



ALLIANCE FOR
AFFORDABLE INTERNET

UNIVERSAL SERVICE AND ACCESS FUNDS IN LATIN AMERICA & THE CARIBBEAN

Prepared by Alliance for Affordable Internet
in partnership with Internet Society

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Executive Summary

Universal Service and Access Funds (USAFs) have been used by governments in Latin American and Caribbean (LAC) countries since the 80s/90s to address telecommunication related gaps. While their existence is not free from criticism, they are an instrument that has been created to achieve universality of communications, which continues to be a major challenge for most countries in the region. Indeed, a study developed in 2020 for the International Telecommunications Union (ITU) has found that almost USD 50 billion are needed to provide universal connectivity in the LAC region alone by 2030.¹

Understanding USAFs, how they work and how they have or haven't been used is thus a fundamental step towards implementing Internet access and connectivity policies. While information about USAFs can, to some extent, be found online, their status, the resources collected, and their level of disbursement, and the impact of the projects implemented through them are much harder to find.

This report has investigated the status of the USAFs of 24 countries in LAC.

This has been done through the analysis of official documents, existing reports, as well as the inputs gathered from 56 interviews with professionals from the private and public sectors, as well as leaders from civil society and academia. Besides investigating how USAF resources have or not been used over the past years, updated information on the financial status of the funds is provided. Further, one of the goals was to understand whether traditional stakeholders – generally large operators – are still the only ones that can access resources, or whether alternative stakeholders, such as small and medium operators and community networks, are also able to implement USAF-funded projects. It also provides actionable recommendations on how the usage of USAFs and the policy and regulatory frameworks that govern them can be strengthened.

USAFs in the analyzed countries have been used for a variety of projects, programs, and initiatives, most of them focused on universal access, especially in lower income areas, as well as rural and remote areas. Some of the main uses are:



Infrastructure deployment: Deploying fiber optic networks with the support from the USAF is part of the plans in Argentina, Bolivia, Chile, Colombia, Dominican Republic, Panama, and Peru. Resources allocation for the deployment of mobile telecommunications infrastructure is also planned in Argentina, Bolivia, Chile, Honduras and Paraguay.



Public access to the internet: In Dominica; Dominican Republic; Chile, Costa Rica, Grenada; Jamaica; Panama, Peru, Saint Lucia; St. Vincent and the Grenadines; and Trinidad & Tobago, several projects are aimed at providing public access to the internet, such as deploying free Wi-Fi hotspots in public spaces.



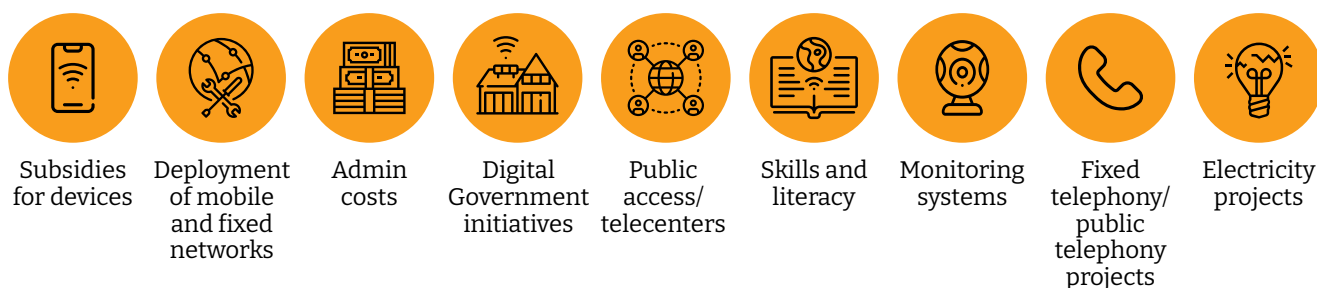
Devices, digital literacy, relevant contents: Costa Rica, Dominican Republic, Saint Lucia, and Trinidad and Tobago are addressing the digital gap from the demand side, using funds towards initiatives focused on strengthening digital skills, developing relevant contents, and/or giving subsidies for the purchase of devices and/or internet service access. Some of the countries are also channeling USAF resources to supplying connectivity and devices to specific groups, such as persons with disabilities; as it happens in Grenada, Jamaica, Saint Lucia, and Trinidad and Tobago.



Digital government: In Argentina, Bolivia, Colombia, Grenada, Jamaica, Paraguay and St. Vincent and the Grenadines resources are used, among other things, to strengthen government digital capabilities, supporting, for example, the purchase of computers and/or monitoring cameras for governmental agencies.

¹ Data from A4AI and Xalam Analytics (2020).

Some examples of how USAF resources are being used in LAC countries



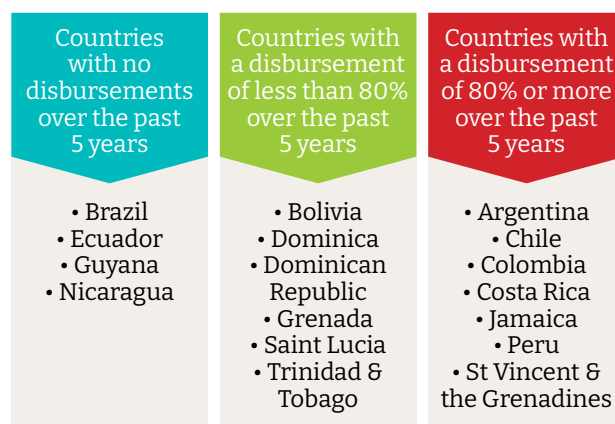
One example of a country which has modernized its USAF legal framework recently is Argentina, which in 2020 has promoted regulatory changes, opening resources up to a wider variety of stakeholders. The Dominican Republic has also issued a Decree in 2021 expressly citing community networks as institutions that are able to make use of USAF-funded resources. Indeed, some results are already positive, as in 2020 one-third of resources awarded as non-refundable projects implemented by stakeholders that did not use to easily access such resources, such as small and medium enterprises (SMEs), public sector, and community networks.

Among other things, the report demonstrates the level of disbursement across countries varies widely across LAC countries. While disbursement rates in a few countries - Argentina, Chile, Colombia, Costa Rica, Jamaica, Peru and St. Vincent and the Grenadines - have reached over 80% at least once since 2016, this is not the reality in many of the countries across LAC, which either have lower disbursement rates or no disbursements at all.²

In the case of El Salvador, the resources are used on projects related to electricity, and in Guatemala, resources are used towards fixed telephony rather than on Internet and data connectivity projects. In Brazil, Ecuador, Guyana, and Nicaragua there have not been disbursements over the past years, although such scenarios might soon change.

Considering what is known from the amounts collected by countries with no disbursements over the past years, there are at least around USD 7 billion being hoarded and/or used for purposes other than connectivity universality in LAC.³

Figure 2: Highest disbursement rates reached in a single year between 2016 and 2020 in selected LAC countries

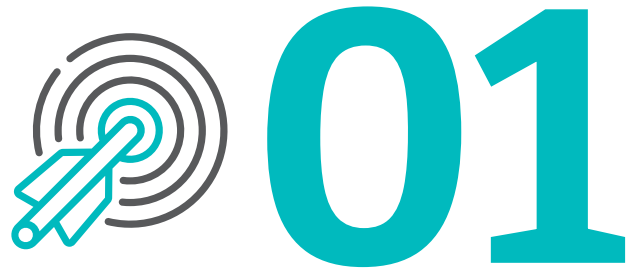


Lastly, the report provides recommendations related to the administrative framework under which the funds are managed; as well as to the legal and policy formulation and implementation of USAFs. More specifically, to strengthen the management of their USAFs, governments should (i) improve the disbursement rate of the USAF; (ii) increase USAF management transparency; (iii) channel resources to addressing the digital gap; and (iv) conduct impact assessments. Regarding the legal/policy formulation and implementation, efforts should be focused on (i) facilitating USAF's access to complementary providers and stakeholders; (ii) ensuring the USAF is shielded from political change; and (iii) using USAF resources towards strengthening equality and equity from the demand side.

² This calculation considers the highest existing disbursement percentage from 2016 until 2020.

³ Considering the available USAF resources collected in Brazil at present values (around USD 6.8 billion, see below), plus the USD 30 million annual collection of funds from operators that are used for fiscal purposes (IADB, 2021). Data from Nicaragua is not available, and Guyana has not started collecting funds yet.

INTRODUCTION



1.1. Context and goals

According to the ITU (2013), Universal Service and Access Funds (USAFs) – or universal service fund (USFs) – are the “mechanism designed as an incentive to encourage operators to assist (...) administrations in achieving their universal service goals” (p.1) and are generally funded by telecommunication service providers/operators, which contribute through funding mechanisms that are created by each country. USAFs usually operate by creating an entity that collects mandatory contributions and then reallocates them in making targeted investments and subsidies on projects for rural and remote locations, as well as underserved parts of the population (A4AI, 2015).

In Latin America and the Caribbean (LAC), in the context of the privatization processes in the 1980s and 1990s, USAFs have emerged as a potential tool for closing connectivity gaps due to the region’s social, economic, geographical, and demographical contexts. While it is true that such funds have had a role in the development of the region, only 45.5% of households have access to a broadband internet connection, substantially less than the 86.3% for OECD countries (IADB, 2021). A recent study has shown that approximately 77 million rural inhabitants of 24 countries in LAC do not have a minimum level of connectivity, and a gap of 34% exists between urban and rural populations regarding their level of connectivity.⁴ Further, a study developed by the Alliance for Affordable Internet (A4AI) for the International Telecommunications Union (ITU) in 2020 has found that USD 428 billion are needed to connect the world by 2030,⁵ and a little under USD 50 billion to connect in the LAC region alone by 2030.⁶

Internet access in Latin America and the Caribbean has become an essential tool for the delivery of public services, and a lifeline. Education, healthcare systems, labor, and governments’ functioning have proven to be heavily reliant on information and communications technologies (ICT) and will remain so as we move forward to a new period of learning how to live with Covid-19.⁷ As governments in the Latin American and Caribbean region struggle to provide essential services in the most disadvantaged parts of their territories, limited access to the internet and digital technologies have brought to the surface how wide the inequality gap is. **If used efficiently and effectively, USAFs are a valuable human-centered tool, one which is already available to governments. Properly implementing, managing, and disbursing such funds is thus an important step to promote equality and equity.**

4. IICA; IADB; and Microsoft (2021).

5. ITU. 2020. Connecting Humanity: Assessing Investment Needs of Connecting Humanity to the Internet by 2030

6. Data from A4AI and Xalam Analytics (2020).

7. Useful resources can be found at the Secretariat of the Inter-American Telecommunication Commission’s (CITEL) webpage.

See: <https://www.citel.oas.org/en/Pages/COVID-19.aspx>

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This study represents an effort to identify how USAFs are structured and how they have been used by governments in LAC to address the digital gap. Based on our findings, this report provides recommendations on how USAFs can be improved to achieve their objectives, enabling governments to maximize their use. The analysis comprises information on legal frameworks, types of funded projects, and financial data.

This study aims to:

- (i) identify the most recent financial information regarding USAFs in the region;**
- (ii) assess the type of projects that currently exists and how/whether they are funded, highlighting interesting cases, and**
- (iii) present actionable recommendations to enable USAFs to reduce the existing divides.**

This was done by gathering first-hand information – from desk research and semi-structured interviews – about the current state of USAFs in 24 Latin American and Caribbean countries.⁸

Detailed information about each countries' USAF can be found in the Annexes, but the main goal of the study was to provide a comprehensive overview of the USAF in Latin American and Caribbean countries. For this reason, in some instances, the acronym "USAF" is generally employed to refer to the overall region and explain common findings identified throughout the region. The study also brings to attention some specific cases to illustrate a situation or make a particular point. Therefore, not every country will be specifically addressed in each of the sections below. When referring to specific countries, the study uses the specific name of the country's fund.

The results of this study can be used as a resource for ongoing and new advocacy efforts at various global, national, regional, and sub-regional levels to support the development of good practices around the management and use of USAFs.

8. [Argentina](#); [Bolivia](#); [Brazil](#); [Chile](#); [Colombia](#); [Ecuador](#); [Paraguay](#); [Peru](#); [Uruguay](#); [Costa Rica](#); [El Salvador](#); [Guatemala](#); [Honduras](#); [Nicaragua](#); [Panama](#); [Dominica](#); [Dominican Republic](#); [Grenada](#); [Guyana](#); [Jamaica](#); [Haiti](#); [Saint Lucia](#); [St. Vincent and the Grenadines](#); and [Trinidad & Tobago](#) See further information in the "methodology" section below.

1.2. Why is this study unique?

While other studies have already looked at the governance of USAFs (Barrantes and García 2010; Barrantes, 2011; A4AI, 2015; A4AI, 2018; IADB, 2021), this report is unique as it:

- i investigates the extent to which USAF resources have been used or are ready to be used towards the deployment of innovative and/or alternative connectivity solutions and/or benefit projects led by alternative stakeholders;
- ii provides updated information on the financial situation of the funds; and
- iii provides actionable recommendations on how policy and regulatory frameworks can be strengthened and even reformed, to support the use of USAFs and to generate enabling environments towards addressing the most prominent issues around universal access in the region.

1.3. How was this study developed?

This report covers 24 countries in South and Central America as well as the Caribbean regions:

South America: Argentina; Bolivia; Brazil; Chile; Colombia; Ecuador; Paraguay; Peru; Uruguay.

Central America: Costa Rica; El Salvador; Guatemala; Honduras; Nicaragua; Panama.

Caribbean: Dominica; Dominican Republic; Grenada; Guyana; Jamaica; Haiti; Saint Lucia; St. Vincent and the Grenadines; Trinidad & Tobago.

Each section in this report has combined desk research involving primary and secondary data, as well as interviews with key stakeholders (See [Annex 4](#)) to gather evidence that support this study's findings and recommendations. In total, 56 interviews were conducted involving government officials, academic experts, civil society leaders, and companies working on providing internet access services in Latin America and Caribbean countries. As the goal was to understand what has changed and/or needs to be changed in regards to the current status of USAFs, most interviews were conducted with public sector representatives as well as civil society leaders and academics.

The analysis was mainly based on primary data from official data sources (official governmental documents) on USAF-funded project implementation and financial information. Secondary sources were also analyzed and used, such as reports developed by non-official sources and publications of national media outlets. The latter was particularly useful to understand the social and political contexts involving USAFs debate in the countries.

Semi-structured interviews – all held virtually – were also conducted to obtain qualitative insights about the use and effectiveness of the USAFs, the current plans for disbursement, and other aspects such as the likelihood of using such funds for innovative connectivity solutions. [Annex 4](#) has a list of specific questions that were used to guide the interviews. Even though a pre-designed interview structure existed, interviewers were free to explore specific points of interest and interviewees could choose which topics they felt more comfortable addressing. Semi-structured interviews have allowed topics not previously anticipated during the planning phase of this study to be explored. All persons interviewed were made aware of an interview protocol, which, among other things, included research goals and privacy considerations.⁹

Figure 1: Number of interviews with government officials, academic, civil society organizations, and private sector representatives

Source: Author's own elaboration.



This report is divided into the main sections outlined below. Each section relies on specific cases to illustrate issues worth of consideration for policy-making purposes. The goal is not to make broad generalizations. Rather, our intention is to highlight important topics to be considered by policymakers, regulators and all stakeholders trying to gather more information about USAFs in Latin American and Caribbean countries.

Existing Frameworks

Legal, policy, and regulatory frameworks and financial information. This section analyzes the current legal and regulatory landscape of USAFs in Latin America and the Caribbean, outlining the most relevant legal and regulatory characteristics in the region. Financial information on USAFs in the region was also gathered and analyzed.

How are USAFs used?

Types of funded projects. This section describes what type of projects are financed with USAFs, highlighting specific projects in some countries.

Recent developments

Recent developments. Besides the traditional uses of USAFs, this study also documents innovative uses of such funds. Some countries have been able to implement changes in their legislation and/or policy and regulatory frameworks to allow other uses and/or allocations that were not originally considered, while others are still focused on support a narrower range of projects and/or stakeholders.

What should the future look like?

Actionable recommendations. After the analysis conducted in the previous sections, the study outlines a series of actionable recommendations to maximize the potential of USAFs in LAC.

9. Interviewees were told they would not be going to be directly quoted. For this reason, there are no quotes in the report, and the list of names of persons who were interviewed has not been added.

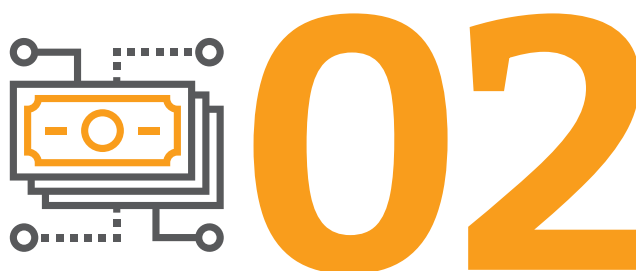
Country-specific information is outlined in the Annexes: [Annex 1](#) provides brief information about legal and regulatory framework, responsible entity, funding sources, and type of projects financed for each country; [Annex 2](#) outlines the key milestones of each of the countries' USAFs through a timeline; and [Annex 3](#) provides more detailed financial information.

Although a large amount of financial information can be found online, it is not necessarily organized in a well-structured manner or in a format friendly to a broader audience. While some countries showed consistency in how financial data is made available to the public,¹⁰ data about the financial status of the USAFs could be more easily accessible. Moreover, information on USAFs is made available in various formats and with wide ranging levels of details, a challenging scenario that is not easily conducive to deep analysis and/or comparisons. For instance, some countries share information about the total revenue collected but do not provide information about the current balance of these funds, while others only publish the amount of funding allocated to specific projects in that year but do not indicate the actual disbursement rate. Given these circumstances, financial and budgetary comparisons have some limitations. Further, since exchange rates in the LAC region vary widely and constantly, numbers are shown in each country's official currency rather than in USD or any other specific currency. Information on exchange rates (as of September 2021) are provided across the document.



¹⁰ Chile and the Dominican Republic have been consistently reporting financial information in their transparency portals and following a similar format. St. Vincent and the Grenadines have been publishing their USAF annual reports consistently for years. Argentina has also released data in its open data portal, but there is only information until 2019 about project execution. More information can be found in its Ministry of Finance's reports. Colombia has detailed information about budget execution available in spreadsheets in its Ministry of ICT webpage. Other information is available in different portals.

USAF FRAMEWORKS AND STATUS



This section provides an overview of current existing USAFs in the Latin American and Caribbean (LAC) region. Besides presenting the overall characteristics of legal and regulatory as well as institutional frameworks surrounding those funds, it delves into the issue of collection, composition, and disbursement to pave the way for a larger assessment of how funds are used.

The table below shows the status of the USAFs in the LAC region. Statuses were classified as follows: (i) “active”: the country had a policy and a legal framework regulating the USAF (at the time of data gathering) and they have made disbursements over the last two years; (ii) “dormant”: the USAF has a policy and a legal framework, but no disbursements have been made over the last two years; and (iii) “no fund”: the country does not have legal framework establishing a USAF.

In 18 countries, USAFs have been disbursed to finance projects over at least the past two years.¹¹ While Haiti’s legislation does include the concept of “universal service,” there is no legal provision creating such a fund. Nonetheless, the National Telecommunication Council (Conseil National des Télécommunications – CONATEL) tries to implement some universal service-related projects.

In countries with the USAF, even though disbursements have been made to implement USAF-funded projects, the analysis of these countries reveals that, although some of them made legal and policy adjustments in the past couple of years to increase the USAF’s scope, many still need to modify their legislation to facilitate project execution and funding disbursement. In some cases, revenue sources must be amplified and/or changed to increase fund collection, which happens particularly in Caribbean countries.

In addition to bringing connectivity to rural areas and low-income communities, new projects financed by the USAF seem to tackle the digital divide challenge from different angles, including broadband coverage and connectivity quality, as well as digital literacy. Notably, many countries have adjusted their universal service legal framework to expand its scope from telecommunications to the umbrella term ICT, which is a term which usually refers to the convergence of communication and media technologies and has enabled users’ interaction with the digital world.

Table 1: USAF Status in Latin America and the Caribbean

ACTIVE				DORMANT	NO FUNDS
Argentina	Dominica	Honduras	Saint Lucia	Brazil	Haiti
Bolivia	Dominican Republic	Jamaica	St. Vincent and the Grenadines	Ecuador	Uruguay
Chile	El Salvador	Panama	Trinidad and Tobago	Guyana	
Colombia	Grenada	Paraguay		Nicaragua	
Costa Rica	Guatemala	Peru			

Source: Author’s own elaboration.

11. Uruguay and Haiti do not have a universal service and access fund in place.

In some cases, although the USAFs are spent on ICT-related projects, there are no mechanisms in place to adequately monitor and assess these projects' impacts. Further, some of these projects are focused on improving ICT within governmental agencies, but not connecting citizens. Other countries have been transferring the funds to their Ministry of Finance and National Treasury to generate budgetary surplus.

Some countries have established a USAF but have not disbursed them in the past years, due to legal constraints or lack of USAF regulatory framework to enable fund allocation. Brazil and **Ecuador** have not implemented USAF-related projects over the past years. In Brazil, the Universal Telecommunications Service Fund (FUST) has nearly not been used since revenue started being collected in 2001¹² (i.e., disbursement rate below 0.01%). In Ecuador, a 2016 legal reform determined that the amount previously collected for the Telecommunications Development Fund (FODETEL) would be used to support not only connectivity and ICT-related projects but also the National System of Science, Technology, and Innovation. However, these resources cannot be used until the end of 2021. Although **Guyana's** legal framework established an "universality fund," it had not yet been established at the time of writing.¹³

Considering what is known from the amounts collected by these countries with a "dormant" USAF, there are at least around USD 7 billion being hoarded and/or used for purposes other than connectivity universality in LAC.¹⁴ This is a conservative estimate, as this amount does not include the calculation of resources that are being used towards fixed telephone and/or electricity, for example.

