Druid

Private Networks for Critical Comms & IoT

Careful planning + Strategic partnerships = Sustained growth

Tadhg Kenny
Driving Mobile Technology Innovation
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Druid Software
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See contact info
See connections (500+)

A highly motivated sales, marketing and business development professional with over 20 years experience in B2B & B2C environments.

Commerical experience ranging from retail to B2B sales and marketing to small, medium and large enterprises. Extensive management experience at board level.

Specialties: Sales & Go to Market Strategies, Marketing, PR, Project Management, Business Development, SaaS, Cloud, Strategic Consulting, Business planning, Sales strategy development, Go to Market Strategies, Product development, Pre-Sales, Mobile, Sales Management, Strategy, Solution Selling

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Druid

Who We Are

Software Development Company based in Dublin, Ireland

Cellular Technology Platform - "RAEMIS"

Solutions for Enterprise, Mobile Edge Computing, Public Safety and IoT

Customisation and Technology Consultancy Services

Druid

Future
Product-based company
with flagship platform
Raemis™

Inflight cellular
network

2003

First hospital system
NL market

2011

First global mobile
operator sale

2015

4G patrol communications
solution

2017

GSMA MWC19™
Barcelona

raemis™

2001
Company creation
consultancy services

2008
Raemis™ platform
launch

2014
Japanese market,
Phillipines, Singapore

2016
IoT reach –
container tracking NIB

2018
US CBRS market
fixed wireless access

Case Study: Dedicated Networks for Critical Public Services

Isala Klinieken Hospital

Private Cellular Network

Public Cellular Network

raemis ™

WWW
The Internet

Enterprise Private
Cellular Coverage

Business Processes
Integration

Alarm Integration

Enterprise PBX
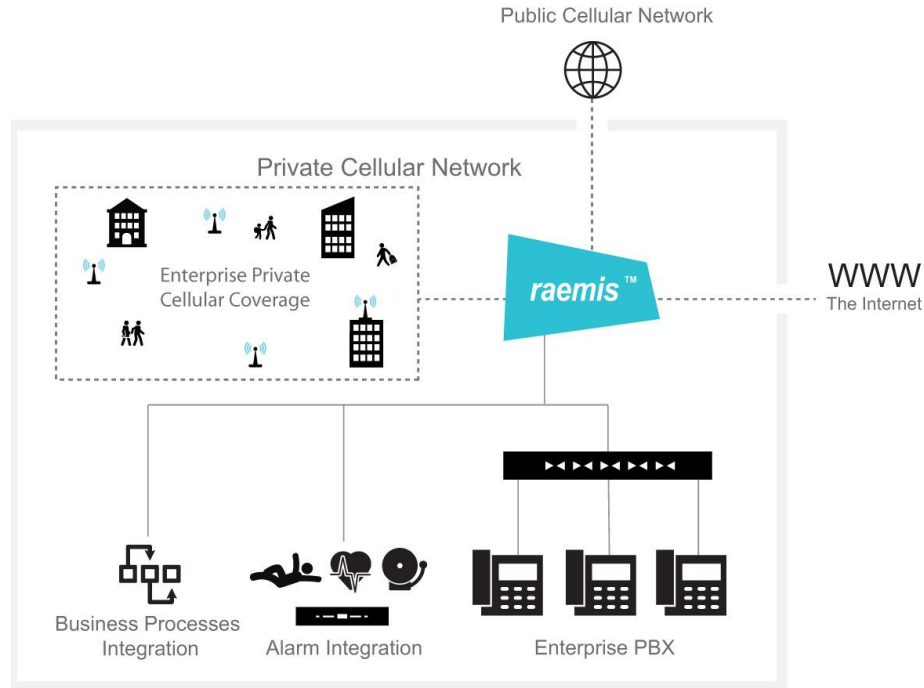
Customer Need:
Built in 2013, the management wanted to deploy the best mobile technology available to deliver dedicated communications to the hospital staff that integrated with the latest nurse call technology.

