Scaling eSIM in 2022 and Beyond
eSIM in the smartphone market
Nearly 60 eSIM smartphone models – more than half have 5G technology

How many eSIM smartphones have been launched?
Cumulative figures

- Most flagship smartphones are now eSIM-enabled
- 5G and eSIM get together
- Various models have a retail price < USD500
- Transition to eSIM-only phones will be a game changer

Source: GSMA Intelligence
eSIM service is now global

eSIM reaches more than 3 billion mobile subscribers

Commercial availability of eSIM service for smartphones

- Number of countries
  - Dec. 2018: 24
  - Dec. 2021: 82

Geographical reach

- Most major markets are on board. eSIM is nearly ubiquitous in major markets
- Africa is catching-up
- China still missing…but for how long?

Source: Minimum number of countries, based on the lists provided by Apple, Huawei and Samsung (publicly available information) and GSMA Intelligence research of the top 30 markets
More than 230 operators offer commercial eSIM service
Fivefold increase over the last 3 years

Number of mobile service providers offering commercial eSIM service for smartphones

- Discussions with eSIM vendors indicate that this figure is even higher
- eSIM is a group strategy for multi-country operators
- MVNOs are driving eSIM for international roaming

What lies ahead?

88% of surveyed operators plan to offer eSIM service by 2023
98% by 2025

Source: Minimum number of mobile service providers, based on the lists provided by Apple, Huawei and Samsung (publicly available information) and GSMA Intelligence research of the top 30 markets.
Source: GSMA Intelligence Operators in Focus Research – Operator Survey (100 operators worldwide), Future of Retail (2021)
Consumers: do they know what eSIM is?
Consumer awareness of eSIM is still low – but growing

**Consumer awareness of eSIM**
Percentage of total surveyed consumers who have heard of eSIM

- **Japan**: 33% (2021), 22% (2020)
- **Italy**: 30% (2021), 26% (2020)
- **Germany**: 28% (2021), 22% (2020)
- **Brazil**: 27% (2021), 25% (2020)
- **USA**: 27% (2021), 17% (2020)
- **South Korea**: 26% (2021), 26% (2020)
- **France**: 20% (2021), 14% (2020)
- **UK**: 14% (2021), 13% (2020)

- Less than 30% of consumers are aware of eSIM (average)
- 5pp increase compared to 2020 (average)
- Significant variations by country…but no correlation with eSIM service availability
- 23% of those aware of eSIM don’t know whether their smartphone has eSIM functionality

Source: GSMA Intelligence Consumers in Focus Research – Consumer Survey (2020 and 2021)
How do consumers first find out about eSIM?
Slow push by OEMs and operators

### Finding out about eSIM
Among surveyed consumers who have heard of eSIM (aggregate, 8 countries)

<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I read an article about eSIM</td>
<td>28%</td>
</tr>
<tr>
<td>A friend/family member/colleague told me about eSIM</td>
<td>16%</td>
</tr>
<tr>
<td>I was told about eSIM when I bought a new device (e.g. phone, smartwatch, tablet) directly from the manufacturer</td>
<td>15%</td>
</tr>
<tr>
<td>I saw an advert for eSIM (e.g. on TV, in-store, online, at an airport)</td>
<td>10%</td>
</tr>
<tr>
<td>I received some information/promotional materials about eSIM from my mobile phone operator</td>
<td>8%</td>
</tr>
<tr>
<td>I heard about eSIM in another way</td>
<td>8%</td>
</tr>
<tr>
<td>Don't know / can't remember</td>
<td>8%</td>
</tr>
<tr>
<td>I heard about eSIM through my work</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: GSMA Intelligence Consumers in Focus Research – Consumer Survey (2021)

- Operators and OEMs don’t talk much about eSIM to their customers
- BUT…OEMs talk more than operators, especially in the USA, Japan and South Korea
eSIM in IoT is eSIM for digital transformation
But what do enterprises think of eSIM?

IoT deployments drive digitisation
Enterprises speak; % of respondents
IoT deployments are:

- 63% Part of a wider digital transformation agenda
- 37% Standalone initiative

Importance of eSIM in future IoT deployments
Enterprises speak; % of respondents

- Very important: 40%
- Somewhat important: 44%
- Not at all important: 10%
- I don't know: 4%
- I am not familiar with eSIM: 2%

Source: GSMA Intelligence Enterprises in Focus Research – Enterprise Survey 2020 (~2900 enterprises across most vertical sectors)
Why eSIM?
Enterprises see best-in-class security & scalability as the top eSIM benefits

Importance of eSIM benefits to the success of enterprise IoT deployments
Enterprises speak; % of respondents

- Device-to-cloud or chip-to-cloud security (eSIM ensures data is secured all the way from where the data is generated to where the data is processed) 66%
- eSIM provides confidence that only devices with the correct security credentials can gain access to network 63%
- Ability to simultaneously and remotely patch deployed devices in the event of security vulnerabilities 62%
- Ability to remotely update large volumes of devices quickly/simultaneously 62%
- eSIM uses industry recognised standards (SIM as the most secure place to store credentials and keys to ensure secure data communications between cellular connected devices) 58%
- Ability to switch mobile network provider remotely in real time 58%
- Tamper-proof and theft-proof as eSIM is embedded to device 58%

Source: GSMA Intelligence Enterprises in Focus Research – Enterprise Survey 2020. Base: enterprises who consider eSIM important to achieve success in their IoT deployments (~2400 enterprises).
What’s next
New GSMA Intelligence report on its way

New GSMA Intelligence report on eSIM in the Consumer Market (early July 2022)

All the eSIM market intelligence and insights

- Commercialisation of eSIM devices
- Commercialisation of eSIM services
- Further granularity on consumer awareness and behaviour
- eSIM consumer adoption and forecast to 2030
- What could accelerate eSIM adoption

Vendor Survey
About GSMA Intelligence

Serves 800 organisations
40,000 users worldwide

Data
1,400 Mobile operators
80 Operators groups
5,000 Networks
30M Data points updated daily

Research
130+ Reports annually
1M Report downloads in 2019
100+ Global, Regional & Topical Research, Deep Dives & Analysis

Pinpoint accuracy
Five-year forecast consistently accurate within +/- 2.5% of reported data, updated quarterly

50+ Analysts & industry experts
Supporting the business strategy of our subscribers and the wider ecosystem

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