

**MWC**<sup>™</sup>  
GSMA

BARCELONA  
26 - 29 FEBRUARY 2024

# eSIM Summit: Dismantling Myths

Wednesday 28 February, 2024 12.30 - 14.30  
Gran Fira, Barcelona Hall 8, Theatre 4



#MWC24

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**THALES**  
Building a future we can all trust



# eSIM Market Overview

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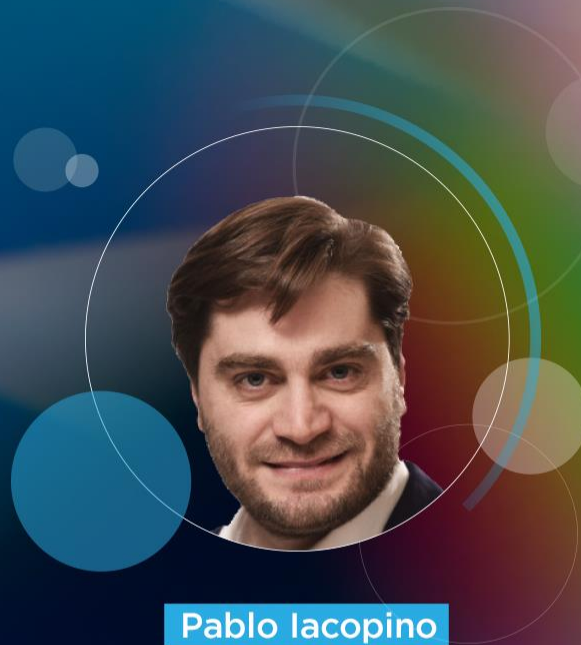


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Pablo Iacopino

Head of Research and Commercial  
Content at GSMA Intelligence  
GSMA

## eSIM: time to scale

*The eSIM journey: where we are, what's next*

**Laying the  
foundation**

**2013-2017**

**Early  
take-up**

**2018-2021**

**Acceleration**

**2022-2023**

**Scale**

New opportunities  
for mobile  
ecosystem players  
and new benefits  
for consumers and  
businesses

**2024-2026**

## Consumer Devices

Smartphones

Smartwatches

Tablets

Laptops

Bikes

Cars

5G FWA CPE

Security cameras

Wearables

## Enterprise IoT Devices

Connected vehicles

Tracking GPS  
devices

Smart meters

Security devices

Healthcare devices

Street lighting

Robots

Aircrafts

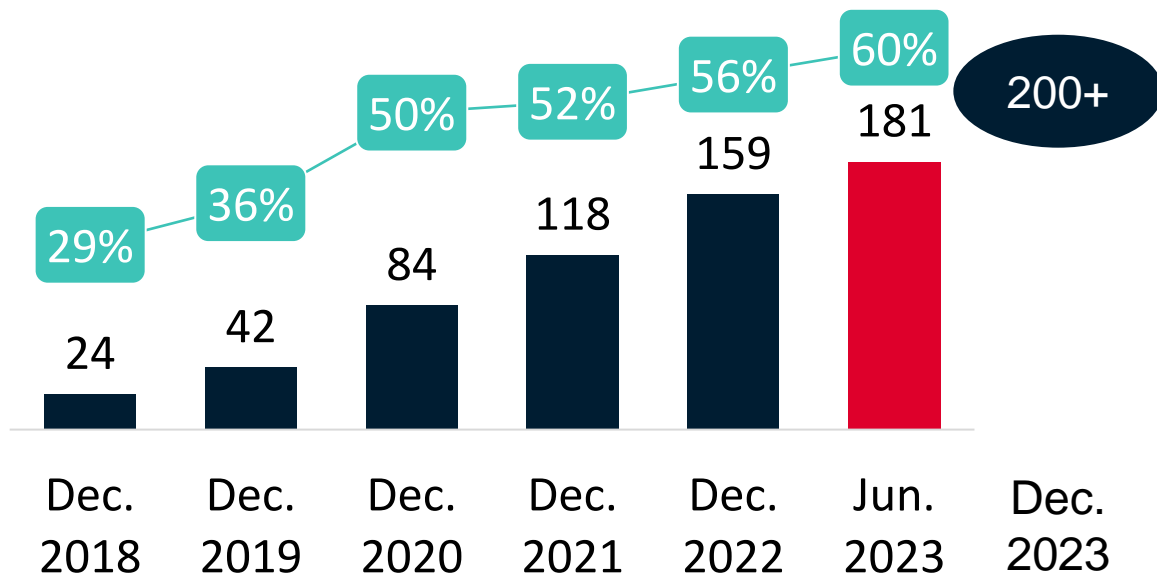
Drones

**Accelerating digital connectivity through eSIM**

Ecosystem work on global specifications continues,  
including for IoT, consumer and integrated eUICC

## How many eSIM consumer devices have been launched?

Number of models launched (cumulative figures for smartphones, smartwatches and tablets) and smartphone share (i.e. eSIM smartphones as % of total eSIM devices)



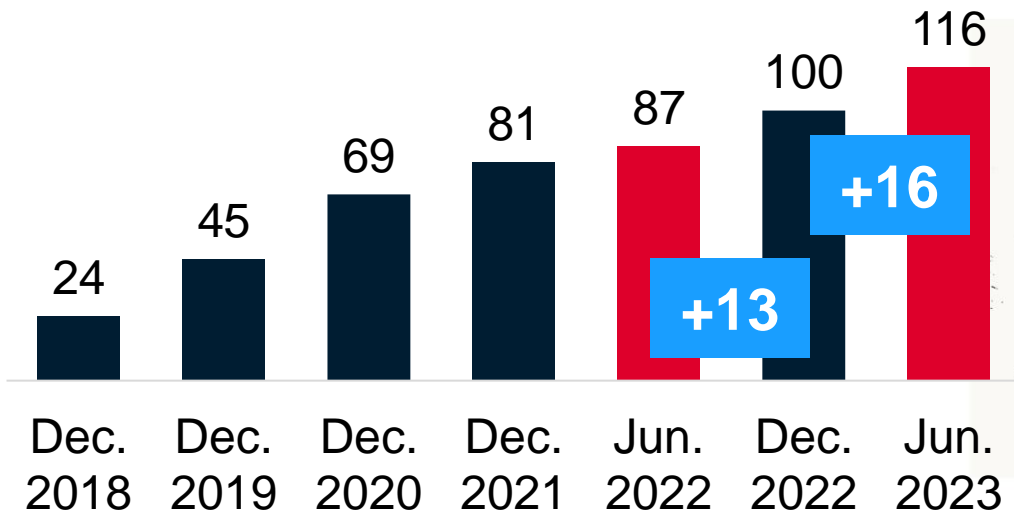
- Significant growth over the last 5 years
- Most of the top OEM brands have launched eSIM
- eSIM-only iPhones in the US a major milestone
- **More work to do: eSIM is mainstream in flagship smartphones. Limited availability beyond flagships**

# eSIM service for smartphone is now global

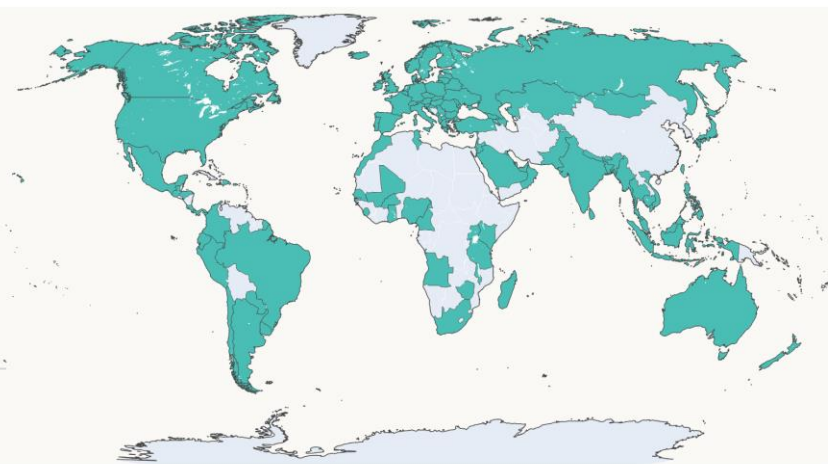
*More than half of the world's countries have launched eSIM service*

## How many countries have launched commercial eSIM service for smartphones?

Number of countries



## eSIM geographical reach



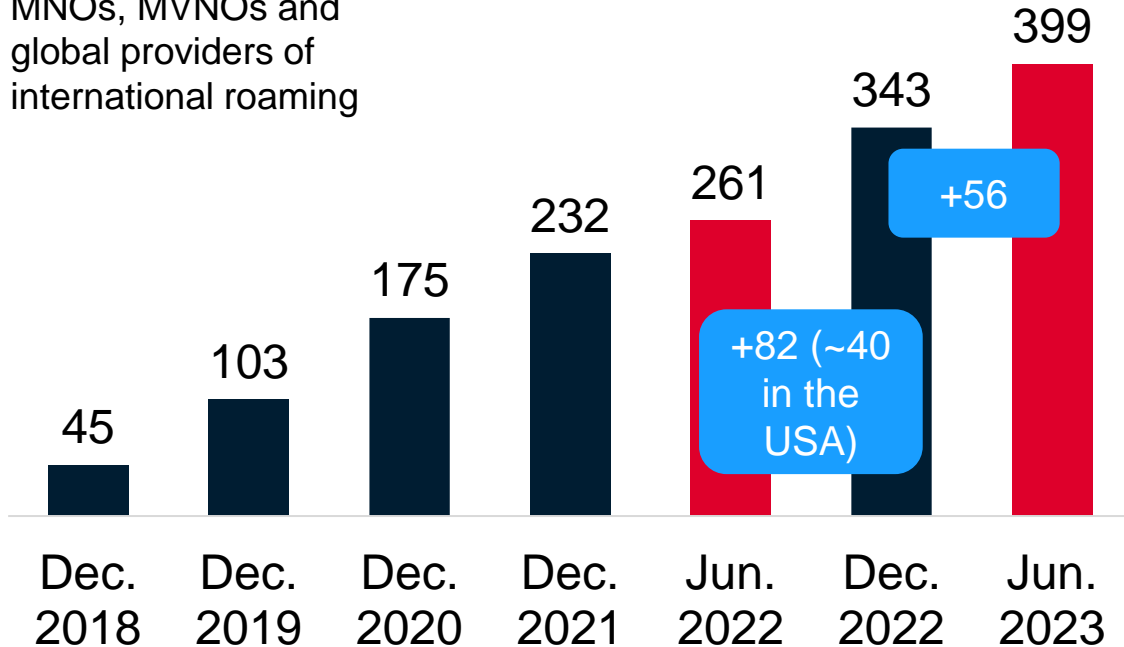
- China is still a notable exception: timelines are uncertain
- Africa is catching up: most of the 16 new launches in H1 2023 were in countries from Africa

## Operators: acceleration of eSIM deployments/launches

~400 operators offer commercial eSIM service for smartphones

### How many operators have launched commercial eSIM service for smartphones?

MNOs, MVNOs and global providers of international roaming



- eSIM-only effect since September 2022: a clear impact in the US and globally
- MVNOs are driving eSIM for international roaming

