Updated Priority Initiatives Going Forward of "JR East Group Management Vision V—Ever Onward"

In October 2012, the JR East formulated a management vision entitled "JR East Group Management Vision V—Ever Onward" and set forth a management policy for "Thriving with Communities, Growing Globally." Based on this, JR East has made efforts to meet the expectations of customers and local communities by fulfilling its "Eternal Missions," and taking on the ongoing challenge of pursuing the "Unlimited Potential" of its railway network.

JR East has reviewed the progress under "Priority Initiatives Going Forward" and updated its initiatives with an emphasis on improving the safety and reliability of transportation. These are initiatives that JR East will work particularly hard to advance in future with a view to accelerating the realization of "JR East Group Management Vision V."

JR East Group Management Vision V	/ "Priority Initiatives Going Forward"		
Eternal Mission	Pursuing Unlimited Potential		
◆ KIWAMERU (Excel)	♦ HIRAKU (Pioneer)		
—Pursuing "Extreme Safety Levels"	—Technological Innovation		
O Advance "Group Safety Plan 2018"	O Promote energy and environmental		
steadily	strategies		
\bigcirc Build a railway capable of withstanding	O Utilize ICT to innovate operations		
natural disasters	O Advance technological innovation		
♦ MIGAKU (Improve)	◆ NOBIRU (Grow)		
-Service Quality Reforms	—Tackling New Business Areas		
O Advance "Medium-term Vision for	O Take on challenge of overseas projects		
Service Quality Reforms 2017"	O Introduce outstanding technology and		
○ Promote usage of Hokuriku Shinkansen,	products from outside Company		
prepare for opening of Hokkaido	♦ HABATAKU (Empower)		
Shinkansen, and prepare for other	—Developing Employees and Creating		
initiatives	Corporate Culture That Maximizes Human		
\Rightarrow Aiming to Heighten the Safety and	Potential		
Reliability of Transportation	O Motivate employees and provide them		
◆ TOMO NI IKIRU (Together)	with further opportunities to grow		
—Strengthening Collaboration with Local	 Promote cohesive group management Reform work style and streamline 		
Communities			
O Advance three types of town development	organizational management		
steadily			
○ Revitalize regional industry			
O Promote Japan as a tourism-oriented			
nation			
Prepare for 2020 Tokyo Summer Olympic and Paralympic Games			
Advance Strategies for Inbou	ınd Tourism		

Eternal Mission: KIWAMERU (Excel) – Pursuing "Extreme Safety Levels"



Viewing a significant incident in April 2015 in which a train track was obstructed by the collapse of an electrical pole on the Kanda–Akihabara segment of the Yamanote Line with the utmost seriousness, JR East will take rigorous preventive measures and endeavor to overcome safety weaknesses. Past Year's Initiatives **Priority Initiatives Going Forward** * Newly added items have been underlined 1. Advance "Group Safety Plan 2018" steadily 1. Advance "Group Safety Plan 2018" steadily Advanced measures to reduce risk steadily with regard to respective (1)Advance concrete measures that reflect basic "accidents due to the JR East Group," "accidents due to external factors," approach of "Group Safety Plan 2018" and "accidents closely related to the public" Risk Establish safety culture Fostered personnel who have knowledge, leadership capabilities, and skills Improve safety management system with respect to safety Reduce risk steadily 0 • Advanced measures to prevent the collision accidents between trains and Conceptual illustration of working Promote priority improvement plan for safety equipment 0 maintenance vehicles or heavy construction machinery that are used for work continuously to avoid risks becoming accidents. on railway tracks based on lessons of a derailment accident within Kawasaki (2) Advance measures aimed at overcoming safety weaknesses in response Station to collapse of electrical pole on Yamanote Line, etc. Implement rigorously measures that have been prepared so far to prevent recurrence of accidents 2. Build railway capable of withstanding natural disasters and incidents and take measure for prevention in advance by analyzing risk information Implemented seismic reinforcement steadily for intensive implementation Take measures to enhance personnel education and skills in light of fact that this is significant 0 period ending FY2017 (completed approximately 50% of plan by FY2015) generational changeover period Advanced seismic reinforcement of embankments near Ochanomizu Station (3) Implement rigorous accident prevention measures (tangible and on Chuo Line intangible) reflecting lessons from derailment accident in Kawasaki Station Advanced discussions with parties in respective locations and preparations for introduction of 2. Build a railway capable of withstanding natural disasters submarine seismograph data with a view to strengthening seismic observation capabilities Vertical-motion automatic (1)Seismic reinforcements platform gates at Haijima Station 3. Formulate phase 2 plan for installing automatic platform Aim to complete approximately 80% of plan by FY2017 in relation to seismic reinforcement of gates Shinkansen viaduct columns and electrical poles and 8-meter+ embankments and stations o Installed at 20 of 23 railway stations on Yamanote Line at which use of ceilings, etc. automatic platform gates to begin by FY2016 Considered introduction to Oimachi Station on Keihin-Tohoku Line and Shin-Koiwa Station on Sobu Line Rapid Service based on review of the usage of (2) Properly renew aging facilities such as structures, track equipment, and line segments and station station buildings Introduced vertical-motion automatic platform gates in Haijima Station on Prepare plan for large-scale upgrading of Shinkansen lines and proceed with replacement of rails 0 Hachiko Line on trial basis and currently implementing verification from on Tohoku Shinkansen Line (from Omiva northward) viewpoints of safety and cost