The management were interested in moving towards cellular technology to meet its communications needs and move away from end of life paging systems that were very costly to maintain.

A dedicated private network with small cell infrastructure was needed to guarantee cellular coverage and capacity within the hospital campus.

The Solution:
Druids private cellular network application Raemis™ delivers over 10 millions calls a year over its dedicated resilient cellular communications services to thousands of medical staff at the ISALA campus.

Our open SIP interface provides full integration of the mobile handset to the enterprise PABX, turning each mobile device into a SIP extension.

Our REST_API provides full integration of the latest nurse call alarm technology, leveraging the capabilities of the ubiquitous smart phone device to improve patient outcomes.

Druids mobile networks for healthcare. Dedicated voice, messaging & data where and when its needed.

Druid.

4G/LTE Networks for Hospitals: Dedicated secure mobile data keeping Doctors and Nurses connected to patients at all times
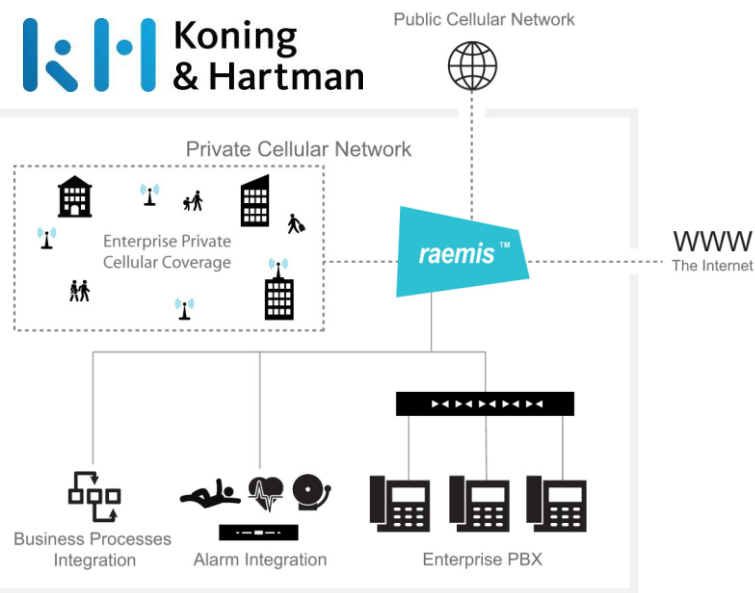
Druid

Healthcare requires highly secure, resilient mobile data for the large-scale critical communications services accessed daily. Koning and Hartman, Druids ICT specialists introduced the Druid 4G technology to this Dutch hospital site in 2018. Several hundred doctors and nurses are provided with a resilient, quality of service private 4G network across the hospital campus for mobile voice, messaging and data services.

Wifi is an excellent technology for many enterprise use cases. It has serious drawbacks however in comparison to 4G/LTE, when trying to carrying secure business critical mobile communications and scaling to accommodate hundreds of devices.

High quality mobility has always been a challenge for shorter range technologies like Wifi to deliver solely. Interference can also be a serious issue with virtually any smart phone device being capable of acting as a Wifi access point and interfering with the enterprise's business critical communications.

The Druid 4G healthcare network is deployed in its own dedicated spectrum working in harmony with the residents Wifi, decongesting it. There are plans now for a 2nd Dutch hospital in '19 from the success of this solution.

