CMP Mobile Cloud Connect

How can I connect low-power devices securely to the cloud?

IoT Cloud Connector

The efficient way to the cloud.
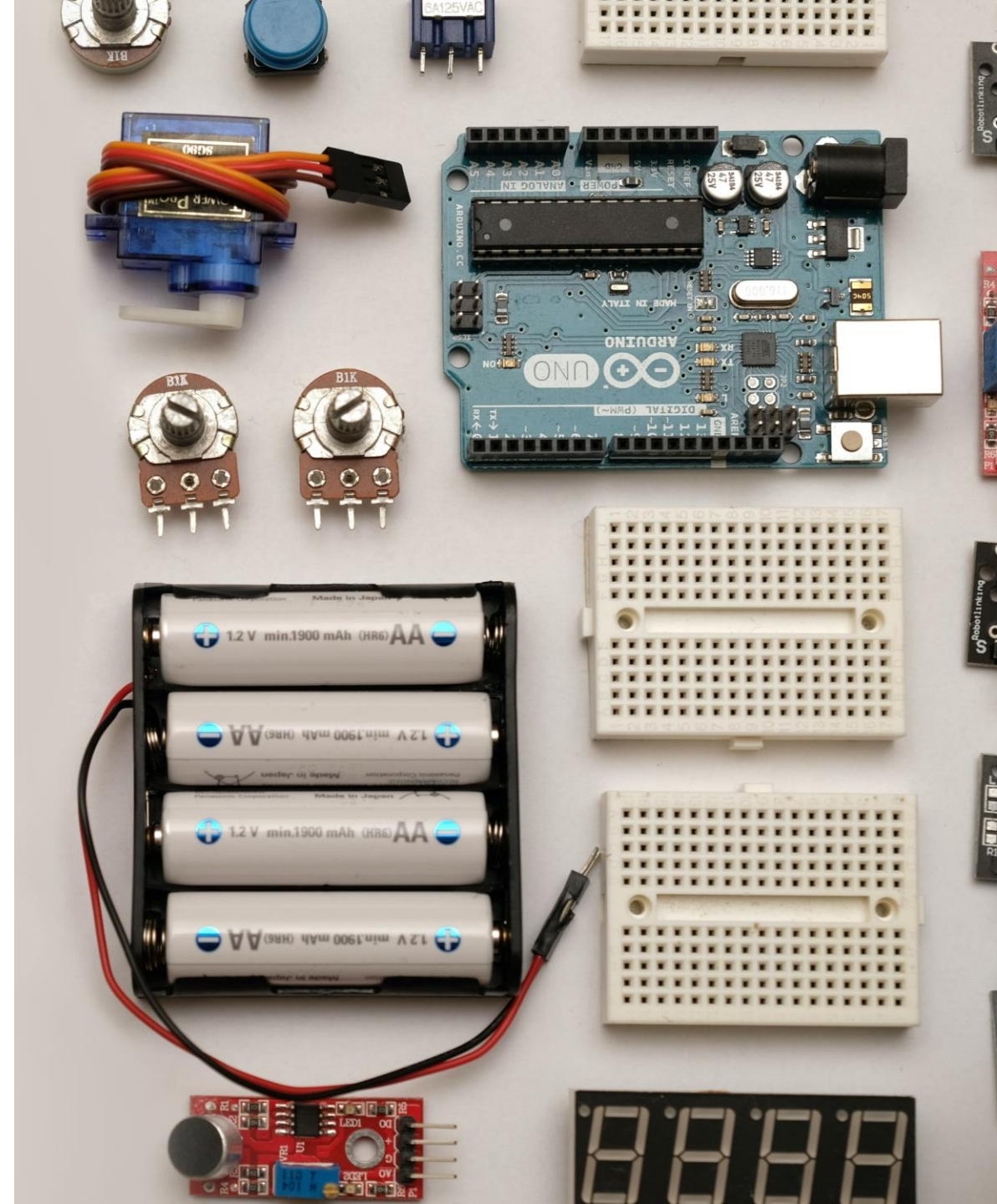
What's special about Low-power IoT devices?

