



Rethinking the Safety Philosophy

Yasutake Kojima | Director | June 12, 2017

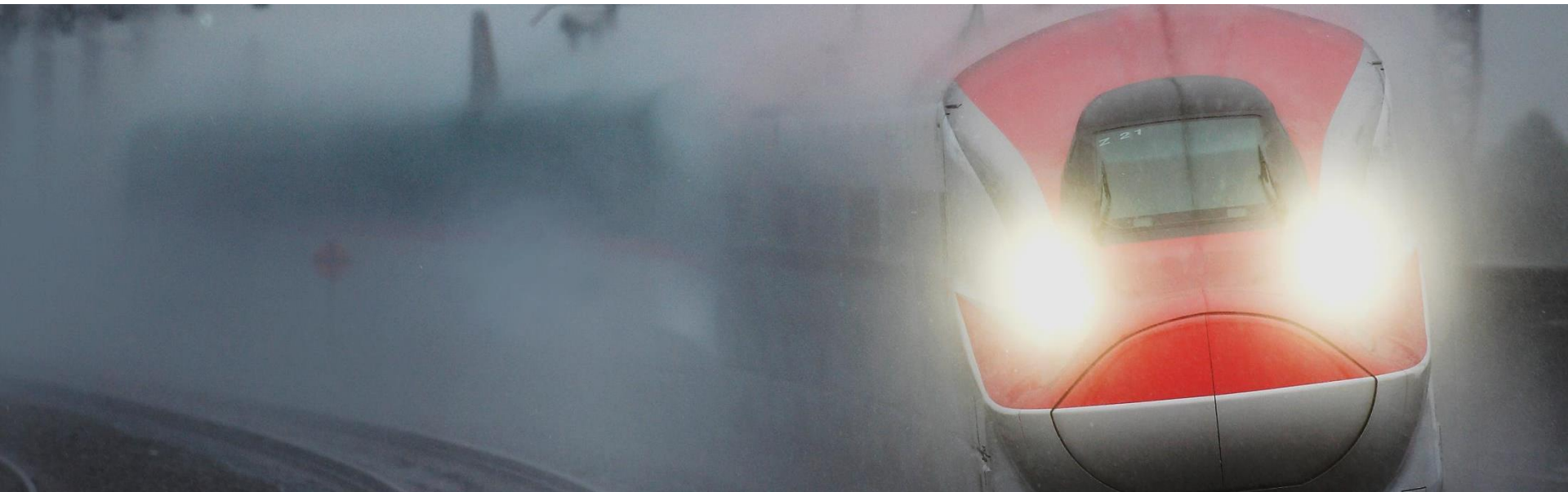


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OVERVIEW OF JR EAST

– 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

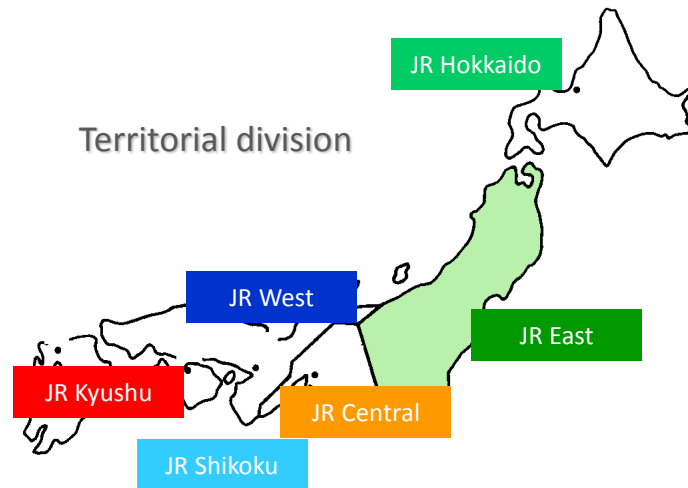
Railway Information System Company

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

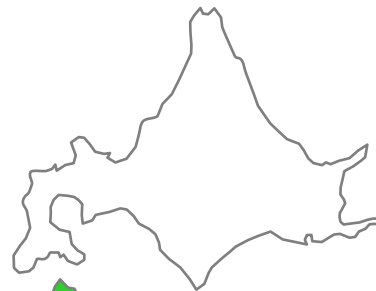


OVERVIEW OF JR EAST

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



Operation and Maintenance



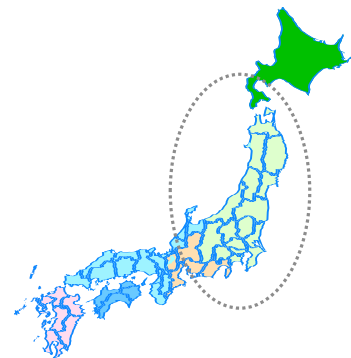
Infrastructure



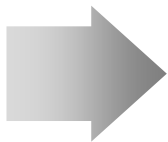
Tokyo

OVERVIEW OF JR EAST

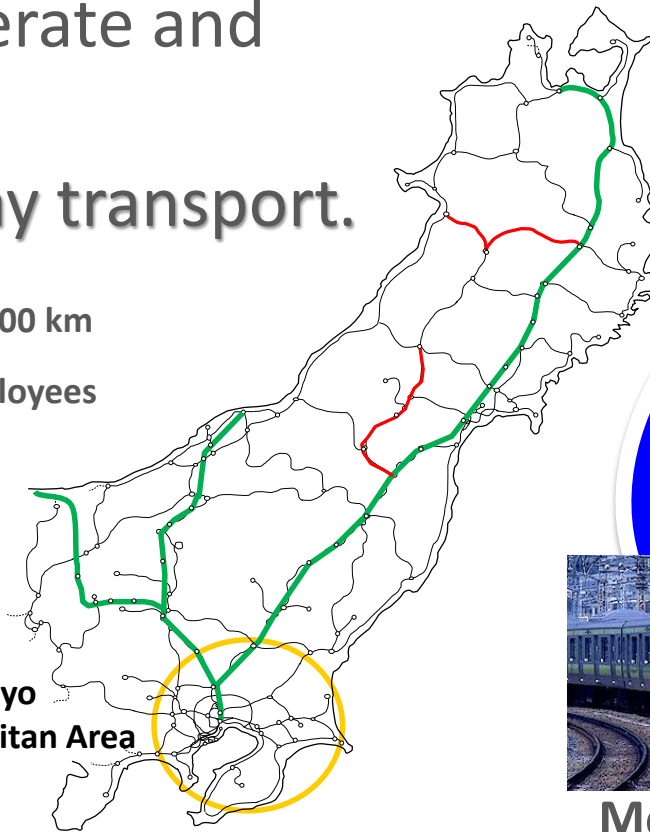
We own and operate and all categories of passenger railway transport.



About 7,500 km
57,000 employees



Tokyo
Metropolitan Area



High-speed



Integrated Railway Network

Passengers:

17 mil. /day



Metropolitan



Regional



OVERVIEW OF JR EAST

Tokyo Metropolitan Area Network

☆ No. of lines

.. 25 lines

☆ Length of operating lines

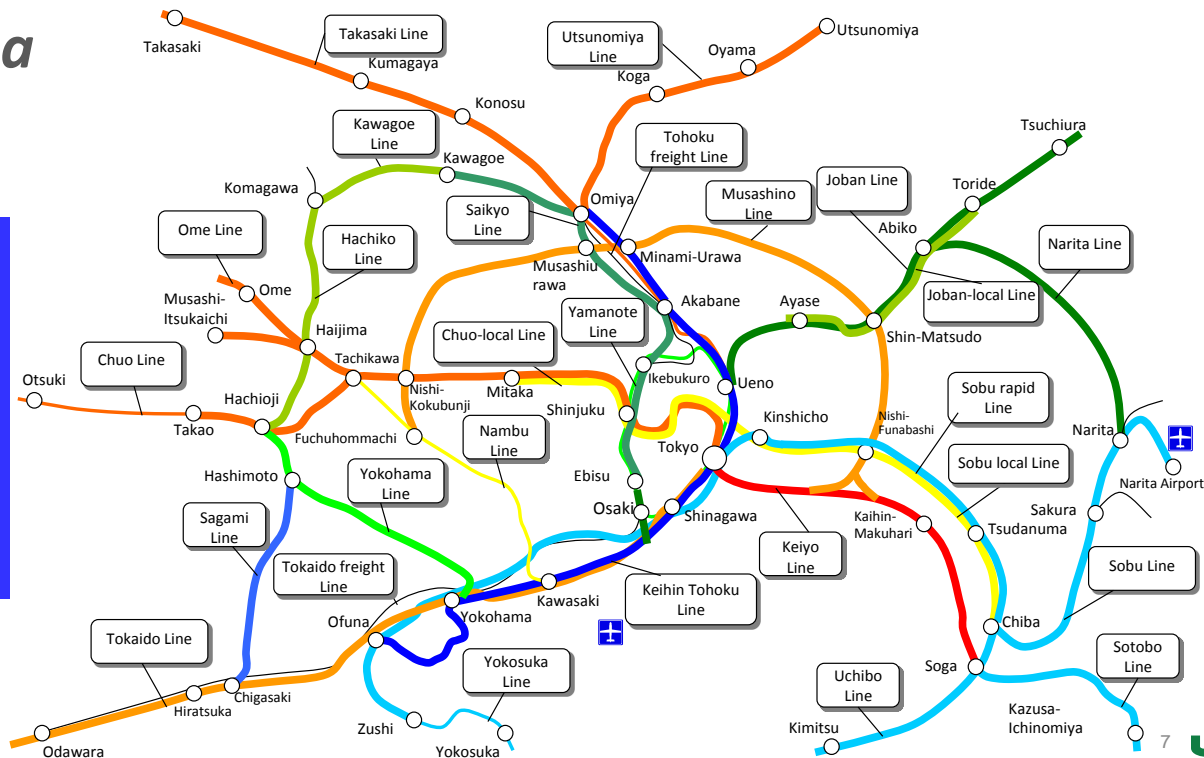
.. 1,088km

☆ No. of passengers per day

.. 13 million

☆ Most frequent train operation

.. Every 2 minute



OVERVIEW OF JR EAST

Ikebukuro Station



Ikebukuro

563,000
passengers/day

Tokyo Station



Big Stations

Shinjuku

766,000
passengers/day

Tokyo

394,000
passengers/day



in Tokyo

Shibuya

426,000
passengers/day

Shinagawa

328,000
passengers/day

Shinagawa Station



OVERVIEW OF JR EAST

Per day:



Passengers: **17.5 million**



Train-kilometers: **69,880,000 km**



Signal validations: **1.2M times**



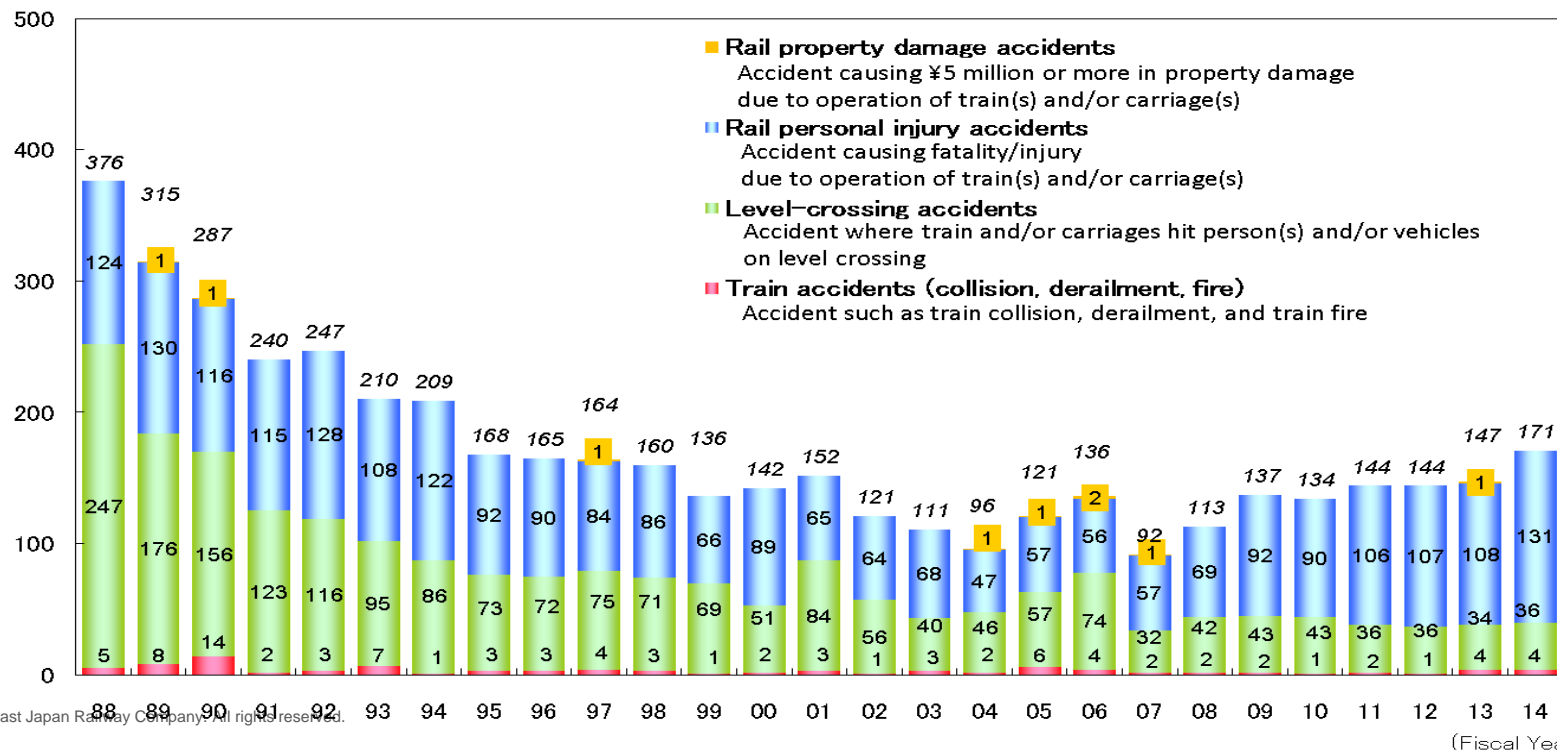
Door openings: **6M times**



Crossing openings: **700,000 times**

THE TOTAL NUMBER OF ACCIDENTS

(Number of accidents)

