Spectrum Policy

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Contents

The objective of this study is to assess the regulator and market's response during and after COVID-19 lockdown.

Here, we observed-

- Direct and indirect Interventions by **50** countries

    - Public awareness campaigns and citizen applications

    - Mostly observed regulatory interventions

    - Minor but notable interventions to facilitate digital lifestyle

Corona Virus outbreak has driven many commercial and social activities to online platform

- **53% of Americans** Say the Internet Has Been Essential During the COVID-19 Outbreak

- Microsoft's online collaboration software usage rose by 40% in a week in March, 2020

- DE-CIX in Frankfurt reported traffic peak of more than 9.1 Terabits per second on March, 2020
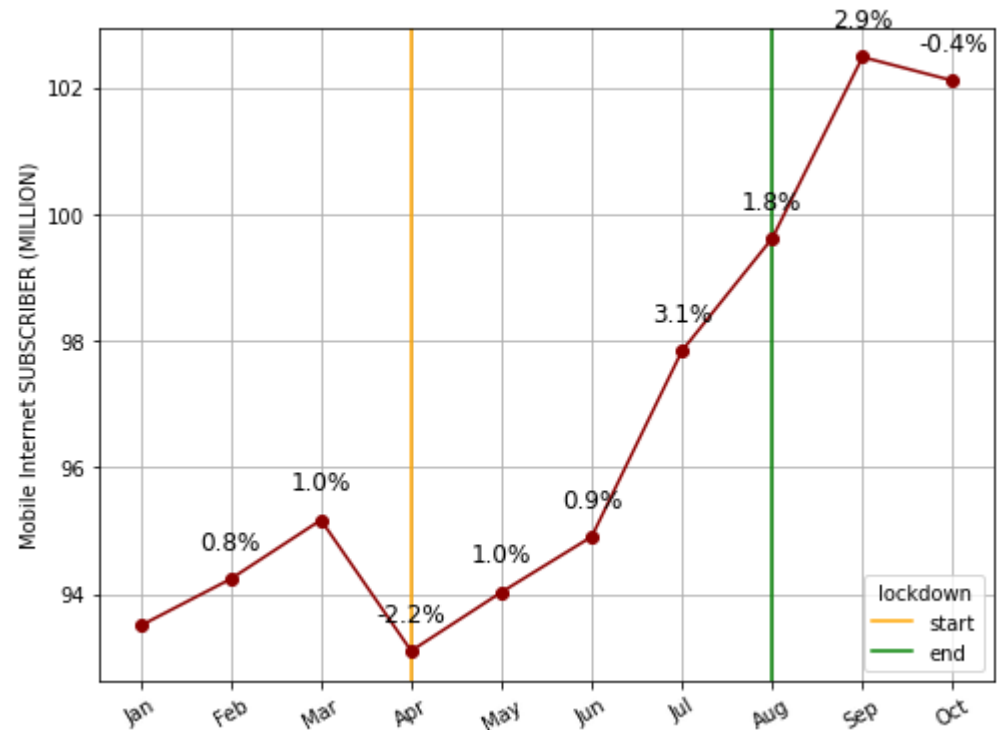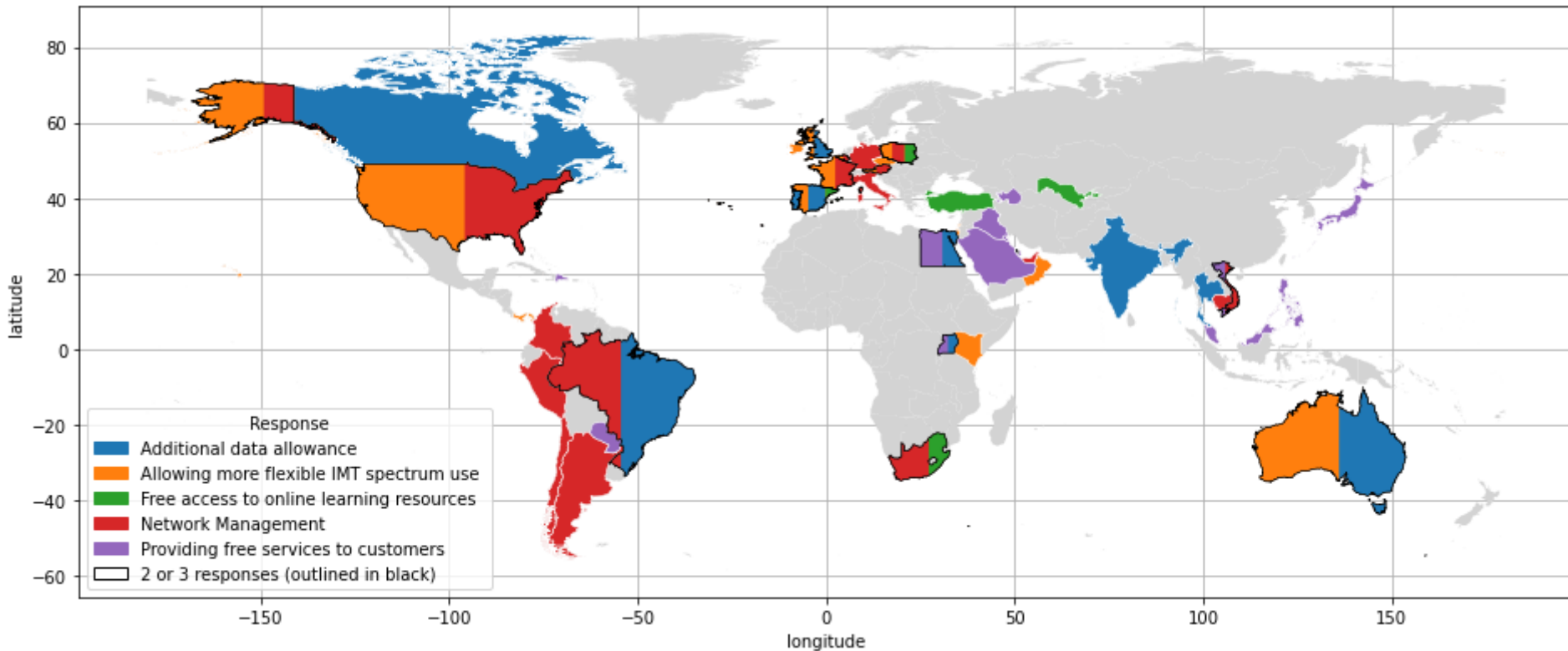

