard once there are existing multiple choice for implementation (stack and silicon)



Thanks to education and promotion efforts that clarify the standards, this initiative is anticipated to encourage widespread adoption, boost competition, and lead to lower costs.

The NR+ BIG's Three Sub-groups



Technology

Bridging the gap between NR+ specifications and the specific needs of Building Automation — for example, enabling integration with Border Routers and other infrastructure components.



Marketing

Driving NR+ promotion, educating the market, and clearly communicating the value the technology brings to building owners. This includes outreach, content creation, and awareness campaigns.



Certification

Establishing a robust certification program to ensure full interoperability between NR+ certified devices, including the selection and coordination of Authorized Test Labs (ATLs).



Marketing Subgroup: Advantages of NR+

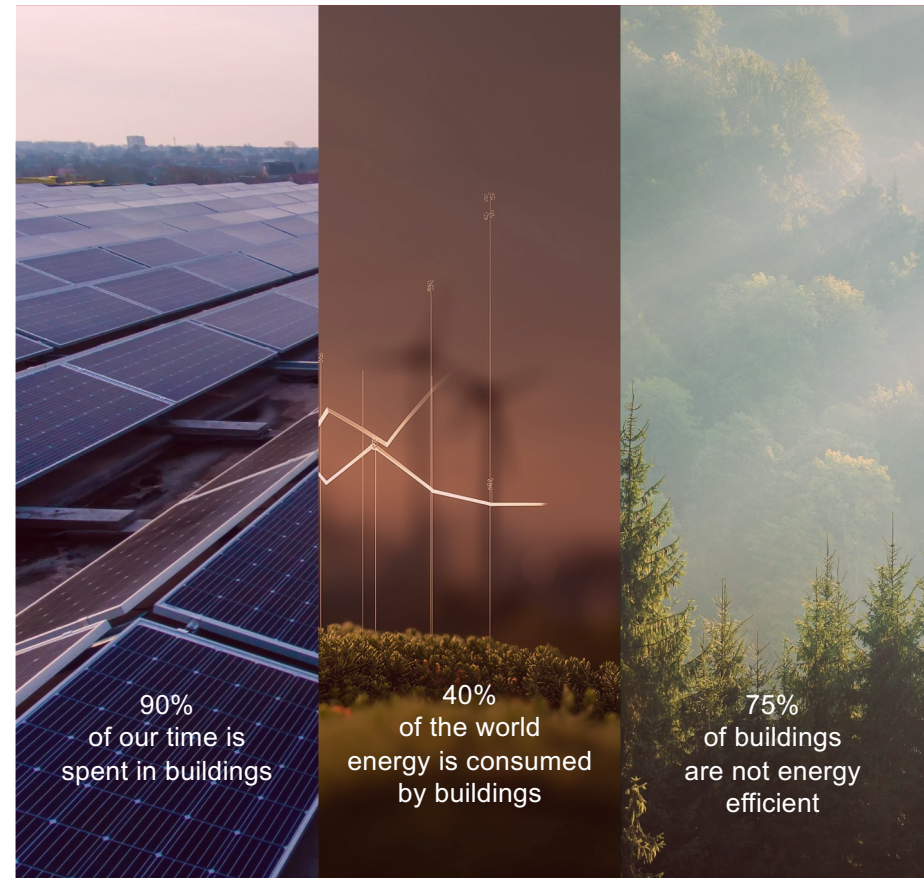
To deliver ultra-reliable wireless coverage everywhere in and between buildings connecting any number of devices.

To ensure ease of installation and planning to optimize rollout effort.

This enables the largest community of adopters to deliver secure, interoperable seamlessly connected products.

Market Drivers

- Buildings consume 40% of global energy,
- 75% of buildings are inefficient
- Need to improve fragmented automation systems to interoperate, share network



