



# COVID-19 – Digital Solutions – Trade and Commerce

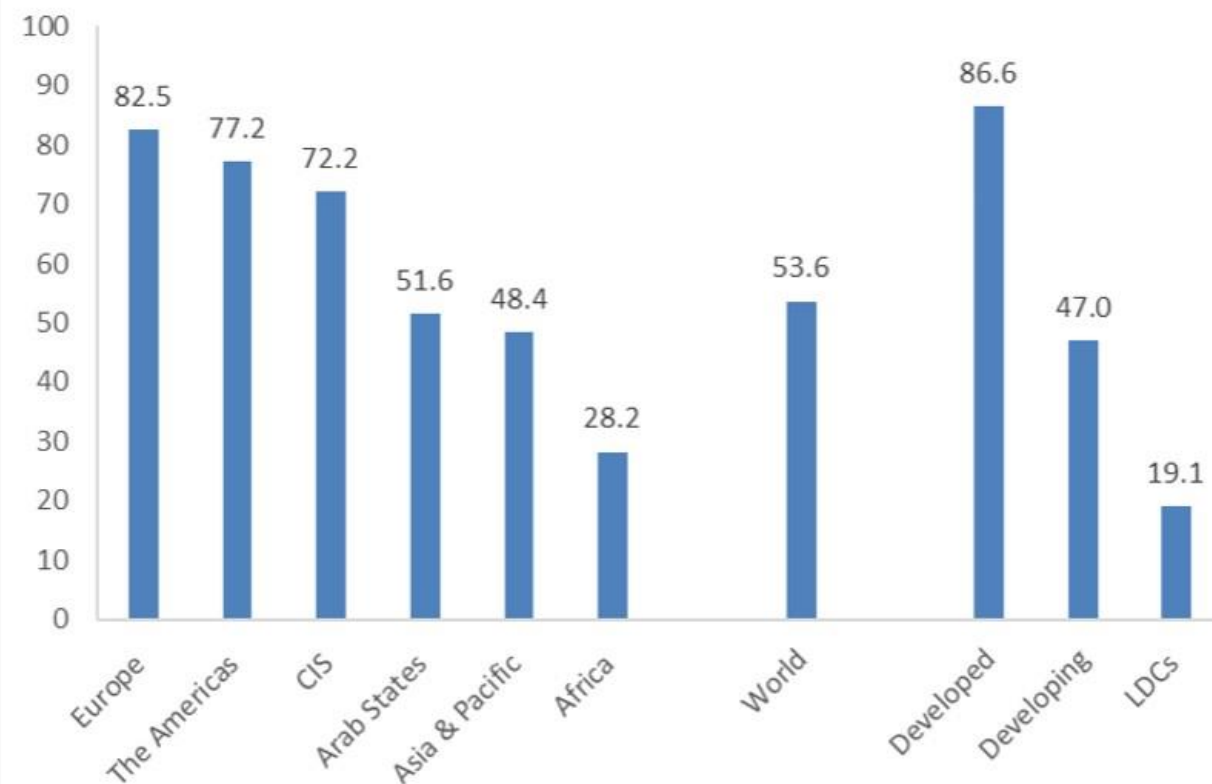
Jaroslav K. PONDER, Head of the ITU Office for Europe  
EURregion@itu.int | @ITU\_EUR

**UNECE: AGAT Conference on Advanced Technologies and  
Supply Chain Disruptions Caused by COVID19  
Thursday, 2 July 2020**

# CONNECTIVITY

2019 Estimates	% of households with	
	Internet access at home	a computer at home
Africa	17.8	10.7
Arab States	57.1	51.9
Asia & Pacific	50.9	43.5
CIS	74.2	66.3
Europe	86.5	78.0
The Americas	71.8	65.7
World	57	49.7
Developed	87	82.3
Developing	46.7	38.5
LDCs	11.8	9.5

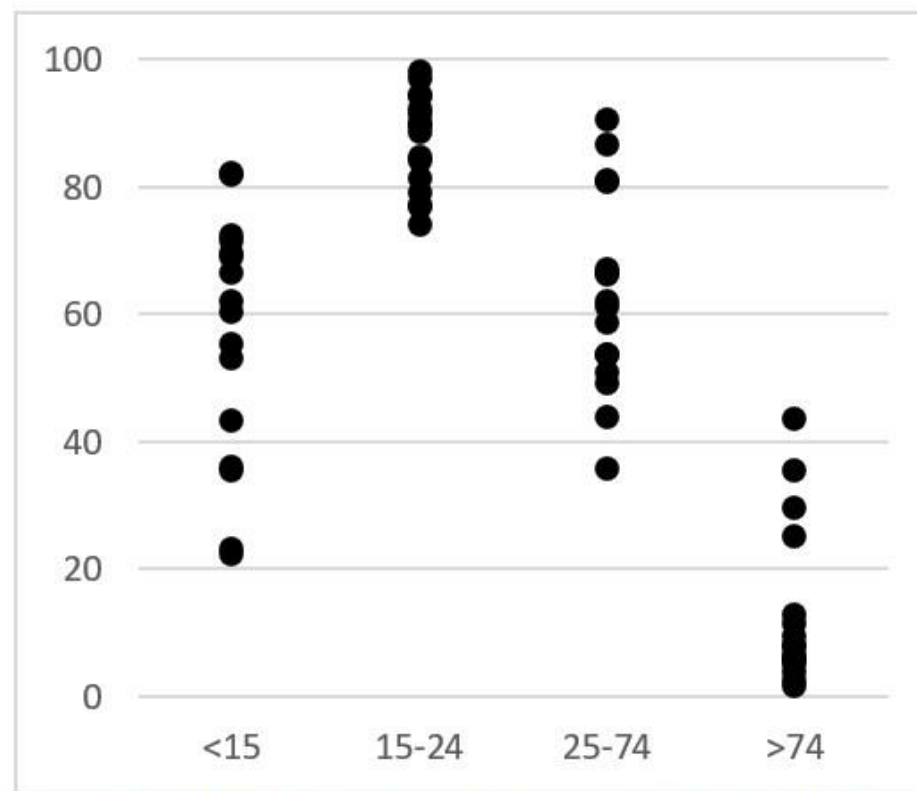
Percentage of individuals using the Internet, by region and development status, 2019\*



Percentage of individuals using the Internet, by age range, 2018, selected countries

