

AWS
re:Invent

TLC203

From SMS to 5G: Out-of-the-box telecom solution

Andrei Ivanov

Architect
TELUS

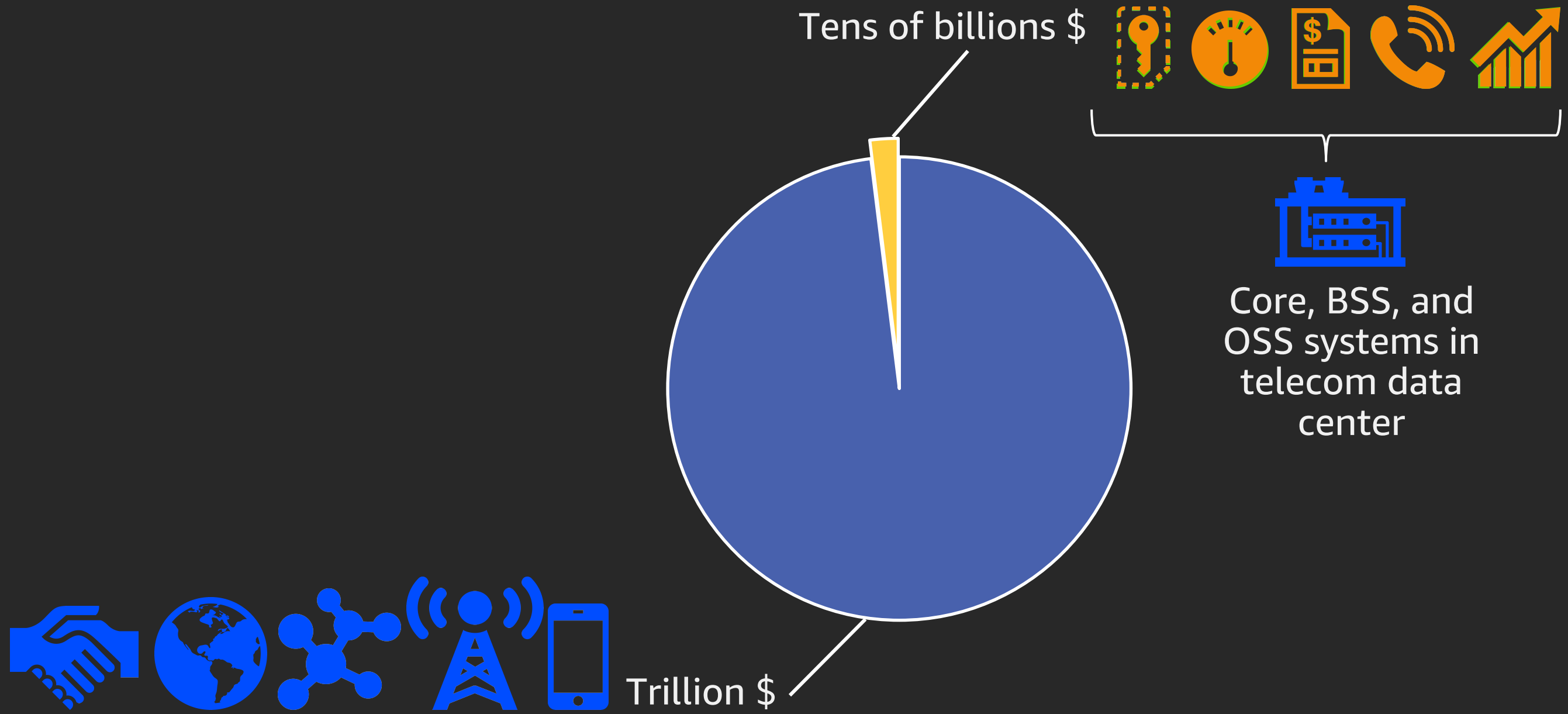
Alejandro Goncalves

Architect
TELUS

