Pandemic in the Internet Age: communications industry responses

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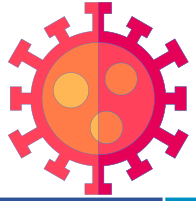
Overview

- Pandemic in the Internet Age – lockdown, telecommunications and economic dislocation
- COVID-19 Emergency responses – from REG4COVID <6 months
- COVID-19 Recovery phase – gradual relaxation 6-18 months
- The new normal – beyond 18 months
- Next Steps – ITU COVID 2.0 paper

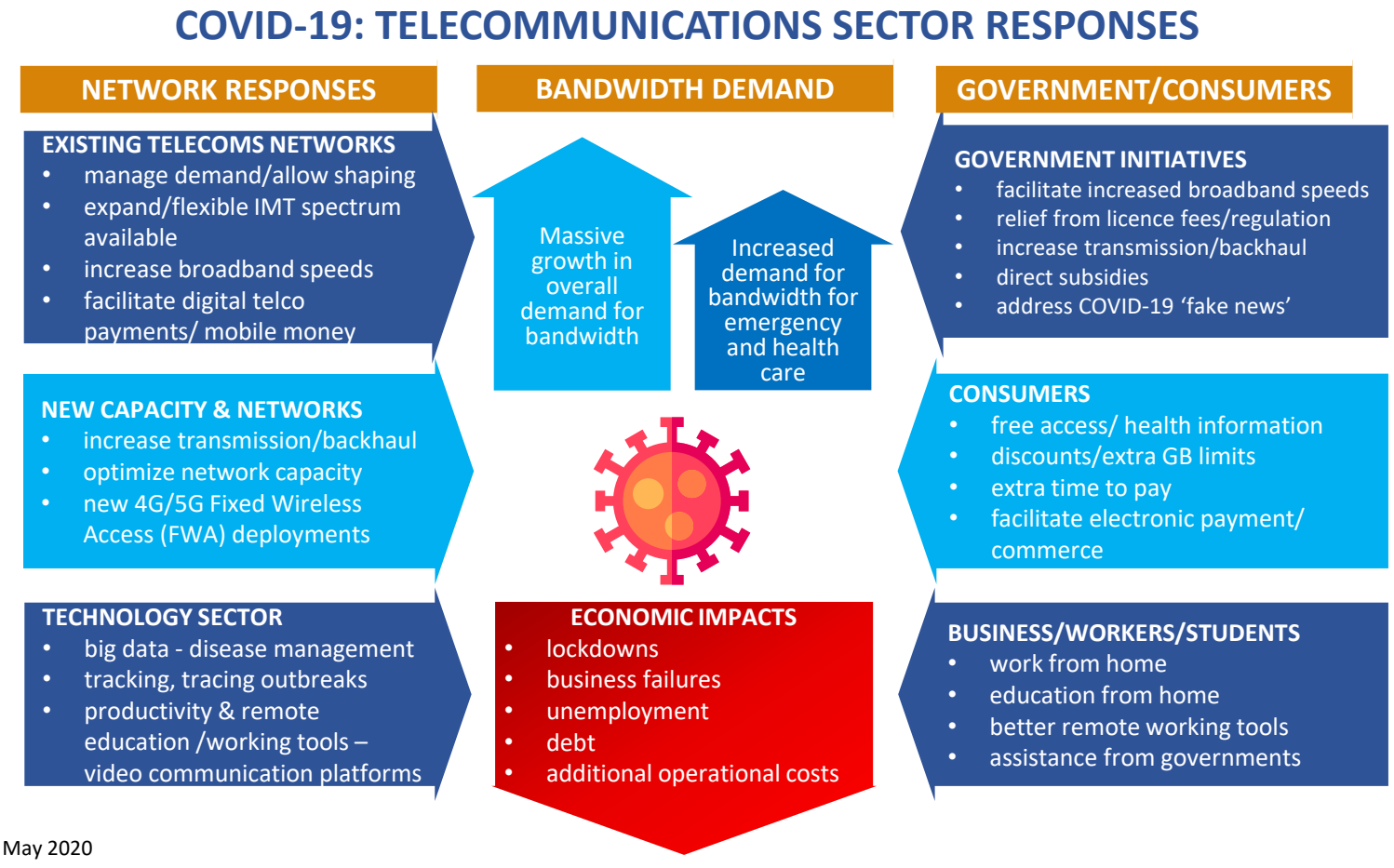
COVID-19: RESPONSE TIMELINE



	EMERGENCY 0 to 6 months	RECOVERY 6 to 18 months	NEW NORMAL from 18 months
INDIVIDUALS	• social distancing mandated • move to online work, education, socialising, commerce and retailing	• embed social distancing practices • adapt to new work, education, social practices	• social distancing as new normal • wearing masks becomes fashion • online proficiency improvement
BUSINESS/ CORPORATE SECTOR	• implement work from home • adapt on-site work practices to minimise contact	• design and embed new work practices • redesign workplaces for reduced contact and crowding	• what is better online stays online • ongoing economic weakness • new logistics & supply chains • reduced business travel
TELECOMMUNICATIONS OPERATORS	• manage immediate demand • provide immediate relief to customers • expand data caps • expand available spectrum and capacity	• expand infrastructure and total capacity • adapt network capacity for video content • develop superior video technologies	• continue to build capacity • adapt networks to increased video traffic, improve quality and reliability • accelerate 4G/5G deployments
GOVERNMENT	• require social distancing • impose lockdowns • limit international travel • testing and tracing • expand medical capacity • source scarce PPE • enhance social safety net • short-term fiscal stimulus	• cautiously adjust lockdown parameters • embed ongoing testing and tracing • assess post emergency phase COVID-19 and need for sovereign strategic production capabilities • focus on economic efficiency • longer term fiscal stimulus emphasising productive infrastructure • more collaboration among sectors	• promote economy wide efficiency measures • embed 'surge capacity' healthcare systems • find efficient policy to support strategic production and storage (e.g., PPE, fuel, critical medical equipment and reagents) • focus on debt reduction
TECHNOLOGY SECTOR	• offer productivity & remote education/ working tools • tracking, tracing outbreaks • quickly help businesses go online	• address COVID-19 fake news • big data responses/data processing • Improve remote cybersecurity • new tools for safe public transport, workplaces, education, health	• build services on new deployed digital infrastructure • mobile payments replacing money • Innovation driving digital markets

Source: ITU - WPC, May 2020

COVID-19 Emergency Phase (1)



Source: ITU- WPC, May 2020

