

Courtesy of VIAVI Solutions



## Commercial 5G Launches by End of 2019

Shows the existing 5G networks and the 5G launches that operators have publicly announced will be operational before the end of 2019



## **5G Deployments Worldwide**

3

2

6

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Shows the number of operators in each region who have launched or are planning to launch commercial 5G networks by the end of 2019

21
Europe

Middle East & Africa



10

Asia

Americas

Australasia

## Shows the known or planned timing for launches of commercial 5G networks

**5G Network Launches by Timing** 



2018 Launches H1 2019 H2 2019 Unspecified 2019

Australia	Telstra	Australia	Optus	Ireland	Vodafone Ireland	Bahrain	Batelco
Finland	Elisa	Bahrain	VIVA	Italy	Wind Tre	Canada	Rogers
Kuwait	ooredoo	China	China Telecom	Philippines	Globe	Chile	Entel
Lesotho	Vodacom Lesotho	Czech Republic	vodafone Czech		PLDT	China	China Mobile
Poland	T-Mobile Polska		Republic	South Africa	Comsol	Estonia	Telia Estonia
		Faroe Islands	Føroya Tele	Switzerland	Swisscom	France	Orange France
Qatar South Korea	ooredoo Qatar KT	Finland	DNA Telia Finland	UK	BT Three	Italy	TIM
	LG U+ SK Telecom	Kuwait	VIVA			Japan	KDDI NTT Docomo
UAE	Etisalat	Lebanon	Alfa			Kuwait	SoftBank Zain
United States	AT&T C Spire	Malta	Melita			Monaco	Monaco Telecom
	Verizon	Qatar	Vodafone Qatar			Portugal	Altice
		South Africa	Rain			Saudi Arabia	STC
		United States	Sprint T-Mobile USA			Spain	Orange Spain
			. Mobile OJA			Switzerland	Salt Sunrise
						UAE	du
						UK	Vodafone UK
						United States	Claro (Puerto Rico)

**5G Network Testing** 

Shows the three major interconnected phases of 5G network testing

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VIAVI (NASDAQ: VIAV) is the global market leader in 5G network testing.
It offers the broadest scope of 4G and 5G validation, verification and visibility