In **Uruguay**, while the USAF has not been established yet, the creation of one is currently being discussed, and it is expected that it will be managed by a committee under the Communications Services Regulatory Unit (URSEC).¹⁵ Nonetheless, a high internet penetration rate has been reached in the country through the deployment of connectivity projects by the country's state-owned telecommunications company (Administración Nacional de Telecomunicaciones ANTEL) and through comprehensive social projects focused on closing the digital gap. Further, long term planning has also led to positive outcomes. Launched over a decade ago, the Plan Ceibal¹⁶ offers devices for educators and children. To support public education during the COVID-19 pandemic, ANTEL offered monthly special data plans of 10GB, with a free data recharge of 40GB, for professionals of the public educational system. Such plans also have included access to edu.uy sites at no cost and use of the videoconference tool of the Plan Ceibal's platform free of data consumption.¹⁷ ANTEL also offers a free of charge broadband service, namely Universal Hogares (a one-time-only connection fee – 1GB monthly cap).¹⁸

12. FUST was originally created to universalize fixed telephony in Brazil and was reformed in 2020 to enable universal funds to be employed in broadband connectivity projects as well.

13. According to the information provided by Guyana's Telecommunications Agency via email on May 6, 2021.

14. Considering the available USAF resources in Brazil -around USD 6.8 billion at present values (see below) - plus the USD 30 million annual collection of funds from operators that are used for fiscal purposes (IADB, 2021).

15. Larocca, Nicolas. July 2021. Proyecto de rendición de cuentas de Uruguay incluye creación del Fondo Universal de Telecomunicaciones <https://digitalpolicylaw.com/proyecto-de-rendicion-de-cuentas-de-uruguay-incluye-creacion-del-fondo-universal-de-telecomunicaciones/>

16. Plan Ceibal. <https://www.ceibal.edu.uy/>

17. ANTEL (April 2021). "Antel relanza plan especial para personal de la ANEP." https://www.antel.com.uy/institucional/sala-de-prensa/comunicados/-/asset_publisher/RdB8x2ixw6mb/content/antel-relanza-plan-especial-para-personal-de-la-anep?inheritRedirect=false; "Plan ANEP." <https://tienda.antel.com.uy/plan/3227>

18. ANTEL. "Plan Universal Hogares." <https://tienda.antel.com.uy/plan/1320>. The connection speed depends on ANTEL's LTE network coverage (i.e., up to 20,480 Kbps upstream and up to 2048 Kbps downstream in LTE network coverage.)

2.1. Legal and Regulatory Frameworks

USAFs in the region are created by law and regulated by a designated Ministry or regulatory agency. Many countries in Latin America and the Caribbean still have the same legal framework that resulted from the telecom privatization process during the 1990s and 2000s. However, given (1) the need to drive digital innovation, (2) USAF's lack of or low disbursement rate, and (3) the persistent digital divide in rural areas and underserved urban communities, some countries have started updating their USAF's legal and/or regulatory frameworks in recent years.

Like other countries in the region, in 2014, **Argentina** expanded the legal scope of universal services to include not only fixed and mobile telephony and Internet but also ICT projects in general with the new law "Argentina Digital"¹⁹ (Maule, 2019, p.67). Created in 2000,²⁰ Argentina's Universal Service Trust Fund (FFSU) was first regulated one decade later²¹ and was managed by a public-private technical committee until the 2014 legal changes. The Argentina Digital law then vested the national communications authority with the power to regulate and manage the FFSU. The last FFSU regulation is from 2020, and it targeted program investment through non-refundable contributions.²²

Similarly, according to what has been mentioned before, **Brazil** has been collecting contributions to its Universal Telecommunications Service Fund (FUST) since 2001, but a 2020 legal reform has enabled universal funds to be employed in broadband connectivity projects aimed at reducing regional inequalities and promoting social and economic development. Previously, Brazil's FUST could only be applied to finance the expansion of fixed telephony services and underlying infrastructure. The Brazilian Ministry of Communication is currently drafting the regulation concerning the FUST steering council, while the country's Telecommunication Regulatory Agency (Agência Nacional de Telecomunicações – ANATEL) is drafting the proposed regulation to effectively operationalize the fund. This regulation will be open to public consultation in the second semester of 2021, and Brazil's FUST is expected to finance connectivity projects from 2022 onwards.²³

In July 2019, **Colombia** sanctioned its ICT Sector Modernization Law²⁴ aimed at simplifying the sector's institutional framework. The consolidation of previous ICT and broadcasting funds into one single ICT fund, namely Unique Fund for ICT (FUTIC), was one of the changes enacted by this new legislation. Also in 2019, Trinidad and Tobago amended the regulation of their Universal Service Fund (USAF) to expand the scope of supported projects to include new technologies. For this reason, the project implementation started only in 2020, albeit contributions from telecom operators having been collected since 2015.

In August 2019, the **Dominican Republic** also issued a new regulation²⁵ which set a minimum amount of the Telecommunications Development Contribution (CDT) that must be allocated to the country's Telecommunications Development Fund (FDT) for project execution -- i.e., at least 3% of the CDT. Specifically, the CDT consists of 2% of public telecommunication services, which is invoiced directly to end users (apart from broadcasting) and 2% of service providers' revenue for international services (apart from broadcasting).^{26 27}

19. Law 27,078/2014. <http://servicios.infoleg.gob.ar/infolegInternet/anexos/235000-239999/239771/norma.htm>

20. Decree 764/2000. https://www.enacom.gob.ar/multimedia/normativas/2000/Decreto%20764_00.pdf

21. Resolution 154/2010 of the Communication Secretariat.

22. Resolution 721/2020 of ENACOM.

23. Information gathered through the interviews with policy agents in Brazil.

24. Law 1978 of 2019.

25. Resolution 063-19. https://transparencia.indotel.gob.do/media/212813/res-063-19_que_aprueba_el_reglamento_del_fondo_de_desarrollo_de_las_telecomunicaciones_signed.pdf

26. Law 153-98, Article 45.1.

27. In March 2021, the Dominican Republic opened a public consultation to discuss a new telecommunication law with the technical support of the Inter-American Development Bank (IADB). The public consultation specifically asks which requirements should be taken into account to improve the FDT management and strengthen public-private cooperation mechanisms for project implementation. Concerning the former, the public consultation highlights the importance of projects' impact assessment. The document also outlines that the fund's sources should be used to close the digital gap. This includes access to connectivity infrastructure and services through projects that consider gender and socioeconomic inequalities, as well as the importance of bringing meaningful content and opportunities to users (INDOTEL, 2021, p.16).

The definition of a minimum amount of the CDT (i.e., 3%) to be allocated to the FDT could ensure the continuity of ICT-related projects, particularly considering that project execution was low in the recent past and a substantial part of the CDT was used to cover administrative expenses. Although setting a minimum amount to be allocated to the FDT is positive, at least 3% of the CDT is still considered low. For instance, in 2008, 47% of the CDT was assigned to the country's FDT.²⁸

In August 2021, Decree 527/21 was issued in the Dominican Republic, with the country's 2030 Digital Agenda.²⁹ It expressly cites that FDT should "support the deployment of last mile community networks in rural and semi-urban areas not reached by where private investments".³⁰ This is a positive change which will be further explored below.

Although the Telecommunications Regulation and Control Agency (ARCOTEL) in **Ecuador** still collects 1% over telecommunications service providers' total income, this amount is no longer allocated to the original Telecommunications Development Fund (FODETEL).³¹ Notably, the 2015 Telecommunications Law maintained the 1% contribution and included the concept of "universal services," which consists of bringing telecommunications services to all national populations and ensuring a bare minimum of accessibility, quality, fair prices, regardless of the economic, social conditions, and geographic location of this population. To implement these universal service projects, the Ministry of Telecommunications and Information Society (Mintel) would have to formulate a "Universal Service Plan" to guide these projects,³² and a 2018-2021 Universal Service Plan was indeed developed.³³ However, the 2016 "Organic Code on Social Economy of Knowledge, Creativity, and Innovation" ("Código Ingenios") determined that the 1% contribution collected by ARCOTEL would

also be used finance the National System of Science, Technology, and Innovation, aside from financing connectivity and other ICT-related project. Moreover, this legal framework defined that the Ecuador's Economic Policy Council could reduce the amounts assigned to these initiatives in the case of "a balance-of-payments crisis." Lastly, "Código Ingenios" also determined that the funds resulting from the 1% contribution could not be used until the end of 2021 (five years from December 2016).³⁴ Universalization projects seem to be financed by the World Bank (USD 28 million) at the moment, at least projects related to the "Digital Family" program.³⁵

Some countries have bills under discussion to amend their telecommunications legal framework. In **Chile**, the Senate is also analyzing a bill that seeks to recognize internet access as a public telecommunications service. The bill proposes to include the "universality principle" in Chile's telecommunication law, promoting access to internet connectivity for the entire population at affordable prices, regardless of their geographic location.³⁶ The proposed legal amendment would authorize this fund to subsidize the payment of internet service bills of the most vulnerable users, based on the country's Households Social Registry. One of the bill's reports prepared by the Chilean Senate highlighted the various types of digital gaps in the country: connectivity infrastructure and quality, investments, and affordability from the demand side. Concerning the latter, Senators have stressed that telecom operators do not amplify the deployment of infrastructure in certain areas for fear that households are not able to afford to pay for internet services and considered extending the country's USF scope to assist in this regard.³⁷

28. Resolution 063-19, p. 6.

29. Decree 527/21 – Available at <https://presidencia.gob.do/decretos/527-21>

30. Decree 527/21, Article 2.1.4

31. <https://www.telecomunicaciones.gob.ec/wp-content/uploads/2021/06/Familia-Digital-Documento.pdf>

32. Articles 89-92, Telecommunications Law. <https://www.telecomunicaciones.gob.ec/wp-content/uploads/downloads/2016/05/Ley-OrgC3%A1nica-de-Telecomunicaciones.pdf>

33. <https://www.telecomunicaciones.gob.ec/wp-content/uploads/2018/11/Plan-de-Servicio-Universal.pdf>

34. Article 602 and transitional disposition 17 of "Código Ingenios."

https://lotaip.ikiam.edu.ec/ikiam2019/abril/anexos/Mat%20A2-Base_Legal/codigo_organico_de_la_economia%20social_de_los_conocimientos_creatividad_e_innovacion.pdf

35. Oficio Nro. STPE-SPN-2020-1098-OF. 2020. <https://www.telecomunicaciones.gob.ec/wp-content/uploads/2021/06/Priorizacion-Familia-Digital.pdf>

36. Chilean Senate (April 2021). Internet como desafío público: el desafío del acceso equitativo y la cobertura.

<https://www.senado.cl/internet-como-servicio-publico-el-desafio-del-acceso-equitativo-y-la/senado/2021-04-15/102930.html>

37. Chilean Senate (April 2021). Segundo Informe de Comisión de Hacienda, p. 5. https://www.senado.cl/appsenado/templates/tramitacion/index.php?boletin_ini=11632-15

In 2020, the Eastern Caribbean Telecommunications Authority (ECTEL) proposed the final draft of the Electronic Communications Bill to update Member States' legislation in the sector, namely **Dominica; Grenada; Saint Lucia; and Saint Vincent and the Grenadines**.³⁸ This bill expands the scope of the Universal Service Fund in ECTEL's Member States to include universal access. In addition to deploying communications networks in areas that are economically unattractive to private investment and providing communications services to households regardless of their location, universal access refers to the accessibility and affordability aspects.

According to ECTEL, the scope of the redefinition aims to encompass "the provision of access devices to users, and the provision of ancillary services (security, training), infrastructure equipment (a/c, generator, electricity, UPS) that is relevant to the USAF project" (ECTEL, 2017, p. 67). As a result, the funds' name in ECTEL's countries will change from "Universal Service Fund" to "Universal Service and Access Fund." It is important to highlight that ECTEL's legal framework allows the participation of non-telecommunication providers in the USAF bidding process, enabling the disbursement of funds to other organizations, including providing grants to ICT start-ups.

FINAL COMMENTS ON LEGAL AND REGULATORY FRAMEWORKS

Recent legal and regulatory reforms have been seen in various countries across LAC and were key to enabling USAF application in more modern communications networks and technologies, and by stakeholders that were not traditionally able to access such funds. In the case of Argentina and Dominican Republic, community networks are seen as crucial stakeholders for bridging the connectivity gap. Additionally, legislators and policymakers across the region seem eager to expand the scope of USAF-funded projects to include Internet payment subsidies, as well as literacy components and the improvement of the provision of digital government services. This increase in scope, however, could inadvertently lead to investments in projects different from the original purpose for which USAFs were created.

³⁸ Saint Kitts and Nevis is also a member of ECTEL. See ECTEL (2020). Electronic Communication Bill. <https://www.ectel.int/revised-draft-electronic-communications-bill-03-07-20/>

2.2. Institutional Framework

ICT and/or telecommunications regulatory agencies or Ministries are, in most cases, responsible for managing the funds. Many countries have allocated the responsibility of managing the USAF to the regulatory agency due to its higher level of independence in comparison to government departments, and its regulatory and technical expertise. This happens, e.g., in Argentina, Dominica, Dominican Republic, Grenada, Paraguay, Saint Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago.

In other cases, whereas the regulatory agency is tasked with issuing USAF regulations and collecting contributions from service providers, the Ministry is responsible for managing ICT-related projects (e.g., **Brazil, Bolivia, Ecuador**). In the case of **Jamaica**, a specific agency was established to manage the country's USAF. In 2005, the Government of Jamaica created the Universal Access Company Limited. This company was replaced in 2012 with a "Universal Service Fund" agency under the umbrella of the Ministry of Science, Energy and Technology.

In general, small technical offices within ICT regulatory agencies or Ministries take responsibility for managing the USAF. While such offices are responsible for daily activities and provide technical expertise, there is usually a decision-making committee or a board that determines the programs and projects to be funded based on the inputs provided by the USAF technical team. In some cases, governments also receive inputs from external stakeholders through public consultations. Despite being open to public consultations, a conclusion derived from the interviews is that meetings and consultations are generally telecom service providers that participate and contribute to USAF public consultations across the region.

In **Chile**, every first trimester of the year, the Telecommunications Undersecretary (SUBTEL) under the Ministry of Transport and Telecommunications receives reports on telecommunications needs from the municipalities.³⁹ Based on this information, SUBTEL prepares a project portfolio, which must be approved by the Telecommunications Development Council (CDT). Once the project portfolio is approved by the CDT, SUBTEL requests resources for the country's telecommunication development fund (FDT) from the Ministry of Finance, which defines the amount allocated in the annual national budget law. Once the funds are received, SUBTEL opens a bidding process to select a telecom operator to deploy the project.

Costa Rica has a clear pathway of how projects funded by the National Telecommunications Fund (FONATEL) are developed: the central government defines the public policy every four years (i.e., close digital gaps in specific underserved parts of the country) and such projects are to be implemented within a 5-year timeframe. The regulator, who acts as fund manager (Superintendencia de Telecomunicaciones – SUTEL), oversees procurement and implementation of the projects as defined by the central government and to meet the defined targets. On the one hand, this cycle seems to be effective in having clarity around the type of projects and targets; on the other, political changes in government every four years are a potential barrier to policy continuity.

39. Law 18,168. Article 28C.

Peru introduced an important legal and institutional amendment in 2018 when it merged its previously legally autonomous Fund (FITEL) to the institutional structure of the Ministry of Transports and Communications and simultaneously created a new entity, Telecommunications National Program (PRONATEL) as the new FITEL fund manager. Although FITEL lost its autonomous legal status, the integrity of the fund was kept in place. The intention behind this restructuring of the fund was to grant more authority to the fund as it would now sit within the Ministry's control but without losing its financial autonomy. Although it is too soon to evaluate the success of the new structure, the scope of the projects that PRONATEL is working on seems to have increased over recent years after the merger with the Ministry.

FINAL COMMENTS ON INSTITUTIONAL FRAMEWORKS

As described, USAFs in most countries are managed by either a regulatory agency or a Ministry, and both entities play a role in their operationalization. While the regulatory agencies generally collect the contributions from telecom operators, the Ministry usually defines which projects will be financed by the USAF and is responsible for the entire project life cycle – from its planning phase to final reporting. The study has also identified that most countries have a process which guides the USAF-project formulation, and it is generally described in the country's legal and policies framework.⁴⁰

40. For instance, in Dominican Republic this process is described in its Universal Service Social Policy (Resolution 024-010). For the member countries of the Eastern Caribbean Telecommunications Authority (ECTEL), there is the "Telecommunications Universal Service Guidelines," which thoroughly describes this process.

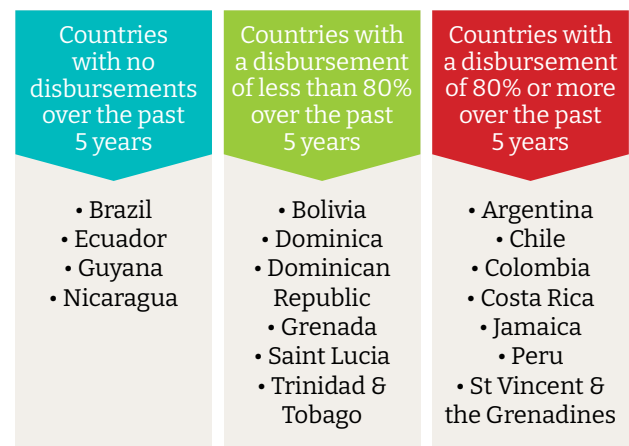
2.3. Collection, Composition and Disbursement

In general, most of the funding for USAFs comes from mandatory contributions made by local telecommunication operators. The amount of the contributions is usually determined by a percentage of their annual earnings – usually between 1% and 2%. Interestingly, while some countries prohibit service providers from transferring the contribution payment to end-users under any circumstances (e.g., **Argentina**), others clearly state that this contribution refers to the amount billed to end-users (e.g., **Dominican Republic**). Although this source of funding accounts for most of the composition of the USAFs, government contributions and other funding sources like percentages of collected fines from government agencies, spectrum allocation fees, donations, or the fund's own investments are also quite common in many jurisdictions (See [Annex 1](#)). For instance, part of the amount derived from the exploitation of .CO country code top-level domain (ccTLD) for Colombia was allocated to the country's FUTIC (IADB, 2021, p. 35). In the case of Chile, funding comes from its national budget since telecommunication service providers do not pay a specific contribution to the country's fund.

Disbursement rates might vary from one year to the other, due to various reasons, which are further explored below. When considering the highest disbursement rate reached in a single year between 2016 and 2019, Argentina, Chile, Colombia, Costa Rica, Jamaica, Peru, and Saint Vincent and the Grenadines have at least one year in which the rate was 80% or higher. This indicates that such funds are active, even if their processes and/or management can be strengthened.

Further details about the collection, composition, and disbursement of funds in the Caribbean, Central America and South America are provided below.

Figure 2: Highest disbursement rates reached in a single year between 2016 and 2020 in selected LAC countries



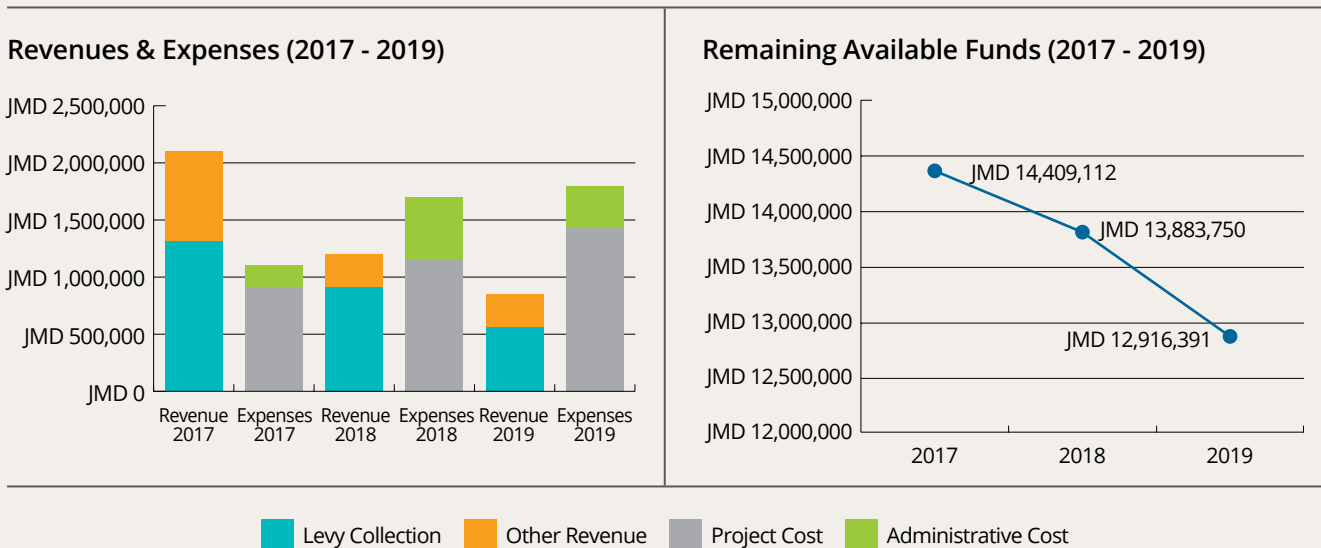
2.3.A. CARIBBEAN

In the Caribbean countries analyzed within the scope of this study contributions to USAFs seem low when considering the potential funding sources and the underserved and unserved connectivity needs.