Fig. Number of mobile internet subscribers in Bangladesh Jan-Oct, 2020 (BTRC)

We have noted 5 distinctive interventions in most countries we have observed

Interventions		Regulators	Market players
Direct	**Infrastructure**	Increasing Broadband Speeds (4)	Increasing broadband capacity and speeds (3)
		New Fixed Wireless Access (FWA) networks (3)	
		Allowing more flexible IMT spectrum use (15)	
		Network (Traffic) Management (17)	
	Price	Government subsidized broadband services (2)	Additional Data Allowances / providing other free services to customers (11)
	Service	Providing free services to customers (13)	Facilitating mobile money transactions (4)
		Generally easing regulatory requirements (5)	Free access by customers to online learning resources (6)
		Enabling Distance Learning (4)	
		SME Support (2)	
Indirect	**Campaign & Engagement**	Awareness Campaign (30)	
		Civic Engagement (3)	
	Ensuring Security and Privacy	Tracing Application (3)	
		Fake news detection (4)	

Response
- Additional data allowance
- Allowing more flexible IMT spectrum use
- Free access to online learning resources
- Network Management
- Providing free services to customers
- 2 or 3 responses (outlined in black)

Among the 50 countries, we observed 12 countries implementing multiple interventions

| COUNTRY	Providing free services to customers	Allowing more flexible IMT spectrum use	Network Management	Additional data allowance	Free access to online learning resources
Brazil	✕	✕	✓	✓	✕
Portugal	✕	✓	✓	✓	✕
United Kingdom	✕	✓	✕	✓	✕
Egypt	✓	✕	✕	✓	✕
Uganda	✓	✕	✕	✓	✕
United States	✕	✓	✓	✕	✕
France	✕	✓	✓	✕	✕
Belgium	✕	✓	✓	✕	✕
Austria	✕	✓	✓	✕	✕
Bahrain	✕	✕	✕	✓	✓
Australia	✕	✓	✕	✓	✕
Vietnam	✓	✕	✓	✕	✕
Spain	✕	✓	✕	✓	✓

Telecom regulators from 17 countries added policies for better network management

- **Voluntary Network management:** Telecom regulators are asking operators to take part in pledges or initiatives to **maintain network connectivity**

- **Mandatory Network Management:** A smaller number of regulators have also implemented mandatory measures requiring **telecom cooperation in enhancing network infrastructure**

- **General Traffic Management**: Publishing new guidelines or revising existing ones to **better handle congested and overloaded networks**
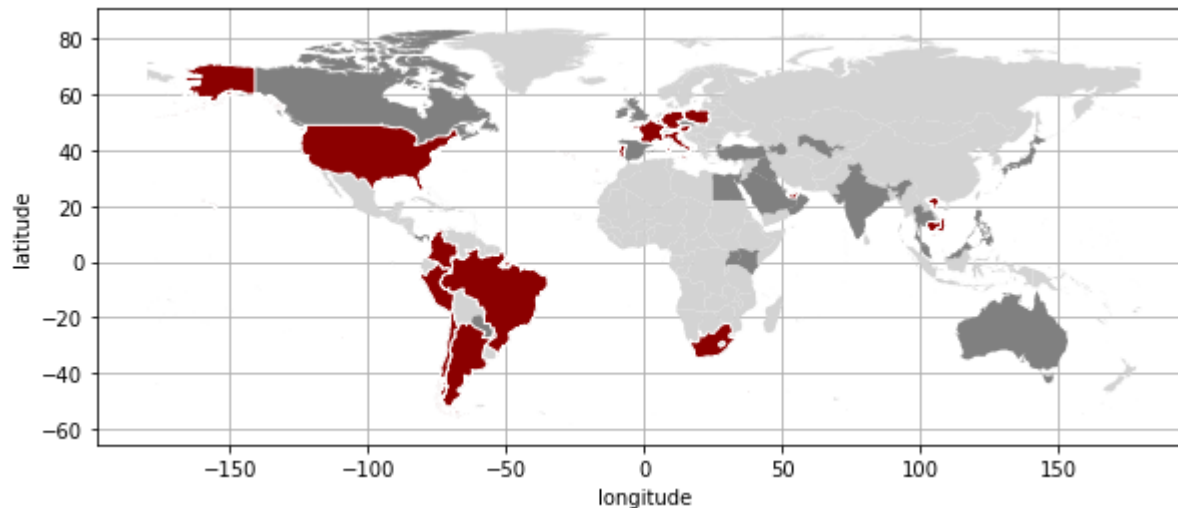
15 countries are allowing more flexible IMT spectrum use

