







Article 28 of the Political Constitution of the United Mexican States (Constitution), paragraph 15th, establishes that the Federal Telecommunications Institute (IFT or the Institute) is an autonomous body, with legal capacity and assets, whose purpose is the efficient development of Telecommunications and Broadcasting (T&B):

"...To this purpose, it will be in charge of the regulation, promotion and supervision of the use, enjoyment and exploitation of the radio spectrum, networks and the provision of broadcasting and telecommunications services, as well as access to active and passive infrastructure, and other essential inputs, guaranteeing the stipulations of articles 6th and 7th of this Constitution."

In addition, article 28 of the Constitution stipulates that the IFT will be authority on the subject of economic competition in the T&B sectors, granting it various powers.

This set of responsibilities confers the IFT a predominantly technical and specialized character; in line with such purposes, the Institute has worked to create a regulatory framework to attain more competition, a wider offer, better prices, a higher quality and more coverage in T&B services, fundamental premises to drive competitiveness and economic growth, to guarantee the integration of the population to the information and knowledge society, as well as to improve its quality of life. This, maintaining the institutional commitment to orient the exercise of its functions to transparency and accountability.

Therefore, the Institute will continue to focus its efforts on actions that address its obligations as an autonomous constitutional body with an aim on increasing the citizens' welfare, promoting people's right to privacy, right of genre, universal digital inclusion and no discrimination; all this, based on the constitutional principles that originated it.

For 2019, the main challenges of the Institute on the subject of telecommunications consist of increasing services coverage and penetration to reduce the digital gap among the population; maintain network security and reliability, to obtain a better connectivity under the best possible price and quality conditions; encourage diversity in the media and the right to information; as well as protect users and audiences, fostering an environment of accessibility and affordability for the whole population.

Relating to services offer, the Institute will continue to generate competition conditions, investment certainty, an effective institutional framework, and modern, timely and pertinent regulations, to have a direct positive impact on the population's life conditions and economy.

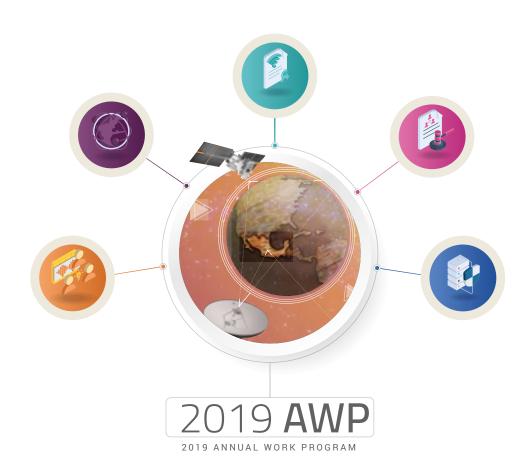




2019 ANNUAL WORK PROGRAM

The IFT is designed to be an autonomous institution in charge of regulating and supervising the T&B sectors, as well as being the economic competition authority in those sectors; it manages the radio spectrum and regulates media and audiovisual contents. This implies the absence of duplicate functions with other institutions of the Mexican State, aside that few regulators in other countries hold all these legal powers.

In this way, this Annual Work Program (AWP) 2019 will not only comply with the applicable legal framework, but will also provide a description of the intended specific projects.





Alignment with institutional objectives and project management

The Institute has a strategic base of institutional objectives (see Figure 1), to which it aligns the project portfolio integrated in the AWP, and their results have contributed to the evolution of the regulated sectors, with a positive impact on the users of T&B services.

FIGURE 1 IFT'S INSTITUTIONAL OBJECTIVES AND STRATEGIES



OBJECTIVE 1

Promote and encourage that users and audiences enjoy enhanced public service options at affordable prices, by nurturing competition and free trade in the regulated sectors.



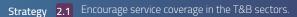
Strategy 1.2 Encourage the entry of new competitors and plurality in the T&B sectors, eliminating barriers to free access.

Strategy 1.3 Manage and encourage an efficient use of the radio spectrum in the T&B sectors.



OBJECTIVE 2

Promote and encourage conditions for universal access to telecommunications and broadcasting technologies and services, to maximize social welfare.



Strategy 2.2 Encourage the development and efficient use of the infrastructure in the T&B sectors.



OBJECTIVE 3

Guarantee that telecommunications and broadcasting services received by the population are consistent with international quality standards.



Strategy 3.2 Improve the user's experience on the quality of telecommunications



OBJECTIVE 4

Foster respect for the rights of telecommunications and proadcasting services end users and audiences. Strategy 4.1 Encourage users and audiences protection.

Strategy 4.2 Empower users and audiences with information and education on their rights in the T&B sectors.



TRANSVERSE AXIS

Institutional Strengthening.

- **Strategy** 1.1 Improve and systemize the management of the Institute's diverse processes, procedures and activities.
- Strategy T.2 Encourage transparency in the Institute's processes, procedures and activities.
- Strategy T.3 Diminish the administrative burden on the regulated sectors and establish regulatory improvement mechanisms.

Note: T&B Telecommunications and Broadcasting Source: IFT.





The various institutional objectives coexist in harmony and ensure the alignment of each one of the projects and their contribution to their attainment; also, they are the basis to develop regulatory policies with the ultimate aim of contributing to the population's welfare and Mexico's development¹ through an efficient management of the T&B sector, addressing the principles of integration to the society of information and knowledge, no discrimination, and gender perspective; as well as the superior interest of childhood; all of them fundamental rights of the population, granted in the Constitution.

In this sense, the Institute is in the process of regulating project management, based on international best practices and addressing the specific needs of the IFT. One of the objectives of this process is to ensure control over the estimates of scope, time, quality and risks of the managed projects.

This is done through tracking, evaluation and supervision, generating timely information to know their development and progress in any of their stages. In this way, any deviations of the projects that compose the AWP and their goals may be documented and corrected; and the link between strategic planning² and execution is strengthened, so that the results of the projects are predictable and consistent with the objectives of the Institute.

Specialized activities have been implemented in the institutional project management process, where the starting point is goal setting for each project, establishment of a plan based on an adequate process to define all related deliverables and their activities, responsible personnel assignment and the creation of a chronogram to control progress and ensure that the project is executed according to the plan.

Upon definition of the project's planning, monitoring or tracking is kept to be able to compare planned versus execution dates. When any significant deviations are detected, the project's leader takes corrective actions to minimize or eliminate them. Generally, the corrective action involves not only the project's team but several levels and sections of the Institute.

Each year, in terms of the Federal Telecommunications and Broadcasting (FTBL), the AWP of the IFT matches their definition and contribution to comply with the objectives and goals set in the National Development Plan (NDP). However, on the date of publishing of this AWP such document is not available. Upon issuance of the NDP, the Institute will review the contribution of its institutional projects to the goals defined by the Federal Executive.

² The IFT's Strategic Planning document.





Besides, detailed chronograms of the projects that compose the AWPs are concentrated in an institutional project center, a support tracking system which holds information integrated jointly with each project leader, especially on three subjects: problems, risks and status of due dates and progress, by which the current status of each project activity can be measured.

Additionally, in line with the best practices, this AWP's project portfolio was prepared under the selection criteria of availability of financial resources and human capital, and technical risks; including hierarchy or priority criteria in terms of compliance with the law, capacity, opportunity or requirements arising from changes in the regulated sectors and in the objectives defined in transverse public policies and those in which the IFT is a relevant participant.

This way, during 2019, the adoption of an institutional project management process will continue, considering an integral portfolio management with a mature risk control system to support its efficient execution.

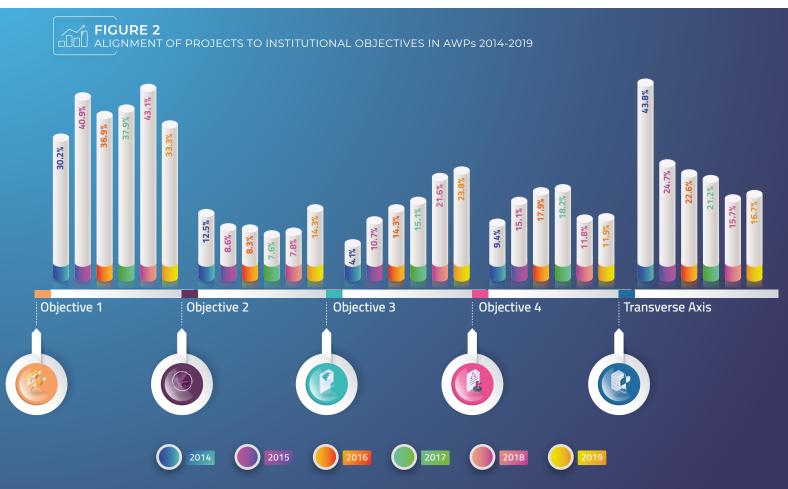
Finally, a systematic and effective project closing process will be developed to allow project leaders to document and analyze any lessons learned from completed projects, which will be useful for the effective execution of future projects, as well as a better planning³.



³ Also, the IFT has set a series of indicators associated to each one of the institutional objectives and strategies, which support tracking the evolution of the regulated markets. The results are shown in the annual report on <u>Behavior of the indicators on the regulated markets during</u> 2018.



Relating the alignment of projects to institutional objectives, for 2014, 43.8% of the projects were oriented to Institutional Strengthening. Also, during 2015 the priority was to encourage competition and free concurrence, to which 40.9% of all programmed projects were aligned; however, the Institutional Strengthening objective was still highly important, with 24.7% of the projects aimed at it (see Figure 2).



Notes: Objective 1. Promote and encourage that users and audiences enjoy enhanced public service options at affordable prices, by nurturing competition and free concurrence in the regulated sectors. Objective 2. Promote and encourage conditions for universal access to T&B technologies and services, to maximize social welfare. Objective 3. Guarantee that T&B services received by the population are consistent with international quality standards. Objective 4. Encourage respect for end users and audiences' rights in T&B services. The Transverse Axis refers to Institutional Strengthening.

Source: IFT.

For 2016, 2017 and 2018, once constitutional goals and the stipulations of the FTBL were complied with, the number of strategic projects was reduced, and the majority became aligned to the objective of competition. In turn, objectives 3 (quality) and 4 (users and audiences' rights) have been experiencing and ascending trend relating to their associated projects.





For AWP 2019, the alignment of the projects to institutional objectives is again aimed at encouraging competition and free concurrence, which will allow the promotion of investments and innovation, to increase service offer, variety and quality with lower prices, for the benefit of consumers.

Relating to the promotion of universal access to technology and T&B services to maximize social welfare (objective 2), the IFT will publish during 2019 the guidelines for the deployment of infrastructure and the structuring of the National Infrastructure Information System, which will host the national, georeferenced database with the information on the records of active infrastructure and transmission media, passive infrastructure and rights of way on the subject of T&B, as well as public and private sites. This information will also be useful for security authorities and prosecutors. Additionally, transverse actions will be promoted, jointly with the Powers of the three levels of the Mexican government, to rely on a regulating framework that allows the implementation of public policies to reduce the digital gap, thus contributing to social welfare through an accelerated and more equitable regional development.

Besides, to ensure that T&B services received by the population are in line with international quality standards (objective 3), projects will be developed to grant legal certainty to the users relating to compliance with conformity evaluations of the products they acquire; which will also contribute to increase service quality standards, to make it more efficient for the benefit of the population.

To promote respect to the users and audiences' rights in T&B services (objective 4), the projects and reports in this AWP 2019 are aimed at the empowerment of the users with tools that enable them to know, use and compare telecommunications services to freely choose the telecommunications service provider that best suits their needs; inform them on the main activities, progress and results of the measures established in the accessibility guidelines in favor of users with disabilities and develop studies that allow the identification of the needs of this population group to raise awareness among the concessionaires and content creators on the pertinence of including services such as hidden subtitles, Mexican signal language and everything related to accessibility.

Also, the Institute addresses and acknowledges the importance of respecting the rights granted by the Constitution to indigenous people, relating to access to information and communications technologies for all Mexicans, so the need for concessions for social, community and indigenous use to contribute to the expression of diversity and strengthening of plurality of ideas is undeniable; along with the encouragement of the values of national identity which allow the promotion of traditions, costumes, language and all other distinctive elements of the indigenous communities' culture.

Referring to Institutional Strengthening, the IFT keeps growing in strength as an independent authority that reaffirms its conviction for competition and the legitimate benefits for the users, audiences and the general population.

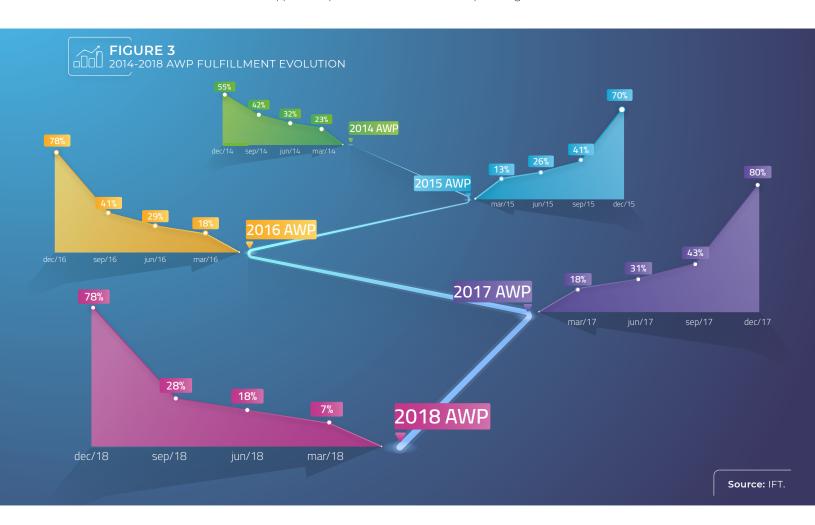
2019 ANNUAL WORK PROGRAM



PREAMBLE

AWP evolution

As part of institutional strengthening and the principles of continuous improvement, a precise measurement of the performance in the execution of projects included in the various AWPs is provided, allowing to know their evolution since 2014, when the first plan was first published, to 2018 (see Figure 3). It will also allow the identification of areas of opportunity for the Institute's annual planning.