Koning & Hartman

Public Cellular Network

Private Cellular Network

Enterprise Private Cellular Coverage

raemis ™

WWW
The Internet

Business Processes Integration

Alarm Integration

Enterprise PBX

Druid delivers the latest 4G/LTE secure mobile data for dedicated Hospital Communications http://tinyurl.com/y4h45hc6

SMALL CELL FORUM
Solving the HetNet puzzle

SCF ref

Case Study: Dedicated Networks for Elderly Care facilities

inspired | RETIREMENT VILLAGES
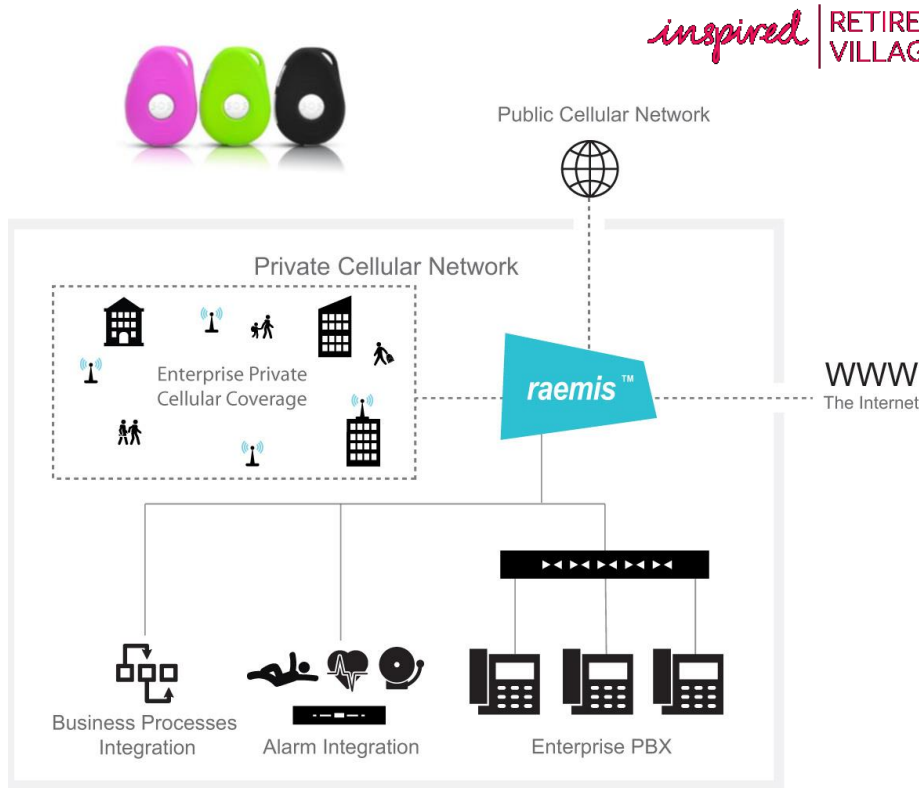
Customer Need:
Built in Oct 2017, the management wanted to deploy the best mobile technology available to deliver dedicated communications to the care staff that integrated with the latest nurse call technology.

The management wanted to provide the residents of the assisting living homes with a device that linked directly into the private network. That would give them freedom to leave the facility but at the same time be part of the village private network communications systems.

A dedicated private network with small cell infrastructure and pebble devices was selected.

The Solution:
These care facilities are often deployed in more rural areas. Druids private cellular network application Raemis™ removes coverage black spots, and ensures dedicated coverage and capacity where and when its needed.