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

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

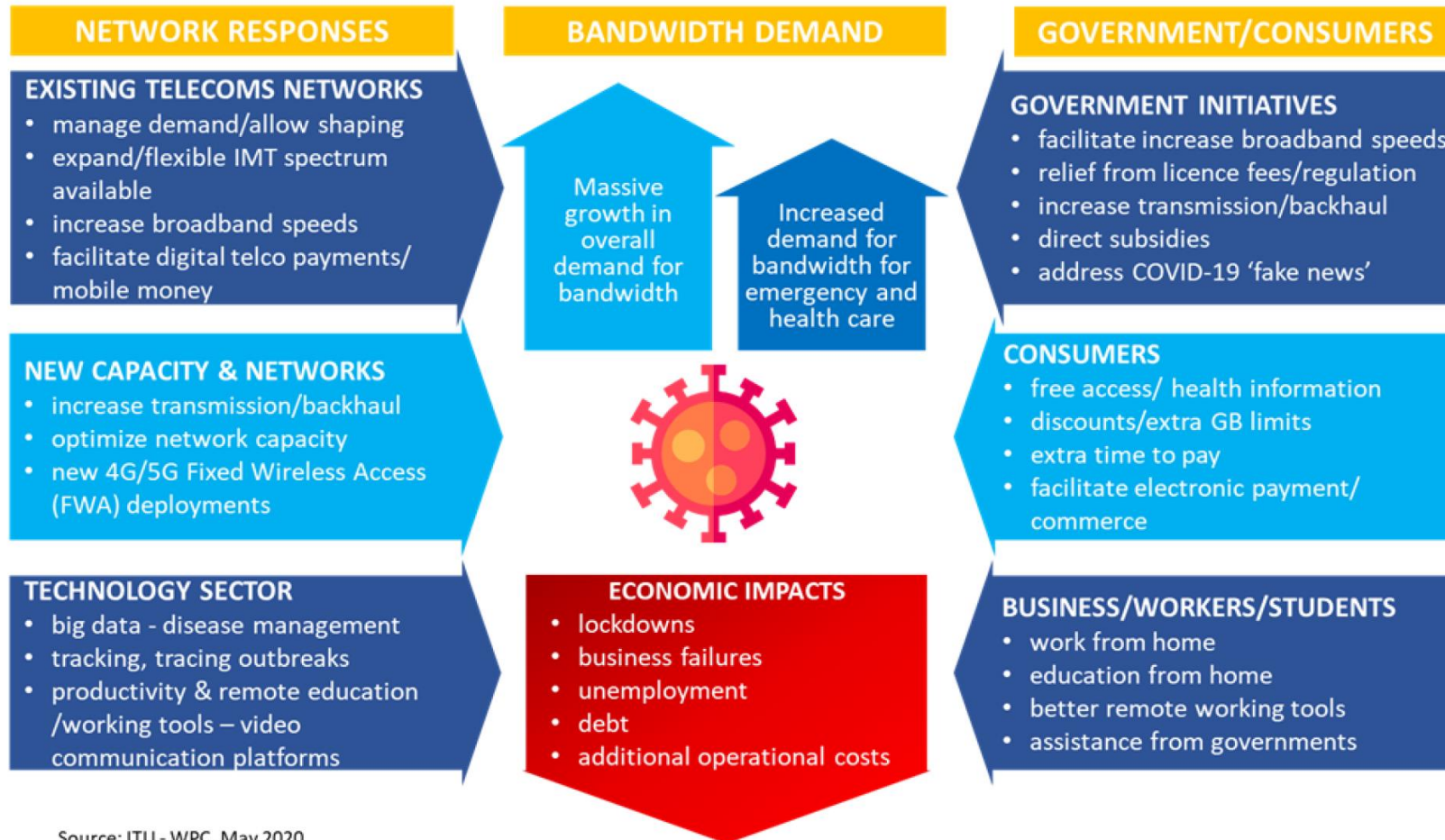


	<div> <b>EMERGENCY</b> 0 to 6 months         </div> <div> <b>RECOVERY</b> 6 to 18 months         </div> <div> <b>NEW NORMAL</b> from 18 months         </div>		
<b>INDIVIDUALS</b>	<ul style="list-style-type: none"> <li>social distancing mandated</li> <li>move to online work, education, socialising, commerce and retailing</li> </ul>	<ul style="list-style-type: none"> <li>embed social distancing practices</li> <li>adapt to new work, education, social practices</li> </ul>	<ul style="list-style-type: none"> <li>social distancing as new normal</li> <li>wearing masks becomes fashion</li> <li>online proficiency improvement</li> </ul>
<b>BUSINESS/ CORPORATE SECTOR</b>	<ul style="list-style-type: none"> <li>implement work from home</li> <li>adapt on-site work practices to minimise contact</li> </ul>	<ul style="list-style-type: none"> <li>design and embed new work practices</li> <li>redesign workplaces for reduced contact and crowding</li> </ul>	<ul style="list-style-type: none"> <li>what is better online stays online</li> <li>ongoing economic weakness</li> <li>new logistics &amp; supply chains</li> <li>reduced business travel</li> </ul>
<b>TELECOMMUNICATIONS OPERATORS</b>	<ul style="list-style-type: none"> <li>manage immediate demand</li> <li>provide immediate relief to customers</li> <li>expand data caps</li> <li>expand available spectrum and capacity</li> </ul>	<ul style="list-style-type: none"> <li>expand infrastructure and total capacity</li> <li>adapt network capacity for video content</li> <li>develop superior video technologies</li> </ul>	<ul style="list-style-type: none"> <li>continue to build capacity</li> <li>adapt networks to increased video traffic, improve quality and reliability</li> <li>accelerate 4G/5G deployments</li> </ul>
<b>GOVERNMENT</b>	<ul style="list-style-type: none"> <li>require social distancing</li> <li>impose lockdowns</li> <li>limit international travel</li> <li>testing and tracing</li> <li>expand medical capacity</li> <li>source scarce PPE</li> <li>enhance social safety net</li> <li>short-term fiscal stimulus</li> </ul>	<ul style="list-style-type: none"> <li>cautiously adjust lockdown parameters</li> <li>embed ongoing testing and tracing</li> <li>assess post emergency phase COVID-19 and need for sovereign strategic production capabilities</li> <li>focus on economic efficiency</li> <li>longer term fiscal stimulus emphasising productive infrastructure</li> <li>more collaboration among sectors</li> </ul>	<ul style="list-style-type: none"> <li>promote economy wide efficiency measures</li> <li>embed 'surge capacity' healthcare systems</li> <li>find efficient policy to support strategic production and storage (e.g., PPE, fuel, critical medical equipment and reagents)</li> <li>focus on debt reduction</li> </ul>
<b>TECHNOLOGY SECTOR</b>	<ul style="list-style-type: none"> <li>offer productivity &amp; remote education/ working tools</li> <li>tracking, tracing outbreaks</li> <li>quickly help businesses go online</li> </ul>	<ul style="list-style-type: none"> <li>address COVID-19 fake news</li> <li>big data responses/data processing</li> <li>improve remote cybersecurity</li> <li>new tools for safe public transport, workplaces, education, health</li> </ul>	<ul style="list-style-type: none"> <li>build services on new deployed digital infrastructure</li> <li>mobile payments replacing money</li> <li>Innovation driving digital markets</li> </ul>

Source: ITU - WPC, May 2020



## COVID-19: TELECOMMUNICATION/ICT SECTOR RESPONSES



Source: ITU - WPC, May 2020



## Key common short term regulatory initiatives

Initiative	Description
<b>Increasing Broadband capacity and speeds</b>	Regulatory bodies have been encouraging MNOs and wholesale providers to increase broadband speeds for customers to ensure quality of service (QoS) is maintained.
<b>Providing free services to customers</b>	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.
<b>Providing information services on COVID-19</b>	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
<b>Network Management</b>	<p>Three forms of network management are common:</p> <ul style="list-style-type: none"> <li><i>Voluntary:</i> 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.</li> <li><i>Mandatory:</i> 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.</li> </ul> <p><i>General:</i> There has also been a regulatory trend towards publishing new guidelines or revising existing ones to better handle congested and overloaded networks.</p>
<b>Allowing more flexible IMT spectrum use</b>	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.