A smart building, today



Fire Alarm



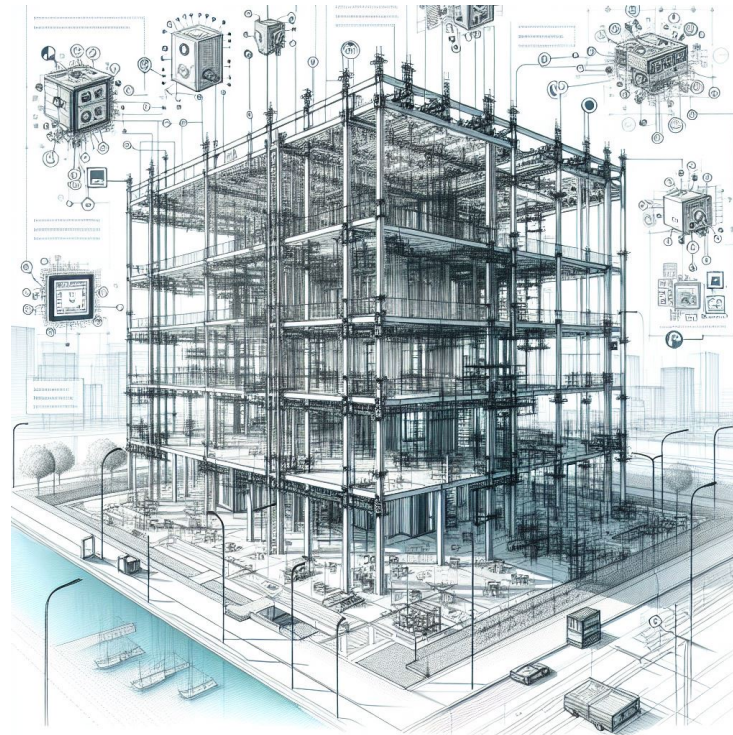
Leak
detection



Lighting



HVAC



Emergency
Lighting



Energy



Security
&
Access Control



Others

Siloed operation | often multiples gateways creating point of failures | Massive #devices

Challenges in Building Automation



Energy Saving

Millions of m² to refurbish
The Need to monitor what's happen inside the building

Opportunity

Wireless & Wired smart IoT propositions



Cybersecurity

EU industries cyber resilient

NIS2 by Oct 2024

RED DA by August 2025

CRA by end of 2027



IP infrastructure

An IP building backbone for LAN and E2E connectivity

More use cases, better services and security.

Short & Long range through Wired and Wireless IoT solution.

- To meet sustainability goals, energy-saving regulations require the deployment of millions of IoT devices in existing buildings. These devices are essential for monitoring building behavior and enabling intelligent scenario-based management.
- However, such widespread deployment must not introduce cybersecurity risks. Buildings must remain secure.
- **IP-based** technologies offer a robust architectural foundation — delivering best-in-class security performance while simplifying interoperability across diverse building ecosystems.

Increasing network complexity

To meet these demands, hundreds of millions of wireless sensors will need to be installed and networked each year throughout Europe and the Americas.

This rapid expansion of wireless sensors-devices places considerable pressure on wireless communication protocols, especially in terms of **range, density, throughput, and reliability**.

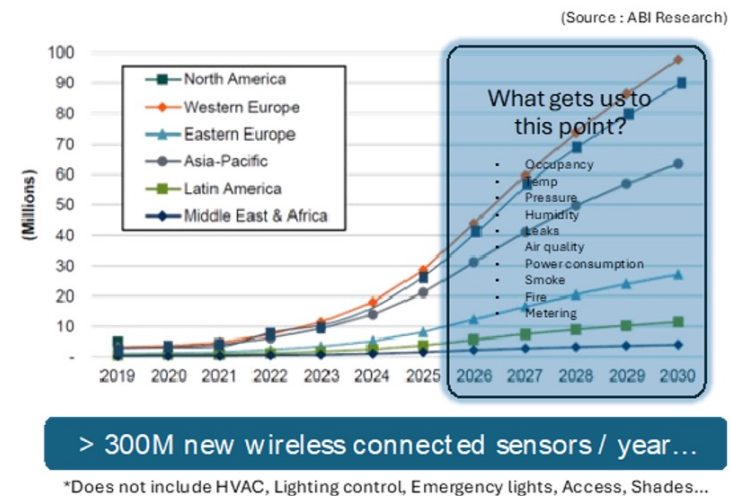


Figure 3 - Sensor Shipments by Region (World Markets: 2019 to 2030)



DECT NR+ BENEFIT

To address the issue of **siloed operations** (consolidating all building applications or device types into a single silo) and the **Energy Performance of Buildings Directive (EPBD)** would involve managing a very large number of devices.

As a 5G technology, DECT NR+ is recognized as a Massive IoT wireless solution.

To address the Challenges of **wireless reliability** (robustness, long range and secure):

NR+ offers long-range capabilities and incorporates cutting-edge technology.

To address the **IP trend**

DECT NR+ supports IPv6 technology, aligning with current IP trends.



