



INSTITUTO FEDERAL DE
TELECOMUNICACIONES

Tender IFT-10

Tender of spectrum for commercial use in the 814-824 / 859-869 MHz, 1755-1760 / 2155-2160 MHz, 1910-1915 / 1990-1995 MHz y 2500-2530 / 2620-2650 MHz frequency bands for Mobile Access Services.

February, 2021

Note: This document is only a general overview of the tender. Therefore, its content is merely informative.

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Spectrum available

41

Spectrum blocks available, located in 4 bands for mobile access services (celular and mobile Internet services).

20

License duration of 20 years.

Blocks	Band	Description	Coverage
Block A1	814-824 MHz / 859-869 MHz	Several segments available in different settlements (municipalities)	Cellular Regions 1 to 4.
Blocks A5.01-A9.05 (37 Blocks)	814-824 MHz / 859-869 MHz	10 + 10 MHz (paired spectrum)	Per Basic Service Area (ABS, by its initials in Spanish) located in the Cellular Regions 5 to 9.
Block B1	1755-1760 MHz / 2155-2160 MHz	5 + 5 MHz (paired spectrum)	Nationwide
Block C1	2500-2530 MHz / 2620-2650 MHz	Several segments available in different settlements (municipalities)	Several segments available in different settlements (municipalities)
Block D1	1910-1915 MHz / 1990-1995 MHz	5 + 5 MHz (paired spectrum)	Nationwide

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Stages and activities

1

- 1.1 Application (via e-mail).
- 1.2 Questions & Answers.
- 1.3 Submission of technical, legal and economic requirements.
- 1.4 Prevention
- 1.5 Submission of additional requirements, when applicable.

2

- 2.1 Issuance of legal and technical opinion.
- 2.2 Issuance of economic competition opinion.
- 2.3 Issuance of participation certificates.
- 2.4 Notification of participation certificates.

3

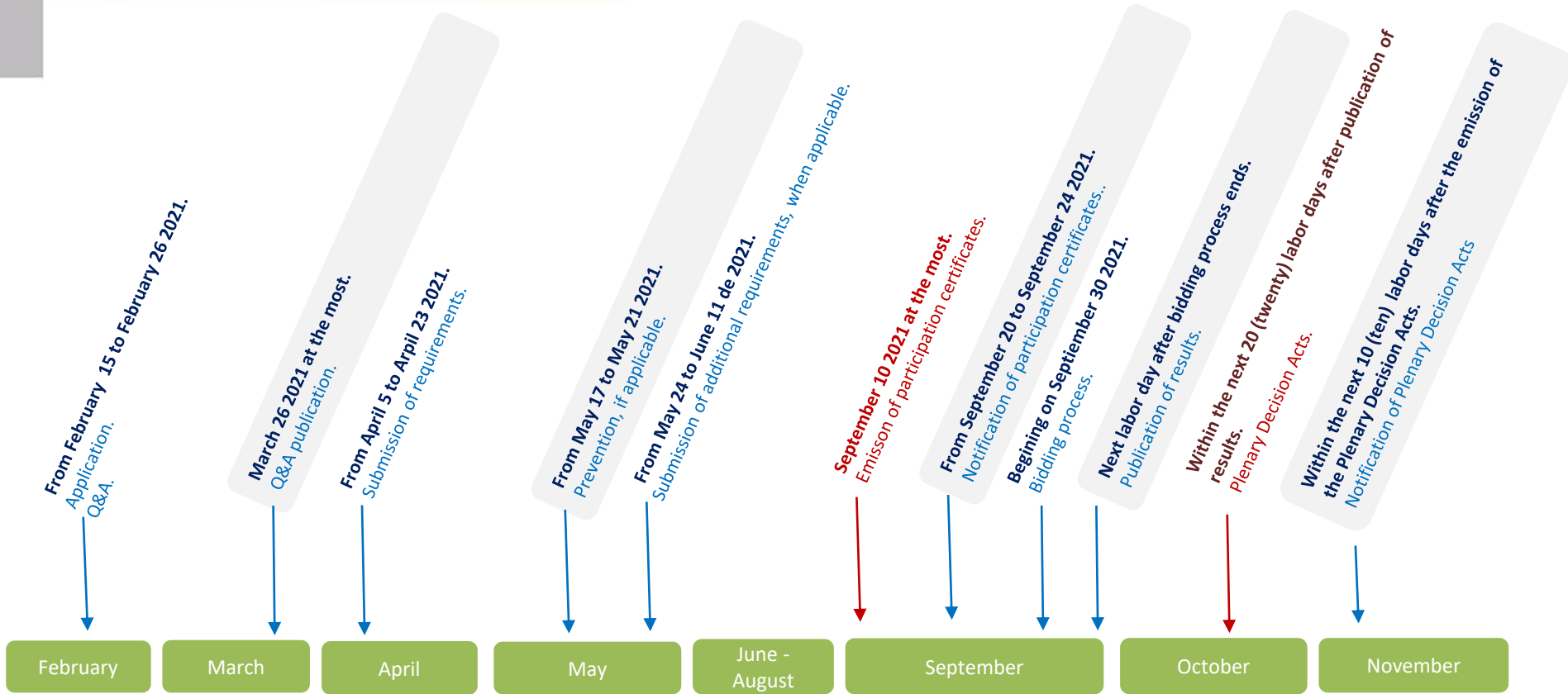
- 3.1 Practice sessions (mock bidding).
- 3.2 Bidding process.
- 3.3 Publication of results.

