Unissoft CU Coding

Enabling Pet Friendly Zones via 5G nEdge

5G nEdge: Your Smart City Enabler

Introduction to the Company

Our Founders

Prof. PC CHING

Prof. Soung LIEW

Prof. Raymond YEUNG

Prof. Patrick LEE

Joseph WONG

Aldous NG

How Gartner Described Unissoft/CU Coding ...

"Unissoft/CU Coding is a ***notable player*** in the arising ***Intelligent Infrastructure market***. Her data repair capability is really impressive. A focus on the intelligent infrastructure automation is the differentiator."

Philip Dawson, **VP Analyst at Gartner**

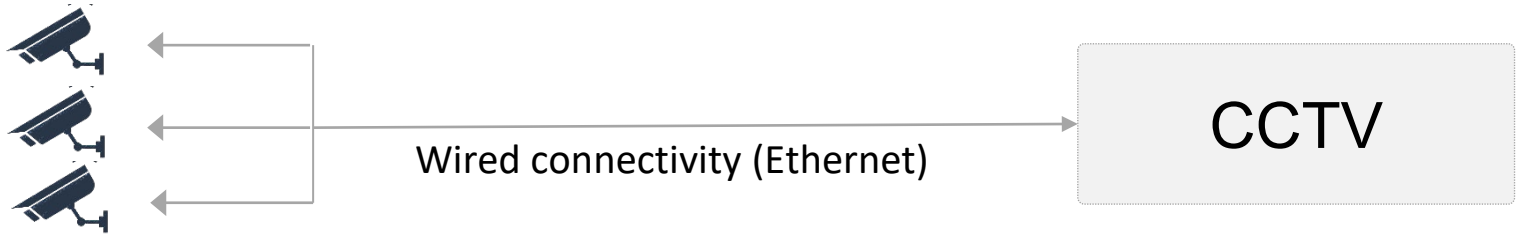
Gartner®

Use Cases

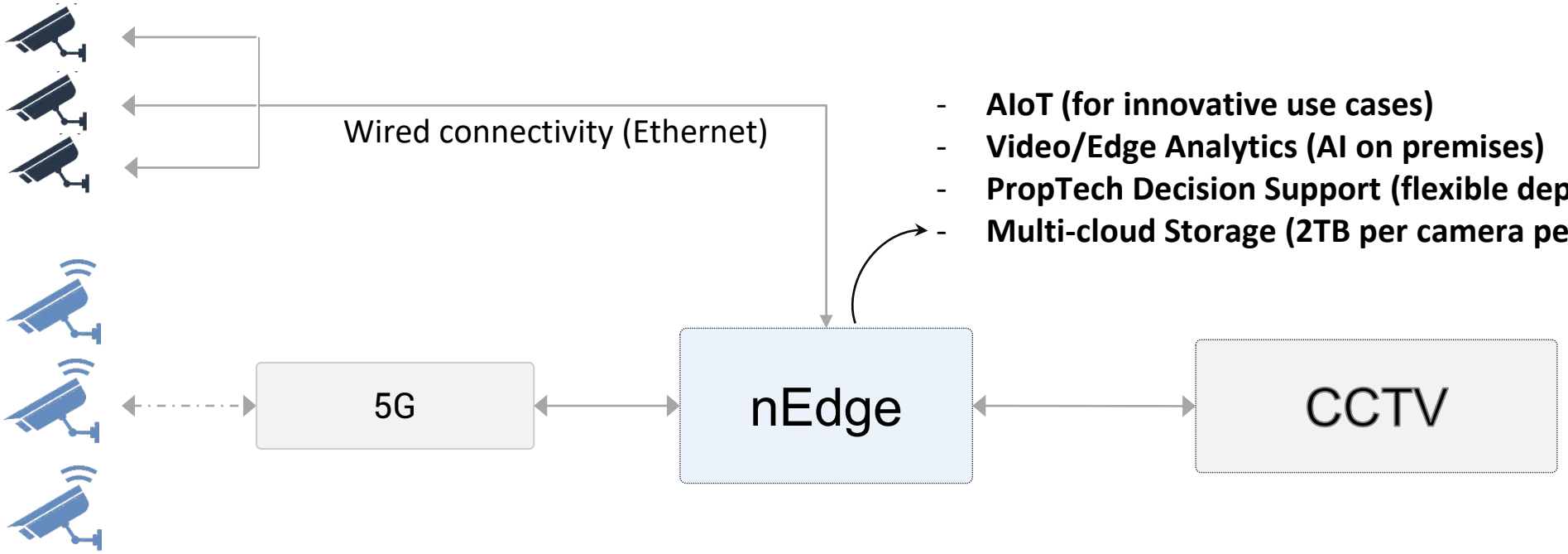
Confidential

Traditional CCTV vs nEdge 5G CCTV

Traditional CCTV Solution



nEdge based 5G CCTV Solution



Press Release
For Immediate Release

Cyberport, Ericsson, SmarTone and Unissoft Join Hands to Develop New 5G Applications Form Hong Kong's First 5G Edge Computing Deployment Scenario Used at Cyberport and Unleash the Power of 5G Technology

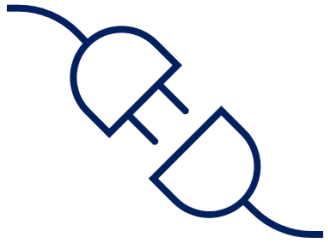
Hong Kong, 3 August 2021 – Hong Kong Cyberport, Unissoft - Cyberport Incubation Programme Alumni, SmarTone, and Ericsson announced a partnership to build Hong Kong's first Multi-access Edge Computing (MEC) deployment scenario at the Cyberport campus and capture the benefit of 5G communication technology. Developed by Unissoft and supported by a 5G MEC system architecture designed by SmarTone, this deployment scenario combines SmarTone's 5G network with the Ericsson Enterprise Edge Link, becoming the first project in Hong Kong to adopt it in a commercial capacity and the first batch of projects in Asia. The first use case will be the Pet Monitoring System at Arcade@Cyberport, estimated to be operational in October this year.

This is one of the first Ericsson Enterprise Edge Link collaborations in Asia to support commercial use, and this installation provides technology enterprises the capacity to adopt 5G edge computing at a lower cost and conducive to the technology popularisation.