Eternal Mission: MIGAKU (Improve) - Service Quality Reforms





Aiming to Heighten the Safety and Reliability of Transportation



Facing internal and external changes that include changes in railway systems, increasing horizontal division of duties, and rapidly advancing transition to the next generation of employees, the JR East Group has to revise education, training, and operational duties and resolve issues proactively.

Series of incidents that have occurred since April 2015

4/12 Collapse of electrical pole on Kanda–Akihabara segment of Yamanote Line 4/29 Breakage of overhead wires within Koriyama Station on Tohoku Shinkansen Line 8/4 Breakage of overhead wires on Sakuragicho–Yokohama segment of Negishi Line

8/9 Damage to window glass of Tohoku Shinkansen



Collapse of electrical pole on Kanda-Akihabara segment of Yamanote Line

Breakage of overhead wires within Koriyama Station on Tohoku Shinkansen Line



<u>Changes</u> (background factors)	railwa	anges in ay systems advancing transitio	Increasing horizontal division of duties that centers on the Group on to next generation of employees	
Aiming to resolve issues				
Revise safety education and training ⇒Conduct practical education that not only covers work procedures (manuals, etc.) but also includes "essence" (intent and purpose, system and operation principles, etc.) and increase safety consciousness and sensitivity		 Strengthen ability to respond to emergencies ⇒ Limit impact and strengthen systems for rapid resumption ⇒ Rescue passengers rapidly and provide appropriate information (expected resumption of operations, etc.) ⇒ Enhance management and direction capabilities of each countermeasures taskforce 		
Enhance technological capabilities in the Group as a whole through collaboration with partner companies				

\Rightarrow Establish systems for strengthening management of railway construction work, expand and intensify personnel exchanges, and increase sharing of risk information

Strengthen Shinkansen facilities and equipment and railcars

⇒Implement strengthening measures based on awareness of such changes as higher speeds and aging

Strengthen electrical facilities and equipment in Tokyo metropolitan area

⇒Minimize impact on transportation by increasing durability and ensuring incorporation of dual systems

Establishment of Railway-Related Risk Mitigation Committee

⇒ Prevent recurrence rigorously (check that measures to prevent serious incidents that occurred in the past are being implemented without fail)

⇒ Realize prevention by identifying risks and weak points (unearth risks and weak points and take countermeasures before serious incidents occur)

Eternal Mission: TOMO NI IKIRU (Together) — Strengthening Collaboration with Local Communities