Our open SIP interface provides full integration of the mobile handset to the enterprise PABX, turning each mobile device into a SIP extension.
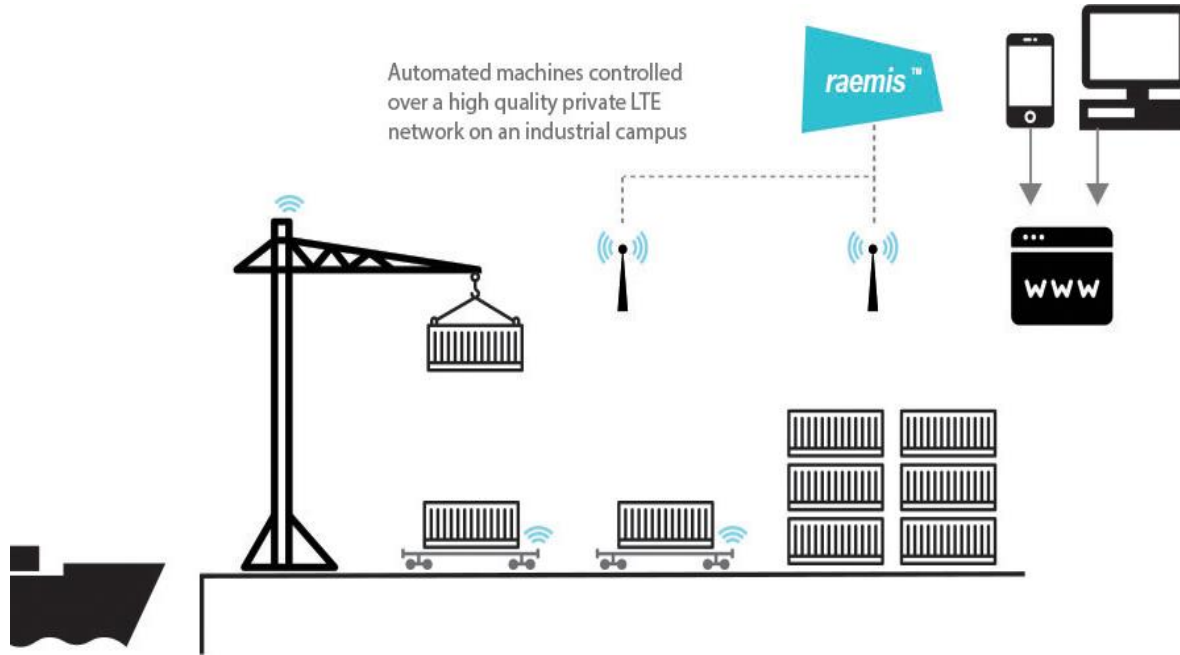
Our REST_API provides full integration of the latest nurse call alarm technology, leveraging the capabilities of the ubiquitous smart phone and pebble device to improve patient outcomes and residents standard of living.

Druids Private Networks for dedicated voice, messaging & data for Care Village Campus & Elderly Care facilities

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Rotterdam Harbour

Automated machines controlled over a high quality private LTE network on an industrial campus

raemis ™

www

Since 1962 Rotterdam Harbour is one of the world's busiest ports, embracing new technology such as unmanned vehicles to boost its efficiency and reduce cost.

This digital transformation project needed a low-latency solution for the positioning application, vehicle control and cargo data of unmanned vehicles in real-time.

Public LTE coverage was ruled out due to basic coverage issues, costs of service, resilience and latency. There are countless WiFi applications in the target domain and cost, latency, connectivity, security issues rules out its use.

After an extensive evaluation Druid's Private Cellular LTE Solution was selected as the best technology to meet this need, as it provided:

- ❖ Dedicated secure coverage
- ❖ Low latency guaranteed (30ms)
- ❖ Ease of management and expansion

**Druids dedicated private 4G networks are essential for IIoT.
Dedicated, highly secure, low latency, and easy to manage.**

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# Ship to Shore: Container Tracking, Telemetry, Maritime Communications and Data services, IoT over P4Glte

Druid's IoT Reach solution lights offshore black spots with coverage for IoT devices. Druid's IoT reach solution can operate in licensed or unlicensed spectrum depending on the specific use case. It acts as an inbound roaming network for IoT devices and provides a real time management interface to identify the IoT devices present on its radio resources.

In this use case Druids private network provides vital coverage on ships for container tracking and telemetry monitoring of refrigerated containers for example for our partners (WMS) Wireless Maritime Services.