This AWP was prepared with the participation of all the Administrative Units (AU) and proposes transcendent strategies and actions aimed at strengthening the Institute, addressing new requirements, needs and demands of the regulated sectors, through projects and actions to be executed during 2019, so progress and results will be shown in Quarterly Activities Reports, in accordance with the constitutional mandate.

The Annual Work Program 2019 is presented in terms of articles 15, section II, and 17, sections I and VII, FTBL.



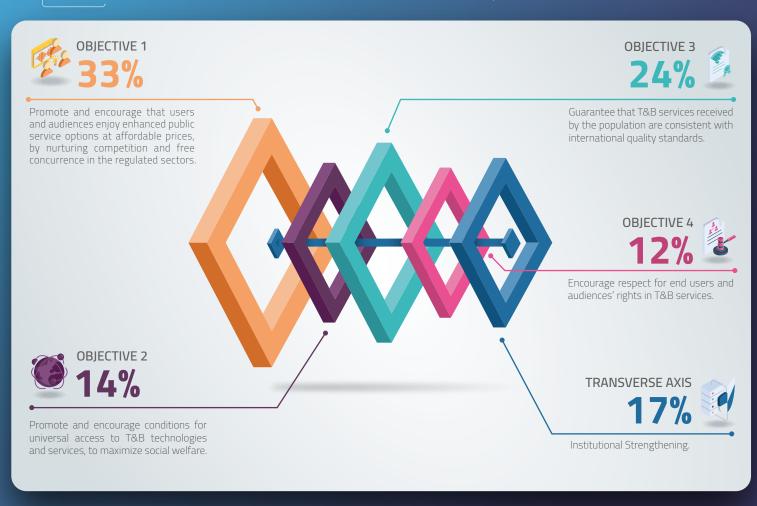


2019 PROJECT PORTFOLIO

2019 ANNUAL WORK PROGRAM

The Federal Telecommunications Institute's (the Institute or IFT) project portfolio for 2019 is comprised of a total of 42 strategic projects, 35 of them aligned to the four institutional objectives and 7 to the Institutional Strengthening transverse axis (see Figure 4).

FIGURE 4 DISTRIBUTION OF STRATEGIC PROJECTS BY INSTITUTIONAL OBJECTIVES, 2019



Note: T&B Telecommunications and Broadcasting Fuente: IFT.



STRATEGY **1.1**

	Amendments to the Regulatory Provisions of the Federal Economic Competition Law for the T&B sectors, published in the Official Gazette on January 12, 2015, relating to the procedures performed by the Investigating Authority and the Economic Competition Unit of the IFT	14
2	Minimum Technical Conditions and Interconnection Rates applicable to year 2020	14
3	Guidelines for traffic management and network administration to be followed by concessionaires and authorized Internet Service Providers*	15
4	Reference offers for the effective disaggregation of the local loop and fixed and mobile infrastructure sharing	15
5	Reference offers for wholesale dedicated links and roaming user services, and for trade or resale of the service by Mobile Virtual Operators	16
6	Review and analysis of Interconnection Framework Agreements	16
7	Second biennial resolution on preponderance in the broadcasting sector	17
8	Second biennial resolution on preponderance in the telecommunications sector	17

STRATEGY **1.2**

9	Regulatory Provisions on the subject of orbital resources and satellite communications	18
10	Tender IFT-9 Complementary fixed service satellite mobile service	18
[11]	Public offer of infrastructure review	19
12	Tender IFT-8 Frequencies for audio broadcasting*	19
13	Tender IFT-10 Wireless access service	20

STRATEGY

1.3

Definition of Spectral Efficiency Technical-Regulatory Metrics and their application methodology*







To fulfill objective 1, the Annual Work Program (AWP) 2019 contemplates 14 projects, eight aligned with strategy 1.1, five with strategy 1.2 and one with strategy 1.3.

ID	AU	Project's name	End of Project**	2019 Goal***	Contributing AU
1	IA-ECU	Amendments to the Regulatory Provisions of the Federal Economic Competition Law for the T&B sectors, published in the Official Gazette on January 12, 2015, relating to the procedures performed by the Investigating Authority and the Economic Competition Unit of the IFT	Q3 2019	100%	NA
2	RPU	Minimum Technical Conditions and Interconnection Rates applicable to year 2020	Q4 2019	100%	LAU
3	RPU	Guidelines for traffic management and network administration to be followed by concessionaires and authorized Internet Service Providers*	Q4 2019	100%	MU
4	RPU	Reference offers for the effective disaggregation of the local loop and fixed and mobile infrastructure sharing	Q4 2019	100%	NA
5	RPU	Reference offers for wholesale dedicated links and roaming user services, and for trade or resale of the service by Mobile Virtual Operators	Q4 2019	100%	NA
6	RPU	Review and analysis of Interconnection Framework Agreements	Q4 2019	100%	NA
7	RPU	Second biennial resolution on preponderance in the broadcasting sector	Q1 2020	75%	CU, ECU, MACU
8	RPU	Second biennial resolution on preponderance in the telecommunications sector	Q1 2020	75%	CU, ECU

Strategy 1.1

Encourage the development of competition and free concurrence in the T&B sectors, eliminating barriers to competition.

Strategy 1.2

Encourage the entry of new competitors and plurality in the T&B sectors, eliminating barriers to free access.

9	RSU	Regulatory Provisions on the subject of orbital resources and satellite communications	Q3 2019	100%	LAU, CSU, ECU
10	RSU	Tender IFT-9 Complementary fixed service satellite mobile service	Q4 2019	100%	NA
11	RPU	Public offer of infrastructure review	Q4 2019	100%	NA
12	RSU	Tender IFT-8 Frequencies for audio broadcasting*	Q3 2020	80%	LAU
13	RSU	Tender IFT-10 Wireless access service	Q4 2020	20%	NA

Strategy 1.3

Manage and encourage an efficient use of the radio spectrum in the T&B sectors.

14 R	RSU	Definition of Spectral Efficiency Technical-Regulatory Metrics and their application methodology*	Q3 2020	60%	LAU, CU, ECU, RPU
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Notes:

NA Not applicable | AU Administrative Unit | IA Investigative Authority | MU Management Unit | LAU Legal Affairs Unit | CU Compliance Unit | ECU Economic Competition Unit | CSU Concession and Services Unit | RSU Radio Spectrum Unit | MACU Media and Audiovisual Content Unit | RPU Regulatory Policy Unit.

^{*} Projects from the 2018 AWP.

^{**} Q2 - Second Quarter, Q3 - Third Quarter, Q4 - Fourth Quarter.

^{***} See Addendum II for the deliverables associated with projects with less than 100% completion goal for 2019.





Amendments to the Regulatory Provisions of the Federal Economic Competition Law for the T&B sectors, published in the Official Gazette on January 12, 2015, relating to the procedures performed by the Investigating Authority and the Economic Competition Unit of the IFT

A review of the Regulatory Provisions of the Federal Economic Competition Law for the T&B sectors will be performed, to identify and propose to the Governing Board of the Institute those amendments deemed necessary within the scope of the powers of the Investigating Authority (IA) and the Economic Competition Unit (ECU).

Potential Benefits

The amendments to the Regulatory Provisions will aim to improve and streamline the management of those procedures in charge of the Institute on the subject of economic competition in the T&B sectors.



IA-ECU



Contributing AU



100% 2019 Goal



Third quarter of 2019

End of Project



Minimum Technical Conditions and Interconnection Rates applicable to year 2020

The Minimum Technical Conditions under which interconnection services shall be provided will be established, allowing concessionaires who request to interconnect their public telecommunications networks to perform such interconnection in accordance with those conditions and with the valid interconnection service rates for 2020, using a costs model prepared in accordance with the methodology approved by the Institute. For the preparation of the project, and according to the principles of transparency and citizen participation, a public consultation process will be performed to strengthen it.

Potential Benefits

With interconnection rates regulation, competition between rival companies in the telecommunications sector will be balanced, allowing the smaller operators to offer competitive pricing plans to obtain a competitive position as service providers. In addition, establishing these conditions provides a technical reference for an efficient interconnection between the concessionaires' networks, in compliance with the quality standards determined by the Institute.







100% 2019 Goal







Guidelines for traffic management and network administration to be followed by concessionaires and authorized Internet Service Providers*

The trend towards an increased use and consumption of goods and services over the Internet by end users and the proliferation of Over the Top (OTT) services, applications and content providers, sometimes in competition against the services offered by traditional operators, requires specific rules on networks administration and Internet traffic management, so that the users are able to choose freely at all times.

To this end, the draft project on guidelines for traffic management and network administration for concessionaires and authorized parties providing Internet access services was prepared, which will be submitted to the Governing Board of the Institute for the approval of the public consultation process in 2019. In this context, once the contributions of the consultation are available, the final guidelines project will be prepared, to be submitted for approval to the Governing Board of the Institute.

Potential Benefits

more elements to prevent discriminatory and/or anticompetitive practices among Internet access and applications, content and/or services providers; ensure users' communications privacy and confidentiality protection, and safety in the networks; protect the right of access to the information; promote transparency in the information made available to the consumers by Internet access providers so that they can make informed decisions on the services, according to their consumption preferences and specific needs; contribute to free competition and concurrence by maintaining the minimum quality standards established by the Institute; and promote the sustained growth of telecommunications infrastructure over which Internet access service is provided; as well as promoting innovation in the content, applications and/or services market.



RPU AU



MUContributing AU



100% 2019 Goal



Fourth quarter of 2019

End of Project



Reference offers for the effective disaggregation of the local loop and fixed and mobile infrastructure sharing

The Preponderant Economic Agent of the Telecommunications sector (PEAT) will submit to the Institute the proposals for reference offers of wholesale disaggregation services, and fixed and mobile infrastructure access and shared use services. The proposals will be reviewed and submitted to the Governing Board of the Institute for approval of the public consultation process, from which the Institute will determine the required amendments to ensure that the authorized offers consider conditions that favor competition in the telecommunications sector. In case of amendment, the PEAT will be granted hearing to make its statements as it may deem convenient.

Potential Benefits

Reference offers generate the conditions to grant access to essential inputs provided by the PEAT to other concessionaires and authorized parties under non-discriminating conditions and with prices based on costs, which enables them to offer services to end users under competitive conditions.



RPU



NAContributing AU



100% 2019 Goal







Reference offers for wholesale dedicated links and roaming user services, and for trade or resale of the service by Mobile Virtual Operators

The PEAT will submit to the Institute the proposals for reference offer of wholesale dedicated links and roaming user services, and for trade or resale of the service by Mobile Virtual Operators (MVO). The proposals will be reviewed and submitted to the Governing Board of the Institute for approval of the public consultation process, from which the Institute will determine if any amendments are required; in case of amendment, the PEAT will be granted hearing to make its statement as it may deem convenient.

This, to ensure that the final authorized offers consider conditions that favor competition in the telecommunications sector.

Potential Benefits





Contributing AU



2019 Goal



Fourth guarter of 2019

End of Project



Review and analysis of Interconnection Framework Agreements

In accordance with the measures imposed to the PEAT by resolution 2014, it shall submit to the Institute its proposal of Interconnection Framework Agreements (IFA), which will be reviewed by the Institute to determine the necessary amendments for their approval. Also, the agreements will be made available to the concessionaires, showing the terms and conditions on which interconnection services are offered, granting them access to necessary and sufficient information to interconnect promptly and in non-discriminatory terms. It shall be noted that, according to the principles of transparency and citizen participation, a public consultation process will be performed to strengthen the project.

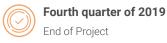
Potential Benefits







2019 Goal







Second biennial resolution on preponderance in the broadcasting sector

In the Resolution by which the Governing Board of the Institute qualified the economic interest group to which Grupo Televisa, S.A.B. and various related corporations belong⁴ as Preponderant Economic Agent in the broadcasting sector (PEAB), the Institute imposed the necessary measures on it to avoid affectations on competition and free concurrence, determined that these will be reviewed every two years to ensure that the objectives of this measures are attained, such as reducing or eliminating entry barriers, favor access to essential inputs, forbid in a preventive manner any anticompetitive behavior, forbid cross-ownership between the Preponderant Economic Agents (PEA) in the T&B sectors and promote the protection of the audiences' rights.

Therefore, an evaluation of the measures in terms of competition, supported by a public consultation process, will be performed to suppress, amend or impose new asymmetric measures, as applicable.

Potential Benefits

The evaluation of the measures imposed to the PEAB will allow the strengthening of the asymmetric regulatory framework of the broadcasting sector, for the benefit of the



RPU



CU, ECU, MACU Contributing AU



2019 Goal



End of Project



Second biennial resolution on preponderance in the telecommunications sector

In the Resolution by which the Governing Board of the Institute qualified the economic interest group to which América Móvil, S.A.B. de C.V., Teléfonos de México, S.A.B. de C.V., Teléfonos del Noroeste, S.A. de C.V., Radiomóvil Dipsa, S.A.B. de C.V., Grupo Carso, S.A.B. de C.V. and Grupo Financiero Inbursa, S.A.B. de C.V. belong as (PEAT), the Institute imposed the necessary measures on it to avoid affectations on competition and free concurrence, determined that these will be reviewed every two years to ensure that the objectives of this measures are attained, such as reducing or eliminating entry and expansion barriers to participants different from the PEAT, forbid in a preventive manner any anticompetitive behavior, forbid crossownership between the PEAT and the PEAB, and promote the protection of end users' rights.

Therefore, an evaluation of the measures in terms of competition, supported by a public consultation process, will be performed to suppress, amend or impose new asymmetric measures, as applicable.