In **Jamaica**, for instance, domestic telecommunications providers collect a levy on all international inbound telephone calls: US\$0.03 on fixed lines and US\$0.02 mobile lines. Changes in technology and increased use of Voice Over Internet Protocols (VOIP) (e.g., WhatsApp, Skype and Facebook Messenger) for international calls led to a significant reduction of revenues. As a result, the collection of funds to the country's USAF has

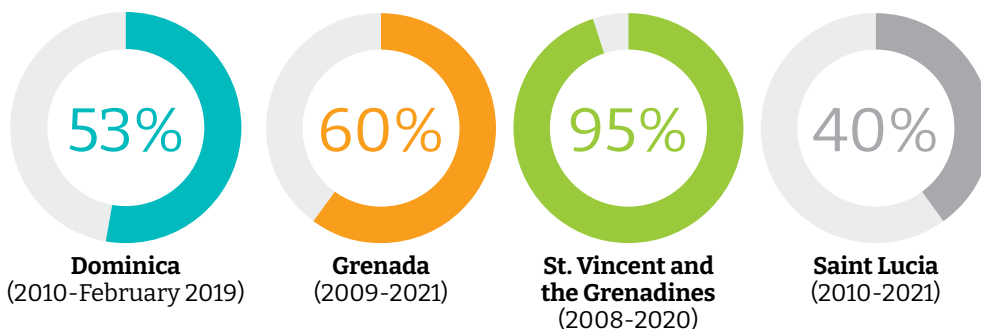
plummeted. In the 2018/2019 fiscal year, there was a difference of almost 50% between the budgeted amount and the actual revenue collected in that year (Jamaica USAF, 2019, p. 24). For fiscal years ending in March 2019 and March 2018, Jamaica's USAF had sustained a deficit in its operation when comparing the revenue collected with the budget executed in those years. This situation has led to a decrease in the USAF reserves. Although Jamaica's USAF still had around JMD 12.9 billion in reserves in March 2019, the independent auditors' report stressed that finding alternative streams of revenue is a priority for Jamaica's USAF, and its sustainability would be challenged if resources from different streams are not received (Jamaica USAF, 2019, p. 55).

Figure 3: Jamaica USAF: Revenues, Expenses, and Remaining Funds USAF



Numbers in thousands.
 Source: Authors based on Jamaica's USAF 2017/2018 and 2018/2019 Annual Reports.
 Financial reports cover the period from April to March of the following year.

Table 2: The disbursement rate of member countries of the Eastern Caribbean Telecommunications Authority (ECTEL). (Approximate)



Total amount disbursed divided by the total revenue collected since the beginning of fund collection. Source: Authors

When comparing the total revenue collected from universal service levies and the total amount disbursed since the beginning of fund collection, Saint Lucia has a disbursement of about 40% of the total revenue collected, while Dominica and Grenada of around 50% and 60%, respectively.

However, disbursement rates do not show the complete picture of USAF's activities in these countries. Some undisbursed funds have already been set aside or committed to ongoing or future projects over the following years. In **Saint Lucia**, for example, part of the undisbursed funds has already been committed towards their 2020/2021 COVID-19 Response project for computer equipment and mobile internet connectivity devices. Part of the USAF's remaining balance is also committed for ongoing projects with a five-year lifespan and to cover departmental overheads.⁴¹ Projects' payments are executed in installments throughout projects' lifespan; therefore, substantial amounts already committed to ongoing projects is a common practice.

Likewise, a significant amount of **Grenada's** USAF remaining funds has already been committed or will soon be allocated to 2021 projects. Given the COVID-19 pandemic, some requirements to finalize projects' approval have been delayed. However, new projects have been brought to the forefront to help tackle the pandemic's effect. Annual disbursement varies depending on a project's lifespan. For example, a higher disbursement usually happens during the project's early stage, and a lower percentage is paid out over the project's life.⁴²

St. Vincent and the Grenadines, the Caribbean country with the higher disbursement rate among those analyzed (i.e., greater than 0.9), reported that cash-flow issues could potentially hamper projects' timely execution due to late levy payment from telecom service providers.⁴³

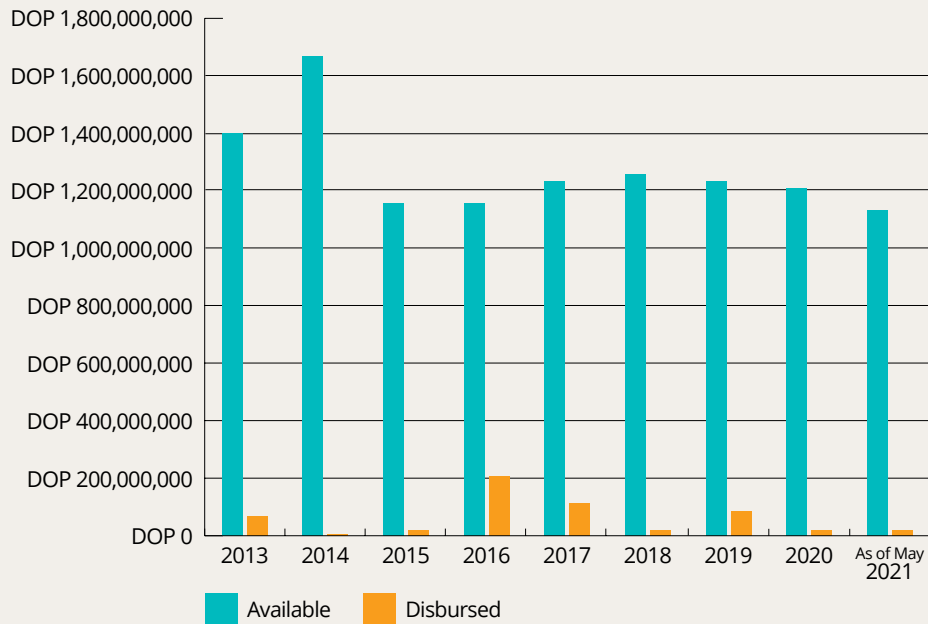
As described in Section 2.1 above, a 2019 amendment in **Trinidad and Tobago's** regulatory framework enabled the use of USAF in projects. This explains why the USAF's overall disbursement rate is less than 10%, as project disbursement started only in 2020. Interestingly, TATT has not levied USAF invoices for 2017/2018 fiscal year as no USAF-funded project was being executed at that time.⁴⁴

41. Information provided by Saint Lucia NTRC via email on May 12, 2021, and through interview on May 13, 2021. 42 Information provided by Grenada NTRC via email on May 13, 2021.

43. Information indicated by St. Vincent and the Grenadines NTRC during an interview conducted on February 18, 2021.

44. As indicated in the USAF Fund Account Report 2019, "As per Board decision, USAF invoices levied for 2016/2017 have been credited and no USAF invoice have been levied for 2017/2018. This in accordance with the Telecommunications (Universal Service) Regulations, 2015, as amended." <https://tatt.org.tt/UniversalService/UniversalServiceFundAccountingReports.aspx>

Figure 4: Dominican Republic - Available and Disbursed Funds (2013-April 2021)



Source: Authors based on INDOTEL's balance sheets from December 2013 to May 2021⁴⁵

In the **Dominican Republic**, the analysis of the Dominican Telecommunications Institute's (INDOTEL) balance sheets available from 2013 to May 2021 reveals a low disbursement when compared to the total amount available in the country's Telecommunication Development Fund (FDT). On average, project disbursement was around DOP 60 million (i.e., USD 1 million), while the fund has over DOP 1 billion (i.e., USD 20 million) available.⁴⁶ For 2021, a budget of DOP 76.6 million (i.e., USD 1.34 million) was approved for project execution.⁴⁷

Despite the amount available in FDT's account, FDT's annual budget limits project execution. As mentioned in Section 2.1, the FDT is funded with part of the Telecommunication Development Contribution (CDT), which is mostly used to cover INDOTEL's operational expenditures. Pursuant to the country's telecommunication law, INDOTEL must define a specific percentage of the CDT to finance the regulatory agency's expenditures and another specific percentage to finance telecommunications development projects through regulation.⁴⁸ According to the latest regulatory framework, at least 3% of the CDT must be allocated to the FDT. However, the agency must temporarily transfer 50% of CDT annual revenues to the National Treasury, which "considerably impacts" the timely execution of FDT-funded projects, as highlighted by INDOTEL.

⁴⁹ In 2021, only 4.13% of the CDT was allocated to fund FDT's projects.⁵⁰ As mentioned in section 2.1, over 40% of CDT used to be allocated to FDT in the late 2000s.

45. INDOTEL, Balance General (December 2013-April 2021)

46. Exchange rate as of June 23, 2021 (USD 1 = DOP 57.07).

47. Resolution INDOTEL 011-2021. https://transparencia.indotel.gob.do/media/214512/res_signed_011-2021_que_aprueba_presupuesto_2021__cy_sm_rc_revision_17_signedfeb_signed2021_1_1_signed.pdf; <https://transparencia.indotel.gob.do/finanzas/balance-general/>

48. Law 153-98, Article 46, <https://indotel.gob.do/media/5132/ley-no-153-98.pdf>

49. Resolution INDOTEL 011-2021, p. 3.

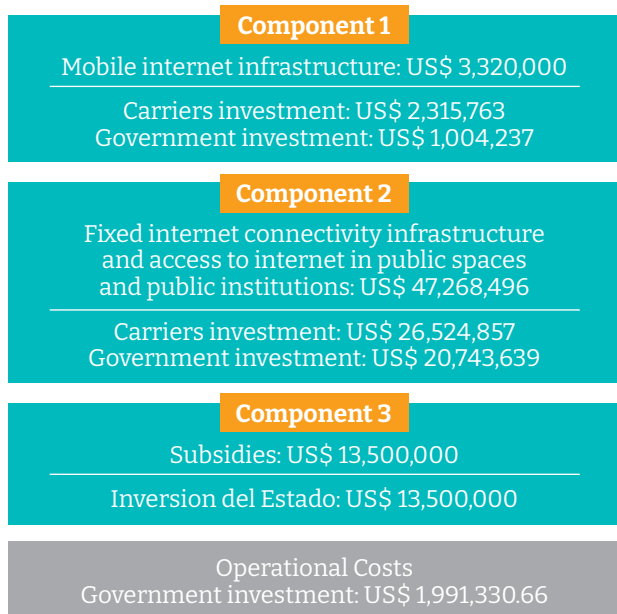
50. Resolution INDOTEL 011-2021, p. 8.

2.3.B. CENTRAL AMERICA

For some countries in Central America assessed in this report, like **Costa Rica**, it is clear how the amount of funds disbursed in USAF-funded projects has grown over the last years, going from about USD 20 million in 2017 to over USD 40 million for the following years (2018 and 2019). The increase of the spending in the Connected Homes Project (Programa Hogares Conectados) has allowed a growth between 2016 and 2019 of nearly 37% percentage points in internet access for the lowest income quintile in the country and 8.9% on overall national internet access.⁵¹ Through the program, subsidies for the purchase of laptops and for payment of fixed broadband connectivity services are provided.

In **Honduras**, the National Telecommunications Commission (CONATEL) will use the funds accumulated over the last years and will be using such funds to finance the National Broadband Plan 2021-2025. Up to February 2021, the fund holds a balance of USD 22,579,940.97. Fund resources are expected

Figure 5: Components of the National Broadband Plan of Honduras



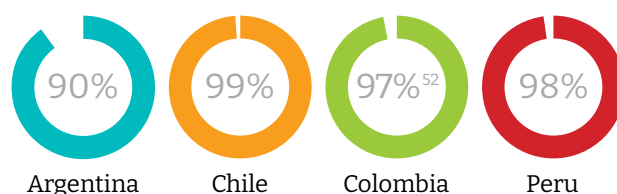
Source: Information shared by CONATEL National Broadband Plan

to be used in full towards realising the broadband plan, and the total amount of USD 37,239,206.66 is expected to be spent, which corresponds to 56% of the broadband plan's predicted investments. The remaining investments will be made by private stakeholders.

2.3.C. SOUTH AMERICA

As per shown in Table 3 below, rates are over 90% in countries such as **Argentina, Chile, Colombia, and Peru**, if the highest rate within the period of 2016-2020 is considered.

Table 3: Highest disbursement rates in selected countries South America in 2016-2020



Source: Authors based on information gathered from primary sources

Despite having reached high disbursement rates in 2016 and 2017, **Argentina's** recent increase in revenues seem to have led to a lower percentage of disbursement in 2018 and 2019 than what used to be the reality in 2016 and 2017 (See Figure 8 below). This is attributed, at least in part, to an increase in the activity level and operators' revenue related to telephony (fixed and mobile), fixed internet access, and pay television.⁵³

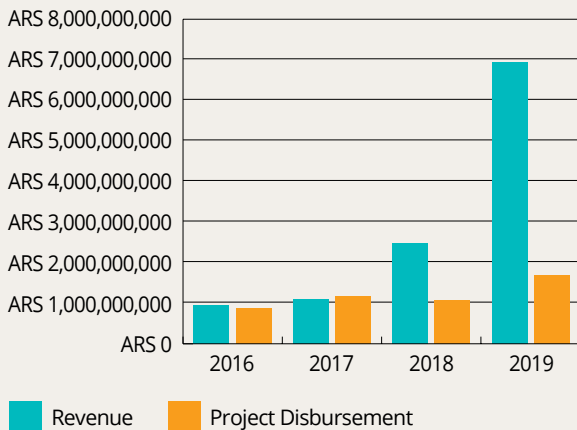
51. https://www.sutel.go.cr/sites/default/files/informes_fonatel/informe_fonatel_2019vf.pdf, page 45

52. Project disbursement, apart from operational costs.

53. ENACOM (2020). Fondo del Servicio Universal - Informe Especial: Conectividad 2020. https://www.enacom.gob.ar/institucional/presentamos-el-informe-de-gestion-enacom-2020_n2953

As of September 30, 2020, the USAF in **Argentina** had collected over USD 160 million only that year.⁵⁴ Although the 2020 disbursement is not available yet, it is noteworthy that almost USD 50 million have been assigned to projects in 2020 (ARS 4,617,416,748.04).⁵⁵

Figure 6: Argentina's FFSU - Revenue and Project Disbursement



*1 ARS=0.01 USD (as of September 2021)
Source: Authors based on ENACOM's and Ministry of Finance's data⁵⁶

In **Bolivia**, the implementation of telecommunication projects for social inclusion is conducted by the Ministry of Public Works, Services, and Housing through the PRONTIS (Programa Nacional de Telecomunicaciones de Inclusión Social). The PRONTIS receives part of the amounts related to licensing payments and contributions from 1-2% of the total income earned from the provision of telecommunication services collected by the country's telecommunication services authority (ATT - Autoridad de Regulación y Fiscalización de Telecomunicaciones y Transportes).

Nonetheless, before sending the amount collected to PRONTIS, the following deductions are made: (i) payment of obligations to the International Telecommunications Union (ITU); (ii) resources demanded by the investment for the control of the radioelectric spectrum; (iii) 5% for the operation, programs and projects of digital government and ICT agency (AGETIC - Agencia de Gobierno Electrónico y de Tecnologías de la Información y Comunicación); (iv) BOB 487,200,000, equivalent to USD 70,000,000 that will be transferred to the General Treasury of the Nation; (v) and 4% for the payment of the program Renta Dignidad.⁵⁷

It is noteworthy that, by December 31, 2020, the PRONTIS did not execute BOB 43,974,859 (USD 6.37 million). As a result, the National Budget Law determined the transfer of this amount to the Ministry of Education to develop digital and printed educational content for the Plurinational Educational System and to pay for Bolivia's state-owned telecommunication company (ENTEL) cloud services and for the satellite transmission in 2021. At the end of 2021, the amount not executed should be transferred back to PRONTIS.⁵⁸ In sum, budgeted resources that have not been used by PRONTIS have been reallocated to other government agencies.⁵⁹ Finally, up to 10% of PRONTIS can be used to cover administrative costs.⁶⁰

As mentioned in Section 2.1 above, **Brazil** has not yet started disbursing its universal telecommunications service fund (FUST) as its previous law only allowed it to invest in fixed telephony-related projects. The new FUST legal framework will enable Brazil's FUST to be employed in different connectivity and ICT-related projects. As of May 2021, Brazil's FUST had collected over BRL 23.9 billion. At present values, the total amount is estimated to be at least BRL 36 billion (around USD 6.8 billion).⁶¹

54. Exchange rate as of June 21, 2021 (USD 1 = ARS 95.39)

55. ENACOM (2020). Fondo del Servicio Universal - Informe Especial: Conectividad 2020. https://www.enacom.gob.ar/institucional/presentamos-el-informe-de-gestion-enacom-2020_n2953

56. ENACOM, Datos Abiertos, Servicio Universal (2016-2019), <https://datosabiertos.enacom.gob.ar/dashboards/20230/servicio-universal/>; ENACOM, 2020 Informe de Gestión, https://www.enacom.gob.ar/institucional/presentamos-el-informe-de-gestion-enacom-2020_n2953; Ministerio de Economía, Ejecución Presupuestaria de los Fondos Fiduciarios (2016- III Trimestre de 2020) <https://www.economia.gob.ar/onp/empresas/2020#ff>

57. Impuestos (2021). Ley del Presupuesto General del Estado 2021. <https://impuestos.com.bo/ley-presupuesto-general-estado-2021/>

58. Bolivia, Cámara de Senadores (April 2021). Senado sanciona proyecto de ley que autoriza transferencia de recursos que contribuyen al acceso a la educación. <https://web.senado.gob.bo/prensa/noticias/senado-sanciona-proyecto-de-ley-que-autoriza-transferencia-de-recursos-que>. Also, in 2019, the national budget law also authorized the transfer to the Ministry of Public Works, Services and Housing the PRONTIS' resources that were not executed by the Ministry of Communication from 2009 to 2015. Such remaining funds would then be transferred to the Ministry of Health for the implementation of medical telecenters (i.e., BOB 144,858,503.30, over USD 20 million), as indicated in the Law 1135-2019 National Budget Law

59. https://medios.economiafinanzas.gob.bo/MH/documentos/DC_interes/2019/TEXTO-ORDENADO-PGE-2019.pdf. 60 Law 1356/2020, General State Budget Law. <https://www.economiafinanzas.gob.bo/ley-n-1356-de-28-de-diciembre-de2020.html>

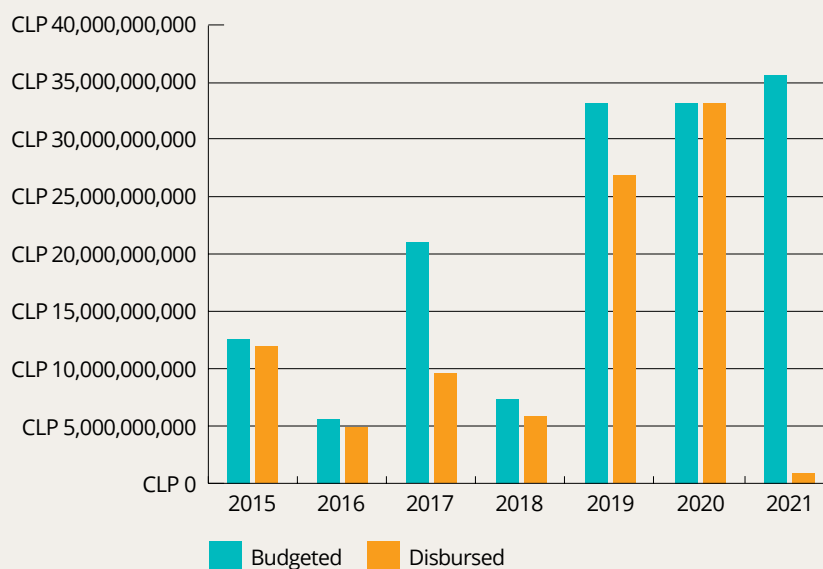
60. Law 1356/2020, General State Budget Law. <https://www.economiafinanzas.gob.bo/ley-n-1356-de-28-de-diciembre-de2020.html>

61. ANATEL(2021). Arrecadação do Fundo de Universalização dos Serviços de Telecomunicações - FUST. <https://sistemas.anatel.gov.br/anexar-api/publico/anexos/download/3f6f712e34c37d36e525d03030a5c543>; Bucco, R.(May 2021). "Presidente da ANATEL reconhece que saldo do FUST não retornará." In Telesintese. <https://www.telesintese.com.br/presidente-da-anatel-reconhece-que-saldo-do-fust-nao-retornara/>

The Brazilian Senate estimates that only 0.006% had been executed by July 2020. Specifically, only BRL 570 thousand had been used for an accessibility program.⁶² Despite the substantial amount collected in the past two decades, withdrawals from the account for other purposes reduced the FUST financial surplus to BRL 5.6 billion in 2019.⁶³ These withdrawals were mostly aimed at maintaining the country's primary surplus and paying government debts; thereby, most of the resources collected for FUST will likely not be invested in the universalization of ICT.

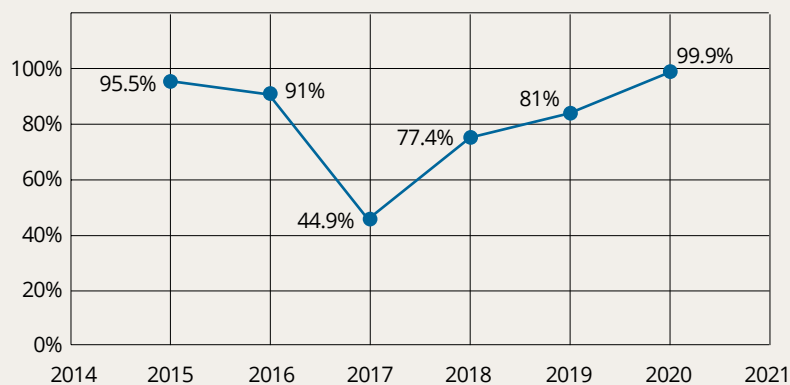
Chile does not charge a specific contribution from service providers; therefore, resources to the Telecommunication Development Fund (FDT) are annually defined by the country's national budget law. In the past three years, the national budget law has allocated each year over CLP 30 billion (i.e., around USD 40 million) to implement telecommunication projects. The disbursement rate has also improved in the past year.

