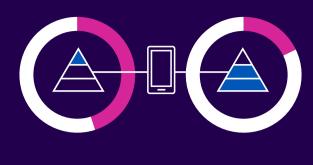


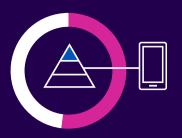
Regional mobile operators are committed to 5GC-87% implementation rate within 3 years.



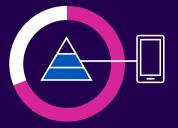
of tier-1

45% & 18% of tier-2/3operators operators

> are implementing **5GC now**



52% of tier-1 operators



of tier-2/3 operators

expect to begin implementation in 1-3 years

All operators, both large and small, see a steady progression towards 5GC

The New Multi-generational Reality Increases Vulnerability

5G isn't going to replace 3G/4G all at once. **By 2025:**



of Regional **Mobile Operators** say most traffic



of Regional **Mobile Operators** say they'll still be



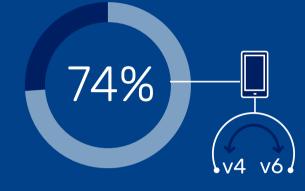
tier 1 and regional operators say they'll still be supporting 4G, but it will be





3G/4G vulnerabilities + 5G vulnerabilities = more numerous and dispersed attack points

Carrier-grade networking (CGN) will play a key role in the transition.

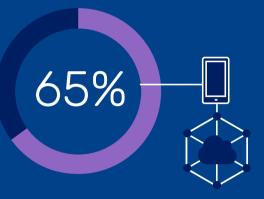


of Regional Mobile Operators will still need CGN by 2023 to bridge network generations

20%

will support CGNAT in container-based functions in a 5G standalone core

Mobile edge compute (MEC) will move slowly as well. In 2025:

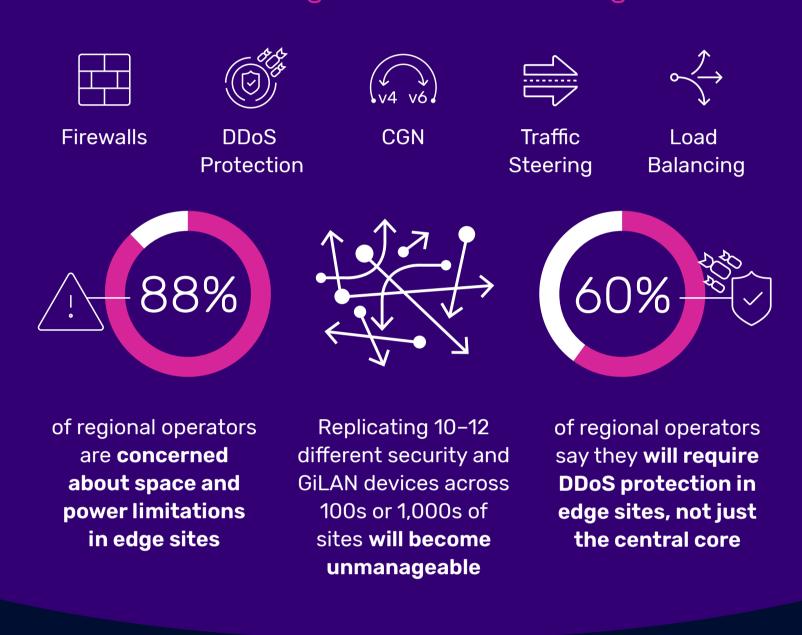


of Regional Mobile Operators will have deployed a **MEC** architecture



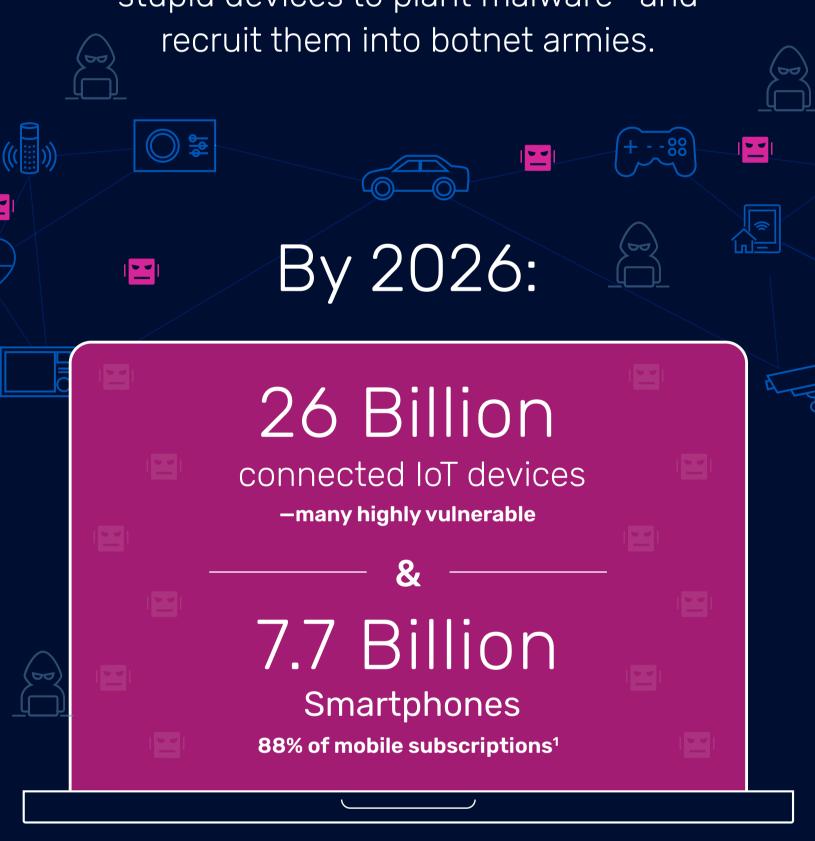
Security Must Now Be Distributed in MEC

Previously centralized functions are moving to the network edge:



IoT, Bots, and Automation Run Wild

Hackers will use smartphones and stupid devices to plant malware-and



DDoS Gets More Effective -and Potentially Lethal

DDoS attacks are getting more frequent, harder to detect, and all too affordable.



potential DDoS attack methods²



growth in attacks in 2020³



were < 5Gbps and went largely undetected⁴



black market cost for 1-week attack⁵

Even small attacks can be devastating

12 Gbps

average 2019 attack is more than enough to overwhelm a MEC node



could devastate an enterprise and disrupt critical services for public security and telemedicine

5 Gbps

Meanwhile large attacks are getting larger and lasting longer



attack against Microsoft Azure in August 2021



4.5x

increase in attack duration for large attacks⁶





Dark Reading

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