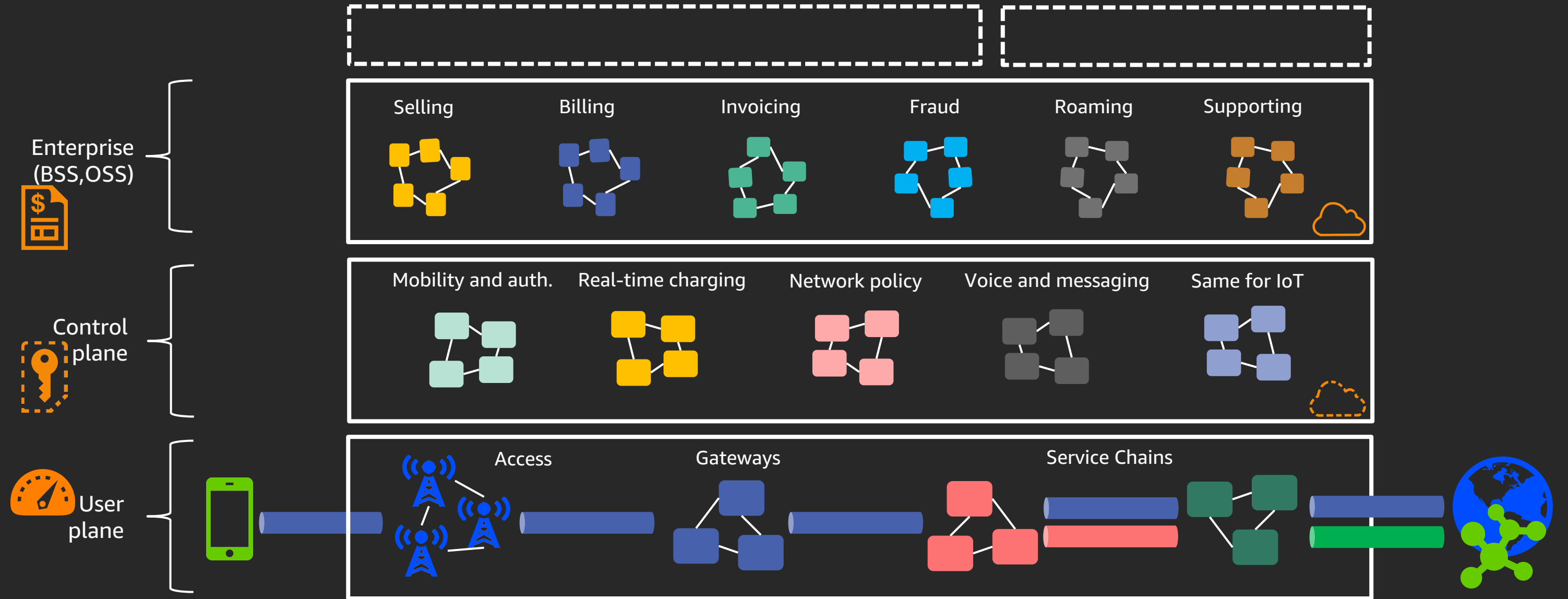
Mohammad Shokuienia

Developer Lead
TELUS

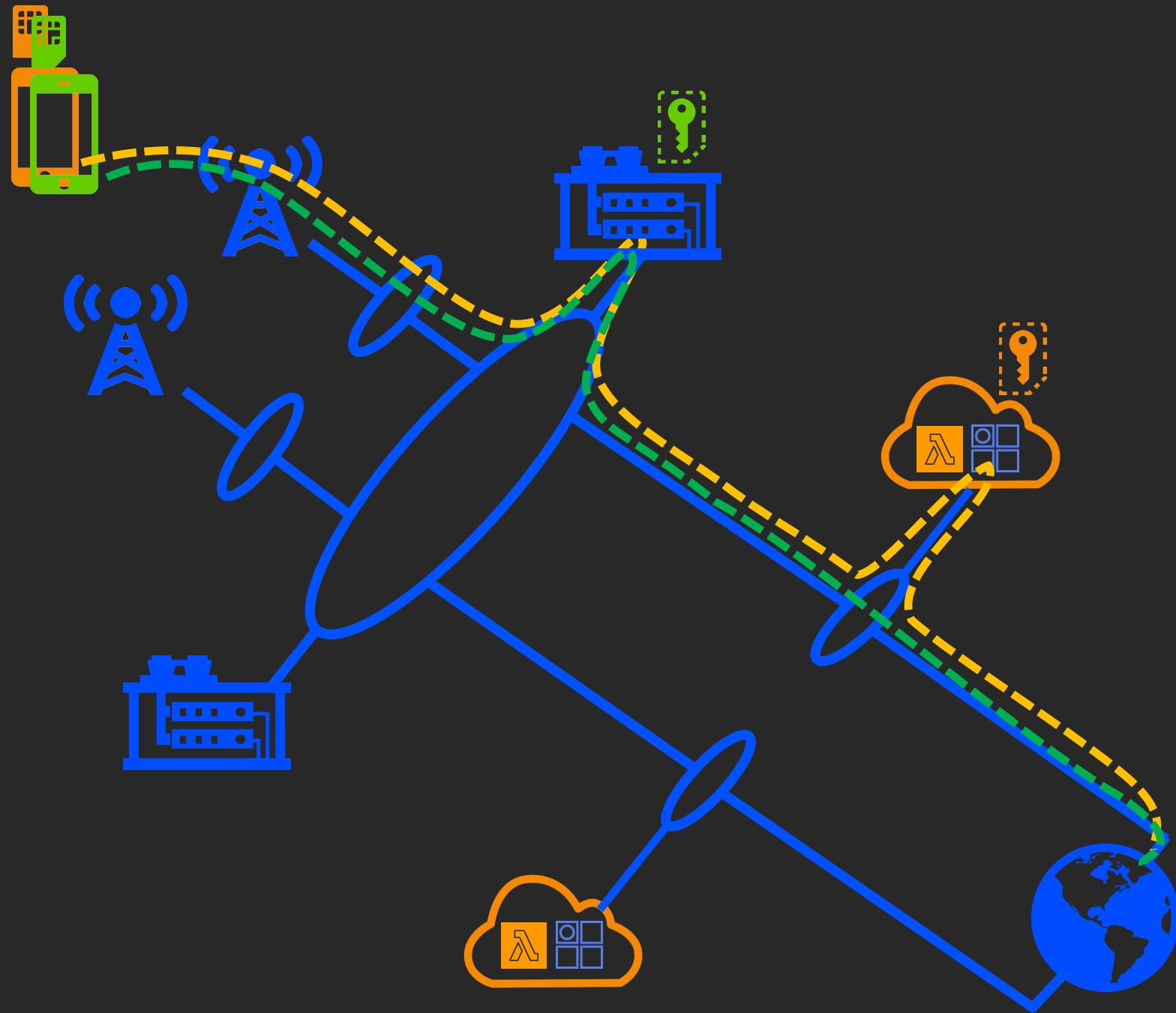
Telecom industry value chain



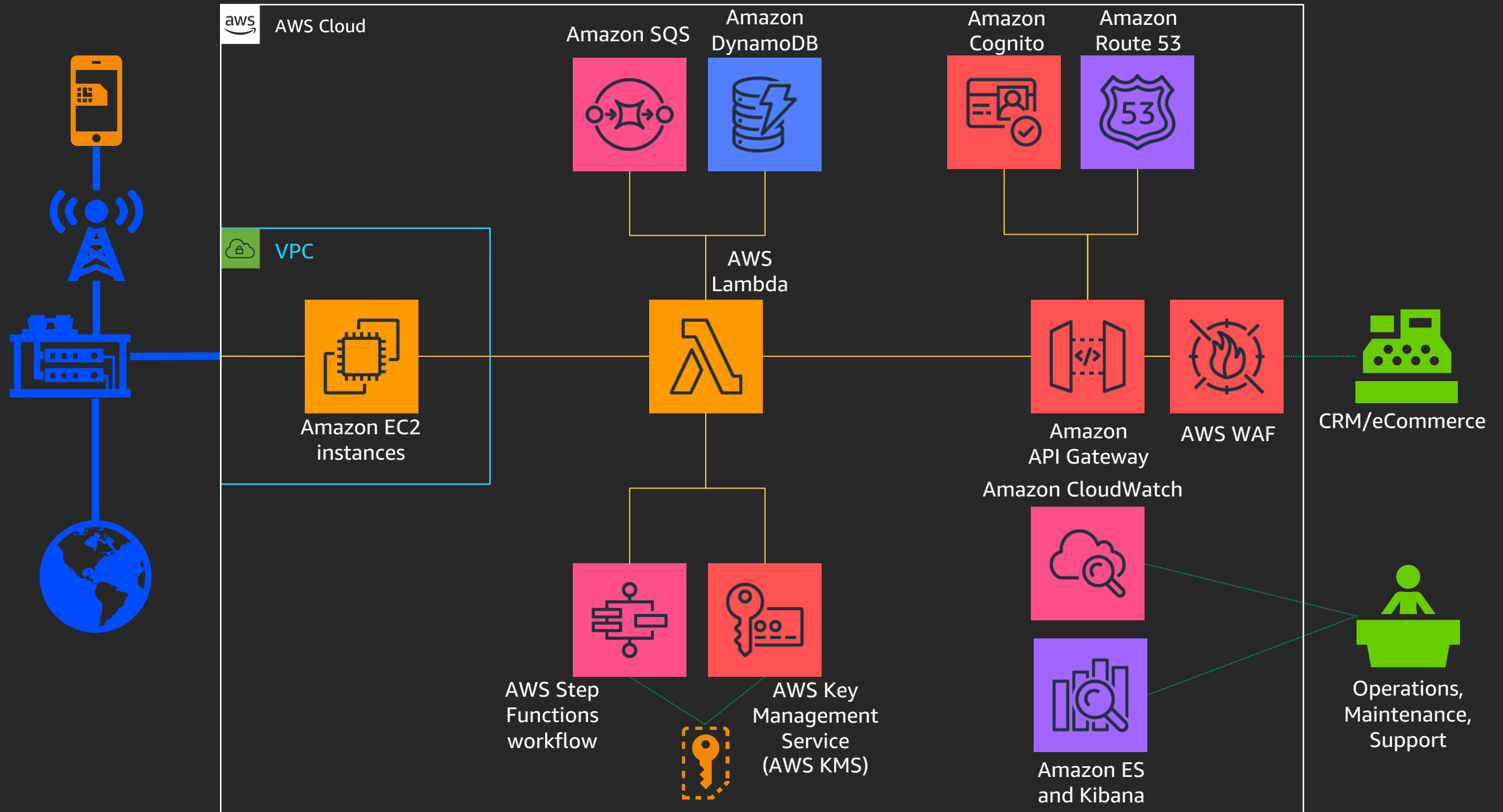
