

## Updated Priority Initiatives Going Forward

Over the medium-to-long term, the JR East Group's business conditions are likely to be characterized by a further decrease in population, an increasingly aged society, and the concentration of population in the Tokyo metropolitan area. In addition, such factors as technological innovation and globalization are expected to result in changes in industrial structures and other changes.

Further, 30 years have passed since the establishment of the JR East Group, and the Group faces a variety of reform challenges, including changing railway systems and the rapid changeover to the next generation of employees.

In response to these challenges, since October 2016 JR East has been tackling three priority Groupwide tasks: improve the safety and reliability of transportation, take on the challenge of enhancing profitability, and advance "TICKET TO TOMORROW" initiatives.

With respect to "Priority Initiatives Going Forward," which are initiatives that it will work particularly hard to advance in future with a view to accelerating the achievement of tasks, JR East has summarized its progress over the past year and updated initiatives.

Cross-sectional priority issues	Updated Priority Initiatives Going Forward
<p><b>Improve the safety and reliability of transportation</b></p>	<ul style="list-style-type: none"> <li>○ <b>Reduce safety-related risk and strengthen management system</b></li> <li>○ <b>Prevent transportation service disruptions and strengthen ability to respond to transportation service disruptions</b></li> <li>○ <b>Advance safety measures related to platforms and railway crossings</b></li> <li>○ <b>Further strengthen railway infrastructure</b></li> </ul>
<p><b>Take on the challenge of enhancing profitability</b></p>	<ul style="list-style-type: none"> <li>○ <b>Use transportation networks to increase passenger traffic</b></li> <li>○ <b>Advance strategies for visitors to Japan</b></li> <li>○ <b>Enhance convenience of and establish brands in terminal stations</b></li> <li>○ <b>Make line-side areas more attractive and convenient</b></li> <li>○ <b>Expand business area</b></li> </ul>
<p><b>Advance "TICKET TO TOMORROW" Initiatives</b></p>	<ul style="list-style-type: none"> <li>○ <b>Take measures focused on the "JR East 2020 Project"</b></li> <li>○ <b>Regional revitalization</b></li> <li>○ <b>Technological innovation</b></li> <li>○ <b>Take on challenge of overseas railway projects</b></li> <li>○ <b>Create a corporate culture that develops employees' capabilities and enhance productivity to strengthen management structure</b></li> </ul>

# Priority Groupwide Task (1) : Improve the Safety and Reliability of Transportation

In recent years, there has been a series of serious incidents related to the safety and reliability of transportation, including transportation service disruptions caused by JR East's facilities. As a company, JR East views this situation with the utmost gravity. Each employee of the JR East Group will go back to the fundamentals of his or her work, then ensure that he or she performs the role that should be performed, and spare no effort in pursuing initiatives focused on rigorous prevention of reoccurrence and on advance prevention.

## Reform challenges

Changes in railway systems

Increasingly flat division of work

Rapidly advancing transition to next generation of employees

### Series of serious incidents related to the safety and reliability of transportation in recent years

April 2015	Collapse of electrical pole on Kanda–Akihabara segment of Yamanote Line Breakage of overhead wires within Koriyama Station on Tohoku Shinkansen Line
August	Breakage of overhead wires on Yokohama–Sakuragicho segment of Negishi Line Incinerated cables on Kunitachi–Tachikawa segment of Chuo Line
March 2016	Breakdown of electric facilities at Kagohara Station on Takasaki Line
June	Collision between train and work trolley on Kita-Matsudo–Matsudo segment of Joban Kanko Line
November	Disruption of network of Autonomous Decentralized Transport Operation Control System (ATOS) on Takasaki Line
September 2017	Power outage at Warabi AC substation for electric railways
October	Breakdown of electric facilities at Higashi-Washinomiya Station on Utsunomiya Line

#### More practical educational and training activities

⇒ Conduct more practical educational and training activities to deepen understanding of nature of work (point/purpose, framework/operating principles, etc.)