Use Case 1:
Cyberport
Enabling Pet-friendly Zones by 5G and AI

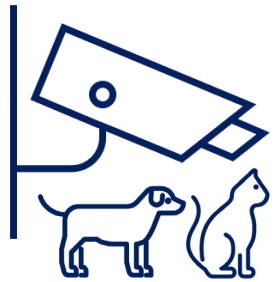
Confidential

Key Selling Points



1st Ericsson 5G MEC installation in the world

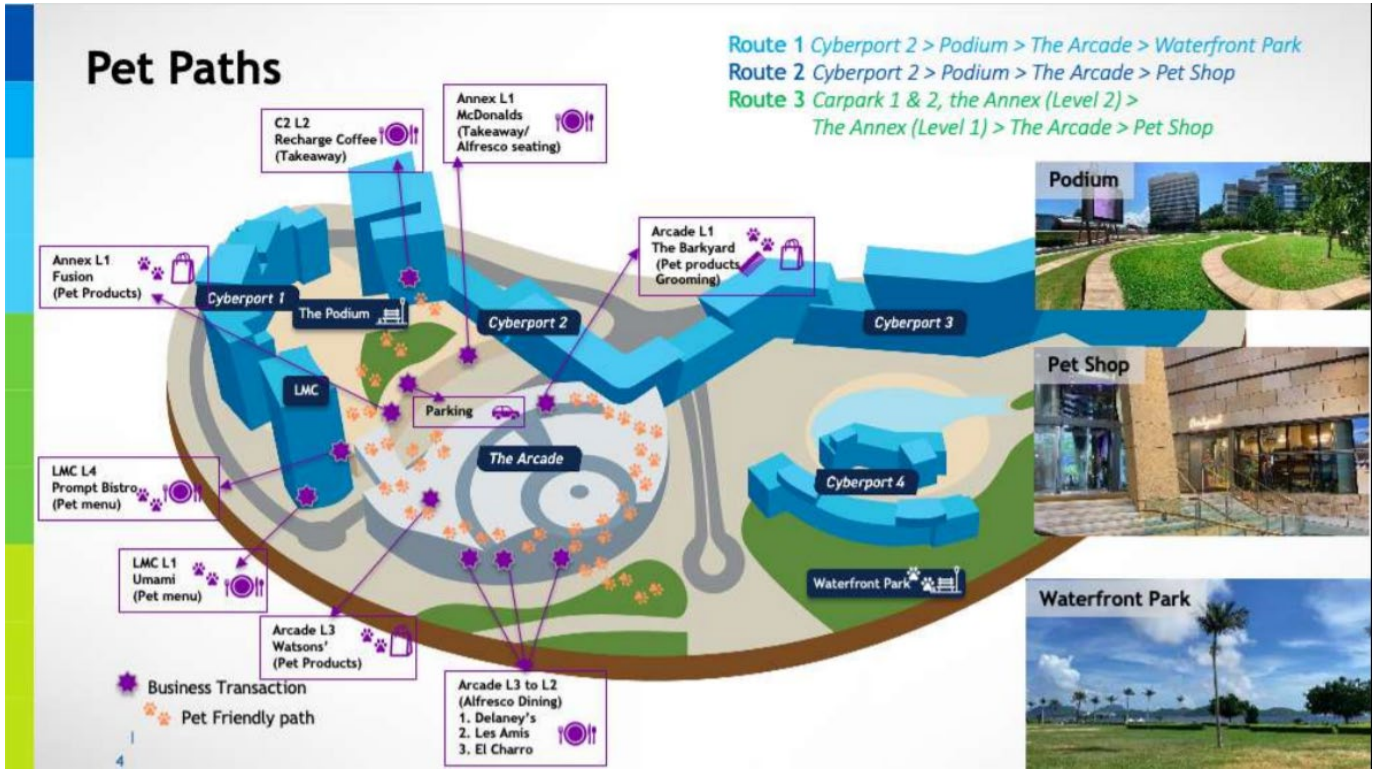
1st 5G MEC in Hong Kong powered by nEdge



Pet-friendly monitoring in the campus by AI technology

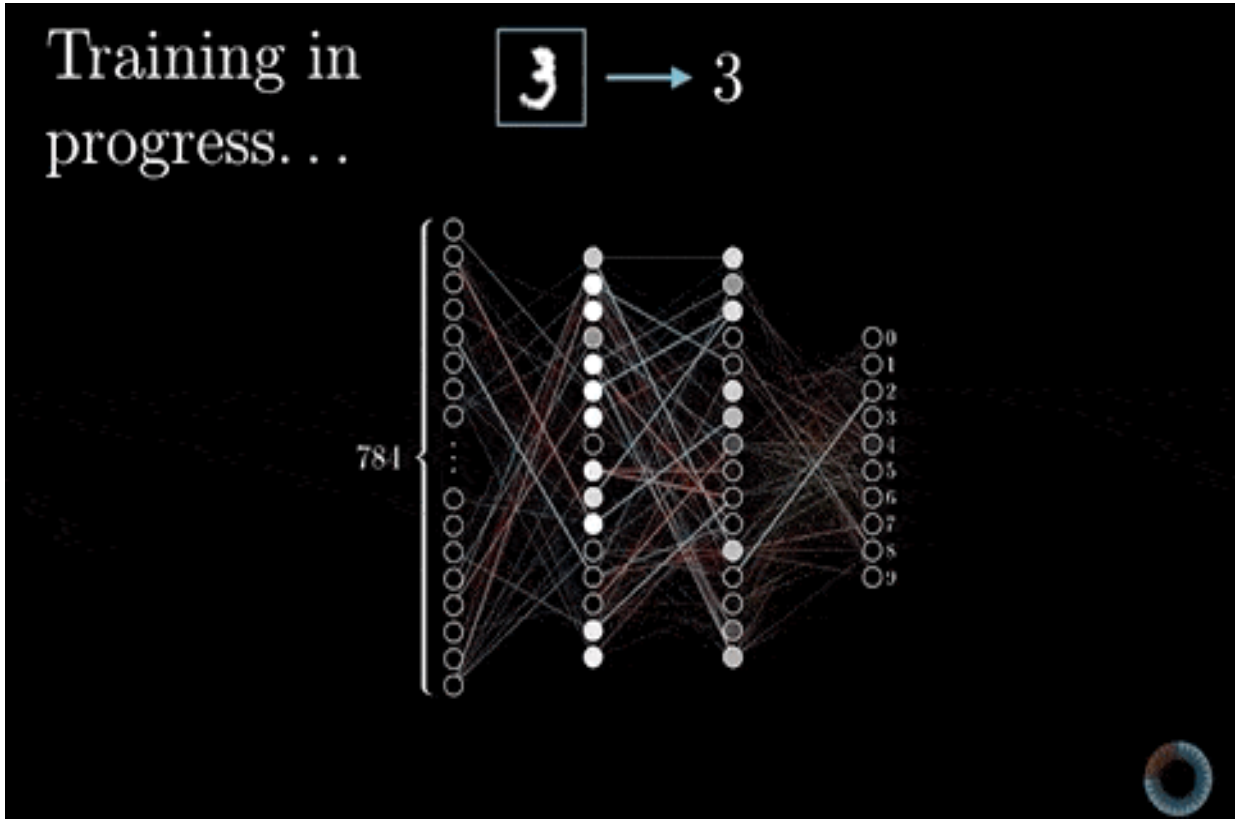
Pain points | Cyberport Pet Friendly Environment