Figure 7: Chile - FDT's Budget and Disbursement (2015-2021*)



*Numbers as of April 2021. **1 CLP=0.0013 USD (as of September 2021).
Source: Authors based on Presupuesto de la Nación.⁶⁴

Figure 8: Chile - FDT's Disbursement Rate (2015-2020)



Source: Authors based on Presupuesto de la Nación.⁶⁵

62. Agência Senado (August 2018). "Após 20 anos e R\$22,6 bi arrecadados, FUST falha em ampliar acesso à internet."

<https://www12.senado.leg.br/noticias/materias/2020/08/17/apos-20-anos-e-r-22-6-bi-arrecadados-fust-falha-em-ampliar-acesso-a-internet>

63. ANATEL (2019). "Superávit Financeiro - FUST." <https://sistemas.anatel.gov.br/anexar-api/publico/anexos/download/e0f0d5095018e6e86a6fe862fdc1a46b>

64. Chile, Presupuesto de la Nación, <https://www.bcn.cl/presupuesto/periodo/2021/partida/19/capitulo/02/programa/01/subtitulo/33/item/01/asignacion/039>

65. Chile, Presupuesto de la Nación, <https://www.bcn.cl/presupuesto/periodo/2021/partida/19/capitulo/02/programa/01/subtitulo/33/item/01/asignacion/039>

Although **Colombia** collects a levy from service providers, the Unique Fund for ICT (FUTIC) budget is annually defined. Usually, the Ministry of Information and Communications Technologies (MinTIC) disburses around 90% of the year's planned budget. The budget includes not only investments in projects, but also operational costs incurred by MinTIC. In 2015, the operational expenditures represented 30% of the total disbursements. This amount has reduced in the following years, ranging from 10-20% of the total disbursements.

FINAL COMMENTS ON COLLECTION, COMPOSITION AND DISBURSEMENT

Countries in LAC have collected substantial amounts that are available to implement USAF-funded projects and tackle the digital divide. Nonetheless, some countries use contributions to cover administrative expenses or to transfer these resources to other government agencies or their respective country's national treasury. While these transfers or reallocation of funds for non-related USAF-funded projects are enabled by each country's legal and regulatory frameworks, they are not conducive to meeting universality goals. Disbursement rates might vary across countries, and might also vary from one year to the other, but countries committed to implementing projects aimed at universality have shown a pattern of disbursement over the past years, many having reached a 80% disbursement rate or more.

Figure 9: Colombia's FUTIC - Budget and Disbursement (2015-2021)

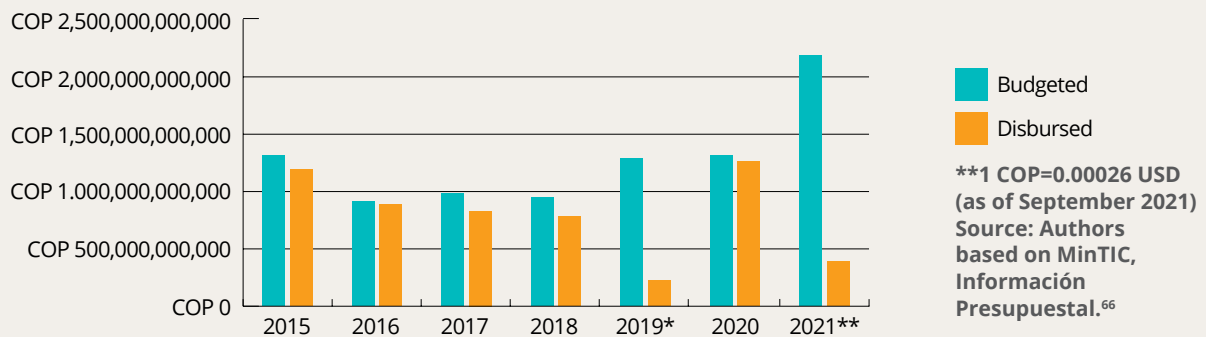
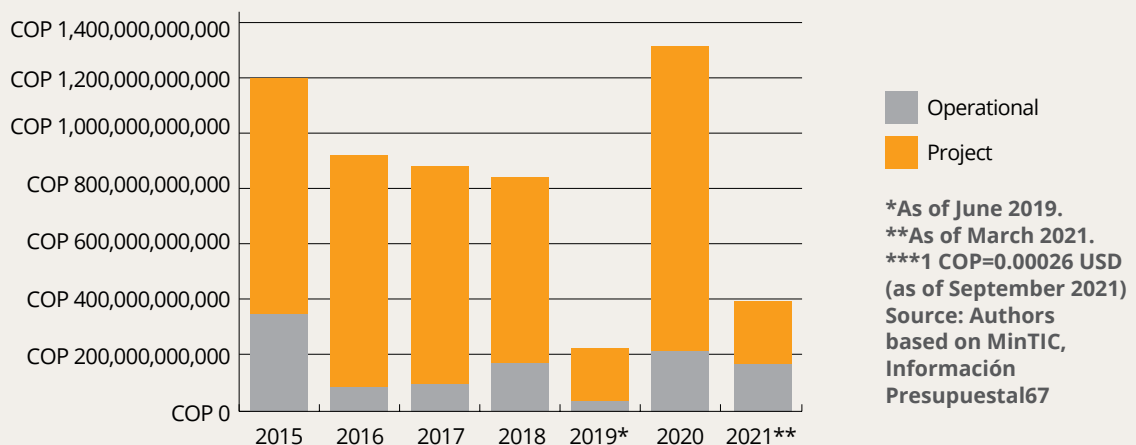


Figure 10: Colombia's FUTIC - Operational and Project Disbursement (2015-2021)



66. MinTIC. Información Presupuestal 2015-2021. <https://www.mintic.gov.co/porta/inicio/Presupuesto/Informacion-Presupuestal/>

67. MinTIC. Información Presupuestal 2015-2021. <https://www.mintic.gov.co/porta/inicio/Presupuesto/Informacion-Presupuestal/>

HOW ARE LAC USAFS USED?



Information about USAF-funded projects and resources is generally available online. In most cases, some information about the status of ongoing projects can be found in some of the agencies' annual reports and operating plans; however, transparency of the status of financial situation of the funds as well as information on ongoing projects and level of execution could be significantly improved. While general information about projects' goals is widely available online, detailed information on the project's results and impact are more difficult to find.

When planning the use of resources, ministries and regulatory agencies take the high-level directives defined by countries' national development policies and strategic goals for the ICT sector into consideration, in addition to the existence of statutory and regulatory authorization to apply the USAF to specific projects (See [Annex 1](#)). Indeed, many countries have launched Digital Agendas or ICT Strategic Plans for the next few years, which underpin the decision to prioritize strategic goals for the sector.

One example of a country that has launched a broader digital agenda is **Chile**, which has developed a "Digital Matrix Plan" that sets the government's roadmap for digital connectivity from 2018 to 2022.⁶⁸ Similarly, **Colombia** has prepared a "National Development Plan" for the 2018-2022 period,⁶⁹ which provides a basis to define the Ministry of Information and Communications Technologies' (MinTIC) annual strategic plans for the sector.⁷⁰ In Trinidad and Tobago, projects are defined based on the main goals of the National ICT Plan Blueprint for 2018-2022.⁷¹

At the operational level, technical units within ICT Ministries and regulatory agencies select projects and prepare operational plans to execute the funds. These plans are usually approved by the Ministry's or agency's decision-making committee, council,

or board. In member countries of the Eastern Caribbean Telecommunications Authority (ECTEL), for example, each country's National Telecommunication Regulatory Commission (NTRC) establishes an annual Operating Plan that not only provides information about the current state of the telecommunication development in the country and indicates where the use of universal funds could add more value, but also outlines goals, specific projects, and budget information.⁷²

Likewise, in the **Dominican Republic**, the FDT Directorate at the Dominican Telecommunications Institute (INDOTEL) prepares in the year's first trimester a Biannual Project Plan that includes all projects to be financed with the funds. INDOTEL's board of directors evaluates and selects the projects, approving the Biennial Project Plan.⁷³

To define USAF-funded projects, many countries have online forms available in which external stakeholders (e.g., underserved communities, civil society), could submit information on their specific telecommunications needs that should be addressed. Then, governments can use this information on telecommunications needs indicated by these stakeholders to formulate the projects to be financed by the USAF.

68. Chile (2018). Matrix Digital 2018-2022. <https://www.gob.cl/matrizedigital/>

69. Presidencia (2018). Plan Nacional de Desarrollo 2018-2022. <https://id.presidencia.gov.co/especiales/190523-PlanNacionalDesarrollo/index.html>

70. MinTIC (2021). Plan Estratégico 2021. <https://www.mintic.gov.co/portal/inicio/Planes/Plan-Estrategico/>

71. Trinidad and Tobago (2018). ICT Blueprint 2018-2022. <https://mpa.gov.tt/publications/NICT%20Plan%202018-2022>

72. ECTEL (2008). Telecommunications Universal Service Guidelines. <https://ectel.int/wp-content/uploads/2015/12/ECTEL-universal-service-guidelines.pdf>

73. Resolution INDOTEL 063-19, Article 9.

In **Trinidad and Tobago**, external specialists can be hired to assist in designing and defining the projects.⁷⁴

External calls for proposals are also conducted in which interested parties can submit detailed project proposals. In most countries, project proposals are submitted by service providers. Many countries reported that inputs from civil society and community-led organizations are not so common, particularly in the Caribbean. However, civil society and community-led organizations in many countries reported that, even in the cases where it is possible to submit inputs and project proposals, the process is designed from the point of view of large service providers – that is, complex and large projects that require substantial investments.

In some countries, USAF projects can be implemented by the public sector. In **Bolivia**, for example, the state-owned telecommunication company (ENTEL) implements several connectivity infrastructure projects financed by the country's PRONTIS. Competitive bidding processes are generally used to allocate USAF funds for the implementation of ICT-related projects by the private sector. Usually, telecom operators and internet service providers implement these projects through a tender process. The contract is awarded to the bidder with the best offer regarding tendered price and project quality. In most countries, only licensed operators that contributed to the USAFs can be part of the tender processes. However, given the complexity of project technical and financial selection criteria, small and medium operators can be excluded from such processes if they are not able to meet all the requirements established by the government authorities. Government authorities consulted for the purpose of this report have stressed the importance of having well-established providers to ensure project execution and financial feasibility in the long-term, particularly considering that many projects have a lifespan of five years in some countries. Nonetheless, focusing on long-term projects which require substantial investments can potentially hinder competition in bidding processes, and result in the exclusion of a wider variety of stakeholders.

In some cases, governments subsidize the provision of connectivity services in rural areas, covering part of the cost incurred by service providers to ensure financial feasibility.⁷⁵ In **Bolivia**, service providers may deduct 50% of the amount invested in providing services in rural areas in the semester when calculating their contribution to the PRONTIS.⁷⁶ This is done as an incentive to encourage service providers to bring connectivity to rural areas in the country. In addition to the participation of private service providers, Bolivia's state-owned telecommunication company (ENTEL) plays a key role in the provision of universal service and access in the country. Through an "invitation process," the Ministry of Public Works, Services and Housing invites ENTEL to express their interest in executing and co-financing the telecommunication projects for social inclusion. If ENTEL does not participate in the project, the government then starts a bidding process to select a private service provider.⁷⁷

74. Interview with the Telecommunications Authority of Trinidad and Tobago (TATT) on April 19, 2021.

75. Interview with the Telecommunications Authority of Trinidad and Tobago (TATT) on April 19, 2021; Interview with Saint Lucia's National Telecommunications Regulatory Commission (NRCC) on May 13, 2021.

76. Ministerial Resolution 13-2013, Article 15. <https://www.lexivox.org/norms/BO-RM-13-2013.html>

77. Ministerial Resolution 13-2013, Articles 4-8. <https://www.lexivox.org/norms/BO-RM-13-2013.html>

In the **Caribbean** region several projects are aimed at providing internet access and equipment to community centers and learning resource centers (See [Annex 1](#)), facilitating internet access through free Wi-Fi hotspots in public spaces and community access project. The latter is usually coupled with digital literacy training activities for the targeted community. Countries have also been implementing projects focused on specific groups. In Jamaica and Trinidad and Tobago, for example, their universal service fund is available for persons with disabilities.⁷⁸ In Trinidad and Tobago, individuals can also directly request USAF subsidies to purchase devices, and a subsidy of 90% of the cost of the device is provided.⁷⁹ In Jamaica, ICT equipment was donated in 2020 to the Council for Persons with Disabilities (JCPD), although it is not clear whether there have been resources allocated to programs that benefit persons with disabilities directly.⁸⁰ Grenada⁸¹ and Saint Lucia⁸² have also planned channeling resources to support persons with disabilities.

Bolivia reported a shift in its PRONTIS-related projects. In the past, the country invested in telecenters connected via satellite; however, such projects presented sustainability issues and did not effectively contribute to connecting people from underserved areas. For this reason, the government reported a greater focus on fiber optic networks, radio base stations for mobile communications, and educational projects.⁸³

USAFs are also used to implement or update governmental institutions' digital services, particularly those responsible for providing essential services, such as education, health, and security. Concerning the latter, in **Paraguay**, the USAF has been used to finance the National Police 911 emergency calls and attention system

for the city of Asunción, acquiring cameras for video surveillance, facial recognition cameras, and other equipment.⁸⁴ In **Argentina** and **Colombia**, there are also projects aimed at improving government entities' internet connectivity (See [Annex 1](#)). In **Bolivia**, 5% of the contributions collected from telecom operators are used for the operation and programs of the digital government and ICT agency (AGETIC – Agencia de Gobierno Electrónico y de Tecnologías de la Información y Comunicación). In **Jamaica**, the USAF funded the provision of computer equipment to the Jamaica Constabulary Force and for the establishment of an infection surveillance system, as well as ICT equipment for the Council for Persons with Disabilities (JCPD), as cited above. In **Grenada** and **St. Vincent and the Grenadines**, the USAF funded the implementation of Very-high-frequency digital selective calling (VHF-DSC) for the Global Maritime Distress Safety System (GMDSS) (See [Annex 1](#)).

When defining USAF projects, authorities consider social and digital gaps identified, the technological evolution, and high-level government priority. In Central America, **El Salvador** counts on USAFs legal and regulatory frameworks as well as defined policies for their use, but the choice has been to use them for electricity infrastructure projects only. **Guatemala** uses funds towards fixed telephony projects. Further, if the fund accumulates over GTQ 30 million (less than USD 4 million), the exceeding amount should be transferred and used towards paying public debt or towards public investments.⁸⁵ **Honduras** has recently launched its National Broadband Plan in 2021-2025 as a national effort that seeks to provide Universal Access across 4 different pillars, but results implementation remains to be seen.⁸⁶

78. See, moreover, Bleeker (2019).

79. Up to TT\$600. See TATT. Universal Service Implementation Report June 2020 – May 2022.

https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1427&PortalId=0&TabId=22

80. \$1.5 million according to the Jamaica Information Service (May 2020). USAF Donates ICT Equipment to the Council for Persons with Disabilities (JCPD). <https://jis.gov.jm/usf-donates-ict-equipment-to-jcpd/>

81. Information provided by Grenada NTRC via email on May 13, 2021. According to the NTRC, the USAF is geared towards funding of projects to underserved and underserved communities, special interest groups, such as elderly and persons with disabilities.

82. See Bleeker (2019). Saint Lucia's NTRC, Universal Service Fund, Closed and Ongoing Projects: from October 2016 to September 2021, the "Differently Abled Project," which is aimed at improving internet access for persons with disabilities.

83. Information provided by the Telecommunications Vice-Ministry of the Ministry of Public Works, Services, and Housing through interview on April 14, 2021.

84. TEDIC (2018). La enajenación continúa de nuestros derechos. Sistemas de identidad: biometría y cámaras de vigilancia no reguladas en Paraguay.

https://www.tedic.org/wp-content/uploads/2018/12/La-enajenaci%C3%B3n-continua-de-nuestros-derechos_TEDIC_2018-2.pdf

85. Article 72 of Decree 94-96.

86. Information provided by government officials from CONATEL. The pillar are (i) deployment of mobile telecommunications infrastructure, (ii) deployment of fixed broadband internet infrastructure, (iii) government investment for the provision of internet connectivity in 75,000 households in rural areas and (iv) government investment for the provision of wireless internet in more than 6,000 public spaces

In **Argentina**, through non-refundable projects, the national telecommunication agency has assigned funds to several projects focused on the expansion of the cooperative sector, community networks - which are not only collectively owned but also governed by the community – as well as small and medium enterprises in more than 215 locations throughout the country.⁸⁷

In addition to financing communication services and access projects, USAFs are also used to cover administrative costs. This is the case in **Colombia**, where the USAF's budget is divided into two main components: operating and investment costs. In the Eastern **Caribbean** Telecommunications Authority member countries, administrative expenses cannot exceed 10% of the fund's annual budget.⁸⁸ In Bolivia, the latest national budget law also defined that up to 10% of the country's USAF could be used to cover administrative expenses of the unit responsible for managing the fund.⁸⁹ Notably, this amount used to be 5%.⁹⁰ However, as reported in section 2.c above, in some countries, resources are also sent to other government agencies, such as the National Treasury in the **Dominican Republic** or to the Ministry of Education in **Bolivia**.

Project execution is usually monitored by either the regulatory agency or the Ministry and, although project monitoring and evaluation is conducted, an overall impact assessment to understand the impact of USAF's projects to close the digital gap has not been conducted on a periodical basis. In **Colombia**, projects' status and results are submitted to the country's National Planning Monitoring (DNP) and are available through their Investment Project Monitoring System (SPI - Sistema de Seguimiento de Proyectos de Inversión).⁹¹ In the **Caribbean**, independent auditors assess the annual budget execution and current financial status of

the USAF. **Jamaica**, for example, makes available the results of independent auditors' assessments. Nevertheless, these control mechanisms are focused on assessing the USAF's budget execution from an accounting point of view rather than analyzing whether the goals of the projects are being met, or how efficient they are and their impact on closing the digital gap.

FINAL COMMENTS ON HOW USAFS IN LAC ARE USED

Information on how USAFs are used can be found online to some extent, but more transparency is needed, especially regarding project execution and impact, as most reports are focused on accounting only. Thus, it is often hard to understand the real impact of the interventions promoted using USAF-funded projects. Notwithstanding such difficulties, USAFs are used in a variety of ways by countries in LAC, subsidizing the provision of connectivity in rural areas, fostering large scale infrastructure investments, or even updating governmental institutions digital services. Some types of uses such as the purchase of ICT equipment such surveillance cameras, however, might not necessarily reflect the universality goal for which USAFs were created. Lastly, while in most countries' resources are accessed by a narrower scope of stakeholders, generally the largest operators, allowing a wider variety range of stakeholders to access them is worth exploring, and some countries are already doing so.

87. ENACOM (2020). Informe de Gestión 2020. https://drive.google.com/drive/folders/121IbNmi42tnb5mNHfASK_VYAEObolLL6

88. ECTEL (2008). Telecommunications Universal Service Guidelines. <https://ectel.int/wp-content/uploads/2015/12/ECTEL-universal-service-guidelines.pdf>

89. Law 1356/2020, General State Budget Law. <https://www.economiayfinanzas.gob.bo/ley-n-1356-de-28-de-diciembre-de2020.html>

90. As set forth in Law 1099/2018.

91. <https://www.lexivox.org/norms/BO-L-N1099.xhtml#:~:text=17%20DE%20SEPTIEMBRE%20DE%202018, en%20el%20sector%20de%20telecomunicaciones.>

91. <https://spi.dnp.gov.co/>

RECENT DEVELOPMENTS



Some countries in the LAC region show progress in achieving broader connectivity for the most vulnerable through connectivity programs models that introduce social components to their implementation. Due to the COVID-19 pandemic, many countries have approved emergency projects to assist low-income families in home-schooling by providing devices and free access to governments' online educational services.

The COVID-19 pandemic has accelerated the speed at which governments react to connectivity gaps, and they have been quick to support locally driven projects that can have a higher impact on specific communities. Internet access has proven to be critical under emergency contexts in which many of the basic public services like healthcare or education are heavily reliant on broadband infrastructure and access. In many jurisdictions, governments have quickly implemented programs to provide equipment (laptops, tablets) to schools in rural areas that could enable online learning.

In **Peru**, PRONATEL has delivered a total of 30,789 tablets for children living in rural areas of Ayacucho, one of the country's more deprived regions, and the government has set an ambitious plan to implement more than 500 "Digital Access Centers"⁹² in local areas of six rural regions of the country. These efforts to deliver infrastructure and connectivity that can foster online education have been accompanied by higher investment in broadband connectivity: PRONATEL has achieved a disbursement that represents 20 times the average of the accrued amount in the last four years for this same period,⁹³ which has allowed it to accelerate the deployment of fiber optic networks at the national level so that more Peruvians have access to the internet and digital development opportunities.

In the **Dominican Republic**, the Dominican Telecommunication Institute (INDOTEL) is also implementing comprehensive connectivity projects that include social components. The project "Connect the Unconnected" (Conectar a los No Conectados) includes actions from both connectivity and access supply and demand side. Specifically, the project encompasses the deployment of broadband infrastructure and service provision, as well as devices to connect to the internet. The project also includes demand-side subsidies targeting vulnerable households, particularly women as heads of households.⁹⁴

One of the potential beneficiaries of USAF funds are community networks, which are "networks collectively owned and managed by the community for non-profit and community purposes." (ISOC, 2018, p.9) These networks are "constituted by collectives, indigenous communities or non-profit civil society organizations that exercise their right to communicate, under the principles of democratic participation of their members, fairness, gender equality, diversity and plurality," (ISOC, 2018, p. 9) but most of them have not yet benefited from USAFs. In the Dominican Republic, Decree 527/21 established the country's 2030 Digital Agenda,⁹⁵ expressly citing that the USF should support community networks in rural and semi-urban areas.⁹⁶

92. These public space centers are environments equipped with computers, tablets, and other equipment to contribute to the development of digital skills, expand Internet access and make better use of this service.

93. <https://www.gob.pe/institucion/pronatel/noticias/490866-pronatel-ejecuto-el-60-de-su-presupuesto-en-proyectos-de-telecomunicaciones-durante-el-periodo-enero-abril-de-2021>

94. INDOTEL (2021). Conectar a los Conectados. <https://transparencia.indotel.gob.do/proyectos-y-programas/plan-bienal-de-proyectos-de-desarrollo-2021-2022/conectar-a-los-no-conectados/>. The document makes a reference to "meaningful connectivity" as a guiding principle to FDT's Biannual Plan. More information on meaningful connectivity can be found at <https://a4ai.org/meaningful-connectivity/>

95. Decree 527/21 – Available at <https://presidencia.gob.do/decretos/527-21>

96. Decree 527/21, Article 2.1.4

Another exception is the case of **Argentina**, where two community networks were granted, in 2020 and 2021, non-refundable funds to finance projects in low-income neighborhoods in urban areas. This is an important precedent for community networks to have access to USAF in the region, as described in the box below.