Initiative	Description
<b>Contact Tracing application development</b>	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.
<b>Government subsidised broadband services</b>	In a small number of countries, Governments have subsidized wireless broadband services to support the costs of consumers working and studying from home.
<b>Free access to online learning resources</b>	Country governments have been working with operators to ensure access to online learning programs while the pandemic is ongoing.
<b>Generally easing regulatory requirements on licensees</b>	Government and regulators have taken steps to minimize the regulatory and reporting obligations on licensed operators.
<b>New Fixed Wireless Access (FWA) networks</b>	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.
<b>Addressing misinformation in relation to COVID-19</b>	A number of countries have promulgated rules addressing misinformation in relation to COVID-19 including the link of 5G to the coronavirus.





### Common short-term Initiatives by operators

Initiative	Description
<b>Additional Data Allowances</b>	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.
<b>Increasing Broadband Speeds</b>	Operators have upgraded Internet speeds – including transmission and backhaul capacity - to better accommodate the unprecedented number of people working and learning from home.
<b>Relaxing of payment terms</b>	Operators have relaxed the payment terms including downgrade plans/vouchers, payment of monthly invoices, and prepaid voucher validities dates etc.
<b>Providing free services</b>	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.
<b>Free access to online learning/education resources</b>	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.
<b>Free access to health/government information</b>	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.
<b>Facilitating mobile money transactions</b>	Telecommunications companies (and banks) are encouraging consumers to avoid cash payment in favour of digital transactions to avoid the spread of the coronavirus.
<b>Going digital in terms of recharges etc.</b>	MNOs have facilitated prepaid mobile recharges being made online rather through physical scratch cards etc. to improve connectivity during any lockdowns

Source: ITU REG4COVID database and selected industry sources, 2020

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

Initiative	Description
<b>Lifting time limits in video calls</b>	<b>Zoom</b> 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. <sup>11</sup>
<b>Reducing network demands</b>	<b>Netflix</b> and <b>Youtube (Google)</b> 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.
<b>Developing new technology</b>	<b>Apple</b> and <b>Google</b> 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.
<b>Range of free services including but not limited to:</b>	<p><b>Microsoft</b> 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.<sup>12</sup></p> <p><b>Google</b> announced that it would offer its enterprise videoconferencing 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</p> <p><b>LogMeIn</b> is making "Emergency Remote Work Kits" 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.<sup>13</sup></p> <p><b>Cisco</b> 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.<sup>14</sup></p> <p><b>Slack</b> 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.<sup>15</sup></p>

Source: ITU REG4COVID database and selected industry sources, 2020



## BEST PRACTICE

### DEMAND SIDE: HELP TO THE CONSUMERS/PUBLIC

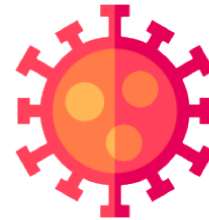
- provision of free/discounted services
- free Access to health and education information
- increase broadband speeds
- addressing COVID-19 'fake news'
- facilitate digital telco payments/ mobile money

### 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

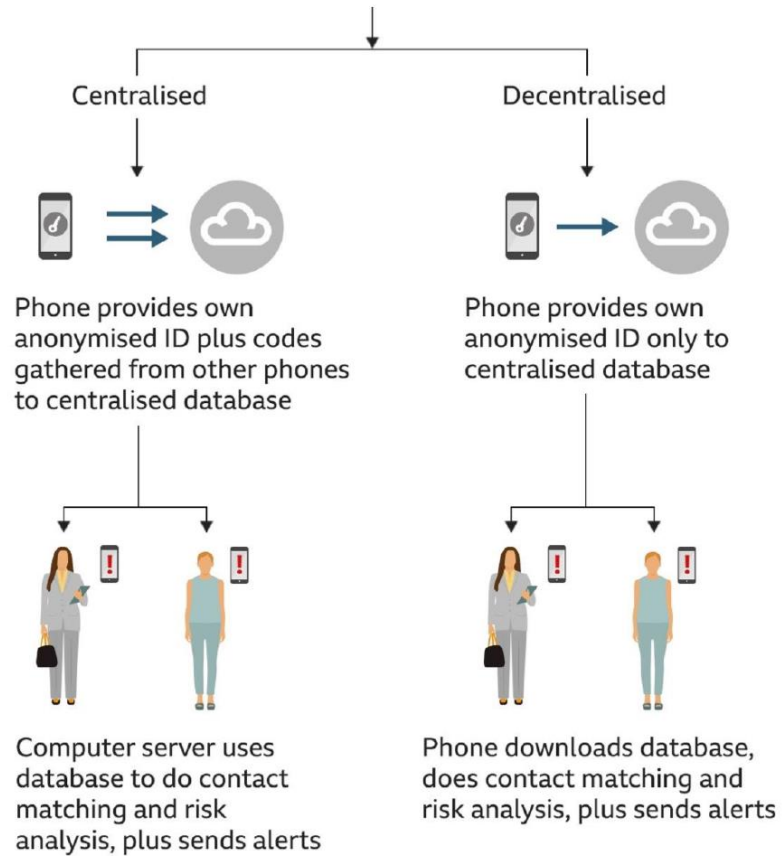
- additional data allowances
- retail tariff discounts
- increase broadband capacity
- investment in new capacity/networks
- relaxing of payment terms
- provision of free services for health sector
- free access to online health information
- free access to online education information
- facilitating 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

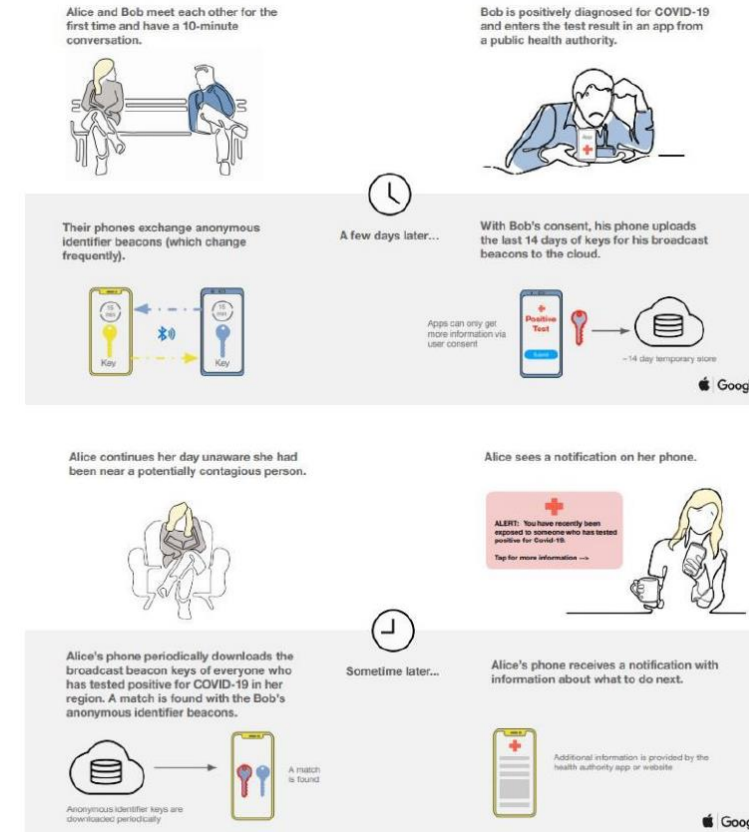
Source: ITU, June 2020

## Centralised versus decentralised apps



Source: BBC<sup>36</sup>

## Apple-Google contact tracing apps



Source: Apple-Google, 2020





# MOBILE HEALTH

# FINANCIAL INCLUSION

# DIGITAL IDENTITY

# MOBILE HEALTH

# FINANCIAL INCLUSION

# DIGITAL IDENTITY



World Health  
Organization



Junta de Andalucía  
Consejería de Salud y Familias



This project has received funding from the European Union's  
Horizon 2020 research and innovation programme under the  
Grant Agreement No 737427