Wireless Maritime Services LLC (WMS) is a joint venture between AT&T and Global Eagle Entertainment that specializes in maritime communications including cellular voice, text, data, Wi-Fi and Internet of Things (IoT) connectivity.
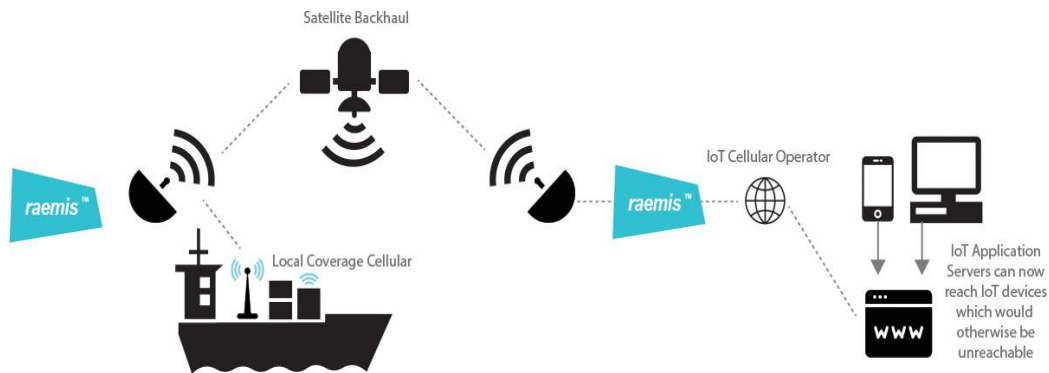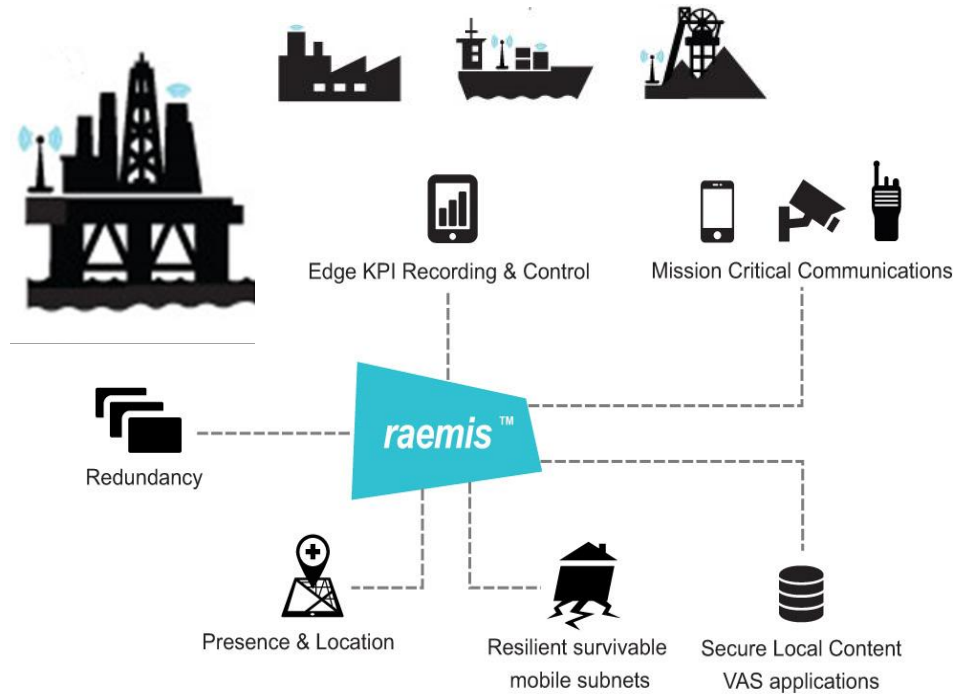

Druid partners with WMS one of the world leaders in maritime Communications and the latest cellular IoT solutions

Case Study: Dedicated Networks for IIoT Critical Services

Oil & Gas, Utilities

Edge KPI Recording & Control

Mission Critical Communications

raemis ™

Redundancy

Presence & Location

Resilient survivable mobile subnets

Secure Local Content VAS applications

As one of the worlds top four energy providers, the management wanted to explore the advantages that the latest mobile technology can deliver.