Case Study – USAFs Supporting Community Networks: Argentina

In 2014, Argentina opened the possibility of financing community networks when Argentina's Digital Law⁹⁷ established that the National Communication Entity (ENACOM) should foster and protect community networks, ensuring that their operations meet their specific technical, economic, and social needs. Although this legal change did not bring immediate governmental investments in community networks, the Digital Law made an important step towards supporting these networks through Argentina's Universal Service Trust Fund (FFSU).

In 2018, Argentina's Resolution 4,954/2018 defined community networks as those managed by their own users and/or governing non-profit organizations. The community network can be expanded to include new users and neighboring communities in populations with no more than five thousand inhabitants.⁹⁸ This Resolution also enabled community network owners to apply for licenses for information and communication technology services, exempting them from paying a license fee. Specifically, it is not a new license, but rather a new registration category for community network owners, namely Value-Added Service – Internet Access, Community Network Owners (VARC) (ISOC, 2018, vi).

This change opened the possibility for community networks to apply to call for proposals of ENACOM's programs financed by FFSU non-refundable contributions (ISOC, 2018, vi). In June 2020, ENACOM approved the Internet Infrastructure Development Program for low-income neighborhoods, funded by FFSU non-refundable contributions.⁹⁹ It is noteworthy that, by that time, community networks had not been

granted their licenses yet. However, given the nature of the neighborhoods that would benefit from this program, ENACOM allowed candidates whose ICT service license was still in progress. This enabled the participation of community networks whose licenses were pending.

In October 2020, ENACOM granted licenses to two community networks: Asociación Civil la Poderosa, Integración por la Educación Popular¹⁰⁰ and Asociación Civil El Hormiguero por la Igualdad, Dignidad y Libertad.¹⁰¹ In December 2020, ENACOM approved El Hormiguero's project and granted it ARS 36,197,207.74 (around USD 380 thousand)¹⁰² to provide connectivity services to Villa Soldati.¹⁰³ The project prioritizes collective spaces, such as educational institutions, which have been carrying out digital literacy work for years, but with outdated technology. The project seeks to provide connectivity to five low-income neighborhoods – Barrio Fátima, Ramón Carrillo, Los Piletones, Las Esperanzas, and Los Pinos.¹⁰⁴ In February 2021, La Poderosa's project was approved and was granted ARS 13,535,669 (around USD 140 thousand)¹⁰⁵ to provide connectivity to 16 low-income neighborhoods of nine provinces.¹⁰⁶ At the time of writing, El Hormiguero and La Poderosa were the only community networks that have been granted funds from the FFSU.

This has been an initial step to use the FFSU to finance community networks in the country, and it is also critical to expanding this opportunity to other community networks, particularly in rural areas. There are still some challenges to be faced, one of the main ones being financial requirements to submit project proposals.

97. Law 27,078/2014, article 94, b.

98. ENACOM, Resolution 4,952/2018, article 2.

99. ENACOM, Resolution 726/2020, <https://www.enacom.gov.ar/multimedia/normativas/2020/res726.pdf>

100. ENACOM, Resolution 1152/2020, <https://www.boletinoficial.gob.ar/detalleAviso/primera/236367/20201021>

101. ENACOM, Resolution 1169/2020, <https://www.boletinoficial.gob.ar/detalleAviso/primera/236426/202010220>

102. Exchange rate as of June 21, 2021 (USD 1 = ARS 95.39)

103. ENACOM, Resolution 1488/2020, <https://www.boletinoficial.gob.ar/detalleAviso/primera/239175/20201224>

104. ENACOM (December 2020). ENACOM entregó ANR por más de \$36 millones a El Hormiguero.

https://www.enacom.gov.ar/noticias/institucional/enacom-entrego-anr-por-mas-de-36-millones-a-el-hormiguero_n2943

105. Exchange rate as of June 21, 2021 (USD 1 = ARS 95.39)

106. ENACOM, Resolution 201/2021, <https://www.boletinoficial.gob.ar/pdf/aviso/primera/241163/20210224>

CONCLUDING REMARKS AND RECOMMENDATIONS



05

Using the USAFs towards improving the access and use of communications is a matter of equality and equity, considering the role the Internet and ICTs have to play in education, health, and various aspects of our lives. Using such funds to support population groups that are unconnected and/or marginalized is therefore urgent, and the recommendations outlined below support the goal of universal access and use with a focus on these population groups. USAFs can be a crucial tool to social-economic and human development in the LAC Region, and this means that resources should not only be used towards connectivity and access but also towards strengthening digital skills and literacy, and other crucial side aspects.

This study has demonstrated that, while a few countries have disbursement rates over 80% in specific years since 2016, most countries in the Latin American and Caribbean (LAC) region have lower disbursement rates. Further, understanding the overall financial status of USAF in the region is challenging due to the lack of sufficient information available or reported; numbers that are disclosed are not always comparable; and lack of detailed information on project implementation and/or results. These gaps were filled, in part, with the information gathered through over 50 interviews conducted with representatives from government, private sector, civil society and academia.

The recommendations provided below are based on the analysis derived from desk research, interviews, and assessments demonstrated above. Through them, governments in the LAC region will be able to enhance the efficiency and effectiveness in the use of USAFs. Undeniably, whenever funds are not properly disbursed, or when funds can only

be accessed by a selected range of stakeholders, there are direct consequences to the unconnected and/or marginalized groups. Considering the urgent need for more and better access to connectivity, the recommendations support governments in their goal of using USAFs as a tool towards reaching equity and equality and ultimately positively impacting society. This is precisely why USAFs were created.

The recommendations were divided into two aspects: (A) the administrative framework under which the funds are managed; and (B) other aspects related to the legal and policy formulation and implementation of USAFs. Each recommendation is detailed below.

Table 4: Recommendations

A. Fund Management
<ol style="list-style-type: none">1. Improve the disbursement rate of the USAF;2. Increase USAF management transparency;3. Channel resources to addressing the digital gap;4. Conduct impact assessments.
B. Legal/Policy Formulation and Implementation
<ol style="list-style-type: none">5. Facilitate USAF's access to complementary providers and stakeholders;6. Ensure the USAF is shielded from political change;7. Use USAF resources towards strengthening equality and equity from the demand side.

Source: Authors' own elaboration.

A1

Improve the disbursement rate of the USAF

Disbursement rates vary widely across Latin American and Caribbean countries, as the study has shown. In some cases, funds have been transferred to other government agencies, and in others, funds are simply left dormant, as funds have simply not been disbursed. Disbursement rates over 80% were only found in a few countries – Argentina, Chile, Colombia, Costa Rica, Jamaica, Peru and St. Vincent and the Grenadines - whereas most countries in the region have much lower rates. Indeed, Peru is an example of a country that was able to increase its USAF's disbursement considerably over the past years. While low disbursement rates happen for various reasons, this is a common pattern in the region and should be addressed. Ultimately, such funds were created precisely to democratize the access to communications, and they should be used towards such goals. Using such funds for the purpose they were created is a matter of equality and equity, especially considering the enormous role that having access to ICTs and being connected to the Internet has in our lives.

A2

Increase USAF management transparency

Although most legal frameworks require the government to publish periodical reports about the implementation of USAF's projects, many countries do not have updated information available online. Governments should be more transparent about the USAF's management and overall financial status. USAF reporting should be more reader-friendly, informing stakeholders of key projects and financial information. Further, besides making financial information and accounting reports available, it is important to publicize information on project implementation and impact. It would not have been possible to have written this report without a wide range of official resources that have been found, but information about some USAFs, especially regarding project implementation and impact, is often insufficiently reported.

A3

Channel resources to addressing the digital gap

According to what has been shown above, countries such as Colombia, Dominican Republic and Jamaica use USAF to cover the ICT Ministry or the regulatory agency's administrative costs. Although many legal and regulatory frameworks establish a cap that can be used for administrative and/or fiscal purposes, using funds for connectivity projects rather than administrative expenses is recommended. In the case of Brazil, recent legislative changes were necessary to allow funds to be used towards broadband projects, as the previous framework allowed it to be used to telephony services only.

A4

Conduct impact assessments

In addition to assessing projects' individual results and impacts, it is critical to conduct an assessment that considers the overall impact of the USAF over time, as well as to establish clear goals and timelines for the future. Perhaps this is the most challenging aspect of USAF execution. Financial information available (See [Annex 3](#)) reveals that most countries in LAC have resources available to invest in projects aimed at closing the digital gap. Authorities responsible for oversight and accountability assessments can play a key role in supporting such endeavors and suggesting adjustments/improvements.

B1

Facilitate access to USAF's access to complementary providers and stakeholders

Groups, such as small- and medium-sized operators, non-profit organizations, and community networks, should be able to access USAF resources. For example, Argentina's experience cited above, showcases that USAFs can support community networks. In many cases, technical and financial requirements of selection processes can only be fulfilled by traditional telecom operators. Governments should create selection processes that do not exclude small and medium operators and/or non-profit organizations, while ensuring projects' goals are met. This requires a shift in project formulation, which should be designed considering their specific characteristics of these groups from the onset. These groups can not only reach the unconnected, but also promote business and/or governance models that are different from the ones of the larger operators, with various positive externalities such as a higher engagement of local communities in content creation, for example.

B2

Ensure USAF is shielded from political change

Although governments define USAFs' projects based on legal and technical criteria, political changes affect the fund's long-term planning as the USAF's decision-making committee or board is commonly composed of Ministry's nominees. Moreover, many projects, especially infrastructure projects, have a medium- and long-term lifespans given their complex nature. While aligning them with sectoral and national policy goals is applauded, the USAF would benefit from having specific both short- and long-term goals. Responsible authorities should design USAF-financed projects by building on previous projects' achievements and considering long-term needs. Frameworks should be updated to reflect such needs.

B3

Use USAF resources to strengthen equality and equity from the demand side

Even in areas where there is broadband coverage, low-income households often cannot afford internet connectivity. Further, the lack of smartphone ownership, limited data packages, the slow and unreliable connections hinder many low-income families from reaping the benefits of the internet. The examples of Costa Rica, Dominican Republic, Saint Lucia, and Trinidad and Tobago illustrate that comprehensive connectivity projects targeting the digital gap challenges from the demand side are also key. In these countries USAFs are also being used to fund initiatives focused on strengthening digital skills, developing relevant contents, and giving access to appropriate devices. Such a human-centered approach is crucial to achieving proper connectivity level and quality. Lastly, while legal, policy and regulatory frameworks in the LAC region have been amended in recent years to expand the scope of USAF-related projects, it is important to ensure that the ultimate goal of universal access to communications is preserved.

Taken together, the recommendations outlined above can help LAC countries to make better use of USAF resources and leverage existing funds to serve public policies that are conducive to the achievement of more inclusive societies, and to advance towards connectivity universality and affordability at the global level.

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ANNEX 1

USAFs' General Information (per country)

ARGENTINA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo Fiduciario del Servicio Universal (FFSU)	Ley Argentina Digital 27.078/2014 (articles 1825) Reglamento General del Servicio Universal (Resolución 721/2020)	Ente Nacional de Comunicaciones (ENACOM)	<ul style="list-style-type: none"> • 1% of the total income earned from the provision of telecommunication services. • Legacy or donations. <p>Source: Article 22 of Law 27.078/2014</p>	<ul style="list-style-type: none"> • Emergency programs for access to ICT services for low-income neighborhoods during the COVID-19 pandemic • Development of internet infrastructure for settlements • Access to ICT services for rural areas • Deployment of mobile communication services • ICT services for public institutions • Connectivity program with non-refundable contributions for companies with the participation of the provincial states • Program to Develop the Federal Fiber Optic Network (REFEFO) • Working capital credit subsidy for ICT service licensees • Connectivity access program for industrial parks <p>Source: ENACOM (2020). Informe de Gestión.</p>

BOLIVIA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Programa Nacional de Telecomunicaciones de Inclusión Social (PRONTIS)	Ley 164/2011 (artículo 65) Decreto Supremo 1391/2012 (Reglamento General a la Ley 164/2011) Reglamento PRONTIS (Resolución Ministerial 013/2013)	Viceministerio de Telecomunicaciones del Ministerio de Obras Públicas, Servicios y Viviendas	<ul style="list-style-type: none"> • Part of the amounts related to license payments, assignment and use of frequencies, fines, auction of goods, execution of guarantee certificates, surplus transfers to new holders. • External, donations, and international cooperation resources. • From 1% to 2% of the total income earned from the provision of telecommunication services. <p>Source: Article 66 of Law 164/2011; Article 188 of Supreme Decree 1391/2012; Article 66 of Ministerial Resolution 013/2013</p>	<ul style="list-style-type: none"> • Deployment of fiber optic network • Radio base stations for mobile telecommunications • Internet services for educational projects <p>Source: Ley 1099/2018</p>

BRAZIL				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fundo de Universalização dos Serviços de Telecomunicações (FUST)	Lei 9.472/1997 (article 81, II) Lei 9.998/2000 Lei 14.109/2020	Conselho Gestor para o FUST, Ministério das Comunicações	<ul style="list-style-type: none"> • Amounts defined in the country's annual budget law and additional credits • 50% of part of the Telecommunications Inspection Fund (FITEL), up to BRL 7000 million annually. • Amount charged by the National Telecommunications Agency (ANATEL) to telecom operators related to the transfer of concession, permission, or authorization of telecommunications services or radio frequency use. • 1% of the gross operating revenue resulted from the provision of telecommunications services in the public and private regimes. • Donations <p>Source: Article 6 of Law 9998/2000</p>	At the time of writing, Brazil's FUST had not been employed in ICT-related projects. FUST is expected to invest in these projects from 2022 onward.

CHILE				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo de Desarrollo de las Telecomunicaciones (FDT)	Título IV de la Ley General de Telecomunicaciones (Ley 18.168/1994). Modificada por la Ley 20.522/2011 Decreto Supremo N° 353, de 2001, del Ministerio de Transportes y Telecomunicaciones.	Subsecretaría de Telecomunicaciones (Subtel), Ministerio de Transportes y Telecomunicaciones Consejo de Desarrollo de las Telecomunicaciones (CDT)	<ul style="list-style-type: none"> National Budget Law defines the amount each year Source: Article 28A of Law 18.168/1994	<ul style="list-style-type: none"> Deployment of fiber optic network, mainly in rural or isolated areas Deployment of mobile network Provision of free and quality internet to local schools WiFi zones Subsidies for digital television transmission system Source: SUBTEL (March 2021). "Informe Nacional – Estado de Avance de los Proyectos del Fondo de Desarrollo de las Telecomunicaciones." ¹⁰⁷

COLOMBIA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo Único de las Tecnologías de la Información y las Comunicaciones (FUTIC)	Ley 1978/2019 - Ley de la Modernización de las TICs	Ministerio de las Tecnologías de la Información y Comunicaciones (MinTiC)	<ul style="list-style-type: none"> Monetary considerations of telecom operators related to the use of radio frequencies 1.9% of telecom and TV operators' gross annual income (this percentage must be reviewed every 4 years) Fines. National budget. Monetary considerations of TV operators related to the use of frequencies. Amount related to the concession of the CO domain. Source: Articles 10, 13, 36, and 37 of law 1978/2019; Article 1 of Resolution MinTiC 903/2020.	<ul style="list-style-type: none"> Deployment of fiber optic networks Training to provide technical skills and knowledge on the use of ICT for vulnerable groups, including children and women ICT access solutions to local communities Enhancement of the national IT industry Support to private sector's digital transformation Support to public entities to promote the digital transformation of their processes Improvement of statistical information regarding the status of ICT in the country Source: MinTiC (2021), "Agenda de Inversión del Ministerio de Tecnologías de la Información y las Comunicaciones para la vigencia 2021." ¹⁰⁸

107. https://www.subtel.gov.cl/wp-content/uploads/2021/04/Informe_Nacional_1T_21.pdf

108. https://www.mintic.gov.co/portal/715/articles-160805_agenda_inversiones_20201214.pdf

COSTA RICA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo Nacional de Telecomunicaciones (FONATEL)	Ley General Telecomunicaciones 8642/2008	Superintendencia de Telecomunicaciones (SUTEL)	<ul style="list-style-type: none"> Parafiscal contribution of between 1% and 3% (set annually by the regulator) of the annual gross income of telecom operators. Interests for late payment of fines. Financial revenues generated by Fonatel's own financial management. Donations Fees collected when granting concessions. <p>Source: General Telecommunications Law N° 8642 (Ley General de Telecomunicaciones N 8642).¹⁰⁹</p>	<ul style="list-style-type: none"> Deployment of Telecom infrastructure Provision of computers to economically disadvantaged families. Provision of free internet in public spaces.

DOMINICA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Universal Service Fund (USAF)	<p>Section 44 of the Telecommunications Act 8 of 2000</p> <p>Telecommunications (Universal Service Fund) Regulations SRO 34 of 2009</p> <p>Telecommunications (Universal Service Fund Contribution) Regulations SRO 45 of 2009</p>	National Telecommunication Regulatory Commission (NTRC)	<ul style="list-style-type: none"> Contributions by telecommunications providers. Notably, the telecom providers must contribute 0.25% of its gross annual revenue of the first year of its license, 0.5% in the second year, and 1% in the third and every other year of its license. Any funds that may be directly appropriated by Parliament for USF purposes. Official grants, donations, bequests, other contributions, or transfers granted by an individual or other legal entity. <p>Source: Telecommunications (Universal Service Fund) Regulations SRO 34 of 2009, section 4, and SRO 45 of 2009, section 3.¹¹⁰</p>	<ul style="list-style-type: none"> Improvement of broadband connectivity Community Wi-Fi Provision of computer equipment <p>Source: NTRC, Universal Service Fund, Projects.¹¹¹</p>

109. http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=63431&nValor3=91176&strTipM=TC#:-:text=N%C2%BA%208642&text=El%20objeto%20de%20esta%20Ley,de%20los%20servicios%20de%20telecomunicaciones

110. <https://www.ntrcdom.org/index.php/en/laws-regulation/telecommunication-regulations>

111. <https://www.ntrcdom.org/index.php/en/universal-service-fund/projects>

DOMINICAN REPUBLIC				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo de las Desarrollo de Telecomunicaciones (FDT)	Ley General de Telecomunicaciones No 153-98 (artículos 45 y 49) Resolución No 024-010 (Política Social sobre el Servicio Universal) Resolución No 063-19 (Reglamento del Fondo de Desarrollo de las Telecomunicaciones)	Instituto Dominicano de las Telecomunicaciones (INDOTEL)	<ul style="list-style-type: none"> Percentage of the Telecommunications Development Fund (CDT) (i.e., at least 3% of CDT). Budgetary surpluses after the payment of INDOTEL's operational expenses. Funds resulted from non-compliance charges and the sale of seized equipment. Donations, contributions, transfers, among others. <p>Source: Article 4 of Resolution 063-19, Regulation of the Telecommunications Development Fund.</p>	<ul style="list-style-type: none"> Deployment of broadband infrastructure and service provision for vulnerable households, particularly single mothers' heads of households Deployment of fiber optic network Courses and workshops to encourage the development of ICT-solutions for local communities by the youth Provision of computers and other ICT-related equipment to government institutions and non-profits <p>Source: INDOTEL, Transparencia, Proyectos y Programas ¹¹²</p>

EL SALVADOR				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo de Inversión Nacional en Electrificación y Telefonía (FINET)	Decreto Legislativo 354/1998	Fondo de Inversión Social para el Desarrollo Local (FISDL)	<ul style="list-style-type: none"> Central government contributions and national budget allocations. 98.5% of the total resources generated by the government for the fees for granting of concessions for the exploitation of radioelectric spectrum. 98.5% of the total resources generated by the government for the management and administration of concessions, contracts, licences and permits for the provision of telecommunication services. All resources generated by granting by SIGET of concessions for the exploitation of hydraulic and geothermal resources for the generation of electrical energy; Fines to the operators of the electricity and telecommunications sectors Any additional income obtained by any legal means <p>Source: Legislative Decree 354</p>	Electricity infrastructure projects.

ECUADOR				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Proyectos y Programas de Servicio Universal	Ley Orgánica de Telecomunicaciones de 2015 (artículos 91 y 92) Código Orgánico de la Economía Social de los Conocimientos, la Creatividad y la Innovación	Agencia de Regulación y Control de las Telecomunicaciones (ARCOTEL) Ministerio de las Telecomunicaciones y de la Sociedad de la Información (MINTEL)	1% of telecommunications service providers' total income. Source: Article 92 of the Telecommunications Law of 2015.	No projects have been executed with these funds in the past five years. Universalization projects seem to be financed by the World Bank at the moment. ¹¹⁴ Source: Transitory disposition 17 of the "Ingenios" Code. ¹¹⁵

112. <https://transparencia.indotel.gob.do/proyectos-y-programas/>

114. <https://www.telecomunicaciones.gob.ec/wp-content/uploads/2021/06/Priorizacion-Familia-Digital.pdf>

115. https://lotaip.ikiam.edu.ec/ikiam2019/abril/anexos/Mat%20A2-Base_Legal/codigo_organico_de_la_economia%20social_de_los_conocimientos_creatividad_e_innovacion.pdf

More information also available at IADB (2021, p. 43).