A WHO/ITU/Andalusian Regional Ministry of Health initiative

- 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





A WHO/ITU/Andalusian Regional Ministry of Health initiative

## 1 Hub

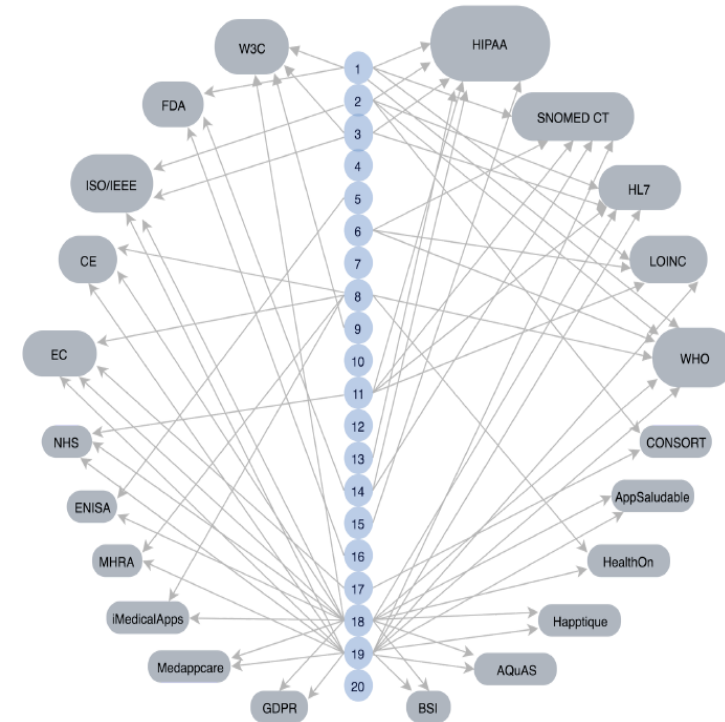
12 countries

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



1. **Consumer Mobile Health Application Functional Framework (HL7):** HIPAA, SNOMED CT, WHO, W3C, LOINC, ICD, FDA
2. **Monitoring and Evaluating Digital Health Interventions A practical guide to conducting research and assessment:** HIPAA, HL7, WHO, ISO/IEEE, ICD, CONSORT, mERA
3. **Continua Design Guidelines:** HIPAA, HL7, W3C, ISO/IEEE
4. **EU guidelines on assessment of the reliability of mobile health applications:**
5. **Code of Conduct on privacy for mHealth apps:** ENISA
6. **AppSalut:** SNOMED CT, WHO, LOINC,
7. **Andalucia/AppSaludable:**
8. **Digital healthcare products (study report):** WHO, ICD, CE certification, EU commission, HealthOn, MHRA, iMedicalApps
9. **Weighted Evaluation Framework for Cross-Platform App Development Approaches:** W3C
10. **mHealth in Ethiopia: strategies for a new framework:**
11. **Evaluating Mobile Apps guide (NLM, NIH):** HIPAA, SNOMED CT, HL7, LOINC, NHS
12. **Evaluating Digital Health Interventions (Murray et al., 2017):**
13. **Privacy Framework for Mobile Health and Home-Care systems:** HIPAA
14. **Mobile Health app guidelines (Xcertia):** HIPAA, SNOMED CT, FDA
15. **APA App evaluation Model:** HIPAA
16. **CDS Coalition Guidelines:** FDA
17. **MAST - Model for evaluation of telemedicine:** EU commission, CONSORT
18. **Haute autorite de sante - Good practice guidelines on health apps and smart devices:** HL7, WHO, W3C, ISO/IEEE, CE certification, EU commission, NHS, mERA, AppSaludable, HealthOn, ENISA, Happtique, Medappcare, BSI, AQuAS, GDPR, iMedicalApps
19. **Report of the Working Group on mHealth Assessment Guidelines:** SNOMED CT, HL7, WHO, LOINC, ICD, ISO/IEEE, CE certification, NHS, AppSaludable, Happtique, Medappcare, BSI, AQuAS, GDPR, MHRA, IGES, Haute autorite de sante
20. **NHS App Assessment for Developers:**

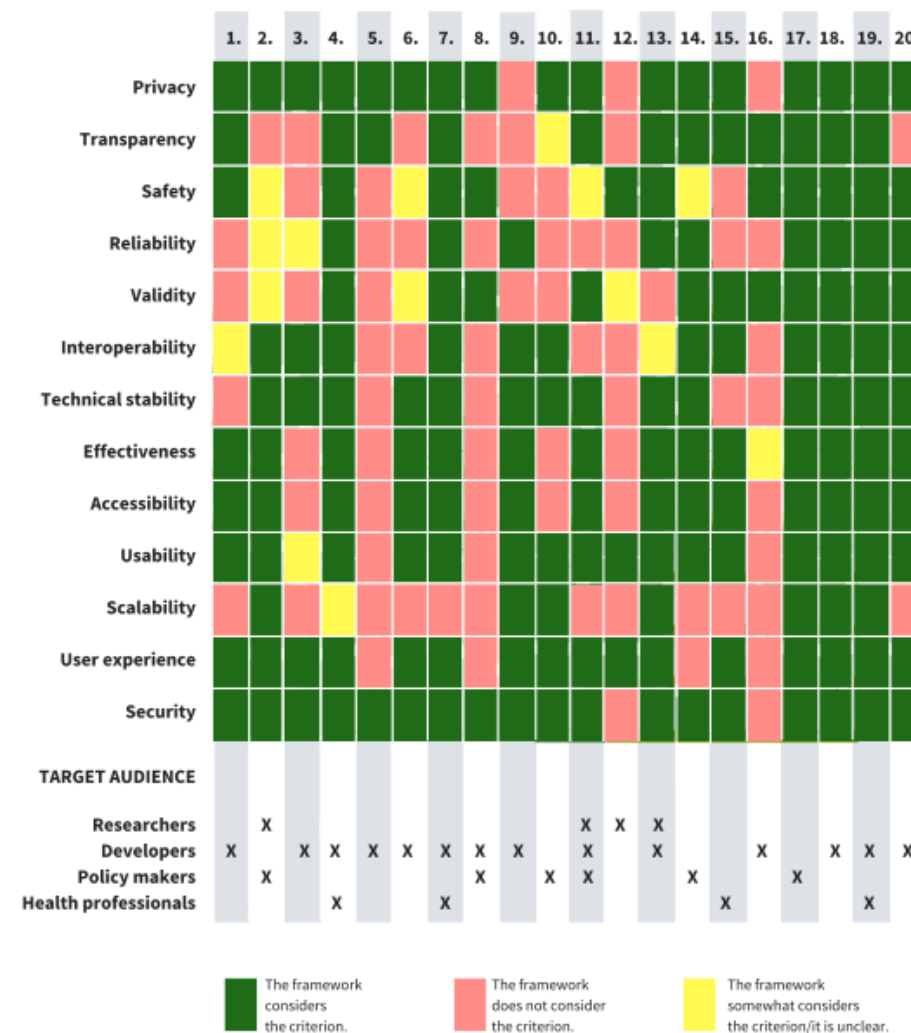
## Evaluation and accreditation of national apps Hub Report (2018) - Main findings (I)