#### BUT...

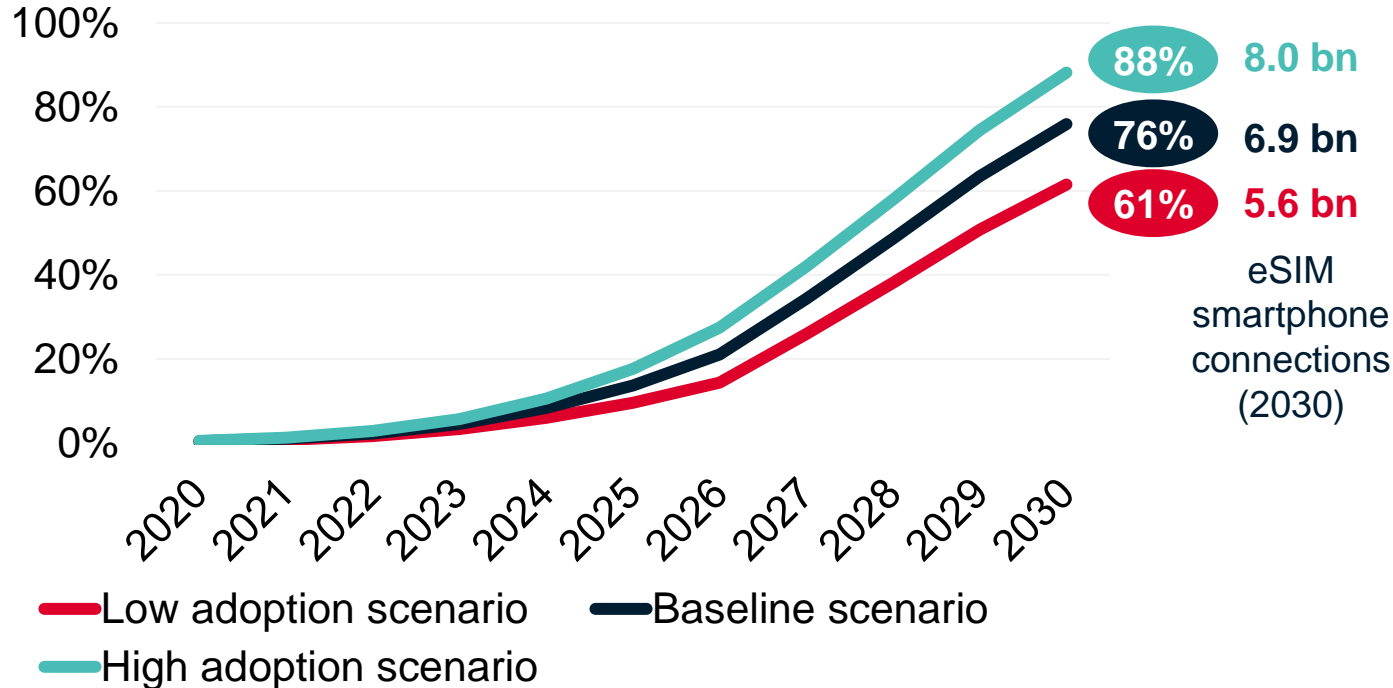
- MNOs are not doing much (so far) to promote eSIM to their customers
- Only **11%** of eSIM-aware consumers have discovered the technology via operator channels

# Consumer awareness is growing, but adoption takes time

## eSIM adoption in the smartphone market: forecast to 2030

### eSIM smartphone connections to 2030

Percentage of total smartphone connections (installed base) globally



**Key milestones:  
Baseline scenario  
(globally)**

**1 billion** eSIM  
smartphone  
connections by  
**2025**

By **2028**, **half** of  
smartphone  
connections will  
use eSIM

North America  
leading by far.  
Europe follows

## IoT is a promising market for eSIM

*eSIM helps scale IoT, enabling digital transformation*

### SO FAR

#### Automotive

eSIM is already mainstream in connected vehicles

#### Beyond Automotive

Single eSIM initiatives rather than sector-wide deployments

### NEW TRENDS SHOULD ACCELERATE ADOPTION

- New developments around enhanced eSIM specifications for IoT, and integrated SIM (iSIM)
- Arrival of new IoT technologies (e.g. RedCap; satellite/cellular integration)
- New products and solutions from eSIM vendors, aiming for global coverage
- eSIM making inroads into private networks: an incremental opportunity
- eSIM supporting the sustainability imperative

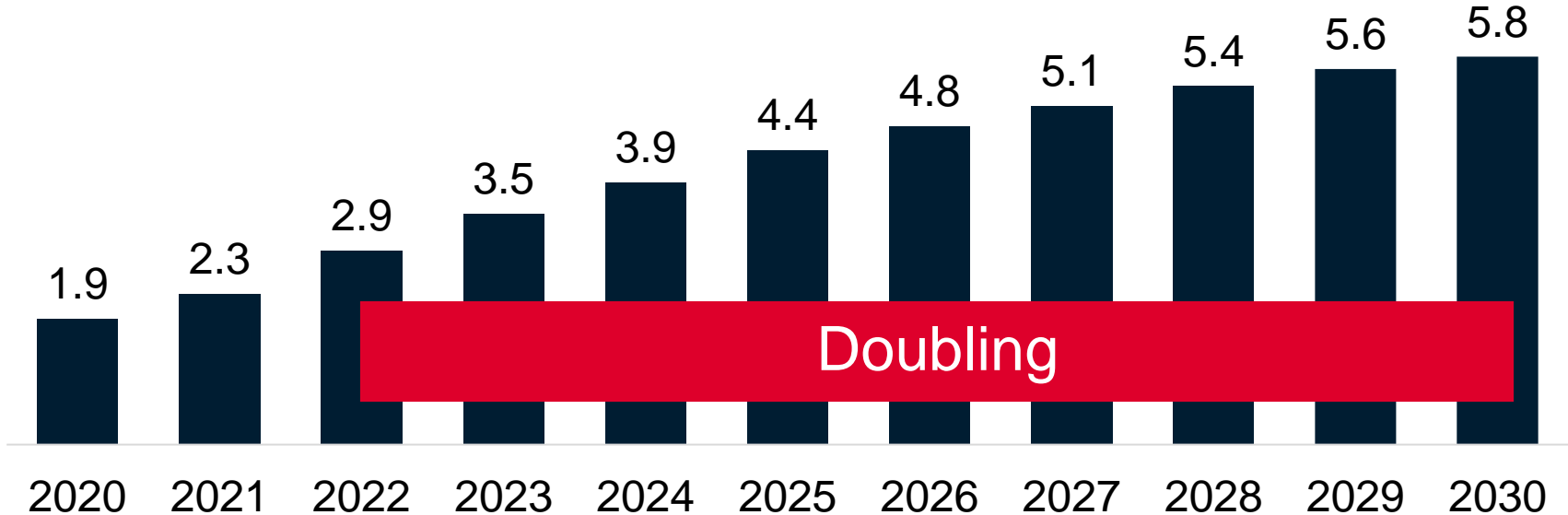
# The potential for growth is significant

*Scaling eSIM and iSIM within a growing IoT market*

## IoT cellular connections globally

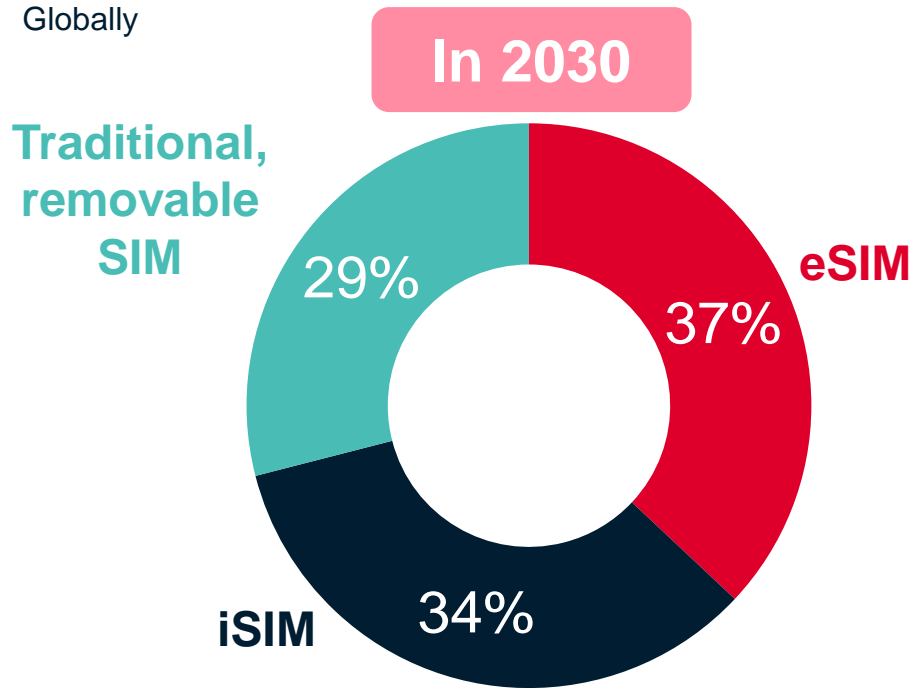
Billion. Total of all SIM form factors

eSIM and iSIM are targeting a growing share of the market



## Operator views: Share of the total number of cellular IoT connections

Globally

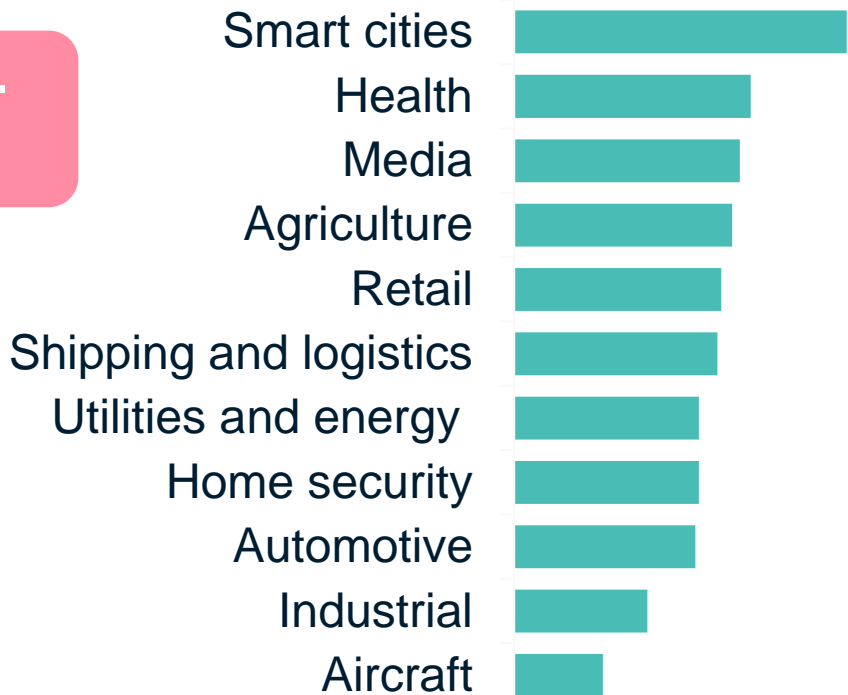


- Today, a majority of cellular IoT devices use the traditional, removable SIM
- Our survey shows that operators expect eSIM and iSIM to account for a combined **71%** of the IoT cellular market by **2030**
- **eSIM versus iSIM is not an either/or scenario**; both are valid options that will coexist for years to meet the requirements of varied IoT use cases

## Operator views: Demand for eSIM-enabled solutions from industry verticals

Globally. Overall score

In 2024-  
2025



- General consensus among operators that enterprises' demands for eSIM-enabled solutions will grow **across most industries**
- Automotive ranked lower (because eSIM is already mainstream!)
- **Smart cities leads expectations for growth**

# Why is eSIM important for IoT deployments?

*Best-in-class security & scalability as the top eSIM benefits*

## Operator views: benefits of eSIM for enterprise IoT deployments

Percentage of respondents. Respondents could select the top three.