Core network close up



View from 10K feet

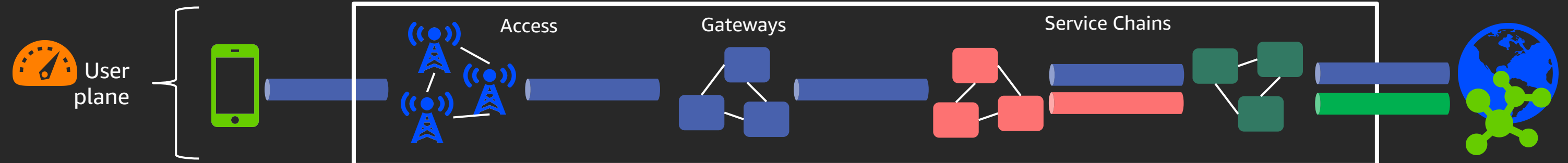
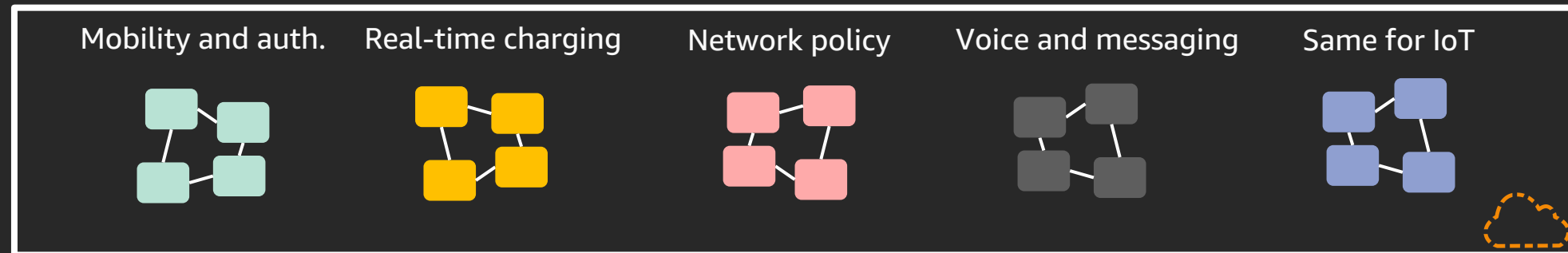
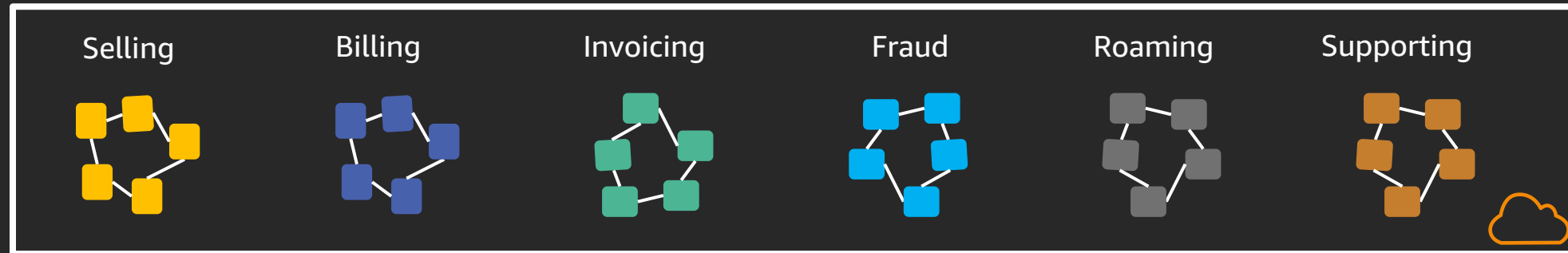


