



PAN AMERICAN & PARAPAN AMERICAN GAMES

Newsletter N° 01

Spectrum Management

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[FAQ](#)

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Radio Frequency Spectrum Management

Technological Development and Broadcast Management Office

Will you use radio frequency devices in the Lima 2019 Pan American Games facilities?

Lima 2019 facilities will require great use of the radio frequency spectrum on Games-time.

The Spectrum's planning and use management are essential to allow users to have good quality radio communication without any interference.

It is important to emphasize that the authorization process for the temporary use of radio frequencies and labeling will be differentiated for members of the Lima 2019 Pan American and Parapan American Games Family. Also certain guarantees will be applied to the Family during their request submission on the Web Portal. For other cases regular licensing will be applied.

What is necessary?

All and any device that uses radio frequency spectrum must be registered and approved for the Lima 2019 Games facilities, according to the process established for frequency requests and access validation through device labeling. This can only be done in coordination with the Spectrum Management Department of the Lima 2019 Organizing Committee. This procedure applies to the following devices:

- Portable radios (Walkie-talkie).
- Intercoms (Talk-back).
- Wi-Fi access points.
- Wireless cameras and microphones.
- Ear monitors (IFB broadcast).
- Fixed and/or mobile microwave links.
- Satellite upload link (SGN/Fly away).
- Others.

This procedure does not apply to cell phones, smartphones, laptops, Bluetooth, key chains and wireless phones. However, these devices should not be used as wireless access points.

If you, your suppliers or partners need to use radio frequency equipment during the Games, please contact the Spectrum Management Department and request authorization for temporary use.

Basic instructions are included in the Radio Frequency Spectrum Management Plan for the Lima 2019 Games and will be better explained in future editions of the Spectrum Management Newsletter.

Any questions should be addressed to spectrum@lima2019.pe.

What is the importance of this procedure?

You will not be allowed to access the Lima 2019 Games facilities with your equipment if they do not have an authorization and a validation tag.

Please pay attention to spectrum news for the Games to be aware of warnings and/or changes in application periods. Also, check the website as often as possible.

About unlicensed radios and existing licenses

Even if you already have a license or use radios classified as unlicensed, you must request a license for temporary use in the Games facilities. Radio frequency devices not coordinated by the Lima 2019 Spectrum Management Department will not be allowed to access and operate in the Games facilities.

Do these rules also apply to test events?

No. Up until then, applications for temporary use must follow Peru's regular procedure (not free) at the Ministry of Transportation and Communications. If you have any questions about frequency management in test events, please contact spectrum@lima2019.pe.

How should I request Temporary Frequency Spectrum?

Step 1: The "Temporary Use of Frequency Spectrum" application process must be initially managed through the Spectrum Management Portal. Therefore, you must register and provide the information required by the Lima 2019 Games. Access the following link: <https://www.lima2019.pe/en/radiofrequency-spectrum>.

Step 2: The information provided will be validated. If there are no observations, we will send you an email, attaching the application form and filling procedure.

You must fill in the requested information of your equipment.

Once the form is filled out, you must send it to spectrum@lima2019.pe to continue with the procedure to request "temporary use of the frequency spectrum."

Step 3: Wait for the approval or denial of your request. Applications will be reviewed by the Spectrum Management Department. In case it is necessary, you may contact it to clarify doubts about your application.

Lima 2019 will send the analyzed request to the Ministry of Transport and Communications, regulatory entity of telecommunications services in Peru, which will be responsible for issuing the authorization.

What will be the deadline for the temporary use of frequency spectrum application?

It is recommended that applications are submitted no later than November 15, 2018. Which would be the first phase.

Otherwise, consider the dates of the extemporaneous applications as the second registration phase according to the following table:

Stages of requests	Request Period (Plantilla/ WEB Portal)	Request response	Description
First	15/09/2018- 15/12/18	30/12/18 - 20/01/19	It will analyze the requests without any priority Higher probability of finding the required frequencies (HBR, OBS)
Extemporaneous Applications	21/12/18 – 22/02/19	Until the 15/04/19	The requests are analyzed according to the order of arrival, availability is not guaranteed
	04/03/19 – 07/06/19	Until the 28/06/19	
Applications During the Games	08/07/19 – 08/08/19	During the Games	Emergency requests will be addressed, with few possibilities of obtaining available frequency.

Table - Schedule of Frequency Requests

Although late requests will be processed, there are no guarantees that they will be analyzed and that a frequency will be assigned.

A table of frequencies for public use is attached under conditions of availability and occupied to date.

