COVID-19 – Digital Solutions – Trade and Commerce

Jaroslaw K. PONDER, Head of the ITU Office for Europe
EURregion@itu.int | @ITU_EUR

UNECE: AGAT Conference on Advanced Technologies and
Supply Chain Disruptions Caused by COVID19
Thursday, 2 July 2020
CONNECTIVITY
<table>
<thead>
<tr>
<th>2019 Estimates</th>
<th>% of households with</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internet access at home</td>
<td>a computer at home</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>17.8</td>
<td>10.7</td>
<td></td>
</tr>
<tr>
<td>Arab States</td>
<td>57.1</td>
<td>51.9</td>
<td></td>
</tr>
<tr>
<td>Asia &amp; Pacific</td>
<td>50.9</td>
<td>43.5</td>
<td></td>
</tr>
<tr>
<td>CIS</td>
<td>74.2</td>
<td>66.3</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>86.5</td>
<td>78.0</td>
<td></td>
</tr>
<tr>
<td>The Americas</td>
<td>71.8</td>
<td>65.7</td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>57</td>
<td>49.7</td>
<td></td>
</tr>
<tr>
<td>Developed</td>
<td>87</td>
<td>82.3</td>
<td></td>
</tr>
<tr>
<td>Developing</td>
<td>46.7</td>
<td>38.5</td>
<td></td>
</tr>
<tr>
<td>LDCs</td>
<td>11.8</td>
<td>9.5</td>
<td></td>
</tr>
</tbody>
</table>

Percentage of individuals using the Internet, by region and development status, 2019*
### Percentage of individuals using the Internet, by age range, 2018, selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>&lt;15</th>
<th>15-24</th>
<th>25-74</th>
<th>&gt;74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>23.1</td>
<td>76.9</td>
<td>43.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Brazil</td>
<td>82.2</td>
<td>89.9</td>
<td>67.2</td>
<td>12.8</td>
</tr>
<tr>
<td>Colombia</td>
<td>60.4</td>
<td>84.2</td>
<td>62.2</td>
<td>11.3</td>
</tr>
<tr>
<td>France</td>
<td>82.0</td>
<td>97.0</td>
<td>86.7</td>
<td>29.7</td>
</tr>
<tr>
<td>Indonesia</td>
<td>22.4</td>
<td>77.1</td>
<td>35.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>72.4</td>
<td>94.5</td>
<td>80.7</td>
<td>8.0</td>
</tr>
<tr>
<td>Macao, China</td>
<td>69.1</td>
<td>98.1</td>
<td>90.7</td>
<td>43.6</td>
</tr>
<tr>
<td>Mauritius</td>
<td>62.0</td>
<td>88.6</td>
<td>53.6</td>
<td>6.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>66.5</td>
<td>90.0</td>
<td>61.3</td>
<td>9.5</td>
</tr>
<tr>
<td>Morocco</td>
<td>71.5</td>
<td>81.3</td>
<td>58.7</td>
<td>35.6</td>
</tr>
<tr>
<td>Paraguay</td>
<td>35.5</td>
<td>84.8</td>
<td>66.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Peru</td>
<td>43.4</td>
<td>79.3</td>
<td>49.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>69.6</td>
<td>91.4</td>
<td>50.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Ukraine</td>
<td>53.2</td>
<td>92.4</td>
<td>66.4</td>
<td>7.7</td>
</tr>
<tr>
<td>Uruguay</td>
<td>55.3</td>
<td>94.4</td>
<td>81.0</td>
<td>25.2</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>36.2</td>
<td>74.2</td>
<td>53.7</td>
<td>5.5</td>
</tr>
</tbody>
</table>

### Distribution of values in selected countries, by age range, for the percentage of individuals using the Internet in 2018

Please note that for some countries, age ranges may differ from those depicted due to the scope of their data collections.
INDUSTRY RESPONSE
Global Network Resiliency Platform
Best practices to improve COVID-19 responses

