

**ITUEvents**

# 3<sup>rd</sup> ITU Inter-regional Workshop on WRC-23 Preparation

27 - 29 September 2023  
Geneva, Switzerland

[www.itu.int/go/ITU-R/wrc-23-irwsp-23](http://www.itu.int/go/ITU-R/wrc-23-irwsp-23)  
#ITUWRC

**WPT towards  
WRC-23 agenda item 10**

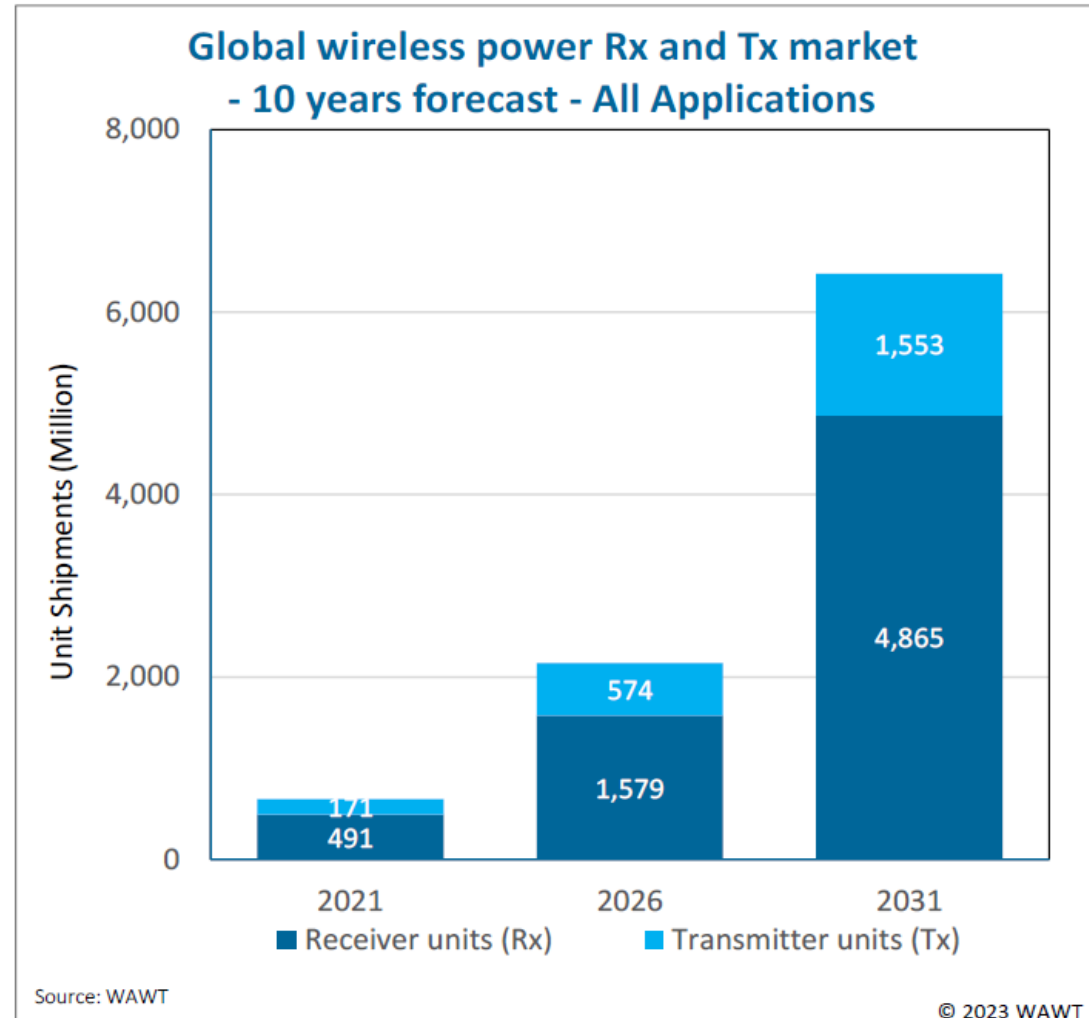
**JAPAN**





# Global WPT Market Forecast

The global WPT market is expected to grow to 6.4 billion units by 2031, with notable growth in applications within the factory automation, building, logistics, and medical domains.



Source: WAWT's Wireless Power Intelligence Service –2022 Report Edition

## Need for regulatory provisions for WPT

Studies on WPT are underway in ITU-R SG1, some administrations regard it as ISM equipment, some administrations regard it as short-range devices and some administrations regard it as radio service.



Administrations shall take all necessary steps for ensure that the operation of electrical apparatus and ISM equipment does not cause harmful interference under RR Nos.15.12 and 15.13.

The possibility of a regulatory provisions for WPT should be considered, so that RR can be covered uniformly to WPT devices and systems.





# ITU-R Recommendation on WPT

After WRC-19 the following three ITU-R Recommendations on WPT have been approved.

[SM.2110 : Guidance on frequency ranges for operation of non-beam wireless power transmission for electric vehicles](#)

[SM.2129 : Guidance on frequency ranges for operation of non-beam wireless power transmission systems for mobile and portable devices](#)

[SM.2151 : Guidance on frequency ranges for operation of wireless power transmission via radio frequency beam for mobile/portable devices and sensor networks](#)



It is time to consider next step !

“to consider, based on the results of ITU-R studies, possible regulatory provisions to avoid harmful interference to the radiocommunication services caused by Wireless Power Transmission (WPT)”



## [Information] Current situation in JAPAN

- The regulations developed in Japan is the first national regulations specialized for Beam WPT in the world.
- WPT station is implemented as a licensed radio station, and the process of operational coordination between WPT license applicants and other radio station licensees is built in the regulation structure. This scheme ensures that frequency resources can be safely shared with other radio systems.