Bands assigned for public services in Lima and Callao

Frequency Range (MHz)		Condition	Service or Technology
385.00	385.25	Occupied	TRONCALIZADO
385.25	385.50	Occupied	TRONCALIZADO
385.50	385.75	Occupied	TRONCALIZADO
385.75	395.00	Available	
395.00	395.25	Occupied	TRONCALIZADO
395.25	395.50	Occupied	TRONCALIZADO
395.50	395.75	Occupied	TRONCALIZADO
395.75	396.00	Available	
411.675	416.675	Available	
416.675	420.000	Available	
421.675	426.675	Available	
426.675	430.000	Available	
450.000	452.500	Available	
452.500	457.500	Occupied	CDMA450
460.000	462.500	Available	
462.500	467.500	Occupied	CDMA450
698.000	703.000	Reserved	
703.000	718.000	Occupied	LTE
718.000	733.000	Occupied	LTE
733.000	748.000	Occupied	LTE
748.000	758.000	Reserved	
758.000	773.000	Occupied	LTE
773.000	788.000	Occupied	LTE

788.000	803.000	Occupied	LTE
803.000	806.000	Reserved	
806.000	824.000	Occupied	TRONCALIZADO
824.000	849.000	Occupied	GSM / PCS
849.000	851.000	Reserved	
851.000	869.000	Occupied	TRONCALIZADO
869.000	894.000	Occupied	GSM / PCS
894.000	899.000	Occupied	GSM / PCS
899.000	915.000	Occupied	PCS / LTE
939.000	944.000	Occupied	GSM / PCS
944.000	960.000	Occupied	PCS / LTE
1710.000	1730.000	Occupied	LTE
1730.000	1750.000	Occupied	LTE
1750.000	1770.000	Available	
1770.000	1780.000	Available	
1850.000	1865.000	Occupied	PCS / LTE
1865.000	1870.000	Occupied	PCS / LTE
1870.000	1882.500	Occupied	PCS / LTE
1882.500	1895.000	Occupied	PCS / LTE
1895.000	1897.500	Occupied	PCS / LTE
1897.500	1910.000	Occupied	PCS / LTE
1910.000	1915.000	Reserved	
1915.000	1920.000	Available	
1920.000	1925.000	Available	
1925.000	1930.000	Reserved	
1930.000	1945.000	Occupied	PCS / LTE
1945.000	1950.000	Occupied	PCS / LTE



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1950.000	1962.500	Occupied	PCS / LTE
1962.500	1975.000	Occupied	PCS / LTE
1975.000	1977.500	Occupied	PCS / LTE
1977.500	1990.000	Occupied	PCS / LTE
2110.000	2130.000	Occupied	LTE
2130.000	2150.000	Occupied	LTE
2150.000	2170.000	Available	
2170.000	2180.000	Available	
2300.000	2330.000	Available	
2330.000	2360.000	Occupied	LTE / WiMAX
2360.000	2390.000	Occupied	LTE / WiMAX
2390.000	2400.000	Reserved	
2400.000	2483.500	Unallocated	

When will I be informed about the distribution of authorizations?

For requests made within the regular period (no later than 11/15/2018), users will be informed no later than 1/10/2019. For late applications, after April 2019.

Authorizations will be sent by mail indicating authorized radio frequencies. You must set up these frequencies in your equipment before arriving at the Games facilities.

You will also receive information and the schedule of "Test and Labeling" dates and places.

What is the cost for radio frequency spectrum use?

There is no cost associated with Games Family members for the use of Spectrum on Games-time (a month prior to the start of the Pan American Games until a week after the Parapan American Games closing). For test events, usage will not be free.

Wi-Fi Requests

If you intend to bring your own Wi-Fi routers to the Games facilities, you must also request prior frequency approval and coordination. To do so, you must request authorization on the Spectrum Management Portal.

Testing and Labeling

Two steps are required to use radio frequency devices in the facilities and during Games-time:

Obtain an Authorization (described above) and have your equipment labeled and approved by Lima 2019 and the MTC before using them in Games facilities.

Depending on the volume and quantity of your equipment, our staff may carry out the validation process of “Test and Labeling” in a place indicated by the delegation. This process must be previously coordinated with the Lima 2019 Organizing Committee (spectrum@lima2019.pe), by scheduling your visit date.

Best practices for wireless equipment use

The following suggestions will help users and optimize the radio electric spectrum available at the Lima 2019 Games, avoiding interference that may affect others.

- **Obtain the correct license and label.**
You must have obtained the correct license to operate.
- **Make sure your equipment is set in the frequencies stated in your authorization license.**
- **Using incorrect or compensated frequencies is a common cause of interference.** It is important to verify that the correct frequencies are being used.
- **Ensure that frequencies are correctly set up.**
For duplex operation, it is especially important for any transmitting equipment to be set up as specified in license documentation.
The use of inverse frequencies can cause generalized interferences. It is important to verify that the correct frequencies are being used for the base and mobile units.
- **Operate within the power limits.**
Using more power than authorized may cause interference.
- **Use filters.**

Using filters on the receiving side will help reduce, and sometimes eliminate, unwanted noise. Please make sure you are filtering the signals received from wireless cameras and wireless microphones.

- **Use high quality shielded cable between the transmitter and receivers.**
Some wireless camera systems are known to be susceptible to interference with low frequency equipment and UHF wires that may have damaged jackets or connectors in poor condition. Cables with high-quality shielding are recommended in order to avoid this issue.
- **Check connectors and batteries.**
It is important to make sure that the antenna is correctly positioned on the equipment and that there are no loose connections. Failure to do so may result in poor or ineffective operations. It is also important to ensure your equipment is fully charged before use.
- **Equipment Labels.**
All the transmitting equipment must have the name of the license holding company and the contact data clearly labeled on it. The end of the antenna and the equipment must be labeled as well. This will help Lima 2019 to locate equipment owners, if necessary.

Lima 2019 Pan American and Parapan American Games Organizing Committee

Source: Rio 2016 Olympic Games; Toronto 2015 Pan American Games.