"Thriving with communities," we view "contributing to the growth and prosperity of communities" as an important mission. Aiming to revitalize regions in the JR East's service area, JR East will actively pursue measures for "town development," "revitalization of regional industry," and "tourism promotion" that we are uniquely qualified to realize. Past Year's Initiatives **Priority Initiatives Going Forward** * Newly added items have been underlined. 1. Advance town development steadily for large-scale **1.** Advance three types of town development steadily terminal stations, line-side areas in Tokyo metropolitan area. and core regional stations (1) Enhance convenience of terminal stations and establish their brand power Began procedures with a view to determining town plan for city foundations, 0 Advance plan with view to provisional opening of new railway station in 2020 between Tamachi etc., of town in Shinagawa and Shinagawa stations and advance plan to develop town that will become new hub of • Began work on upgrading main building of Shibuya Station international exchanges centered on new railway station and Shinagawa Station • Opened nonomichi and established facilities that benefit community Advance development of such large-scale terminals as Shinjuku, Shibuya, and Yokohama stations 0 (community station, etc.) underneath railway viaduct from Musashi-Sakai to steadily through opening of JR SHINJUKU MIRAINA TOWER (March 2016) and other initiatives Higashi-Koganei on Chuo Line (2) Establish preferred line-side brand Opened nonowa Musashikoganei (phase 1) and nonowa Kunitachi (phase 1) Concluded alliance agreement with Akita Prefecture and city of Akita for • Advance Chuo Line Mall Project and HAPPY CHILD PROJECT development of "compact cities" with view to regional revitalization (3) Develop towns around core regional railway stations Opened MIDORI Nagano and tourist information center integrated with café 0 in Nagano Station and implemented Shinshu 100 Stories to publicize appeal Advance development of appealing towns around railway stations in 0 of respective areas of Shinshu collaboration with local authorities, etc. (Akita Station, Atami Station, etc. Conceptual illustration of Shinagawa area development 2. Revitalize local communities with NOMONO shops and Sanchoku-Ichi 2. Revitalize regional industry • Extended small-scale markets to include Koenji Station, Asagaya Station, and Kameari Station (1) Expand sales channels for local produce and step up • Opened Tokamachi Sukoyaka Factory Ebisu Store • Began construction of tomato cultivation greenhouses at JR Tomato Land publicity in Tokyo metropolitan area • Increase number of NOMONO stores and develop Sanchoku-Ichi Iwaki Farm Co., Ltd. (farmers' markets) and small-scale markets actively 3. Promote Japan as tourism-oriented nation (2) Advance sextic industrialization of agriculture, forestry • Concluded comprehensive operational alliances through subsidiary with local and fisheries Conceptual illustration of travel agents in Thailand and China: S.M.I. Travel and ET Mobile Japan • Advance NOMONO 1-2-3 Project and expand sales channels of NOMONO Kitchen Ikebukuro • Received accreditation from Japan Tourism Agency for wide ranging Tokamachi Sukoyaka Factory sightseeing excursion route: Japan's Innermost Treasures/Tohoku Exploration Route 3. Promote Japan as a tourism-oriented nation Announced name of cruise train TRAIN SUITE 0 SHIKI-SHIMA and establishment of exclusive (1) Create appealing trains that are ridden for ride experience itself new lounge in Ueno Station: PROLOGUE GENBI A T SHINKANSEN Begin operations of "traveling art café Shinkansen" GENBI SHINKANSEN SHIKI-SHIMA GENBI SHINKANSEN design in Niigata area around spring 2016 (2) Prepare for introduction of cruise train TRAIN SUITE SHIKI-SHIMA Establish actual course of operations and travel products, etc., with view to Conceptual illustration of lounge beginning operations around spring 2017

Pursuing Unlimited Potential: HIRAKU (Pioneer)

- Technological Innovation



Aiming to realize the evolution of railways, we will adopt an open innovation approach that uses external development capabilities and intellectual properties to achieve further technological innovation and operational innovation and pursue *unlimited potential*.

Past Year's Initiatives

1. Promote energy and environmental strategies

- Proceeded with upgrading of No. 1 generator of Kawasaki Thermal Power Station
- Advanced preparations for introduction of catenary and battery-powered hybrid railcars for through services with alternating current (AC) railway segments
- Introduced renewable energy
 - Solar power generation: Began using solar-cell power plants at two locations in Katagami, Akita Prefecture
 - Wind power generation: Established JR East Energy Development Co., Ltd. Geothermal power generation: Began exploratory drilling in northwestern Hakkoda
 - Biomass power generation: Established Hachinohe Biomass Electric Power Co., Ltd.
- Resumed operation of regenerative power control equipment at Ushiku feeder substation

2. Utilize ICT to innovate operations

 Incorporated and tested monitoring devices (railcars, railway track equipment, power equipment) on Yamanote Line, etc.
 Expanded area for introduction of station remote control



track equipment

- systems (streamlined ticket gate operations)
 Integrated in-house system with tablet computers
- Developed new alarm systems for oncoming trains that use GPS, etc., to identify positions of trains and workers with view to preventing train contact accidents and began work for introduction
- Began work for introduction of wireless train control systems (ATACS) to Saikyo Line

3. Technological innovation by employees on front lines

 Strengthen collaboration among branch offices centered on innovation conductors (leaders who accelerate technological innovation by employees on front lines)

Priority Initiatives Going Forward

* Newly added items have been underlined.