GRENADA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Universal Service Fund (USF)	<p>Section 43 of the Telecommunications Act 31 of 2000</p> <p>Telecommunications (Universal Service Fund) Regulations SRO 21 of 2009</p> <p>Telecommunications (Universal Service Fund Contribution) Order SRO 56 of 2016</p>	National Telecommunication Regulatory Commission (NTRC)	<ul style="list-style-type: none"> Contributions by telecommunications providers. Notably, the telecom providers must contribute 0.25% of its gross annual revenue of the first year of its license, 0.5% in the second year, 1% in the third year, 1.5% in the fourth year, 1.75% in the fifth year, and 2% in the sixth and each subsequent year of its license. Any funds that may be directly appropriated by Parliament for USF purposes. Official grants, donations, bequests, other contributions, or transfers granted by an individual or other legal entity. <p>Source: Telecommunications (Universal Service Fund) Regulations SRO 21 of 2009, section 5, and SRO 56 of 2016, section 2.¹¹⁶</p>	<ul style="list-style-type: none"> Very-high-frequency digital selective calling (VHF-DSC) for the Global Maritime Distress Safety System (GMDSS) Digital trunked communications network Solar powered ICT Center Wireless mesh network for schools ICT equipment and wireless internet access Network connectivity to health facilities Broadband infrastructure and services to underserved communities Training for underserved communities <p>Source: Based on the information provided by Grenada's NTRC.¹¹⁷</p>

GUATEMALA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo para el Desarrollo de la Telefonía (FONDETEL)	Decreto 94-96	Fondo para el Desarrollo de la Telefonía (FONDETEL), Ministerio de Comunicaciones, Infraestructura y Vivienda	<ul style="list-style-type: none"> 70% of the revenue collected for the allocation of radioelectric spectrum in favor of operators. Interests generated by the resources deposited in the fund. Budget allocations and transferences made by the central government. Donations. <p>Source: Decree 94-96¹¹⁸</p>	National Broadband Plan 2020-2025

GUYANA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Universality Fund	<p>Telecommunications Act 18 of 2016</p> <p>Telecommunications (Universal Access and Universal Services) Regulations 6 of 2020</p>	<p>Ministry of Finance</p> <p>Telecommunications Agency</p>	<ul style="list-style-type: none"> 1% of gross annual revenues of telecom operators and service provider Penalties imposed by the Telecommunications Agency Funds that may be provided to the fund according to legal frameworks Grants, donations, loans, bequests, or other contributions to the Tele-communications Agency for purposes of achieving universal access or universal services. <p>Source: Section 14 of the Telecommunications (Universal Access and Universal Services) Regulations 2020.</p>	Guyana's USAF has not been operationalized. ¹¹⁹

116. https://ntrc.gd/wp-content/uploads/2015/11/Legislation-Universal-Service-Fund-Regulations-SRO-21-of-2009_0.pdf; <https://ntrc.gd/wp-content/uploads/2016/12/Telecommunications-USF-Order-2016.pdf>

117. Information provided by Grenada NTRC via email on May 13, 2021.

118. https://www.congreso.gob.gt/detalle_pdf/decretos/897#gsc.tab=0

119. Although Guyana's legal framework established a USAF, it has not brought into effect as of May 2021, according to the information provided by Guyana's Telecommunications Agency via email on May 6, 2021.

HONDURAS				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo de Inversiones en Telecomunicaciones y las Tecnologías de la Información y las Comunicaciones (FITT)	Resolución 007/14, Reglamento FITT	Comisión Nacional de Telecomunicaciones (CONATEL)	<ul style="list-style-type: none"> Mandatory monthly contribution of Telecom operators and ISP's equivalent to 1% of their gross monthly income. Donations and Legacies Concessional Credits form external or internal sources. <p>Source: Decree 325-2014.</p>	<ul style="list-style-type: none"> National Broadband Plan 2020-2025 Provision of computing equipment and internet in schools located in rural areas.

JAMAICA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Universal Service Fund (USF)	2000 Telecommunications Act (Amended in 2012)	The Universal Service Fund is an agency of the Ministry of Science, Energy, and Technology	<p>Domestic telecom operators must collect a universal service levy on all international calls terminating on local networks. Calls terminating on fixed lines incur a levy of USD 0.03, while calls terminating on mobile lines incur a levy of USD 0.02.</p> <p>Source: Jamaica Universal Service Fund, Annual Report 2018-2019</p>	<ul style="list-style-type: none"> Community access points Free Wi-Fi in parks, town centers, and high traffic stretches of roadway nationwide Tablets in schools Island-wide broadband network connecting schools, hospitals, libraries, police stations, and health centers ICT infrastructure for educational institutions and Government Ministries, Departments and Agencies ICT support for universities 12-month program facilitating training, certification, and work experience in the field of ICT for young persons from 18 to 35 years old <p>Source: Jamaica Universal Service Fund, Projects.¹²⁰</p>

NICARAGUA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo de Inversión en Telecomunicaciones (FITEL)	Reglamento del Fondo de Inversión de Telecomunicaciones – Acuerdo Administrativo 006-2006	Instituto Nicaragüense de Telecomunicaciones y Correos (TELCOR)	<ul style="list-style-type: none"> Income generated by (TELCOR) for: Rights and fees, such as: study of applications, the granting, modification, revalidation and use of concessions, licenses, permits, registrations and authorizations, and others. Fines and surcharges, for infractions incurred by ISP's service providers and telecom operators. Fees collected for allocation and use of radioelectric spectrum. Contributions, donations or transfers, made in favor of FITEL. National allocations by general budget of the Central Government. Financial income generated by the FITEL resources deposited or invested in different financial instruments. <p>Source: Acuerdo Administrativo 006-2006</p>	<ul style="list-style-type: none"> Deployment of Rural public telephones National Broadband Plan Telemedicine-related projects

120. <https://usf.gov.jm/projects/>

PANAMA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo para el Desarrollo de Proyectos de Servicio y Acceso Universal	Ley 59/2008	Junta Asesora de Servicio y Acceso Universal	<ul style="list-style-type: none"> • 1% of telecom operators annual taxable income. • Interconnection fees collected on incoming international calls from Panama, terminated in local networks, under any of its modalities. <p>Source: Law 59/2008</p>	<ul style="list-style-type: none"> • Connectivity projects in rural areas. Such projects include: <ul style="list-style-type: none"> • "Internet for everyone"; • Rural public telephones; • Community Wi-Fi • Deployment of telecom infrastructure

PARAGUAY				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo de Servicios Universales (FSU)	Ley 642/95 de Telecomunicaciones (artículo 97); Decreto 14.135/96 (artículo 129); Reglamento del Fondo de Servicios Universales y sus modificaciones, como la Resolución Directorio 2.474/2018	Comisión Nacional de Telecomunicaciones (CONATEL)	<ul style="list-style-type: none"> • 30% of the 1% of telecommunications operators' gross revenue • 50% of the amount collected of non-compliance fines from telecom operators • Donations, bequests, other contributions, or transfers granted by an individual or other legal entity. <p>Source: article 1 of Resolution 2,474/2018.¹²¹</p>	<ul style="list-style-type: none"> • Telemedicine programs • Expansion of 11 Emergency Services • Expansion of the mobile connectivity infrastructure and internet access in the western region of the country <p>Source: CONATEL, Proyectos en Curso.¹²²</p>

PERU				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Fondo de Inversión en Telecomunicaciones (FITEL)	Decreto Supremo 010-2007-MTC Resolución Ministerial 0311-2020-MTC/01.03	Programa Nacional de de Telecomunicaciones (PRONATEL), Viceministerio de Comunicaciones, Ministerio de Transportes y Comunicaciones	<ul style="list-style-type: none"> • A percentage of the total revenue generated by telecom, cable broadcasting and internet providers. The percentage is determined annually and it is usually 1%. • A percentage of the fee collected for the allocation and use of the radioelectric spectrum of public telecommunications services. The percentage is determined annually; • The resources transferred by the Public Treasury • Financial income generated by FITEL own resources • Donations <p>Source: Supreme Decree 010-2021-MTC</p>	<ul style="list-style-type: none"> • Deployment of Regional Broadband Projects in rural areas. • Creation of an emergency 911 national system. • Provide equipment and computers to disadvantaged families. • Public Wifi access in rural areas.

121. https://www.conatel.gov.py/conatel/wp-content/uploads/2021/02/rd_n_2474_2018_modificacion_reglamento_fsu.pdf

122. <https://www.conatel.gov.py/conatel/proyectos-en-curso/>

SAINT LUCIA				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Universal Service Fund (USF)	<p>Section 43 of the Telecommunications Act 27 of 2000 (Amended by Act 20 of 2003 and Act 9 of 2006)</p> <p>Telecommunications (Universal Service Fund) Regulations 120 of 2008</p> <p>Telecommunications (Universal Service Fund Contribution) Order 45 of 2009</p>	National Telecommunication Regulatory Commission (NTRC)	<ul style="list-style-type: none"> Contributions by telecommunications providers. Notably, the telecom providers must contribute 0.25% of its gross annual revenue of the first year of its license, 0.5% in the second year, and 1% in the third year and throughout the duration of the license. Any funds that may be directly appropriated by Parliament for USF purposes. Official grants, donations, bequests, other contributions, or transfers granted by an individual or other legal entity. <p>Source: Telecommunications (Universal Service Fund) Regulations SRO 120 of 2008, section 5, and SRO 45 of 2009, section 3.¹²³</p>	<ul style="list-style-type: none"> Provision of equipment and related services for community access centers, libraries, orphanages, schools, and colleges Deployment of payphones in rural communities and public institutions Improvement of internet access for the differently abled International Girls in ICT Day with the support of the International Telecommunication Union (ITU) <p>Source: Saint Lucia's NTRC, Universal Service Fund, Closed and Ongoing Projects.¹²⁴</p>

SAINT VINCENT AND THE GRENADINES				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Universal Service Fund (USF)	<p>Section 42 of the Telecommunications Act (Cap 418) of 2009</p> <p>Telecommunications (Universal Service Fund) Regulations 45 of 2008</p> <p>Telecommunications (Universal Service Fund Contribution) Order 4 of 2017</p>	National Telecommunication Regulatory Commission (NTRC)	<ul style="list-style-type: none"> Contributions by telecommunications providers. Notably, the telecom providers must contribute 0.25% of its gross annual revenue of the first year of its license, 0.5% in the second year, 1% in the third year, 1.5% in the fourth year, 1.75% in the fifth year, and 2% in the sixth and each subsequent year of its license. Any funds that may be directly appropriated by Parliament for USF purposes. Official grants, donations, bequests, other contributions, or transfers granted by an individual or other legal entity. <p>Source: Telecommunications (Universal Service Fund) Regulations 45 of 2008, section 5, and Order 2017, section 2.¹²⁵</p>	<ul style="list-style-type: none"> Wireless internet access points in community access centers Installation of payphones in tourist sites, beaches, and at points along the main road Wireless internet access points in schools Implementation of digital selective calling (DSC) for the Global Maritime Distress Safety System (GMDSS) Wireless internet access to police stations and health centers Supply of equipment and teaching aids to St. Vincent and the Grenadines Community College <p>Source: St. Vincent and the Grenadines NTRC, USF Operating Plan 2021.¹²⁶</p>

123. <https://www.ectel.int/wp-content/uploads/2015/12/SLU-sro-120-2008-usf.pdf>; <https://www.ectel.int/wp-content/uploads/2015/12/SLU-45-2009-usf-order.pdf>

124. <https://www.ntrcslu.lc/wp-content/uploads/2020/06/CLOSED-AND-ONGOING-PROJECTS.pdf>

125. http://ntrc.vc/docs/legislations/Universal_Service_Fund_regulations_1.pdf; <http://ntrc.vc/docs/legislations/Arrangement%20of%20Order.pdf>

126. <https://www.ntrc.vc/providers/universal-service-fund/>

TRINIDAD AND TOBAGO				
Universal Service Fund (USAF)	Legal Framework	Responsible Agency	Funding Sources	Funding Usage
Universal Service Fund (USAF)	Section 28 of the Telecommunications Act 4 of 2001, amended by 17 of 2004 The Telecommunications (Universal Service) Regulations, 2015 The Telecommunications (Universal Service) (Amendment) Regulations, 2019	Telecommunications Authority of Trinidad and Tobago	<ul style="list-style-type: none"> Contributions paid by the telecom service providers. Telecom providers must contribute 0.5% of their total gross annual revenue related to domestic telecommunications services or operation of domestic telecommunications network facilities, and 1% of their total gross annual revenue related to international telecommunications service or operation of international telecommunications network facilities. <p>Source: Section 5 of the Telecommunications (Universal Service) Regulations, 2015.¹²⁷</p>	<ul style="list-style-type: none"> Implementation of free public Wi-Fi at specified locations, such as public transportation hubs, national libraries, and public health institutions (i.e., National Free Wi-Fi Initiative) Provision of ICT access to persons with disabilities Provision of ICT-enabled devices and internet connectivity access services to students¹²⁸ <p>Source: TATT (2020). "Universal Service Implementation Report June 2020-May 2022."¹²⁹</p>

127. https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=519&PortalId=0&TabId=222

128. Rampersad, S. (October 2020). "TATT donates 10,000 devices to students." In Trinidad and Tobago Guardian. <https://www.guardian.co.tt/news/tatt-donates-10000-devices-to-students-6.2.1238563.392ef23e17>

129. <https://tatt.org.tt/UniversalService/UniversalServiceFundInitiatives.aspx>

ANNEX 2: USAFs' Timeline (per country)

Argentina

- 2000** : **Creation of FFSU**
Decree 764/2000 of the National Communication Commission created Argentina's Universal Service Trust Fund (FFSU).
- 2008** : **Creation of a public-private technical committee**
Decree 558/228 created a Technical Committee with seven representatives from the public and private sectors, which would be responsible for analyzing the feasibility of FFSU projects. In 2008, the funds were also transferred to an account opened for the FFSU (IADB, 2021, p.21).
- 2010** : **FFSU Regulation**
Resolution 154/2010 was FFSU first regulation.
- 2014** : **Argentina Digital Law**
Law 27,078/2014, namely Argentina Digital Law, transferred the FFSU to the National State and tasked the national communications authority with regulating and managing the FFSU, excluding the participation of the private sector. Additionally, Argentina Digital Law opened the possibility of FFSU non-refundable contributions and encouraged investments in community networks.
- 2015** : **Creation of ENACOM**
Decree 267/2015 created the National Communication Entity (ENACOM).
- 2020** : **FFSU latest regulation**
Resolution 721/2020 is the last FFSU regulation. In December 2020, the community network El Hormiguero was the first community network in the country to be awarded non-refundable funds from the FFSU.

Bolivia

- 2011** : **Creation of PRONTIS**
Law 164/2011 created the National Telecommunications Program for Social Inclusion (PRONTIS).
- 2013** : **PRONTIS regulation**
Ministerial Resolution 013/2013 regulates PRONTIS.
- 2018** : **Destination of resources**
Law 1099/2018 defined the destination of the resources collected by the Telecommunications and Transportation Regulation and Supervision Authority (ATT) for the telecommunications sector. The funds collected by ATT suffer several deductions before sending them to PRONTIS. Moreover, the legal framework prioritized investments in the deployment of fiber optic, radio base stations for mobile telecommunications, and provision of internet service for educational units.

Brazil

2000 **Creation of FUST**

Law 9,998/2000 created Brazil's universal telecommunications service fund (FUST).

2020 **New legal framework and FUST Steering Council**

Law 14,109/2020 enabled the use of FUST in broadband connectivity projects. It also established that a Steering Council for the fund will be created, which will be chaired by the Ministry of Communications.

Chile

1994 **Creation of FDT**

Law 18,168/1994 created the Telecommunication Development Fund (FDT).

2001 **FDT Regulation**

Supreme Decree 353/2001 of the Ministry of Transportation and Telecommunications approved FDT's regulatory framework,

2011 **New legal framework**

Law 20,522 indefinitely extended the FDT execution, and underscored FDT's focused on increasing the connectivity coverage of rural and urban low-income areas.

Colombia

1976 **Creation of the Communications Fund**

Law-Decree 129/1976 created the Communications Fund, which supported telecommunications social programs.

2009 **ICT Law and the creation of FONTIC**

Law 1341/2009 redefined the Communications Fund and created the Information and Communications Technology Fund (FONTIC).

2019 **ICT Modernization Law and the creation of FUTIC**

Law 1978/2019 consolidated the previous ICT and broadcasting funds (i.e., FONTIC and FONTV), respectively) and into one single ICT fund, the Unique Fund for ICT(FUTIC).

Costa Rica

2008 **Creation of FONATEL**

The General Telecommunication Law created the National Telecommunications Fund (FONATEL) in June 2008.

2015 **Start of the 2015-2021 National Plan for Telecommunications Development**

In 2015 the government launched the new national Plan for Telecommunications for the next 5 years.

2019 **Highest-ever number of projects**

In 2019 FONATEL reached a total of 36 funded projects, reaching the highest-ever number of projects since implementation started.

Dominica

2000 **Telecommunications Act 2000**

The Telecommunications Act was approved in 2000. Section 44 of the Telecommunications Act 2000 required the government to create a Universal Service Fund (USF).

2009 **USF Regulatory Framework**

The Universal Service Fund (USF) regulations were enacted.

Dominican Republic

1998 **Telecommunication Law**

Article 49 of the General Telecommunications Law creates the Telecommunications Development Fund (FDT), and article 76 establishes the Dominican Institute of Telecommunications (INDOTEL).

2010 **The Social Policy on Universal Service**

Resolution 024-10 modified Resolution 016-01, which had established INDOTEL's first Social Policy on Universal Service. Such Policy provides INDOTEL with directives to promote universal service for the public interest in the country. Particularly, this Policy defines what falls within "telecommunications services" for the purpose of formulating FDT-funded projects.

2019 **New regulatory framework**

Resolution 063-19 modified the 2010 regulatory framework for the FDT. The FDT regulation provides detailed information on how to operationalize FDT-funded projects. Moreover, the 2019 Resolution established that at least 3% of the Telecommunications Development Contribution (CDT) should be allocated to the FDT.

Ecuador

2000 **Law for Ecuador's Digital Transformation**

This law established the Telecommunications Development Fund of Ecuador (FODETEL).

2015 **New Telecommunications Law**

Although the New Telecommunications Law kept the contribution of 1% of the total income received by telecommunication service providers, the statute replaced FODETEL with the execution of "universal services projects and programs."

2016 **The Organic Code on Social Economy of Knowledge, Creativity, and Innovation ("Ingenios" Code)**

The "Ingenios" Code included the amount that was previously collected for FODETEL as one of the resources to finance the National System of Science, Technology, and Innovation. Article 602 of the "Ingenios" Code also established that the resources previously collected for FODETEL would finance connectivity and ICT-related projects in general. However, these resources were frozen until the end of 2021.

El Salvador

1998 **Creation of FINET**

Investment Fund in Electricity and Telecommunications FINET was created by Law 354.

Guatemala

1996 **Creation of FONDETEL**

The Fund for the Development of Telecommunications (FONDETEL) was created in November 1996 by Decree 94-96.

1998 **FONDETEL starts operating**

In 1998 FONDETEL was incorporated into the Ministry of Communications, Housing and Infrastructure.

2001 **New Regulation**

The Regulation for FONDETEL (the Reglamento Orgánico del FONDETEL) was approved in 2001.

2004 **Change in mechanism funding**

Until 2004, FONDETEL was funded by revenue from spectrum allocations. After 2004, the main source of funding was the national government allocation of the budget.

2018 **New proposal for National Broadband Plan**

In 2018, a non-governmental coalition led by the Alliance for Affordable Internet (A4AI) started working on a national broadband plan for Guatemala with the purpose of closing the country's digital divide.

Grenada

2000 **Telecommunications Act 2000**

The Telecommunications Act was approved in 2000. Section 44 of the Telecommunications Act 2000 required the government to create a Universal Service Fund (USF).

2009 **USF Regulatory Framework**

The Universal Service Fund (USF) regulations were enacted.

2016 **Regulation on USF Contribution**

The Telecommunications (Universal Service Fund Contribution Order) 56 of 2016 was enacted and established a new percentage that telecom operators must contribute to the country's USF.

Guyana

2016 **Telecommunications Act**

The Telecommunications Act 18 of 2016 in section 43(4) established that the Telecommunications Agency shall establish a Universality Fund.

2020 **USF Regulatory Framework**

The Telecommunications (Universal Access and Universal Services) Regulations 6 of 2020 regulated the Universality Fund. However, the fund has not been operationalized yet.

Honduras

2014 **Creation of FITT and Regulation**

The Fund for investment in Telecommunications and Technology (FITT) was created in January 2014. The FITT Regulation was approved in May 2014.

2016 **The FITT changes its financial management**

In 2016 the fund went on to be managed financially by the Banco Nacional de Desarrollo Agrícola (BA - NADESA).

2020 **New National Broadband Plan**

In 2020, Honduras approved the National Broadband Plan 2020-2025.

Jamaica

2000 **Telecommunications Act**

Section 38 of the 2000 Telecommunications Act established the Universal Service Fund.

2005 **Universal Access Company Limited**

A Ministerial Order created the Universal Access Company Limited and established that telecommunications providers must collect a levy on all international calls terminating on local networks.

2012 **Amendment of the Telecommunications Act**

The Universal Service Fund, an Agency of the Ministry of Science, Energy and Technology, replaced the Universal Access Company Limited.

Nicaragua

2004 **Creation of FITELE**

In December 2004, the Special Fund for Investment in Telecommunications and Postal Services (FITELE) was created by Executive Decree 128-2004,

2006 **FITELE starts operations and new regulations**

In January 2006, the Supreme Decree 05-2006 officially implemented and regulated the FITELE. In March 2006, by Administrative Agreement 6-2006 the new Regulations of FITELE were published. It also extended FITELE's existence for 10 years.

2016 **Decree 23-2016**

In December 2016, Decree 23-2016 established that FITELE would continue to exist for ten more years.

New National Broadband Plan

In 2016, the Good Government Plan included as part of its components the creation of the new National Broadband Plan with participation of IADB, TELCOR and COMTELCA.

Panama

1996 Law 31

In 1996, Law 31 established the obligation of the Panama government to provide universal access to telecommunications.

2008 New regulation and Creation of USAF

In 2008, the Law 59 created the USAF (Fondos de Acceso y Servicio Universal) and appointed a committee to manage it.

2015 Launch of the National Network 2.0

In 2015, the Resolution 14-2015 launched the National Network 2.0 with the goal of improving connectivity nationwide.