- Granting permanent or temporary IMT spectrum licenses
- Allowing use of vacant or unused spectrum
- Postponing new auction plans for 5G spectrum
- Kenya – Temporary spectrum allocation during a crisis did not increase demand as network as MNOs have sufficient spectrum already assigned.
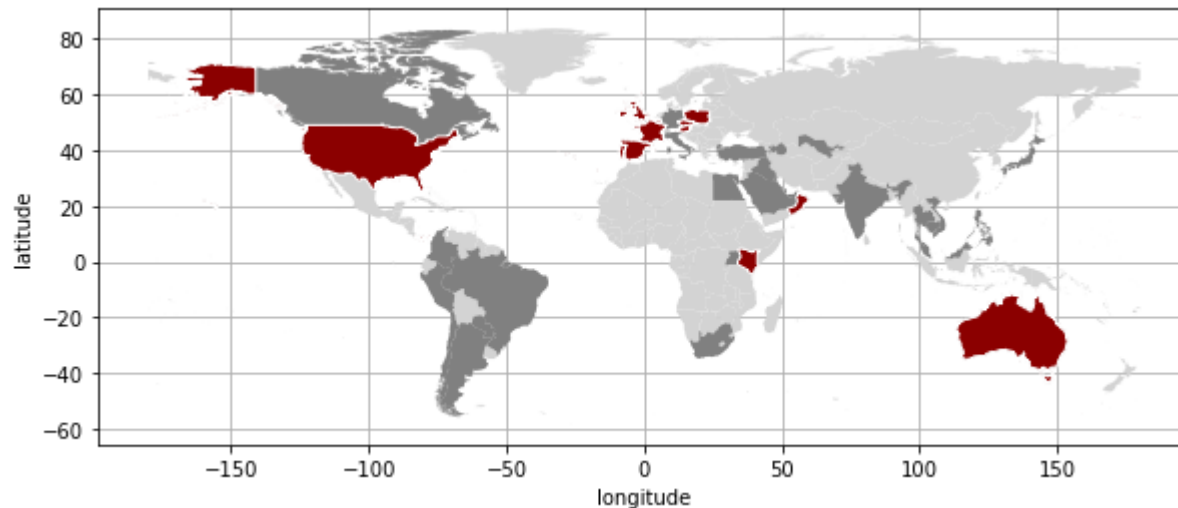
11 countries providing additional Data Allowances

- MNOs offered additional data package (free/reduced price/special bundle offer)
- For example:
  - Thailand- AIS Thailand and Truemove have launched the FWA package35
  - Brazil-Claro has voluntarily increased data consumption limits for their users 36
  - India-ACT Fibernet has announced unlimited data consumption for all subscribers for the month of March.
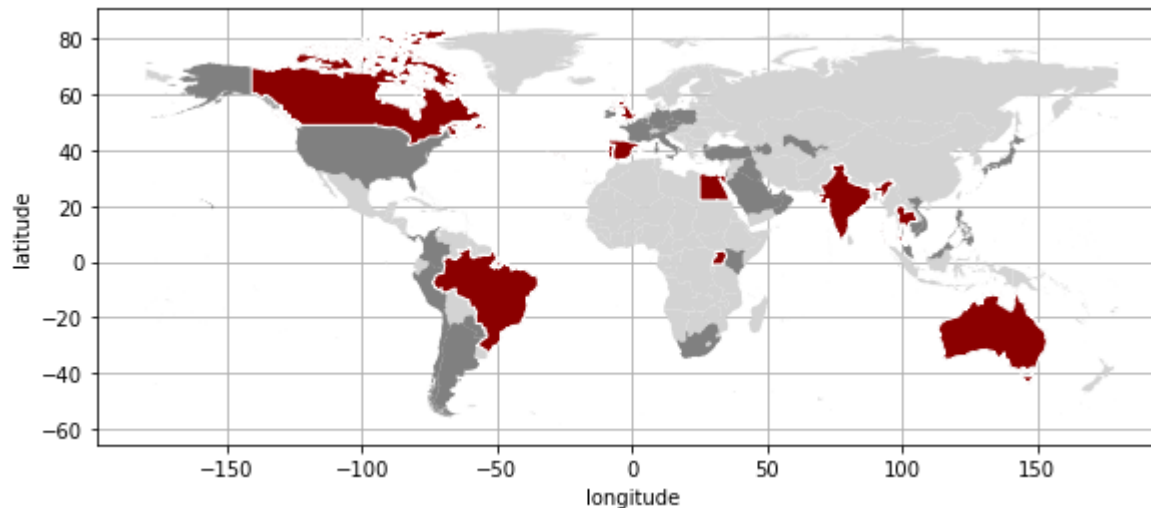
13 countries have provided free services to customers

