AllSense IoT
Making Sense of the Internet of Things

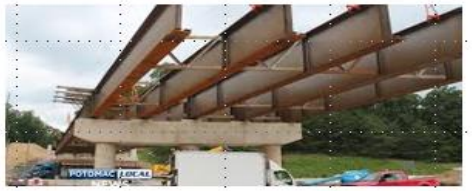
AllSense IoT Industrial Zone LPWan Gateway Mini-Networks

AllSense IoT (www.allsense-iot.weebly.com)

is a Malaysian Internet of Things Solution Creator –

with Global Plans

We focus on **low cost, no-capex, subscription-based deployments** of IoT solutions for SME's around the world



Beams

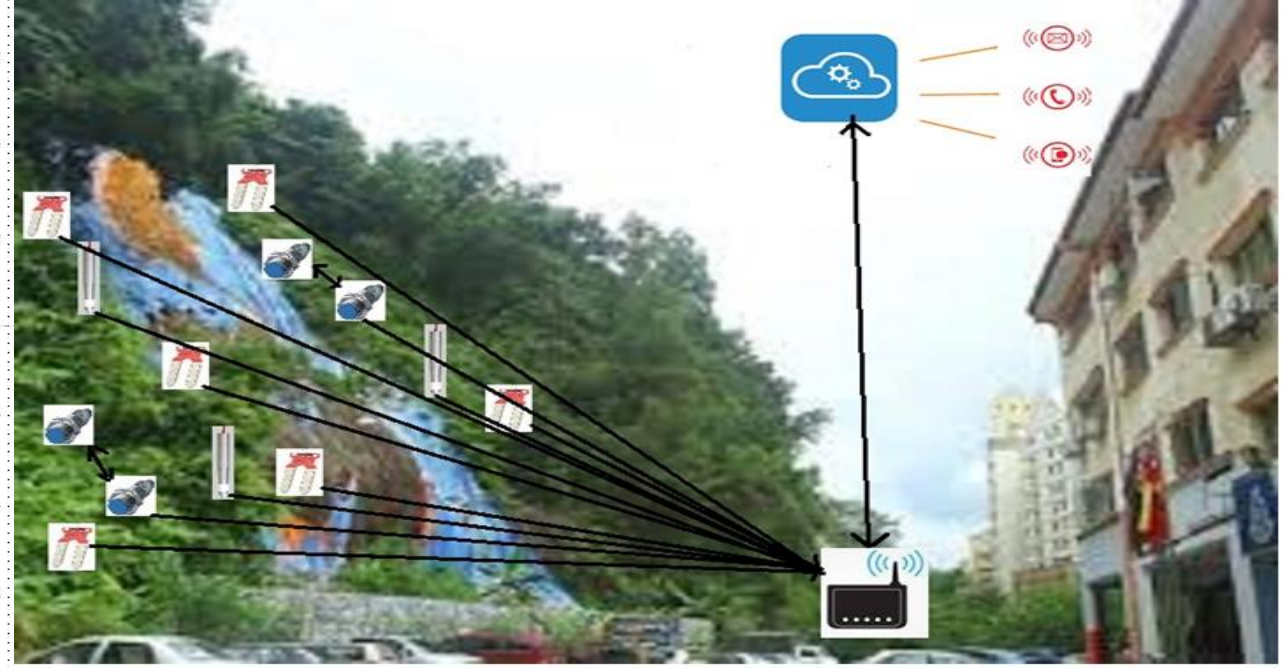
Bridges

Slopes

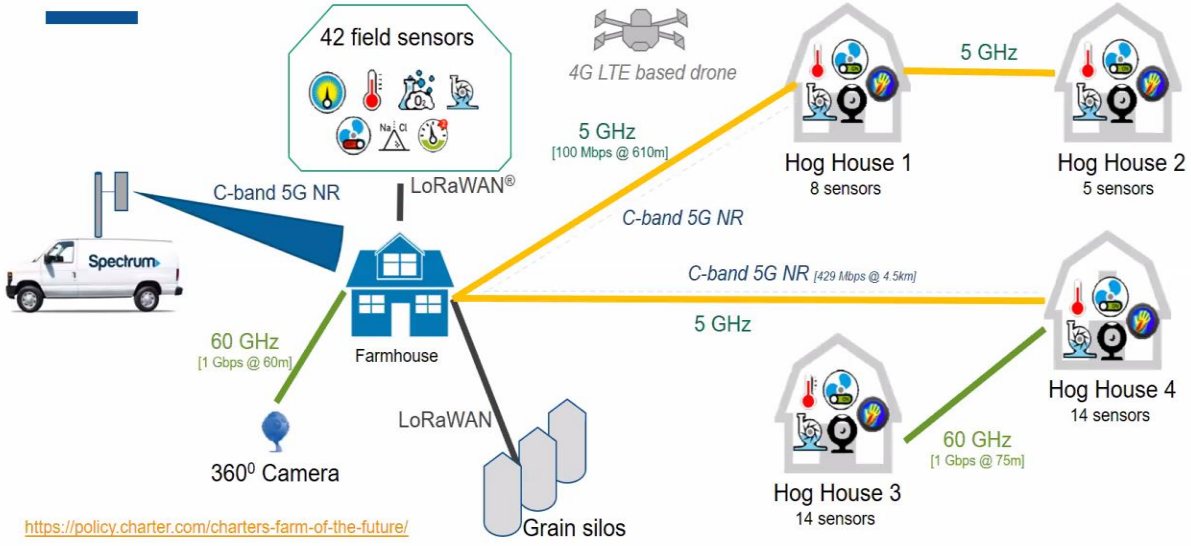
Pumps & Motors

Steel Structures

Wharfs & Piers

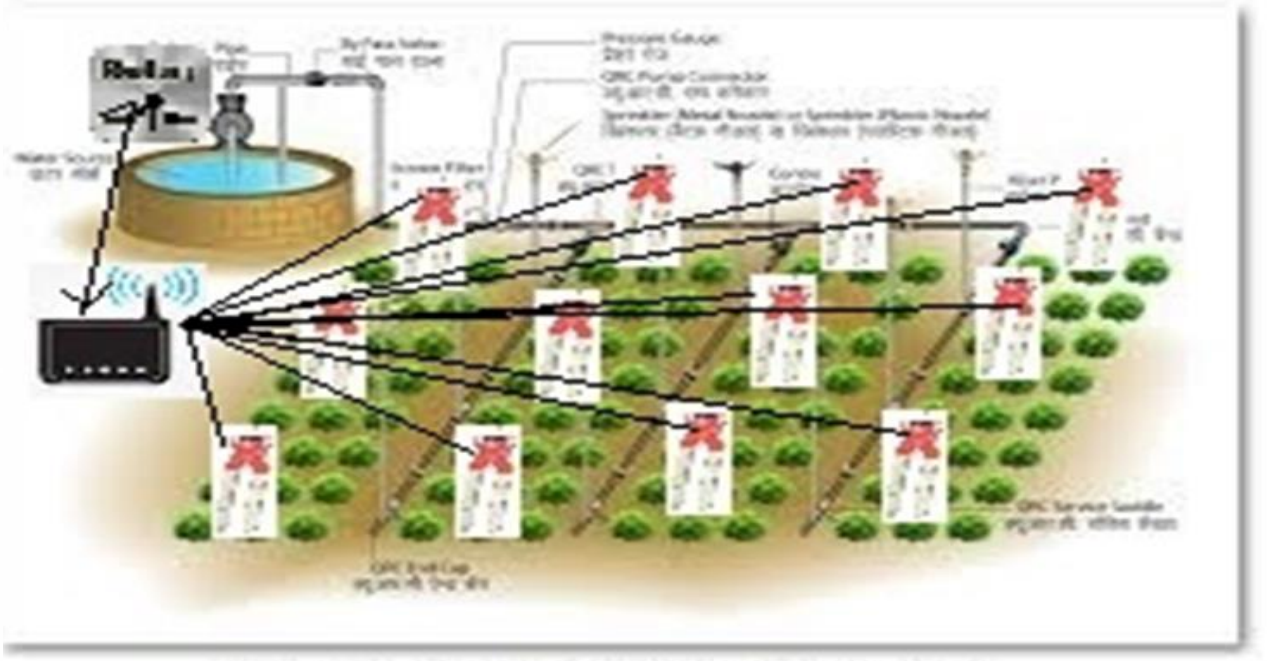