Due to the highly critical nature of Oil & Gas exploration and production, there is an essential need for dedicated data networks off/on shore to provide live video streaming from fixed point & body worn cameras, MCPTT, man down, lone worker emergency alarms.

Beyond security and resilient delivery of mission critical communications systems, this large utility also has plans for the future of what cellular can deliver for IIoT.

With NB-IoT (LPWA) technology already being rolled out in several countries in 2017, cellular coverage is best placed to support the highest number of IoT devices per single cell, with greater power efficiencies for longer life single charge per IoT device and lowest cost hardware.

**Druids 4G/LTE networks for dedicated voice, messaging & data for Oil & Gas, Energy providers & Utilities**

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Instant 4G/LTE Networks for First Responders: Dedicated Data Services with latest 4G/LTE Mesh networking

Druid's Raemis 4G platform is ideal for serving First Responders with instant broadband services. It can be installed on portable toughened platforms designed for either vehicular or battery powered backpack deployment. Raemis is a complete standalone solution that includes management, provisioning and reporting in a single software platform that can be deployed on a variety of commercially available hardware platforms. From power-up, the application can be in services serving users in under 5 minutes and users can be configured and managed locally via an easy to use onboard GUI.

With Druid's mesh networking application, multiple 'Instant Network' solutions can be meshed together to behave as a single network. This feature facilitates seamless expansion and contraction of the mesh as individual Druid networks join and leave the network.
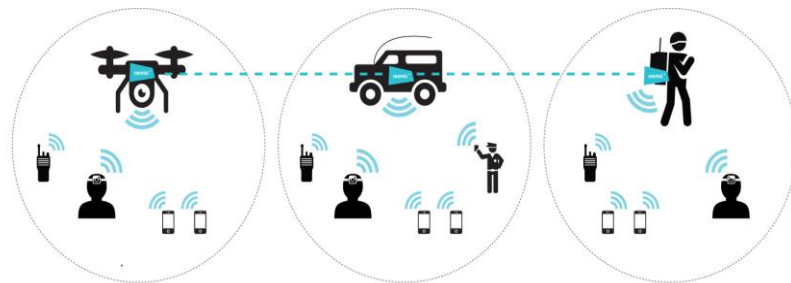
Druid delivers the latest 4G/LTE mesh applications for first responders, patrols and fire services http://tinyurl.com/y29ee8f3

Sunderland Recycling Plant Fire
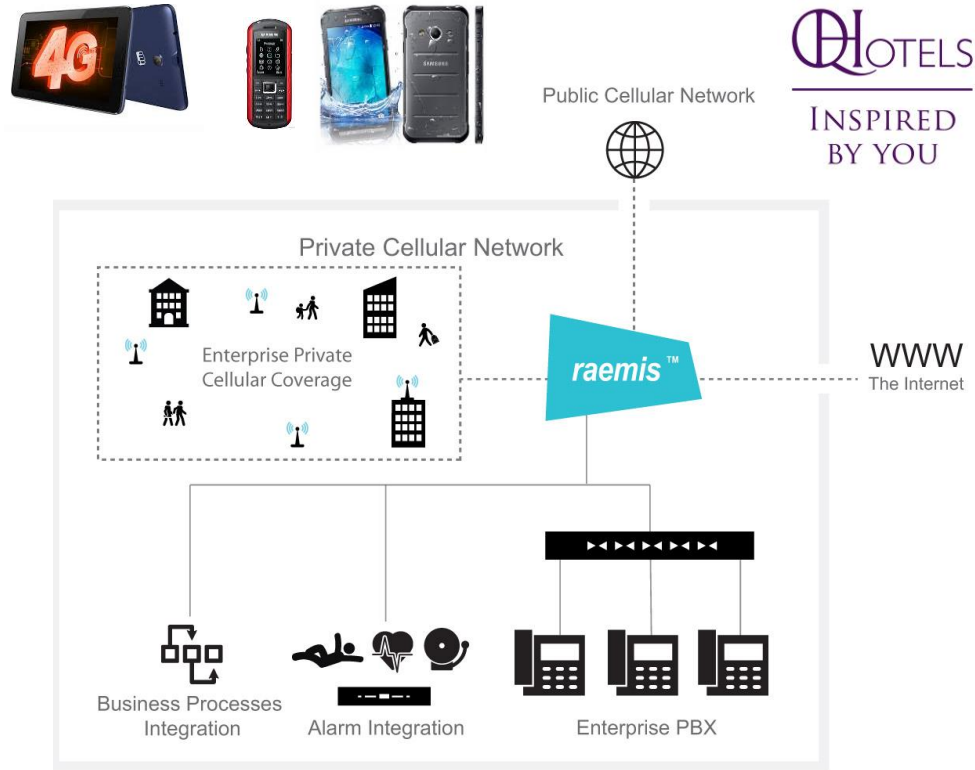
54 Fire Fighters
10 Fire Engines