- Free access to educational websites
- Partially free data allowance and payment date extension
- Zero rated websites
- For example:
    - Egypt - **Special offer for all professionals working in the isolation** hospitals for COVID-19 patients
    - Malaysia - The Government has mandated that MNO's **provide 1 GB of wireless data per day free** to their customers.
    - Philippine - **The Free Wi-Fi for All** Program connects COVID-19 monitoring and control centers
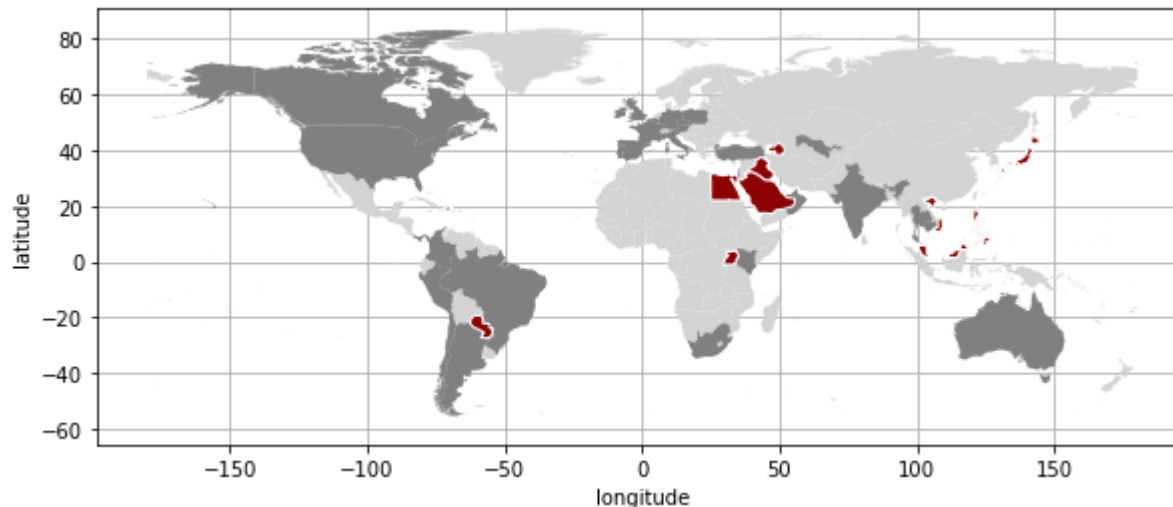
6 countries providing free access to online learning resources

- Access to remote leaning opportunities and educational platforms has been made available at no cost by a number of operators

- For example:

  - Bahrain-Batelco offered free web browsing for customers on a number of sites like Google Classroom, Schoology, etc.

  - South Africa-Telkom in South Africa has announced it will zero-rate dozens of educational websites.
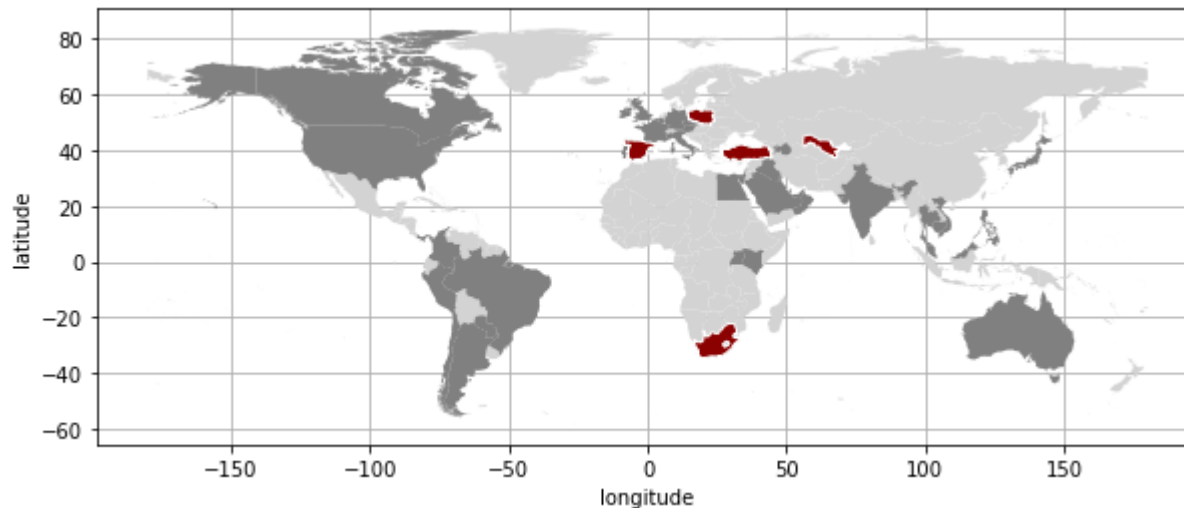
Public awareness using mobile app, SMS, social media, dedicated covid-19 informational website