Limited capability

– Smaller processors and memory
– Designed for low powered UDP networks
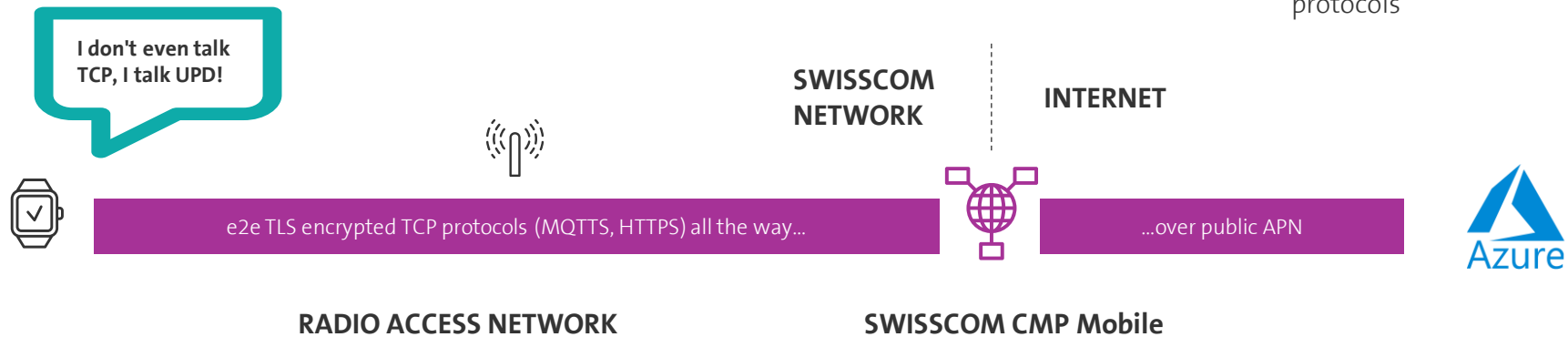– Optimized for small firmware protocol stacks

Energy efficient

– Meant to last on the field for years
– CPU usage is critical
– Must talk as little as possible
– Must communicate very efficiently

Connecting IoT devices can be a challenge...

Azure IoT endpoints require e2e encryption and the use of tcp protocols

I don't even talk TCP, I talk UPD!

SWISSCOM NETWORK

INTERNET

e2e TLS encrypted TCP protocols (MQTTS, HTTPS) all the way...