Potential Benefits



RPU



CU, ECU Contributing AU



75% 2019 Goal



T1 2020 End of Project

⁴ Canales de Televisión Populares, S.A. de C.V., Radio Televisión, S.A. de C.V., Radiotelevisora de México Norte, S.A. de C.V., T.V. de los Mochis, S.A. de C.V., Teleimagen del Noroeste, S.A. de C.V., Televimex. S.A. de C.V., Televisión de Puebla, S.A. de C.V., Televisora de Mexicali, S.A. de C.V., Televisora de Navojoa, S.A., Televisora de Occidente, S.A. de C.V., Televisora Peninsular, S.A. de C.V., Mario Enriquez Mayans Concha, Televisión La Paz, S.A., Televisión de la Frontera, S.A., Pedro Luis Fitzmaurice Meneses, Telemisión, S.A. de C.V., Comunicación del Sureste, S.A. de C.V., José de Jesús Partida Villanueva, Hilda Graciela Rivera Flores, Roberto Casimiro González Treviño, TV Diez Durango, S.A. de C.V., Televisora de Durango, S.A. de C.V., Corporación Tapatía de Televisión, S.A. de C.V., Televisión de Michoacán, S.A. de C.V., José Humberto y Loucille, Martínez Morales, Canal 13 de Michoacán, S.A. de C.V., Televisora XHBO, S.A. de C.V., TV Ocho, S.A. de C.V., Televisora Potosina, S.A. de C.V., TV de Culiacán, S.A. de C.V., Televisión del Pacífico, S.A. de C.V., Tele-Emisoras del Sureste, S.A. de C.V., Televisión de Tabasco, S.A. and Ramona Esparza González.





Regulatory Provisions on the subject of orbital resources and satellite communications

Progress in the satellite industry has left behind the legal instruments in force. Therefore, the Institute needs to develop new regulations on the subject of orbital resources, addressing the current situation of the Mexican and international satellite industry, and promoting the entry of new competitors, their coexistence and technological breakthroughs.

In accordance with this, an analysis of the <u>Regulations on Satellite Communications</u> will be made to identify those regulations that have been surpassed by the Federal Telecommunications and Broadcasting Law (FTBL) and legal instruments issued by the Institute.

Also, the concerns of the industry, academy, public agencies and private parties will be collected, grouped and addressed through a public consultation process. This, to be able to issue these new regulations on the subject of satellite communications and space vehicles.

Potential Benefits

By issuing these stipulations, the legal framework on satellites will be updated, giving clarity and legal certainty to the participants of the satellite and space industry. Likewise, competition in the sector will be promoted and encouraged, establishing clear rules that motivate the participation of diverse actors.

In addition, with this new regulations, technological innovation in the satellite industry, the government and the academy will be stimulated.



RSU AU



LAU, CSU, ECUContributing AU



100% 2019 Goal



Third quarter of 2019End of Project



Tender IFT-9 Complementary fixed service satellite mobile service

Tender No. IFT-9 is intended to grant concession on the use, enjoyment and commercial exploitation of 40 MHz of radio spectrum available in two 10 + 10 MHz blocks, in the segments of frequencies 2000-2010/2190-2200 MHz and 2010-2020/2180-2190 MHz for the provision of the complementary fixed service of the satellite mobile service in the Mexican territory. Both services operate on the same segment of the radio spectrum and allow the transmission of signs, signals, documents, images, voice, sounds or information of any nature.

The public consultation process on the project of tender rules was performed in 2018; and the publishing of its call and rules is planned for 2019, as well as the delivery of participation certifications, resolution minutes to the winning participants or, when applicable, the resolution of deserted items, as well as concession titles.

Potential Benefits

This public tender will help to complement satellite coverage through the installation of land infrastructure, providing additional value to the satellite network of the mobile satellite service (MSS). It will also enable satellite operators of the MSS to enhance the offer of services available in Mexico.













Public offer of infrastructure review

In this project, the proposal of public offer of infrastructure presented by the PEAB will be reviewed and submitted to public consultation. The Institute will require the PEAB to amend the terms and conditions of its proposal of offer when it does not match the preponderancy measures or, in its opinion, does not offer conditions that favor competition in the sector. The PEAB shall then submit a new proposal of offer to the Institute, including the requested amendments, for authorization, which shall be published on November 30, 2019 at the latest and will be valid for two years.

Potential Benefits

This review will generate conditions enabling other concessionaires to access the PEAB's infrastructure under non-discriminatory conditions and rates based on costs, so they may provide their services to end users in a competitive manner.



RPU



NAContributing AU



100% 2019 Goal



Fourth quarter of 2019

End of Project



Tender IFT-8 Frequencies for audio broadcasting*

Public tender No. IFT-8 is intended to grant concession on the commercial use, enjoyment and exploitation of the frequencies within the 88 to 106 MHz of Frequency Modulation (FM) band and of the frequencies within the 535 to 1605 kHz Amplitude Modulation (AM) band for sound broadcasting public services, considering that the frequencies defined in the Annual Program for the Use and Exploitation of Frequency Bands (APFB) for years 2016, 2017, 2018 and 2019, as amended, as well as the corresponding frequencies not granted in Tender No. IFT-4.

The definition of the granting mechanism and the preparation of the proposal for tender rules were done in 2018. Tender rules will be submitted to public consultation in 2019 and, afterwards, the corresponding call and rules will be published to begin the bidding process.

Potential Benefits

This public tender will offer the available radio spectrum frequencies to the interested parties, grow sound broadcasting services in Mexico, increasing the options of access to contents and their diversity, and stimulate competition in this sector.





LAUContributing AU



80% 2019 Goal



Third quarter of 2020





Tender IFT-10 Wireless access service

Tender No. IFT-10 is intended to concession the commercial use, enjoyment and exploitation of the 10 MHz of radio spectrum available in frequencies band 1755-1760/2155-2160 MHz and various segments of radio spectrum available in the frequencies band of 2500-2530/2620-2650 MHz in various regions of Mexico, for wireless access services.

An analysis on the band and the definition of the granting mechanism will be done during 2019, to obtain the necessary input to prepare the tender's call and rules.

Potential Benefits











Definition of Spectral Efficiency Technical-Regulatory Metrics and their application methodology*

From the analysis and research on spectrum efficiency performed during the previous years (2015-2017) and complemented with the various contributions of the work group integrated by the Administrative Units (AU) of the IFT involved in the definition of the Spectrum Efficiency Technical-Regulatory Metrics (SET-RM), an integration <u>public consultation</u> process was started in 2018 to acquire information, comments and opinions from the academy, the industry and the general public to contribute to the decision making process relating to the design and application of metrics for the T&B sectors.

Also, with the completion and analysis of the comments received from the interested parties, during the 2019-2020 period, the development and general implementation framework for application methodologies will be defined, as well as the mandatory metrics and regulations draft, which will be submitted to the Governing Board of the Institute.

Potential Benefits

diverse T&B services in a clear, objective and quantifiable manner, in favor of a better use and exploitation of the radio spectrum for the benefit of the users and audiences. Besides, spectrum, causing an increase in service







2019 Goal





STRATEGY 2.1 Regulatory recommendations to promote digital inclusion and infrastructure 23 deployment Annual Program for the Use and Exploitation of Frequency Bands 2020 24 STRATEGY 2.2 Guidelines for T&B infrastructure deployment* 24 Guidelines for the construction of the National Infrastructure Information 25 System (NIIS)* Promotion of the transition from the IPv4 protocol to IPv6* 25

National Infrastructure Information System*

26





To fulfill objective 2, the AWP 2019 contemplates six strategic projects, two aligned with strategy 2.1, five with strategy 2.1 and four with strategy 2.2.

STRATEGY 2.1

Encourage service coverage in the T&B sectors.

ID	AU	Project's name	End of Project**	2019 Goal***	Contributing AU
15	RPU	Regulatory recommendations to promote digital inclusion and infrastructure deployment	Q3 2019	100%	BIL
16	RSU	Annual Program for the Use and Exploitation of Frequency Bands 2020	Q4 2019	100%	ECU, CSU

STRATEGY 2.2

Encourage the development and efficient use of the infrastructure in the T&B sectors.

17	RPU	Guidelines for T&B infrastructure deployment*	Q1 2019	100%	NA
18	RPU	Guidelines for the construction of the National Infrastructure Information System (NIIS)*	Q1 2019	100%	CSU
19	RPU	Promotion of the transition from the IPv4 protocol to IPv6*	Q2 2019	100%	MU
20	CSU	National Infrastructure Information System*	Q3 2020	50%	NA

Notes:

NA Not applicable | AU Administrative Unit | BIL Bureau of Institutional Liaison | MU Management Unit | ECU Economic Competition Unit | CSU Concession and Services Unit | RSU Radio Spectrum Unit | RPU Regulatory Policy Unit.

^{*} Projects from the 2018 AWP.

^{**} Q1 - First Quarter, Q2 - Second Quarter, Q3 - Third Quarter, Q4 - Fourth Quarter.

^{***} See Addendum II for the deliverables associated with projects with less than 100% completion goal for 2019.





Regulatory recommendations to promote digital inclusion and infrastructure deployment

Telecommunications, as a tool for economic and social development, allow the creation of opportunities, reduction of poverty and encouragement of economic and social development for the population's welfare; studies show that a 1% progress in the digitalization index generates an increase on productivity that translates into an economic growth of 0.3% of the GNP⁵; so, it is imperative to attain a significant reduction of the digital gap and consolidate a telecommunications infrastructure to support it, as well as the intensive incorporation of information and communications technologies to the productive processes of the companies.

This way, it is also necessary to consolidate all efforts on creating diagnostics and tools⁶, which will allow to have precise and necessary elements to generate the referred regulatory recommendations.

To the purpose of implementing transverse actions and in coordination with the Powers of the three government levels, a set of recommendations will be created to adapt the regulating system that impacts the telecommunications sector, in order to increase telecommunications services provision in those areas where they are not available, as well as to include the population in the usage of information technologies for their social, cultural and economic development, among others.

Potential Benefits

Having a regulating framework for the sector that allows the implementation of public policies to encourage the reduction of the digital gap and contribute to social welfare through an accelerated and more equitable regional development, as well as higher investments.



AU



Contributing AU



100% 2019 Goal



^{5 &}lt;u>Digitalization: A key for the future growth of productivity in Latin America</u> (Katz, 2018. Published by the Latin American Center for Telecommunications Studies).

Study with guaranteed Coverage of Mobile Service for Indigenous People; Mobile service coverage maps; Broadcasting coverage querying system; Calculator of probability of ICT adoption and use of the Internet in Mexico; DTT signal search by town, among others.





Annual Program for the Use and Exploitation of Frequency Bands 2020

The Annual Program for the Use and Exploitation of Frequency Bands (APUEFB) is an annual programmatic tool by which the Institute publishes the frequencies or frequency bands that will be open for bidding or may be granted directly, establishing the timeframe for submitting the requests for the granting of public and social use concessions, for the provision of public broadcasting services.

The requests for frequency bands, category, usage modes and geographic coverages submitted by the interested parties are evaluated by the Institute for its preparation. In addition, the results of the Study on the coverage of broadcasting services in Mexico will be considered, analyzing those locations with a population over 5,000 that do not receive FM sound broadcasting services, according to Addendum VI. Locations lacking FM service, from such study, and where an assignment process is not pending from prior programs.

For the telecommunications sector, the Institute will analyze new frequency bands susceptible to be included in the APUEFB 2020 for the provision of such services through social use concessions, to contribute to the reduction of the digital gap by broadening the coverage and enhancing mobile telephony and broadband internet access services in the country.

Potential Benefits

With the issuance of the APUEFB 2020, legal certainty will be provided to the public, private and industrial sector relating to the Institute's plans for the spectrum in the short and mid-term. This will allow an adequate planning of future investments and projects. It will also contribute to the creation of more infrastructure to expand public T&B services coverage and improve their quality, as well as to encourage an efficient use and exploitation of the radio spectrum, aimed at a higher benefit for the users, at the minimum possible cost, in view of demand, coverage and quality needs.



RSU



ECU, CSU Contributing AU



100% 2019 Goal



Fourth quarter of 2019 End of Project

2019 **AWP**

Objective 2 / Strategy 2.2



Guidelines for T&B infrastructure deployment*

The guidelines to promote the deployment, access and shared usage of the infrastructure in the T&B sectors will be developed, establishing terms and conditions for those cases where the Institute should resolve on a disagreement, those where access barriers to premises may be created, and encouraging the publishing of civil works for the possibility of joint infrastructure development.

During 2018, the draft of the guidelines was completed and submitted to a new public consultation process that ended on November 22. The comments received during such process will be analyzed and addressed during 2019 to prepare the project, which will then be submitted to the Governing Board of the Institute.

Potential Benefits

These guidelines will contribute to an efficient deployment of infrastructure, favoring the optimal use of resources. They will also integrate elements that promote a higher competition in the T&B sectors, since they will allow deployments with less investment requirements and transaction costs, reducing deployment costs for the concessionaires and authorized parties, diminishing, in turn, entry barriers to the market by encouraging infrastructure sharing and deployment.



RPU



Contributing AU



100% 2019 Goal



First quarter of 2019





Guidelines for the construction of the National Infrastructure Information System (NIIS)*

These guidelines will define the information composing the National Infrastructure Information System (NIIS), also the times and terms for the submission of information by the concessionaires, authorized parties, agencies and entities of Mexico's Federal, State and Municipal Public Administration and independent agencies, on passive infrastructure, active infrastructure, transmission media, easement, public and private sites will be established.

In 2018, the new public consultation process on the draft completed on December 5 was approved and started, and the analysis of the comments received from such process is intended for 2019, to modify the draft, update the Regulatory Impact Analysis (RIA) and prepare the project to be submitted to the Governing Board of the Institute in 2019.

Potential Benefits

These guidelines will constitute the regulating instrument under which the Institute will develop the NIIS, to have complete and reliable information as a tool to locate the infrastructure of the various concessionaires, encourage infrastructure sharing and promote a more efficient deployment of infrastructure, and will also constitute a registry to support the evaluation of the sector's progress in terms of infrastructure and the implementation of policies on the subject.





CSU Contributing AU



100% 2019 Goal



First quarter of 2019

End of Project



Promotion of the transition from the IPv4 protocol to IPv6*

A majority of devices connect to the Internet using addressing from the Internet Protocol version 4 (IPv4); however, facing the growth in Internet usage, it will eventually be insufficient, and the adoption of communications protocols that support the new needs will be imperative.