Out-of-the box telecom solution close up



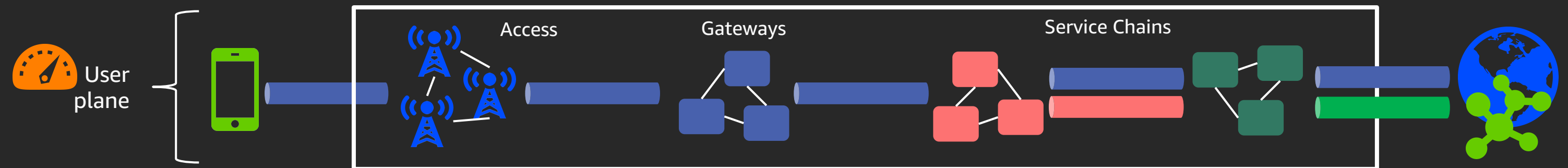
Cloud functions

Provide equivalent of all core for control plane and BSS of UMTS, LTE



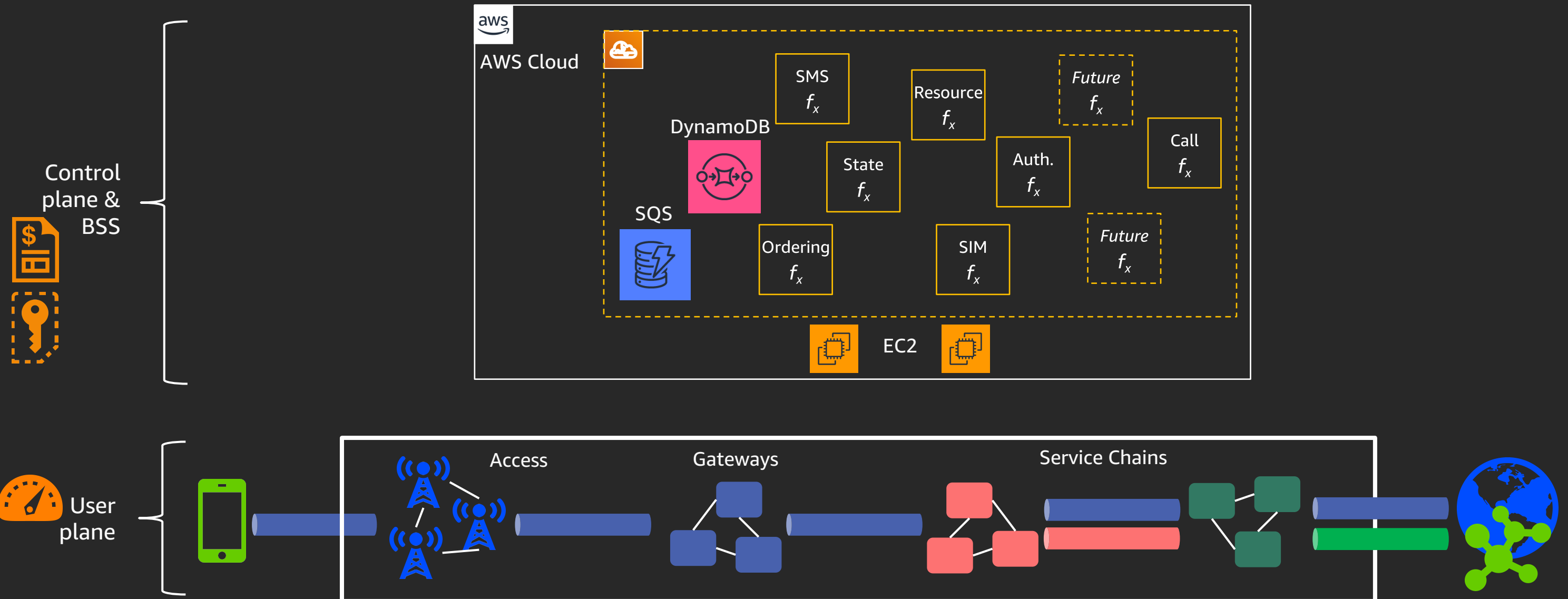
Cloud functions

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Cloud functions