COVID-19 Emergency Phase (2)

Initiative	Description
Increasing Broadband capacity/speeds	Regulatory bodies have been encouraging MNOs and wholesale providers to increase broadband speeds for customers to ensure quality of service (QoS) is maintained.
Providing free services to customers	Regulators have also supported other initiatives such as free access to educational websites as well as free data allowances to citizens during COVID lockdown periods.
Providing info services on COVID-19	Policymakers in a number of countries have introduced new e-services such as a website dedicated to COVID-19 information, as well as a health platform to assist healthcare providers in remote areas to better utilise information technology and mobile health solutions
Network Management	Three forms of network management are common: • Voluntary: Telecom regulators are asking operators to take part in pledges or initiatives to maintain network connectivity and help customers cope with the coronavirus outbreak. Typically, these initiatives are not government mandate, but a voluntary measure on the part of providers. • Mandatory: A smaller number of regulators have also implemented mandatory measures requiring telco cooperation in enhancing network infrastructure, ensuring QoS, etc. in order to address the effects of the pandemic. General: There has also been a regulatory trend towards publishing new guidelines or revising existing ones to better handle congested and overloaded networks.

COVID-19 Emergency Phase (3)

Initiative	Description
Allowing more flexible IMT spectrum use	Policymakers and regulators have engaged in responses designed to grant temporary IMT spectrum licenses in the midst of the pandemic. Such responses typically involve allowing the use of either vacant spectrum or unused spectrum of existing licensees. These additional temporary IMT spectrum licenses were designed to facilitate operators providing their customers with greater network access and improved quality of service.
Free access to online learning resources	Country governments have been working with operators to ensure access to online learning programs while the pandemic is ongoing.
Generally easing regulatory requirements on licensees	Government and regulators have taken steps to minimize the regulatory and reporting obligations on licensed operators.
New Fixed Wireless Access (FWA) networks	4G/5G FWA has been used in some areas to quickly deploy necessary wireless broadband infrastructure. The need for improved connectivity is due to the need to quickly augment coverage and capacity near health care facilities and/or over cities and urban/suburban areas which may be subject to social distancing requirements.
Addressing misinformation re COVID-19	A number of countries have promulgated rules addressing misinformation in relation to COVID-19 including the link of 5G to the coronavirus.

