

Marketing EX-IC and TOICA Services

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Introduction

Since the establishment of Central Japan Railway Company (JR Central) in April 1987, the company has played a leading role in operating both shinkansen linking Tokyo, Nagoya, and Osaka, as well as conventional railways in the Chubu region centred on Nagoya and Shizuoka. JR Central's safety and timekeeping records for its key Tokaido Shinkansen services are unmatched by any other railway in the world. It has also worked unflinchingly on improving service, starting with the N700 series shinkansen in July 2007, bringing together state-of-the-art technology, improved in-carriage environment, energy efficiency, reduced running noise pollution, and more. Additionally, a timetable update was implemented in March 2008 centred on services departing from Shinagawa Station with more stops at Shin-Yokohama Station. From the marketing viewpoint, more people are using the Express Reservation

online system for the Tokaido and San'yo shinkansen; the EX-IC ticketless service for the Tokaido Shinkansen was introduced; and the TOICA (Tokai IC Card) urban area IC fare card service was expanded to the Shizuoka area. Furthermore, transfers between the shinkansen and conventional lines were made more convenient by interoperability between TOICA and JR East's Suica and JR West's ICOCA and by the combination of EX-IC Service and TOICA. This article explains the marketing measures using IC fare cards centred on EX-IC Service.

Express Reservation

JR Central's Express Reservation service uses IT to make the Tokaido Shinkansen more convenient; registered users who have paid an annual fee of ¥1050 can make and change seat reservations for the Tokaido and San'yo shinkansen via

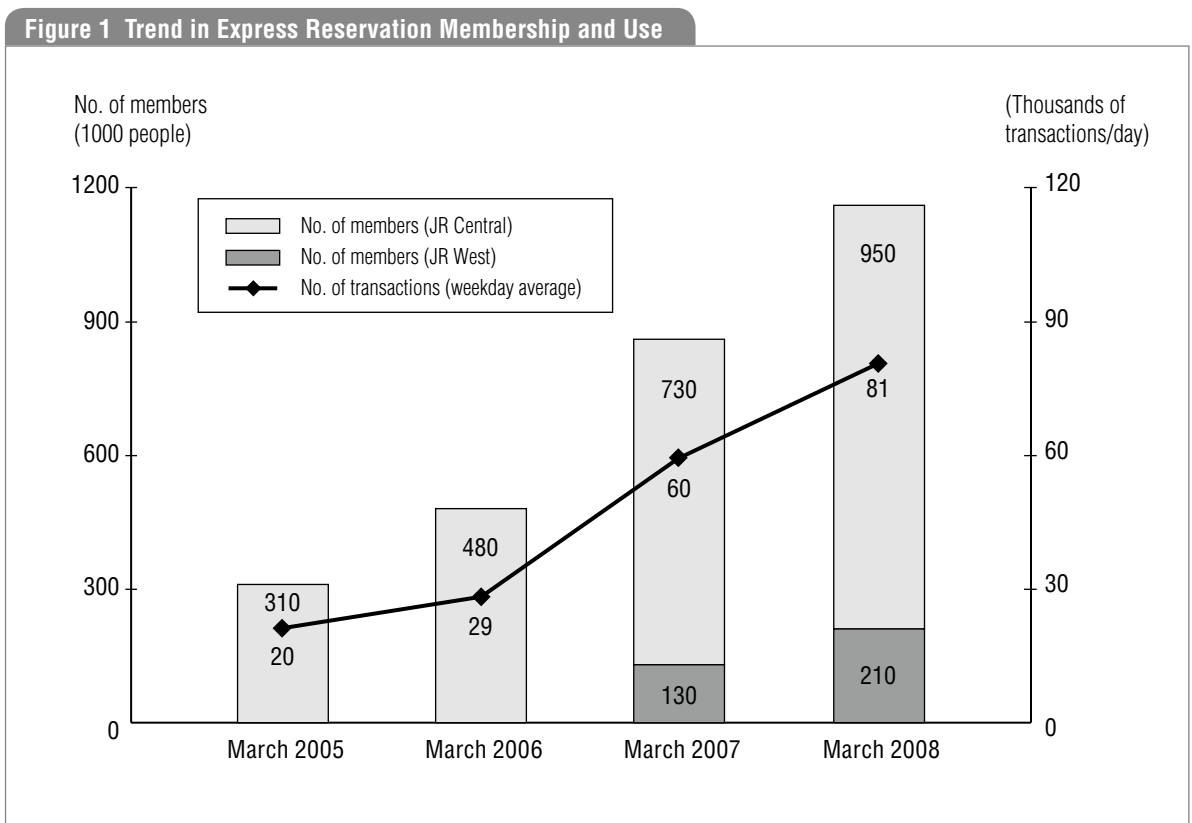


Figure 2 Business Area of JR Central in JR Group

JR Central operates the Tokaido Shinkansen artery connecting Tokyo, Nagoya, and Osaka and 12 conventional lines centred on urban transport in the Nagoya and Shizuoka areas.