Alignment between  
enterprises and  
operators

Ability to remotely update large volumes of devices quickly/simultaneously

41%

Ability to simultaneously/remotely patch devices in case of security vulnerabilities

38%

Confidence that only devices with the correct security credentials can access the network

27%

Device-to-cloud or chip-to cloud security

22%

Future-proof connectivity as it uses industry recognised standards

19%

eSIM is tamper-proof and theft-proof as eSIM is embedded to device

18%

Ability to switch mobile network provider remotely in real time

16%

eSIM enables global coverage

11%

Simplifies and reduces logistical and manufacturing costs

7%

# About GSMA Intelligence

[info@gsmaintelligence.com](mailto:info@gsmaintelligence.com)



**30+**

analysts &  
industry experts



**350**

data metrics  
tracked



**44K+**

users  
worldwide



**170**

data metrics modelled  
and forecasted up to  
2030



**150+**

reports published  
annually



**2k+**

news items curated  
on our platform,  
updated quarterly



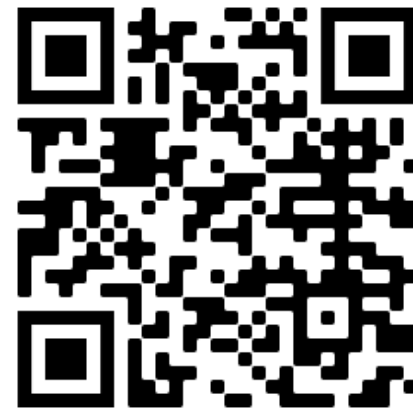
**50m**

data points  
updated daily



**6K+**

operator  
networks  
tracked





# THANK YOU!

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Pablo Iacopino

Head of Research and  
Commercial Content

[piacopino@gsma.com](mailto:piacopino@gsma.com)

GSMA<sup>®</sup>  
**Intelligence**

# Excelling with eSIM challenges in Consumer and IoT areas

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**Mikkel Escartin**

VP Digital Solutions Business Line  
IDEMIA SECURE TRANSACTIONS

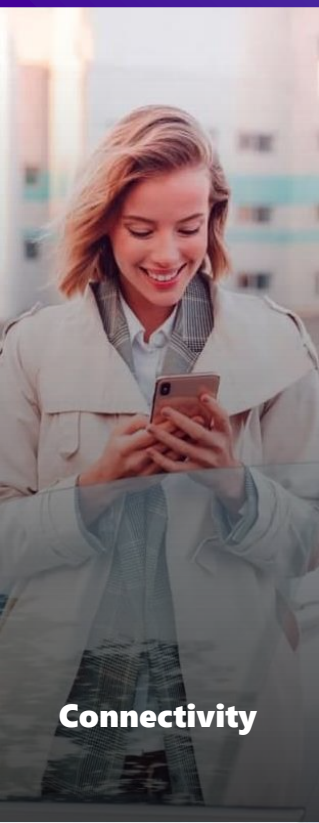


**Sylvain Givord**

eSIM Product Manager  
IDEMIA SECURE TRANSACTIONS



**UNLOCK THE WORLD, MAKE IT SAFER**



**Connectivity**



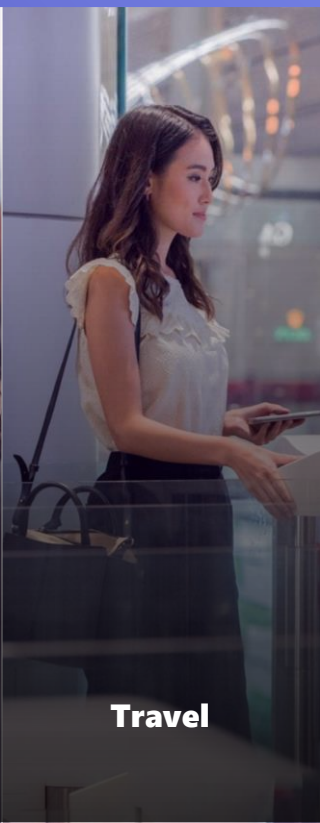
**Payment**



**Access Control**



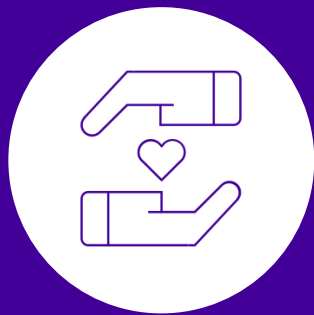
**Identity**



**Travel**



**Public Security**



**SIMPLIFY**



**SCALE**



**INNOVATE**

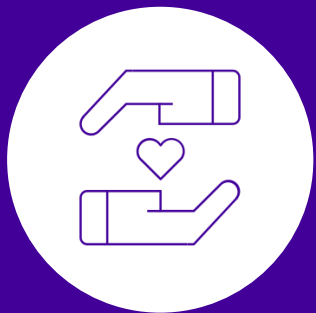


## CONSUMER eSIM

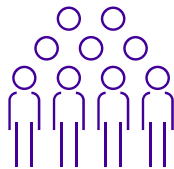
eSIM-only smartphones expansion

eSIM ready  $\neq$  eSIM-only ready

A set of challenges & opportunities



# SIMPLIFY



**User Experience  
(UX)**



**Mobile operators'  
back-end**

**Streamline  
eSIM activation  
process**

**Optimize  
digital inventory  
management**

**Eliminate  
eSIM profile  
obsolescence**



**SCALE**

## Whole new expectations in terms of eSIM service levels

**Capacity & elasticity**



**Availability**



**Resilience**



**Security**



**IDEMIA hosts its eSIM platforms on  
Microsoft Azure public cloud**

# SCALE

WITH MINIMUM IMPACT  
ON THE PLANET



## For one Consumer eSIM profile handled by IDEMIA

eSIM profile generation



eSIM profile download



Datacenter energy consumption  
& equipment

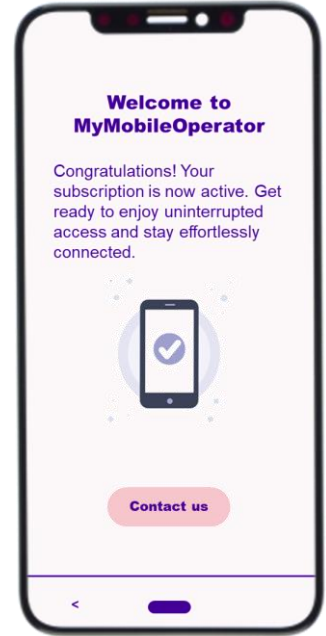
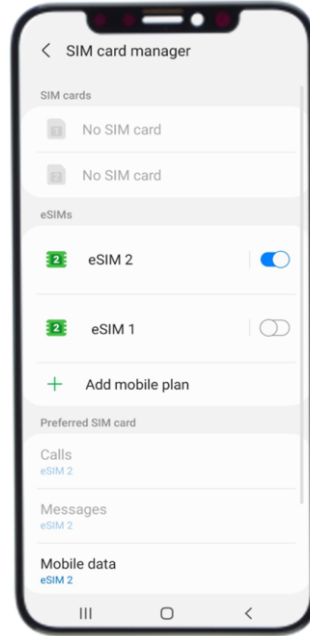
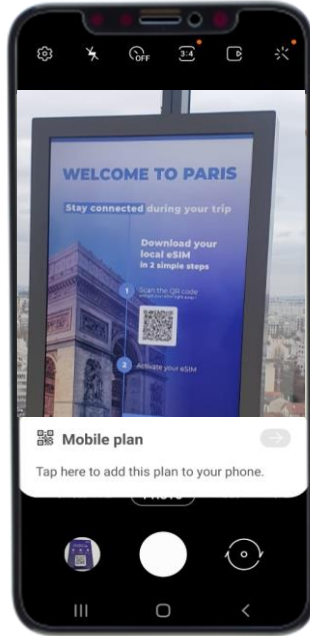
**< 0.2g** CO2 equivalent

Lifecycle assessment verified by Bureau Veritas

# Rethink customer interactions



# INNOVATE



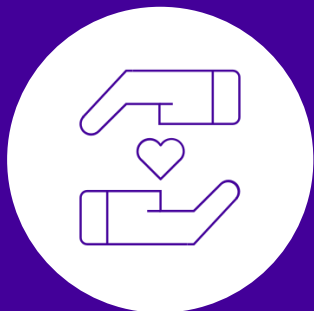
A night cityscape with digital data lines overlaid on the buildings. The lines are vertical and horizontal, connecting various points across the scene, suggesting a network or data flow. The city lights are visible in the background, and the overall color palette is dominated by blues and purples.

# eSIM IoT

Address new IoT use cases

Best of M2M and Consumer frameworks

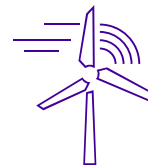
Game-changer in opening the IoT market



# SIMPLIFY



**More  
business  
opportunities  
for MNOs**



**More local  
connectivity providers  
for OEMs**

**Adapt  
your eSIM  
Consumer platform**

**Manage  
IoT devices  
fleet remotely**



# SCALE

eSIM IoT enables you to  
**expand globally** while meeting **local** needs,  
**today & tomorrow**

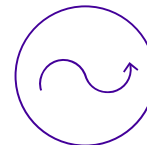
**Scale  
use cases**



**Scale  
with local focus**



**Scale  
flexibly**



**Orchestration  
of M2M & IoT  
use cases**

**Personalization  
of connectivity  
workflows**

**Deployment  
in the  
public cloud**



**INNOVATE**

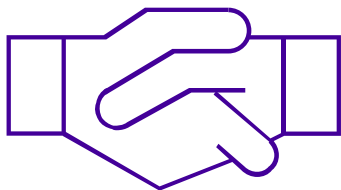
## **Easily manage** the vast heterogeneity of devices & use cases