Source: ITU REG4COVID database and selected industry sources, 2020

COVID-19 Recovery Phase

- COVID-19 Contact Tracing Apps
- Accelerate the assignment of globally harmonised IMT Spectrum
- Accelerate 4G/5G deployment & transition from legacy networks
- Deployment of FWA as complimentary & substitute networks
- Facilitate innovative and future technologies to bridge the 'digital divide' eg non-geo satellites & HAPS etc
- Misinformation and COVID-19 – including 5G & COVID-19
- Cybersecurity and COVID-19 – working from home
- Big data responses/data processing - big data, AI, and machine learning

COVID-19 Recovery Phase (2)

An example: Accelerate the assignment of globally harmonised IMT Spectrum
Comparison of IMT spectrum licensed in each ITU region versus harmonised IMT spectrum

	Region 1 (EU/ EFTA)	Region 1 (ASMG)	Region 1 (Africa)	Region 1 (CIS/ Balkans)	Region 2	Region 3
Average spectrum licensed in 2019	757 MHz	556 MHz	477 MHz	430 MHz	426 MHz	549 MHz
Percentage of harmonised spectrum licensed	60%	52%	44%	40%	41%	60%
Typical amount of spectrum yet to be licensed (2019)	**300 to 400 MHz**	**500 to 600 MHz**	**500 to 700 MHz**	**600 to 700 MHz**	**500 to 600 MHz**	**300 to 500 MHz**

Source: LSTelcom, 2019 NB. Analysis undertaken pre -WRC-19 so does not include temporary spectrum

COVID-19 ‘new normal’ Phase

- Speculating on the ‘new normal’
  – some short measures eg additional bandwidth will need to become permanent but commercial issues make be challenging; contact tracing and digital mitigation measures needed; changes to temporal demand; critical importance of social inclusion to avoid new forms of digital divide; need to revised broadband plans
- Facilitating ‘smart cities’
- Accelerating the move to the digital economy in the ‘new normal’
- COVID-19 and competition issues going forward – need to review sector competition impacts between operators and ‘big tech’ under COVID conditions

Next Steps – ITU COVID 2.0 paper

- The health and economic implications of COVID-19 are not just a short term issue unfortunately
- COVID-19 has been a uniquely powerful game-changer, with digital connectivity now at the top of every nation's agenda
- With the ITU we have commenced work on a COVID 2.0 paper which is focused on the lessons learned for better preparedness with a Roadmap for Action
  – The purpose is to provide the different groups of ICT stakeholders with an analysis of policy and regulatory measures undertaken during the pandemic and provide concrete guidance in preparing for the post-pandemic to ensure better preparedness, and contribute to long term global connectivity
- A survey of key stakeholders will be undertaken
- Aimed to be completed by the end of 2020

Thank You

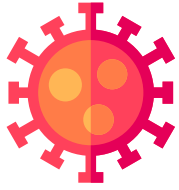
Checklist of best practice – June 2020

BEST PRACTICE

DEMAND SIDE: HELP TO THE CONSUMERS/PUBLIC
- provision of free/discounted services
- free Access to health and education information
- increase broadband capacity and speeds
- addressing COVID-19 'fake news'
- facilitate digital telco payments/ mobile money

GOVERNMENT SECTOR SUBSIDIES
- direct subsidies to consumers/ public
- direct subsidies to operators
- discounted offers by Government owned operators
- foregone revenues from licensing fees, spectrum etc.

SUPPLY SIDE: HELP TO INDUSTRY
- manage demand/allow shaping
- expand/flexible IMT spectrum
- relief from licence fees/regulation
- increase transmission/backhaul direct subsidies
- facilitation of new 4G/5G Fixed Wireless Access (FWA) deployments



OPERATOR COMMERCIAL INITIATIVES
- additional data allowances
- retail tariff discounts
- increase broadband capacity
- investment in new capacity/networks
- relaxing of payment terms
- provision of free services for health sector
- free access to online health information
- free access to online education information
- facilitating mobile money transactions
- going digital for recharges, payments
- Innovative assistance (e.g. funds etc)

HELP BY CONTENT & ONLINE SERVICE PROVIDERS
- lift limits on video calls
- reduce download sizes (content resolution)
- increase capacity/capability
- developing new technology (e.g. tracing)
- range of free services e.g. video communication platforms

Source: ITU, June 2020