In this sense, and to encourage the transition to the use of Internet protocol version 6 (IPv6), an investigation on international practices to promote IPv6 was conducted in 2018, which constituted a reference for the preparation of the recommendations document to encourage the transition to IPv6 in Mexico. This document will be submitted to the public opinion in 2019, to strengthen it and receive comments from the main agents of the digital environment in Mexico, after this process it will be issued by the Institute.

Potential Benefits

The adoption of the IPv6 protocol, among other things, will allow optimal technical conditions to develop the IoT (Internet of Things) ecosystem by increasing the capacity to connect multiple and diverse devices to the country's networks and enhancing addressing capacity, as well using safer protocols.



RPU



MU Contributing AU



100% 2019 Goal



Second quarter of 2019





National Infrastructure Information System*

The system will host the geo-referenced national database with the registry of active infrastructure and transmission media, passive infrastructure and easement on the subject of T&B, as well as public and private sites. It will be consistent with the Guidelines for the construction of the NIIS issued by the Governing Board. The information will be available to the operators or any person who intends to be a concessionaire or authorized party, as well as to security and law enforcement authorities to exercise their powers.

Potential Benefits

Maximize the integration of the Institute's systems and databases with the information provided by the NIIS, in particular with the Public Registry of Telecommunications (PRT); favor competition by making general information on the existing T&B infrastructure in the country available to T&B service providers and those interested in becoming concessionaires or authorized parties. Promote infrastructure sharing among the providers of those services; provide services to bound parties, concessionaires and authorized parties allowing them to record their infrastructure information in a clear, precise and timely fashion; and provide useful information to security and prosecution authorities.





Contributing AU



50% 2019 Goal



Third quarter of 2020



Guarantee that T&B services received by the population are consistent with international quality standards.



STRATEGY

3.1

21	Conformity evaluation procedure*	29
22	Definition of performance counters for mobile services	29
23	Technical Provision IFT-007-2019. Maximum exposure limits for human beings to non-ionizing electromagnetic radiation in the 100 kHz to 300 GHz range in the radio communication stations environment*	30
24	Technical Provision IFT-012-2019. Technical specifications to comply with the maximum limits of non-ionizing radio emissions from products, equipment, devices or systems destined to telecommunications that may be connected to a telecommunications network and/or use the radio spectrum. Specific Absorption Rate*	30
25	Guidelines for T&B equipment standardization*	31
26	Guidelines establishing broadband parameters to be applied by Internet access service providers*	31
27	Guidelines that set quality indexes and parameters for fixed service providers*	32
28	Review of the regulation on the geographic location of calls to emergency number 911	32

STRATEGY

3.2

29	Guidelines for the accreditation of Verification Units*	33
30	Quality monitoring platform for mobile service experience*	33







The 2019 AWP includes 10 strategic programs aligned to fulfill objective 3, eight of them aligned with strategy 3.1 and two with strategy 3.2.

STRATEGY 3.1

Guarantee fulfillment of the quality standards defined by the IFT for T&B services provided by the operators.

ID	AU	Project's name	End of Project**	2019 Goal***	Contributing AU
21	RPU	Conformity evaluation procedure*	T1 2019	100%	NA
22	RPU	Definition of performance counters for mobile services	T2 2019	100%	CU
23	RPU	Technical Provision IFT-007-2019. Maximum exposure limits for human beings to non-ionizing electromagnetic radiation in the 100 kHz to 300 GHz range in the radio communication stations environment*	T2 2019	100%	NA
24	RPU	Technical Provision IFT-012-2019. Technical specifications to comply with the maximum limits of non-ionizing radio emissions from products, equipment, devices or systems destined to telecommunications that may be connected to a telecommunications network and/or use the radio spectrum. Specific Absorption Rate*	T2 2019	100%	NA
25	RPU	Guidelines for T&B equipment standardization*	T3 2019	100%	NA
26	RPU	Guidelines establishing broadband parameters to be applied by Internet access service providers*	T3 2019	100%	NA
27	RPU	Guidelines that set quality indexes and parameters for fixed service providers*	T3 2019	100%	BUP
28	RPU	Review of the regulation on the geographic location of calls to emergency number 911	T4 2019	100%	NA

STRATEGY 3.2

Improve the user's experience on the quality of telecommunications services.

29	RPU	Guidelines for the accreditation of Verification Units*	T2 2019	100%	NA
30¹	BUP	Quality monitoring platform for mobile service experience*	T2 2020	40%	RPU

1 The development of the project depends on the budgetary availability of the IFT during 2019. See Addendum I.

Notes

NA Not applicable | AU Administrative Unit | BUP Bureau of User Policy | CU Compliance Unit | RPU Regulatory Policy Unit.

^{*} Projects from the 2018 AWP.

^{**} Q1 - First Quarter, Q2 - Second Quarter, Q3 - Third Quarter, Q4 - Fourth Quarter.

^{***} See <u>Addendum II</u> for the deliverables associated with projects with less than 100% completion goal for 2019.





Conformity evaluation procedure*

A clear and unobstructed procedure will be established within the technical standards and responsibilities of the Institute so that the evaluation of conformity with the different Technical Provisions (TP) issued by the Institute is homogeneous and effective.

The final project was prepared in 2018 and will be submitted to the Governing Board of the Institute for approval during 2019.

Potential Benefits

Simplifying the conformity evaluation process will support the standardization of products destined to T&B, granting legal certainty to the users on the compliance of the products they acquire; it will promote the adoption of the best technological standards and measures to protect intellectual property; this will also contribute to increase service quality standards, to make it more efficient for the benefit of the population.



RPU AU



NA Contributing AU



100% 2019 Goal



First quarter of 2019

End of Project



Definition of performance counters for mobile services

The proposal of the set of performance counters to be submitted to the Institute by mobile service providers will be defined, as well as the structure of the audited report and the technical criteria to maintain and deliver detailed information on the quality of the mobile service at the radio base level. This, in accordance with the Guidelines that set quality indexes and parameters for mobile service providers, published in the Federal Official Gazette on January 17, 2018.

On November 28, 2018, the Governing Board of the Institute approved the <u>public</u> consultation, which began on November 30, with a duration of 20 business days. The comments received during such process will be analyzed and addressed in 2019 to prepare the final project of mobile services performance counters to be submitted to the Governing Board of the Institute for approval.

Potential Benefits

Analyses on the performance of the networks of the different operator in Mexico may be performed on the information obtained from the performance counters, offering information to the end user to decide on the selection of a mobile service provider. Besides, the Institute will have information to track the evolution and performance of the quality offered by the service providers.



RPU AU



CUContributing AU



100% 2019 Goal



Second quarter of 2019





Technical Provision IFT-007-2019. Maximum exposure limits for human beings to non-ionizing electromagnetic radiation in the 100 kHz to 300 GHz range in the radio communication stations environment*

This TP establishes the maximum exposure limits for human beings to non-ionizing radiofrequency electromagnetic radiation in the radiocommunication stations or emitting sources environment, as well as the calculations and testing methods to evaluate their compliance. This, to prevent that such maximum exposure limits are exceeded in the areas of exposure to electromagnetic fields caused by the operation of radiocommunication stations or emitting sources, for the frequency range from 100 kHz to 300 GHz.

The RIA was concluded in 2018 and the final version of the project was prepared considering the comments received during the public consultation process. The project will be submitted to the Governing Board in 2019 for approval.

Potential Benefits

Grant legal certainty to all stakeholders relating to conformity evaluation procedures in terms of this TP, enabling the deployment and operation of wireless infrastructure while addressing the growing concern among the population on the proliferation of radiocommunication stations that generate electromagnetic fields.



RPU AU



Contributing AU



100% 2019 Goal



Second quarter of 2019

End of Project



Technical Provision IFT-012-2019. Technical specifications to comply with the maximum limits of non-ionizing radio emissions from products, equipment, devices or systems destined to telecommunications that may be connected to a telecommunications network and/or use the radio spectrum. Specific Absorption Rate*

This TP establishes the technical specifications to comply with the maximum limits of radio emissions from products, equipment, devices or systems destined to telecommunications that may be connected to a telecommunications network and/or use the radio spectrum, measured at the proximity of the human body by the Specific Absorption Rate (SAR), in the range of 30 MHz to 6 GHz, and the corresponding measurement procedure for compliance.

At the same time, the TP will help to ensure that fixed and mobile wireless communication devices operating in the frequencies range from 30 MHz to 6 Ghz and used near the head, particularly the ear, or on the human body or less than 20 cm from it, do not exceed the basic limits of maximum exposure, specifically the SAR values.

The RIA was concluded in 2018 and the final version of the project was prepared considering the comments received during the public consultation. The project will be submitted to the Governing Board in 2019 for approval.

Potential Benefits

The issuance of this TP in conformity with international standards, to comply with the referred limits, will support supervision relating to radio emissions through a procedure to standardize products, equipment, devices or systems destined to telecommunications that may be connected to a telecommunications network or use the radio spectrum. It will also grant legal certainty in relation to the corresponding conformity evaluation procedures for the benefit or users.





NAContributing AU



100% 2019 Goal







Guidelines for T&B equipment standardization*

The issuance of these guidelines will establish a clear and unobstructed procedure, within the technical regulating framework and powers of the Institute, to standardize T&B equipment in a uniform and effective manner, addressing the need to have a regulatory framework to guide those parties interested in the obtention of the corresponding certificate for a certain product.

The guidelines draft and the corresponding RIA were completed in 2018. The public consultation, and analysis and integration of the comments received from it, will be performed in 2019 to further submit the final project to the Governing Board of the Institute for approval.

Potential Benefits

These guidelines will provide legal certainty to the users relating to the acknowledgment of the products they acquire, and which comply with applicable technical standards or stipulations. They will also grant legal certainty to the interested parties on the standardization procedure for T&B equipment, which will also contribute to increase service quality standards, to make it more efficient for the benefit of the population.



RPU



NA Contributing AU



100% 2019 Goal



Third quarter of 2019

End of Project



Guidelines establishing broadband parameters to be applied by Internet access service providers*

These Guidelines will fix the minimum parameters for data access services to be considered as broadband, as well as the conditions under which such parameters will be updated by the Institute. The guidelines establish the minimum parameters for fixed and mobile broadband services, considering each one's characteristics. Besides, the review term of the guidelines will be established.

The final project is under review and will be submitted to the Governing Board of the Institute for approval in 2019.

Potential Benefits

Users will have access to true and comparable information on the broadband service to be contracted or received. This, in conformity with minimum parameters and characteristics that will define Mexico's broadband, in accordance with the international best practices and the sector's technological evolution.



RPU



NA Contributing AU



100% 2019 Goal



Third quarter of 2019





Guidelines that set quality indexes and parameters for fixed service providers*

These guidelines establish quality indexes and parameters that fixed service providers, understood as fixed telephony and/or Internet access, must comply. Compliance indexes or values are to be established to define the performance of fixed telephony and Internet access services, as well as those that must be fulfilled in relation to the service, such as customer care, installation and solution of faults. Also, the methodology to measure such parameters will be established as well as the information required from the concessionaires to generate informative reports on the quality of fixed services nationwide.

The public consultation of the guidelines draft was performed in 2018. The final project will be submitted to the Governing Board of the Institute for approval in 2019.

Potential Benefits

There is no current regulation on the quality telephony services are governed by the parameters established in the corresponding concession titles and specific provisions. The guidelines for fixed services are intended as a general application instrument where quality indexes and parameters for these services are established, allowing that such services are provided to end users in quality conditions aligned with technology and the sector's

Also, making fixed services quality information available to end users empowers them to make informed decisions on the selection of their service provider, and encourages concessionaires to provide higher quality services, aligned with international standards.





Contributing AU



100% 2019 Goal



Third quarter of 2019

End of Project



Review of the regulation on the geographic location of calls to emergency number 911

Due to technological evolution and to have effective and updated regulations, this project is aimed at updating precision and performance parameters of calls made to the emergency number 911, established in the <u>Guidelines for Collaboration on the</u> Subject of Security and Law Enforcement, published in the Official Gazette in 2015 and amended in 2018, so that they respond to technological breakthroughs and the current capacity of mobile service networks, besides being aligned to international best practices.

Potential Benefits

The updating of precision and performance parameters will permit an adequate and effective regulation in view of the latest technologies, as well as provide legal certainty to mobile service providers in terms of the technical and effective feasibility of such parameters, on which the Institute will verify compliance.



RPU



Contributing AU



100% 2019 Goal



Fourth quarter of 2019





Guidelines for the accreditation of Verification Units*

The guidelines relating to Verification Units (VU) intend to establish the requisites, procedures and deadlines to accredit national third party VU⁷ so that they may perform tests, measurements or determine one or more T&B service, product or infrastructure features subject to conformity evaluation. This, in conformity with international standard ISO/IEC 17020⁸.

The public consultation of the guidelines draft was completed in 2018. The final project will be submitted to the Governing Board of the Institute for approval in 2019.

Potential Benefits

These guidelines will provide legal certainty to VU accreditation applicants; verification activities established in various technical stipulations and guidelines will be strengthened; the conformity evaluation procedure for services, products, equipment, devices or apparatus used for T&B will be reinforced



RPU AU



NAContributing AU



100% 2019 Goal





Quality monitoring platform for mobile service experience*

A platform to monitor the performance of end user mobile networks service will be implemented to produce input for the Institute to direct actions to evaluate mobile service quality in those regions where an inefficient performance of the networks is identified. Besides, it will allow users to be aware of their voice, text messages and data consumption.

During 2019, tests will be performed on various platforms and considering new elements that may be identified, and the terms of reference will be updated.

Potential Benefits

With this technological platform, the Institute will be able to implement focused monitoring and surveillance actions for those regions where an inefficient performance of the networks is detected. Also, users will be provided with a tool to know and control their consumption of voice, text messaging and data transfer services, and to obtain useful information on their consumption and the quality of the service.