...over public APN

Azure

RADIO ACCESS NETWORK
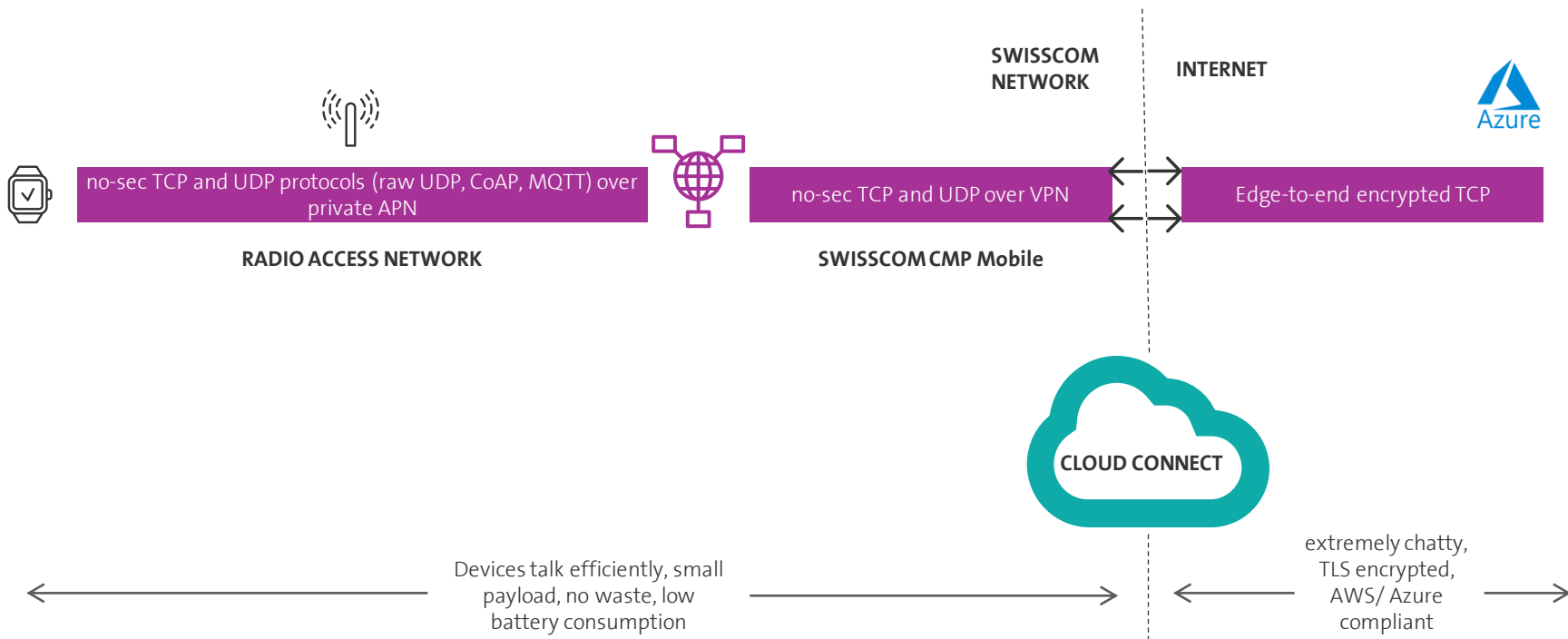
SWISSCOM CMP Mobile

Usual challenges

- The CA certificate needs to be installed on each device

- More configuration setup for each device

- The device now talks a lot more! Typically: from 50 bytes to 10 Kbytes

- Energy Consumption is much higher

- Some devices can't even talk TCP protocols!

With Cloud Connect you can easily connect your IoT devices to Azure

SWISSCOM NETWORK

INTERNET

Azure

no-sec TCP and UDP protocols (raw UDP, CoAP, MQTT) over private APN

no-sec TCP and UDP over VPN

Edge-to-end encrypted TCP

RADIO ACCESS NETWORK

SWISSCOM CMP Mobile

CLOUD CONNECT

Devices talk efficiently, small payload, no waste, low battery consumption

extremely chatty, TLS encrypted, AWS/ Azure compliant

Typical use cases where cloud connect can help you

- CAT M1/NBIoT devices where TLS /DTLS from device is problematic

- Any device requiring X.509 root of trust certificate on the device

We support your low power massive IoT Use Case...

IoT Hub Azure

...on the device

- Best practice in power consumption
- Best practice in data efficiency
- Connectivity settings
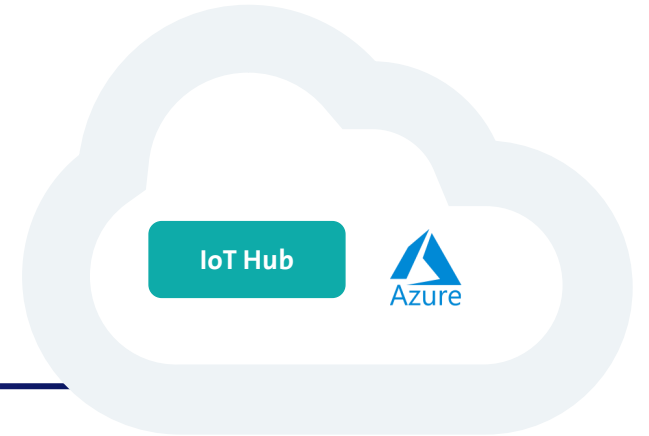- Protocols (UDP, COAP, MQTT, LWM2M, LoRaWAN)
- Device Security