#REG4COVID
## COVID-19: RESPONSE TIMELINE

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

Source: ITU - WPC, May 2020
COVID-19: TELECOMMUNICATION/ICT SECTOR RESPONSES

NETWORK RESPONSES

EXISTING TELECOMS NETWORKS
- manage demand/allow shaping
- expand/flexible IMT spectrum available
- increase broadband speeds
- facilitate digital telco payments/mobile money

NEW CAPACITY & NETWORKS
- increase transmission/backhaul
- optimize network capacity
- new 4G/5G Fixed Wireless Access (FWA) deployments

TECHNOLOGY SECTOR
- big data - disease management
- tracking, tracing outbreaks
- productivity & remote education/working tools – video communication platforms

BANDWIDTH DEMAND

Massive growth in overall demand for bandwidth
Increased demand for bandwidth for emergency and health care

GOVERNMENT/CONSUMERS

GOVERNMENT INITIATIVES
- facilitate increase broadband speeds
- relief from licence fees/regulation
- increase transmission/backhaul
- direct subsidies
- address COVID-19 ‘fake news’

CONSUMERS
- free access/health information
- discounts/extra GB limits
- extra time to pay
- facilitate electronic payment/commerce

ECONOMIC IMPACTS
- lockdowns
- business failures
- unemployment
- debt
- additional operational costs

BUSINESS/WORKERS/STUDENTS
- work from home
- education from home
- better remote working tools
- assistance from governments

Source: ITU - WPC, May 2020
**Key common short term regulatory initiatives**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increasing Broadband capacity and speeds</strong></td>
<td>Regulatory bodies have been encouraging MNOs and wholesale providers to increase broadband speeds for customers to ensure quality of service (QoS) is maintained.</td>
</tr>
<tr>
<td><strong>Providing free services to customers</strong></td>
<td>Regulators have also supported other initiatives such as free access to educational websites as well as free data allowances to citizens during COVID-19 lockdown periods.</td>
</tr>
<tr>
<td><strong>Providing information services on COVID-19</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>
| **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 mandates, 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 quality of telecommunication services, 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. |
| **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. |

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contact Tracing application development</strong></td>
<td>A number of countries have created or are in the process of creating tracing applications in order to track the spread of COVID-19. Apple and Google have also announced its partnership to develop a contact tracing technology to reduce the spread of COVID-19.</td>
</tr>
<tr>
<td><strong>Government subsidised broadband services</strong></td>
<td>In a small number of countries, Governments have subsidized wireless broadband services to support the costs of consumers working and studying from home.</td>
</tr>
<tr>
<td><strong>Free access to online learning resources</strong></td>
<td>Country governments have been working with operators to ensure access to online learning programs while the pandemic is ongoing.</td>
</tr>
<tr>
<td><strong>Generally easing regulatory requirements on licensees</strong></td>
<td>Government and regulators have taken steps to minimize the regulatory and reporting obligations on licensed operators.</td>
</tr>
<tr>
<td><strong>New Fixed Wireless Access (FWA) networks</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Addressing misinformation in relation to COVID-19</strong></td>
<td>A number of countries have promulgated rules addressing misinformation in relation to COVID-19 including the link of 5G to the coronavirus.</td>
</tr>
</tbody>
</table>
### Common short-term Initiatives by operators