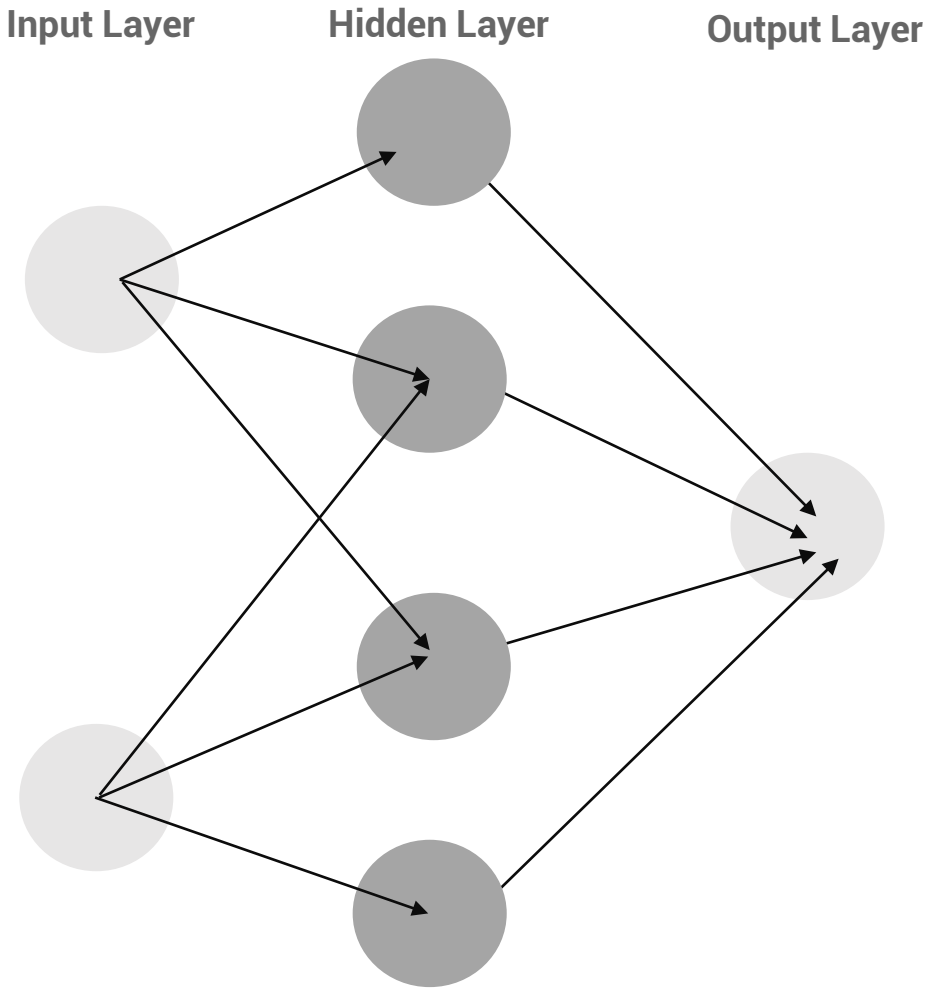
- High Costs in Hiring Pet-dedicated Security Guards
- Inaccurate Manual Pet Counting
- High Maintenance Geo fencing & Alerts
- Expensive Traditional Wired CCTV



