One: Overview of JR EAST
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Five: Steadily Reducing Risks
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OVERVIEW OF JR EAST

– Japan is a land of railroads
OVERVIEW OF JR EAST

Japanese National Railways (JNR)
  Transferred in April 1987
  JNR Settlement Corporation

Japan Freight Railway Company

Railway Information System Company

Railway Technical Research Institute

Telecommunication, etc.

Passenger Transport Companies
1) JR Hokkaido  2) JR East  3) JR Central  4) JR West  5) JR Shikoku  6) JR Kyushu

Territorial division

JR Hokkaido
JR Central
JR East
JR West
JR Shikoku
JR Kyushu
OVERVIEW OF JR EAST

We own all the infrastructure of railway, operate and maintain as full integration railway model.
We own and operate and all categories of passenger railway transport.

About 7,500 km
57,000 employees

Tokyo Metropolitan Area

Passengers:
17 mil. /day

High-speed

Integrated Railway Network

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OVERVIEW OF JR EAST

Tokyo Metropolitan Area Network

☆ No. of lines ・・ 25 lines
☆ Length of operating lines ・・ 1,088km
☆ No. of passengers per day ・・ 13 million
☆ Most frequent train operation ・・ Every 2 minute
OVERVIEW OF JR EAST

Big Stations in Tokyo

- **Shibuya**: 426,000 passengers/day
- **Shinjuku**: 766,000 passengers/day
- **Tokyo**: 394,000 passengers/day
- **Shinagawa**: 328,000 passengers/day
- **Ikebukuro**: 563,000 passengers/day
OVERVIEW OF JR EAST

Per day:

- Passengers: 17.5 million
- Train-kilometers: 69,880,000 km
- Signal validations: 1.2M times
- Door openings: 6M times
- Crossing openings: 700,000 times
THE TOTAL NUMBER OF ACCIDENTS

(Number of accidents)

- **Rail property damage accidents**
  Accident causing ¥5 million or more in property damage due to operation of train(s) and/or carriage(s)

- **Rail personal injury accidents**
  Accident causing fatality/injury due to operation of train(s) and/or carriage(s)

- **Level-crossing accidents**
  Accident where train and/or carriages hit person(s) and/or vehicles on level crossing

- **Train accidents (collision, derailment, fire)**
  Accident such as train collision, derailment, and train fire

(Fiscal Year)
JR EAST
SAFETY PLAN 2018
– The five-year safety plan
OVERALL IMAGE OF JR EAST SAFETY PLAN 2018

Goal
- Passenger fatalities/injuries
- Employee fatalities
  - Also reduce injury-causing accidents

Directions to aim for
- Eliminate
- Systematically cut risk
- Cooperate with society to develop comprehensive measures

4 Principles
- Establish safety cultures
- Steadily reduce risk
- Improve safety management system
- Promote priority improvement plans for safety equipment

Goal
- Passenger fatalities/injuries
- Employee fatalities
  - Also reduce injury-causing accidents

Employees in the JR East Group Safety Plan 2018 means all employees involved in railway work, including people in JR East, Group companies and partner companies.
ESTABLISH SAFETY CULTURES

– JR EAST Safety Plan 2018 (1)
FIVE CULTURES

Culture of proper reporting
Swiftly and correctly report accidents and incidents to prevent further occurrences.

Culture of noticing
Be aware of potential accidents and incidents before they happen, and share information to prevent them happening.

Culture of direct discussion and debate
When looking for causes, work through various opinions and engage in debate to pinpoint background factors to help develop truly effective countermeasures.

Culture of learning
Imagine an accident had happened to someone else not in your job and learn from it to help develop specific responses.

Culture of action
Finally, turn conclusions into specific actions to really ensure safety. Think and act yourself - these are the virtues that underpin safety.

‘Stop the train if you feel something is dangerous’ pointing and calling out
STOP THE TRAIN IF YOU FEEL SOMETHING IS DANGEROUS
POINTING AND CALLING OUT

- Train protection training at training facility
- Train driver pointing at signaling indicators and calling out the status
PRINCIPLE OF THREE ACTUALITIES

- **Principle of Three Actualities**
  - **Actual location**
    - Go to the actual location to understand the circumstances.
  - **Actual objects**
    - Examine the actual object (rolling stock, equipment, machine, tool, etc.) to understand its condition.
  - **Actual persons**
    - Meet face-to-face with the people actually involved to understand their situation.
“CHALLENGE SAFETY” CAMPAIGN

In every workplace:

Think about safety
Debate safety
Act on safety

feel satisfaction in achieving safety

Refine their safety consciousness and sensitivity
LEARNING FROM THE PAST

Emergency Evacuation from Train

- Yamada Line
- Senseki Line
- Jyoban Line
- Kesennuma Line
- Ishinomaki Line

Derailed by TSUNAMI
LEARNING FROM THE PAST

安全は輸送業務の最大の使命である。

一

安全の確保は、規程の遵守及び執務の厳正から始まり、不急の修練によって築きあげられる。

二

安全の確保には、敬意の徹底は、確認の勤行と連絡の徹底が必要である。

三

安全の確保に最も大切である。

四

安全の確保のためには、職責をこえて、一致協力しなければならない。

五

疑わしいときは、あえてず自ら考え、最も安全と認められるものを採らなければならな。
LEARNING FROM THE PAST

General principles of Safety

1. Safety is the most important mission in transportation.
2. Ensuring safety is based on exact observance of rules and procedures, and is achieved through constant practice.
3. Enforcement of confirmation and complete contact is most important for ensuring safety.
LEARNING FROM THE PAST

General principles of Safety

4. For ensuring safety we should cooperate together and go beyond our official responsibility.

5. When we have questions or must choose among several options, we should remain calm, think by ourselves, and take the safest course after thorough consideration.
LEARNING FROM THE PAST

The example during Great East Japan Earthquake

Train stopped by earthquake

Go to evacuation place
【MANUAL】

Stay in the train
【Crew’s Decision】

Tsunami Warning

The train stopped at the place that is slightly higher than the neighborhood.

General principles of Safety
5. When we have questions or must choose among several options, we should remain calm, think by ourselves, and take the safest course after thorough consideration.
IMPROVE SAFETY MANAGEMENT SYSTEM

– JR EAST Safety Plan 2018 (2)
DEVELOPING SPECIALISTS IN SAFETY MANAGEMENT

Key safety leaders
- Specific practice on knowledge, guidance and training of successors at every worksite

Good teamwork

General Training Centre
- Skills Training Center
- Implementing training adapted to practice

Safety Pros
- Specifically putting into practice activities that expand safety efforts in branch offices, etc.
PROACTIVE AND PRACTICAL SUCCESSION ON TECHNICAL EXPERTISE

• Knowledge of the history of safety rules and the backgrounds of previous accidents, and the wisdom that comes with experience retained by veterans

• Seminar by Safety Authority in Specific Expertise
• We share information among all partnering companies, and push ahead with specific initiatives like sharing the same vision of safety senses.

Conference of Presidents of Group companies

Safety Reviews
INITIATIVES FOR ‘DEEP’ LEARNING
THE MISERY OF ACCIDENTS

• Accident History Exhibition Hall
• Safety Portal website
STEADILY REDUCING RISKS

– JR EAST Safety Plan 2018 (3)
THOROUGHLY REDUCING RISKS ACCOMPANYING ACCIDENTS DUE TO IN-HOUSE

– We will take every possible means to eliminate such accidents, including systematically enhancing traditional measures to reduce risks, making use of technologies development outcomes, and reviewing our setup.

– We will aim to eliminate any recurrence of similar incidents due to the same causes.

Train Control System with Radio Transmission

Prevention of overspeed
REDUCING RISK OF ACCIDENTS DUE TO OUTSIDE FACTORS

- In readiness for severe earthquakes and increasingly more-frequent severe weather, etc., we will reduce risks by promoting disaster countermeasures to minimize secondary damage after disasters.

Reinforced Elevated Bridge against Severe Earthquake

Research of a Doppler radar observation method
REDUCING RISK OF ACCIDENTS DUE TO OUTSIDE FACTORS

– We are implementing measures to prevent level-crossing accidents, people falling from platforms onto tracks, etc., by installing warning devices at level crossings, and automatic platform gates.

– At the same time, we will cooperate with customers and regional communities to develop overall measures, such as reducing level crossings when possible and developing campaigns to communicate the dangers of railways to the public.
PRIORITIZE SAFETY EQUIPMENT PLANNING

– JR EAST Safety Plan (4)
PRIORITIZE SAFETY EQUIPMENT PLANNING

- Since our foundation 30 years ago, JR East has invested more than ¥3 trillion in safety.
- The JR East Group Safety Plan 2018 invests about ¥1 trillion more over the 5 years.
  
  - Continue to invest in countermeasures for severe earthquakes
  - Introduce even better protection devices
  - Work on measures to prevent level-crossing accidents
  - Work to complete installation of automatic platform gates at all 23 stations in Tokyo metropolitan area, as well as formulate installation plans for other lines

Trend in safety investments

(billion yen)
Conclusion

- Pursuing ultimate safety
CONCLUSION

• Safety has been our top management priority since establishment: management are engaged to work relentlessly to heighten the level of safety.

• All employees are involved to prevent accidents, and for the challenge of ‘ultimate safety’.

• We are pursuing “ultimate safety”, not “perfect safety”. It can never end.

• We will continue to work tirelessly to improve safety by pursuing a goal of “zero accidents involving passenger injuries or fatalities and zero accidents involving employee fatalities (including partnering companies).”
Thank You

Yasutake Kojima | Director | June 12, 2017