4

- 4.1 Issuance of the Plenary Decision Acts.
- 4.2 Notification of the Plenary Decision Acts.
- 4.3 Payment.
- 4.4 License awarding.

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Tender Timetable



- November / December 2021 (estimated date)

Estimated payment period.

2021

- February 2022 (estimated date)

License awards.

- The timetable is only a reference and indicates only certain relevant activities of the Tender; the complete timetable can be found in numeral 5 of the Tender rules.
- In this timetable, maximum terms are used to estimate the periods.

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Online Bidding platform (SEPRO, by its Spanish initials)

Benefits of using the SEPRO

- ❖ **Efficient management** of the bidding process.
- ❖ **Elimination** of entry barriers.
- ❖ **Capability to simultaneously submit bids** for multiple blocks.



Practice sessions

Online mock biddings in order to get acquainted to the SEPRO.



User name and password

Each and every participant will be provided with a user's manual and a unique username and password in order to operate the SEPRO.



Bidding process in the SEPRO

Participants will be able to submit their bids online through a web application.

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Simultaneous Multi-Round Auction (SMRA)



Multiple rounds

- ❖ Each contest is made up of three (3) stages with an indeterminate number of rounds.



Units

- ❖ Each Block will have a value in units. The value in units of each block was calculated taking into consideration the minimum reference value, annual use fees (derechos) and the estimated cost of the coverage obligations.



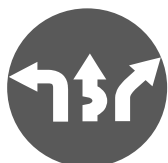
Eligibility Units

- ❖ The total number units available in each round for bidding. It's determined by the value of its deposit and its spectrum accumulation limit.



Activity level

- ❖ Depending on the stage the bidding process, a certain level of activity will be required (60%, 80%, 95% in each corresponding stage).



Block switching

If a participant holds highest valid bid for a block (OVMA¹, for its acronym in Spanish), he will be able (a certain number of times) to withdraw that OVMA and to place a bid in any other block².



Withdrawal penalty

- ❖ Each withdrawal of an OVMA might be subject to a penalty if at the end of the contest there is not another OVMA for that particular block³.

¹ Participation might be restricted on certain settlements depending on the spectrum accumulation limit for each participant.

² OVMA: meaning the highest valid bid for a specific Block.

³ In case of incurring in a withdrawal penalty it will be calculated by applying the consideration formula (Fórmula de Evaluación de Contraprestación) to the full value of the withdrawn OVMA, that is, not taking into consideration the "not economic components".

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Deposit, payment and license awards



Deposit amount should be associated with the number of eligibility units that the participant wishes to acquire for the bidding process. Each unit has a value of **1 million 400 thousand Mexican pesos** (\$1,400,000.00 MXN).