1. Promote energy and environmental strategies

(1) Expand the introduction of catenary and battery-powered hybrid railcars

- Introduce catenary and battery-powered hybrid railcars for through services with alternating current (AC) railway segments
- (2) Introduce renewable energy actively
- Leverage bountiful natural environments to transform northern Tohoku into renewable energy base (solar, wind, geothermal and biomass energy)

Conceptual illustration of wind power generation

2. Utilize ICT to innovate operations

- (1) Innovate maintenance operations
- Introduce monitoring devices for railway track and power equipment on Yamanote Line and other model line segments and advance practical application
- Begin analyzing railcar monitoring data obtained from Yamanote Line Series E235 massproduction lead railcars
- o Reduce costs and increase operational efficiency by analyzing and using data accumulated

(2) Use ICT to establish new sales capabilities

- Introduce dynamic packages that allow customers to select trains and hotels
- Begin online sales service for View products that enables availability checking via Internet

(3) Revolutionize transportation systems

- Complete work related to wireless train control systems (ATACS) for <u>Senseki Line and conduct</u> wireless tests on Saikyo Line
- <u>Advance development to enable real-time visualization of trains' operational status (delays, congestion rates, etc.)</u>

3. Advance technological innovation

 In preparation for progress in Internet of Things (IoT) and artificial intelligence (AI) and to advance technological innovation ahead of times, prepare medium-to-long-term vision for technological innovation including JR East Group's future technological goals and begin from FY2017

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Pursuing Unlimited Potential: NOBIRU (Grow)

Tackling New Business Areas



In light of the fact that numerous railway projects are under consideration overseas, we will take advantage our expertise in such areas as railcar manufacturing, maintenance, and train operations to take on the challenge of developing businesses globally.

Past Year's Initiatives

1. Take on challenge of overseas projects

- Hired local personnel and prepared maintenance and training plans for Purple Line urban mass transit railway system in Bangkok, Thailand
- o Began transferring Series 205 railcars that were used on Nambu Line to railway operator in Indonesia and JR East's drivers provided local support in relation to railcar inspection and maintenance
- o Heightened JR East's presence and strengthened networks with those involved in rail overseas by holding "9th UIC World Congress on High Speed Rail"

TOKYO 2015



UIC World Congress on High Speed Rail

Distributed information through expos and seminars overseas

2. Take on challenge of new business areas in life-style service business

• Supported life-style service business Group companies in implementation of trial overseas businesses (Station lunchbox festival in Taiwan, etc.)

3. Establish railcar manufacturing as fourth business pillar

- Conduct sales activities in Japan and select overseas projects/prepare for bid participation for sustina stainless-steel railcars
- Conduct sales activities for LRT manufactured by overseas railway manufacturer

Priority Initiatives Going Forward

1. Take on challenge of overseas projects

(1) Advance Purple Line urban mass transit railway system in Bangkok, Thailand

• Proceed with supply of railcars and with maintenance operations for railway systems steadily with a view to opening in August 2016





Railcar to be supplied to Purple Line

(2) Expand technological support, etc., for railway operators in Indonesia and Myanmar further

- (3) Advance initiatives aimed at participation in overseas high speed rail projects
- Develop joint public/private sector initiatives aimed at participation in high speed rail projects between Malaysia and Singapore, and in India, etc.
- (4) Develop sustina actively to win overseas projects
- Follow on from Purple Line by winning orders for supplying sustina overseas
- (5) Develop life-style service business overseas
- Create business opportunities overseas and develop global human resources

2. Introduce outstanding technology and products from outside Company

- Monitor international tenders for procurement of diesel railcars for Hachinohe Line and Niigata and Akita areas and, based on results of this, examine methods of developing suppliers
- Continue to unearth outstanding technology and products through technological exchanges with European suppliers

Pursuing Unlimited Potential: HABATAKU (Empower)

Developing Employees and Creating Corporate Culture That Maximizes Human Potential



