**Key Measures and Capital Investment in FY2012** 

(year ending March 31, 2013)

We will prioritize ensuring safe and reliable transportation, which is the foundation of the

railway business, such as by continuous safety-related investments and integrated employee

training with our group companies.

In railway business, we continue to prioritize ensuring safe and reliable transportation

including earthquake countermeasures for the Tokaido Shinkansen. We will also improve

transportation services through introducing N700A and replacing old rolling stock with new

one on conventional lines.

We also steadily move forward with the Chuo Shinkansen project using the

Superconducting Maglev System based on a long-term perspective, as well as Nagoya

Station New building Project, and overseas deployment of high-speed railway system.

At the same time, amidst a continuing harsh business environment, we shall enhance

management vitality by strengthening earning capability, continuously improving technological

competency, and pursuing efficiency and cost reduction at all levels including capital

investment, in order to proceed with long-term projects.

I. Key Measures

Ensuring Safe and Reliable Transportation

Enhancing Transportation Services of the Tokaido Shinkansen

Enhancing Transportation Services of Conventional Lines

Promoting the Chuo Shinkansen Project using the Superconducting Maglev System

Enhancing Marketing Initiatives

Strengthening Technological Competency, Pursuing Overseas Deployment of High-Speed

Railway System, Conserving the Global Environment,

Developing Affiliated Businesses

II. Capital Investments

Consolidated: 348 billion yen

Non-consolidated : 324 billion yen \*

\*including 149 billion yen for safety-related investments

# **Ensuring Safe and Reliable Transportation**

(Capital Investments: 102 billion yen)

- We will prioritize ensuring safe and reliable transportation, which is the foundation of the railway business.
- ■Strongly promoting countermeasures for derailment and deviation as well as the reinforcement of embankments and bridges as further anti-earthquake measures for the Tokaido Shinkansen
- ■Systematically maintaining and renewing tracks, including replacing sleepers on the Tokaido Shinkansen
- ■Promoting the renovation of the Hamamatsu Workshop, where general overhauls of the Tokaido Shinkansen rolling stock are conducted
- Promoting countermeasures for falling rocks and upgrade of level-crossing safety devices for the conventional lines
- ■Enhancing employee training that focuses on safety and hospitality in cooperation with group companies by utilizing the General Education Center



Countermeasure for Derailment and Deviation of the Tokaido Shinkansen



Rendering of the Hamamatsu Workshop



General Simulator for conventional lines (at the General Education Center)

[Note]

The renovation of the Hamamatsu Workshop :
An overhaul at a new line will begin in March 2017

Quake-resistant reinforcement of embankments and bridges of the Shinkansen Embankments: approx. 2.3km Bridges: approx. 45 bridges (FY2012)

Countermeasure for derailment and deviation: Derailment Prevention Guards approx. 59 km (FY2012)

### Enhancing Transportation Services of the Tokaido Shinkansen

( Capital Investments: 59 billion yen )

- We will enhance transportation services of the Tokaido Shinkansen, such as replacing the Series 700 with N700A.
- ■Replacing the Series 700 with N700A for the Tokaido-Sanyo Shinkansen and gradually expanding operations by the Series N700 and N700A (N700 type).
- ■Promoting large-scale renovations of a station concourse including equipments relating to ticket sales and entry gates and the addition of a platform at Shin-Osaka Station
- ■Installing the latest model of movable platform fences at Tokyo Station and on platform #27 at Shin-Osaka Station
- ■Replacing old Braille blocks with new Braille blocks that have lines to indicate on which side the edge of the platform lies



Rendering of Shin-Osaka Station Platform Addition



Rendering of a new-model moving platform fence

#### [Note] · Large-scale renovations at Shin-Osaka Station :

Beginning of use of platform #27 and completion of a concourse renovation at the end of FY2012 Beginning of full use of renovated facilities during FY2013

- New-model moving platform fences :
- Beginning of use of the fences on platform #14 of Tokyo Station and on platform #27 of Shin-Osaka Station in March 2013
- Beginning of use of the fences on platform from #15 to #19 of Tokyo Station in series by the end of March 2015
- Introducing 13 trainsets of the N700A (6 in FY2012 and 7 in FY2013)
- Electric power consumption of the N700 type (when operated at 270km/h)
  - -25% compared with the Series 300 and -19% compared with the Series 700

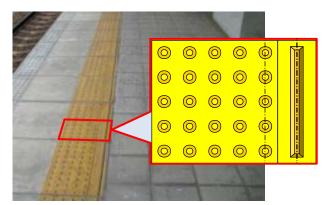
## **Enhancing Transportation Services of Conventional Lines**

(Capital Investments: 6 billion yen)

- We will work on various measures such as the replacement of old rolling stock.
- ■Working to further improve transportation services such as the replacing old rolling stock
- Strengthening the transportation infrastructure in the Nagoya Metropolitan Area through plans to electrify the Taketoyo Line
- ■Replacing old Braille blocks with new Braille blocks that have lines to indicate on which side the edge of the platform lies and steadily introducing barrier-free accessible facilities