RPUContributing AU



40% 2019 Goal



End of Froject

Note: The development of the project depends on the budgetary availability of the IFT during 2019.

See <u>Addendum I.</u>

^{*} Projects from the 2018 AWP.

⁷ Third-party conformity assessment activity: refers to that activity performed by a person or body that is independent of the person or organization that provides the object, and of user interests in that object (ISO/IEC 17000:2004).

^{8 |} ISO/IEC 17020 Standard: "Requirements for the operation of various types of units (bodies) performing verification (inspection)".



2019 Annual Work Program

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STRATEGY

4.1

31	General guidelines on the monitoring of maximum quantifiable advertising times*	36
) I	UITIES	
32	Update on portability rules	36
33	Common national protocol for risk or emergency situations alert*	37

STRATEGY

4.2

34	General guidelines for the publishing of transparent, comparable, appropriate and updated information on telecommunications services*	37
35	Platform for innovators and new business models	38





Q4 2019

100%

BIL



To fulfill objective 4, the AWP 2019 includes five projects, three aligned with strategy 4.1 and two with strategy 4.2.

STRATEGY 4.1 31 MACU General guidelines on the monitoring of maximum quantifiable advertising times* STRATEGY 4.1 31 MACU General guidelines on the monitoring of maximum quantifiable advertising times* STRATEGY 4.1 32 RPU Update on portability rules Q2 2019 100% NA

Common national protocol for risk or emergency situations alert*

STRATEGY 4.2

Empower users and audiences with information and education on their rights in the T&B sectors.

•	34	BUP	General guidelines for the publishing of transparent, comparable, appropriate and updated information on telecommunications services*	Q4 2019	100%	CSU, BSP
	35	RPU	Platform for innovators and new business models	Q4 2020	20%	NA

Notes:

RPU

33

NA Not applicable | AU Administrative Unit | BSP Bureau of Strategic Planning | BUP Bureau of User Policy | BIL Bureau of Institutional Liaison | ECU Economic Competition Unit | CSU Concession and Services Unit | MACU Media and Audiovisual Content Unit | RPU Regulatory Policy Unit.

^{*} Projects from the 2018 AWP.

^{**} Q2 - Second Quarter, Q4 - Fourth Quarter.

^{***} See Addendum II for the deliverables associated with projects with less than 100% completion goal for 2019.





General guidelines on the monitoring of maximum quantifiable advertising times*

These guidelines will regulate the scope and specific components that define quantifiable advertising, as well as the adoption of measurement mechanics and methods for the maximum advertising times allowed in broadcasted television, sound broadcasting, and pay television and/or audio services.

Also, the guidelines will include requisites, accreditation and registration of national producers and independent national producers, in accordance with the FTBL.

At the end of 2018, the guidelines draft was submitted to the Governing Board of the Institute for approval of the <u>public consultation</u>, which started in December 2018 and will end on February 2019. Then, the analysis of the comments received, and the corresponding RIA will be made to prepare the final version of the project of guidelines to be submitted to the Governing Board of the Institute for approval.

Potential Benefits

Based on such guidelines, the rules that allow the verification of compliance with maximum advertising times in public broadcasting services, as well as pay television and/or audio, will be established. Also, the rules on advertising times measurement, the elements that integrate advertising and the possibilities granted by the FTBL to increase the percentage of advertising by programming national production and/or independent national production will be clearly established.



MACU AU



ECUContributing AU



100% 2019 Goal



Second quarter of 2019

End of Project



Update on portability rules

As a consequence of the growing number of user complaints about unconsented portability and considering that the telecommunications sector is dynamic and requires an appropriate regulation, Portability Rules will be reviewed⁹. In the updating of these rules, mechanisms will be established to avoid this kind of practices.

Potential Benefits

By updating Portability Rules, the right of the users to keep the same telephone number upon changing concessionaire or telephone service provider, free of charge and within a 24-hour term, will be reinforced.



ALL



Contributing AU



100% 2019 Goal



Second quarter of 2019

^{*} Projects from the 2018 AWP.

⁹ Resolution by which the Governing Board of the Federal Telecommunications Institute issues the Rules for Number Portability and modifies the Fundamental Technical Numbering Plan, the Fundamental Technical Signaling Plan and the operation specifications for the implementation of portability of geographic and non-geographic numbers. Likewise, Resolution by which the Governing Board of the Federal Telecommunications Institute amends the Rules for Number Portability published on November 12, 2014, as well as the Fundamental Technical Numbering Plan published on June 21, 1996.





Common national protocol for risk or emergency situations alert*

These guidelines regulate the broadcasting of emergency alerts generated by competent authorities and distributed by T&B concessionaires in case of risk, emergency or disaster situations; using an internationally standardized common alerting protocol (CAP, backed by the International Telecommunications Union (ITU) in its recommendation UIT-T X.1303 bis.

The public consultation of the guidelines draft was completed in 2018. The final project will be submitted to the Governing Board of the Institute in 2019.

Potential Benefits

Having a common alerting protocol, as well as the mechanisms for mobile, broadcasting and pay television concessionaires and authorized parties (when applicable) to timely and effectively collaborate with the competent authorities to alert the population on civil protection hazards or emergency situations.



RPU



Contributing AU



100% 2019 Goal



Fourth quarter of 2019

End of Project

2019 **AWP**

Objective 4 / Strategy 4.2



General guidelines for the publishing of transparent, comparable, appropriate and updated information on telecommunications services*

Mandatory stipulations will be prepared for telecommunications service operators, which will include the necessary conditions to publish information relating to prices, rates or any other expense associated with the provided services, in a transparent, adequate, updated and comparable manner. The guidelines draft was linked to the amendment of the "Resolution by which the Governing Board" of the Federal Telecommunications Institute establishes the procedure to submit an electronic application for the registration of user fees that the concessionaires and authorized telecommunications service providers must comply in terms of the FTBL", published in the Official Gazette on December 14, 2017.

Comments received during the public consultation process were addressed in 2018 and guidelines project was integrated; the final version of the project will be prepared in 2019 to be submitted to the Governing Board of the Institute for approval.

Potential Benefits

With the issuance of these provisions, the rights of telecommunications services users established in the FTBL will be guaranteed in particular empowering the users with the necessary information to allow them to freely choose the service provider of their preference and to be aware of the commercial terms under which they contract their telecommunications services.







100% 2019 Goal









Platform for innovators and new business models

A technological platform will be created to help users in developing digital abilities by using ICTs for productive processes and the development of new business models. A document will be prepared during 2019 to define the platform's design and planning.

The platform will include access to courses, manuals, tutorials, incentives, discounts and application development, to promote interest among the users on the generation of new business models, as well as to encourage the entrance to the technological and telecommunications world by promoting the applications developed by the users.

Potential Benefits

The platform will provide the users the necessary support and tools to use ICTs in productive processes, promoting the use of technology and telecommunications for the benefit of society. It also aims at generating a higher social inclusion and accessibility in the use of services such as banking, commerce, education, health, entertainment, leisure, among others, through technological and telecommunications services.





Contributing AU



2019 Goal







PROJECTS LINKED TO TRANSVERSE AXIS

Institutional Strengthening



Strategy		
T.1	Adoption of the IPv6 standard for the infrastructure and public web portals of the IFT*	41
	Modernization and update of the IFT's Procedures and Services Registry	41
, and the second second	Digital platform of the technical archive	42
Strategy		
T.2	39 Update and improvement of the IFT's Public Consultations portal	42
•		
Strategy		
T.3	Guidelines of the Public Registry of Concessions	43
	41 Regulatory Impact Analysis electronic management system*	43
•	Design and implementation of solutions to start the integrated electronic government strategy in the Institute, aimed at the management of various electronic procedures, as well as administrative simplification for various information submission obligations on the subject of telecommunications and the issuance of their corresponding general guidelines*	44





The 2019 AWP contemplates 7 strategic projects aligned with the institutional strengthening of the IFT transverse axis, three aligned with transverse strategy 1, one with transverse strategy 2 and three with transverse strategy 3.

STRATEGY TRANSVERSAL 1

Improve and systemize the management of the Institute's diverse processes, procedures and activities.

ID	AU	Project's name	End of Project**	2019 Goal***	Contributing AU
36	MU	Adoption of the IPv6 standard for the infrastructure and public web portals of the IFT* $ \frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left($	Q1 2019	100%	NA
37	BRI	Modernization and update of the IFT's Procedures and Services Registry	Q4 2019	100%	MU
38¹	MU	Digital platform of the technical archive	Q4 2019	100%	NA

STRATEGY TRANSVERSAL 2

Encourage transparency in the Institute's processes, procedures and activities.

39	BRI	Update and improvement of the IFT's Public Consultations portal	Q3 2019	100%	MU
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STRATEGY TRANSVERSAL 3

Diminish the administrative burden on the regulated sectors and establish regulatory improvement mechanisms.

40	CSU	Guidelines of the Public Registry of Concessions	Q2 2019	100%	NA
41¹	BRI	Regulatory Impact Analysis electronic management system*	Q4 2019	100%	NA
42	BSP	Design and implementation of solutions to start the integrated electronic government strategy in the Institute, aimed at the management of various electronic procedures, as well as administrative simplification for various information submission obligations on the subject of telecommunications and the issuance of their corresponding general guidelines*	Q4 2019	100%	BRI, MU

Notes:

NA Not applicable | AU Administrative Unit | BRI Bureau of Regulatory Improvement | BSP Bureau of Strategic Planning | MU Management Unit | CSU Concession and Services Unit.

¹ The development of the project depends on the budgetary availability of the IFT during 2019. See Addendum I.

^{*} Projects from the 2018 AWP.

^{**} Q1 - First Quarter, Q2 - Second Quarter, Q3 - Third Quarter, Q4 - Fourth Quarter.





Adoption of the IPv6 standard for the infrastructure and public web portals of the IFT*

The use of IPv6 in Mexico is still very limited, since it has been implemented mainly by academic institutions, research institutions, Internet service providers and some companies. In this sense, it is considered that the IFT shall promote and be prepared for the use of IPv6.

To this purpose, in 2018 an analysis on the impact of the adoption of IPv6 in the Institute's infrastructure was conducted; the general design of communications architecture was prepared; the renewal of the links through which Internet navigation is provided; the publication of institutional portals and mail; the renewal, installation and configuration of communications and information systems security infrastructure; and the definition of changes in institutional portals to publish them under the IPv6 protocol.

The detailed design of the architecture to support the publication of institutional web portals on the IPv6 protocol, maintaining their publication over the still operating IPv4 protocol, the security policy and procedures for its massive implementation, and the launching of three institutional portals with such addressing will be done in 2019.

Potential Benefits

The adoption of this protocol will allow the Institute to be prepared for its worldwide adoption, with more addressing space, higher security, enhanced compatibility for service quality, enabling the optimization in the mid-term of the available broadband usage through the Institute's links, since it will be feasible to increase the offer of electronic services over the institutional data network, as well as the portals published in the Internet.



MU AU



NA Contributing AU



100% 2019 Goal



First quarter of 2019

End of Project



Modernization and update of the IFT's Procedures and Services Registry

This project aims at the modernization of the current procedures inventory of the IFT, to make it easier, faster and more accessible to the general public, using ICTs. Also, this registry will be updated in terms of <u>General Law of Regulatory Improvement</u>, providing more and better information on the Institute's procedures and services in favor of the regulated subjects, users and audiences for an adequate fulfillment of their obligations and an effective exercise of their rights.

Potential Benefits

With the improvement of the procedures inventory, the Institute will offer full transparency to the regulated subjects, users and audiences on the formalities to be observed in each one of the procedures and services under its responsibility, significantly reducing the costs of obtaining information and allowing a remote, constant, progressive and proactive interaction, which will result in a reduction of the administrative burden.



BRI AU



MUContributing AU



100% 2019 Goal



Fourth quarter of 2019

End of Project





Digital platform of the technical archive

During the process of attention of loan requests and consultation of files, the files are exposed to elements having a direct impact on the conservation of the document collection, deteriorating its life cycle; also, the files may not be viewed simultaneously by the different AU of the Institute, which diminishes the productivity of these tasks.

Therefore, the files composing the technical archive of T&B will be digitized and managed through a digital platform to allow their storage, reproduction and digital viewing through specialized equipment.

Potential Benefits

With the creation of the digital platform for the technical archive, response times for viewing requests as well as certified and simple copies will be reduced, the quality of images will be enhanced, costs relating to the attention of lending requests will be eliminated, material resources usage will be diminished, the exposure of files to any internal or external event that may cause losses of information or the indiscriminate use of the files will be avoided.









Fourth quarter of 2019

End of Project

Note: The development of the project depends on the budgetary availability of the IFT during 2019. See Addendum I.

2019 **AWP**

Transverse Axis / Strategy T.2



Update and improvement of the IFT's Public Consultations portal

In order to improve in a substantive way the management of the consulting processes performed by the Institute, an computer tool will be developed to automate the internal process of this body, from the integration of the annual public consultations calendar and its corresponding updates, to the possibility that any interested party may participate in such processes through a dynamic and intuitive online interface that facilitates the submission of comments, opinions and contributions to this body, also allowing the automatic generation of statistics on those transparency and citizen participation processes.

Potential Benefits

Strengthen the information archive of the consultation processes performed by the Institute, improvement of communications between the UA for those purposes, facilitate the participation of the interested parties in a quick, easy and unobstructed manner, as well as the possibility of generate statistical reports on the subject that may be interesting for the participants of the T&B industry.













Guidelines of the Public Registry of Concessions

The issuance of the Guidelines of the Public Registry of Concessions (PRC) is imperative to establish regulations that allow T&B operators to have clear and precise stipulations to comply with their obligation of submitting to the Institute all data, reports and documents required to integrate the PRC, in the terms that the Institute indicates, in writing and electronic media.

Therefore, operation rules for the PRC will be established relating to the registration, modification and cancellation of the registered acts, and the registry will be gradually systemized. All this in order to regulate the processes and offer clarity to registry users. It shall be noted that according to the principles of transparency and citizen participation, a public consultation process will be performed to strengthen the project.