Confidential

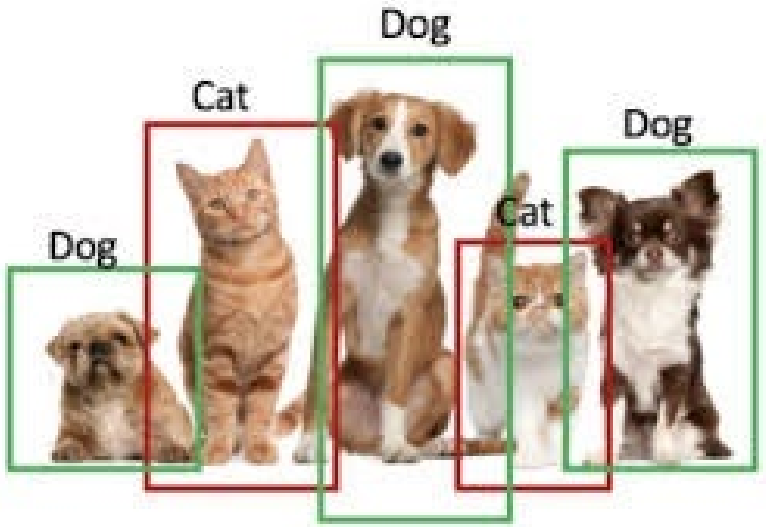
nEdge Runs AI Centrally

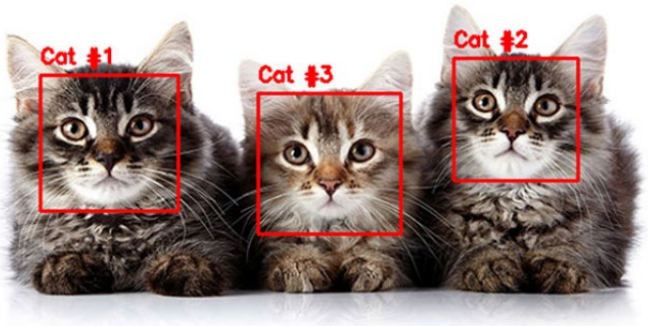


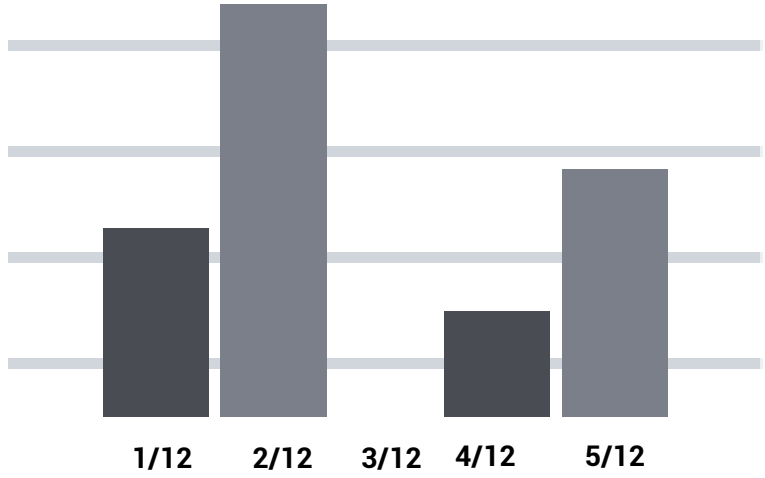


Benefits

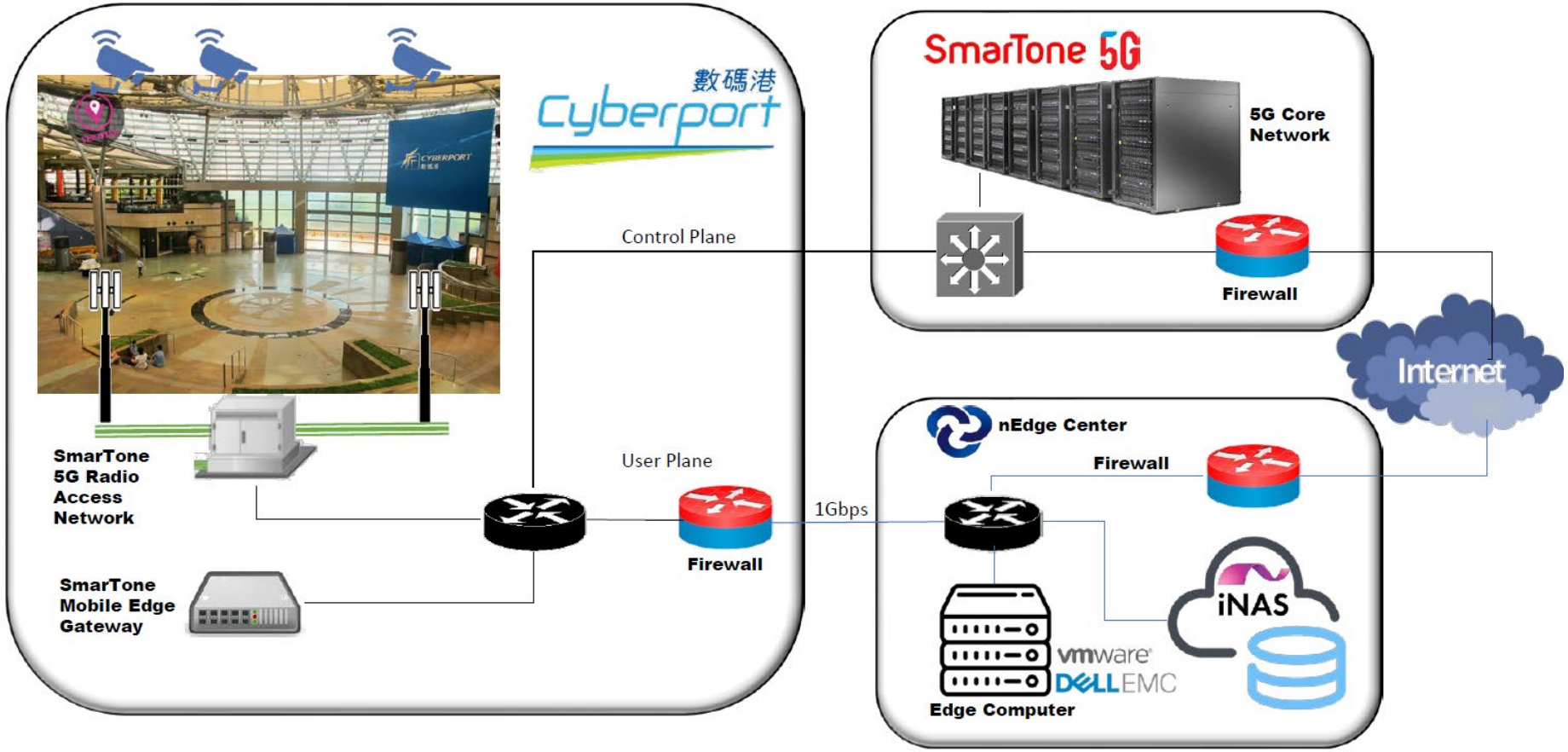
1. Pets Counting & Geo Fencing
2. No Need for Cabling
3. Strong ROI by Saving 3 Guards
4. Labor Counting Inaccurate
5. Realtime Dashboard