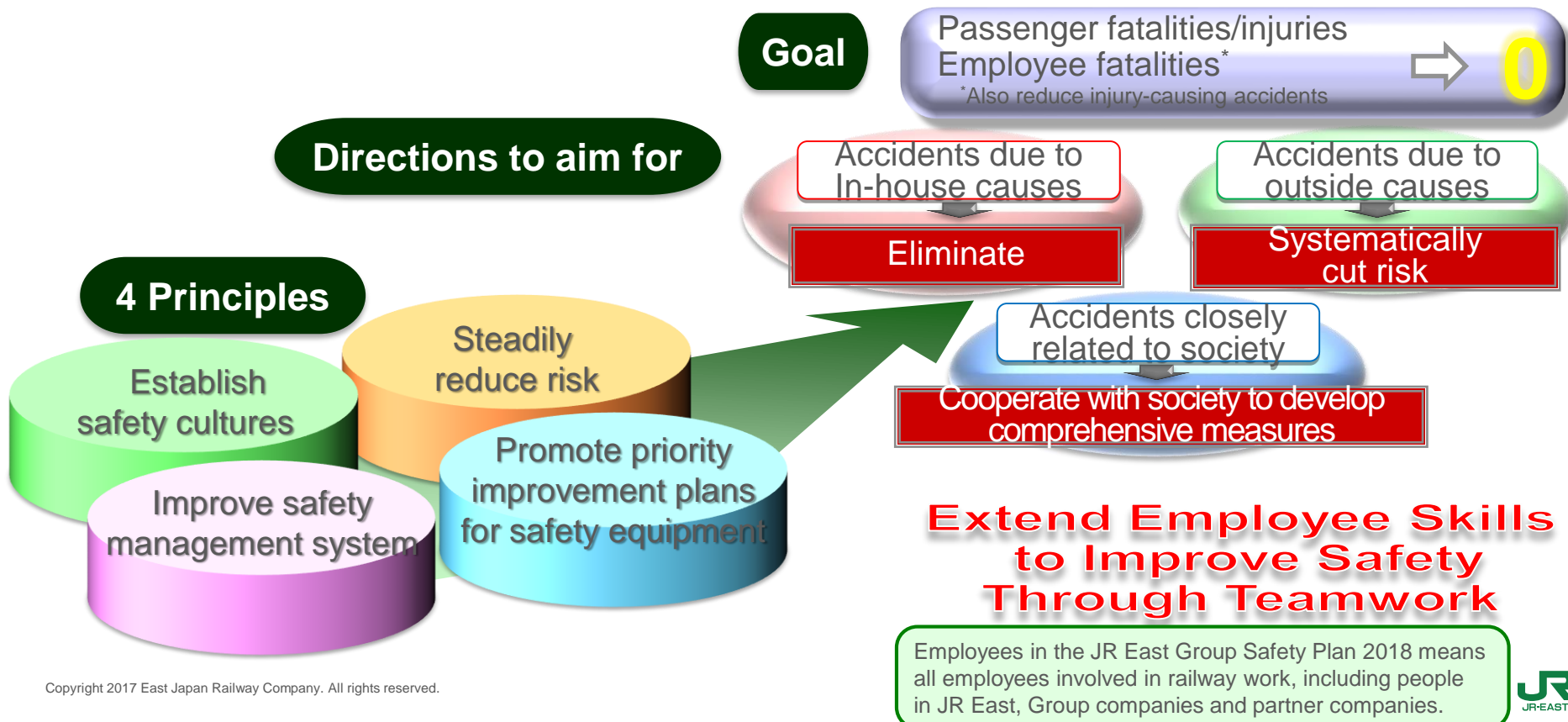




JR EAST SAFETY PLAN 2018

– The five-year safety plan

OVERALL IMAGE OF JR EAST SAFETY PLAN 2018





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:

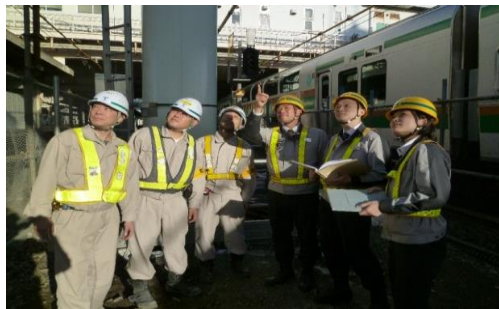
Think about safety

Debate safety

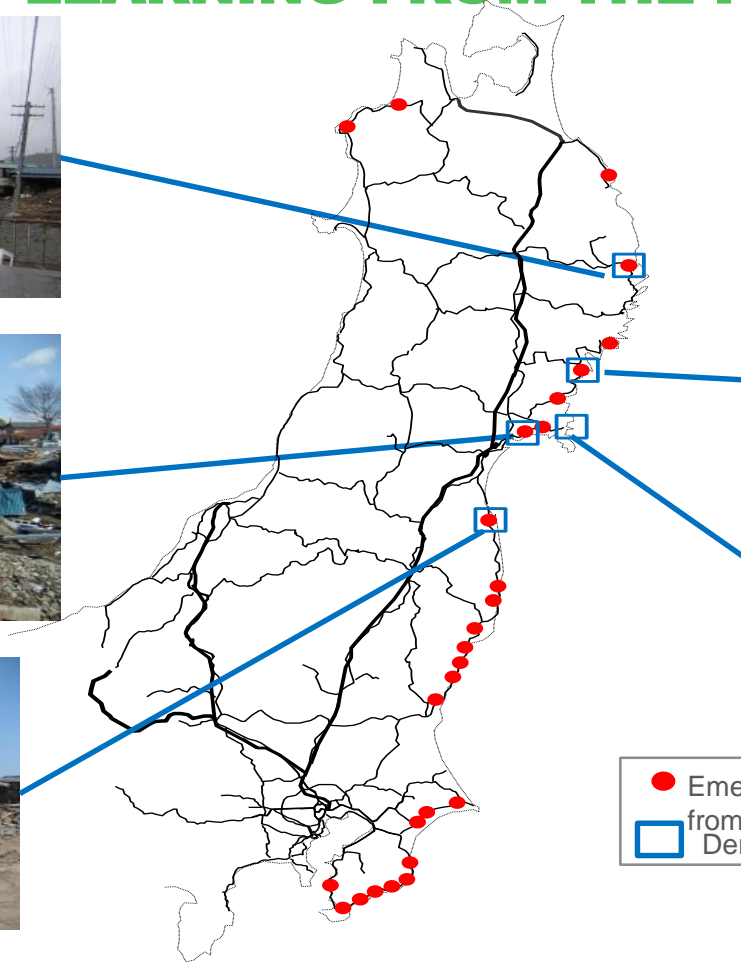
Act on safety

feel satisfaction in
achieving safety

Refine their safety
consciousness
and sensitivity



LEARNING FROM THE PAST



- Emergency Evacuation from Train
- Derailed by TSUNAMI

LEARNING FROM THE PAST

安全綱領

- 一 安全は輸送業務の最大の使命である。
- 二 安全の確保は、規程の遵守及び
執務の厳正から始まり、
不断の修練によって築きあげられる。
- 三 確認の励行と連絡の徹底は、
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、あわてず、自ら考えて、
最も安全と認められるみちを
採らなければならない。

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.