👉 Frameworks are being re-invented rather than building on any existing

# Evaluation and accreditation of national apps Hub Report (2018) Main findings (II)

☞ Most frameworks did not assess all the criteria



# Evaluation and accreditation of national apps: Hub Report (2018) - Main findings (III)

## ❑ 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).

### Report on the mHealth Assessment Frameworks

#### Executive summary

This report builds upon the previously published report by The Working Group on mHealth assessment, which analyzed interviews with different stakeholders groups (researchers, public authorities, health practitioners, industry, and developers) on mHealth assessment framework criteria. In order to determine the core criteria needed in a common framework, we analyzed the existing mHealth assessment frameworks to identify the similarities and differences.

#### Main findings

##### 1. This report identifies 3 framework categories:

**Assessment:** frameworks outlining how to assess an mHealth product.

**Implementation:** frameworks outlining how to assess the readiness of the environments to adapt an mHealth product.

**Service:** frameworks used by services to provide an assessment of an mHealth product.

Frameworks can fall into more than one category. Only frameworks in the "assessment" category were analyzed in further detail.

##### 2. Large amount of heterogeneity: Among the assessment frameworks assessed, there is a large amount of heterogeneity regarding comprehensiveness, depth, format, and target audience of the frameworks. Some frameworks are comprehensive and broad, and others are very specific to certain target audiences and criteria.

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

##### 4. Differences in stakeholder and framework priorities: Most frameworks did not assess the criteria considered most important by the stakeholders, as interviewed by The Working Group on mHealth assessment (i.e. transparency, safety, reliability, validity, and interoperability).

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## 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.

## Evaluation and accreditation of national apps Hub Toolkit (30<sup>th</sup> June 2020)

### Around 25 frameworks

- Safety & Quality Strategy in Mobile Health Apps (Andalusia, Spain)
- Accreditation Service and TICSS guarantee certification (Catalonia, Spain)
- Digital Assessment Questions (DAQ) (UK)
- mHealth Belgium
- My SNS Selecção (Portugal)
- Evidence Standards Framework for Digital Health Technologies (UK)
- Good practice guidelines on health apps and smart devices (France)
- App Check (Germany)
- Criteria catalogue for self-declaration of the quality of health apps (Switzerland)
- Mind Apps (Denmark)
- PAS 277: 2015 (UK)
- AppKRI (Meta-criteria catalogue) (Germany)
- AppQ: quality criteria core set for digital health applications (DiGA) (Germany)
- BfARM guidance (Germany)
- GGD apps store (Netherlands)
- ORCHA (UK)
- My Health Apps (UK)
- CEN/ISO 82304-2
- Isys Score (Catalonia, Spain)
- Medappcare Quality Approach (France)
- Our Mobile Health /UK)
- cMHAFF (HL7)
- Continua Design Guidelines (CDG)
- EU guidelines on assessment of the reliability of mobile health applications
- Code of Conduct on privacy for mHealth apps (final draft) (EC)

# Evaluation and accreditation of national apps Hub Toolkit (30<sup>th</sup> June 2020)

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...)

## Health apps repositories in Europe



**UK**

- NHS Apps Library  
by National Health Service (NHS)  
[EN](#)
- EMIS App Library  
by EMIS App Library  
[EN](#)
- Your health app finder  
by Organisation for Review of  
Care and Health Apps (ORCHA)  
[EN](#) / [NL](#) / [ET](#)
- My health apps  
by Patient View  
[EN](#)
- Our Mobile Health  
App Curated Library  
by Our Mobile Health  
[EN](#)

**SCOTLAND**

- The Right Decision - Apps Library  
by NHS Scotland  
[EN](#)

**Portugal**

- MySNS Seleção  
by Shared Services of the Ministry of Health  
[PT](#)

**Belgium**

- mHealth Belgium - All apps  
by mHealth Belgium  
[FR](#) / [EN](#) / [NL](#)

**Spain**

**ANDALUSIA**

- AppSaludable Health  
Apps Catalogue  
by Andalusian Agency for  
Healthcare Quality  
[EN](#) / [ES](#)

**CATALONIA**

- Catálogo de Aplicaciones  
de la Salud  
by iSYS Foundation  
[ES](#) / [CA](#)

**France**

- Kiosques de recommandation  
by Medappcare  
[FR](#) / [EN](#)
- Kiosque de services digitaux  
by AG2R LA MONDIALE-Medappcare  
(partnership)  
[FR](#)

**Denmark**

**SOUTHERN DENMARK**

- MindApps. Apps for Mental Health  
By Centre for Telepsychiatry in  
the Region of Southern Denmark  
[DA](#) / [EN](#)

This is a non-exhaustive list of health apps repositories developed in Europe. If you know of anyone else, please contact to [mhealthhub.acsa@juntadeandalucia.es](mailto:mhealthhub.acsa@juntadeandalucia.es)

# 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, accesibility, 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.

The screenshot displays the mHealth Hub website's COVID-19 app repository. At the top, the mHealth Hub logo is visible, along with navigation links for HOME, THE HUB, NETWORK, WORK AREAS, NEWS & EVENTS, and CONTACT. Below the header, a section titled "MHEALTH SOLUTIONS FOR MANAGING THE COVID-19 OUTBREAK" is shown. A paragraph explains that the repository is a preliminary, living, non-exhaustive list of initiatives developed in Europe. A button labeled "SUBMIT IT HERE" is present. Below this, a disclaimer states that the inclusion of an mHealth solution does not imply endorsement. The main content area features a search filter with tabs for "All", "Community based initiative", "Private", and "Public". Below the filters, three app cards are displayed: "SMITTESTOPP (DIGITAL CONTACT TRACING)" for Norway, "COVIDTRACKER" for Switzerland, and "OPEN CORONAVIRUS" as a community-based initiative. Each card includes a brief description of the app's purpose and functionality.