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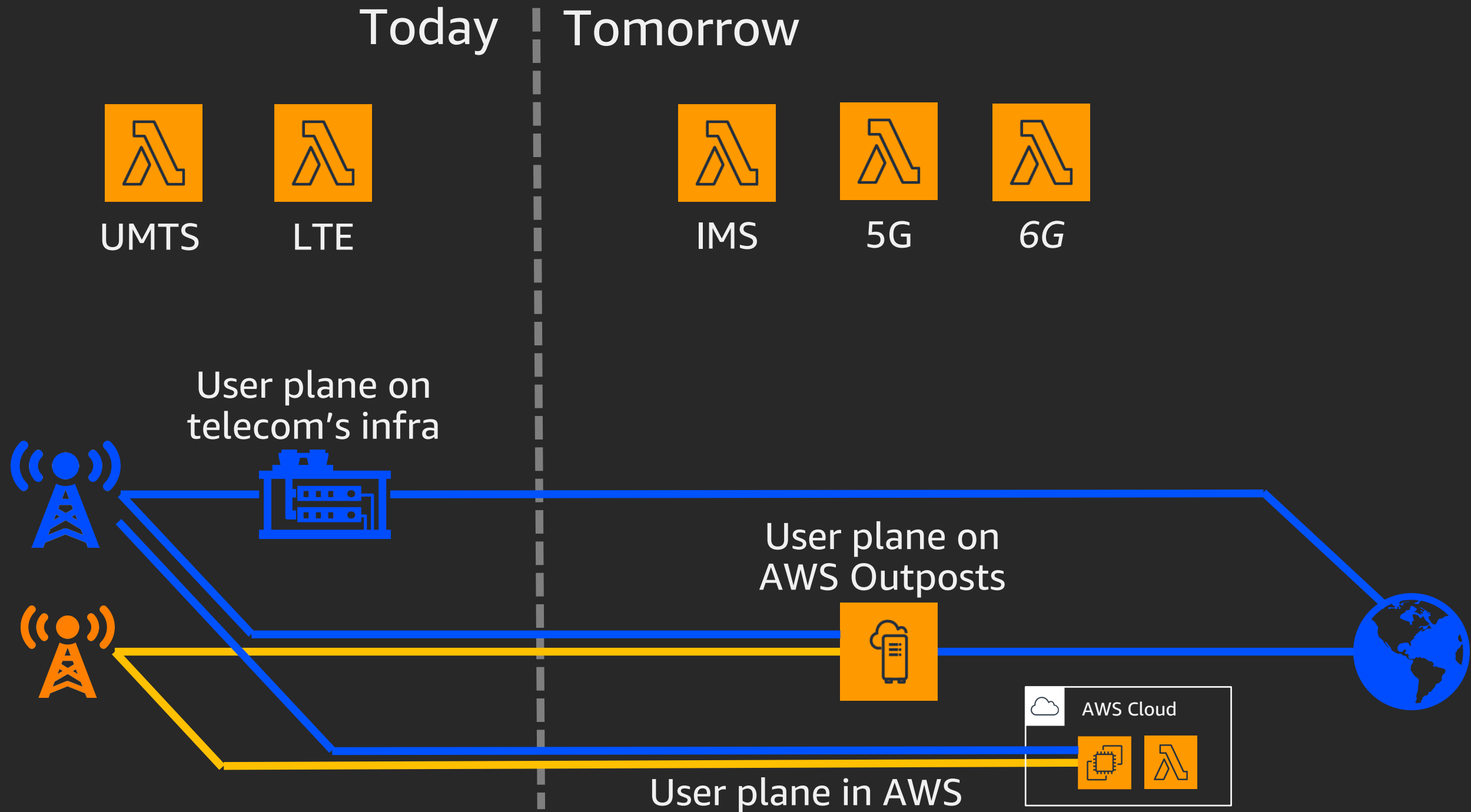
Demo

QR codes for eSIM for demo

ICCID	Status	Code
8912230200030010330 302220601000033 17827755555	ENABLED	
8912230200030010348 302220601000034	RELEASED	
8912230200030010355	DELETED	
8912230200031340025 302220601133002	TEST	