Potential Benefits

The project will improve efficiency in the attention of procedures to record those acts that require such formality in the PRC, generating transparency on the corresponding requirements and procedures. Also, the administrative burden relating to the registration of the regulated subjects will be diminished and information updating times will be significantly reduced.



CSU AU



NA Contributing AU



100% 2019 Goal



Second quarter of 2019

End of Project



Regulatory Impact Analysis electronic management system*

A computer tool will be developed to allow the AU of the Institute the preparation, management and electronic sharing of the regulations drafts and projects' RIA made available to the regulated parties, users and industry; this, in order to transparent and better explain the issues to be solved, the evaluated alternatives, potential impacts, the implementation and evaluation associated to the regulations proposals prepared for an efficient development of T&B, in accordance with the best practices suggested by various domestic and international agencies.

The technical documentation on such tool was prepared in 2018 and it will be implemented in the Institute in 2019.

Potential Benefits

The evaluation of the impact of regulation drafts and projects prepared by the Institute will be reinforced, generating efficiencies in the regulatory improvement process and in the management of the Institute's regulatory policy information archives.

Also, this tool will have an economic impact calculator to categorize regulations drafts and projects as moderate or high impact, a process diagram builder, and various functions that will provide the regulated subjects, users and audiences with more information on the regulatory policy of the Institute.







100% 2019 Goal



Fourth quarter of 2019

End of Project

Note: The development of the project depends on the budgetary availability of the IFT during 2019. See Addendum I.





Design and implementation of solutions to start the integrated electronic government strategy in the Institute, aimed at the management of various electronic procedures, as well as administrative simplification for various information submission obligations on the subject of telecommunications and the issuance of their corresponding general guidelines*

This project comprises three guidelines and one integral system which shall establish the common elements to allow standardization of the Institute's procedures and define the basic systems to be integrated in the service-oriented architecture (SOA) being designed to start the migration of the Institute to electronic government, in terms of procedures and services.

The report of the considerations from the public consultation was delivered in 2018, and the final guidelines project was prepared. The approval of those guidelines, which are the legal basis of the project, will be submitted to the Governing Board in 2019 and, upon approval, the integral system to support the digitalization of the Institute's procedures and services will be implemented, to enable their electronic management. Later, the procedures and services of the different AU of the Institute will be integrated.

Potential Benefits

With this project, homogeneous and betterquality information will be obtained, reducing transaction costs and administrative burden on the operators, and duplicate requirements will be avoided.

Also, use of the advanced electronic signature will grant the regulated subjects and the Institute higher security in the exchange of information in the procedures and their management. Additionally, higher information quality is expected which, along with the possibility to interconnect various internal databases, will provide public officials more and better information to support the development and design of regulatory policies and to further analyze their impact.

Likewise, the statistical information held by the Institute with the new electronic formats will be public through the Telecommunications Information Bank (TIB), with more indicators and in more detail, to provide the markets with more information for a better decision making on commercial and investment strategies by operators and investors.

Finally, as a result of the mapping of obligations to build the statistical electronic formats, information submittal obligations of telecommunications operators will be eliminated, equivalent to an administrative simplification of about 50% of their current obligations, which will reduce the transaction costs of the industry.













Radio spectrum outlook in Mexico for fifth generation mobile services	Analysis of international best practices for the definition of indicators in the broadcasting sector
Study on the feasibility of implementing digital radio and multiprogramming in Mexico*	10 Exploratory analysis on the marketing of connectivity services for loT 2019
Mobile Virtual Operators market analysis 47	Diagnostic study on the economic conditions of T&B services or markets*
Prospective study on the telecommunications sector in Mexico*	National Survey on Audiovisual Content 2018
Document including recommendations to promote competition in telecommunications services public acquisitions* 48	Gender roles and representations in Mexican television 51
Study on the relationship of audiences with disabilities with audiovisual media and content*	Study on Cloud Computing in Mexico
ICT adoption and use of the Internet in Mexico: Impact of users' sociodemographic characteristics (2019 version)	Study on the development of the IoT for productive sectors
Ex post impact analysis of the must carry and must offer policy on the pay TV market in Mexico	National Survey on Availability and Use of Information Technologies in Households 2019







Developing studies, research, analyses and diagnostics that generate new knowledge and conduct to regulatory projects in the mid-term is important for the Institute. Besides, they provide elements that allow the evaluation of the regulatory impact of the adopted resolutions and the evolution of the regulated markets, to align with international best practices on the subject and promote better possibilities to develop prospective on the T&B sectors.

The following studies and analyses will be conducted in 2019:

ID	UA	Name of the Study or Analysis	Publication**
1	RSU	Radio spectrum outlook in Mexico for fifth generation mobile services	Q1 2019
2	RPU	Study on the feasibility of implementing digital radio and multiprogramming in Mexico*	Q1 2019
3	BSP	Mobile Virtual Operators market analysis	Q2 2019
4	BSP	Prospective study on the telecommunications sector in Mexico*	Q2 2019
5	ECU	Document including recommendations to promote competition in telecommunications services public acquisitions*	Q2 2019
6	MACU	Study on the relationship of audiences with disabilities with audiovisual media and content*	Q2 2019
7	BSP	ICT adoption and use of the Internet in Mexico: Impact of users' socio-demographic characteristics (2019 version)*	Q4 2019
8	BSP	Ex post impact analysis of the must carry and must offer policy on the pay TV market in Mexico	Q4 2019
9	BSP	Analysis of international best practices for the definition of indicators in the broadcasting sector	Q4 2019
10	BSP	Exploratory analysis on the marketing of connectivity services for IoT 2019	Q4 2019
11	ECU	Diagnostic study on the economic conditions of T&B services or markets*	Q4 2019
12	MACU	National Survey on Audiovisual Content 2018	Q4 2019
13¹	MACU	Gender roles and representations in Mexican television	Q4 2019
14	RPU	Study on Cloud Computing in Mexico	Q4 2019
15	RPU	Study on the development of the IoT for productive sectors	Q4 2019
16¹	BSP	National Survey on Availability and Use of Information Technologies in Households 2019	Q1 2020

AU Administrative Unit | BSP Bureau of Strategic Planning | ECU Economic Competition Unit | RSU Radio Spectrum Unit | MACU Media and Audiovisual Content Unit | RPU Regulatory Policy Unit.

^{1 1} The development of the project depends on the budgetary availability of the IFT during 2019. See <u>Addendum I.</u>

^{*} Studies from the 2018 AWP.

^{**} Q1 - First Quarter, Q2 - Second Quarter, Q4 - Fourth Quarter.





Radio spectrum outlook in Mexico for fifth generation mobile services Considering that fifth generation (5G) mobile systems will allow an ultra-reliable low latency communication (URLLC), and that they provide an enhanced mobile broadband service as well as massive machine type communications (mMTC), a document will be prepared showing the prospective of the frequency bands that the Institute deems feasible to use for the deployment of 5G systems in accordance with international best practices.

This document will contribute to prepare a favorable atmosphere for the future deployment of this kind of networks, considering their impact on Mexico's development, not only in terms of telecommunications services but also on the implementation with other vertical industries such as health, agriculture, transportation and intelligent cities.



RSU



First quarter of 2019

Publication



Study on the feasibility of implementing digital radio and multiprogramming in Mexico* Ten years from the beginning of actions to implement digital radio in Mexico, this study will analyze the current status of the sector and the feasibility of generating policies that drive the development of this technology, considering costs and impacts on concessionaires and the possible benefits for them and the audiences. It shall also consider the implications for the diverse stakeholders in the sector: broadcasters, technology providers, manufacturers, and receiver distributors, among others.

It will provide elements to make decisions on the evolution and development of sound broadcasting in Mexico.



RPU

ΑU



First quarter of 2019

Publication



Mobile Virtual Operators market analysis

Considering that MVOs are mobile telecommunications service operators with very specific market segments and whose importance stems from being key players in the mobile market, an analysis on the behavior of the entrance and development of the MVOs in Mexico and other countries will be prepared, as well as on the trends of the different policies that have been implemented.

This will allow the identification of opportunity areas on the regulations to promote the development of competition and free concurrence in the mobile telephone and broadband market. In addition, the study will allow the consumers and the industry in general to have updated and timely information on the service alternatives offered by the MVOs in Mexico, as well as on the evolution of this market segment.



BSP

Second quarter of 2019





Prospective study on the telecommunications sector in Mexico* These are three studies that analyze Mexico's current situation in telecommunications and the main trends of the related markets.

The first study called "Regulatory prospective and analysis of the current situation of the telecommunications markets in Mexico 2018" analyzes the current situation of the main telecommunications services and proposes a convergence analysis from two perspectives. The second study, called "Regulatory prospective of telecommunications infrastructure in Mexico 2018: network coverage, sharing and deployment" examines infrastructure investments and sharing for network deployment, based on available public information and international experience.

Finally, the third study, called "Regulatory prospective of telecommunications in a digital transformation environment 2018", addresses progress and technological innovation to understand the market and gain awareness on regulatory needs. The influence of new actors and regulatory matters arising from the technological convergence phenomenon in a digital environment are explored from this perspective.



BSP



Second quarter of 2019

Publication



Document including recommendations to promote competition in telecommunications services public acquisitions

The adoption of competition principles in public purchases of telecommunications goods and services implies better pricing, quality and innovation conditions for the State on contracting such services. This way, from the review and analysis of common practices in the design or public contracting of telecommunications goods and services, a document will be prepared with recommendations on the best practices and applicable competition principles, which will include proposals or recommendations to amend the applicable legal framework or the processes design, to contribute to the improvement of economic competition in the contracting processes of the State in the T&B sectors.



ECL

Second quarter of 2019





Study on the relationship of audiences with disabilities with audiovisual media and content

A qualitative study will be conducted in the form of interviews to gain awareness on the habits and expectations of visually and hearing disabled population, relating accessibility services (subtitles, program guides, audio description); as well as to identify the way in which these audiences adopt broadcasted content.

This study will be a first approach to the subject and its results are expected to allow the identification of the needs of this population group and sensitization of the concessionaires and content creators on the need to include services such as hidden subtitles, Mexican sign language and any other accessibility mechanism.



MACU

ΑU



Second quarter of 2019

Publication



ICT adoption and use of the Internet in Mexico: Impact of users' socio-demographic characteristics (2019 version)*

Through an analysis of the NSAUITH 2018 database, a study will be generated to identify the impact of the main sociodemographic characteristics of the population on the probability of using ICTs and execute certain activities in the Internet.

This study will identify the main sociodemographic factors that obstruct access to ICT usage and will help to generate public policies aimed at increasing the population's access to those technologies, as well as improving ICTs users' abilities, considering that they are an important source to promote economic development.



BSP

ΑU



Fourth quarter of 2019

Publication



Ex post impact analysis of the must carry and must offer policy on the pay TV market in Mexico The study will evaluate the impact on open and pay television services in Mexico, as an effect of the implementation of the must carry and must offer policy. Based on this policy, the behavior of various available indicators (pay TV subscriptions, market concentration and number of channels, among others) will be analyzed to quantify the effects associated to this regulatory measure on local or public open TV channels and pay television operators, among others that will be defined during the execution of the study.



BSP

ΑU



Fourth quarter of 2019





Analysis of international best practices for the definition of indicators in the broadcasting sector* An analysis on the best international practices for the generation of indicators to monitor the evolution of the AM, FM and open TV broadcasting sector will be delivered, considering the sector's features, and the type of concessionaires and services that compose it.

The proposal of indicators to be requested from broadcasting services concessionaires will be integrated from this analysis, and the electronic forms through which the Institute will request such information will be prepared. Based on this, a conceptual framework will be developed to generate a statistical archive to know the results of the regulations issued by the IFT and identify opportunity areas in the sector.



BSP

AU



Fourth quarter of 2019

Publication



Exploratory analysis on the marketing of connectivity services for IoT 2019

This study will identify the marketing trends of connectivity services for the IoT in Mexico, which will be compared to the commercial information observed internationally, which will allow the identification of the determining factors for this type of services.

The information obtained from the study will allow the dimensioning of the possible demand that should be attended to cover the required telecommunications and radio spectrum infrastructure to provide IoT services.



BSP

ΔΠ



Fourth quarter of 2019

Publication



Diagnostic study on the economic conditions of T&B services or markets* Following the commitment of assigning more resources to market study processes, diagnostic studies will be prepared for the Institute to become aware of the prevailing economic conditions in T&B services or markets.

To perform these studies, the Institute will collect and analyze various sources of information on the involved services or markets to generate objective information on their evolution. The studies will be used internally by the Institute's UAs to improve their interventions as attorney or regulator.



ECL

Fourth quarter of 2019





National Survey on Audiovisual Content 2018 Surveys will be applied, analyzed and published to study audiovisual content consumption habits among the Mexican population. This will produce updated information that will help to analyze radio, television and Internet audiovisual content consumption preferences and patterns.

With this exercise, the audiences will be able to express their opinions directly, and the results will translate into information representing national, urban, rural, state and even local levels for the industry to become aware of the preferences of its audiences.



MACU

ΑIJ



Fourth quarter of 2019

Publication



Gender roles and representations in Mexican television

Due to the core role exercised by mass communications media on both society's representations and the spreading of stereotypes, qualitative studies will be performed from a gender perspective to identify the presence of women and men stereotypes in audiovisual contents and weigh their influence on the construction and reinforcement of images in the audiences.

The results of this research intend to contribute the empowerment of the audiences and to become a source of information for the concessionaires relating to the power of media discourse and the importance of communications media, mainly television, in the spreading and validation of gender roles and representations in society. The document may also contribute to the design of public policies in terms of media and audiovisual contents, to fight historical and structural causes that prevent and obstruct the development of equalitarian societies.



MACU

ΑU



Fourth quarter of 2019

Publication

Note: The development of the study depends on the budgetary availability of the IFT during 2019. See Addendum I.



Study on Cloud Computing in Mexico

A study will be performed to gain awareness on the current situation, as well as a prospective evaluation, on Cloud Computing in Mexico, a system that seeks access to the network by a set of physical or virtual resources that may be connected to next generation networks (NGN).