The winning participants must make and provide evidence of the payment for the license award and, when applicable, the payment of the withdrawal penalties and additional regulatory fees. Otherwise, the deposit will be executed.



Once licenses are issued and granted the corresponding winners participant's deposit will be released only if they did not incur in any grounds for disqualification.

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Spectrum accumulation limit

26.5% 1st contest

30% 2nd contest

Operator	600 MHz Band	700 MHz Band	L Band	800 MHz Band	850 MHz Band	PCS Band	AWS Band	2.5 GHz Band	3.3 GHz Band	Total	%
América Móvil (AMX)	0	0	0	0	21.51	28.40	80	51.05	0	180.96	24.0%
AT&T	0	0	0	3.2	16.93	32.10	50	80	0	182.23	24.2%
Altán-Red Compartida	0	90	0	0	0	0	0	0	0	90	11.9%
Telefónica	0	0	0	0	0.94	43.31	0	0	0	44.25	5.9%
TV Zac	0	0	0	0	0	0	0	0.65	0	0.65	0.1%
Licitación IFT-10	0	0	0	16.8	0	10	10	8.3	0	45.1	6.0%
Available	70	0	91	0	0	0	0	0	50	211	28.0%
Total	70	90	91	20	39.38	113.81	140	140	50	754.19	100.0%

*Common or comercial names of spectrum concession operators for reference purpose only.

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Participation Incentives (Non Economic Components)

30%

New Competitors in IMT bands (applicable if the participant does not have any IMT spectrum licenses granted).

20%

Competitors with low spectral holdings in IMT bands (less than 15% of the spectrum granted and available in IMT).

The following **conversion formula** is used to calculate the economic component:

$$CE^j = Pt^j * (1 - x) * N$$

Where:

CE^j : Economic component (payment, can't be less than VMR);

Pt^j : Bid value in points;

N is the scaling factor used and is equal to 1,000,000;

$x = 0.30$, if it is a New Competitor;

$x = 0.20$, if it is a Competitor with low spectral holdings, and

$x = 0$, all other cases.

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Coverage obligations

Blocks A5.01-A9.05 (800 MHz Band)

Provide mobile services using 4G technology or superior **on at least the number of settlements with a population higher than 300 inhabitants located in each ABS ([Annexed](#)) that do not have mobile Internet service**, using either the 800 MHz Band obtained or any other frequency band and / or terrestrial infrastructure, owned or owned by third parties by any legal means.*

Block B1 and Block D1 (AWS y PCS Bands respectively)

Provide mobile services using 4G technology or superior **on at least 100 settlements** with population higher than 300 inhabitants **that do not have mobile Internet service per Block in Chiapas, Guerrero, Oaxaca and Veracruz.***

Settlements located in Chiapas, Guerrero, Oaxaca and Veracruz will count as 2 instead of 1, but the total number of covered settlements can't be less than 70.

* This obligation has to be fulfilled by the winnerlicensee within the next two (2) years after license granting , covering at least the 80 % (eighty percent) of the population of each settlement.

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Coverage obligations

Block C1 (2.5 GHz Band)

- **Provide mobile services**, using 4G technology or superior, in **at least 30 out of 52 settlements of between 1,000 and 5,000 inhabitants that do not have mobile service**, using either the obtained 2.5 GHz Band or any other frequency band and / or terrestrial infrastructure, directly owned or owned by third parties and acquired by any legal means.*
- **Provide mobile services** using 2.5 GHz Band, in **at least 3 out of the 6 metropolitan zones**, as established by the interinstitutional group conformed by INEGI, CONAPO and SEDATU that have a population of over one million inhabitants.*
- **Provide mobile services** using either the obtained 2.5 GHz Band or any other frequency band and / or terrestrial infrastructure, directly owned or owned by third parties and acquired by any legal means, in **at least two (2) highway sections** established in the Tender rules.**

* This obligation has to be fulfilled by the winner licensee within the next two (2) years after license has been granted , covering at least the 80 % (eighty percent) of the population of each settlement.