5G nEdge enabled Smart CCTV at Cyberport

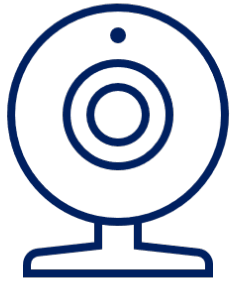


Use Case 2:
CUHK
5G Surveillance and Smart Campus

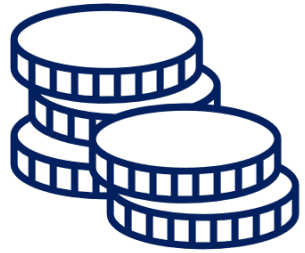
Confidential

Key Selling Points

5G surveillance overcomes remote sites without fiber



AI for Incident Detection and Surveillance

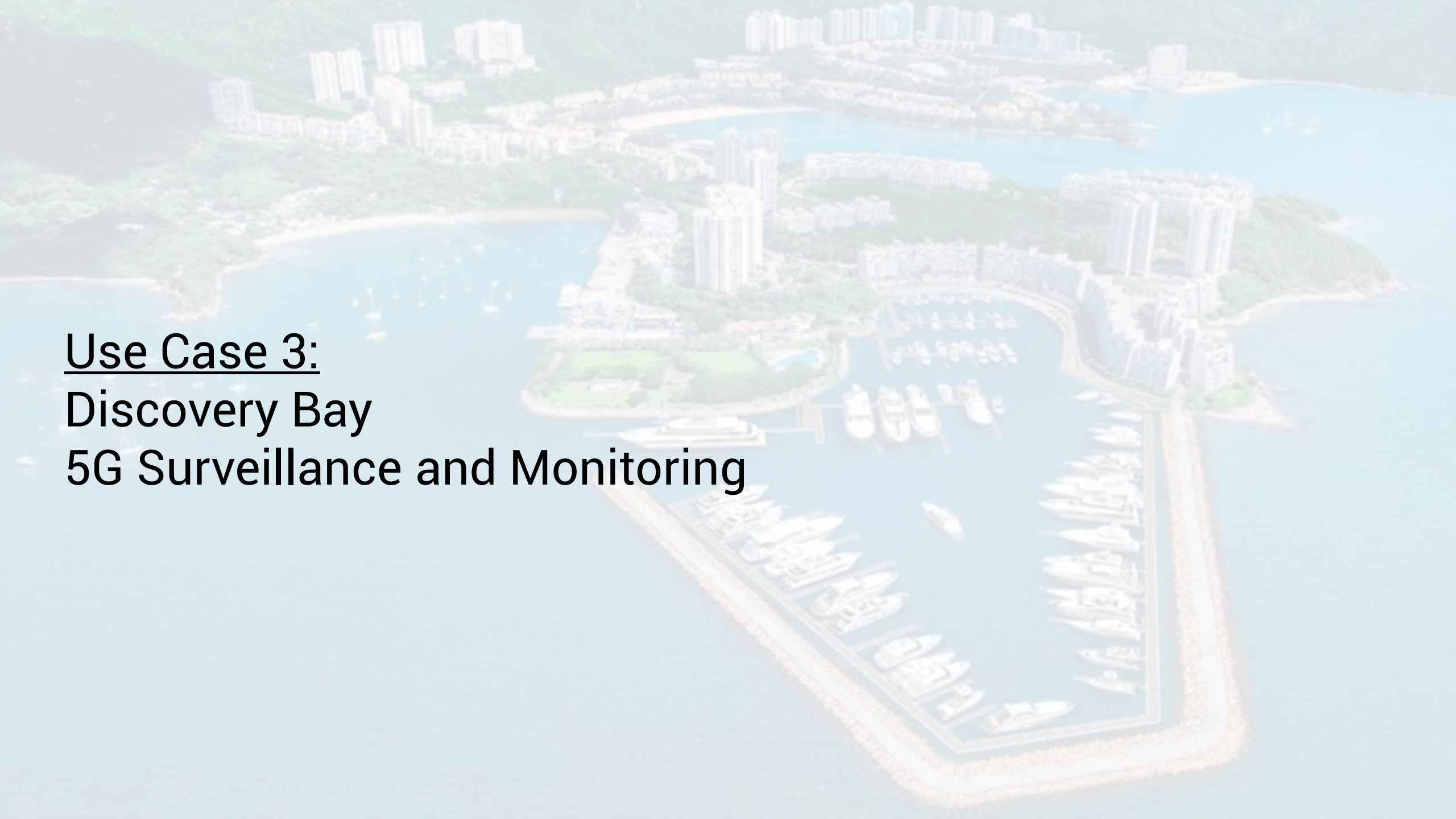


Cost effective & immediately deployable

Pain points | CUHK Campus Monitoring

- No Fiber Coverage
- Dangerous Materials Storage
- Limited Security Guards in Area
- No existing automated and AI based solutions

L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
朗濤 ONTOLO
海日灣II Centra Horizon
NEFIN
香港科學園第三期
Yau King Lane public car park
優景里公眾停車場
Cheung Shue Tan Village Site 2 Public Toilet (2)
樟樹灘村公廁(2)
Cheung Shue Tan Outdoor Parking
Cheung Shue Tan Rd
Cheung Tai Rd
Campus Circuit N
環迴北路
創新路
Starbucks
星巴克
科學園第一期停車場 P1
Parking garage
Lee Woo Sing College
香港中文大學和聲書院
Residence Rd
Shaw College
逸夫書院
環迴西路
United College
聯合書院
New Asia College
新亞書院
Hong Kong Institute of Biotechnology (HKIB)
Science Park Rd
Sea Side Dr
觀海崇庭
ragon Fountain
Tai Po Road (Ma Liu Shui)
The Chinese University of Hong Kong...
The Chinese University of Hong Kong
香港中文大學
The Sir Philip Haddon-Cave Sports...
夏鼎基運動場
CUHK Paper & Coffee
Tai Po Road
High View
Google



Use Case 3:
Discovery Bay
5G Surveillance and Monitoring

Pain points | Discovery Bay Surveillance and Monitoring

- No Fiber Coverage at Tunnels and Yacht
- Burglary, attempted burglary, loitering, illegal access to the area
- Limited Security Guards in Area
- No existing automated and AI based solutions

Area Coverage – DB Tunnel Portal

Area Coverage – DB Tunnel Portal

- Mount on lamp post to cover Area 1.1

Area Coverage – DB Tunnel Portal

- Mount on high mast to cover Area 1.2
- Mount on high mast to cover Area 1.3

Area Coverage – DB Coastline, Hillsides and Hiking Trails

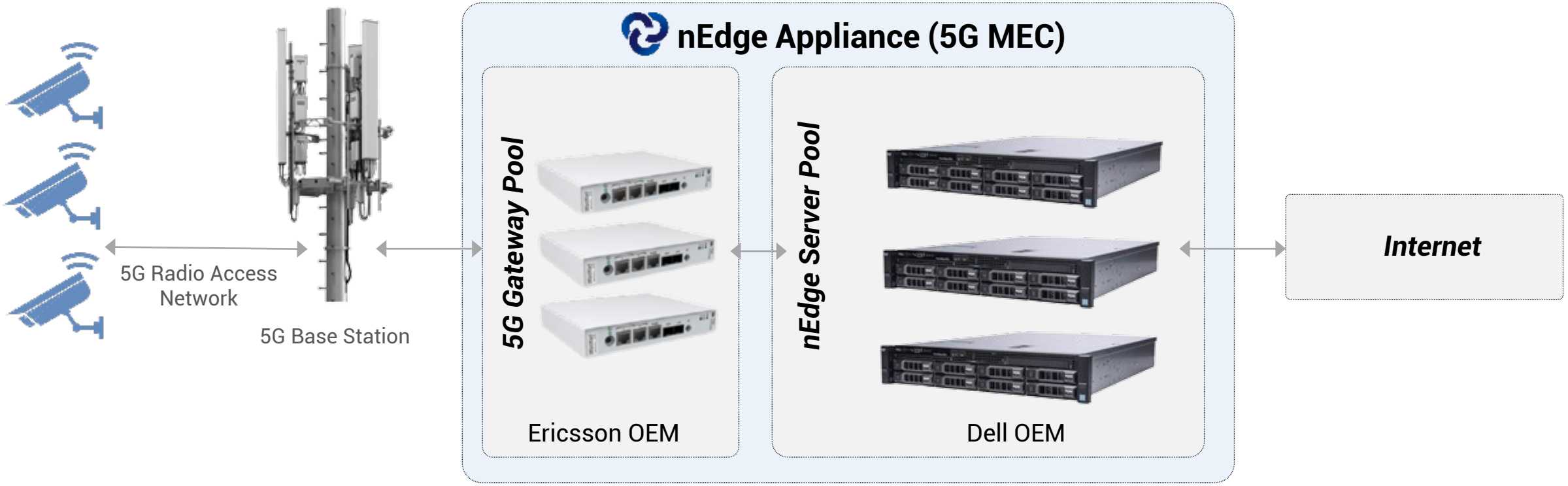
To monitor the coastline as there is no existing surveillance system at the concerned area

To cameras to monitor the hillsides and / or hiking trails as there is no existing surveillance system at the concerned area. Only monthly inspection or ad-hoc patrol is arranged as the case may require.