The Series 313



Braille blocks that have lines to indicate on which side the edge of the platform lies

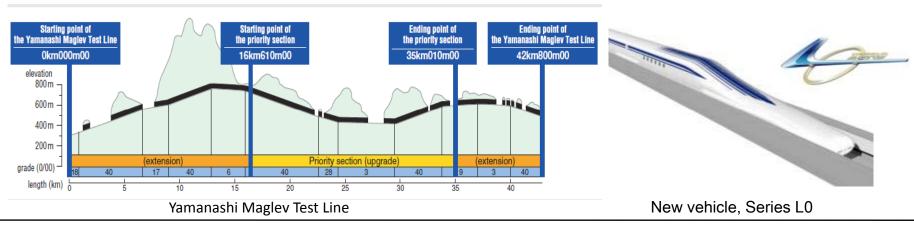
- Note] · Replacement with new rolling stock : manufacturing 32 Series 313 cars (FY2012)
  - Starting operation of the newly electrified Taketoyo Line: from the spring of 2015 (Planned)
- · Replacement of Braille blocks: 13 stations (FY2012)
- Barrier-free accessible facilities: 2 elevators for 1 station, 1 multifunction toilet for 1 station (to be upgraded in FY2012)

#### Promoting the Chuo Shinkansen Project using the Superconducting Maglev System

(Capital Investments: 105 billion yen)

\*only includes capital investment related to the extension and the upgrade of facilities of the Yamanashi Test Line

- We will promote measures to realize the Chuo Shinkansen using the Superconducting Maglev System.
- ■Steadily proceeding with preparations to begin constructions including an assessment of environmental impacts between Tokyo and the City of Nagoya
- ■Proceeding with the construction works to extend the length of the Yamanashi Maglev Test Line to 42.8 km and upgrade its facilities in full scale steadily and swiftly toward early completion
- Making efforts to improve the Superconducting Maglev technology and reduce costs for construction, operation and maintenance
- ■Proceeding with the manufacture of the new rolling stock, the Series L0



[Note] Yamanashi Maglev Test Line : Running tests using new facilities will be started at the end of 2013 (planned)

The Series L0: Manufacturing 14 cars, out of which 2 leading cars and 3 middle cars will be introduced in FY2013 and the other 9 cars will be gradually introduced by FY2015

# **Enhancing Marketing Initiatives**

( Capital Investments: 10 billion yen )

- We will proactively develop marketing initiatives to increase revenues.
- ■Enhancing efforts to expand the use of "EX-IC Service" and increase the number of "Express Reservation" members
- ■Making efforts to expand mutual use of TOICA with IC cards of other transport operators
- ■Proactively developing various marketing campaigns by utilizing tourist resources in Kyoto, Nara and other destinations and developing travel products for inbound tourists
- ■Expanding the use of conventional lines by proactively developing events such as "SAWAYAKA Walking (walking event)."



IC cards for transportation, starting mutual use in the spring of 2013



A poster for the Kyoto Marketing Campaign

Express Reservation membership: 1.96 million (as of the end of February, 2012)

Mutual use of TOICA with other IC cards:
with "manaca" from 21 April, 2012
with IC cards of 11 transport operators from the spring of 2013

### Strengthening Technological Competency, Pursuing Overseas Deployment of High-Speed Railway System, Conserving the Global Environment

(Capital Investments: 1 billion yen)

- · We will continuously strive to enhance our technological competences, which is the foundation of railway management and development, to pursue overseas deployment of high-speed railway system, and to conserve the global environment.
- ■Promoting research and development for the maintenance and reinforcement of civil engineering structures with emphasis on the Shinkansen, the enhancement of transportation services, and countermeasures for natural disasters
- ■Engaging in marketing activities in regions and corridors that have been selected as viable targets for the overseas deployment of high-speed railway system by leveraging our comprehensive technological competences
- ■Promoting measures to contribute to the conservation of the global environment such as replacing old rolling stock with energy-saving rolling stock



Tri-axial Loading System for Structures



Photovoltaic Power Generation System (SCMAGLEV and Railway Park)

# **Developing Affiliated Businesses**

(Capital Investment: 35 billion yen) \*including 24 billion yen to be invested by the consolidated subsidiaries

- We will steadily proceed with the Nagoya Station New Building Project and increase competitiveness and revenues of our existing business.
- ■Promoting a construction of Nagoya Station New Building after the dismantlement of the existing building
- ■Increasing revenues by invigorating commercial facilities, such as "First Avenue Tokyo Station," which is being renovated
- Making continuous efforts to develop our agriculture business to provide safer and more reliable food products



Rendering of the "Nagoya Station New Building" (tentative name)



Tokyo Character Street (in "First Avenue Tokyo Station")