30,000 tonnes of refuse

Command Vehicle

Live Drone footage
14th May 2018

Case Study: Dedicated Networks for Enterprise Hospitality

Customer Need:
The management at Qhotels had been using legacy DECT technology for years. The hotels old period buildings and extensive estates had many coverage black spots, which impacted on staff communications and efficiencies. They found it impossible to solve this with short wave DECT coverage or Wifi.

QH went in search of the best mobile technology available, both indoor and out door to deliver dedicated communications to their staff while integrating with the latest PMS technology.

A dedicated private network with small cell infrastructure allowed them to easily deploy blanket coverage with only a handful of base stations required.

The Solution:
Qhotels are often located in more rural areas, with Spa facilities and golf courses. Druids private cellular network application Raemis™ removes coverage black spots, and ensures dedicated coverage and capacity where and when its needed.

Our open SIP interface provides full integration of the mobile handset to the enterprise PABX, turning each mobile device into a SIP extension.

Our REST_API provides full integration of the latest hospitality technology, leveraging the capabilities of the ubiquitous smart phone and tablet devices to improve guests experience and staff communications and efficiencies.

Druids Private Networks for dedicated voice, messaging & data for the Hospitality Industry

Druid.

Case Study: Dedicated Networks for Manufacturing
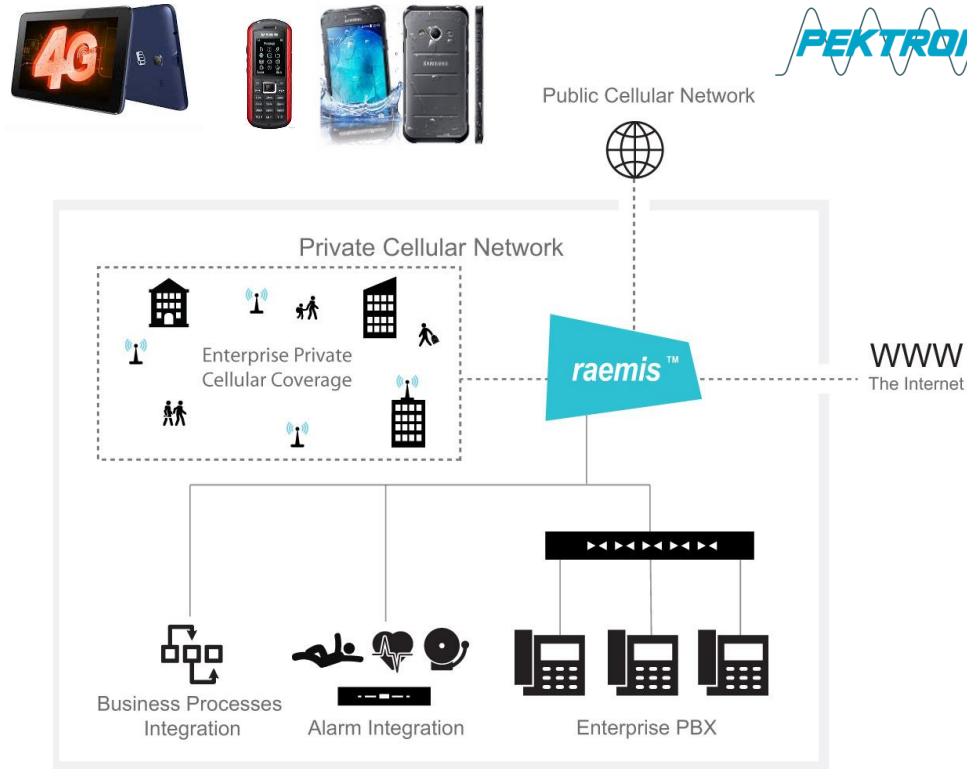
Customer Need:

Pektron are one the largest privately owned manufacturers in the world and have evolved into a significant global force as an electronics design, development and manufacturing partner for some of the worlds' most recognisable brands.

They had been using the public network and also legacy DECT technology for years. The extensive manufacturing facilities over multiple sites had many coverage black spots, which impacted on staff communications and efficiencies. They found it impossible to solve this with short wave DECT coverage or Wifi.

They went in search of the best mobile technology available, both indoor and out door to deliver dedicated communications.

The Solution:

A dedicated private network with small cell infrastructure allowed them to easily deploy blanket coverage across various sites with only a handful of base stations required.

Our open SIP interface provides full integration of the mobile handset to the enterprise PABX, turning each mobile device into a SIP extension.

Our REST_API provides full integration of the latest UC technology, leveraging the capabilities of the ubiquitous smart phone and tablet devices to improve guests experience and staff communications and efficiencies.

Druids Private Networks for dedicated voice, messaging & data for the Manufacturing Industry

Druid.
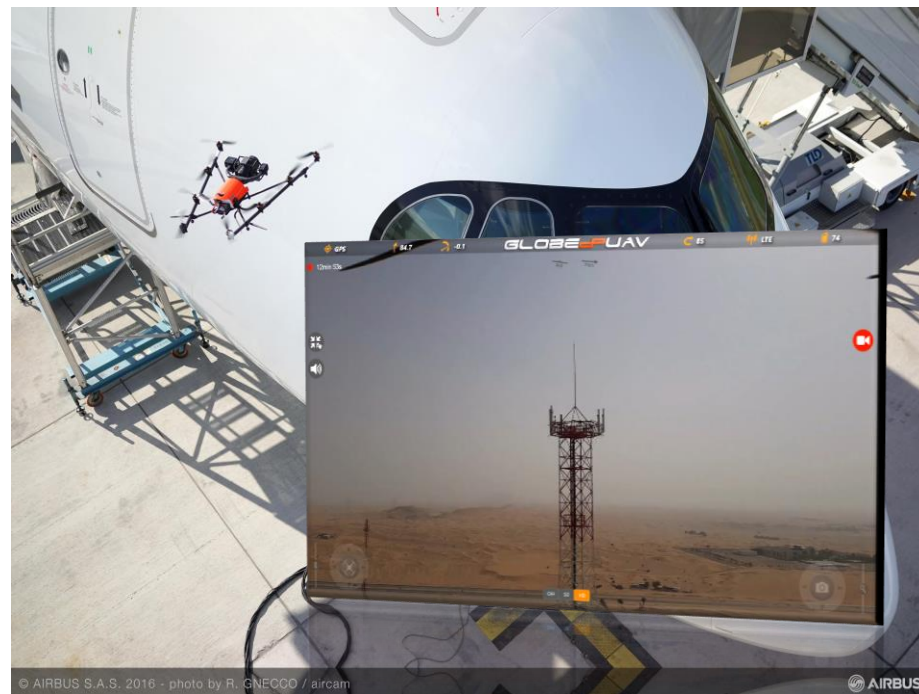
Case Studies

Druid

The future of Maintenance

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Smart Factories - 4IR

SCaaS (Small Cells as a Service)