This aims at the identification of the standardization and regulating frameworks to promote innovation, development and implementation of disruptive technologies, without compromising or risking current networks' infrastructure and operations. The necessary network resources for its proper development are also identified, as well as the evolution of the activities performed by this new service platform, and, as a consequence, its future impact on telecommunications networks.



RPU



Fourth quarter of 2019





Study on the development of the IoT for productive sectors A study on the development of the IoT in various economic sectors will be performed, to identify challenges and opportunities for its adoption by the Mexican productive sector. This will provide the Institute with information to define actions to be taken to encourage the adoption of this technology to strengthen investment and innovation in the productive sectors.



RPU



Fourth quarter of 2019
Publication



National Survey on Availability and Use of Information Technologies in Households 2019 Statistical information will be generated through NSAUITH 2019, to become aware of the availability and use of ICTs in the households and by individuals ages six or higher living in Mexico, as well as to analyze its evolution from 2016 to 2019. This survey will have a national geographic representation level, by state and by urban and rural areas in Mexico.

This information will allow the update of indicators on the availability of computers, telephone services, pay television services and Internet connectivity in Mexico. New questions have also been added to the questionnaire to generate new indicators on electronic commerce and telecommunications services packaging, among others. This information will allow the IFT to reinforce the analysis of regulatory policies on the democratization of telecommunications services, promotion of the adoption of ICTs in Mexico, and the development of economic competition in both national and regional markets.



BSP

ΑU



First quarter of 2020

Publication

Note: The development of the survey depends on the budgetary availability of the IFT during 2019. See Addendum I.





Annual Activities Program 2019 of the Studies Center	Recommendations on the use of the radio spectrum to provide wireless access for social use purposes 55	Reports on telecommunications users' consumption patterns, satisfaction levels and users experience
Annual report on the rights, risks, interests, preferences, trends or consumption patterns of telecommunications services users during 2018	International convention to share telecommunications security best practices*	Quarterly Reports on the PEAs in the T&B sectors
Report on the administration of the IFT's resources	Report on the youth's consumption habits of communications media 55	Quarterly Reports on radio and television audiences, from a gender perspective
Proposal of fees on the use, enjoyment and exploitation of the radio spectrum, based on the analysis prepared in 2018	Report on results of appreciation of information and opinion contents 56	36 2019 Statistical Yearbook
Code of Best Practices for IoT cybersecurity	Quarterly statistical information on the T&B sector	Report on the coverage of mobile telephony for indigenous people
Behavior of the regulated markets' indicators, 2019	30 IFT's Quarterly Activities Report 56	Report on accessibility to telecommunications services for people with disabilities 62
Telecommunications services forecasts	Soy Usuario (I am User) Statistic Report 57	The IFT's Annual Program 2019 for the promotion of gender equality, diversity and inclusion
Instructions manual to submit information on economic competition to evaluate concentrations*	Reports on comparable plans and tariffs information for end users	







Among its activities, the IFT delivers reports and programs that show institutional results to the citizens and other interested parties in a quarterly, biannual or annual basis; this also contributes to transparency in the exercise of its powers.

ID	UA	Report Name or other document	Publication**
17	SC	Annual Activities Program 2019 of the Studies Center	Q1 2019
18	BUP	Annual report on the rights, risks, interests, preferences, trends or consumption patterns of telecommunications services users during 2018	Q2 2019
19	MU	Report on the administration of the IFT's resources	Q2 2019
20	RSU	Proposal of fees on the use, enjoyment and exploitation of the radio spectrum, based on the analysis prepared in 2018	Q2 2019
21	RPU	Code of Best Practices for IoT cybersecurity	Q2 2019
22	BSP	Behavior of the regulated markets' indicators, 2019	Q3 2019
23	BSP	Telecommunications services forecasts	Q3 2019
24	ECU	Instructions manual to submit information on economic competition to evaluate concentrations*	Q3 2019
25	RSU	Recommendations on the use of the radio spectrum to provide wireless access for social use purposes	Q3 2019
26	BUP	International convention to share telecommunications security best practices*	Q4 2019
27	MACU	Report on the youth's consumption habits of communications media	Q4 2019
28	MACU	Report on results of appreciation of information and opinion contents	Q4 2019
29	BSP	Quarterly statistical information on the T&B sector	Quarterly
30	BSP	IFT's Quarterly Activities Report	Quarterly
31	BUP	Soy Usuario (I am User) Statistic Report	Quarterly
32	BUP	Reports on comparable plans and tariffs information for end users	Quarterly
33	BUP	Reports on telecommunications users' consumption patterns, satisfaction levels and users experience	Quarterly
34 ¹	CU	Quarterly Reports on the PEAs in the T&B sectors	Quarterly
35	MACU	Quarterly Reports on radio and television audiences, from a gender perspective	Quarterly
36	BSP	2019 Statistical Yearbook	Annually
37	BUP	Report on the coverage of mobile telephony for indigenous people	Annually
38	BUP	Report on accessibility to telecommunications services for people with disabilities	Annually
39	MU	The IFT's Annual Program 2019 for the promotion of gender equality, diversity and inclusion	Annually

Notes:

AU Administrative Unit | SC Studies Center | BSP Bureau of Strategic Planning | BUP Bureau of User Policy | MU Management Unit | CU Compliance Unit | ECU Economic Competition Unit | RSU Radio Spectrum Unit | MACU Media and Audiovisual Content Unit | RPU Regulatory Policy Unit.

¹ Article 275 of the FTBL stipulates that the Institute or an external auditor will prepare a quarterly report of compliance with the asymmetric obligations of the PEAs in the T&B sectors. Contracting such external auditor, expert and independent, to assist the Institute in the preparation of such quarterly Reports, as stipulated in said article, will be subject to budgetary availability in the IFT during 2019. See Addendum I.

^{*}Reports and other documents carried from the 2018 AWP.

^{**} Q1 - First Quarter, Q2 - Second Quarter, Q3 - Third Quarter, Q4 - Fourth Quarter.





Annual Activities Program 2019 of the Studies Center

The Annual Activities Program will define the studies and research to be performed by the Studies Center (SC) during 2019; the execution of projections and prospective studies of the T&B sectors and domestic and international markets will be programmed.

Publishing, education, academic liaison and collaboration with research institutions activities will also be defined, with the ultimate end of generating theoretical and methodological elements to support the actions and resolutions of the Institute, contributing to the development of the T&B sectors.



SC



First quarter of 2019

Publication



Annual report on the rights, risks, interests, preferences, trends or consumption patterns of telecommunications services users during 2018

A report will be prepared, including a compilation of the lines of action executed by the IFT for the benefit of the users to protect their rights, the challenges faced on their execution, as well as the projects destined to achieve an effective protection of the users' rights during 2018.

Likewise, it will include the most important findings arising from the surveys conducted on users to detect their interests or consumption patterns, and their levels of satisfaction, so that opportunity areas are identified to make a positive impact on those items.



BUP

ΑL



Second quarter of 2019

Publication



Report on the administration of the IFT's resources

A report showing the main actions, measures, standards and strategies adopted during 2018 will be prepared, which will also include a description of the current status of the Institute's talent and financial, material and technological resources management.

This, to consolidate the IFT as an institution committed with accountability and performance evaluation, based on the fact that a transparent and efficient exercise of the resources is a fundamental premise for institutional performance.



MU



Second quarter of 2019





Proposal of fees on the use, enjoyment and exploitation of the radio spectrum, based on the analysis prepared in 2018 According to the results obtained from the Analysis of fee schemas for the use, enjoyment and exploitation of the radio spectrum and considerations for the granting of concessions by tender prepared in 2018, a proposal will be made for a possible amendment of the <u>Federal Law of Duties</u>, relating to charges for the use, enjoyment and exploitation of the radio spectrum.

This aims at making progress towards a schema that promotes investment and competition in the sector, balanced with a fair recovery of revenue corresponding to the State, considering international standards and best practices.



RSU



Second quarter of 2019

Publication



Code of Best Practices for IoT cybersecurity

A Code of Best Practices in Security for IoT Products will be developed and established, based on risk management and making emphasis on security by design, to diminish the cybernetic risks of those devices. Said instrument will be agile and flexible to address the fast technological evolution and ever-changing needs of the sector, as well as harmonized with the best international practices¹⁰ to avoid the creation of technical obstacles on trade or the inhibition of innovation.

This code will help to strengthen and encourage the implementation of IoT technologies in Mexico with their consequent social and economic benefits, as well as to increase confidence in the use of the Internet and to promote innovation, allowing a safe and reliable technological evolution.



RPU

ΑU



Second quarter of 2019

Publication



Behavior of the regulated markets' indicators, 2019 A report with the result of the tracking metrics on the evolution of the markets regulated by the Institute will be prepared, with statistical information for 2018. Also, as part of a continuous improvement process, the metrics will be reviewed to evaluate their validity and encourage transparency and accountability in the IFT.

This to offer updated information to the industry and the general public, allowing them to become aware of the development of the T&B sectors in Mexico.



B21

Third quarter of 2019

¹⁰ UK Department for Digital, Culture, Media & Sport "Mapping of IoT Security Recommendations, Guidance and Standards to the UK's Code of Practice for Consumer IoT Security.





Telecommunications services forecasts

A document with forecasting models that measure and model the evolution of telecommunications services will be prepared, based on the historical data series published by the Institute.

This instrument will allow the estimation and projection of the behavior of the services, as well as to recognize the main milestones of their evolution, constituting a source of relevant information of the Institute's UAs and the general public.



BSF



Third quarter of 2019

Publication



Instructions manual to submit information on economic competition to evaluate concentrations*

An instructions manual will be published to support the identification of the minimum necessary information to make an analysis on economic competition relating to the applications of the economic agents for the approval of grantings, transfers and disposals of shares of concession titles.

This instruction manual will allow to accelerate the Institute's response times relating to these types of procedures and is intended to cause the elimination of transaction costs and a more efficient functioning of the economic agents



ECU

(

Third quarter of 2019

Publication



Recommendations on the use of the radio spectrum to provide wireless access for social use purposes Arising from the lack of general information on the deployment of wireless networks in remote areas in Mexico and in indigenous communities, a collection of the regulations associated to social use telecommunications concessions that stimulate the use of the radio spectrum for mobile broadband services with social purposes.

The intention is to prepare recommendations on the use of the radio spectrum for social concessionaires and non-profit civil organizations become acquainted with the mechanisms that may eventually allow them to provide mobile broadband services and contribute to the reduction of the digital gap.



RS



Third quarter of 2019





International convention to share telecommunications security best practices* An international convention will be signed to share experiences, information and tools to identify the best practices on the subject of telecommunications networks security. Solutions to possible risks to which users are exposed will be implemented and information will be provided to enhance safety in the use of services and devices.



BUP

AU



Fourth quarter of 2019

Publication



Report on the youth's consumption habits of communications media

A report with the results of the study on audiovisual content consumption in traditional media, social networks and new platforms This document will include qualitative and quantitative information on communications media exposure and consumption habits among the population between ages 20 and 35, residing in different areas in the country and observed for one year.

Likewise, said report will include the most important findings arising from the research techniques used to detect consumption trends or patterns, allowing the identification of habits variations during the term under study.



MACU

ΑU



Fourth quarter of 2019

Publication



Report on results of appreciation of information and opinion contents The results of the qualitative and quantitative analysis on the regular consumption of information and opinion contents among audiences over 18 at a national and regional level, to become acquainted with the appropriation of this type of contents in the voice of the audiences themselves, from what may be acknowledged about both the offer and its consumption.

These results are aimed at contributing to promote respect and empowerment of audiences in T&B services.



MACU

ΑU



Fourth quarter of 2019

^{*} Reports and other documents carried from the 2018 AWP.





Quarterly statistical information on the T&B sector

As part of the Institute's commitment to generate knowledge on the development of T&B in Mexico, reports with statistical indicators from which the evolution of those sectors is monitored in the BIT will be published, showing also the distribution, penetration and a comparative analysis at an international level on the services offered in the fixed telephony, land broadband, pay television, mobile telephony and mobile broadband markets to promote an atmosphere of trust in the industry, investors and the general public on the markets that compose these sectors.

It is also intended to contribute to improve public policies for the benefit of the population, as well as to strengthen decision making within the different public and private parties involved in these sectors.



BSP



QuarterlyPublication



IFT's Quarterly Activities Report

A quarterly report will be published including progress on the projects, studies, analysis, events and campaigns defined in the IFT's 2019 AWP; as well as the substantial activities that the UAs execute within the scope of their responsibilities.

This is intended to strengthen the IFT's commitment with transparency and accountability and to provide the citizens, the industry and regulated parties with timely and updated information on the performance and actions of the Institute.



BSP

ΑU



QuarterlyPublication

31

Soy Usuario (I am User) Statistic Report

A quarterly report will be published, showing the progress in the reception, process and attention to complaints submitted by telecommunications service users through the electronic system <u>Soy Usuario</u> (I am user).

This way, the users will have clear and timely information on the attention to complaints provided by the companies, showing data such as the reported service, the number of complaints by operator, the type of issues that the users submit and the average response time.



BUF

ΔΗ



QuarterlyPublication





Reports on comparable plans and tariffs information for end users Reports on comparable information, in terms of plans and rates registered in the PRT and the current offer published in the concessionaires Internet portals will be generated. The objective of this document is to provide the users with a reference on the subject to make better decisions, and to officially make the concessionaires offers transparent, generating an information cycle for the benefit of the users.



BUP

ΑL



QuarterlyPublication



Reports on telecommunications users' consumption patterns, satisfaction levels and users experience Based on a series of surveys to be applied to identify consumption patterns, satisfaction levels and user experiences, relating to telecommunications services, a quarterly report will be prepared at a national level to identify the best options available in the market, at affordable prices, with an adequate quality level in accordance with international standards, to make useful information available to the users for better informed decisions on the contracting of telecommunications services.