Multi-RAN: Combining Licensed & Unlicensed Spectrum



https://policy.charter.com/charters-farm-of-the-future/

Charter



Layout of Sprinkler Irrigation System

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LPWan (Low Power Wide Area Network) IoT protocols permits thousands of physical sensors (measuring virtually anything that can be imagined!) to remotely and in real-time monitor the condition of:

- Machinery
- Infrastructure
- Mobile Assets
- The Environment

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LPWan Protocols can be used for:

- Sending small packets of data at frequent intervals during the day, indicating conditions being measured by the sensors
- Long life wireless battery sensors

LPWan can’t be used for:

- High volume data (images, video, talk)

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For Use Cases where LPWan cannot be used, we can also deploy other systems (where available in the location):

- Sim-connected cellular uplinks
- NB-IoT
- Wifi
- LTE

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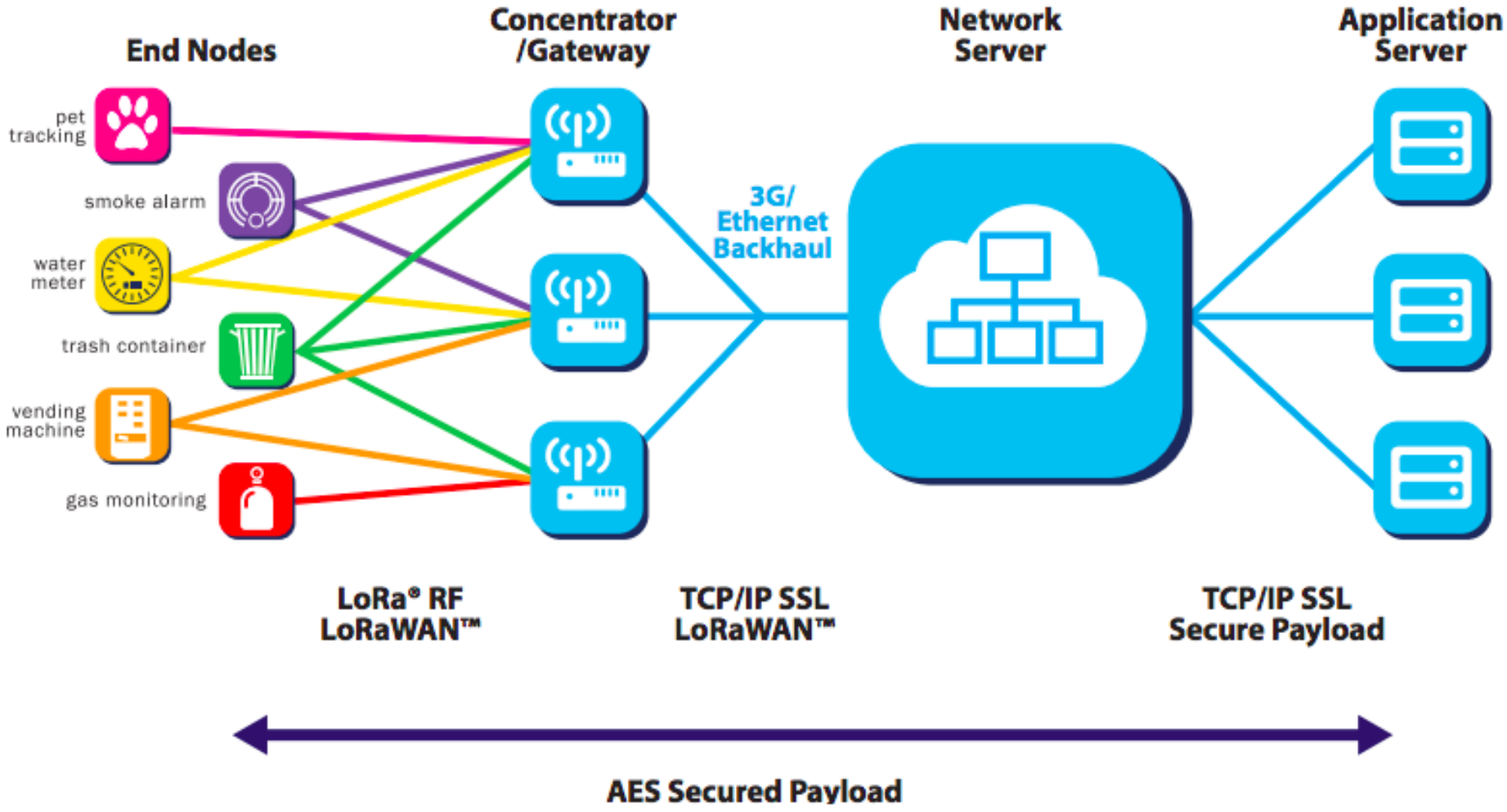
These thousands of sensors send data through a small number of “Gateways” and from there to the Cloud, where the “magic” happens:

- Data Analysis
- Data Management
- Automatic Alerts to Asset Owners when things are starting to go wrong (***BEFORE*** they go really wrong!!)
- Automatic Operation of Shut Down or Turn On controls to protect or operate equipment



NB: We are moving to adopt the MIOTY Protocol (www.mioty-alliance.com) in place of LoRaWan, due to the more robust nature of MIOTY for scalability and security)

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However, in order to enable SME businesses to take advantage of the benefits of IoT, they need to be able to have both Sensors and Gateway hardware.

While not overly expensive, setting up and managing the Gateway infrastructure is beyond most Business Owners – they just want the results!

So AllSense IoT has developed it's

Industrial Zone LPWan
Gateway Mini-Network Strategy

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The Strategy means that AllSense IoT will deploy and manage Gateway Mini-Networks in industrial parks and zones to support our target SME Business market in developing countries
(but can be deployed in any country).

This will allow those Businesses to simply deploy sensors to suit their needs.

And on a simple monthly subscription basis –

so no CapEx!

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AllSense IoT and it's Local In-Country Partners will be the Network Manager, and initially, the System Integrator for creating solutions for Business Clients.

However, we will also encourage the local IoT ecosystem and enable local IoT players to deploy solutions and connect through our Network

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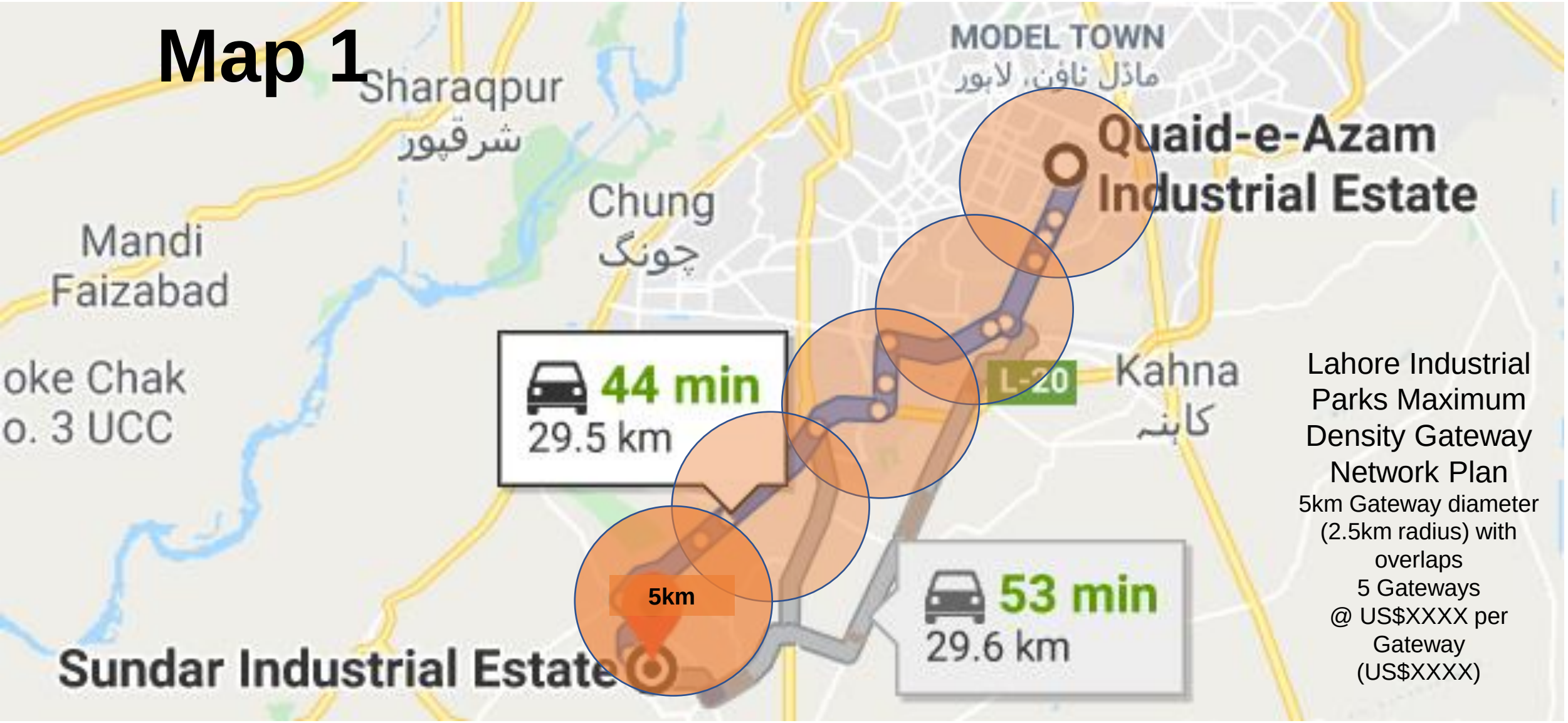
The following Maps show an example of such a deployment in Lahore, Pakistan (a project in the pipeline).

Map 1 is the deployment of 5 Gateways covering the industrial corridor of Lahore (Phase 1)

Map 2 shows the expansion of the network coverage to provide for “fair use” of the network throughout the whole of Lahore (Phase 2)

Map 3 shows the densification of the network to provide sufficient Gateway coverage for all Lahore Users (Phase 3)