** This obligation has to be fulfilled by the concessionaire within the next two (2) years after license has been granted , covering at least the 80 % (eighty percent) of each chosen highway sections.

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VMRs, Units associated to each Block and Deposit

Block	VMR (MXN)	Annual regulatory fees 2021 (MXN)	Units associated to the Block	Deposit (MXN)
A1	374,000,000.00	\$148,229,809.27	64	89,600,000
Block	VMR (MXN)	Annual regulatory fees 2021 (MXN)	Units associated to the Block	Deposit (MXN)
A5.01	118,651,000.00	54,231,399.70	32	44,800,000
A5.02	13,383,000.00	17,015,095.12	16	22,400,000
A5.03	1,826,000.00	9,244,119.54	8	11,200,000
A5.04	1,895,000.00	8,908,685.21	8	11,200,000
A5.05	24,264,000.00	9,630,390.19	8	11,200,000
A5.06	13,897,000.00	5,515,875.33	8	11,200,000
A5.07	1,305,000.00	3,576,634.91	4	5,600,000
A6.01	30,135,000.00	11,960,914.28	16	22,400,000
A6.02	993,000.00	6,511,698.95	8	11,200,000
A6.03	1,754,000.00	6,382,226.21	8	11,200,000
A6.04	1,084,000.00	13,684,874.46	16	22,400,000
A6.05	431,000.00	4,249,430.77	4	5,600,000
A6.06	708,000.00	2,320,055.34	4	5,600,000
A7.01	2,045,000.00	1,831,004.45	2	2,800,000
A7.02	1,445,000.00	573,461.31	1	1,400,000
A7.03	1,046,000.00	415,124.29	1	1,400,000
A7.04	926,000.00	367,216.27	1	1,400,000
A7.05	638,000.00	1,326,256.73	2	2,800,000
A7.06	1,357,000.00	538,424.49	1	1,400,000
A7.07	223,000.00	1,115,286.43	2	2,800,000
A7.08	786,000.00	311,750.91	1	1,400,000
A7.09	1,563,000.00	620,156.34	1	1,400,000

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VMRs, Units associated to each Block and Deposit

Block	VMR (MXN)	Annual regulatory fees 2021 (MXN)	Units associated to the Block	Deposit (MXN)
A7.10	900,000.00	357,219.59	1	1,400,000
A7.11	631,000.00	250,299.19	1	1,400,000
A8.01	2,273,000.00	901,907.38	1	1,400,000
A8.02	1,384,000.00	1,640,215.02	2	2,800,000
A8.03	396,000.00	1,199,161.49	2	2,800,000
A8.04	1,213,000.00	481,289.78	1	1,400,000
A8.05	555,000.00	220,104.24	1	1,400,000
A8.06	1,096,000.00	434,734.26	1	1,400,000
A8.07	415,000.00	164,469.32	1	1,400,000
A8.08	421,000.00	166,918.50	1	1,400,000
A9.01	706,852,000.00	280,559,447.95	64	89,600,000
A9.02	127,534,000.00	59,796,449.94	32	44,800,000
A9.03	38,486,000.00	15,275,633.71	16	22,400,000
A9.04	14,140,000.00	38,749,670.61	32	44,800,000
A9.05	26,539,000.00	10,533,597.79	8	11,200,000
Block	VMR (MXN)	Annual regulatory fees 2021 (MXN)	Units associated to the Block	Deposit (MXN)
B1	89,000,000.00	502,922,800.00	128	179,200,000
Block	VMR (MXN)	Annual regulatory fees 2021 (MXN)	Units associated to the Block	Deposit (MXN)
C1	270,000,000.00	294,871,831.69	64	89,600,000
Block	VMR (MXN)	Annual regulatory fees 2021 / Exploitation* annual (MXN)	Units associated to the Block	Deposit (MXN)
D1	89,000,000.00	502,922,800.00	128	179,200,000