5G nEdge Architecture

Confidential

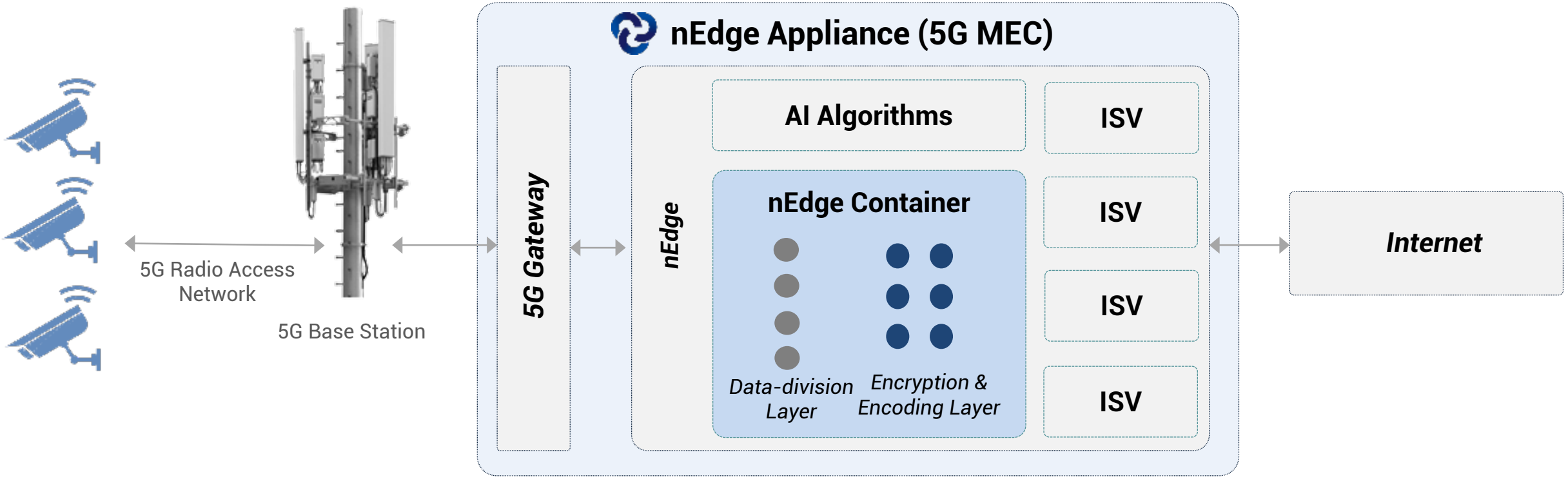
nEdge Architecture in 5G



One-stop hybrid edge-cloud integration platform, supporting multiple applications with open architecture, enhanced security and data reliability through network coding while providing convergence between IT and mobile technology