<https://mhealth-hub.org/mhealth-solutions-against-covid-19>

# EC Recommendation on Covid-19 apps



REPRESENTACIÓN EN ESPAÑA

COMUNICADO DE PRENSA

## 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 empoderar 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 encierran 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

[https://ec.europa.eu/info/files/recommendation-on-apps-contact-tracing\\_es](https://ec.europa.eu/info/files/recommendation-on-apps-contact-tracing_es)



Brussels, 8.4.2020  
C(2020) 2296 final

### COMMISSION RECOMMENDATION

of 8.4.2020

**on a common Union toolbox for the use of technology and data to combat and exit from the COVID-19 crisis, in particular concerning mobile applications and the use of anonymised mobility data**



## 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***

**[https://ec.europa.eu/health/sites/health/files/ehealth/docs/covid-19\\_apps\\_en.pdf](https://ec.europa.eu/health/sites/health/files/ehealth/docs/covid-19_apps_en.pdf)**

MOBILE  
HEALTH

FINANCIAL  
INCLUSION

DIGITAL  
IDENTITY

# 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*.



# Opportunity for ICTs to bridge the financial inclusion gap

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

**Two-thirds of unbanked adults have a mobile phone**  
Adults without an account owning a mobile phone, 2017



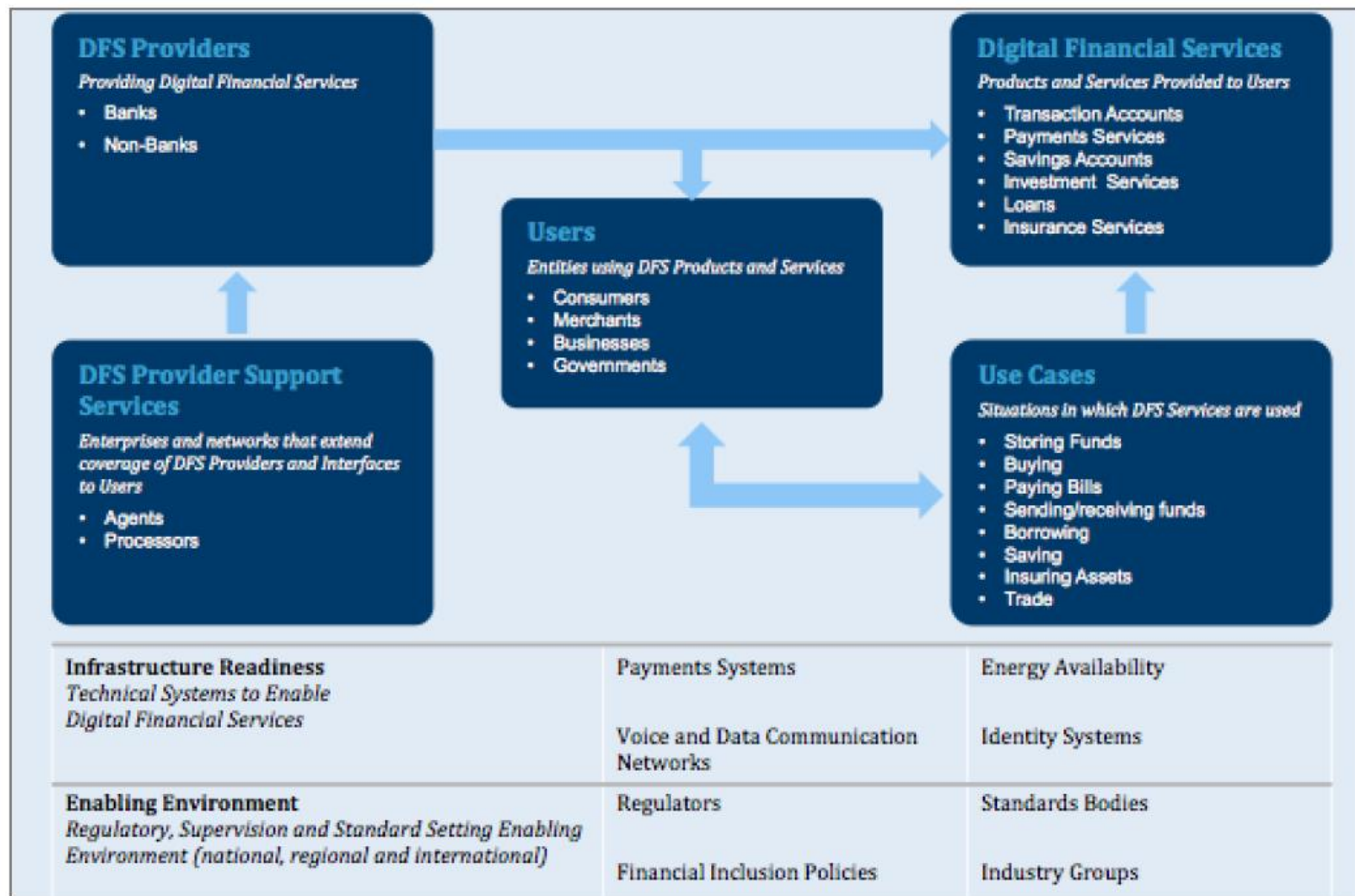
Sources: Global Findex database; Gallup World Poll 2017.

Note: Data are not displayed for economies where the share of adults without an account is 5 percent or less.