Area of Japan: 380,000 km²
Population: 127 million

*Source: Basic census (March 2006)

	JR Central	Other Operators in JR Group
Shinkansen		
Conventional Lines		

0 500 km

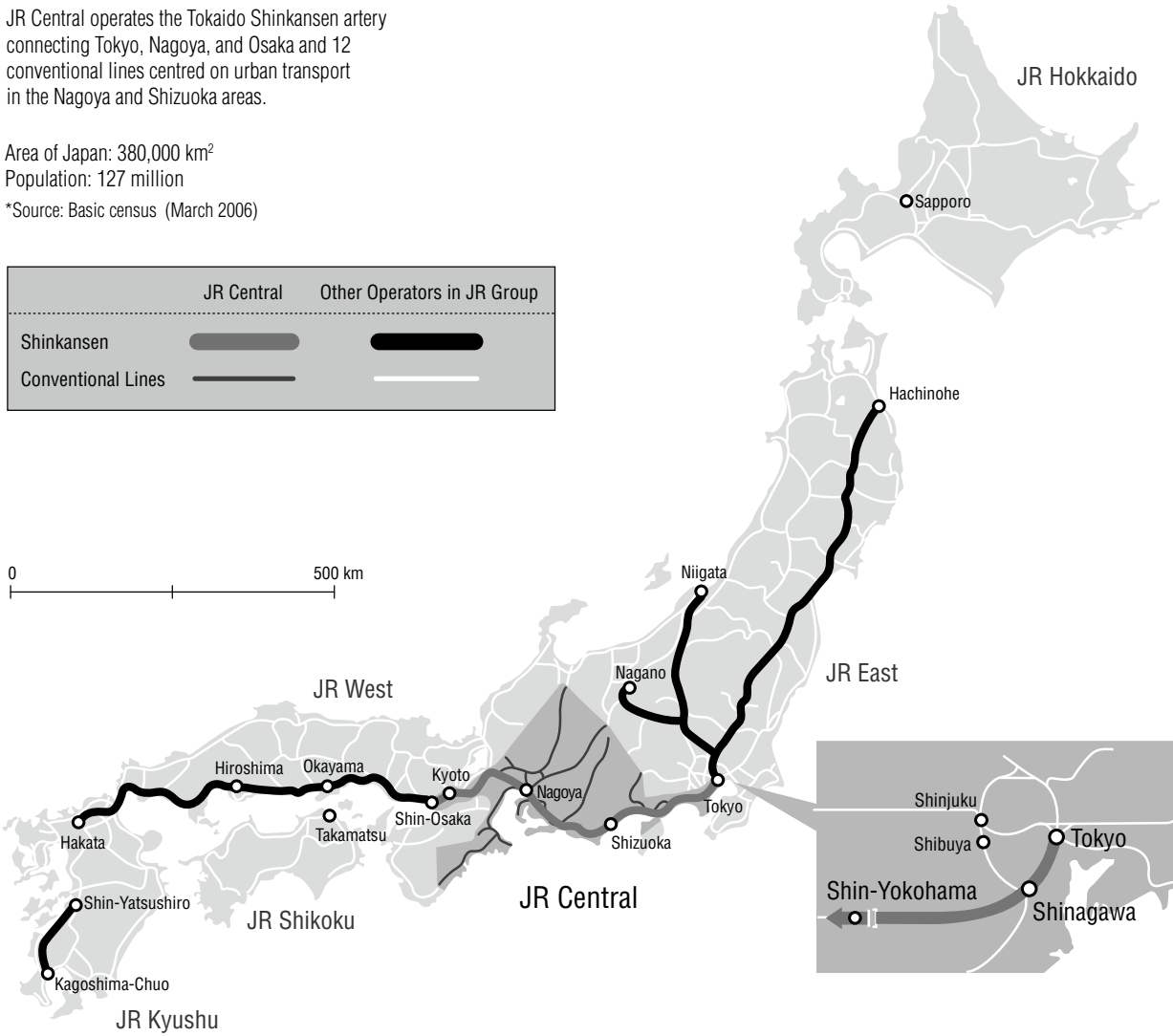
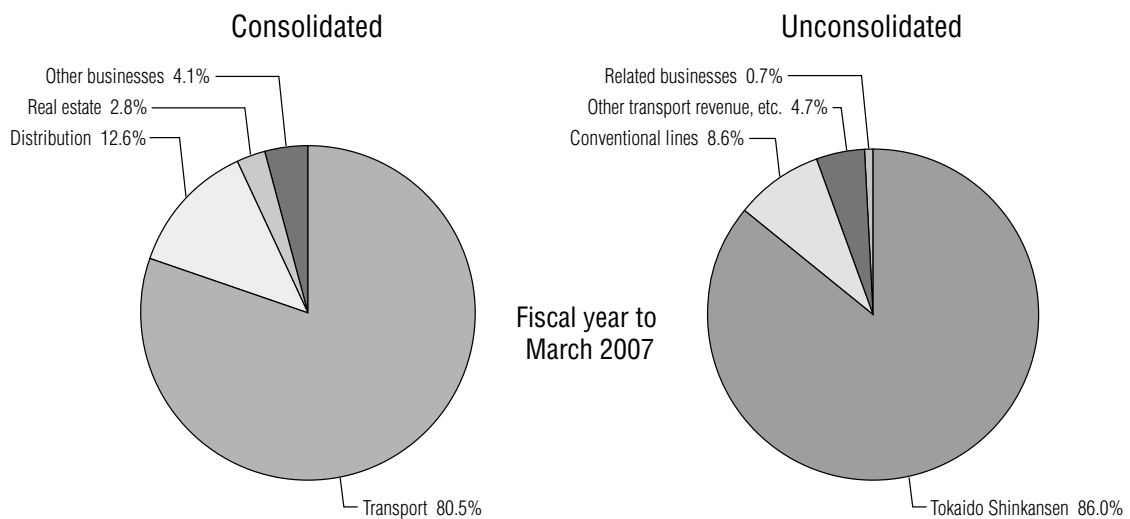


