EVOLUTION OF LoRaWAN® STANDARD

EXPANSION OF ADDRESSABLE MARKETS

- Asset visibility with satellites
- IPv6 application integration (metering DLMS)
- Relay to extend connectivity
- Multicast for point-to-multi-point applications
- High density global coverage from satellites
- Satellite connectivity enhancements
- Relay enhancements
- Mobile gateways for drive-by data collection

HYPERSCALABILITY

- Multicast (multi-point connections) enable:
- Over-the-air firmware updates
- QR-based device ID for easy onboarding
- High-capacity global coverage
- Codec APIs for quick sensor decoding
- Multi-package access (for faster firmware updates)
- Carrier-sense multiple access for improved uplink utilization
- Device profile management
- Device migration
- RFID over LoRaWAN (GS1)

CORE NETWORK MANAGEMENT

- Network coverage (public/private)
- Inter-network roaming
- Remote activation
- Community/hybrid public/private interconnectivity
- Roaming hub for global coverage
- Geolocation and advanced identification
- Application server interface standardization
- GW interface standardization

CERTIFICATION

- First LoRaWAN device is certified
- LoRaWAN Certification Test Tool (LCTT) for LW1.0.2
- LCTT testing support for LW1.0.4
- IPv6 support added to LCTT
- Over-the-air firmware updates and relay certification
- Advanced interoperability testing

PHYSICAL/LINK LAYER DEVELOPMENT

- First LoRaWAN standard
- Security enhancements
- Battery-efficient latency tradeoff (Class B)
- Satellite connectivitiy (LR-FHSS)
- Multicast device-to-device
- Relay
- Crypto-agility

LoRaWAN®

2015-2017	2018-2020	2021-2023	2024-2027
Building Networks	Interconnecting Networks	Ease of Deployment	Application Scalability

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