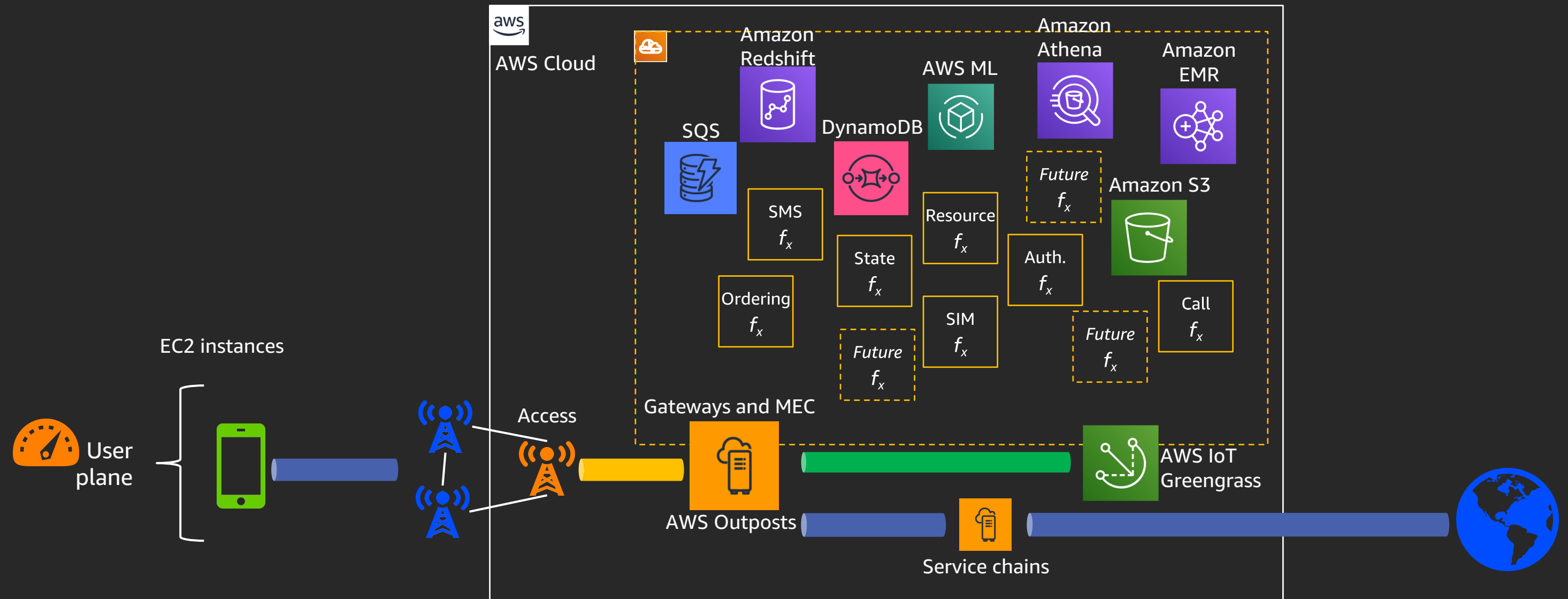
Demo end!

Technology roadmap



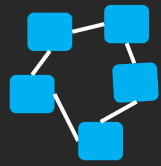
User plane

Host user plane on AWS Outposts and extend serverless to it
Enable smarter connectivity by using AWS services

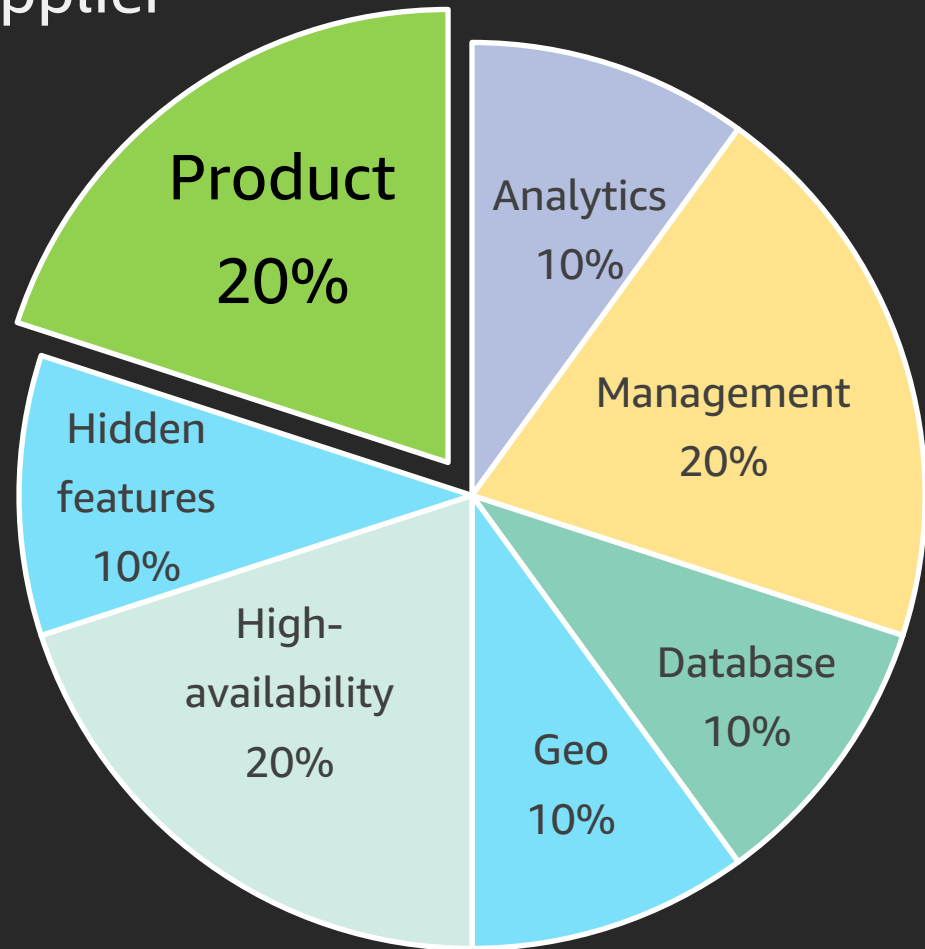
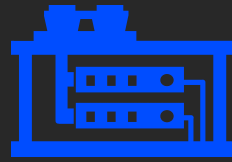