Map 1



Lahore Industrial Parks Maximum Density Gateway Network Plan

5km Gateway diameter (2.5km radius) with overlaps

5 Gateways @ US$XXXX per Gateway (US$XXXX)

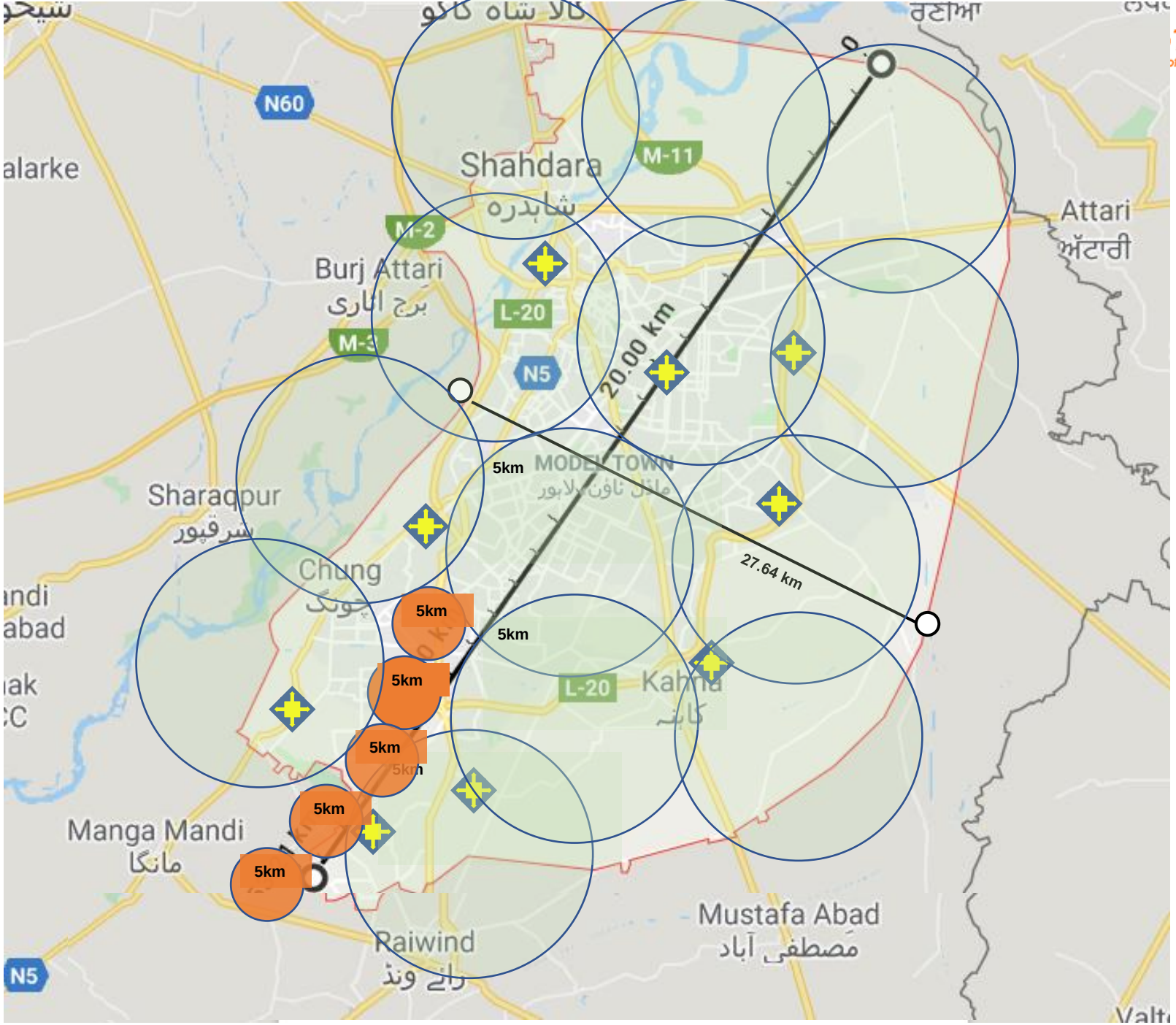
Map 2

Lahore Maximum Medium Gateway Network Plan

10km Gateway diameter (5km radius) with overlaps
20 Gateways
@ US$XXXX per Gateway
(US$XXXXX)