Figure 3 Profit Structure



Note: Consolidated ratios based on sales outside JR Central group.

mobile phone or PC and collect their tickets from a pick-up only ticket vending machine without having to queue at the ticket window, reducing total journey time. It has proved very popular because it allows members to make unlimited changes to reservations, and prices for normal reserved seats are less than for normal non-reserved seats.

JR Central is also working to further enhance convenience by broadening the service in conjunction with JR West. In July 2006, sections where the service can be used were expanded to the entire Tokaido and San'yo shinkansen (1174.9 km between Tokyo and Hakata), and the J-West Card (Express) credit card issued by JR West was upgraded to support the Express Reservation service too.

The service is especially popular with shinkansen commuters for whom it has become a key function and 1.16 million members were making 81,000 transactions a day by March 2008.

EX-IC Service

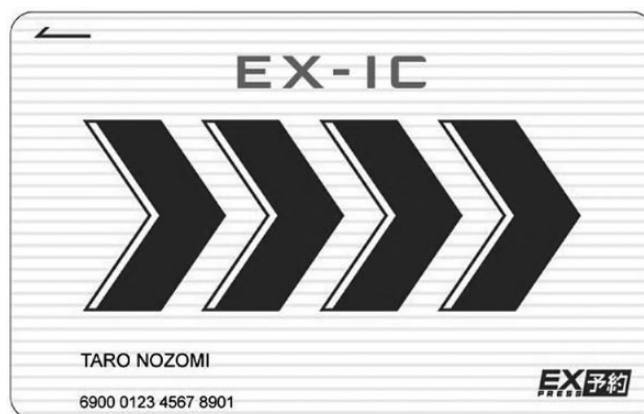
In March 2008, IC card technology was introduced as EX-

IC Service on the Tokaido Shinkansen to deploy a ticketless service unlike anything offered by conventional tickets and offering passengers even more convenience than the Express Reservation service where passengers have to collect their reserved tickets before boarding. EX-IC Service combines the Express Reservation convenience of making and changing reserved seat reservations, and enables passengers to pass through the shinkansen gates only by touching the EX-IC Card over a card reader, without collecting tickets.