**Just-in-Time eSIM  
Profile generation**



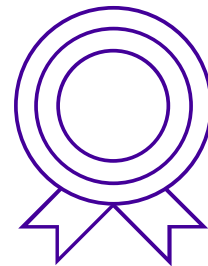
**iSIM  
development**



**A reliable partner  
for Connectivity  
Services**



**Secure &  
future-proof  
solutions**



**Pioneering the  
eSIM revolution,  
together**

# eSIM User eXperience (UX): Real-life case studies, challenges and best practices

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**Mikkel Escartin**

VP Digital Solutions Business Line  
IDEMIA SECURE TRANSACTIONS



**Arya Alatsas**

Account Director  
Make It Clear

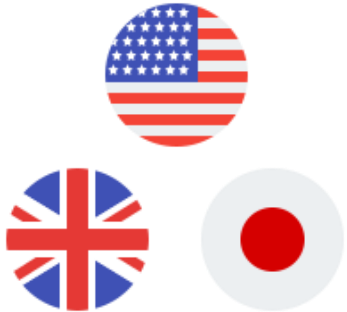
# ESIM USER EXPERIENCE (UX)

Real-life case studies,  
challenges & best practices

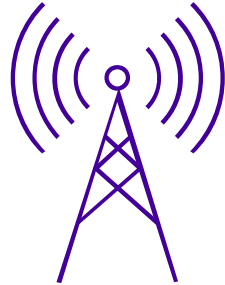


# AN EXTENSIVE eSIM USER EXPERIENCE STUDY

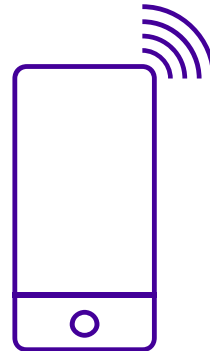
## 3 MAJOR eSIM MARKETS



## 15 MOBILE OPERATORS



## 3 MAJOR SMARTPHONE BRANDS



## FULL USER JOURNEYS ASSESSED & TESTED



Marketing review



UX review



Users' testing



## **USERS EDUCATION & eSIM PROMOTION**

Overall availability of  
**support content on eSIM**

Limited **promotional  
information** on eSIM

Enhanced **findability**  
of eSIM will **boost adoption**



## eSIM-COMPATIBLE OFFERS

**Depth of eSIM-compatible offers** varies across the 3 markets assessed

**Wider eSIM offers in the US** linked to eSIM-only smartphones availability

Expanding and clarifying eSIM offers to **support more use cases**

## FULL DIGITAL EXPERIENCE

Search and purchase  
are well digitized

eSIM activation is not always an  
end-to-end digital journey

Some only allow physical **SIM** to  
**eSIM transfer** to get an eSIM



## eSIM ACTIVATION PROCESS

**QR Codes** are widely offered to allow the eSIM profile download

**Push notifications** triggering eSIM profile download are convenient

Few mobile operators rely on **mobile apps** to finalize the eSIM activation

# BEST PRACTICES TO ELEVATE THE eSIM USER EXPERIENCE



**INCREASE  
VISIBILITY OF  
eSIM TO BOOST  
ADOPTION**



**EXTEND  
AVAILABILITY OF  
eSIM OFFERS & USE  
CASES**



**DEVELOP  
AN END-TO-END  
DIGITAL USER  
EXPERIENCE**



**GUIDE  
USERS FOR SMOOTH  
eSIM ACTIVATION  
PROCESS**

**COME  
&  
MEET US**

**Hall 7,  
meeting rooms**

**#7E3Ex & #7E5Ex**

**LEARN ABOUT OUR  
CONNECTIVITY  
SERVICES**



# eSIMplify your IoT business: How to unleash full potential beyond Consumer

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**Andreas Morawietz**

Global Head of Portfolio Strategy  
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# eSIMplify your IoT business: How to unleash full potential beyond Consumer

## MWC24 – eSIM Summit

Andreas Morawietz, Global Head of Portfolio Strategy

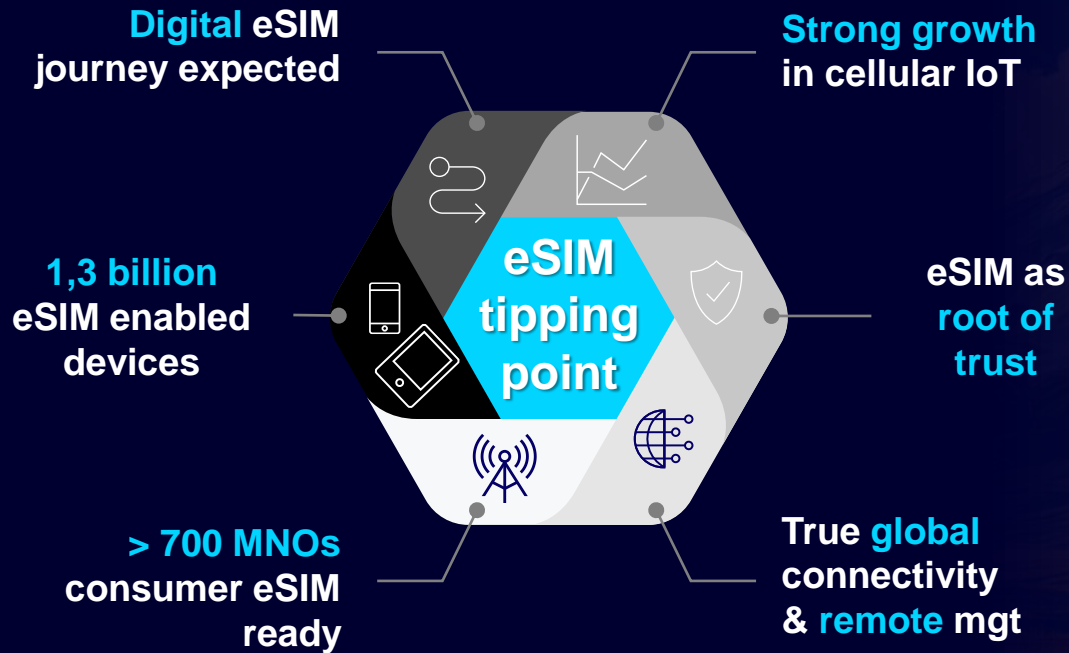
Barcelona, 28 February 2024

The G+D offering plays an important role in people's everyday lives.



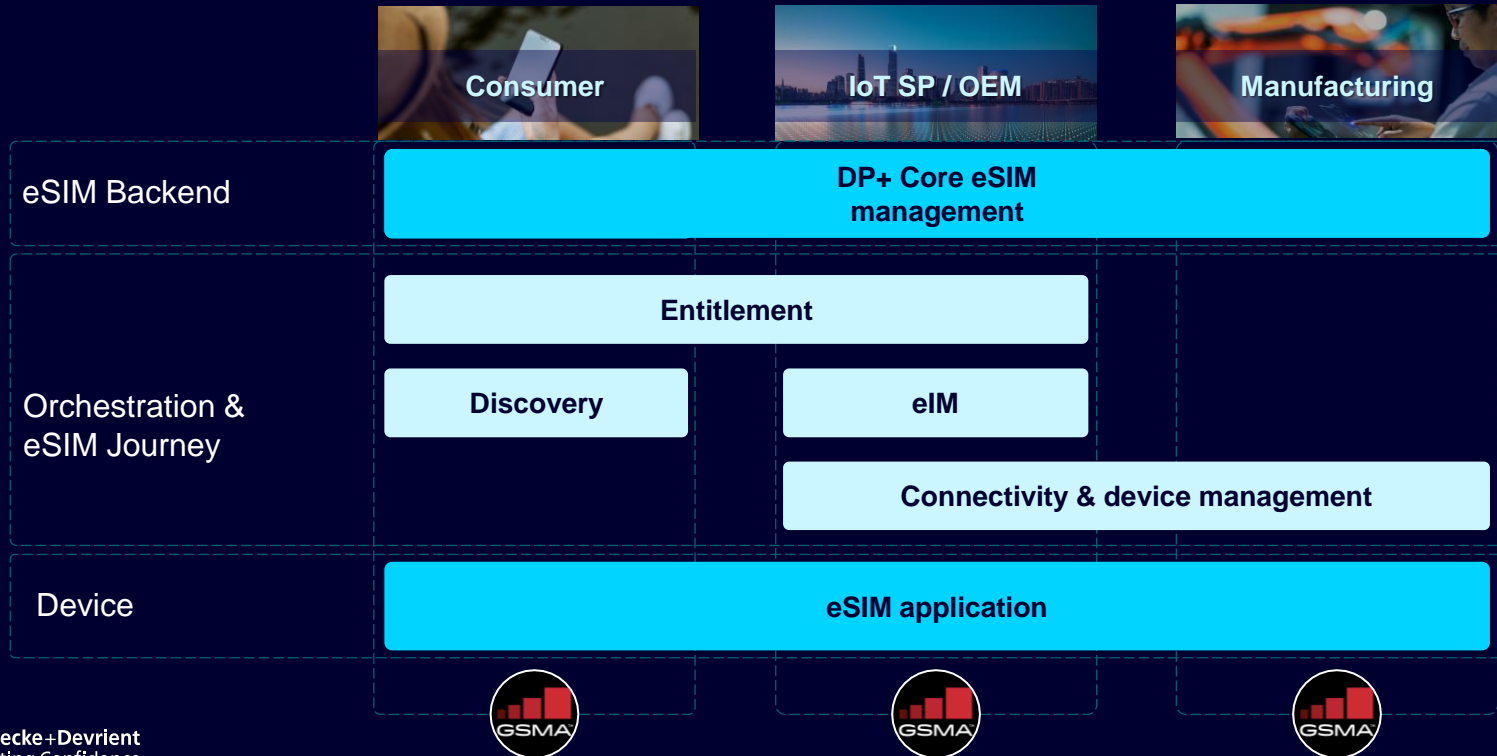
# Myth: eSIM is still far away from commercial