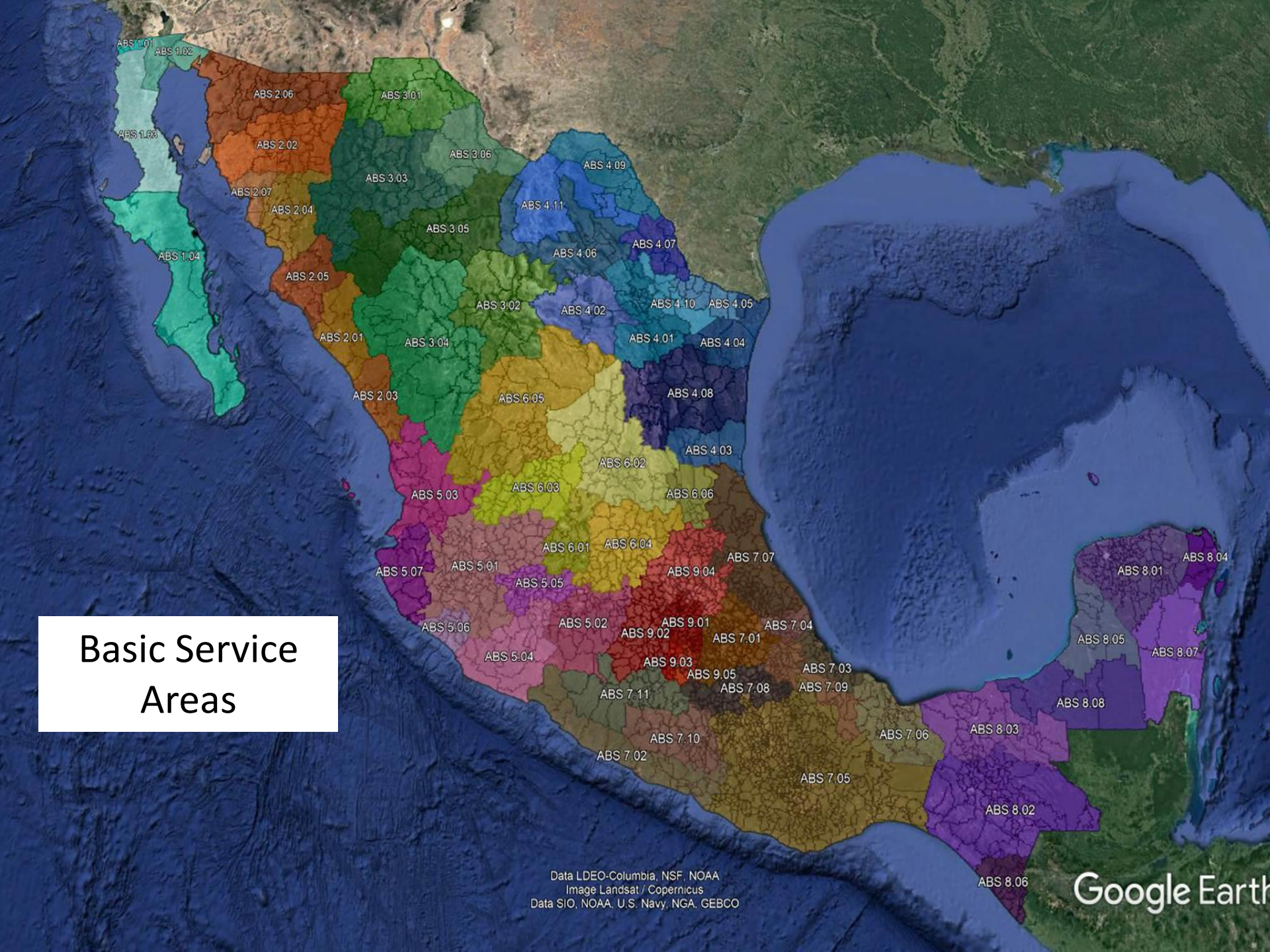
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Annexes

Basic Service Areas

Data LDEO-Columbia, NSF, NOAA
Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google Earth



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Cellular Regions

Region 1:

Every township within Baja California, Baja California Sur and San Luis Río Colorado within the State of Sonora. Hidalgo within State of Jalisco.