Aiming to resolve issues

#### Strengthening of collaboration with group companies and partner companies, etc.

⇒ Analyze actual circumstances and rigorously recheck and reinforce rules and procedures with respect to railway related construction and work in cooperation with group companies, partner companies, and others

#### Appropriate maintenance and strategic renewal/strengthening of facilities

⇒ Ensure incorporation of dual systems, increase durability in response to higher operating speeds on Shinkansen and other factors

#### Strengthening of responsiveness to transportation service disruptions

⇒ Minimize impact, respond to customers rapidly, and resume operations as soon as possible following disruptions

#### Retracing of past countermeasures to ensure rigorous prevention of reoccurrence

⇒ Check implementation progress regularly, ensure effectiveness of reoccurrence prevention measures

#### Achievement of advance prevention through identification of weak points of physical and intangible infrastructure

⇒ Unite planning departments and frontline operations in efforts to unearth weak points and nip accidents in the bud

Safety measures at station platforms and railway crossings

Improve the safety and reliability of transportation

Increase resilience of railways through seismic reinforcement measures, etc.

# Priority Groupwide Task (1) : Improve the Safety and Reliability of Transportation

## Past Year's Initiatives

### 1 Implement “JR East Group Safety Plan 2018” steadily

- Advanced establishment of more practical educational and training facilities, including simulators for training train crew members
- Strengthened safety system throughout the Group by analyzing and sharing information about the actual circumstances of the management of railway related construction and work
- Built safety management system through development of safety professionals, etc.
- Conducted campaign through broadcasting of commercials (TV, radio), etc., aimed at preventing railway crossing accidents
- Advanced strengthening of electric facilities in the Tokyo metropolitan area through electrical pole collapse countermeasures, cable incineration countermeasures, interlocking ground equipment measures, and lateral cable protection, etc.
- Implemented advance installation of bogie vicinity monitoring cameras in Tokyo and Morioka as a countermeasure for snow falling from Shinkansen railcars and conducted verification
- Established and announced development plan covering the period through to FY2021.3 based on a policy of introducing automatic platform gates to all railway stations on the Yamanote Line and on the Omiya–Sakuragicho segment of the Keihin-Tohoku and Negishi Lines
- Introduced new-type “Smart” automatic platform gates to platform 4 of Machida Station on the Yokohama Line



Training using a simulator

### 2 Advance “Medium-term Vision for Service Quality Reforms 2017”

- Increased establishment of turnaround facilities, etc. (Tomobe Station, Joban Line; Fukaya Station, Takasaki Line)
- Implemented alternative line operations on Tokaido Line and Yokosuka Line (Shinagawa–Totsuka segment), etc., to minimize the effect of transportation service disruptions
- Expanded the initiative to make prompt announcements (first announcement within 15 minutes) of the expected time of resumption of operations when services are disrupted
- Expanded collaboration with other railway operators, etc., and strengthened the assistance campaign in which personnel ask nearby customers whether they require assistance



Poster aimed at strengthening assistance campaign

### 3 Build a resilient railway

- Advanced seismic reinforcement measures as planned (80% completed as of FY2017.3)
- Advanced development of construction methods that are for use in large-scale renovation of Shinkansen infrastructure and which are aimed at enhancing long-term durability and work efficiency and reducing costs
- Began rail replacement using trains mounted with large-scale machinery on Tohoku Shinkansen Line (from Omiya northward)



Shinkansen line rail replacement

## Priority Initiatives Going Forward

\* Newly added items have been underlined

### 1 Reduce safety-related risk and strengthen management system

- Advance prevention by implementing rigorous measures that have been established for the prevention of reoccurrence and by identifying weaknesses
- Conduct more practical educational and training activities to deepen understanding of nature of work (point/purpose, framework/operating principles, etc.)
- Analyze actual circumstances and rigorously recheck and reinforce rules and procedures with respect to railway related construction and work in cooperation with Group companies, partner companies, and others
- Give priority to strengthening electrical equipment in the Tokyo Metropolitan area as well as Shinkansen facilities and railcars



Training at a skills training center

### 2 Prevent transportation service disruptions and strengthen ability to respond to transportation service disruptions

- Prevent transportation service disruptions (strengthen ground facilities and railcars and continue countermeasures for large-scale natural disasters)
- Minimize the impact of transportation service disruptions and resume operations as soon as possible following disruptions (establish turnaround facilities for contingency shuttle operations, strengthen contingency shuttle and alternative line operations, etc.) and respond to customers rapidly (promptly provide information about the expected time of resumption of operations and promptly resolve issue of trains stopped between railway stations, etc., through training based on emergency scenarios, etc.)