## We are closer than we think...



# Myth: eSIM for IoT is a completely new service

## DP+ as horizontal service meets vertical needs



# Learnings from G+D in our consumer eSIM journey



**175 mio**

eSIM downloads via G+D AirOn360® RSP



**>300**

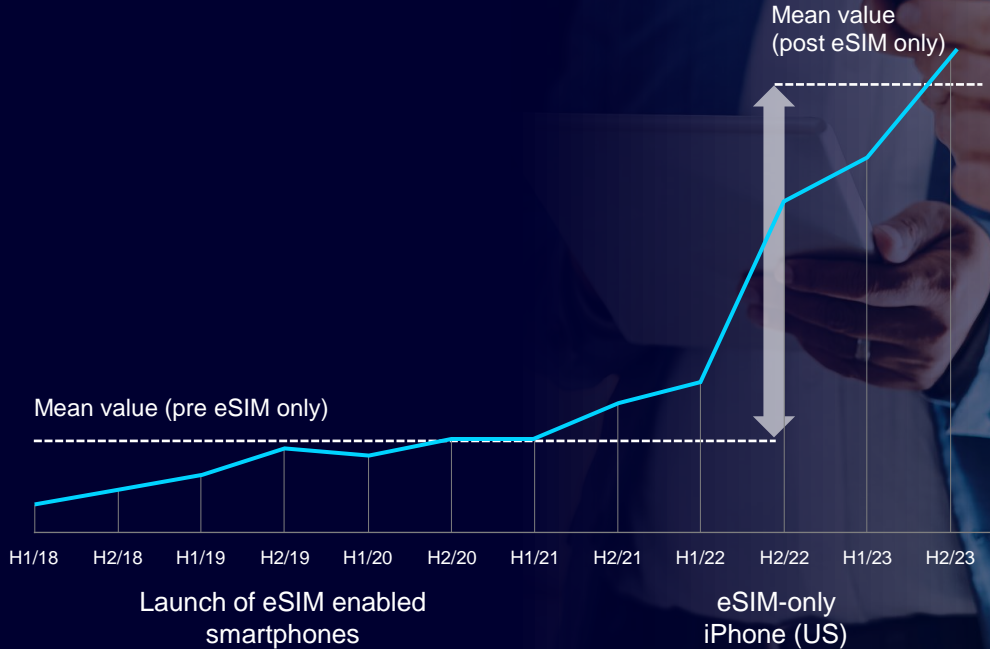
commercial eSIM mgt services by G+D



**Highest quality**

Profile intelligence, Geo redundant

## G+D Consumer eSIM Profile Downloads



# Myth: eSIM management is only for consumer

## Private networks already today benefit from eSIM

### Nomadic LTE / MPN

Disaster or mega event

### eSIMplified onboarding

Scan & connect with G+D universal eSIM voucher



# A typical cellular IoT device for Track & Trace

## Use Case

Asset management on sea, land and air

## Solution

Battery-driven with solar panel

Typical lifetime: >10 years

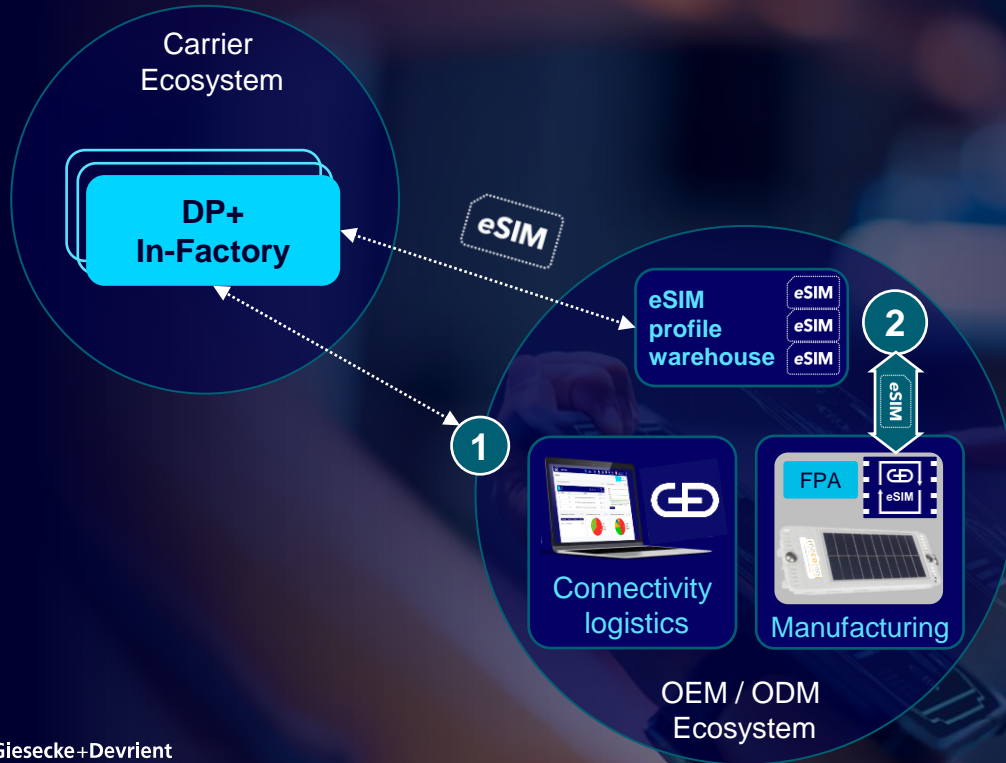
Maintenance-free

Soldered eUICC

Global Connectivity



# On-demand eSIM profile loading to IoT device within manufacturing process (SGP.42)



## Ownership

Production planning

## No SAS

OEM manufacturing lines

## Offline

Production process

*Myth: In-Factory eSIM mgt is not available today!*  
**Commercially in operation**

**Tens of millions**

eSIM profiles till today delivered  
into manufacturing lines by G+D



**Headless  
IoT  
devices**

**No Wi-Fi  
required for  
device  
setup**

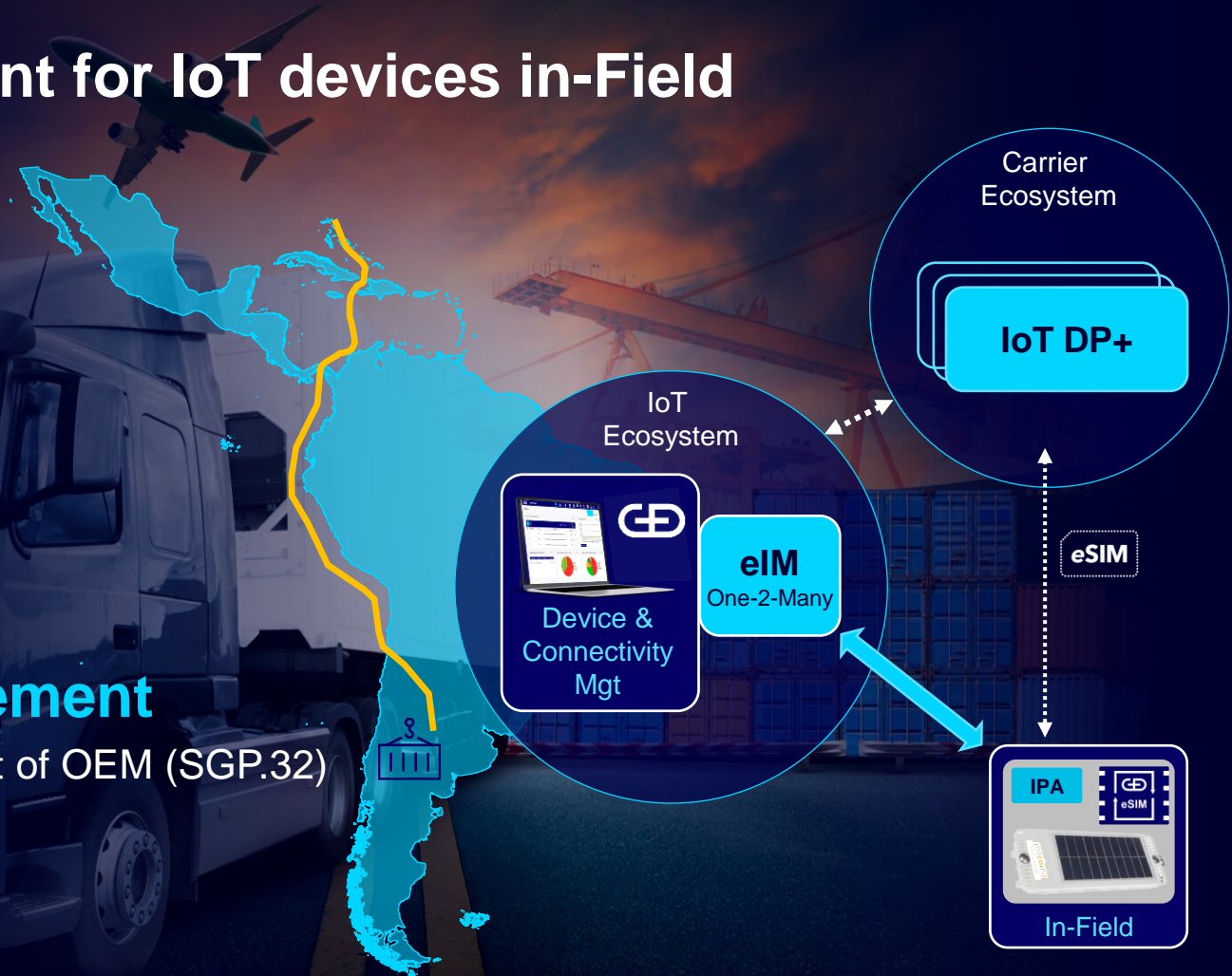
# eSIM management for IoT devices in-Field

## Global service

IoT device tracking

## Remote management

Device & connectivity mgt of OEM (SGP.32)



# eSIMplify your business with AirOn360® family

## Core DP+ service for consumer and IoT

Leverage experience and expertise

## eSIM is integrated into IoT ecosystem

Fulfill IoT requirements

## G+D provide all you need to get eSIM ready

Reference code, eSIM starter kit,...

**eSIM mgt  
M2M**  
AirOn360®  
M2M

**eSIM mgt  
consumer**  
AirOn360®  
RSP

**eSIM  
mgt IoT**  
AirOn360®  
IoT

**eSIM mgt  
In-Factory**  
AirOn360®  
IFPP

**IoT  
connectivity  
mgt**  
AirOn360®  
IoT Suite

# Thank you!

Come and chat with G+D in Hall 7 to find out more



Giesecke+Devrient  
Creating Confidence

## eSIMplify your business with

### eSIM Management



**Andreas Morawietz**

Global Head of Portfolio Strategy

Giesecke+Devrient

**MWC24 – eSIM Summit**

Barcelona, 28 February 2024

# Mastering eSIM: Why Entitlements ensure the best possible customer experience

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**Andreas Morawietz**

Global Head of Portfolio Strategy  
Giesecke+Devrient



**Gary Waite**

Product Evangelist/Strategist  
NetLync

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# Mastering eSIM: Why Entitlements ensure the best possible customer experience

**MWC24 – eSIM Summit**

Gary Waite, Product Evangelist / Strategist

Barcelona, 28 February 2024

A wireframe globe is centered in the background, composed of a network of white lines and dots on a dark blue background. The globe shows the continents of North and South America.