...on the connectivity

- Training connectivity management platform
- Training cloud connector settings

...on the cloud

- By design
- Solution cloud gateway configurator
- Device communication via cloud connector
- E2E security design
- Cost optimization
- Application integration

Cloud Connect Pricelist valid as of December 2022

Cloud Connect*	Price on-off (OTC)	Price per month (MRC)
Connected device fee (per device) devices 1- 10'000	-	CHF 0.12.-
Connected device fee (per device) devices 10'000 - 100'000	-	CHF 0.10.-
Connected device fee (per device) devices 100'000 - 500'000	-	CHF 0.08.-
Dedicated APN/VPN**	CHF 3'000.-	CHF 500.-

*   Cloud connect prices indicated in the table left have to be applied on top of normal the connectivity offering
**   For high-volume enterprises (greater than 10'000 SIMs), a dedicated APN and VPN can be requested.

IoT Connector Starter Package

Swisscom IoT Cloud Connector Services help you to build IoT applications that are low cost, use low data rates and can have a long battery life up to many years. It's secure and highly scalable because of its integration into the Swisscom Mobile Network (NB-IOT, LTE-CATM1, LTE, 5G) with world wide coverage.

Do you want to realize a massive IoT Use Case?

This package guarantees you a quick and easy start on your low power journey from the device to cloud.

- ✓ 10 SIMs, 3 months of Swisscom CMP incl. Cloud Connector
- ✓ Low Power to the Cloud Starter Workshop (3 hours)
- ✓ Support & Consulting (8 hours included) based on needs

Price on-off (OTC):

CHF 1500.-

Low Power IoT Expertise: Consulting Areas

Device
- Best Practice in Power Consumption
- Best Practice in Data Efficiency
- Connectivity Settings & Technology (NB-IOT, LTE-CATM1, (LoRaWAN)
- Protocols (UDP, COAP, MQTT, LWM2M, LoRaWAN)
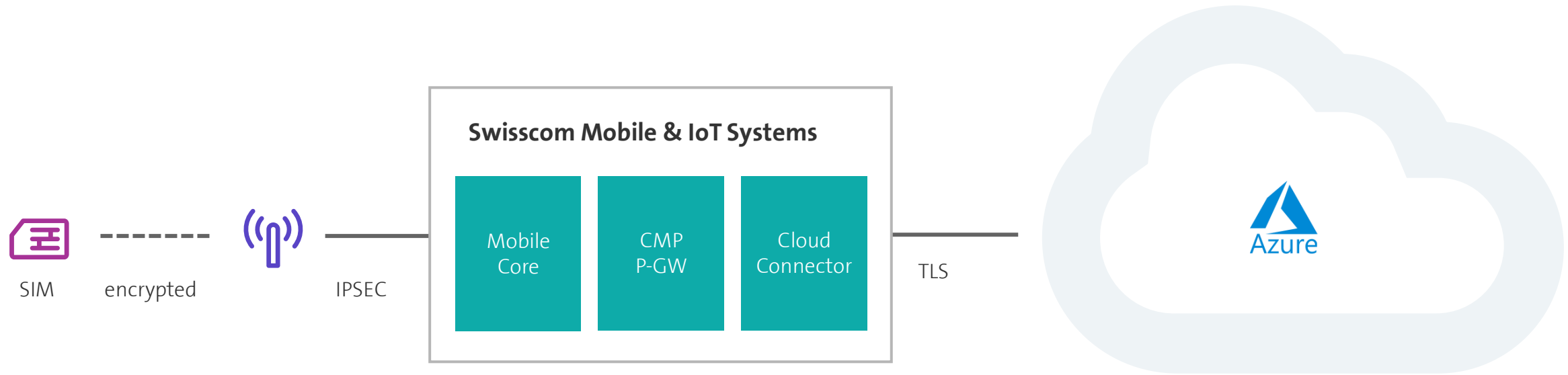- Device Security

