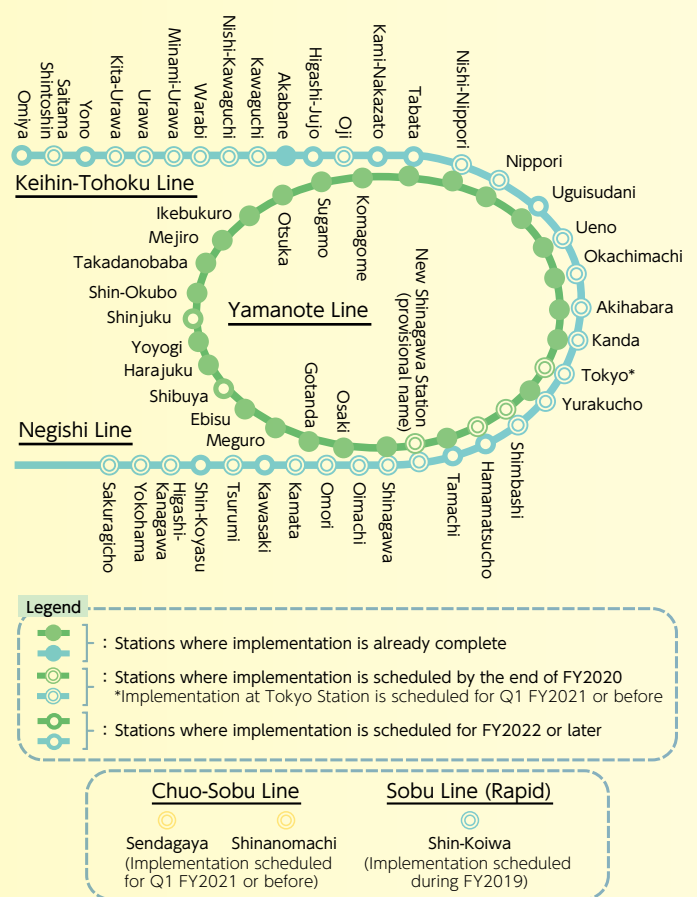


# Progress of Automatic Platform Door Implementation

As a measure to prevent passengers coming into contact with trains on station platforms or falling off the platform edge onto the railway tracks, JR East began introducing automatic platform doors and dot-braille blocks that indicate which direction is away from the edge of the platform on the Yamanote Line and other lines. We are continuing to move forward with the installation of automatic platform doors at various stations in order to further improve platform safety.

## ◎Overview of Automatic Platform Door Implementation Plan

We began introducing automatic platform doors at all stations on the Yamanote Line in 2010. Excluding those stations where upgrades are scheduled, installation has been completed at 24 of 30 stations, including New Shinagawa Station (provisional name). Installation will be done at Shimbashi, Hamamatsucho, and New Shinagawa Station (provisional name) FY2020 and at Tokyo Station by Q1 of FY2021. Doors will be introduced at Shinjuku and Shibuya Station in FY2022 or later. We have also decided to proceed with the introduction of automatic platform doors at a total of 37 stations on the Keihin-Tohoku Line and Negishi Line between Omiya and Sakuragicho. By the end of FY2020, the work will be complete at 26 stations, while implementation at Tokyo Station will take place by Q1 of FY2021. Doors will be introduced at the remaining 10 stations in FY2022 or later. In addition, installation work will be undertaken at Shin-Koiwa Station on the Sobu Line (Rapid) with the aim of starting use by the end of FY2019 and at Sendagaya Station and Shinanomachi Station on the Chuo-Sobu Line (the closest stations to the New National Stadium), with the aim of starting use by Q1 of FY2021. Based on this implementation plan, 58 conventional line stations should be equipped with automatic platform doors by Q1 of FY2021.



## ◎Smart platform doors®

An issue with expanding the installation of automatic platform doors is the considerable cost and the amount of time required to perform the work. In order to address this issue, we have tried and tested the introduction of “smart platform doors®” (developed by JR East Mechatronics Co., Ltd.), a new type of door that makes it possible to lower costs and shorten work periods while ensuring the same robustness and safety as the automatic platform doors introduced on the Yamanote Line and other lines.

After installing the new doors for a single train car at Machida Station on the Yokohama Line in December 2016 and making improvements to problems that occurred during the initial stage, we expanded the smart platform doors to cover an entire train-set in July 2017. We will proceed with testing the safety and reliability of the equipment with a view to rolling it out to other stations in future.

### VOICE

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#### Takuya Sakata

Platform Doors Group  
Mechatronics Technology Management Center, Facilities Dept. (Head Office)

As the person in charge of equipment specification decision-making, implementation plan development, and so forth for automatic platform doors aimed at ensuring safe station platforms, I work to develop doors that will provide peace of mind to passengers. Automatic platform doors are essential safety-related equipment, and I feel a great sense of responsibility and fulfillment in my daily work through contributing to passenger safety and stable transportation by train.

The considerable cost and amount of time required to perform the work are issues with installing automatic platform doors, and we rack our brains every day thinking about how to create doors that will be less expensive and take less time to install while still ensuring safety. When we're deciding on specifications, we receive various suggestions from our partner companies; however, adding new functions can lead to operating errors by staff or equipment malfunctions, resulting in increased costs. We therefore strive to develop specifications that are simple and user-friendly. What's more, besides developing equipment that is easy to install on site, we also need to bear in mind issues such as maintenance and replacement of aging equipment, since automatic platform doors cannot be eliminated once they are introduced.

We are now proceeding with the installation of doors in order to enhance station platform safety, and going forward, we intend to consider applicability criteria for automatic platform doors based on station conditions, including development of doors for stations where the car door positions vary for different kinds of trains, such as commuter trains and express trains, and we will also work to increase the pace at which they are installed.

If automatic platform doors are installed at a station you use regularly, I hope you will stop for a moment to take a closer look at them.



#### Eijiro Shimata

Manager, Platform Door Systems Division  
JR East Mechatronics Co., Ltd.

As a type of equipment that protects the safety of passengers using train stations, automatic platform doors have attracted the interest of the public, who would like them to be introduced rapidly. There are various issues involved in the installation of these doors, such as the cost and the length of the work. We have a role to play in resolving these issues and promoting rapid implementation. It is rewarding to be able to make a contribution to the installation of the doors, which help ensure the safety and satisfaction of many passengers.

I am also involved in the development of smart platform doors®. The aim of these doors is to perform the functions required to prevent accidents such as falls or contact with trains using a structure and system that are as simple as possible, in order to keep costs down, and we are working on their development while also focusing on making them safer and more reliable.

Implementing smart platform doors® that are relatively inexpensive and easy to install compared to conventional platform doors should help make the use of platform doors more widespread. We intend to verify the results of the trial currently under way at Machida Station and then make improvements, with the aim of eventually introducing smart platform doors® at many stations.



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See p. 41 and p. 42 for a related feature. ⬇