Marketing Subgroup

Work in progress

- Defining use cases and providing illustrations for upcoming marketing communications
- Positioning classification table highlighting NR+ performance

Meeting

- Weekly Meeting – Tuesday, 2:00 PM CET – Considering rescheduling to 4:00 PM to accommodate participants from Americas-based companies



Certification Program Subgroup



*BIG Group
Formation*



*Test Specifications
Published (ETSI)*



Beta
Testing / Go Live

Test Tooling / Golden Unit

Detailed Certification Process Design

High Level Certification Process Design

Building Interest
Group Roadmap

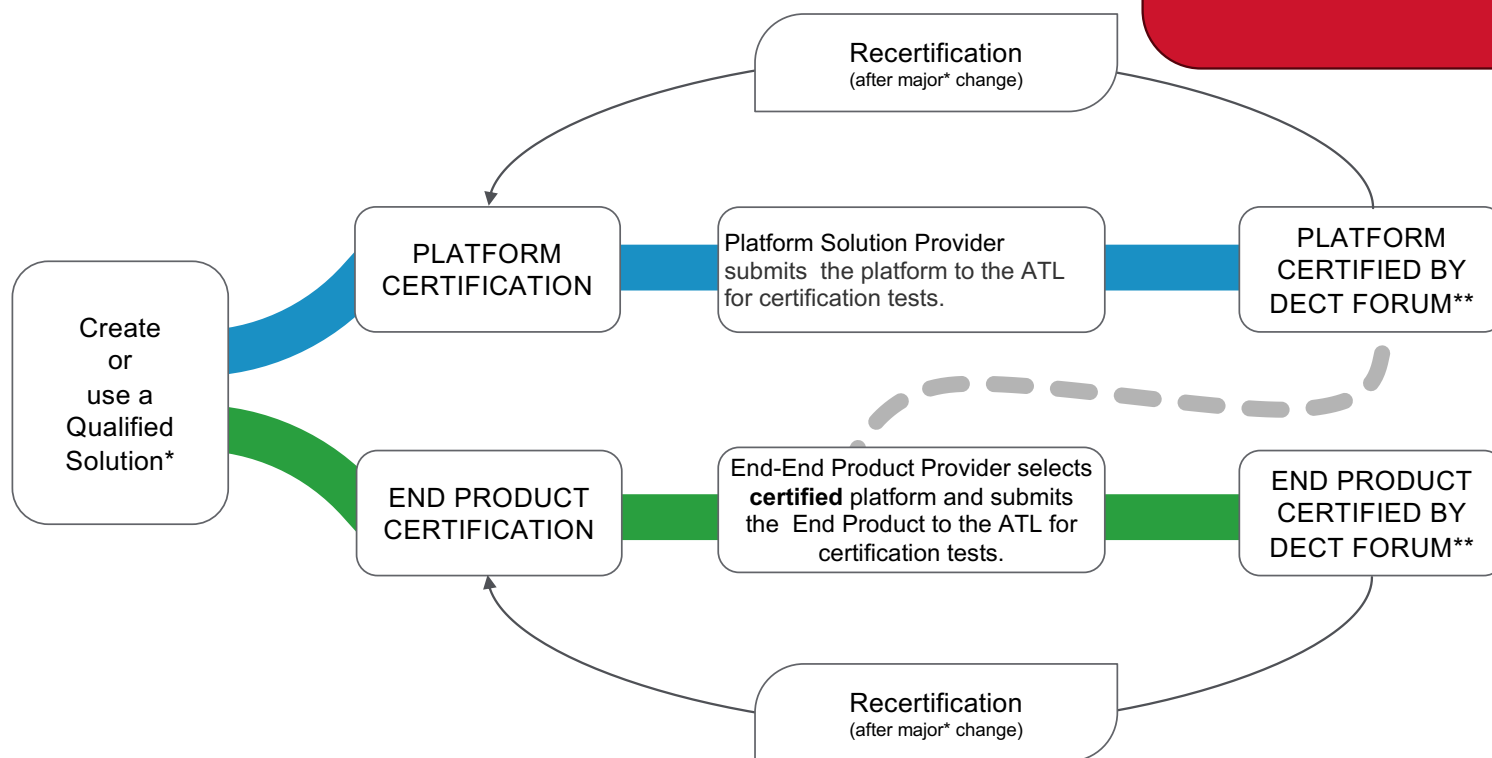
H1 2025

H2 2025

H1 2026

H2 2026

Early concept, *subject to change!*
Idea is to take what has worked well within **DECT Forum** and combine with proven certification programs from the IoT industry



Certification Subgroup

Work in progress

- Finalizing High Level Process Design (ETA: 18 November)
- Detailed Process Design, Tooling Definition & Creation
- Engage with external laboratories to onboard them *early*.

Meeting

- Weekly Meeting – Monday, 2:00 PM CET – Considering rescheduling to 4:00 PM to accommodate participants from Americas-based companies

Technology Subgroup



Call for volunteer



This sub-group is not active at the moment, and we are looking for a volunteer to take on the leadership role. If you are interested, please reach out to Roel and the Chair of BIG.



The initial deliverable is the Border Router specification, which is crucial for linking to the NR+ ecosystem through any internet connection, mobile application, and other platforms.



The timeline is to get it ready by the end of 2026