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Data Allowances</td>
<td>Many fixed operators, MNOs and wholesale providers have offered to provide their customers with additional data allowances as businesses and schools across the world transition to working remotely, due to the spread of the COVID-19 virus.</td>
</tr>
<tr>
<td>Increasing Broadband Speeds</td>
<td>Operators have upgraded Internet speeds – including transmission and backhaul capacity - to better accommodate the unprecedented number of people working and learning from home.</td>
</tr>
<tr>
<td>Relaxing of payment terms</td>
<td>Operators have relaxed the payment terms including downgrade plans/vouchers, payment of monthly invoices, and prepaid voucher validities dates etc.</td>
</tr>
<tr>
<td>Providing free services</td>
<td>MNOs have also commenced a variety of other initiatives for their customers, many at no extra cost. These include free access to networks and waiving overcharge fees.</td>
</tr>
<tr>
<td>Free access to online learning/education resources</td>
<td>In order to support distance learning and home-schooling during school closures, access to remote learning opportunities and educational platforms has been made available at no cost by a number of operators.</td>
</tr>
<tr>
<td>Free access to health/government information</td>
<td>Operators are providing free access to information contained in government and social welfare sites, as well as to websites containing health information relevant to coronavirus crisis.</td>
</tr>
<tr>
<td>Facilitating mobile money transactions</td>
<td>Telecommunications companies (and banks) are encouraging consumers to avoid cash payment in favour of digital transactions to avoid the spread of the coronavirus.</td>
</tr>
<tr>
<td>Going digital in terms of recharges etc.</td>
<td>MNOs have facilitated prepaid mobile recharges being made online rather through physical scratch cards etc. to improve connectivity during any lockdowns</td>
</tr>
</tbody>
</table>

Source: ITU REG4COVID database and selected industry sources, 2020

### Selected COVID-19 related Initiatives by Content and Online Service Providers

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifting time limits in video calls</td>
<td>Zoom has lifted time limits on its video calls for the free versions in China, as well as for schools in Japan, Italy, and the US, by request.</td>
</tr>
<tr>
<td>Reducing network demands</td>
<td>Netflix and Youtube (Google) reduced the resolution of their video content to assist in reducing the peak network demands on fixed and mobile networks experiencing additional COVID-19 demand.</td>
</tr>
<tr>
<td>Developing new technology</td>
<td>Apple and Google announced its partnership to develop a contact tracing technology to reduce the spread of COVID-19. The two companies have launched a comprehensive solution that includes application programming interfaces (APIs) and operating system-level technology to assist in enabling contact tracing. Given the urgent need, this solution is being implemented in two steps while maintaining strong protections around user privacy.</td>
</tr>
<tr>
<td>Range of free services including but not limited to:</td>
<td>Microsoft is offering anyone its premium version of Teams for free for six months and has lifted existing user limits on its free version. The premium Teams product was already available for no extra cost to those who pay for the Office Suite, and Teams had already been free for many schools. Google announced that it would offer its enterprise videoteleconferencing features — for example, larger meetings of up to 250 people and the ability to record — for free to G Suite and G Suite for Education customers through July 1, 2020. LogMeIn is making &quot;Emergency Remote Work Kits&quot; available for free for three months. Those kits are designed for nonprofits, schools, and health care organizations that aren’t already customers. The kits include GoToMeeting, GoToWebinar—where users can host presentations for up to 3,000 users—and LogMeIn, which provides remote desktop access from numerous devices. Cisco is offering the free version of its Webex service with no time restrictions. In addition, it will allow up to 100 meeting participants and has added toll-free dial-in features with a 90-day license for businesses that are not already customers. Slack already offers a free tier, but the company is offering live Q&amp;A and webinars to get the influx of new users up to speed.</td>
</tr>
</tbody>
</table>

Source: ITU REG4COVID database and selected industry sources, 2020
BEST PRACTICE

DEMAND SIDE: HELP TO THE CONSUMERS/PUBLIC
- provision of free/discounted services
- free Access to health and education information
- increase broadband 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 in terms of recharges
- Innovative assistance (eg funds etc)

HELP BY CONTENT & ONLINE SERVICE PROVIDERS
- lift limits on video calls
- reduce download sizes (content resolution)
- increase capacity/capability
- developing new technology (eg tracing)
- range of free services eg Teams, Zoom etc