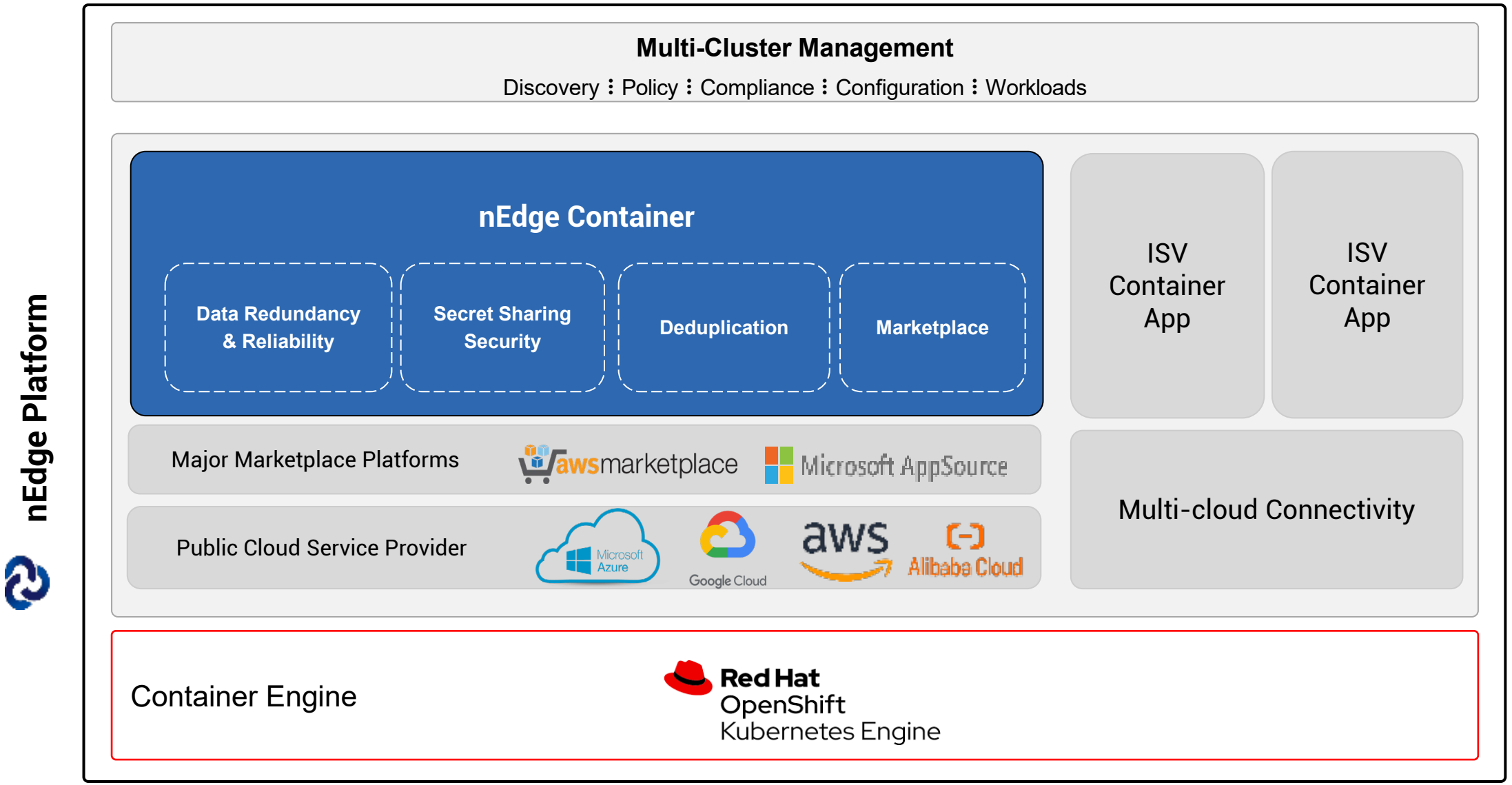
Confidential

nEdge Architecture in 5G



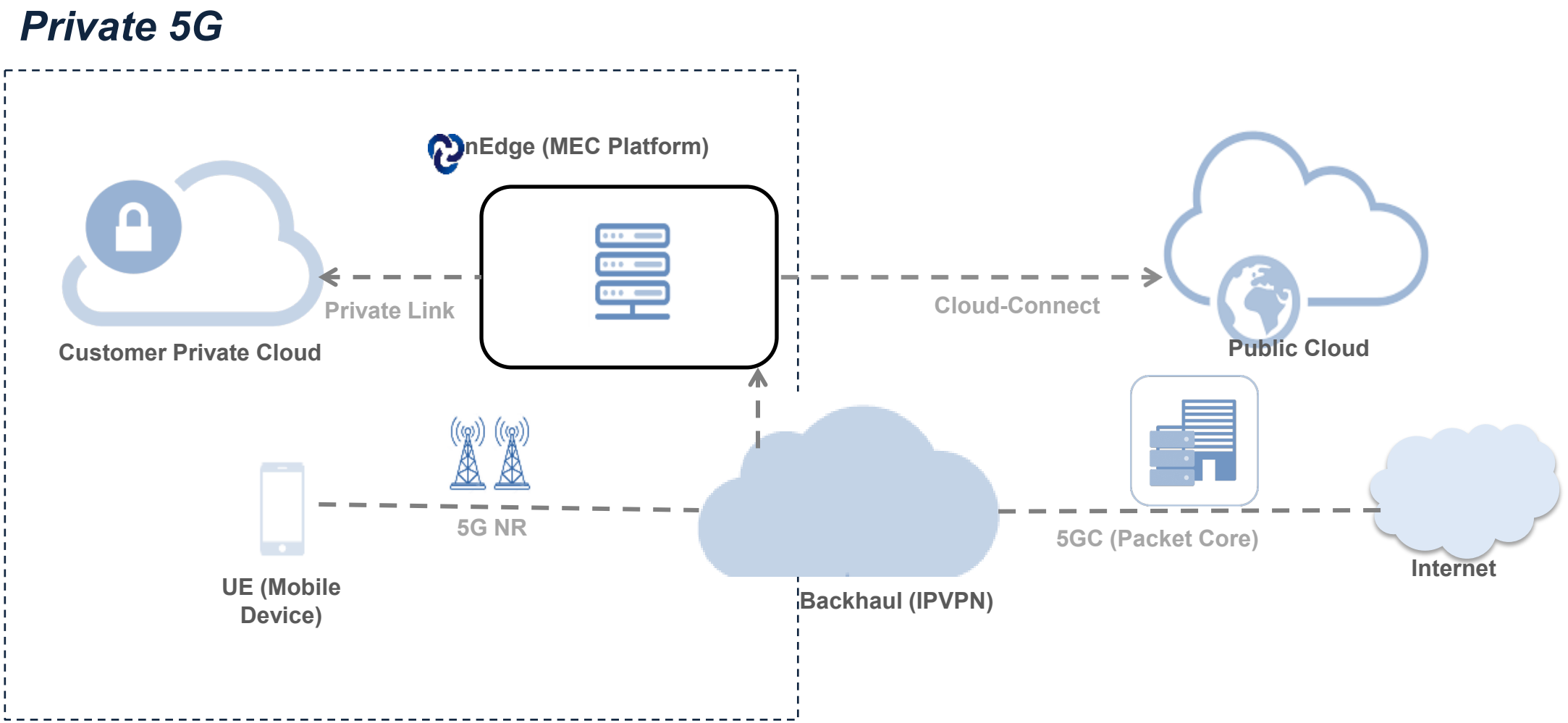
One-stop hybrid edge-cloud integration platform, supporting multiple applications with open architecture, enhanced security and data reliability through network coding while providing convergence between IT and mobile technology

nEdge-nCloud Integration with Red Hat Solutions



Confidential

nEdge MEC Application Flow | Benefits

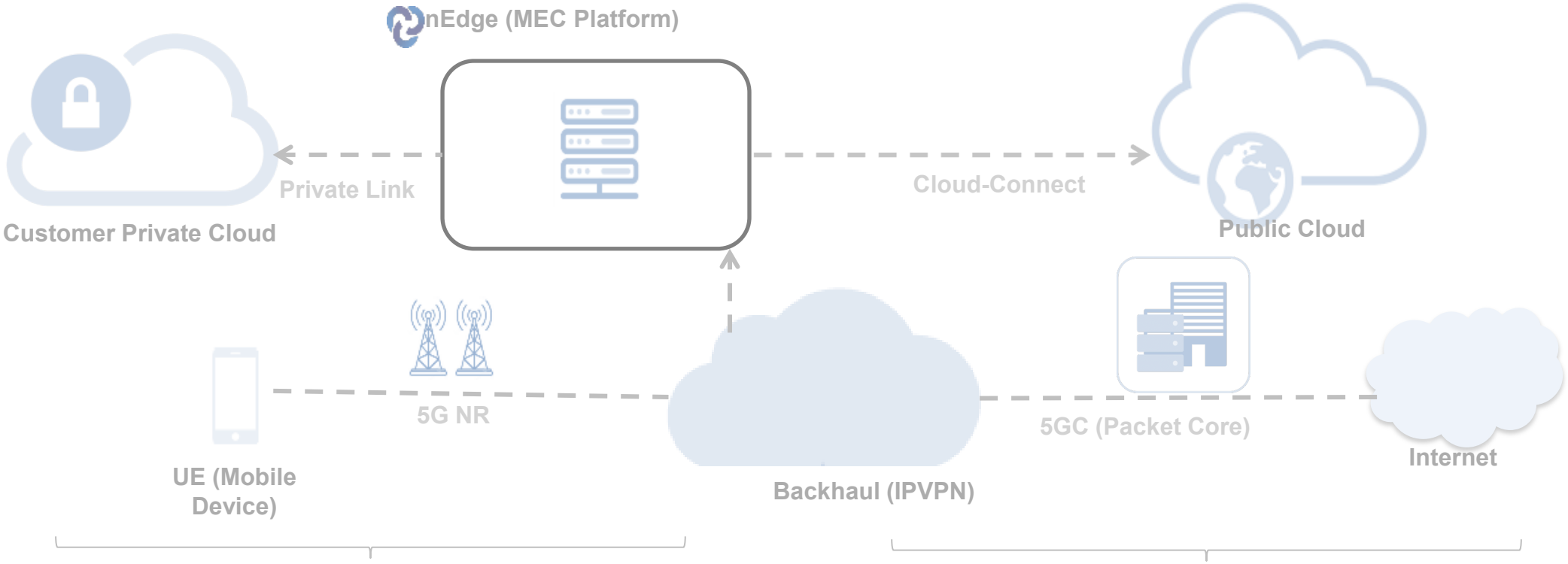


Confidential

nEdge MEC Application Flow | Benefits

Streamlined architecture

Virtualized edge computing design enhances network communication and IT computing capability