Outcome

A system
from
telecom
supplier



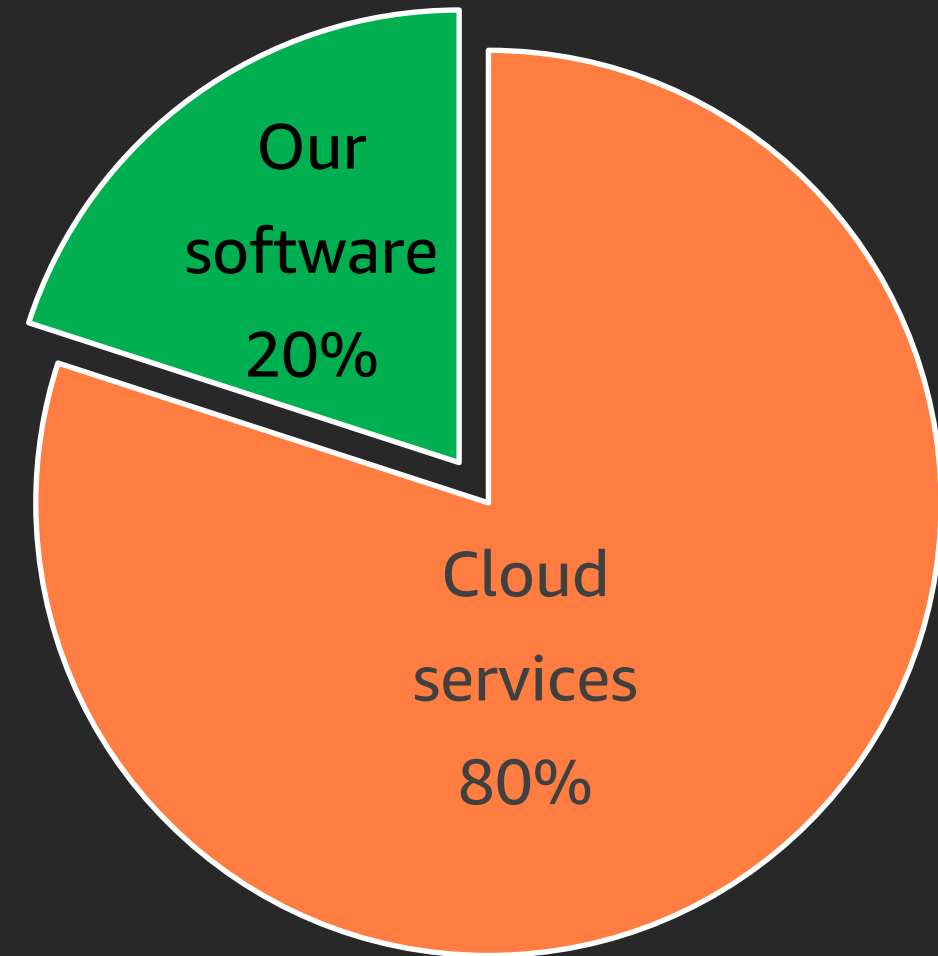
in a



Our
code



in a



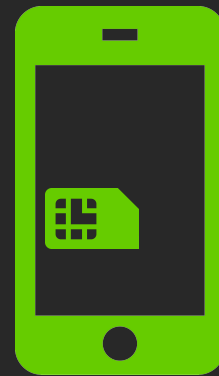
Current solution for LTE and 5, 6 ... G networks

Subscription and connectivity management today and will be carried on ...

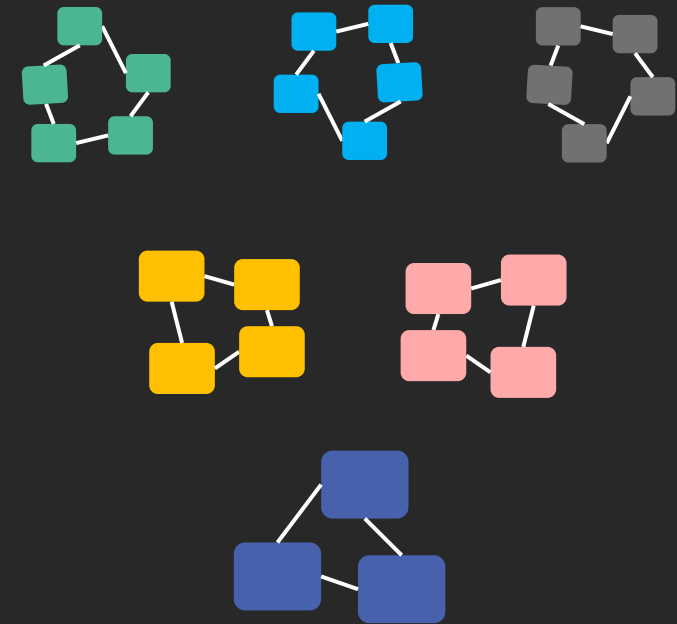


10K SIM cards

1



2



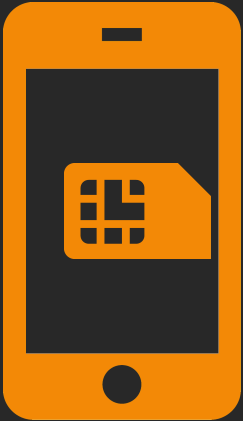
Telecom systems
from network to
business