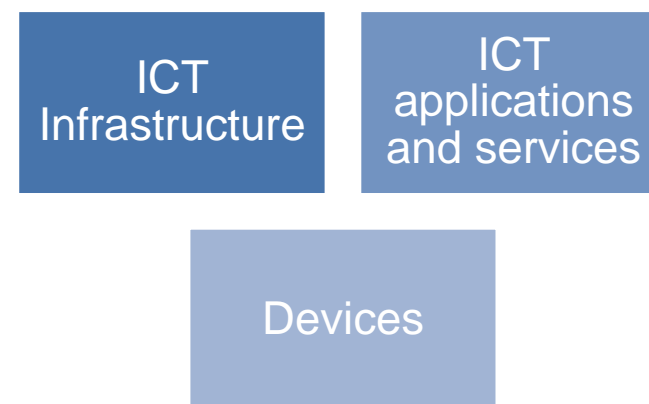


## DFS: Issues

- 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



Source: ITU-T Focus Group Digital Financial Services Outputs

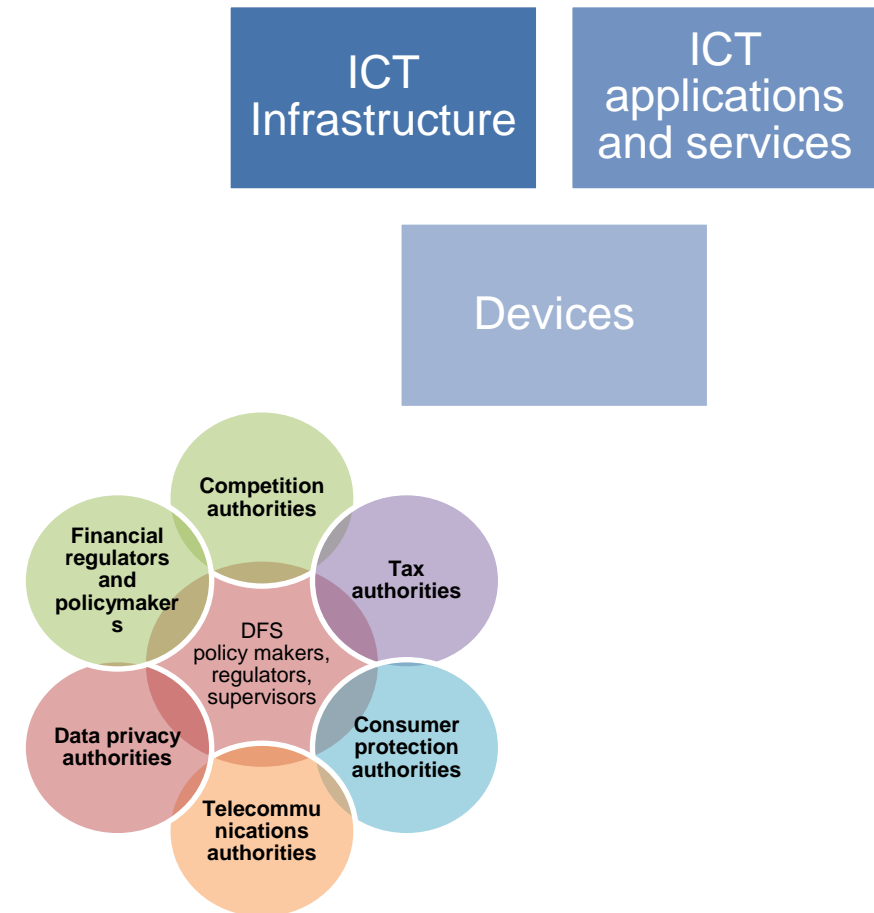
Effective collaboration and coordination is critical to the development of a safe and enabling DFS ecosystem

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

## Collaboration Needs



# 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 \(2016\)](#)

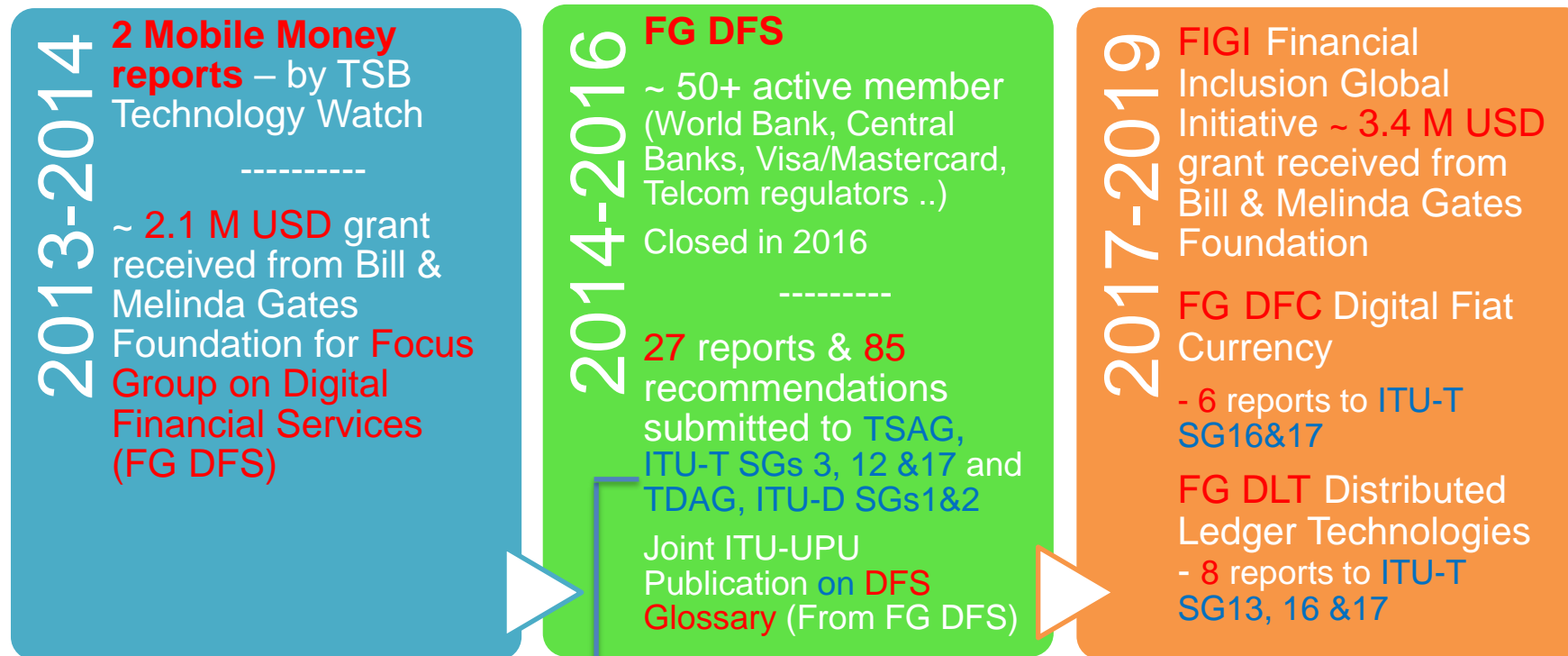
ITU-D activities global (examples)