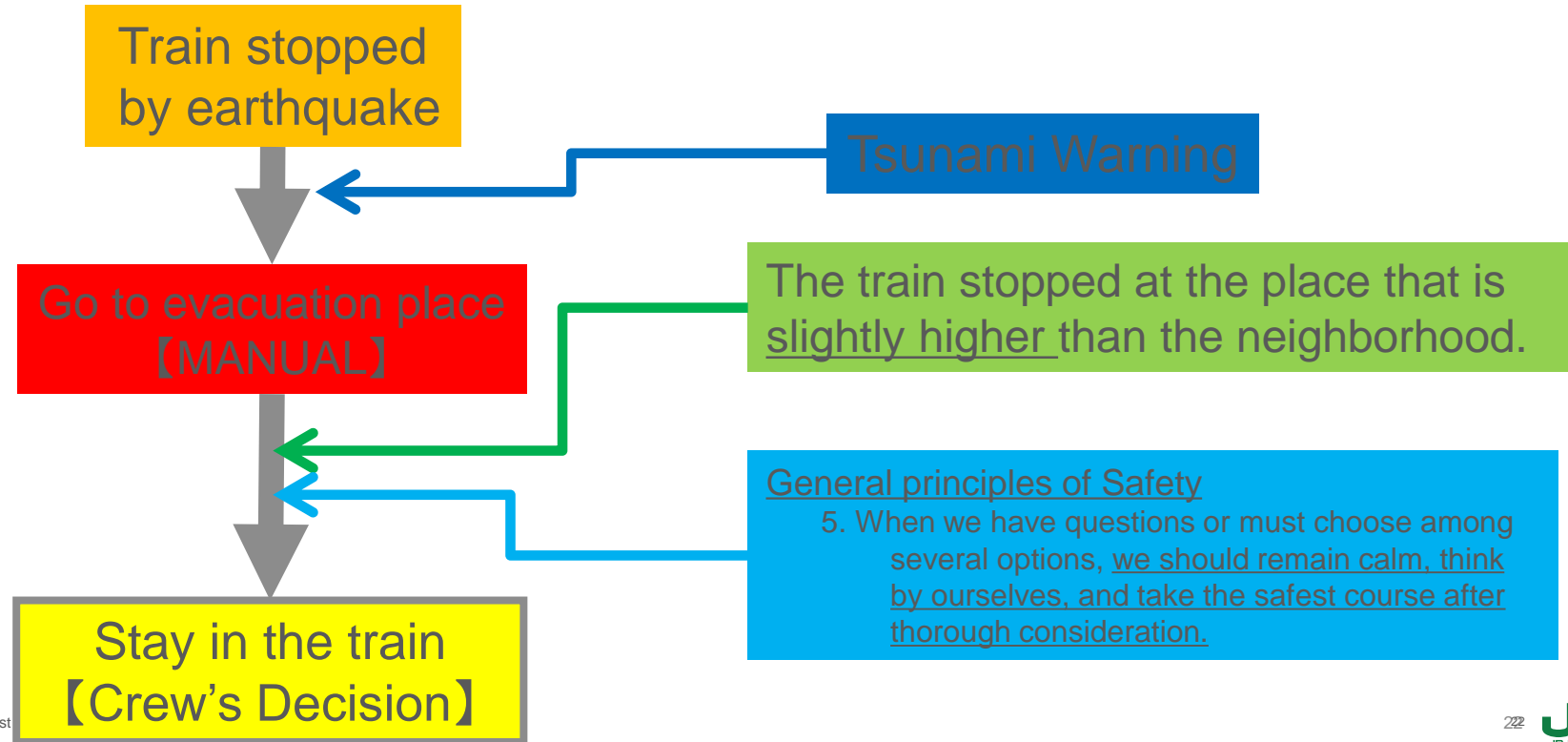
LEARNING FROM THE PAST

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

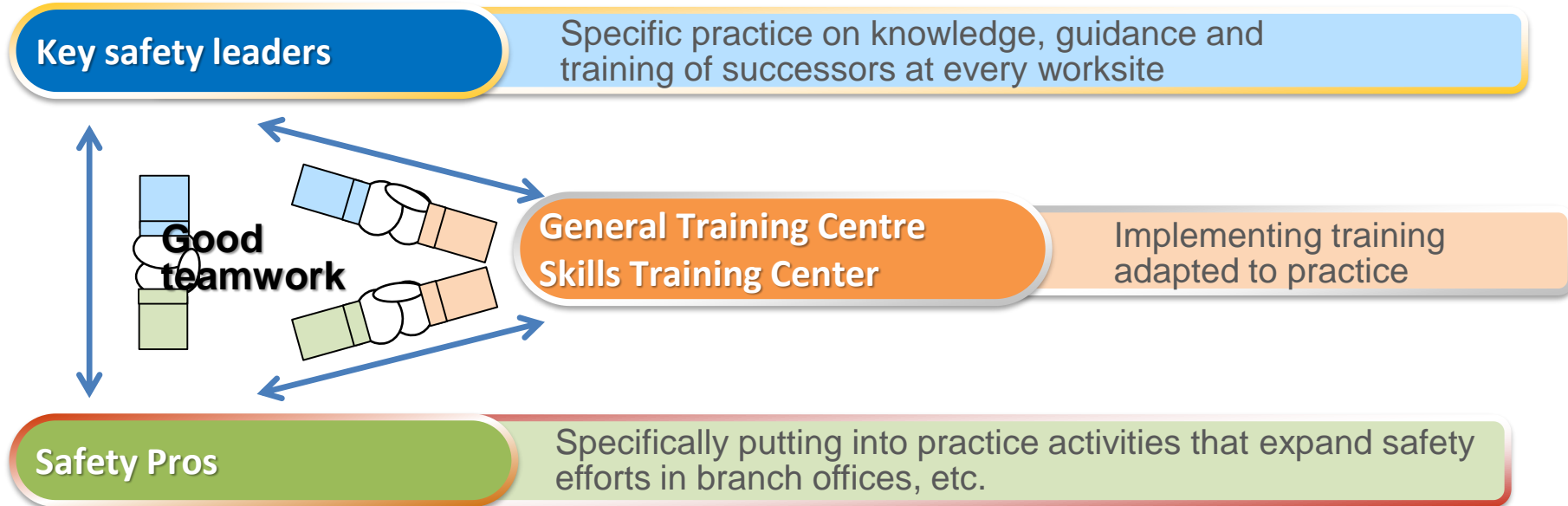




IMPROVE SAFETY MANAGEMENT SYSTEM

– JR EAST Safety Plan 2018 (2)

DEVELOPING SPECIALISTS IN SAFETY MANAGEMENT



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



IMPROVING SAFETY BY INTEGRATION JR EAST GROUP

- We share information among with all partnering companies, and push ahead with specific initiatives like sharing the same vision of safety senses.

Conference of Presidents of Group companies



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Safety Reviews



INITIATIVES FOR 'DEEP' LEARNING THE MISERY OF ACCIDENTS

- Accident History Exhibition Hall
- Safety Portal website



安全ポータル

グループ安全計画2018

安全まつり
安全のルール・マニュアル
映像資料
研究開発
さらに興味のある方へ
最近使った車両

最新情報

「グループ安全計画2018」を、
自分の職場で具体的に基めていく上で
参考になる資料を順次追加しています！

タイトル	内容	更新日時	更新者
東日本大震災対応記録誌	東日本大震災対応記録誌	2014年7月11日 22:27:31	山口 新
東日本大震災対応記録誌	東日本大震災対応記録誌	2014年7月11日 22:27:06	山口 新
東日本大震災対応記録誌	東日本大震災対応記録誌	2014年7月11日 22:26:36	山口 新

おすすめ情報

1位	安全計画
2位	東日本大震災対応記録誌
3位	東日本大震災対応記録誌

A high-speed train with a white and blue livery is moving on the left track, and a blue locomotive with a white star logo is moving on the right track. The background shows a blurred cityscape and railway infrastructure.