Source: ITU, June 2020
Centralised versus decentralised apps

Centralised

- Phone provides own anonymised ID plus codes gathered from other phones to centralised database
- Computer server uses database to do contact matching and risk analysis, plus sends alerts

Decentralised

- Phone provides own anonymised ID only to centralised database
- Phone downloads database, does contact matching and risk analysis, plus sends alerts

Source: BBC

Apple-Google contact tracing apps

- Alice and Bob meet each other for the first time and have a 10-minute conversation.
- Bob is asymptomatic diagnosed for COVID-19 and sends the test result to an app from a public health authority.
- Their phones exchange anonymised location-based personal contact change histories.
- A few days later...
- With Bob’s consent, his phone uploads the last 14 days of his phone’s broadcast Beacons to the cloud.
- Alice continues her day unaware she had been near a potentially contagious person.
- Alice sees a notification on her phone.
- Apple’s phone periodically downloads the broadcast beacon data or everyone who has tested positive for COVID-19 in her region. A match is found with the Bob’s anonymised identifier beacon.
- Alice learns that she has been notified to take further action.
- Someone通报...
- Alice’s phone receives a notification with information about what to do next.

Source: Apple-Google, 2020
Creating a trusted cyberspace for all
• Joint collaboration of ITU, WHO and Andalusian Regional Ministry of Health and Families (Spain) in digital health space. (H2020 project till Sept 2021).

• Implemented by a Consortium of 18 partners from across Europe led by Andalusia.
  • Governments
  • Healthcare systems
  • Tech sector
  • NGO, Academia

Hub’s main areas of activities

• mHealth assessment frameworks
• Evidence-based mHealth solutions on NCDs
• Integration of mHealth into health systems
• Support to large-scale implementation of mHealth programmes
• Contributions to policy frameworks on mHealth topics, cross-border adoption and assessment of innovations.
• Ethics
1 Hub

- 60% Public institution
- 30% Non-for-profit organisations
- 10% Private sector

https://mhealth-hub.org/
Frameworks are being re-invented rather than building on any existing
Most frameworks did not assess all the criteria
Heterogeneity
- Regarding comprehensiveness, depth, format, and target audience.
- Some frameworks are comprehensive and broad; others very specific to certain target audiences and criteria.

Similarities
- Most frameworks assessed security, privacy, user experience, and usability.
- Most frameworks did not assess reliability and safety.
- Most frameworks targeted developers in some capacity.
- Some standards were referenced by multiple frameworks.
- Most frameworks did not reference each other.

Differences in stakeholder and framework priorities
Most frameworks did not assess the criteria considered most important by the stakeholders, as interviewed by the EC Working Group on mHealth assessment (i.e. transparency, safety, reliability, validity, and interoperability).
Evaluation and accreditation of national apps
Hub Toolkit (30th June 2020)

Objectives:
• To assist decision makers in creating/adopting assessment frameworks.
• To provide grounds for common assessment components across borders.

Findings on how specific criteria relevant for COVID-19 are covered by those frameworks: e.g. interoperability, privacy, safety, security or effectiveness.
Preliminary compilation of 13 health apps repositories in Europe.

Findings on the process of building and keeping a health apps repository (e.g. transparent methodology; how information is organized; languages...)

Evaluation and accreditation of national apps Hub Toolkit (30th June 2020)
Evaluation and accreditation of national apps
Summary of valuable Hub contributions

• The Hub as a one-stop shop → European repository of mHealth solutions deployed for different purposes in the pandemic management.

  Further and more sophisticated development of the Hub COVID-19 repository.

• Catalogue of assessment frameworks and repositories in Europe; Brief Technical Notes on gaps / common assessment components / recommendations.

• Brief Technical Notes with guidance for countries on how apps are assessed by different criteria in the existing frameworks. (interoperability, accessibility, privacy, effectiveness, etc.)
Integration of mHealth solutions into health systems

• Guidance with roadmap for health authorities to adopt mHealth solutions.