The EX-IC Service system distributes information on reservations made by using the member's mobile phone or PC to ticket gates at the boarding station and when the passenger touches the EX-IC Card on one of these gates the EX-IC Card ID information is compared with the reservation and the gate opens when there is a match. Passengers can confirm the reserved train and seat number by a seat guide that is issued when passing through the ticket gates. At the same time, this information is written in the EX-IC Card. EX-IC Service is proving very popular and is steadily penetrating the market with 20,000 uses a day at the end of April 2008, one month after the service started.



EX-IC Card and ticket gate



EX-IC Card



EX-IC Service seat guide

Ticketless Shinkansen Fares

Following the introduction of EX-IC Service on the Tokaido Shinkansen, strategic ticketless shinkansen fares have been set. They combine the basic fare and express charge, but are set lower than conventional tickets. As an example, for an adult normal reserved seat on *Nozomi* between Tokyo/Shinagawa and Osaka (where the shinkansen competes with air), the price for EX-IC Service members is ¥13,000, which is ¥1050 less than the standard reserved fare during normal periods and ¥200 less than the conventional express reservation.

When transferring between the Tokaido Shinkansen and a conventional line, the price is the total of the shinkansen ticketless fare plus the fare for the conventional line. Therefore, the total differs with boarding station. For this reason, the conventional Express Reservation service remains available so members can select the best service by comparing the EX-IC Service and Express Reservation prices using the EX-IC fare navigator on the reservation web site.

TOICA Service

Urban areas across Japan are rushing to introduce IC fare card services due to the convenience of simply touching an IC card to the automatic ticket gate and boarding without pre-purchasing a ticket. The JR Central TOICA service was developed to achieve seamless transfer between shinkansen and conventional lines and to stimulate use of conventional lines. The first TOICA service started in November 2006 at 75 stations in the Nagoya area and was expanded to 39 stations in the Shizuoka area in March 2008. At April 2008, approximately 50% of passengers in the Nagoya area where the service started were using TOICA and the figure rises to 70% when looking at commuter passes alone. The service is growing steadily and has already surpassed first expectations with more than the initially planned 500,000 cards being issued in the 18 months since introduction.

Table 1 Ticketless Shinkansen Fares

[Main Stations] ¥					
		Tokyo/ Shinagawa	Shin-Yokohama		
Shizuoka	[New] Shinkansen ticketless fare	5,470	4,930	Shizuoka	
	[Conventional] e limited express ticket + train ticket	5,670			
Nagoya	[New] Shinkansen ticketless fare	9,830	9,200	5,670	Nagoya
	[Conventional] e limited express ticket + train ticket	10,030	9,400		
Kyoto	[New] Shinkansen ticketless fare	12,470	11,840	9,200	4,690
	[Conventional] e limited express ticket + train ticket	12,670	12,040		
Shin-Osaka	[New] Shinkansen ticketless fare	13,000	12,680	9,830	5,430
	[Conventional] e limited express ticket + train ticket	13,200	12,880		