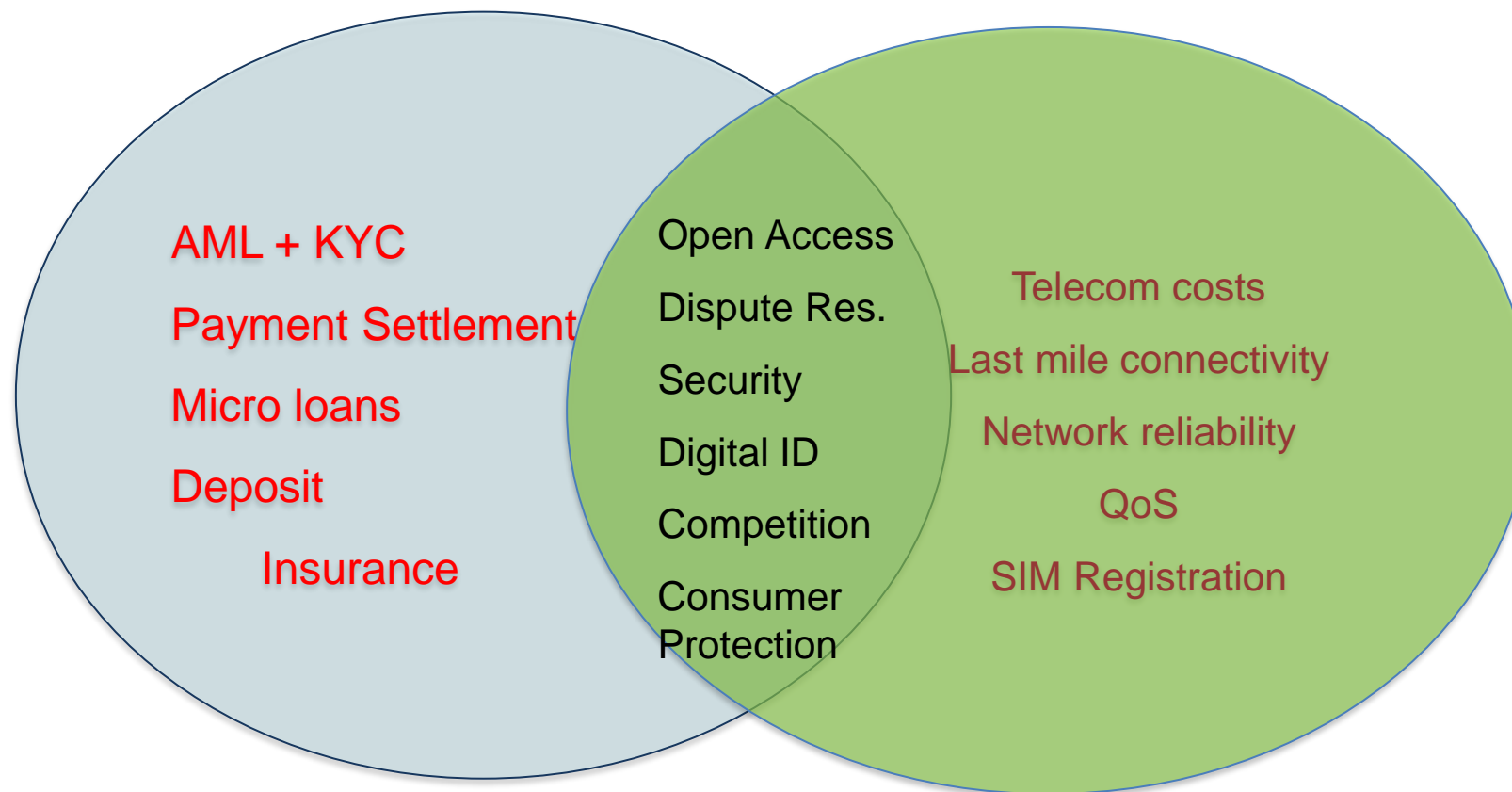
## TSB on DFS and DFI – The Journey



- 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

## TSB on DFS and DFI

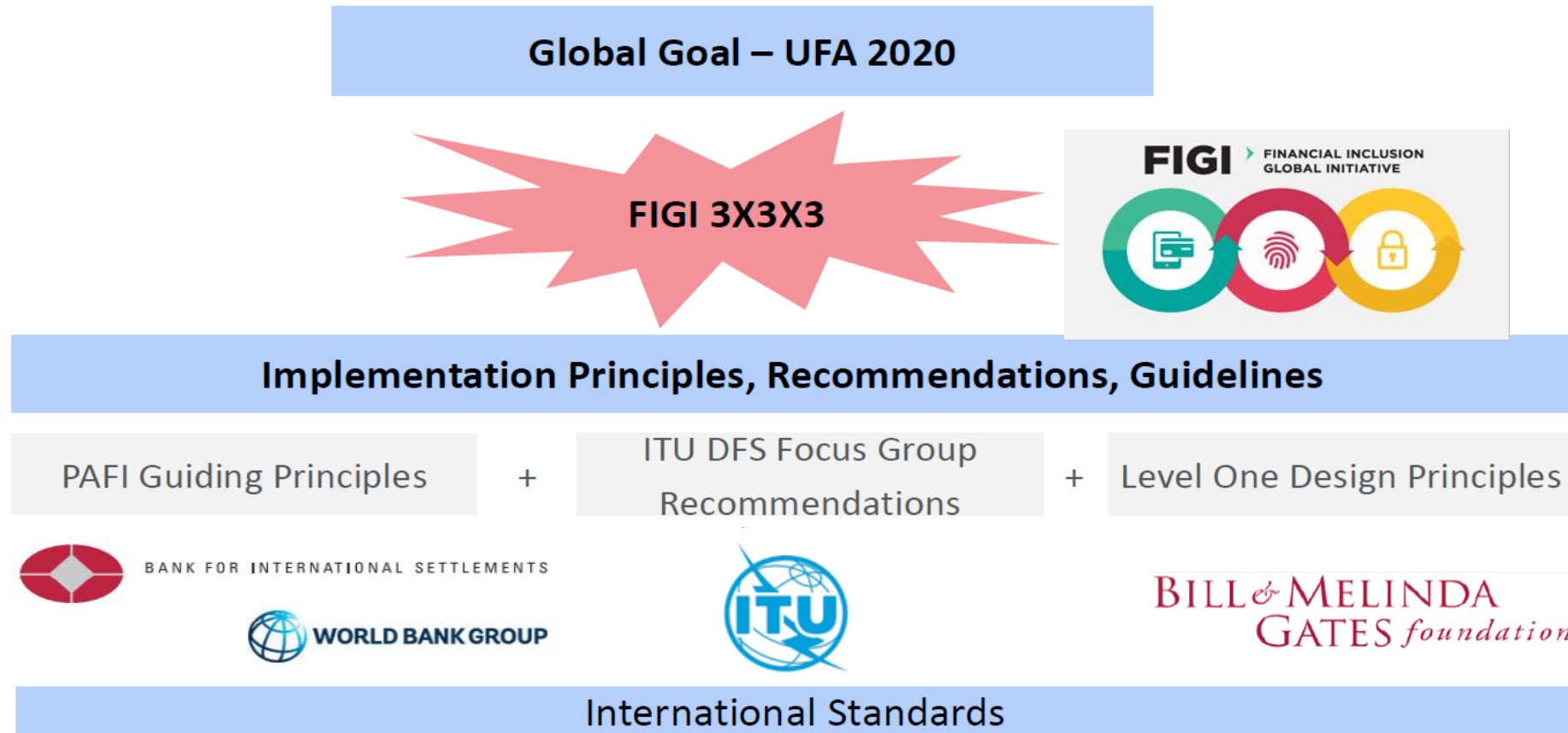
Financial Services Regulator



Telecom Regulator

FG DFS: Collaboration Between Telecom and Financial Services Regulators

# FIGI: Cross-ITU Collaboration and Co-operation

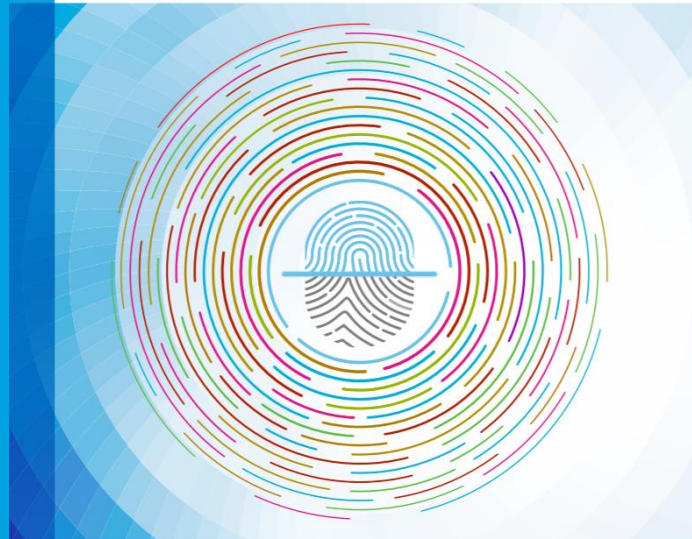


MOBILE  
HEALTH

FINANCIAL  
INCLUSION

DIGITAL  
IDENTITY

## Digital Identity Roadmap Guide





Thank you



[www.itu.int](http://www.itu.int)