BUP

ΑU



QuarterlyPublication

34

Quarterly Reports on the PEAs in the T&B sectors A quarterly report on compliance with asymmetric obligations, with disaggregation of local public telecommunications network elements obligations and with the PEA's concession titles in the T&B sectors will be prepared.

This will help to improve substantially the evaluation procedures on compliance with asymmetric regulations, increasing the levels of reliability of the obtained results, and improving the adaptability of the processes to regulatory updates and amendments.



CL

QuarterlyPublication

Note: Article 275 of the FTBL stipulates that the Institute or an external auditor will prepare a quarterly report of compliance with the asymmetric obligations of the PEAs in the T&B sectors. Contracting such external auditor, expert and independent, to assist the Institute in the preparation of such quarterly Reports, as stipulated in said article, will be subject to budgetary availability in the IFT during 2019. See <u>Addendum I</u>.





Quarterly Reports on radio and television audiences, from a gender perspective An integrated analysis on the ratings of radio and television audiences, observed from a gender viewpoint, is prepared to identify convergences and divergences existing between female and male audiences media exposure and consumption habits.



MACU

AU



QuarterlyPublication



2019 Statistical Yearbook To the purpose of having a source of input for the Institute and provide timely and reliable information on the development of the T&B sectors for the general public, the Statistical Yearbook 2019 will be published, composed of data from 2018, showing information monitored by the IFT at a national level, by state and some indicators at the municipal level or by city, on the subject of ICT equipment, fixed and mobile services, open radio and television contents consumption and radio spectrum, among others.

Based on this information, better regulation, investment, trading or business strategies may be generated, as the case may be according to the roles of the different actors involved in the sectors.



BSP

ΑU



Annual

Publication



Report on the coverage of mobile telephony for indigenous people Considering Mexico's pluricultural composition, it is necessary to continue with the generation of information inputs to favor the design and development of more functional public policies for universal connectivity and access.

For that reason, the preparation of a diagnostic is proposed to obtain knowledge on the evolution of mobile services guaranteed coverage under the 2G, 3G and 4G technologies, in reference to indigenous people identified in the Population and Housing Census 2010 of the National Institute of Statistics and Geography (INEGI). The purpose of this analysis is to generate instruments that support the digital empowerment and alphabetization of this population sector.



BUP

AnnualPublication





Report on accessibility to telecommunications services for people with disabilities

A report will be delivered establishing the progress and compliance level of the operators with the General guidelines for accessibility to telecommunications services for users with disabilities.

The intention is to publish the actions being taken on the subject and inform on the level of compliance of the operators, as well as to identify opportunity areas that may have a positive impact on these users.



BUP



Annual Publication

The IFT's Annual Program 2019 for the promotion of gender equality, diversity and inclusion

A program promoting gender equality, inclusion and the eradication of any kind of discrimination will be prepared, including the promotion of women's leadership.

This document is intended to contribute to the consolidation of an integral dimension of the gender perspective, and to fortify the IFT as an emblematic institution on the subjects of gender equality, respect to diversity, tolerance and inclusion, whose processes, projects and actions are free of discriminatory biases, allowing the creation of a participative work environment, based on trust.





Annual Publication







Telecommunications services users Workshops

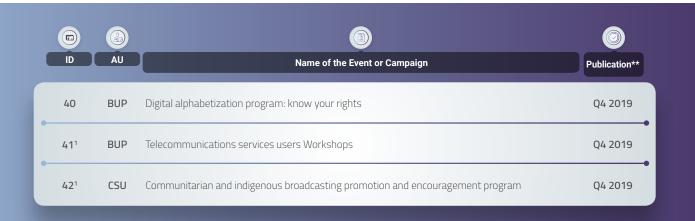
65

Communitarian and indigenous broadcasting promotion and encouragement program





EVENTS AND CAMPAIGNS



Notes:

** Q4- Fourth quarter.

AU Administrative Unit | BUP Bureau of User Policy | CSU Concession and Services Unit.

¹ The development of this program depends on the budgetary availability of the IFT during 2019. See Addendum I.





Digital alphabetization program: know your rights Aninformationandtrainingprogramwillbeimplementedin 2019, aimedattelecommunications services users, which contemplates the collaboration of public and private institutions in Mexico City (CDMX) and the states of the Mexican Republic, to implement training courses, provide information materials such as brochures and booklets, offer assistance and support on the submission of complaints from the users and the attention of specific questions from the users (portability, contracting, quality, among others).

The programs will empower the users and train them to make informed decisions and an adequate usage of their telecommunications services and equipment. It will also help to publish the work of the Institute and increase the usability of the digital tools developed for the users' benefit.



BUF

AU



Fourth quarter of 2019

Publication



Telecommunications services users Workshops

During 2019, digital alphabetization workshops will continue, aimed at girls and boys, youngsters, people with disabilities, and the elderly (vulnerable groups), that allow them to learn how to use various devices and applications, benefit from telecommunications services and ICTs, as well as to show them the advantages of using ICTs and telecommunications in their daily life, reducing asymmetries in knowledge and adoption of new technologies.



BUP

ΑU



Fourth guarter of 2019

Publication

Note: The development of these workshops depends on the budgetary availability of the IFT during 2019. See Addendum I.



Communitarian and indigenous broad-casting promotion and encouragement program

Campaigns will be performed in the states of the Mexican Republic, considering those where more social, community and indigenous use concessions have been requested to promote and encourage community and indigenous broadcasting in our country, as well as to provide assistance relating to the legal framework, the requirements, form filling-up and the necessary information and documentation to apply for a concession.

A temporary filing window will be installed during the terms established in the APFB 2019 for the submission of applications for social use broadcasting concessions. This will ensure that the interested parties have the opportunity to submit their applications in due time by having a temporary office near their place of residence.



CSU



Fourth quarter of 2019

Publication

Note: The development of this program depends on the budgetary availability of the IFT during 2019. See Addendum I.





IFT'S RECURRENT ACTIVITIES

2019 ANNUAL WORK PROGRAM

The Institute will continue with its key activities for the proper functioning and compliance with the regulations in force and other important matters for the citizens and parties interested in the T&B sectors. The following are included among the regular activities for 2019:

- Oversight actions (verification/supervision) on the compliance of the regulations in force
- Measurement of the quality of mobile service
- Monitoring and supervision of the radio spectrum
- Supervision actions to concessionaires and other regulated subjects for compliance with T&B regulations
- Processing and evaluation of requests on the subject of T&B
- Resolutions on interconnection disagreements
- Procedures conducted by the IA, investigating the probable commission of anticompetitive practices
- Information on the proportion of female occupancy by position ranges in the Institute
- Communication of information on telecommunications services quality
- Revenue collection for the use of radio spectrum frequencies
- Management of the Infrastructure and Equipment Fund of the IFT (IEF-IFT)
- Budgetary, investment projects, financial statements and audit reports
- Subjects on transparency, access to information, accessibility and personal data protection, as well as open government actions
- Strengthening of the organizational culture and best practices to consolidate the IFT as a good place to work for
- Informatics developments.

In addition to these activities, it shall be noted that, given the dynamic nature of the T&B sectors, other key activities may arise during 2019 that are not currently listed but will be reported in the Institute's Quarterly Activities Reports.



Abbreviations, Initials and Acronyms

5G	< Fifth generation mobile technology	BRI Sureau of Regulatory Impression the IFT	ovement of
PEA	< Preponderant Economic Agent	BSP Sureau of Strategic Planning	5
PEAB	Preponderant Economic Agent in the Broadcasting sector	BUP Sureau of User Policy of the	IFT
PEAT	Preponderant Economic Agent in the Telecommunications sector	BIL Sureau of Institutional Liaiso	on of the IFT
IA	< Investigation Authority of the IFT	IFA < Interconnection Framework	Agreement
RIA	< Regulatory Impact Analysis	FOG < Federal Official Gazette	
AM	< Amplitude Modulation	TP < Technical Provision by the IF	Т
TIB	< Telecommunications Information Bank	National Survey on Avail Use of Information Technology Households	ability and nologies in
САР	< Common Alerting Protocol	IEF-IFT < Infrastructure and Equipment the IFT	ent Fund of
CDMX	< Mexico City	FM < Frequency Modulation	
SC	< IFT's Studies Center	GHz < Gigahertz	





ABBREVIATIONS, INITIALS AND ACRONYMS

IEC	< International Electrotechnical Commission	MSS	< Mobile-satellite service
IFT or the Institute	< Federal Telecommunications Institute	NGN	< Next Generation Network
INEGI	< National Institute of Statistics and Geography	MVO	< Mobile Virtual Operators
loT	< Internet of Things	ОТТ	< Over The Top
IPv4	< Internet Protocol version 4	APUEFB	Annual Program for the Use and Exploitation of Frequency Bands
IPv6	< Internet Protocol version 6	AWP	< Annual Work Program of the IFT
ISO	<pre></pre>	NDP	< National Development Plan
kHz	< Kilohertz	RPC	< IFT's Public Registry of Concessions
FTBL	< Federal Telecommunications and Broadcasting Law	RPT	< Public Telecommunications Registry
SET-RM	< Spectrum Efficiency Technical- Regulatory Metrics	PTR	< Public Telecommunications Registry
MHz	< Mega Hertz	SAR	< Specific Absorption Rate
mMTC	< Massive Machine-Type Communications	NIIS	National Infrastructure Information System





ABBREVIATIONS, INITIALS AND ACRONYMS

SOA	< Service Oriented Architecture	ECU	< Economic Competition Unit of the IFT
ICT	< Information and Communications Technology	CSU	< Concession and Services Unit of the IFT
TV	< Television	RSU	< Radio Spectrum Unit of the IFT
T&B	< Telecommunications and Broadcasting	ITU	< International Telecommunications Union
AU	< Administrative Units of the IFT	MACU	< Media and Audiovisual Content Unit of the IFT
MU	< Administration Unit of the IFT	RPU	< Regulatory Policy Unit of the IFT
LAU	< Legal Affairs Unit of the IFT	URLLC	< Ultra-reliable low latency communication
CU	< Compliance Unit of the IFT	VU	< Verification Units





Addendum I.

Projects dependent on budgetary availability for year 2019

Table 1. Projects, studies and reports dependent on budgetary availability for year 2019

Project / Study / Report / Campaign ¹	Area	Alignment	Project conclusion ²
Quarterly Reports on the PEAs in the T&B sectors ³	CU	Objective 1	Quarterly
Communitarian and indigenous broadcasting promotion and encouragement program	CSU	Objective 2	Q4 2019
Quality monitoring platform for mobile service experience	BUP	Objective 3	Q2 2020
Telecommunications services users Workshops	BUP	Objective 4	Q4 2019
Regulatory Impact Analysis electronic management system	BRI	Transverse Axis	Q4 2019
Digital platform of the technical archive	MU	Transverse Axis	Q4 2019
Gender roles and representations in Mexican television	MACU	Transverse Axis	Q4 2019
National Survey on Availability and Use of Information Technologies in Households 2019	BSP	Transverse Axis	Q1 2020

Notas:

AU Administrative Unit | BRI Bureau of Regulatory Improvement | BSP Bureau of Strategic Planning | BUP Bureau of User Policy | MU Management Unit | CU Compliance Unit | CSU Concession and Services Unit | MACU Media and Audiovisual Content Unit.

Objective 1. Promote and encourage that users and audiences enjoy enhanced public service options at affordable prices, by nurturing competition and free concurrence in the regulated sectors. Objective 2. Promote and encourage conditions for universal access to T&B technologies and services, to maximize social welfare. Objective 3. Guarantee that T&B services received by the population are consistent with international quality standards. Objective 4. Encourage respect for end users and audiences' rights in T&B services. The Transverse Axis refers to Institutional Strengthening.

Source: IFT

^{1 | 1}The development of these projects, studies, reports and campaigns depends on budgetary availability of the IFT during 2019; therefore, their planned execution term and ending may be affected by the times in which those resources are available.

² Q1 - First Quarter, Q2 - Second Quarter, Q4 - Fourth Quarter.

Article 275 of the FTBL stipulates that the Institute or an external auditor will prepare a quarterly report of compliance with the asymmetric obligations of the PEAs in the T&B sectors. Contracting such external auditor, expert and independent, to assist the Institute in the preparation of such quarterly Reports, as stipulated in said article, will be subject to budgetary availability in the IFT during 2019.





Addendum II.

Deliverables for projects with partial progress in 2019

Table 2. Partial deliverables to be done in 2019 for projects with later completion dates

		(2)			
ld	Project	AU	Project conclusion**	2019 Goal	2019 Deliverables
7	Second biennial resolution on preponderance in the broadcasting sector	RPU	Q1 2020	75%	Information request to the PEAB and the industry, and public consultation process on the effectiveness of the imposed measures in terms of competition.
8	Second biennial resolution on preponderance in the telecommunications sector	RPU	Q1 2020	75%	Information request to the PEAT and the industry, and public consultation process on the effectiveness of the imposed measures in terms of competition.
12	Tender IFT-8 Frequencies for audio broadcasting*	RSU	Q3 2020	80%	Draft of the tender rules and public consultation process, issuance of the call and tender rules, participation certifications and resolution minutes.
13	Tender IFT-10 Wireless access service	RSU	Q4 2020	20%	Band study and analysis. Development of the offer submission procedure.
14	Definition of Spectral Efficiency Technical-Regulatory Metrics and their application methodology*	RSU	Q3 2020	60%	Definition and design of the implementation framework for spectrum efficiency metrics.
20	National Infrastructure Information System*	CSU	Q3 2020	50%	Technical addendum integrated.
30	Quality monitoring platform for mobile service experience*	BUP	Q2 2020	40%	Testing on platforms and updating of the defined reference terms.
35	Platform for innovators and new business models	RPU	Q4 2020	20%	Platform design definition document.

Notes

AU Administrative Unit | BUP Bureau of User policy | CSU Concession and Services Unit | RSU Radio Spectrum Unit | RPU Regulatory Policy Unit.

 $^{^{\}ast}$ Projects from the 2018 AWP.

^{**} Q1 - First Quarter, Q2 - Second Quarter, Q3 - Third Quarter, Q4 - Fourth Quarter.