10km General Gateways

5km Industrial Corridor Gateways



Map 3

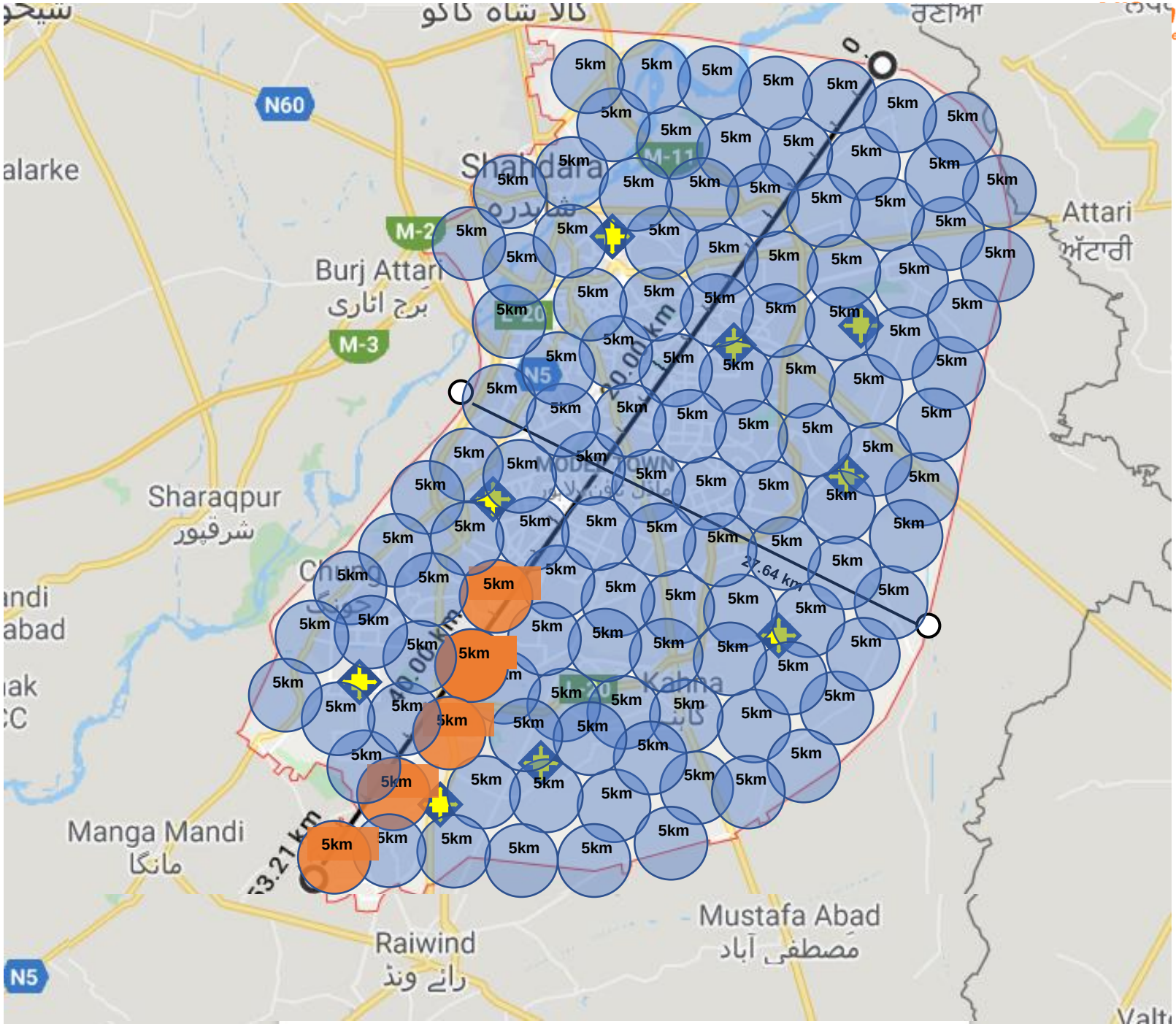
Lahore Maximum Density Gateway Network Plan

5km Gateway diameter (2.5km radius) with overlaps

100 Gateways @ US$XXXX per Gateway (US$XXXXXX)

5km General Gateways

Industrial Corridor Gateways



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From the day that the very first Gateway is deployed, Businesses can start deploying sensors and sending condition data on their most critical assets and equipment.

As more Gateways are deployed, more and more sensors can be used throughout the city of Lahore for more and more things.

Once sufficient Gateway density is achieved, city-wide infrastructure, air quality, water quality and many other use cases can be monitored to support citizens needs, cut City Government costs and improve the quality of life for all Lahorians.

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Timeline & Steps

1. Local Partner presents Network Coverage Plan to Pakistan Telecommunications Authority (PTA) – July 2020

2. Local Partner presents Partnership Plan to Metropolitan Corporation Lahore (MCL) – July 2020

3. PTA Approval – September 2020

4. MCL Partnership – August 2020

6. First Gateway Deployment (Industrial Zone) – November 2020

7. Phase 2 Roll Out (Medium Density) – March 2021

8. Phase 3 Roll Out (Maximum Density) – December 2021

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If you'd like to know more or you wish to Partner with us for a Roll Out in your city, please contact Dennis McMahon on +60169839715 or email: mcmdennis@gmail.com