Rendering of controllers directing contingency shuttle and alternative line operations

### 3 Advance safety measures related to platforms and railway crossings

- Advance establishment of automatic platform gates and CP lines in the Tokyo metropolitan area (with aim of shortening construction periods and reducing costs, realize practical application of “Smart” automatic platform gates, etc.)
- Advance measures to prevent accidents at railway crossings (heighten performance of obstacle detection devices, etc.)
- Continue conducting, in collaboration with related companies, the assistance campaign in which personnel ask nearby customers whether they require assistance



“Smart” automatic platform gates

### 4 Further strengthen railway infrastructure

- Advance further seismic reinforcement measures in expanded target area and for increased target facilities
- Renew aging facilities steadily (develop technology for large-scale renovation of Shinkansen infrastructure and replace rails of Tohoku Shinkansen Line, etc.)

Target areas for further seismic reinforcement (examples)



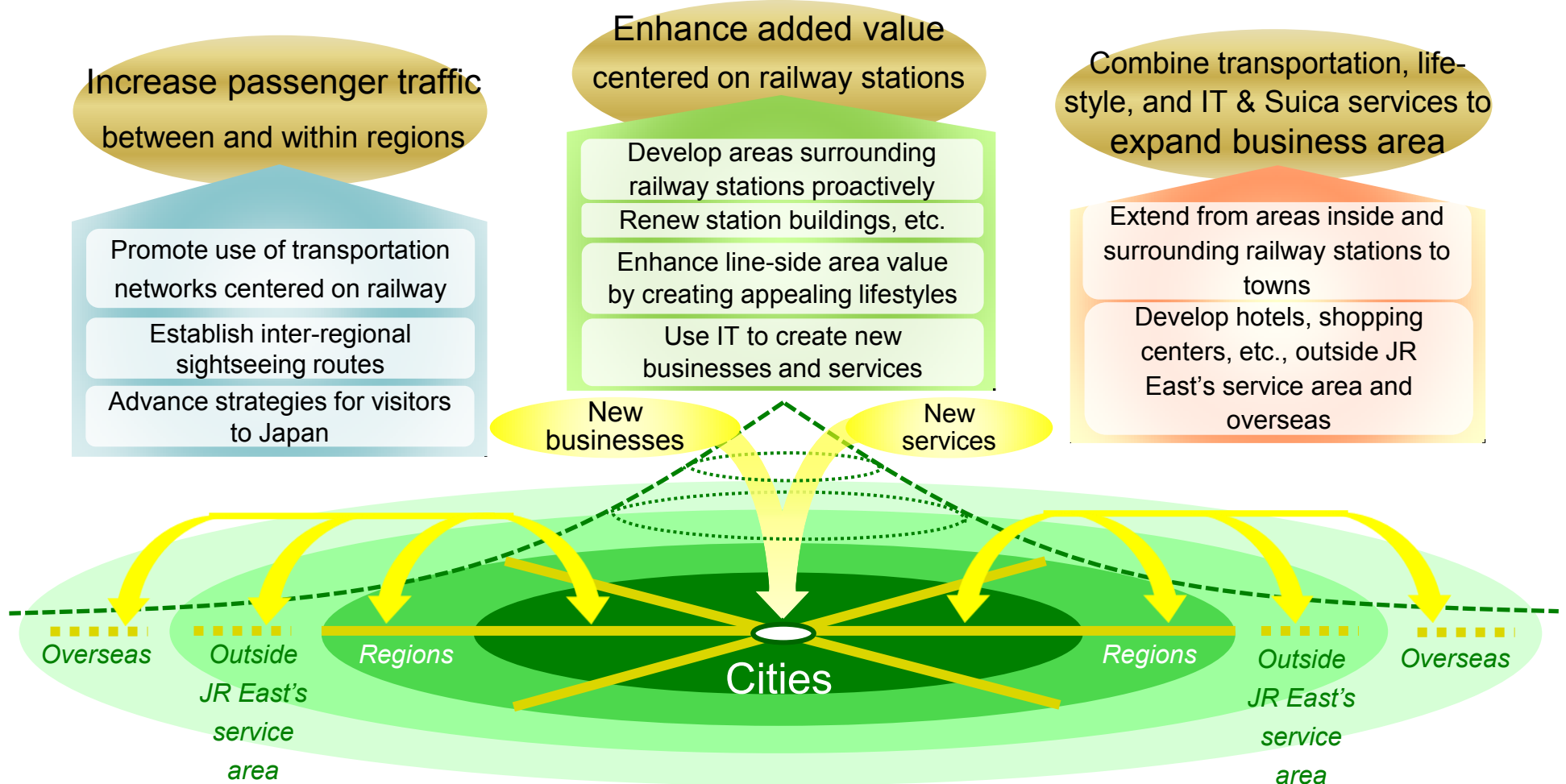
Rahmen rigid-frame railway viaducts with bridge piers and bridge girders that form unified structure