Figure 4 TOICA Service Area

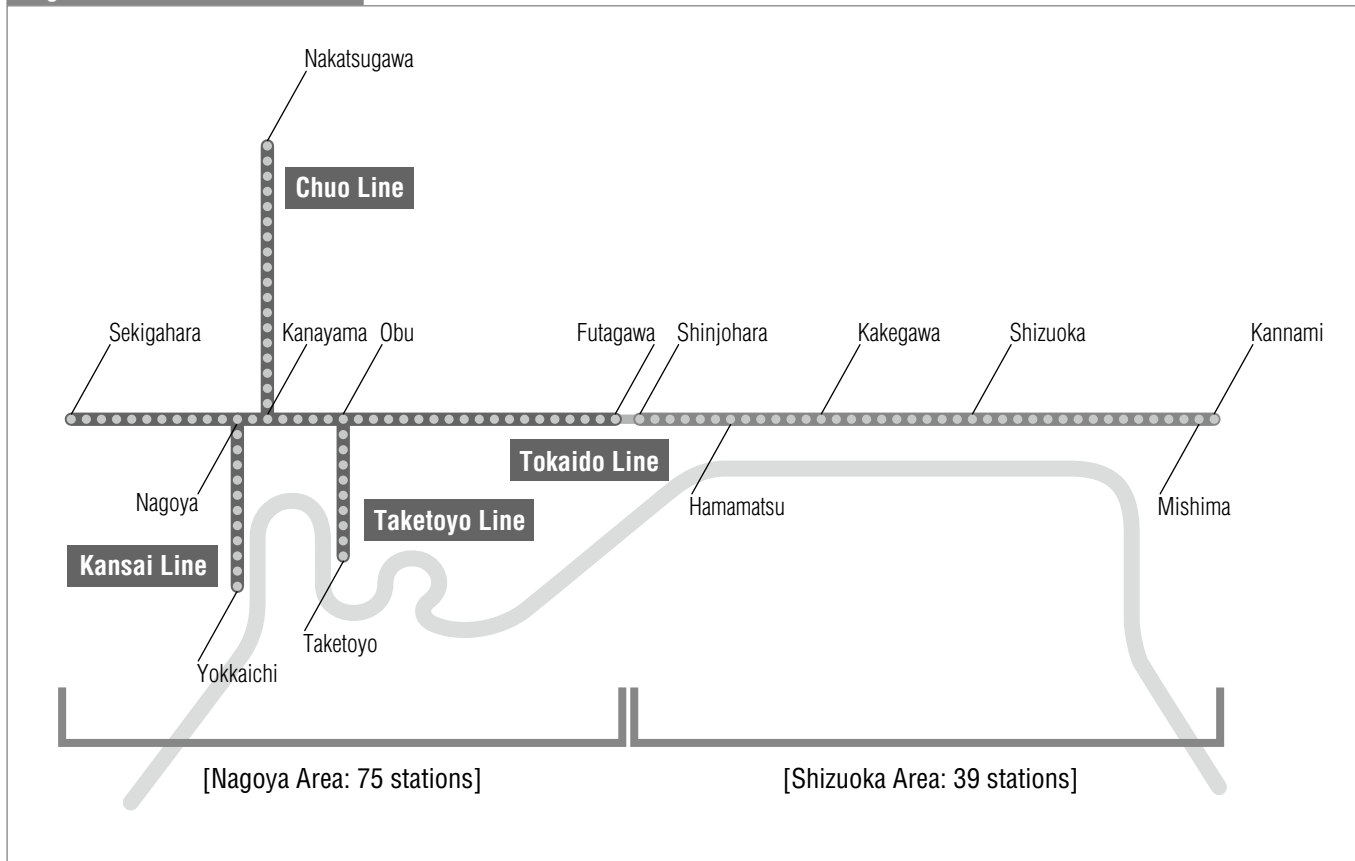
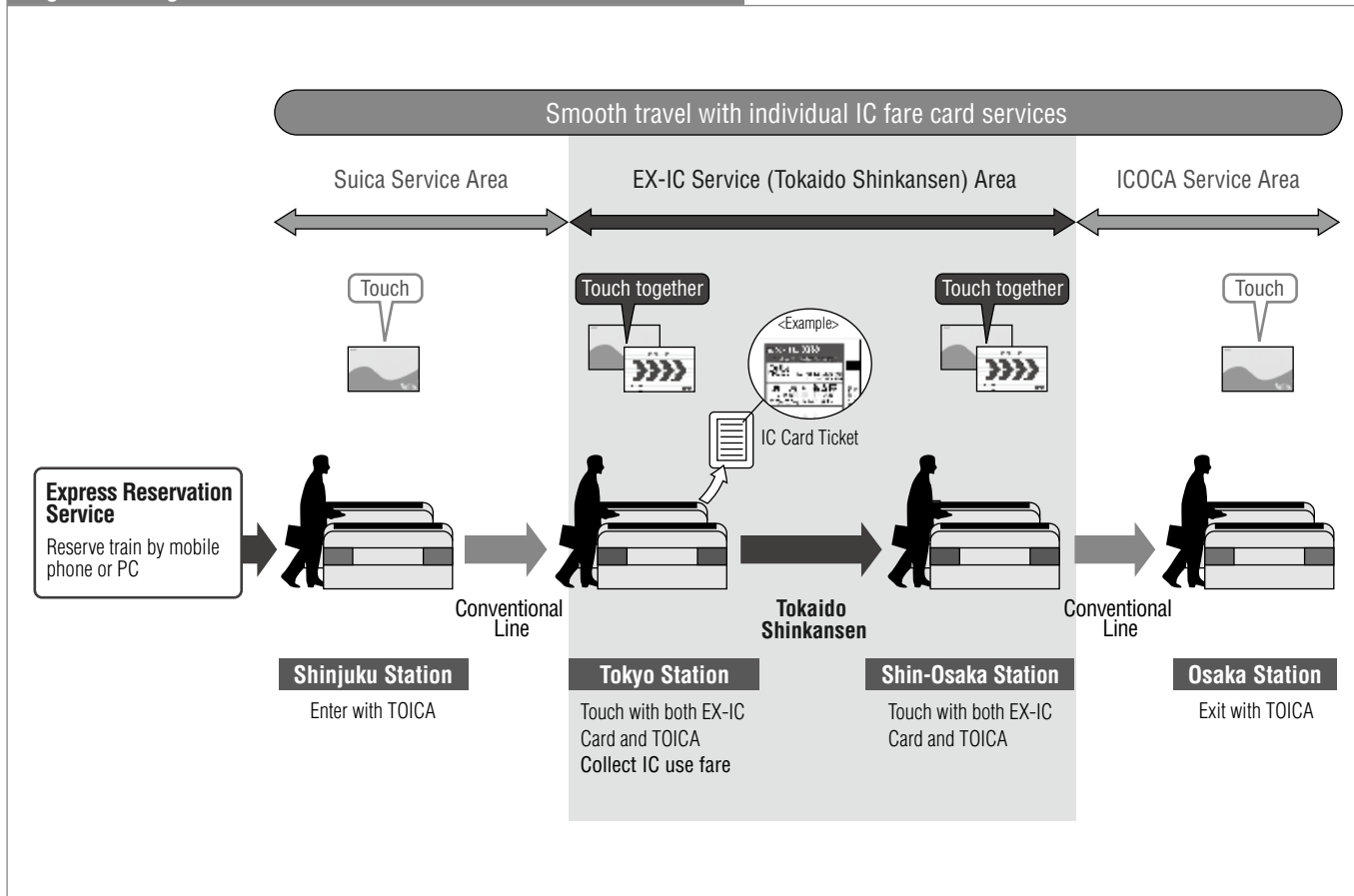