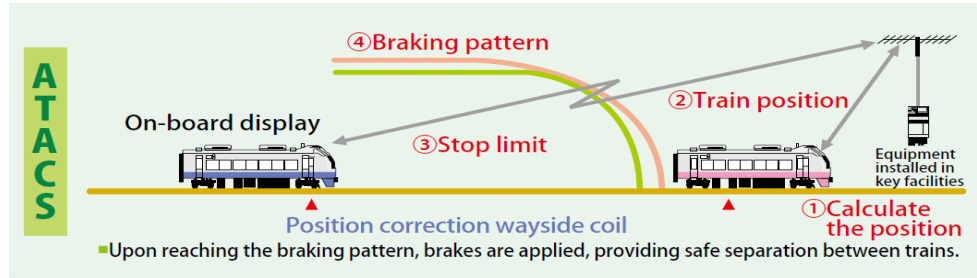
STEADILY REDUCING RISKS

– 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

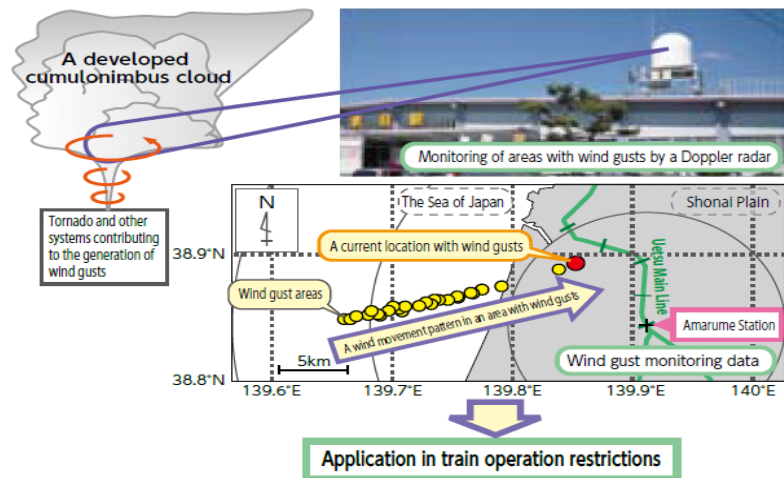
- In readiness for severe earthquakes and increasingly more-frequent severe weather, etc., we will reduce risks by promoting disaster countermeasures to minimize secondary damage after disasters.

Reinforced Elevated Bridge against Severe Earthquake



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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.

Warning Devices at Level Crossings



Automatic Platform Gates



Campaigns to Communicate to the Public





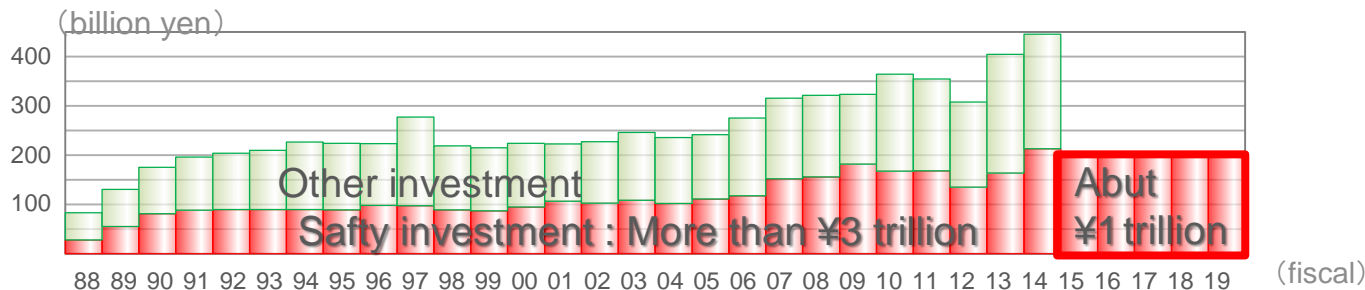
PRIORITIZE SAFETY EQUIPMENT PLANNING

– 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



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



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