Embankments

# Priority Groupwide Task (2): Take on the Challenge of Enhancing Profitability

JR East will heighten the value of the JR East Group's multilayered "real" networks and take on the challenge of enhancing profitability. Specifically, JR East will endeavor to increase passenger traffic between and within regions while taking measures to enhance the added value centered on railway stations. In conjunction with these efforts, leveraging the synergy benefits of respective transportation, life-style, and IT & Suica services as strengths, JR East will take on the challenge of expanding its business area.



# Priority Groupwide Task (2): Take on the Challenge of Enhancing Profitability

## Past Year's Initiatives

### 1 Promote use of railway network

- Operated temporary direct Shinkansen service on Sendai–Kanazawa segment
- Increased services on the Ueno-Tokyo Line through timetable revision in October 2017
- Advanced deliberations and adjustments aimed at direct services between JR East lines and the Sagami Line
- Leveraged new compatibility of Suica with the Apple Pay\* payment service for iPhone7\*, etc., as opportunity to increase Suica usage



Sendai–Kanazawa direct Shinkansen service

### 2 Advance strategies for visitors to Japan

- Coordinated with airlines in Asia and launched new air and land “Air + JR” travel packages
- Expanded and improved JR EAST Travel Service Center at Narita Airport Terminal 2-3 Station and established prayer room at Tokyo Station
- Increased railway stations where JR-EAST FREE Wi-Fi available



Prayer room at Tokyo Station (External view, ablution facilities)

### 3 Enhance convenience of and establish brands in terminal stations

- Began construction of Shinagawa New Station (provisional name) and established and announced Guidelines for Community Development of the Northern Peripheral Area of Shinagawa Station
- Opened Gransta Marunouchi (Tokyo Station) and S-PAL Sendai East Building fully
- Opened PERIE CHIBA EKINAKA (IN-STATION), PERIE CHIBA (Phase II), and Hotel Metropolitan Sendai East

Gransta Marunouchi



### 4 Enhance added value through renewal of existing stores

- Considered reorganizing related Group companies and changing management scheme inside railway stations to expedite development and renewal inside railway stations
- Increased locations where the Group's unified JRE POINT useable (total of 84 locations)
- Held JR East Omiyage Grand Prix

#### and other measures



Award ceremony of JR East Omiyage Grand Prix

### 5. Promote the line-side brand appeal of railway lines

- Opened nonowa Musashi-Koganei SOUTH and COTONIOR Kunitachi on Chuo Line and opened Musashi-Sakai Poppo Park
- Developed child-rearing-support facilities inside station buildings and other buildings with aim of establishing 130 child-rearing-support facilities by April 2020 under the HAPPY CHILD PROJECT (total of 102 facilities)