 NetLync





# Customer Experience



Apple  
**iMessage**

Apple  
**FaceTime**

**VoLTE**

**Wi-Fi Calling**



# Entitlements



Entitlement  
Server

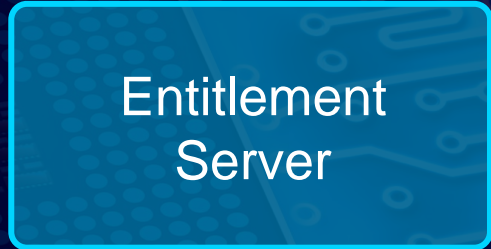


Carrier  
OSS/BSS

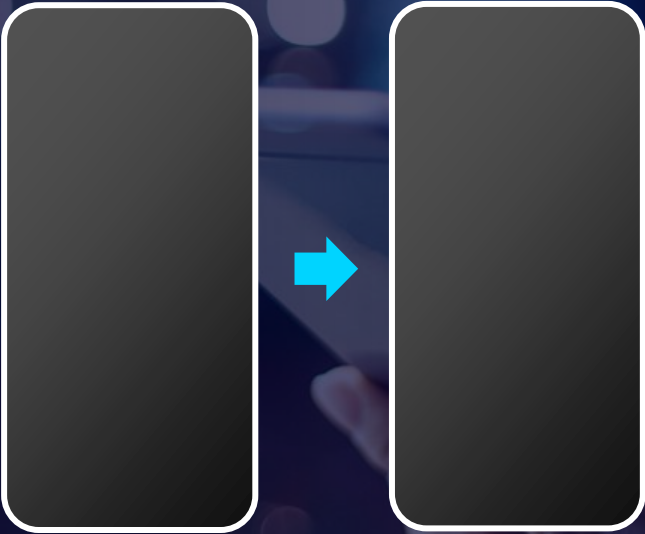


DP+

# Apple Phone Number Registration



# Transferring from One Device to Another



Current  
Device

New  
Device

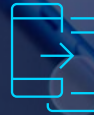
# eSIM Quick Transfer on iPhone



Current  
iPhone



New  
iPhone



Transformed customer experience



Enhances carrier reputation



# Entitlements

# Challenges to the Worldwide Adoption of Entitlements



Complex Contracting



Slow & Painful Deployment



High Cost of Ownership



Difficulties when adding new use cases



# AirOn360<sup>®</sup> ES



**Technical**

AirOn360® ES

# Entitlements as a Service (EaaS)



Cloud-based



Multi-tenant



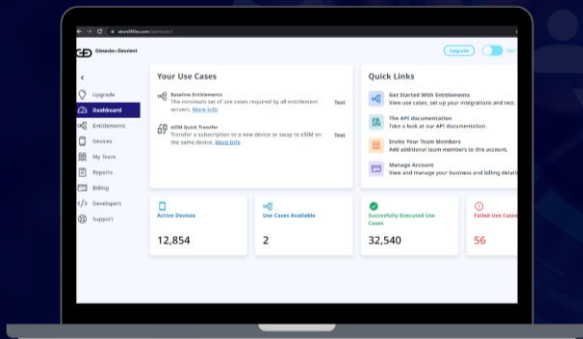
Secure



# Technical

AirOn360<sup>®</sup> ES

# Developer-led, Self-onboarding



3 developers x 4 weeks

stripe

twilio

ATLASSIAN

HubSpot

slack

Square



**Technical**

AirOn360<sup>®</sup> ES

Supports both  
iOS and Android



**Technical**

AirOn360® ES

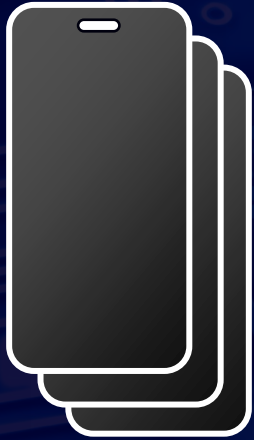
# Ready for New Use Cases



- ➔ Pay as you grow model
- ➔ No setup fees / CAPEX / hidden costs
- ➔ No minimum commitments
- ➔ Removes all the risk and fits any budget

The background of the slide is a dark blue, textured surface with a pattern of light blue circuit traces and nodes, resembling a printed circuit board. In the center-left, there is a dark, square microchip with a grid of small, light blue dots on its surface, representing a multi-entitlement support chip.

# Multi-Entitlement Support



Your Current  
Entitlement Solution



Carrier  
OSS/BSS



DP+



Your Current  
Entitlement Solution



Carrier  
OSS/BSS



DP+

Phone Number Registration

5G

VoLTE

Wi-Fi Calling

# eSIM Quick Transfer on iPhone



Phone Number Registration

5G    VoLTE    Wi-Fi Calling



# Availability

AirOn360® ES

Entitlements is now available to  
**every MNO and MVNO**  
across the world



# Case Studies



*"As we dive into learning and onboarding entitlement services for the first time, it's crucial to grasp the full picture of how things flow, from the device all the way to the far end of the networking components. Plus, the developer portal is user-friendly."*



*"The digital customer experience is critical to our strategy. Having access to entitlements for the first time added crucial features to deliver the best experience designed by OEMs. We added these capabilities to 3 countries in a matter of months with no external resources."*



AirOn360<sup>®</sup> ES



- ➔ The **fastest** and most **affordable** way to deploy entitlements today
- ➔ One solution for **both** iOS and Android
- ➔ Now available to **every** MNO and MVNO – no matter what size
- ➔ **Multi-Entitlement Support** for eSIM Quick Transfer on iPhone
- ➔ A commercial model that removes **all the risk** and **fits any budget**

Come and chat with our G+D representatives over in **Hall 7** to find out more

# Thank you!

Come and chat with G+D in Hall 7 to find out more



Giesecke+Devrient  
Creating Confidence

**Andreas Morawietz**

Global Head of Portfolio Strategy

**Giesecke+Devrient**

**Gary Waite**

Product Evangelist / Strategist

**NetLync**

**MWC24 – eSIM Summit**

Barcelona, 28 February 2024

**eSIMplify your business with**

**Entitlement Service**



# eSIM: Enhancing Connectivity for people and objects in the Digital Age

Wednesday 28 February, 2024 12.30 - 14.30  
Gran Fira, Barcelona Hall 8, Theatre 4

#MWC24

Platinum Sponsors:



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Gold Sponsors:



**Benjamin Mazet**

Product Line Manager of the  
On-Demand Connectivity vertical.  
Digital Identity and Security  
Thales



**Sathish Karunakaran**

Director of  
Engineering  
Google - Android connectivity

# Enhancing Connectivity for people and objects in the Digital Age

eSIM SUMMIT 2024

[www.thalesgroup.com](http://www.thalesgroup.com)



**MWC™**  
Barcelona



# Benjamin **MAZET**

Product Line Manager  
of the On-Demand  
Connectivity



# 2023 Main Facts Driving the eSIM Usage



iPhone 15 reinforces momentum of **eSIM only launch** in the US started by iPhone 14

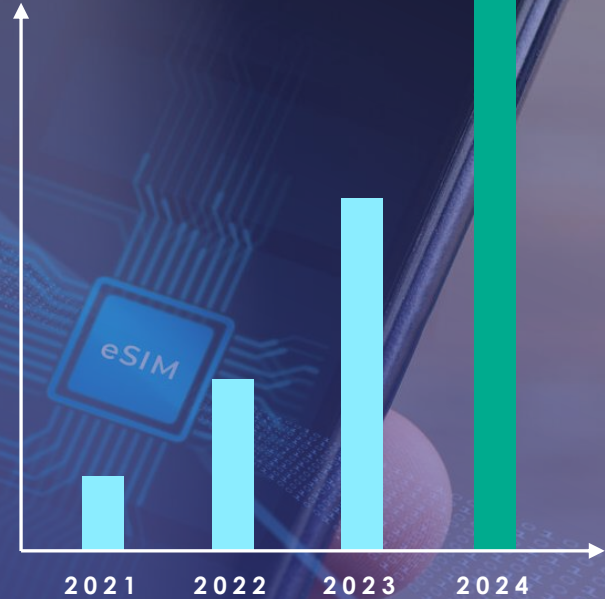


**eSIM first** strategies and new use cases are multiplying with more eSIM commercial offers around the world



**Increase in eSIM activations** thanks to enriched digital experience & **discovery services on Android ecosystem.**

VOLUME OF eSIM PROFILE DOWNLOADS



# 2023 eSIM Consumer Main facts



**+109%**

**TRANSACTION INCREASE**  
worldwide in 2023



**72%**

**OF TRANSACTIONS  
IN THE USA**  
come from eSIM only  
smartphones in 2023



**+104%**

**TRANSACTION  
INCREASE IN EUROPE**  
in 2023



**88%**

**SMARTPHONE SHARE**  
across total transactions  
in Europe 2023



Source: Thales Market Intelligence

# Massive eSIM deployment expectations



**High scalability** to support peaks of eSIM activation



**High availability with Geo-redundancy** to ensure full reliability of service



Hybrid cloud model with **Sovereign approach**  
Key security elements remain under Thales control

# Maintain seamless experience in a digital environment

## Today's situation for eSIM activation



90% are using QR Codes



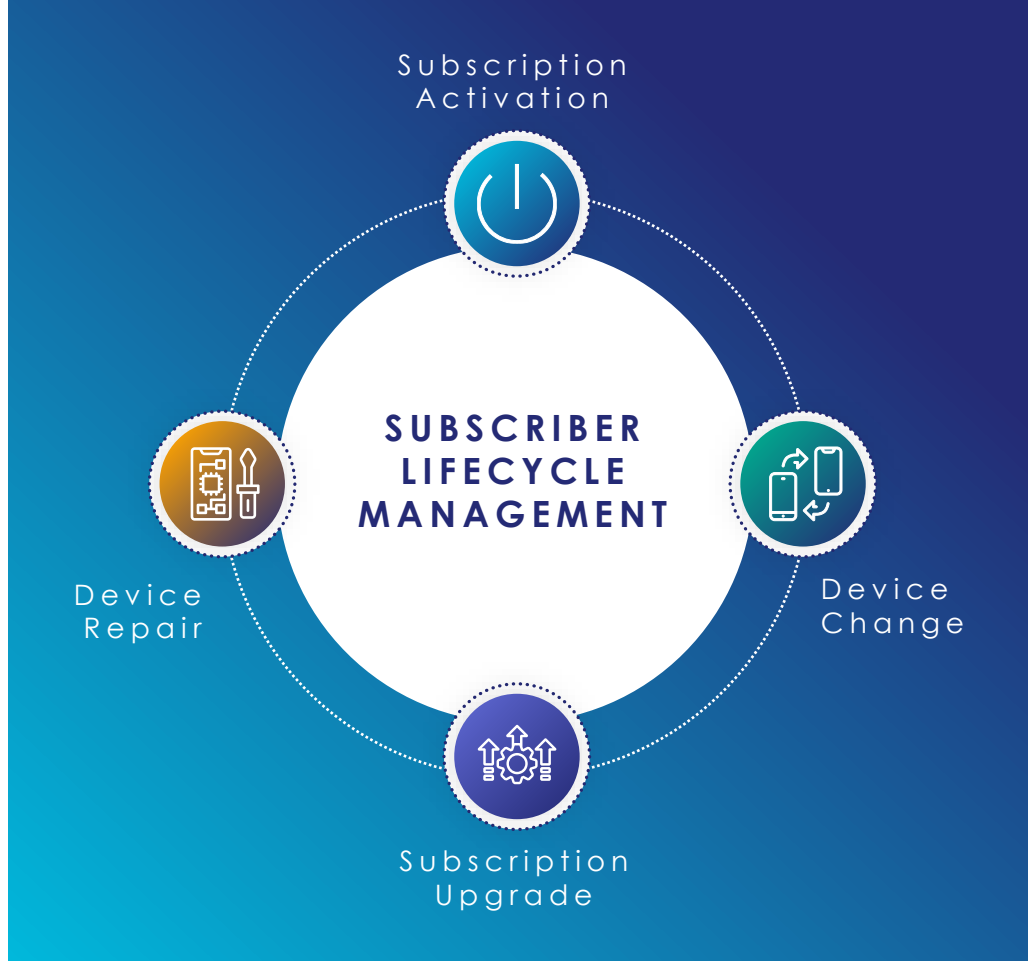
30% are using Entitlement Server



10% are using Carrier App

## Digital & seamless strategies gaining interest from MNO

- Mobile App
- Entitlement Server
- Multiplication of eSIM Discovery Services for out-the-box experience



# Maintain a seamless experience in a digital environment

## DIFFERENT STRATEGIES

### MOBILE APP

#### Intuitive in-app eSIM activation

- Leverage your existing Mobile app
- Can integrate onboarding steps (eKYC, top-up...)



