



Press release

East Japan Railway Company

West Japan Railway Company

30 May 2023

JR East and JR West promote technical cooperation for automated Shinkansen bullet train operation

- East Japan Railway Company (Headquarters: Shibuya-ku Tokyo, President and CEO: Yuji Fukazawa) and West Japan Railway Company (Headquarters: Kita-ku Osaka, President and Representative Director: Kazuaki Hasegawa) have been developing automated Shinkansen operation systems, aiming to facilitate efficient and sustainable railway business and to realize safer and more convenient transportation services. Taking into consideration circumstances of social instability due to issues, such as decreasing birthrate, aging population and work style reform.
- Both companies will promote technical cooperation to develop systems and to reduce costs together for automated driving based on the E7/W7 Series rolling stock of the Hokuriku Shinkansen that operate through both companies' lines as a direct service between each other.

1. JR East's experiences and plans

- JR East has been developing Automated Train Operation (ATO) to realize driverless operation (GoA3, GoA4) which is mentioned in JR East Group Management Vision "Move Up" 2027.
- In FY2021, JR East successfully tested the automated operation of a non-revenue train between Niigata Station and the Niigata Shinkansen Rolling Stock Center on the Joetsu Shinkansen Line.
- Based on the knowledge gained from the tests to date, JR East will achieve driverless operation on the Joetsu Shinkansen: non-revenue trains between Niigata Station and Niigata Shinkansen Rolling Stock Center on GoA4 systems by the end of the 2020s; and commercial trains between Tokyo Station and Niigata Station on GoA3 systems by the middle of the 2030s.

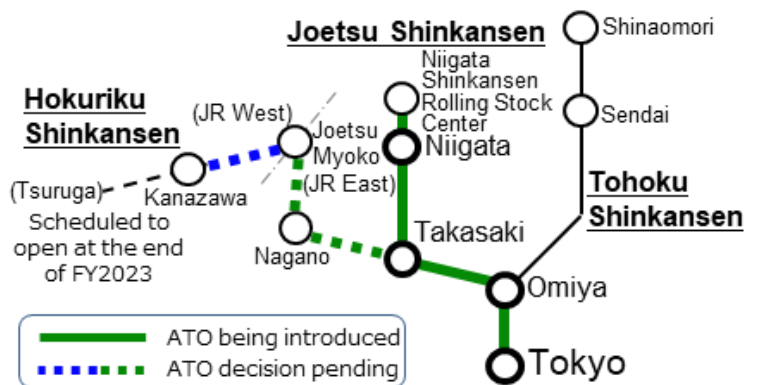
2. JR West's experiences and plans

- JR West has been developing technologies to realize "improved safety and transport quality through automated driving technology" with a technological vision aiming for "ideal combination of people and technology".

- As part of elemental technology development for automated driving functions, JR West has been conducting substantive tests at the Hakusan Railyard and Factory of the Hokuriku Shinkansen since FY2022. These tests evaluate automated driving functions and identify a technical challenge of a control system that autonomously controls vehicle speed and stops the vehicle at a designated position.
- JR West is going to proceed with systems development, cost reduction and other challenges to realize automated operation on the Hokuriku Shinkansen.



Series E7/W7



Plans for Shinkansen ATO

3. The further technical cooperation between JR East and JR West.

JR East and JR West signed a memorandum in April 2023 to cooperate on technical development for realizing automated operation on the Hokuriku Shinkansen E7/W7 Series trains used for through-operation between the two companies' areas.