To respond to rapidly changing business conditions, the JR East Group will make a concerted effort to motivate employees and encourage their growth while advancing efficient work methods and the building of highly productive svstems Priority Initiatives Going Forward Past Year's Initiatives * Newly added items have been underlined 1. Motivate employees and provide them with further opportunities 1. Motivate employees and provide them with further opportunities to grow to grow (1) Expand and improve open-application programs for personnel transfers Implemented open-application programs for personnel transfers and and training system expanded personnel exchanges with other companies and public • Entrench systems that respond to employees' ambition and enable real sense of growth agencies through work Enhanced training system to strengthen management capabilities of Advance steadily passing on of technology and skills through OJT and on-site managers and employees of planning divisions and heighten exchanges among companies and foster and actively deploy personnel that will capabilities of Group's personnel overall become core of workplaces in preparation for rapid generational changeover • Conducted "Challenge! Foreign Language Program" aimed at (2) Strengthen development of global human resources improving ability in languages other than English (Vietnamese, • Continue developing diverse menu for nurturing human resources Indonesian, Thai) (short-term and long-term study abroad, training, temporary • Women accounted for 30% of new graduate hires in FY2016 and assignment to other companies, etc.) in preparation for global percentage of female employees (as of April 1, 2015) increased to strategies and corporate culture reforms going forward 10.3% (+0.9% year on year) (3) Promote diversity Continued promoting female employees to management positions and Overseas experience program Prepare new diversity program during FY2016 appointed first female executive officer (general manager of branch office) • Promoted employment of disabled by holding joint Group employment 2. Promote cohesive group management presentations, etc. (1) Establish "Group Stretch Targets" Share medium-term targets throughout Group and advance concrete measures to 2. Promote cohesive Group management enhance Group's value even further (enhance safety and service quality. • Launched JR East Group's first gold card, increase earnings from visitors to Japan and new business areas etc.) 3587 8701 2345 6789 RE POIN JCB (2) Launch JRE POINT as common service throughout View Gold Plus Card, service for customers JR East Group and expand and improve it who use JR East Group frequently Launch JRE POINT service (February 2016) 0 View Gold Plus Card JRE POINT logo Promote View Thanks Point, Suica Point, and JRE POINT in integrated manner 0 3. Reform work style and streamline organizational management Implemented concerted effort with Group companies to reform 3. Reform work style and streamline organizational management outsourcing (streamlined outsourcing, etc., by expanding • Pursue compact operational implementation system with higher productivity introduction of station remote control systems) • Advance reform of operations based on business types and business formats of Group Shortened core time at locations where flextime has been companies with a view to enhancing productivity further by fostering employees with introduced multiple capabilities, etc.

Initiatives with View to 2020 Tokyo Summer Olympic and Paralympic Games and Advancement of Strategies for Inbound Tourism



JR East will steadily advance tangible and intangible preparatory measures for the 2020 Tokyo Summer Olympic and Paralympic Games. At the same time, JR East will capture demand from inbound tourism, which has continued to increase in recent years, by attracting them to Tohoku and other regions in JR East's service area.

Past Year's Initiatives with View to 2020 Tokyo Summer Olympic and Paralympic Games

Provide safe, smooth and comfortable transportation services

 Increased installation (in Narita Airport Station and Airport Terminal 2 Station) of large elevators (with capacity for 24 people)



Increased installation of elevators in Narita Airport Station

- Provided free public wireless LAN service at all stations within Yamanote Line and at more regional railway stations (41 railway stations and 5 tourism centers for visitors to Japan)
- Advanced measures for information services in foreign languages based on initiative of on-site frontline personnel (held study groups, provided ICTenabled information service tools throughout operations, etc.)



Tokyo OMOTENASHI Project

Priority Initiatives Going Forward

* Newly added items have been underlined.

Prepare for 2020 Tokyo Summer Olympic and Paralympic Games

(1) Bolster capabilities of railway stations and other facilities near Olympic and Paralympic venues and transportation capacity during event

- Implement plans for upgrading of railway stations and other facilities near Olympic and Paralympic venues with a view to beginning use them by time of holding of event (Sendagaya Station, Shinanomachi Station, Shimbashi Station, Shin-Kiba Station, etc.)
- Continue examining transportation plans for period during event based on envisioned customers flows
- (2) Promote construction of barrier-free facilities
- o Take measures in response to "Accessibility Guidelines" of event organizing committee

Advance Strategies for Inbound Tourism

(1) Increase profile of Tohoku area

- Build brand through collaboration with Tohoku Tourism Promotion Organization, etc., and establish wide-ranging routes
- (2) Capture demand from inbound tourism on Group basis
- Promote sales overseas of railway travel in Japan by leveraging comprehensive operational alliances concluded with local travel agencies that have strengths in Asian countries
- Increase and improve stores that offer duty free shopping services in station buildings and station concourses
- (3) Establish environment that accommodates needs of

visitors to Japan and increase convenience

- <u>Develop communications environment by providing free Wi-Fi, etc.</u> in station concourses, railcars, station buildings, hotels, etc.
- Increase and enhance tablet computer-enabled provision of multilingual information during emergencies and transportation service disruptions
- Increase and enhance JR East Travel Service Center mainly in Tokyo metropolitan area
- Examine enhancing convenience of ticketing for customers overseas
- Increase and enhance functions of seating reservation service for overseas customers (JR-EAST <u>Train Reservation</u>)



The"Treasureland TOHOKU JAPAN" Logo



LUMINE duty free counter



Seating reservation service for overseas customers