- Some exceptional measures:
    - Addressing fake COVID-19 news initiatives
    - **Mauritius-**A Facebook account and a landing page have been setup to create awareness for COVID-19 by the government. [26]
    - **North Macedonia-**Individuals using the 'MyDDV' mobile application will be able to donate their VAT refunds for the first quarter of 2020 to combat COVID-19 [32]
    - **Saudi Arab -** Developed two apps **WATEEN** and **ASAFNY to** help people find others who need a specific blood type in nearby blood donation centers during lockdown[33]
- **Republic of Korea**-Transparency in the sales of protective masks [34]
    - Application for citizen to get real-time mask availability at nearby pharmacies using government data on rationed masks
- Thailand MNOs are providing every Thai phone user with a national ID number (99+% of citizens) **10GB for free for a month** with the help of the government.
- Egypt has **Increased the download quota of home Internet** packages by 20% with government subsidy

Some minor but notable interventions

- **Increasing Broadband Speed -** Regulatory bodies have been encouraging MNOs to increase broadband speeds for customers.
    - Countries: Israel, Qatar, Lebanon
- **Generally easing regulatory requirements** - Government and regulators have taken steps to minimize the regulatory and reporting obligations on licensed operators.
    - UAE, Bahrain, Belgium, Brazil, Peru
- ****United Arab Emirates** - The Telecommunications Regulatory Authority **lifted a block**, on an exceptional" and temporary basis, of **several VoIP platforms and applications**
- **Enabling Distance Learning** - Distance learning programs through TV channels
    - Countries: Bangladesh, Turkey, Czech Republic, Indonesia, North Macedonia
- **Facilitating mobile money transactions**
    - Kenya-Airtel offers free transactions on Airtel money across all bands due to the COVID-19 outbreak
    - Bank of Ghana and mobile industries to implement free mobile service transactions to promote digital forms of payments