## Priority Initiatives Going Forward

\* Newly added items have been underlined

### 1 Use transportation networks to increase passenger traffic

- Increase passenger traffic bound for Tohoku, Hokkaido, and Hokuriku by taking such measures as increasing number of trains and conducting tourism campaigns
- Ease congestion and enhance convenience of conventional lines in the Tokyo metropolitan area
- Use introduction of new-type express railcars on the Chuo Line as an opportunity to promote railway usage in the Tokyo–Yamanashi/Nagano area
- Create tourism demand through such measures as the operation of “joyful trains”



Campaign (Hokuriku)

### 2 Advance strategies for visitors to Japan

- Build a new sales system for rail passes in Asia's market
- Promote air and land tourism that uses airports in the Tohoku and Hokkaido area as gateways
- Establish environment that accommodates travel needs of visitors to Japan (expand and improve JR EAST Travel Service Centers, establish station numbering in the Tokyo metropolitan area, establish in-car luggage storage areas for such services as the Series E5 Tohoku Shinkansen)

Shinkansen in-car luggage storage area



### 3 Enhance convenience of and establish brands in terminal stations

- Advance construction work aimed at the interim opening of Shinagawa New Station (provisional name) in 2020 and advance plan for the development of a town that will become a new international exchange hub centered on the new railway station and Shinagawa Station
- Advance the development of large-scale terminal stations, including Chiba, Shibuya, and Yokohama (open PERIE CHIBA fully, etc.)

### 4 Make line-side areas more attractive and convenient

- Discover and create new value in line-side areas centered on the Tokyo metropolitan area
- Advance support for enhancement of “ways of living” and “ways of working” (expand and improve mamorail service for watching over children and develop rental homes that offer lifestyles, etc.)
- Integrate Suica Point with the Group's unified JRE POINT



“mamorail” service

### 5 Expand business area

- Develop businesses in towns, outside JR East's service area, and overseas (hotels, shopping centers, etc.)

\* Apple Pay and iPhone are the trademarks of Apple Inc.

# Priority Groupwide Task (3): Advance “TICKET TO TOMORROW” Initiatives

Under the “TICKET TO TOMORROW” slogan, the JR East Group will provide high-quality services in all business fields and upgrade each aspect of work to meet customers’ expectations and leave a legacy for society beyond 2020.

TICKET

TO

TICKET TO TOMORROW

TOMORROW

Provide high-quality services in all business fields and upgrade each aspect of work

Develop employees and create corporate culture that maximizes human potential

Take on challenges in new business areas

Technological innovation

Regional revitalization

JR East 2020 Project

Point of “TICKET TO TOMORROW”

All JR East Group employees take on challenges to realize their new potential

Provide high-quality services in all business fields and upgrade each aspect of work

Pass on **legacy** for society and JR East Group beyond 2020

Helping to ensure that the Games proceed without issues

Establish barrier-free facilities, provide comfortable passenger rail transportation services, etc.

Contributing to the growing enthusiasm surrounding the Games

Upgrade large-scale stations, revitalize regions, advance diversity, etc.

# Priority Groupwide Task (3): Advance “TICKET TO TOMORROW” Initiatives

## Past Year's Initiatives

### 1 Take measures focused on the “JR East 2020 Project”

- Advanced upgrading work and barrier-free development at railway stations nearest to competition venues and transfer railway stations in coastal areas

### 2 Revitalize regions

TRAIN SUITE SHIKI-SHIMA

- Began operating TRAIN SUITE SHIKI-SHIMA and conducted publicity in Japan and overseas focused on appeal of JR East's service area
- Established JR Agri Sendai, with view to sextic industrialization and opened AOYA mainstay store
- Hosted JR East nomono Awards and increased “nomono” stores (total of 7 stores)
- Opened LUSCA Atami and Akita Station's west exit parking garage building and advanced plan for development of area surrounding Niigata Station