### ENTITLEMENT SERVER

#### Enables you to support richer use cases

- eSIM activation on companion devices
- One click transfer on primary devices



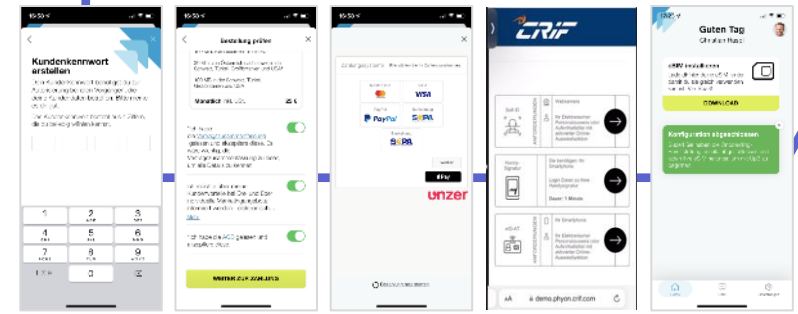
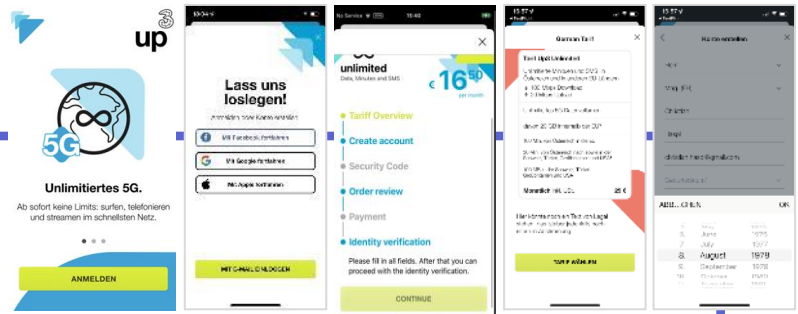
# Up-delivering on the product promise



IS >>> **...telecommunication on the next level – one level up!**

... a fully digital, OTT-like product delivering telecommunication in a new way.

**SIMPLE STRONG SMART**



**COMPLETE ONBOARDING IN UNDER 5 minutes!**



**Directly on the mobile device**

# A digital Subscription for your smartphone

## Up3 VISION FOR THE CUSTOMER



- Available worldwide
- No binding, no additional fees, no device subsidy.
- Fully digital & instant – 24/7 via up<sup>3</sup> App.
- No cards, no paper, no discussions – **eSIM only.**
- Apple Visual Voicemail free included.
- Chat interface for fast support with real agents.
- Support of all eSIM enabled smartphones.
- Everything in one app (MNP, pause & resume, view of units utilization, Roaming Add-ons purchasing)

FULL FOCUS ON SIMPLE & SINGLE DIGITAL  
SUBSCRIPTION AS “**ALL YOU EVER NEED**” APPROACH.



# Seamless digital user experience is crucial

## Making easy any device gets connected regardless of the channel



eSIM – Connect easily in any use case situation is important



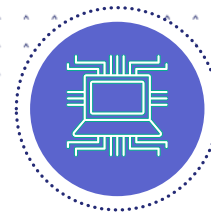
Device change is done **quickly**



at the same time **the User experience is smoothen**



While keeping a high level of **security**



**For any device** regardless of its OS

# Strategy through device repair

## »»» The challenges of device repair with eSIM only devices?

- How does an MNO or OEM test a device during the repair or refurb process?
- If the customer deleted the eSIM profile, the broken device has no functional profile when it arrives at the repair center.
- For repair or refurb, how do you make sure that you delete the old profile before re-packaging the device?

## »»» Mobile Network Operator context

- Based in United States
- Managing eSIM only devices since September 2022
- Using SM-DP+ to manage different use cases, sales channels etc...
- Device repair center for direct, indirect and wholesale channels

## »»» Their way of managing device repairs



Dedicated SM-DP+



Dedicated teams



Exceptional re-download  
of eSIM profile



**MOBILE NETWORK  
OPERATOR**  
IN UNITED STATES 

## Take away



### DIFFERENT WAYS TO CREATE A SEAMLESS USER EXPERIENCE

AT ALL STAGES OF  
THE LIFECYCLE MANAGEMENT

- o MNO branded Carrier App.
- o Seamless OS-powered Transfer experience with Entitlement Server.

### eSIM DISCOVERY SERVICES ARE ENRICHING THIS EXPERIENCE

WITH OUT OF THE BOX EXPERIENCE  
FOR eSIM DOWNLOAD



# Thank YOU!



Android

# eSIM on Android

Mobile World Congress 2024



**Satish Karunakaran**  
Director of Engineering, Google



Leading operators see eSIM as not just a technology upgrade, but a strategic opportunity for their business.

# eSIM strategic opportunities



Digital Transformation



Sustainability



Cost Savings



New Revenue Streams

Focus on the user  
and all else will  
follow...



**Activating or moving my mobile service between devices should be quicker and easier than with a physical SIM.**

eSIM is the **preferred activation** method

**Seamless Transfer** from old device

**eSIM Profile Discovery** for all Android devices

# Two ways to achieve this...



Download with discovery  
server



Device to device transfer  
with entitlement server

Built at the request of leading carriers, **Google SM-DS** supports consistent, seamless and robust activation of eSIM on Android devices





# Best in class activation with Google SM-DS

- ✓ Robust SLAs
- ✓ No charge to carriers
- ✓ Available to all Android OEMs
- ✓ EID pattern required
- ✓ Push notification support
- ✓ Feature compliant to GSMA specifications

# Easily transfer your eSIM with **Device to Device Transfer**





## Best in class activation with Seamless Transfer

- ✓ Compliant to TS.43
- ✓ Secure and reliable
- ✓ pSIM to eSIM conversion
- ✓ Available to all Android OEMs
- ✓ Transfer from any Android 10+ device
- ✓ Settings and setup wizard supported

**Get in touch**

**We're here to support**



**Thank you**



# Challenges of Enterprise IoT and the role eSIM can play in it

Wednesday 28 February, 2024 12.30 - 14.30  
Gran Fira, Barcelona Hall 8, Theatre 4



**Xiaodong Guo**

Head of Global Strategy & Partnership  
Redtea Mobile

#MWC24

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## Challenge in Enterprise IoT and how eSIM can help

---

Xiaodong Guo  
Head of Strategy and Global Partnership

**28 February 2024**

# Redtea Mobile: Global Connectivity Orchestrator

Redtea Mobile is an end-to-end eSIM/iSIM solution provider, focusing on connectivity efficiency improvement and eSIM penetration across a wide variety of industries.

- Established in 2015
- Headquartered in Singapore, present in the U.S., the Netherlands, India & China
- Team with diversified background in deeply rooted in telco industry
- GSMA Certified RSP Server in Netherlands, Entitlement solution deployed worldwide
- Apple eSIM partner & Microsoft eSIM ecosystem partner
- eIM & automotive market solution for OEMs
- Wide partnership with leading players: Apple, Qualcomm, Nordic Semiconductor, CKH, China Mobile, China Unicom, Quectel, FiboCom, OPPO, and more
- Strategic Investment from Qualcomm, OPPO

## Mission:

Simplify connectivity for a more productive world.

## Vision:

Make connectivity as utility and leading the world with our CaaS services.

**200+**

Countries & Regions  
with 3G/4G Coverage

**70+**

MNO/MVNO  
Partners

**500M+**

Devices  
Covered

**100M+**

Registered  
Users

**30+**

OEM, Chip & Module  
Partners

GSMA™

Counterpoint

QUALCOMM

oppo



中国移动  
China Mobile

China  
unicom中国联通

T

AIS

3

stc

airtel

QUALCOMM

NORDIC  
SEMICONDUCTOR

infineon

QUECTEL

FIBOCOM

东信和平  
EASTCOMPEACE

国家电网有限公司  
STATE GRID  
CHINA STATE GRID CORPORATION

CHINA TOWER  
中国铁塔

SERES

## eSIM to reshape the landscape of cellular IoT ecosystem



### Without eSIM

- Big cost consideration for global deployment.
- Complicated logistics: Connectivity is bounded with SIM card, which is shipped and installed during manufacturing.
- Compliance issues: MNOs/MVNOs licence required for connectivity business.

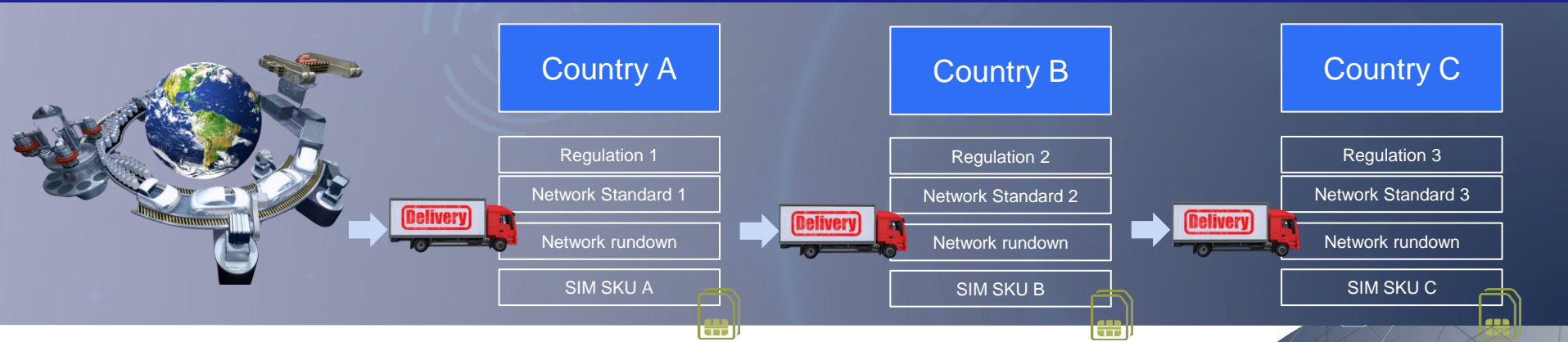
**eSIM (and SGP.31/32) makes it possible** - to ship connectivity in a digital approach and to decouple connectivity with SIM cards.

- IoT fleet manager/user to sign up directly with local MNOs/MVNOs.
- OEM installs eSIM and provisioning capability during manufacture, not bounded to MNOs/MVNOs.
- MNOs/MVNOs dispatch their connectivity to device upon the sign-up of the owners.