• Checklists or Brief Technical Notes on the challenge of integrating mHealth solutions, in particular contact tracing, into the health system and their eHR and e-prescription system.

• Disseminate lessons learnt from past integration experiences (before COVID-19) on cross cutting topics (architecture, security, privacy, data integrity, governance, needs-solutions matching).
MHEALTH SOLUTIONS FOR MANAGING THE COVID-19 OUTBREAK

Given the global situation the World is facing these days due to COVID-19, many governments, companies and citizens movements have developed mHealth initiatives to keep the population informed and help manage the crisis situation. This is a preliminary, living, non-exhaustive list of some initiatives developed in Europe, compiled with high efforts within a short time frame. Applications are still coming in and are complemented by our own network efforts.

Coronavirus: la Comisión adopta una Recomendación para apoyar estrategias de salida de la crisis mediante datos y aplicaciones móviles

Bruselas, 8 de abril de 2020

La Comisión ha recomendado hoy una serie de pasos y medidas para desarrollar un enfoque común de la UE en cuanto al uso de aplicaciones y datos móviles en respuesta a la pandemia del coronavirus. Llegado el momento, y siempre que se ajusten a las normas de la UE y estén bien coordinadas, las herramientas digitales pueden desempeñar un importante papel en el levantamiento gradual de la medida de confinamiento.

La Recomendación marca un proceso para la adopción, junto con los Estados miembros, de un conjunto de instrumentos centrado en dos dimensiones:

- un enfoque coordinado paneuropeo sobre el uso de las aplicaciones móviles con objeto de empujar a los ciudadanos para que adopten medidas eficaces y más selectivas de distanciamiento social y con fines de alerta, prevención y seguimiento de contactos, y

- un enfoque común para la modelización y la predicción de la evolución del virus mediante datos de localización móvil agregados y anonimizados.

La Recomendación establece los principios fundamentales para el uso de estas aplicaciones y estos datos en lo que respecta a la seguridad de los datos y al respeto de los derechos fundamentales de la UE, como la protección de la privacidad y de los datos.

Thierry Breton, comisario responsable del Mercado Interior, ha afirmado: «Las tecnologías digitales, las aplicaciones móviles y los datos sobre movilidad ofrecerán un enorme potencial para ayudarnos a comprender cómo se propaga el virus y ofrecer una respuesta eficaz. Con esta Recomendación, ponemos en marcha un enfoque coordinado europeo para el uso de dichas aplicaciones y datos, sin poner en riesgo las normas de la UE en materia de protección de la privacidad y de los datos y evitando la

eHealth Network

Mobile applications to support contact tracing in the EU’s fight against COVID-19

Common EU Toolbox for Member States

Version 1.0

15.04.2020

What is Financial Inclusion?

• Financial inclusion means the sustainable provision of affordable financial services that bring the poor into the formal economy.

• An inclusive system includes a range of financial services that provide opportunities for accessing and moving funds, growing capital, and reducing risk. Such services may be provided by banks and other traditional financial services organizations, or by nonbank providers.

• Financial inclusion contributes to the development goals of poverty reduction, economic growth and jobs, greater food security and agricultural production, women’s economic empowerment and health protection.
How many unbanked adults have a mobile phone?

Globally, about 1.1 billion — or about two-thirds of all unbanked adults. In India and Mexico more than 50 percent of the unbanked have a mobile phone; in China 82 percent do.

Sources: Global Findex database; Gallup World Poll 2017.
Note: Data are not displayed for economies where the share of adults without an account is 5 percent or less.
DFS: Issues

• DFS are new and complicated, raising **new economic issues** relating to licensing, market dynamics, market power, competition, interoperability, consumer protection, and legal issues around regulators’ mandates in this area.