Connectivity
- Training Connectivity Management Plattform
- Training Cloud Connect Settings

Cloud
- Cloud Gateway Configuration
- Device Communication via Cloud Connector
- E2E Security by Design
- Solution Design
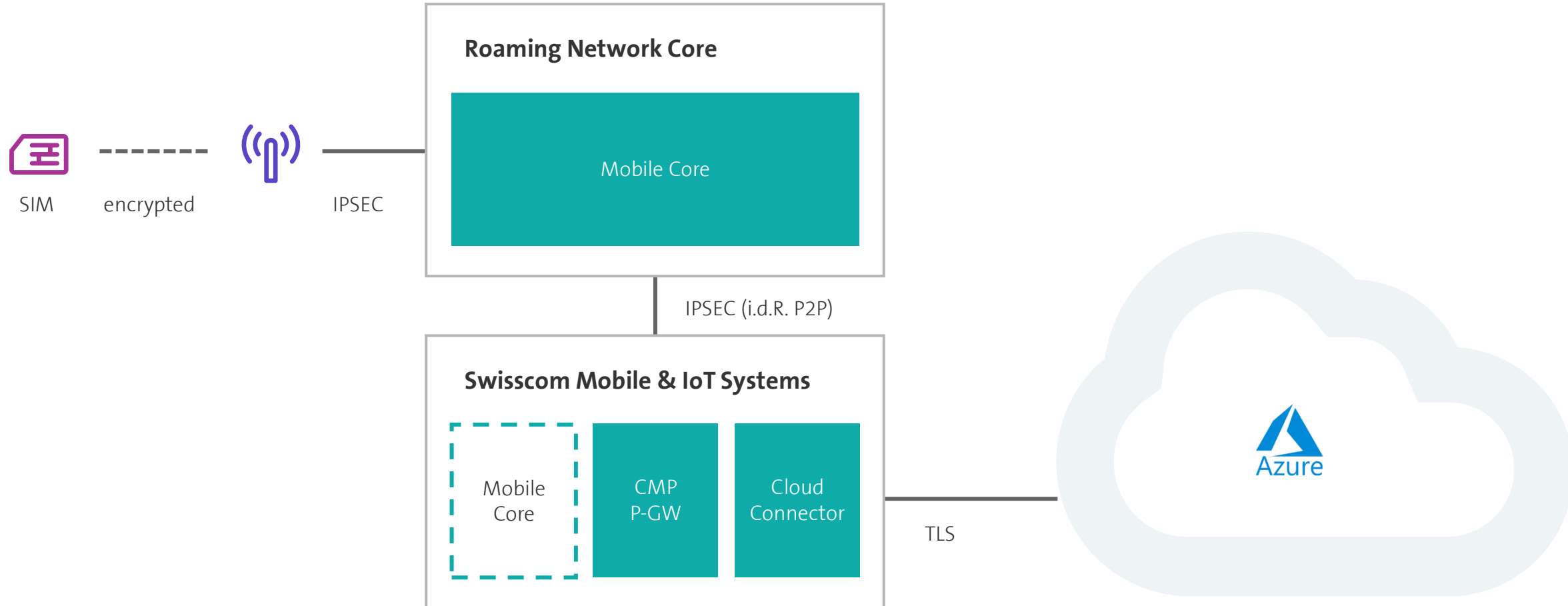- Cost Optimization
- Application integration

Szenario Switzerland

SIM   encrypted   IPSEC

Swisscom Mobile & IoT Systems

Mobile Core   CMP P-GW   Cloud Connector   TLS

Azure

Szenario Roaming

Roaming Network Core

Mobile Core

SIM ---- encrypted ---- IPSEC

IPSEC (i.d.R. P2P)

Swisscom Mobile & IoT Systems

Mobile Core | CMP P-GW | Cloud Connector

TLS

Azure

We look forward to supporting you on the topic of IoT

IoT SPOC

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