2017-2020 Implementation

During 2017-2020 the government will conclude implementation, operation and maintenance of the National Network 2.0 projects.

Paraguay

1995 Creation of the FDT

Law 642 of 1995 (Telecommunications Law) established the Universal Service Fund in Paraguay.

1996 Telecommunications Regulation

Decree 14,135/96 regulated the Telecommunications Law and established that the National Telecommunication Commission (CONATEL) could not use the USF funds to cover the agency's operational costs.

2018 Latest Regulatory Framework

The latest amendment to Paraguay's USF regulatory framework, which increased from 20% to 30% the amount of the 1% contribution over telecom operators' gross revenue allocated to the country's USF.

Peru

1993 Creation of FITEL

The Fund for Investment in Telecommunications was created in 1993 as a national policy.

2006 Fund becomes autonomous

In 2006 the Law 28900 granted FITEL the category of autonomous fund managed by the Ministry of Transport and Communications.

2012 New FITEL purpose

In 2012 several amendments to the National Broadband Plan were passed, which established FITEL's main purpose to be the promotion of public telecommunication services in rural areas.

2018 FITEL becomes PRONATEL

In 2018, with the purpose of strengthening FITEL's capability it was merged with the Ministry of Transport and Communications as an intangible fund, and a new entity called PRONATEL was incorporated to manage the fund.

Saint Lucia

2000 Telecommunications Act 2000

The Telecommunications Act was approved in 2000. Section 43 of the Telecommunications Act 2000 required the government to create a Universal Service Fund (USF).

2008 USF Regulatory Framework

The Universal Service Fund (USF) regulations were enacted.

2009 Regulation on USF Contribution

The Telecommunications (Universal Service Fund Contribution) Order 45 of 2009 was enacted and established the percentage that telecom operators must contribute to the country's USF.

St. Vincent & the Grenadines

2001 Telecommunications Act

The Telecommunications Act 1 was approved in 2001. Section 42 of the Telecommunications Act 2001 required the government to create a Universal Service Fund (USF).

2008 USF Regulatory Framework

The Universal Service Fund (USF) regulations were enacted.

2017 Regulation on USF Contribution

The Telecommunications (Universal Service Fund Contribution) Order 4 of 2017 updated the percentage that telecom operators must contribute to the country's USF.

Trinidad & Tobago

2004 Telecommunications Act

Although the first Telecommunications Act is from 2001, the creation of the Telecommunications Authority of Trinidad and Tobago (TATT) and the statutory provision enabling the establishment of the Universal Service Fund (USF) only took place in 2004 through an amendment to the statute.

2015 USF Regulatory Framework

The USF was regulated in 2015 through the Telecommunications (Universal Service) Regulations, 2015, enabling the collection of contributions to the USF.

2019 Amendment on USF Regulatory Framework

The Telecommunications (Universal Service) (Amendment) Regulations, 2019 updated the language of Trinidad and Tobago's USF regulatory framework, finally enabling the execution of projects.

ANNEX 3: USAFs' Financial Information

Information on the status of each individual USAF is provided hereunder. According to what has been mentioned above, governments make information about their respective USAFs, collected amounts and disbursement rates in different ways. For this reason, comparisons are hard to make. Moreover, the LAC region is known for volatile currency exchange rates, and for this reason numbers are reported in each respective official currency. A table with exchange rates of each country as of September 2021 is presented below, in order to facilitate the understanding of these numbers:

Table 5: Exchange rates (September 2021)

Country	Currency	Exchange rate*
1. Argentina	ARS	0.01
2. Bolivia	BOB	0.14
3. Brazil	BRL	0.19
4. Chile	CLP	0.0013
5. Colombia	COP	0.00026
6. Costa Rica	CRC	0.0016
7. Dominica	XCD	0.37
8. Dominican Republic	DOP	0.018
9. Ecuador	USD	1.00
10. El Salvador	SVC	0.11
11. Grenada	XCD	0.37
12. Guatemala	GTQ	0.13
13. Guyana	GYD	0.0048
14. Honduras	HNL	0.041
15. Jamaica	JMD	0.0067
16. Nicaragua	NIO	0.028
17. Panama	PAB	1.00
18. Paraguay	PYG	0.00015
19. Peru	PEN	0.24
20. Saint Lucia	XCD	0.37
21. St. Vincent and the Grenadines	XCD	0.37
22. Trinidad & Tobago	TTD	0.15

*Approximate exchange rate to USD as of September 2021

Argentina

According to extra-official information provided to the ENACOM Board of Directors by ENACOM National Promotion and Development Direction in September 2018, the FFSU had accumulated ARS 5,791,288,926 at that time¹³² (Maule, 2019, p. 60). Notably, the annual disbursement rate (i.e., annual revenue v. annual disbursement rate) has significantly varied in the past years, as depicted in the table below:

Table 6: Argentina FFSU Annual Disbursement Rate from 2016 to 2019 (in thousands)

Year	Revenue	Project Disbursement	Annual Disbursement Rate
2016	ARS 980,500	ARS 883,604	90%
2017	ARS 1,111,800	ARS 1,164,316	105%
2018	ARS 2,492,300	ARS 1,054,974	42%
2019	ARS 6,924,700	ARS 1,688,943	24%

Source: Authors based on ENACOM's and Ministry of Finance's data¹³³

As of September 2020, FFSU had collected around ARS 15 billion' (USD 150 million), and over ARS 4.6 billion has been assigned to ICT-related projects in 2020.¹³⁴ Interestingly, most of the funds were assigned to the Program to Develop the Federal Fiber Optic Network (REFEFO), a program aimed at increasing the federal fiber network capacity nationwide as well as the access of retail operators to ICT services,¹³⁵ while 34% of these funds were awarded to small and medium enterprises (SMEs), public sector, community networks and alternative stakeholders as non-refundable funds. Lastly, 1% was allocated to COVID-19 emergency programs.¹³⁶

132. Exchange rate as of June 21, 2021 (USD 1 = ARS 95.39)

133. ENACOM, Datos Abiertos, Servicio Universal (2016-2019), <https://datosabiertos.enacom.gov.ar/dashboards/20230/servicio-universal/>; ENACOM, 2020 Informe de Gestión, https://www.enacom.gov.ar/institucional/presentamos-el-informe-de-gestion-enacom-2020_n2953; Ministerio de Economía, Ejecución Presupuestaria de los Fondos Fiduciarios (2016- III Trimestre de 2020), <https://www.economia.gov.ar/onp/empresas/2020#ff>

134. ENACOM (2020). Fondo del Servicio Universal - Informe Especial: Conectividad 2020. https://www.enacom.gov.ar/institucional/presentamos-el-informe-de-gestion-enacom-2020_n2953

135. Government of Argentina. Qué es la Red Federal de Fibra Óptica. <https://www.argentina.gov.ar/jefatura/innovacion-publica/ssetic/conectar/refefo/que-es-la-red-federal-de-fibra-optica>

136 ENACOM (2020). Fondo del Servicio Universal - Informe Especial: Conectividad 2020. https://www.enacom.gov.ar/institucional/presentamos-el-informe-de-gestion-enacom-2020_n2953

Bolivia

While around 70% of the funds collected by Bolivia's Telecommunications and Transportation Regulation and Supervision Authority (ATT) are transferred to the National Treasury and later reassigned, approximately 30% is allocated to the National Telecommunication Program for Social Inclusion (PRONTIS).¹³⁷ However, several deductions are made before transferring to PRONTIS, such as payments to the International Telecommunication Union (ITU), investments for the control of the radioelectric spectrum, investments in e-government programs and projects, among others. Concerning the amount allocated to PRONTIS, Law 1099/2018 authorized the Ministry of Public Works, Services, and Housing to transfer up to BOB 5 million (i.e., around USD 725 thousands)¹³⁸ to cover medical telecenters' operational costs. Additionally, up to 10% of PRONTIS can be used to cover operational and administrative costs of the unit responsible for implementing the projects.¹³⁹

In 2020, BOB 125 million was budgeted in the framework of PRONTIS for the deployment of radio base stations to bring internet connectivity to the country's rural areas, and 93% of the budget was executed. Another project included the deployment of fiber optic networks with the budget of BOB 142 million; however, only 40% of the budget was executed.¹⁴⁰ In contrast, most projects reached a 100% disbursement rate in 2019, which had a budget of almost BOB 600 million.¹⁴¹ For 2021, it is estimated a budget of almost BOB 147 million for the deployment of fiber optic networks, and of over BOB 75 million for the deployment of radio base stations.¹⁴²

Brazil

At the time of writing, Brazil had disbursed less than 0.01% of the funds collected for the country's (FUST). The total amount collected is estimated to be at least BRL 36 billion at present values (around USD 6.8 billion),¹⁴³ but only around BRL 500 thousand had been used,¹⁴⁴ while the government employed most of the resources to ensure fiscal surplus and pay government debts.

Table 7: FUST Revenue (2001-2021)

Year	Revenue (BRL Million)	Year	Revenue (BRL Million)
2001	1,045.2	2011	2,537.2
2002	1,099.4	2012	1,727.3
2003	530.7	2013	1,510.6
2004	621.2	2014	1,545.1
2005	490.9	2015	1,564.4
2006	533.1	2016	1,432.3
2007	1,041.6	2017	1,058.8
2008	1,306.1	2018	854.9
2009	1,295.7	2019	1,215.3
2010	833.4	2020	900.1
		2021*	775.7
			Total 23,918.9

*As of May 2021

Source: ANATEL (2021)¹⁴⁵

137. Information provided by the Vice-Ministry of Telecommunications of the Ministry of Public Works, Services, and Housing through interview on April 14, 2021.

138. Exchange rate as of April 21, 2021 (USD 1= BOB 6.89).

139. Law 1356/2020, General State Budget Law. <https://www.economiayfinanzas.gob.bo/ley-n-1356-de-28-de-diciembre-de-2020.html>

140. OOPP (2020). Audiencia Pública de Rendición de Cuentas Final - Gestión 2020. <https://www.oopp.gob.bo/wp-content/uploads/2021/02/PRESENTACION-RENDICION-PUBLICA-DE-CUENTAS-22-02-2021-ok.pdf>

141. OOPP (2019). Rendición Pública de Cuentas y Evaluación de Resultados - Gestión 2019. https://www.oopp.gob.bo/wp-content/uploads/2020/antiguos/f1429987c83140bd4b4bd4e7619976c9Rendici%C3%B3n_P%C3%BAblica_de_cuentas_final_2019.pdf

142. OOPP (2021). Audiencia de Rendición Pública de Cuentas Inicial - Gestión 2021. <https://www.oopp.gob.bo/wp-content/uploads/2021/04/PRESENTACION-OFICIAL-RENDICION-PUBLICA-DE-CUENTAS-31-MARZO-2021.pdf>

143. ANATEL (2021). Arrecadação do Fundo de Universalização dos Serviços de Telecomunicações - FUST. <https://sistemas.anatel.gov.br/anexar-api/publico/anexos/download/3f6f712e34c37d36e525d03030a5c543>; Bucco, R.(May 2021). "Presidente da ANATEL reconhece que saldo do FUST não retornará." In Telesintese. <https://www.telesintese.com.br/presidente-da-anatel-reconhece-que-saldo-do-fust-nao-retornara/>

144. Agência Senado (August 2018). "Após 20 anos e R\$22,6 bi arrecadados, FUST falha em ampliar acesso à internet." <https://www12.senado.leg.br/noticias/materias/2020/08/17/apos-20-anos-e-r-22-6-bi-arrecadados-fust-falha-em-ampliar-acesso-a-internet>

145. ANATEL (2021). "Receita do Fundo de Universalização dos Serviços de Telecomunicações - FUST." <https://sistemas.anatel.gov.br/anexar-api/publico/anexos/download/3f6f712e34c37d36e525d03030a5c543>.

Chile

Differently from most Latin American and Caribbean countries, Chile does not charge a specific contribution from telecom operators. Instead, the National Budget Law annually allocates an amount to the Telecommunication Development Fund (FDT). Table 8 depicts the amount allocated from 2015 to 2021, as well as the amounts annually disbursed until April 2021.

Colombia

The government defines the FUTIC's budget annually. The Ministry of Information and Communications Technology (MinTIC) is responsible for implementing ICT-related projects in the country, and usually disburses around 90% of the defined budget for that year. Nonetheless, it is noteworthy that FUTIC is also used to cover the Ministry's operational costs, which represent 10-20% of the total disbursements, as depicted in table 9 below.

Table 8: Chile's FDT Budget and Disbursement (2015-2021)

	Budgeted*	Disbursed*	Annual Disbursement Rate
2015	CLP 12,655,140	CLP 12,089,317	95.5%
2016	CLP 5,597,160	CLP 5,093,381	91.0%
2017	CLP 21,219,628	CLP 9,521,858	44.9%
2018	CLP 7,507,060	CLP 5,811,990	77.4%
2019	CLP 33,334,538	CLP 27,011,172	81.0%
2020	CLP 33,393,083	CLP 33,350,673	99.9%
2021	CLP 35,461,927	CLP 1,089,528*	3.1%*

*In thousands **As of April 2021

Source: Authors based on Presupuesto de la Nación.¹⁴⁶

Table 9: Colombia's FUTIC Budget and Disbursement from 2015 to 2021 (in Colombian Pesos)

Year	Budgeted	Disbursed		Annual Disbursement Rate
		Operational Costs	Project Investments	
2015	1,295,394,544,122.00	346,838,193,324.64	853,364,653,988.45	93%
2016	935,662,730,657.00	85,902,690,095.00	831,112,223,953.00	98%
2017	986,467,136,777.00	95,361,856,189.00	785,985,533,970.00	89%
2018	972,003,641,125.00	180,383,005,581.00	658,230,204,249.00	86%
2019*	1,267,219,919,943.00	36,656,923,378.00*	171,272,936,095.00*	16%
2020	1,335,736,300,361.00	208,315,198,596.00	1,090,635,670,260.00	97%
2021**	2,160,117,000,000.00	172,506,278,583.28**	220,749,383,926.00**	18%**

*By June 2019. **By March 2021

Source: Authors based on MinTIC, Información Presupuestal 2015-2021.¹⁴⁷

Table 10: FUTIC's Disbursement (2015-2021)

Year	Total Disbursement	Operational Costs (%)	Project Investments (%)
2015	1,200,202,847,313.09	29%	71%
2016	917,014,914,048.00	9%	91%
2017	881,347,390,159.00	11%	89%
2018	838,613,209,830.00	22%	78%
2019*	207,929,859,473.00	18%*	82%*
2020	1,298,950,868,856.00	16%	84%
2021**	393,255,662,509.28	44%**	56%**

*By June 2019. **By March 2021

Source: Authors based on MinTIC, Información Presupuestal 2015-2021.¹⁴⁸

146. Chile, Presupuesto de la Nación, <https://www.bcn.cl/presupuesto/periodo/2021/partida/19/capitulo/02/programa/01/subtitulo/33/item/01/asignacion/039>

147. MinTIC. Información Presupuestal 2015-2021. <https://www.mintic.gov.co/portal/inicio/Presupuesto/Informacion-Presupuestal/>

148. MinTIC. Información Presupuestal 2015-2021. <https://www.mintic.gov.co/portal/inicio/Presupuesto/Informacion-Presupuestal/>

Costa Rica

At the end 2019, the FONATEL resources had been invested across 4 programs, 36 projects and a total of US \$ 125 million invested,¹⁴⁹ which translated into coverage of 478 districts that accounts for 98% of the total districts of the country. This benefited 1,171,572 people with access to telecommunications services, 370,662 households with internet service, 996 public service provision centers (CPSP) with connection to fixed voice and internet services, 3,809 CPSP with devices for access and use of the latter and a contribution of 4,85% to the increase in penetration of the fixed internet service.¹⁵⁰

The following table shows the details of the amounts collected (parafiscal contribution of between 1% and 3% - set annually by the regulator - of the annual gross income of telecom operators); the amount budgeted for the various programs of the fund, and the amount disbursed from 2017 to 2019.

Dominica

In 2010, Dominica started collecting the contributions for the country's Universal Service Fund (USF). For the first and second years of the license, telecom operators must contribute 0.25% and 0.5% of their gross annual revenue, respectively. From the third year onward, telecom providers must contribute 1%.¹⁵⁴ As of February 2019, Dominica's disbursement rate was 53%. Specifically, the country had collected USD 2,389,203 and disbursed USD 1,266,595 from 2010 to February 2019 (Bleeker, 2019, p. 52).

Table 11: Collected and disbursed funds in Costa Rica (2015-2019)

Year	Collected ¹⁵¹	Budgeted	Disbursed	Annual Disbursement Rate (relative to the budgeted amount)
2017	¢19 877 201 995,00	¢35 305 865,27	¢12 736 124 633,00	64%
2018	¢13 346 091 285,00	¢29 431 869 638,00	¢25 409 202 459,00	86%
2019	¢14 079 404 007,81	¢34 322 500 652,72	¢25 585 937 158,34	75%

Source: Own elaboration based on FONATEL's information publicly available (years 2019, 2018 and 2017)^{152 153}

149. https://www.sutel.go.cr/sites/default/files/informes_fonatel/informe_fonatel_2019vf.pdf

150. <https://publications.iadb.org/publications/spanish/document/Cerrando-la-brecha-de-conectividad-digital-Políticas-públicas-para-el-servicio-universal-en-América-Latina-y-el-Caribe.pdf>

151. This represents the amount collected from operators (Contribución Especial Parafiscal) but FONATEL also comprises other sources of money.¹⁵² Reports from 2019, 2018 and 2017 - Available at <https://www.sutel.go.cr/fonatel/informes-fonatel>

152. Reports from 2019, 2018 and 2017 - Available at <https://www.sutel.go.cr/fonatel/informes-fonatel>

153. Amounts from 2017 had been reported in USD by SUTEL, and were converted into colones.

154. Telecommunications (Universal Service Fund) Regulations SRO 45 of 2009. <https://www.ntrcdom.org/index.php/en/laws-regulation/telecommunication-regulations>

Dominican Republic

The Telecommunications Development Fund (FDT) started 2021 with a balance of over DOP 1.14 billion and has disbursed around DOP 14.8 million as of May 2021. The overall balance of the FDT has been around DOP 1.2 billion in the past years.

Although the FDT mostly consists of the contribution paid by telecom operators (i.e., Telecommunications Development Contribution – CDT), the amount collected is not entirely assigned to the FDT. The CDT consists of 2% of public telecommunication services that are billed directly to end users' billing and 2% of operators' revenues derived from international services.¹⁵⁶ Only 4.13% of the CDT was allocated to the FDT in 2021 (i.e., DOP 76,619,301), while the remaining funds are used to cover operational costs of the Dominican Institute of Telecommunications (INDOTEL). The FDT regulatory framework establishes that at least 3% of the CDT must be allocated to the FDT.

Ecuador

Although the contribution of 1% of telecommunications service providers' total income has been collected by the Telecommunications Regulation and Control Agency (ARCOTEL), all collected resources have been transferred to the Ministry of Finance and have not been used for ICT-related projects since 2016. Changing this scenario is something that is currently being discussed within the country. Further, the Telecommunications Law, enacted in 2015, determined that the funds resulting from the 1% contribution could not be used until the end of 2021 (five years from December 2016).¹⁵⁷

El Salvador

FINET, the USAF fund in El Salvador, has only funded projects related to electric infrastructure. The electric infrastructure projects are aimed at facilitating the access of rural sectors and those with lower income of the population to electricity. Government officials from FISDL (i.e., the fund manager entity) confirmed this information. The following table shows the details of the amounts collected and disbursed in electricity infrastructure projects for a period of 4 years.¹⁵⁸

Table 12: Dominican Republic - Funds Available and Disbursed (2016-2021)

Year	Available	Disbursed	Annual Disbursement Rate
2016	DOP 1,159,784,975.42	DOP 207,369,066.38	17%
2017	DOP 1,230,323,759.98	DOP 111,538,890.00	9%
2018	DOP 1,256,216,441.92	DOP 23,982,258.22	1.9%
2019	DOP 1,232,221,702.19	DOP 89,855,490.28	7%
2020	DOP 1,210,728,252.11	DOP 22,791,186.16	1.8%
2021	DOP 1,137,460,037.29	DOP 14,821,807.78	1.3%

Source: Authors based on INDOTEL's balance sheets from December 2016 to May 2021¹⁵⁵

Table 13: El Salvador - Funds Available and Disbursed (2015-2019)

Year	Available	Disbursed	
2015	USD 131,860,000		
2016	USD 93,166,000	USD 90,983,300	90%
2017	USD 46,288,000	USD 45,860,000	99%
2018	USD 210,000	USD 50,207,005	239%
2019	USD 112,158	USD 55,179,713	491%

*The amounts are approximate. Government sources reviewed do not categorize the use of funds in this structure.

Source: Authors own elaboration based on FISDL information¹⁵⁹

155. INDOTEL, Balance General (December 2013-April 2021). <https://transparencia.indotel.gob.do/finanzas/balance-general/>

156. Law 153-98, Article 45.1.

157. <https://www.telecomunicaciones.gob.ec/wp-content/uploads/downloads/2016/05/Ley-Org%C3%A1nica-de-Telecomunicaciones.pdf>

158. The amounts depicted in the table are approximate figures.

Grenada

Grenada's National Telecommunications Regulatory Commission (NTRC) collects contributions from telecom operators for the country's Universal Service Fund (USF) based on their years of operation. Specifically, the contribution ranges from 0.25% to 2% of telecommunications providers gross annual: 0.25% of telecom operators' gross annual revenue for the first year of its license; 0.50% for the second year; 1.0% for the third year; 1.5% for the fourth year; 1.75% for the fifth year; and 2% for the sixth year onward. As of May 2021, the total revenue collected for the USF is estimated to be around XCD 20 million, while total disbursement has been over XCD 11 million. Therefore, approximately 60% of the funds have been disbursed. Notably, XCD 7.3 million has already been committed for new projects.¹⁶⁰

Guatemala

Guatemala's Fund for the Development of Telephony (Fondetel), in Guatemala, cannot be used to finance broadband. Rather, it is dedicated to fixed telephony only according to Decree 94-96. Further, the last approved "mission" of the fund is to address the development of telephony and telecommunications in rural areas as well as low-income urban areas.¹⁶¹ As of August 2021, the fund had GTQ 7,630,000.00 available.¹⁶² This amount is approximately equivalent to USD 1 million. Since 2019 the same amount has been allocated. In April 2021 there was a modification due to external reasons that has decreased the available amount in GTQ 370,000 (USD 48,000)¹⁶³ but it is not clear why this has happened.