Conclusion

- COVID-19 has driven society to digital solutions
- We observed 50 countries and the interventions taken by the regulators
- Most countries had public awareness campaigns through:
    - Civic Engagement
    - Tracing Application
    - Fake news detection
- We observe these 5 major telecom interventions to keep up with the increase in internet demand
- Few countries have started or implemented services for better digital living, such as:
    - Facilitating mobile money transactions
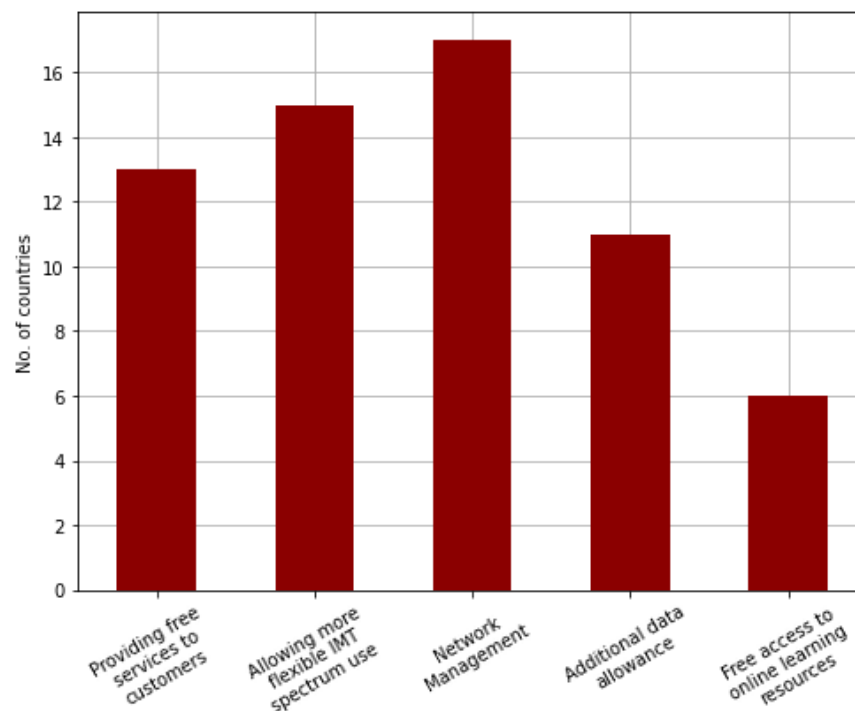   - E-learning and communications

Fig. Telecom interventions for better digital lifestyle during lockdown

References

1. https://datacenterfrontier.com/internet-exchanges-see-record-levels-of-network-traffic/

2. UNCTAD: Digital Economy Update, April, 2020. 'The Covid-19 Crisis: Need to Bridge Digital Divide'

3-4. ITU, FIRST OVERVIEW OF KEY INITIATIVES IN RESPONSE TO COVID-19

5. COMPENDIUM OF DIGITAL GOVERNMENT INITIATIVES IN RESPONSE TO THE COVID-19 PANDEMIC,2020.

6. Bhandari, V. (2020). *Improving internet connectivity during Covid-19*. Digital Pathways at Oxford Paper Series; no. 4. Oxford, United Kingdom

7-8. ITU, FIRST OVERVIEW OF KEY INITIATIVES IN RESPONSE TO COVID-19

9-10.Squire Patton Boggs: COVID-19 Global Telecommunications Regulatory Measures

11. ITU, FIRST OVERVIEW OF KEY INITIATIVES IN RESPONSE TO COVID-19

12-13. Squire Patton Boggs: COVID-19 Global Telecommunications Regulatory Measures

14. Bhandari, V. (2020). *Improving internet connectivity during Covid-19*. Digital Pathways at Oxford Paper Series; no. 4. Oxford, United Kingdom

15. ITU, FIRST OVERVIEW OF KEY INITIATIVES IN RESPONSE TO COVID-19

16-17. Squire Patton Boggs: COVID-19 Global Telecommunications Regulatory Measures

18-19. ITU, FIRST OVERVIEW OF KEY INITIATIVES IN RESPONSE TO COVID-19

20. 12. Squire Patton Boggs: COVID-19 Global Telecommunications Regulatory Measures

21. https://www.hrw.org/news/2020/04/07/covid-19-unblock-voice-over-ip-platforms-gulf

22. Squire Patton Boggs: COVID-19 Global Telecommunications Regulatory Measures

23-26.COMPENDIUM OF DIGITAL GOVERNMENT INITIATIVES IN RESPONSE TO THE COVID-19 PANDEMIC,2020.

27-28. Squire Patton Boggs: COVID-19 Global Telecommunications Regulatory Measures

29-34. COMPENDIUM OF DIGITAL GOVERNMENT INITIATIVES IN RESPONSE TO THE COVID-19 PANDEMIC,2020.

35-45. ITU, FIRST OVERVIEW OF KEY INITIATIVES IN RESPONSE TO COVID-19

Thank You All !