Application need

Low latency, high bandwidth, security and localized service needs

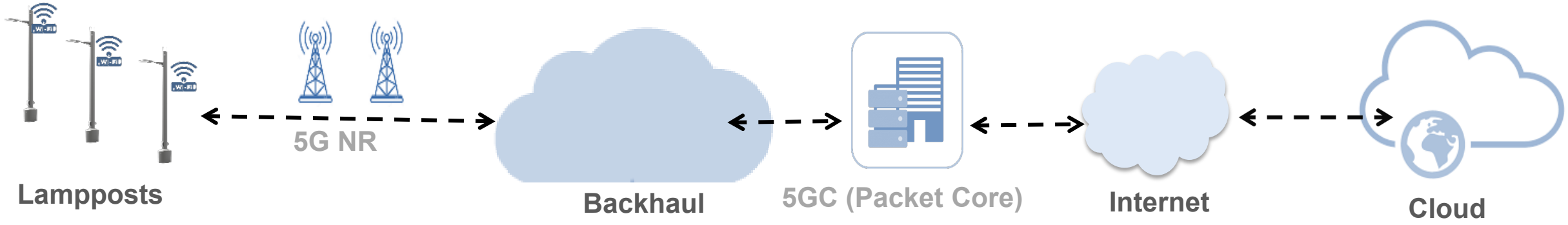
Lower costs

Reducing traffic flow via EPC and Internet Transit

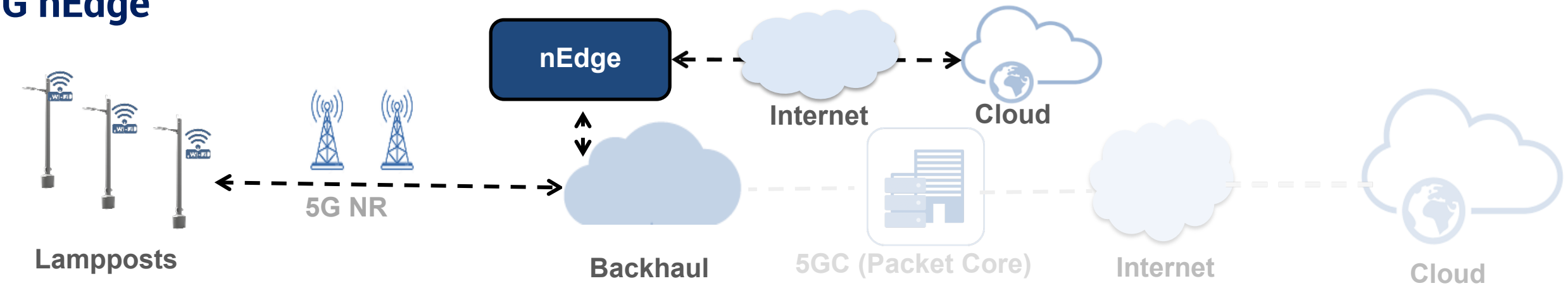
Confidential

5G vs 5G nEdge Application Flow

5G

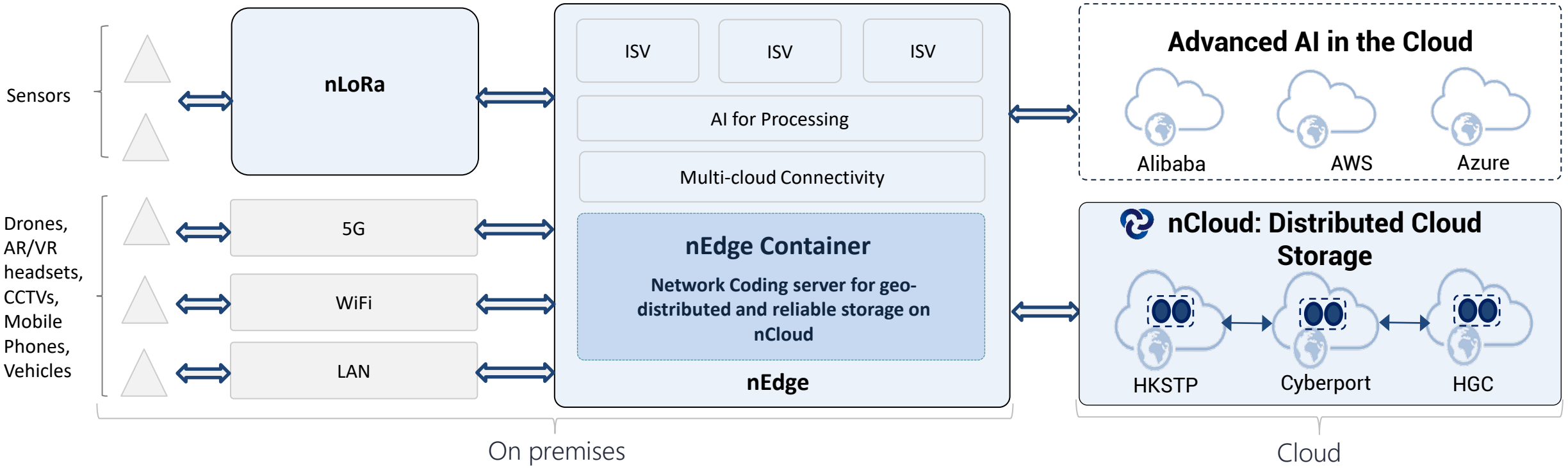


5G nEdge



Confidential

nEdge-nCloud: A Futureproof Multiaccess Technology for Managing Computation, Communication and Storage



nEdge-nCloud pair leverages multi access technologies to provide computation, communication and distributed cloud storage solution

Computing on accumulated data (on-premises as well as in the cloud)	Storage on nCloud. Network coding is performed at nEdge and network-coded data is stored in nCloud.	Local breakout for internet-bound traffic

Contact Us

CU Coding

Unissoft

Contact Person: Aldous Ng

Email: aldous_ng@cucoding.com