Region 2:

Every township within the State of Sinaloa and all townships within the State of Sonora, exceptuating the San Luis Río Colorado township.

Region 3: Every township within the State of Chihuahua and Durango and Francisco I. Madero, Matamoros, San Pedro, Torreón and Viesca townships, within the State of Coahuila.

Region 4:

All townships within the states of Nuevo León, Tamaulipas y Coahuila, exceptuating Francisco I. Madero, Matamoros, San Pedro, Torreón y Viesca townships.

Region 5:

All townships within the states of Colima, Michoacán, Nayarit and Jalisco, exceptuating Bolaños, Colotlán, Encarnación de Díaz, Huejúcar, Huejuquilla el Alto, Lagos de Moreno, Mezquitic, Ojuelos de Jalisco, Santa María de los Ángeles, Teocaltiche, Villa Guerrero y Villa Hidalgo townships.

Region 6:

All townships within the states of Aguascalientes, Guanajuato, Querétaro, San Luis Potosí, Zacatecas and Bolaños, Colotlán, Encarnación de Díaz, Huejúcar, Huejuquilla el Alto, Lagos de Moreno, Mezquitic, Ojuelos de Jalisco, Santa María de los Ángeles, Teocaltiche, Villa Guerrero y Villa townships.

Region 7:

Every township within the states of Guerrero, Oaxaca, Puebla, Tlaxcala and Veracruz.

Region 8:

Every township within the states of Campeche, Chiapas, Quintana Roo, Tabasco and Yucatán.

Region 9:

Every township within the states of Hidalgo, Morelos, México and Mexico City's territorial demarcations.

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Coverage obligations: 800 MHz Band (37 blocks)

ABS	ABS States	Number of localities to cover (minimum amount)	Total number of localities from which to select	Number of localities without service (fixed or mobile)*
5.01	Jalisco	7	14	14
5.02	Michoacán	11	23	23
5.03	Jalisco, Nayarit	8	45	44
5.04	Michoacán	8	25	24
5.05	Michoacán	0	1	1
5.06	Colima	0	3	3
5.07	Jalisco	3	10	9
6.01	Guanajuato	0	2	2
6.02	San Luis Potosí	6	90	86
6.03	Aguascalientes, Jalisco, Zacatecas	5	26	23
6.04	Guanajuato, Querétaro	13	44	43
6.05	Jalisco, Zacatecas	4	111	107
6.06	San Luis Potosí	2	22	22
7.01	Puebla, Tlaxcala	1	71	70
7.02	Guerrero	0	157	155
7.03	Veracruz	0	4	4
7.04	Veracruz	0	14	14
7.05	Oaxaca	1	1160	1151
7.06	Veracruz	0	147	146
7.07	Puebla, Veracruz	1	283	279
7.08	Puebla	0	148	142
7.09	Veracruz	0	140	140
7.10	Guerrero	0	322	322

* Localities considered in the Social Coverage Program of SCT (Secretaría de Comunicaciones y Transportes – Ministry of Communications and transportation)

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Coverage obligations: 800 MHz Band (37 blocks)

ABS	ABS States	Number of localities to cover (minimun amount)	Total number of localities from which to select	Number of localities without service (fixed or mobile)*
7.11	Guerrero	0	143	139
8.01	Yucatán	0	37	37
8.02	Chiapas	1	1030	1028
8.03	Chiapas, Tabasco	1	314	314
8.04	Quintana Roo	0	9	9
8.05	Campeche	0	52	52
8.06	Chiapas	0	206	206
8.07	Quintana Roo	0	70	69
8.08	Campeche	0	78	78
9.01	Ciudad de México, México	-	-	-
9.02	México	9	19	19
9.03	Morelos	-	-	-
9.04	Hidalgo	32	64	63
9.05	Morelos	0	3	2
	Total	113	4,887	4,839

* Settlements considered in the Social Coverage Program of SCT (Secretaría de Comunicaciones y Transportes – Ministry of Communications and transportation)

From the 4,887 considered settlements, 4,839 are considered a priority by the Social Coverage Program 2019 established by the la Ministry of Communciations and Transportation.