### Redtea Mobile delivers eSIM solution for each player of the IoT ecosystem.

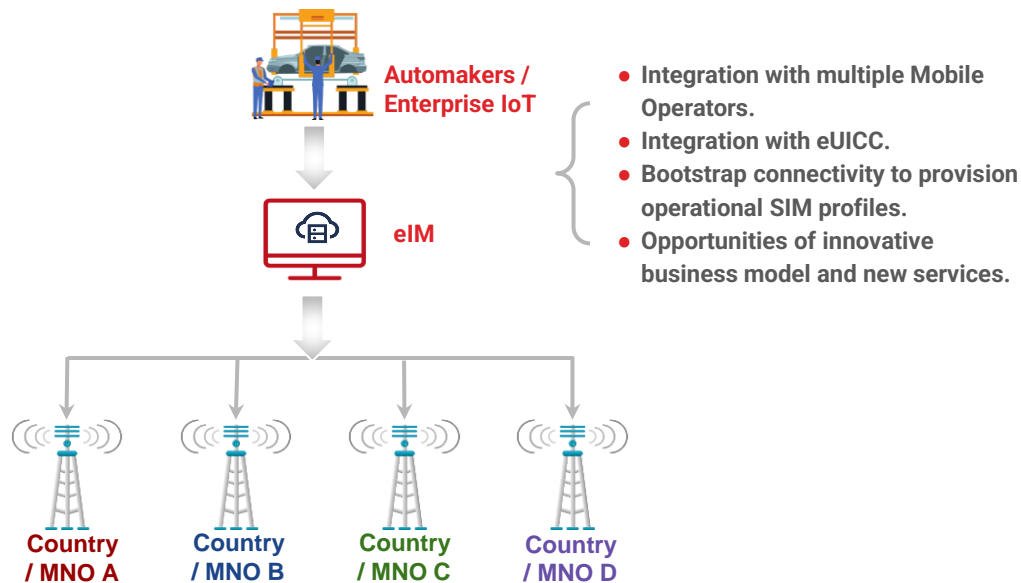
- eSIM.plus (RSP and entitlement solution) for MNOs/MVNOs eSIM enablement.
- eIM & connectivity orchestration solution for IoT enterprise.

# Challenges Within Enterprise IoT Space



- **Global Coverage & “Bring Your Own MNO”.**
- **Complex Supply Chain.**
- **SLA.**
- **Challenge for after-sale opportunities.**

## eIM is the solution for OEM world? Yes and No!



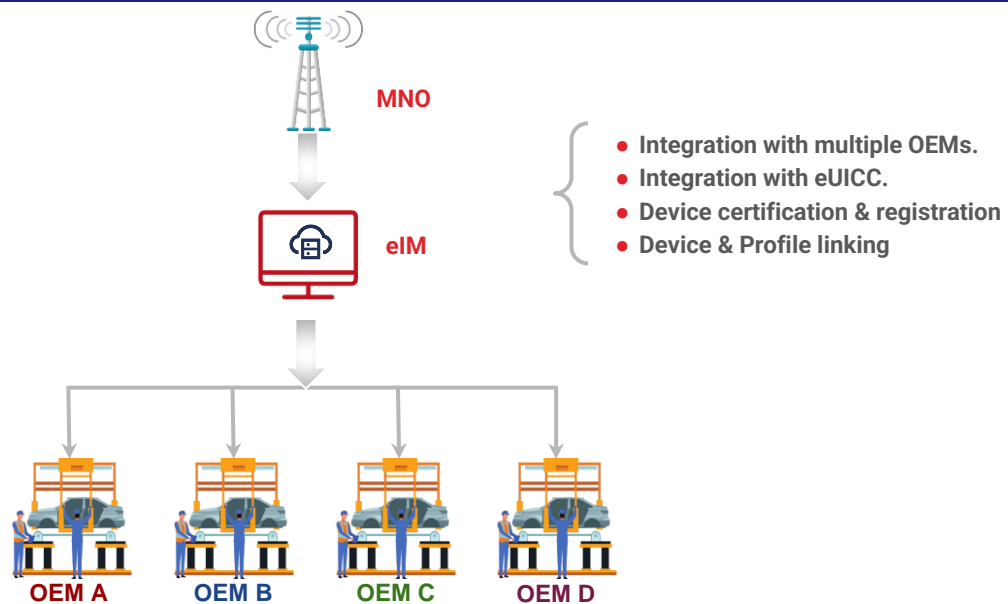
➤ eIM is great, but that's only half the solution

➤ Challenge still:

- Single-pane-of-glass connectivity management/orchestration solution → "BYO MNOs"
- Device certification



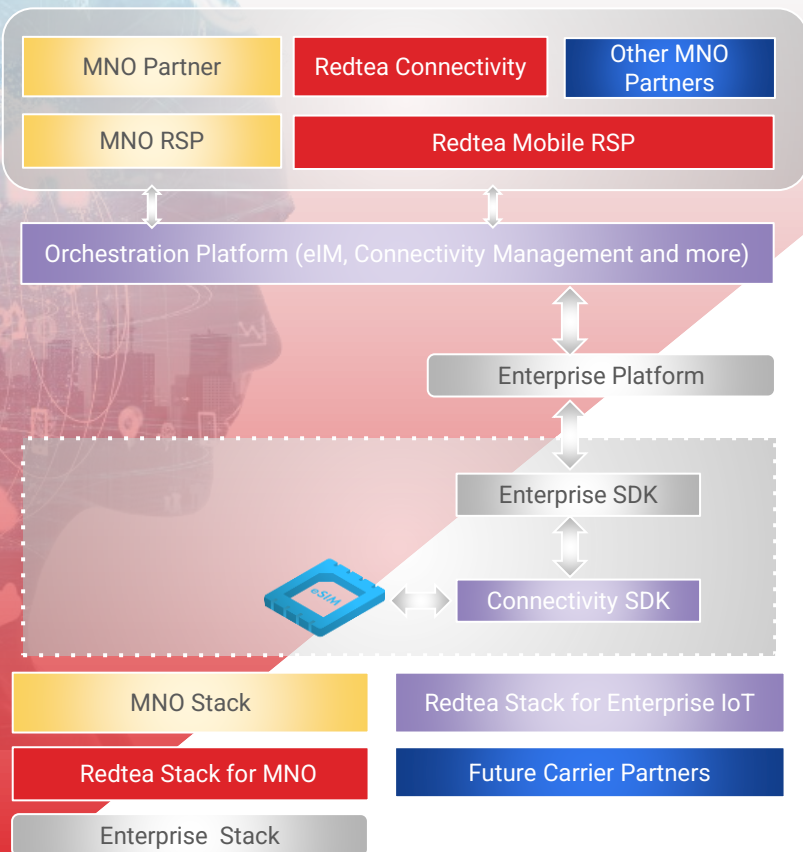
## eIM is the solution for MNO world? Yes and No!



- Doesn't it feel a bit like the "Good Old" M2M style SM-SR?
- Best working in cases where device sold through MNO



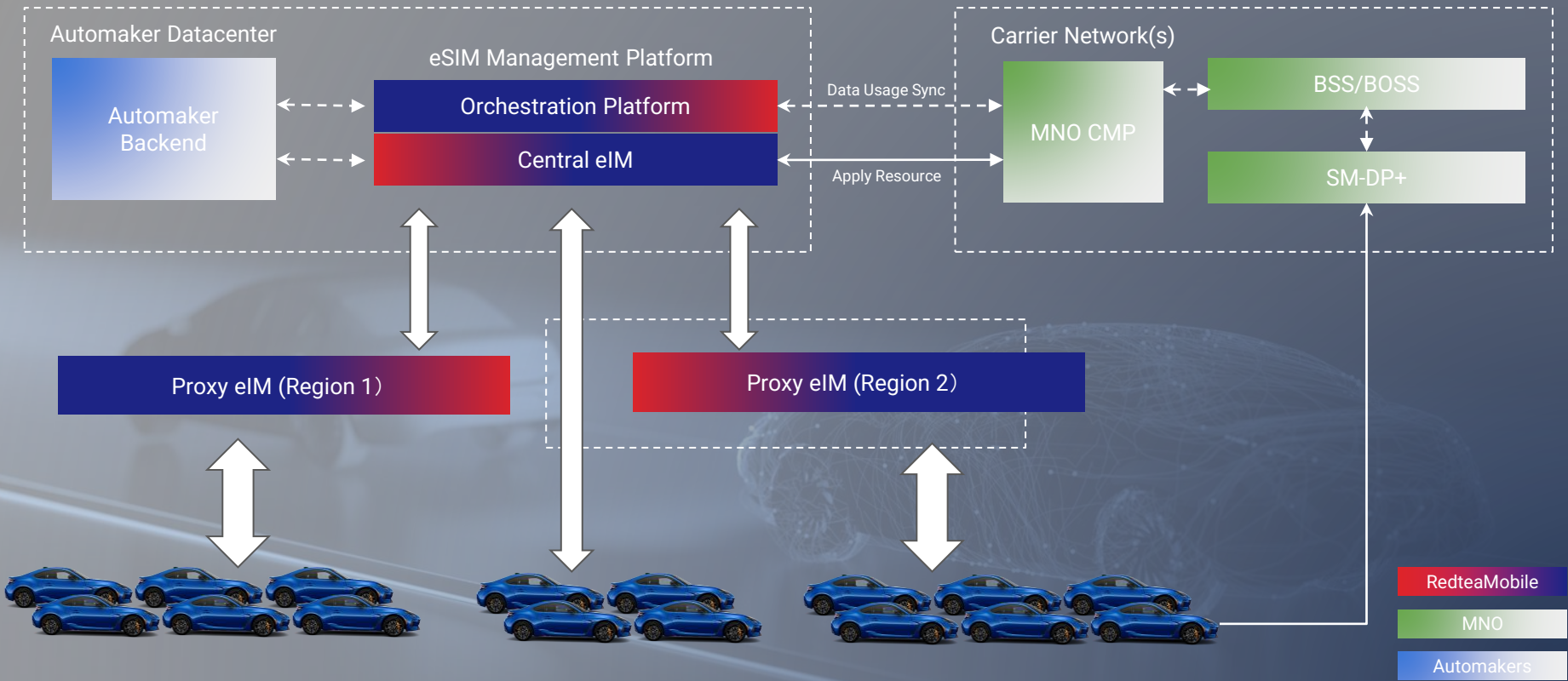
## The "coalition" solution for enterprise IoT → eIM + Orchestration



***A single-pane-of-glass connectivity orchestration solution to win the enterprise clients and serve them better.***

- **Primary & Supplemental Network.**
- **Future-Proof.**
- **Portability.**
- **Security & Reliability.**

# Example solution in Automotive



# We have done a lot, and we need to do better!



- Opportunities for operators: a *single-pane-of-glass* for the Global Connectivity for Global digitalization of enterprises.
- Challenges: "not clear" boundaries between consumer and IoT
  - From KYC (customer), to KYD (device), and even KYE (enterprise)?
  - Fragmentation of regulations: non-local IMEI max 90 days? No SMS/voice/eCall for IoT?

# THANKS

Reach us at  
[communications@redteamobile.com](mailto:communications@redteamobile.com)

Website



LinkedIn



# Thanks, eSIM Sponsors



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Creating Confidence

**Platinum Sponsors**



**IDEMIA**  
SECURE  
TRANSACTIONS

**THALES**  
Building a future we can all trust

**Gold Sponsors**



**RedteaMobile**

# See you all in MWC25!

# Unlock the Power of eSIM

Discover the benefits of eSIM technology, including portability, convenience, and the ability to manage multiple profiles on a single device. Learn how to activate and use eSIM services for your mobile phone.