3

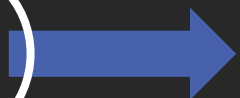


Our solution for UMTS LTE, 5, 6 ... G networks

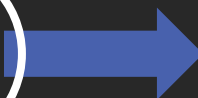
Personalized and smart connectivity for everything and on-demand



1



2



Setting up cellular connectivity at the price point of a few Lambda calls



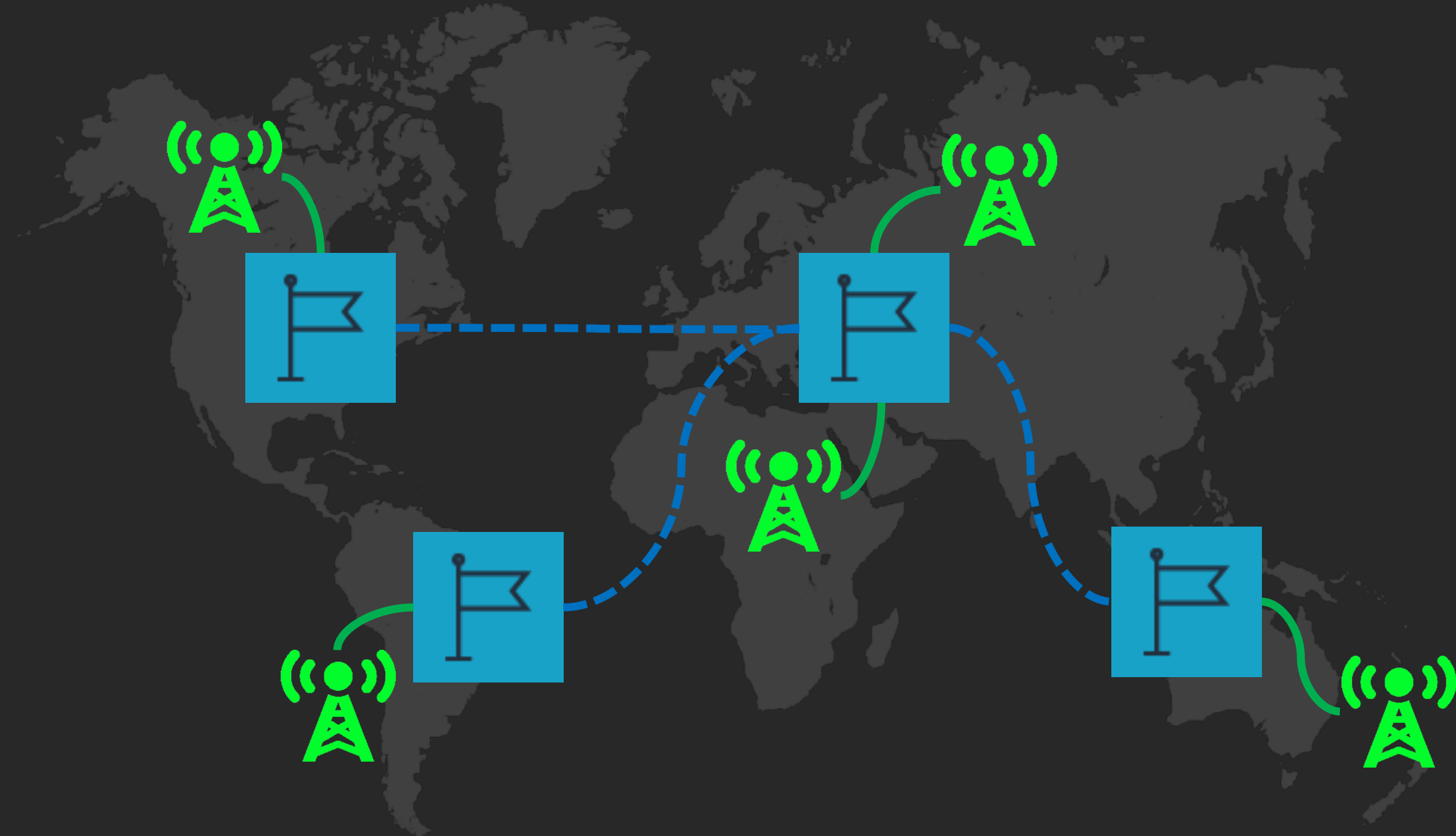
AWS Cloud



AWS serverless

"All cores" and BSS

Future telecom



Q&A for chalk talk

Performance – how long it takes for a call to connect

Scale – what if my operator is too big to fit in AWS at lower cost

Latency – how to deploy it across the country

Staffing – how many people are needed to run it, say, across opcos

SIM authentication – keys, subscription info and data, loading

Lambda-specific – dealing with warmup

Geo-redundancy – diameter mesh, global tables

5G – orchestration of network slicing and MEC

Selling – catalog API

Thank you!



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