Akita Station's west exit parking garage building



Rendering of ALFA-X

### 3 Advance technological innovation

- Established new high-performance Doppler radar in Sakata, Yamagata Prefecture, and began trial observation
- Developed AI-enabled support system for inquiries center operators
- Began manufacturing prototype railcar(ALFA-X) with a view to realizing next-generation Shinkansen
- Increased acquisition and analysis of railcar monitoring data (Series E235, the Yamanote Line) and increased line segments covered by line facility monitoring operations and introduced electric facility monitoring to Series E235 on the Yamanote Line
- Began operation of JR Akita Shimohama wind power plant
- Established Musashi-Mizonokuchi Station, on the Nambu Line, Niitsu Station on the Shinetsu Line, and Kobuchizawa Station on the Chuo Main Line as model ecological stations (ECOSTE)
- Began using an energy management system covering multiple railway stations

### 4 Take on challenge of overseas railway projects

- Received order for and advanced consultation operations in relation to Indian high-speed railway project through Group company Japan International Consultants for Transportation
- Selected collectively with Mitsui and Abellio UK as winning bidder for the West Midlands Franchise, a passenger rail franchise in the United Kingdom
- Advanced localization of maintenance operations on Purple Line in Bangkok, Thailand

### 5 Develop employees and create a corporate culture that maximizes

**human potential**

- Conducted personnel transfers, etc., that reflect employees' ambitions through open-application programs, etc.
- Advanced development of backyard workplace environments, including those of Group companies
- Certified with the highest evaluation, gold, by “PRIDE” Index, which reflects evaluations of LGBT initiatives
- Began joint management of Hon-Hachinohe Station and station building (Seagull Town) with a view to unified management of railway operations and life-style service business

## Priority Initiatives Going Forward

\* Newly added items have been underlined

### 1 Take measures focused on the “JR East 2020 Project”

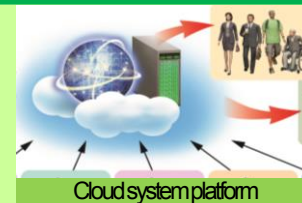
- Advance implementation of plans for upgrading work at railway stations in areas around competition venues, etc.
- Promote and consider barrier free improvement plans in line with Tokyo 2020 Accessibility Guidelines
- Enhance security of railways (increase installation of security cameras in railway stations and railcars, etc., and expand and improve security system)

### 2 Regional revitalization

- Promote tourism (publicize appeal of regions through operation of TRAIN SUITE SHIKI-SHIMA and implement new initiatives aimed at promoting tourism in Tohoku, and strengthen collaborations through personnel exchanges with municipal authorities)
- Revitalize local industries and promote passenger flows to regions (sextic industrialization, Tsuchiura cycling center, etc.)
- Develop towns centered on regional core railway stations (Akita, Niigata, etc.)

### 3 Technological innovation

- Advance safety and reliability (early earthquake detection, etc.)
- Advance services and marketing (develop service robots, etc.)
- Advance operations and maintenance (develop automated driving technology, etc.)
- Advance energy and the environment (develop power-saving operational styles, etc.)
- Build a cloud system platform
- Realize “innovation ecosystems” through such initiatives as the Mobility Innovation Consortium



Cloud system platform

### 4 Take on challenge of overseas railway projects

- Advance Indian high-speed railway project (train and provide technical support, etc., to personnel of Indian high-speed railway)
- Participate in the West Midlands Franchise, a passenger rail franchise in the United Kingdom (begin operations of operating company West Midlands Trains in December 2017, etc.)

Training personnel of Indian high-speed railway



### 5 Create a corporate culture that develops employees' capabilities and enhance productivity to strengthen management structure

- Heighten the level of and increase productivity in all business fields through such measures as work-style reform, promotion of diversity, and technological innovation
- Extend even further the fields in which employees work
- Advance “internal globalization” through various opportunities for exchanges inside and outside the Group



Joint management of Hon-Hachinohe Station and station building