

Smart IoT Village Broadcasting Service

over LPWA Network

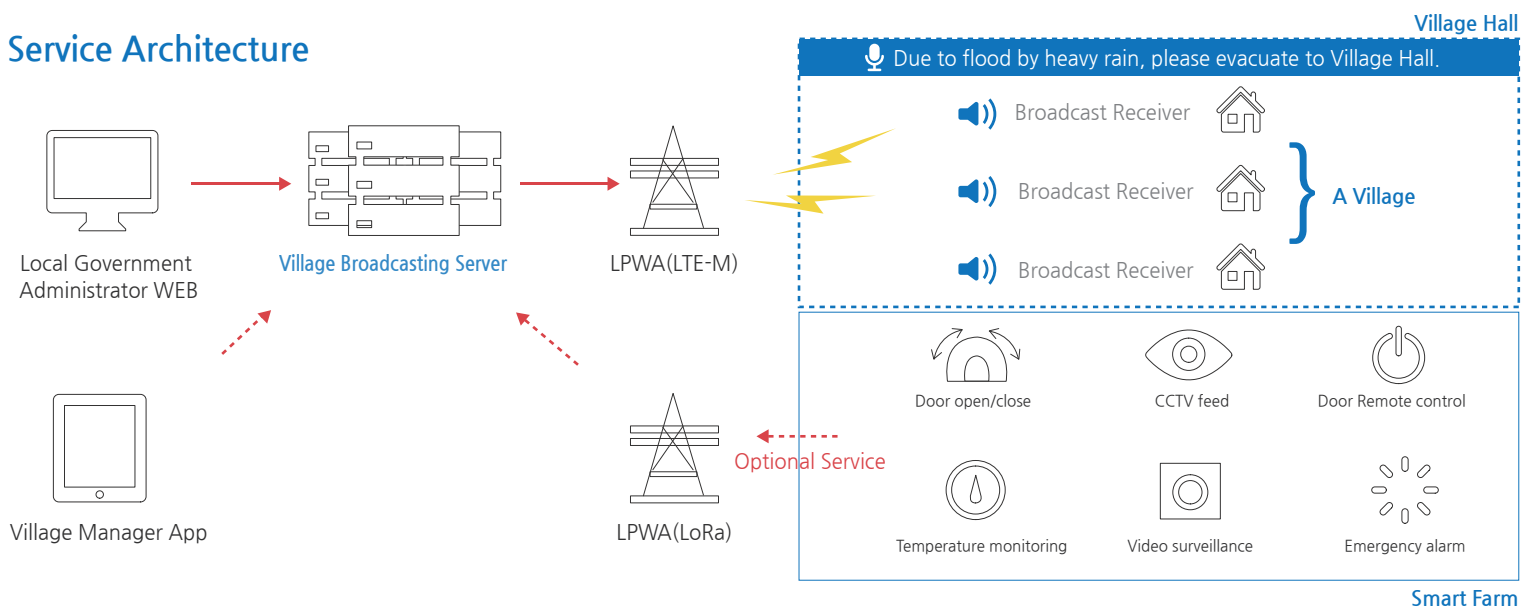
Service Overview

Effective broadcasting service for local area or village through Broadcast Receiver at home for emergency and other various public notifications

Requirements from Current Broadcasting System

- **Broadcasting by Trumpet Speaker:** many communicability issues such as dead spot, echo, howling, invasion of privacy
- **Wired individual broadcasting:** : difficulty in landline installation, voice loss during long distance transmission
- **Broadcasting by Mobile phone:** communication fee

Service Architecture



Service Comparison

Category	Smart IoT Village Broadcasting	Existing Village Broadcasting
Component	<ul style="list-style-type: none"> Outdoor Broadcasting (Broadcasting System + Amplifier + Wired Outdoor Broadcast Receiver) Indoor Broadcasting (Home Broadcast Receiver) 	<ul style="list-style-type: none"> Outdoor Broadcasting (Broadcasting System + Amplifier + Wired Outdoor Broadcast Receiver) Indoor Broadcasting (Wireless Transmitter + Home Broadcast Receiver)
Communication Method	<ul style="list-style-type: none"> LPWAN (LTE-M/LoRa 2-way communication) 	<ul style="list-style-type: none"> 422Mhz RF Wireless Transmission (1-way communication)
Broadcast Type	<ul style="list-style-type: none"> Voice and Text Messages (Data Broadcast) 	<ul style="list-style-type: none"> Voice Broadcast
Broadcast Type	<ul style="list-style-type: none"> Voice message broadcast and replay Message display Date, Day, Time display Weather Information, Facility Temperature /Humidity display Emergency Call Address information 	<ul style="list-style-type: none"> Voice message broadcast Date, Day, Time, Temperature(indoor) display
Advantage	<ul style="list-style-type: none"> Message Delivery Confirmation Electronic Album in idle mode 3rd party service link 	<ul style="list-style-type: none"> Stable service No communication fee
Issue		<ul style="list-style-type: none"> Communicability (Noise, voice loss, echo, howling, etc.)

Broadcast Receiver Menu

Current Time
Date, Day, Time

Exterior Sensor Information

Weather Information
Today & Tomorrow's Temperature, Humidity, Wind Speed, Wind Direction, etc

Text / Address Display
- Address Display in ordinary time
- Unread Message Display

Emergency Call
Emergency message notification to pre-configured telephone number

Text View
Show the text message in the full screen

Broadcast Replay
Example)
Touch once: Replay the recent broadcast
Touch twice: Show the list of previous broadcasts

Service Scenario