Table 14: Guatemala
- Funds Available –
GTQ (2016-2021)

Year	Available
2016	6,500,000.00
2017	6,100,000.00
2018	6,100,000.00
2019	8,000,000.00
2020	8,000,000.00
2021	7,630,000.00

Source: Authors own elaboration based on Fondetel¹⁶⁴

According to the Article 72 of Decree 94-96, if over GTQ 30 million are accumulated by the fund, the exceeding amount should be transferred and used towards paying public debt or towards public investments.

Guyana

Although the Telecommunications Act 18 of 2016 established the Universality Fund in Guyana, the fund was only regulated in October 2020.¹⁶⁵ Nevertheless, no funds have been collected by Guyana's Telecommunication Agency as of May 2021.¹⁶⁶ Article 12 of the regulation n.6/2020 established that the fund should be used "in sole discretion of the Minister, to subsidize the retail prices charged for fixed wire public telecommunication services, to provide assistance in such prices reaching economic levels".¹⁶⁷

160. Information provided by Grenada NTRC via email on May 13, 2021.

161. <http://fondetel.gob.gt/wp-content/uploads/2019/09/Punto-resolutivo-vision-y-mision.pdf>

162. <https://fondetel.gob.gt/wp-content/uploads/2021/09/08-agosto-Articulo-10-Numeral-7-Presupuesto-de-Ingrosos-y-Egresos.pdf>

163. <https://fondetel.gob.gt/wp-content/uploads/2021/06/decreto-57-2008-articulo-10-numeral-7-modificaciones-al-presupuesto-abril-2021.pdf>

164. http://fondetel.gob.gt/info_publica-2/decreto-57-2008-articulo-10-numeral-7/

165. https://officialgazette.gov.gy/images/gazette2020/oct/Extra_23OCTOBER2020Reg6of2020.pdf

166. Information provided by Guyana's Telecommunications Agency via email on May 12, 2021.

167. https://officialgazette.gov.gy/images/gazette2020/oct/Extra_23OCTOBER2020Reg6of2020.pdf

Honduras

In early 2021, the Investment Fund in Telecommunications and Technology (Fondo de Inversiones en Telecomunicaciones y Tecnologías de la Información - FIIT) had a balance equivalent to USD 22,579,940.97.¹⁶⁸ The FIIT will be used entirely

for financing the New National Broadband Plan 2020-2025. The New National Broadband Plan 2020-2025 consists of 4 projects that will require investments for USD 17,596,320.00 according to the following details:

Table 15: Expected investments - National Broadband Plan in Honduras

	Year 1 (2021)	Year 2 (2022)	Year 3 (2023)	Year 4 (2024)	Year 5 (2025)
Project 1	USD 228,480	USD 456,540	USD 456,540	USD 456,540	USD 456,540
Project 2	USD 68,240	USD 336,480	USD 336,480	USD 336,480	USD 336,480
Project 3	USD 58,800	USD 117,180	USD 117,180	USD 117,180	USD 117,180
Project 4	USD 6,750,000	USD 6,750,000	-	-	-
TOTAL	USD 7,205,520	USD 7,660,200	USD 910,200	USD 910,200	USD 910,200

Source: Authors own elaboration based on data from National Broadband Plan strategy shared by government officials interviewed.

Jamaica

As of March 2019, Jamaica's USAF has approximately JMD 12.9 billion in reserves. However, the amount in reserve has been consistently declining since 2017, given the reduction in USAF revenue streams. Specifically, the revenue declined from JMD 1.306 billion for the year ending in March 2017 to JMD

591 million for the year ending in March 2021. Such decline is attributed to the increase of use of voice over IP (VOIP) technologies for international calls, which reduced the amount of levy collected from international inbound telephone calls.¹⁶⁹

Table 16: Available resources in Jamaica

	As of March 2017	As of March 2018	As of March 2019
Fund Balance	JMD 14,409,112	JMD 13,883,750	JMD 12,916,391

Source: Authors based on Jamaica's USAF 2017/2018 and 2018/2019 Annual Reports. Financial reports cover the period from April to March of the following year. - Numbers in thousands

Table 17: Jamaica USAF Annual Revenue and Expenses (2016-2019)

	April 2016 - March 2017	April 2017 - March 2018	April 2018 - March 2019
Levy Collection	JMD 1,306,560	JMD 972,894	JMD 591,185
Other Revenues	JMD 774,337	JMD 186,266	JMD 272,850
Project Costs	JMD 928,866	JMD 1,174,524	JMD 1,467,409
Administrative Costs	JMD 142,394	JMD 494,253	JMD 341,373

Source: Authors based on Jamaica's USAF 2017/2018 and 2018/2019 Annual Reports. Financial reports cover the period from April to March of the following year. - Numbers in thousands

This reduction in revenue streams has also impacted the annual disbursement rate. When comparing annual project costs with annual levy collection, the increase in the annual disbursement rate is staggering – from 71% in March 2017 to 248% in March 2019.

Similarly, administrative costs represented 58% of the levy collected in the 2019 Fiscal Year, while administrative costs were only 11% of the levy collected from telecom operators in the 2017 Fiscal Year.

Table 18: Jamaica Project Cost v. Levy Collection and Disbursement Rate (%)

	April 2016 – March 2017	April 2017 – March 2018	April 2018 – March 2019
Levy Collection	JMD 1,306,560	JMD 972,894	JMD 591,185
Project Cost	JMD 928,866	JMD 1,174,524	JMD 1,467,409
Disbursement Rate	71%	121%	248%

Source: Authors based on Jamaica’s USAF 2017/2018 and 2018/2019 Annual Reports. Financial reports cover the period from April to March of the following year. – Numbers in thousands.

Table 19: Levy Collection; Administrative Cost and Administrative Cost Rate

	April 2016 – March 2017	April 2017 – March 2018	April 2018 – March 2019
Levy Collection	JMD 1,306,560	JMD 972,894	JMD 591,185
Administrative Cost	JMD 142,394	JMD 494,253	JMD 341,373
Administrative Cost Rate	11%	51%	58%

Source: Authors based on Jamaica’s USAF 2017/2018 and 2018/2019 Annual Reports. Financial reports cover the period from April to March of the following year. – Numbers in thousands

Nicaragua

In December 2016, Decree 23-2016 established that FTEL would continue to exist for ten more years, and that geographic areas with no coverage or poor coverage should be the focus of the resources.¹⁷⁰

While there seems to be evidence that some projects have been implemented since 2005 using the USAF,¹⁷¹ little information has been found regarding the availability of funds and/or disbursements.

Panama

According to the Annual Plan of the Junta Asesora de Servicio y Acceso Universal for 2021, the total collected amount for 2021 was USD 8.3 million and the projected expenses for 2021 are USD 21.6 million, with a balance brought from the previous year of USD 14 million.¹⁷² Some of the resources are used to fund public telephony projects and some will be used for optical fiber projects; management systems; laptop purchases, and rural connectivity projects.¹⁷³ A proposed Bill from 2020 is aimed at increasing the revenue of the USAF in Panama, with 25% of the resources from spectrum bids to be allocated to it.¹⁷⁴

170. <http://legislacion.asamblea.gob.ni/normaweb.nsf/b92aeea87dac762406257265005d21f7/b47332c1ccdcf74006258088007643b4?OpenDocument>

171. See IADB (2021), pages 58 to 61.

172. The total collected amount for 2021 was PAB 8,316,000.00 and the projected expenses for 2021 are PAB 21,681,033.55, with a balance brought from the previous year of PAB 14,010,000.00. One PAB = 1 USD. See https://www.gacetaoficial.gob.pa/pdfTemp/29290_A/GacetaNo_29290a_20210520.pdf (Page 46)

173. Id.

174. https://www.espaciocivico.org/wp-content/uploads/2020/08/2020_A_031.pdf

Paraguay

According to the contracts signed by the National Telecommunications Commission (CONATEL) from 2011 to 2019 for the execution of USAF-related projects in Paraguay, around PYG 187 billion of the country's Universal Service Fund (FSU) have been allocated. Nevertheless, it is not clear how much of this amount has been disbursed.

Table 20: Amounts of USAF Related Contracts in Paraguay (2011-2019)

Year	Contracts Signed (PYG)
2011	PYG 14,000,000,000
2012	PYG 40,000,000,000
2013	PYG 5,206,185,120
2014	PYG 34,464,660,930
2015	PYG 1,984,999,999
2016	-
2017	PYG 24,257,960,445
2018	PYG 34,911,090,092
2019	PYG 32,938,500,000
TOTAL	PYG 187,763,396,586

Source: CONATEL, "Contratos Otorgados a través del FSU."¹⁷⁵

In 2018, information provided by media outlets in Paraguay indicated that only 15% of the overall amount collected had been disbursed by 2017. It was also reported that CONATEL had collected around PYG 40 billion in 2013, PYG 55 billion in 2014, and PYG 35 billion in 2015. In 2016 and 2017, PYG 24.7 billion was collected each year.¹⁷⁶

Peru

PRONATEL's institutional budget for the year 2020 was PEN 364,851,145, of which a total of PEN 356,490,278.33 was spent (98%).¹⁷⁷ The two biggest projects PRONATEL invests its resources in are the Regional Networks and the National Fiber Optic Backbone network. The former is intended to provide internet access in rural areas and the latter is the backbone through which the Regional Networks connect. For the Regional Networks, 4 projects have already been implemented and are in the operational phase with a total amount of PEN 720,593,883 invested. 15 projects are in the implementation phase with a total amount of PEN 1,090,906,210 invested up to December 2020.¹⁷⁸ For the National Fiber Optic Backbone, the estimated investment is PEN 1,284,571,000 connecting 22 regional capitals through a 13,500 km fiber optic network.¹⁷⁹

Saint Lucia

As of May 2021, the National Telecommunications Regulation Commission (NTRC) in Saint Lucia has collected around XCD 21 million, from which XCD 8 million has been disbursed. As a result, the overall USAF disbursement rate has been around 40%. However, XCD 7 million has already been committed towards a COVID-19 Response Project. Deducting the amounts disbursed and the fund committed, the USAF has around XCD 6 million available.¹⁸⁰

175. <https://www.conatel.gov.py/conatel/contratos-fsu/>

176. Larocca, N. (2018). "Conatel Paraguay solo utilizó el 15% de lo recaudado por el Fondo de Servicios Unversales." In TeleSemana. <https://www.telesemana.com/blog/2018/03/12/conatel-paraguay-solo-utilizo-el-15-de-lo-recaudado-por-el-fondo-de-servicios-universales/>

177. http://www.pronatel.gob.pe/pte/ayuda_memoria_2020.pdf

178. http://www.pronatel.gob.pe/pte/ayuda_memoria_2020.pdf

179. <https://publications.iadb.org/publications/spanish/document/Cerrando-la-brecha-de-conectividad-digital-Politicas-publicas-para-el-servicio-universal-en-America-Latina-y-el-Caribe.pdf>

180. Information provided by Saint Lucia's NTRC via email on May 12, 2021.

St. Vincent & the Grenadines

As of December 2020, a total of XCD 18,208,035.37 was collected from telecom service providers, while XCD 17,461,839.16 has been disbursed. As such, the overall disbursement rate is over 95%.¹⁸¹ Like Grenada, the contribution collected from telecom providers ranges from 0.25% to 2% of their gross annual: 0.25% of telecom operators' gross annual revenue for the first year of its license; 0.50% for the second year; 1.0% for the third year; 1.5% for the fourth year; 1.75% for the fifth year; and 2% for the sixth year onward. As depicted in table 21 below, revenues collected in 2020 have substantially increased, reaching over XCD 2.8 million.

When comparing project costs with revenue collected, it is noteworthy how the annual disbursement rate has significantly varied throughout the years. While the amount disbursed for project execution was almost 150% of the revenues collected in 2019, project disbursement was only 32% in 2020. This was due to deferral of payments as some USAF projects did not meet their contractual obligations.¹⁸³ Likewise, the rate of administrative costs relative to annual revenues has ranged from around 10-30% in the past five years.

In 2021, the USAF expects to collect XCD 2,225,700.00 from the telecommunications service providers.

Table 21: St. Vincent and the Grenadines - USAF Annual Revenue and Expenditures (2016-2020)

	2016	2017	2018	2019	2020
Revenue	1,193,052	1,413,095	1,841,640	1,523,893	2,897,807
Project Costs	922,155	1,220,090	464,294	2,247,480	934,219
Administrative Costs	307,037	432,095	365,245	407,975	372,810

Amounts in XCD

Source: Authors based on NTRC's USAF Operating Plans from 2016 to 2021.¹⁸²

Table 22: St. Vincent and the Grenadines - Project Cost v. Revenue Collected (2016-2020)

	2016	2017	2018	2019	2020
Revenue	1,193,052	1,413,095	1,841,640	1,523,893	2,897,807
Project Costs	922,155	1,220,090	464,294	2,247,480	934,219
Disbursement Rate	77%	86%	25%	147%	32%

Amounts in XCD

Source: Authors based on NTRC's USAF Operating Plans from 2016 to 2021.¹⁸⁴

Table 23: St. Vincent and the Grenadines - Administrative Cost v. Revenue Collected (2016-2020)

	2016	2017	2018	2019	2020
Revenue	1,193,052	1,413,095	1,841,640	1,523,893	2,897,807
Administrative Costs	307,037	432,095	365,245	407,975	372,810
Administrative Cost Rate	26%	31%	20%	27%	13%

Source: Authors based on NTRC's USAF Operating Plans from 2016 to 2021.¹⁸⁵

181. Information provided by St. Vincent and the Grenadines' NTRC on June 17, 2021.

182. <https://www.ntrc.vc/providers/universal-service-fund/>

183. St. Vincent and the Grenadines' NTRC (2021). "USF Operating Plan 2021." <https://www.ntrc.vc/providers/universal-service-fund/>

184. <https://www.ntrc.vc/providers/universal-service-fund/>

185. <https://www.ntrc.vc/providers/universal-service-fund/>

Trinidad & Tobago

As of September 2020, the Telecommunications Authority of Trinidad and Tobago (TATT) had a revenue of over TTD 120 million, but only disbursed around TTD 12 million. Notably, fund disbursement related to project execution only started in 2020, as the USAF regulation was amended to enable investments in specific projects in 2019. Therefore, Trinidad and Tobago's overall disbursement rate was approximately 10% as of September 2020.

Table 24: Trinidad and Tobago – USAF Revenue Collected and Disbursement (2016-2020)

Year	Revenue Collected	Disbursement	
		Project Costs	Administrative Costs
2016	TTD 120,538,365	-	TTD 360
2017	TTD 89,698	-	TTD 360
2018	TTD 66,290	-	TTD 360
2019	TTD 193,761	-	TTD 360
2020	TTD 2,686,629	TTD 11,739,163	TTD 351,307
TOTAL	TTD 123,574,743	TTD 12,091,910	

Source: Authors based on TATT, Universal Service Fund Accounting Reports 2016-2020.186

The initial amount of TTD 120,538,365, in 2016, comes from revenues received from spectrum licenses and other fees. In the following years, the revenue collected refers to the contributions paid by the telecom operators, which contribute 0.5% of their total gross revenue related to domestic telecommunications services and 1% of their total gross revenue from international telecommunication services. The column "Revenue Collected" refers to the amount paid by telecom operators from 2016 to 2020, and not the amount invoiced to them. For instance, TATT has not levied USAF invoices for 2017/2018 fiscal year. Finally, it is noteworthy the surge in the administrative costs in 2020. From 2016 to 2019, administrative costs only included bank charges, while in 2020 those costs encompassed not only bank charges but also staff costs, contracted services, hosting of conferences, and advertising.

186. <https://tatt.org.tt/UniversalService/UniversalServiceFundAccountingReports.aspx>

ANNEX 4:

List of Questions (Semi-Structured Interviews)

1 Does the country have a Universal Access/Service legal and/or policy framework?
If so, please provide a link or copy of these frameworks.

2 Does the country have a Universal Service/Access Fund (USAF) in place?
If so, please provide the current and relevant statutes or regulatory instruments.

3 What are the control mechanisms in place? Who evaluates the disbursement of the USAF funds and/or the lack of disbursement?

4 Who administers/manages the Fund? Provide contact details in case follow up is needed

5 What are the sources of contributions to the fund (include percentage of revenues from each source where relevant)?

6 What is the existing balance on the fund accounts in local currency (By February 2021 or most recently available)?

7 What is the average annual disbursement rate for the fund over the last 10 years (i.e., how much of what is collected is assigned or allocated for projects)?

8 For each of the last 10 years what were the total revenues (in local currency) of the Fund?

List of Questions (continued)

9 For each of the last 10 years what were the total disbursements (in local currency) by the Fund?

10 Are resources allocated to other governmental units? How? Who decides about the unspent/surpluses of funds? Is the Ministry of Economy involved in such decisions?

11 What type of projects has your country's USAF funded in the last 2-5 years? Be as specific as you can.

12 Do you have specific projects targeted at marginalized groups?
If so, please provide details of the level of investment in these types of projects.

13 Does the USAF fund alternative connectivity models? Which ones?

14 Are community networks able to benefit from USAF resources? How? Please provide examples.

15 Have you conducted an evaluation of the USAF and its impact in the last 10 years?
If so, please provide relevant reports.

16 Do you produce USAF annual reports? If so, please provide the last 2 reports or a link to them on the website.

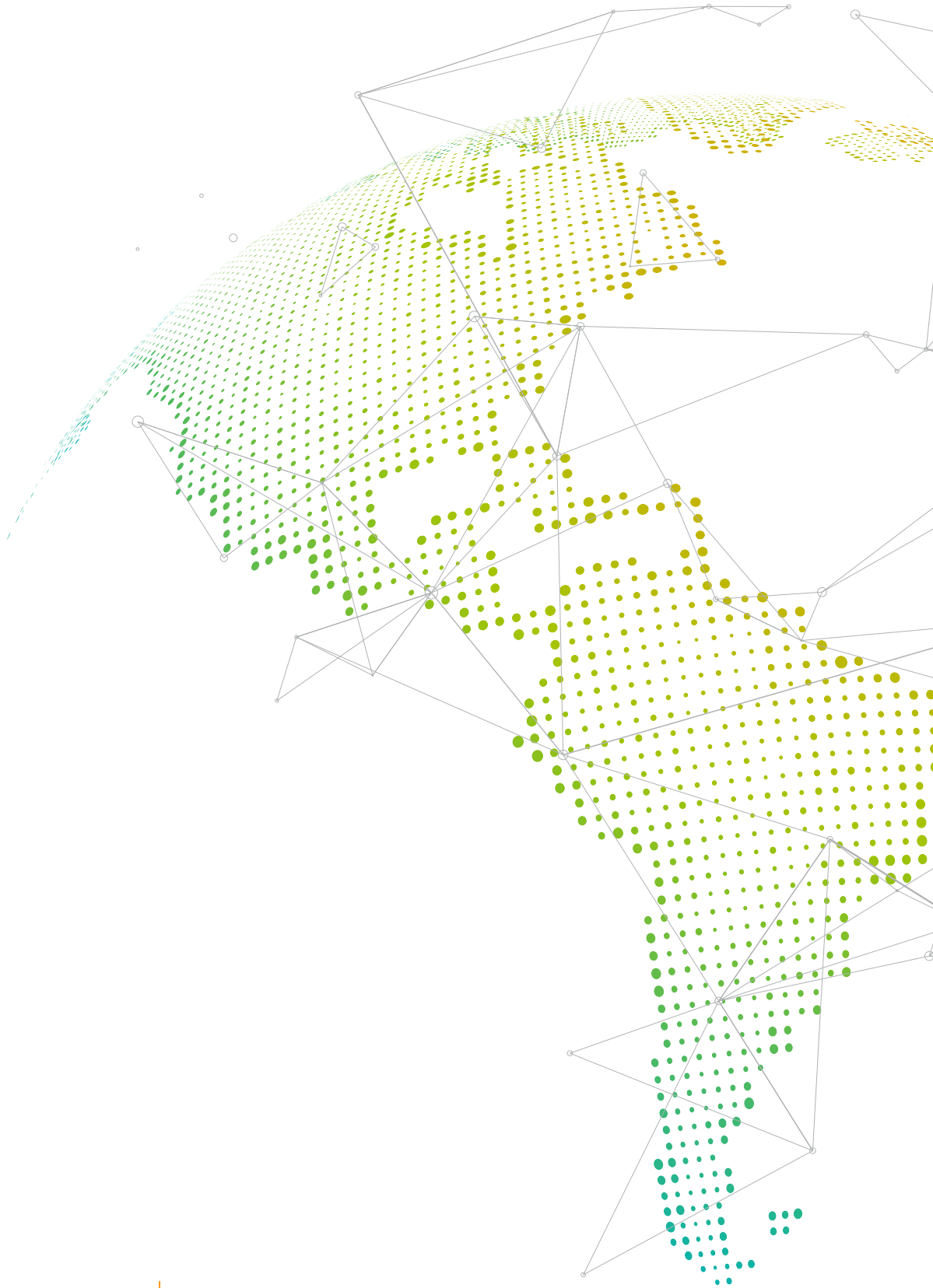
17 Are the USAF reports and project updates available on the website and to the public in any other form?

List of Questions (continued)

18 What challenges has your institution faced with unlocking the potential of the USAF or its overall universal access/service strategy? Please be as specific as possible

19 To what extent have international organizations (e.g., ITU) and/or public interest organizations been useful to facilitate the development and implementation of universal access in your country?

20 Please provide any additional comments and information you believe is relevant to this analysis.



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