Figure 5 Image of IC Transfer Service with EX-IC Card and TOICA



IC Card Interoperability

The start of EX-IC Service on the Tokaido Shinkansen also marked the start of interoperability between JR Central's TOICA, JR East's Suica, and JR West's ICOCA. As a result, a passenger only needs one TOICA, Suica, or ICOCA card to ride all conventional lines within the individual service areas. TOICA can be used in the Suica area of Greater Tokyo and in the ICOCA area of Kinki (Shiga, Kyoto, Osaka, Nara, Hyogo and Wakayama.) Similarly, Suica and ICOCA can be used in the TOICA area centred on Nagoya and Shizuoka. This interoperability greatly increases convenience for passengers using the Tokaido Shinkansen to travel between Japan's three largest conurbations.

Transfer Service

IC fare cards are already used widely in the Tokyo, Chubu, and Kinki areas where many Tokaido Shinkansen passengers live and many passengers are assumed to already have a TOICA, Suica, or ICOCA card. Consequently, the IC Transfer Service was started in March 2008 at the same time as EX-IC Service so these passengers can transfer smoothly between shinkansen and conventional lines.

Using this service, a passenger just has to touch an EX-IC Card plus an urban IC card, such as TOICA, on the transfer gate between the Tokaido Shinkansen and conventional line to gain smooth passage.

The EX-IC Service part of the processing involves comparing the ID information recorded on the EX-IC Card with the reservation information distributed to automatic ticket gates on boarding the Tokaido Shinkansen. The urban IC fare processing deducts the fare for using the conventional line from the stored value when boarding the Tokaido Shinkansen. Despite this complexity, the IC Transfer Service processing is nearly instantaneous.

In addition to the combined use of TOICA and EX-IC, this service can also be used with next-generation IC cards combining both EX-IC Card and TOICA functions in one card as well as with mobile phones incorporating Suica functions owned by Express Reservation members.

Introduction of the IC Transfer Service also allows IC card processing at automatic ticket gates for passengers using IC fare cards for urban areas and shinkansen tickets together, eliminating the need for visits to ticket windows.

As a usage example, a passenger can board at Yokkaichi in suburban Nagoya using TOICA and then insert the shinkansen ticket and touch the TOICA card to the automatic ticket gate at the transfer gate in Nagoya station. The fare for using the conventional line is taken automatically and the passenger can pass through the gate.

Conclusion

To increase competitiveness, JR Central is strengthening its business base through concentrated investment in the N700 Series shinkansen. Simultaneously, it is working on a long-term project to introduce maglev trains between Tokyo and Nagoya from 2025. Marketing measures supporting these rolling-stock advances include extensive use of IC fare cards with expansion of EX-IC Service to the San'yo Shinkansen in summer 2009. Effort is also being made to ensure that the EX-IC, TOICA, IC Interoperability and IC Transfer services take good root, furthering JR Central's competitiveness and Tokaido Shinkansen services. ■



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