• Increasing the impact of DFS depends on collaboration among public and private stakeholders to:
  – Build a deep knowledge base
  – Ensure connectivity for DFS
  – Address other key overlapping issues:
    • interoperability
    • digital identity
    • Consumer data
    • Privacy and data protection
The DFS Ecosystem

**ICT Infrastructure**

**ICT applications and services**

**Devices**

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Source: ITU-T Focus Group Digital Financial Services Outputs
Effective collaboration and coordination is critical to the development of a safe and enabling DFS ecosystem

Financial authorities should regularly engage with other public-sector actors (e.g., authorities responsible for telecommunications, competition, data protection, and taxation), DFS providers, consumer advocates, DFS technical experts, development partners, and other DFS stakeholders (issues e.g. interoperability, third generation mobile (3G) coverage, service quality, fraud mitigation, data privacy, or digital credit)

DFS authorities should establish formal mechanisms for coordination

Mechanisms such as a national payments council can facilitate a collaborative approach to DFS regulation. Financial and telecommunications authorities should also consider signing a memorandum of understanding (MoU) or similar agreement to guide their collaboration to foster the development of a safe and enabling DFS ecosystem.

Source: ITU-T Focus Group Digital Financial Services Outputs
BDT on DFS and DFI

FIGI Project (ITU, World Bank, Bill & Melinda Gates Foundation)

Regional Initiatives (2020-2023)

Chief Regulatory Officers – Working Group on DFS

Country Assistance:
✓ Mongolia (2017)
Digital Financial Services (DFS) and Digital Financial Inclusion (DFI) Ecosystem in Mongolia: A study with focus on cross-sectoral policy and regulatory collaboration
✓ China (2018-2020)
Cooperation with World Bank as well as Bill & Melinda Gates Foundation as part of FIGI project
✓ India (2018)
Capacity building on Understanding Digital Payments
✓ Thailand (2018)
Regional training on Distributed Ledger Technologies
✓ Sudan (2017)
Digital Financial Services (DFS) and Digital Financial Inclusion (DFI): A study with focus on cross-sectoral policy and regulatory collaboration

Best Practice Guidelines on Collaborative Regulation for Digital Financial Inclusion (2016)

ITU-D activities global (examples)
TSB on DFS and DFI – The Journey

2 Mobile Money reports – by TSB Technology Watch

~ 2.1 M USD grant received from Bill & Melinda Gates Foundation for Focus Group on Digital Financial Services (FG DFS)

2013-2014

FG DFS

~ 50+ active member (World Bank, Central Banks, Visa/Mastercard, Telcom regulators ..)

Closed in 2016

~ 27 reports & 85 recommendations submitted to TSAG, ITU-T SGs 3, 12 & 17 and TDAG, ITU-D SGs 1 & 2

Joint ITU-UPU Publication on DFS Glossary (From FG DFS)

2014-2016

FIGI Financial Inclusion Global Initiative ~ 3.4 M USD grant received from Bill & Melinda Gates Foundation

FG DFC Digital Fiat Currency

- 6 reports to ITU-T SG16 & 17

FG DLT Distributed Ledger Technologies

- 8 reports to ITU-T SG13, 16 & 17

2017-2019

• 1 Recommendation from ITU-T SG 12
• 3 Draft Recommendations from ITU-T SG 3
• 6 adopted as technical reports in ITU-T Study Groups
AML + KYC
Payment Settlement
Micro loans
Deposit
Insurance

Open Access
Dispute Res.
Security
Digital ID
Competition
Consumer Protection

Telecom costs
Last mile connectivity
Network reliability
QoS
SIM Registration

TSB on DFS and DFI

FG DFS: Collaboration Between Telecom and Financial Services Regulators
FIGI: Cross-ITU Collaboration and Co-operation

Global Goal – UFA 2020

FIGI 3X3X3

Implementation Principles, Recommendations, Guidelines

- PAFI Guiding Principles
- ITU DFS Focus Group Recommendations
- Level One Design Principles

International Standards
Creating a trusted cyberspace for all
Digital Identity Roadmap Guide
Thank you