

*Details of*

*“2013 Safety Vision”*

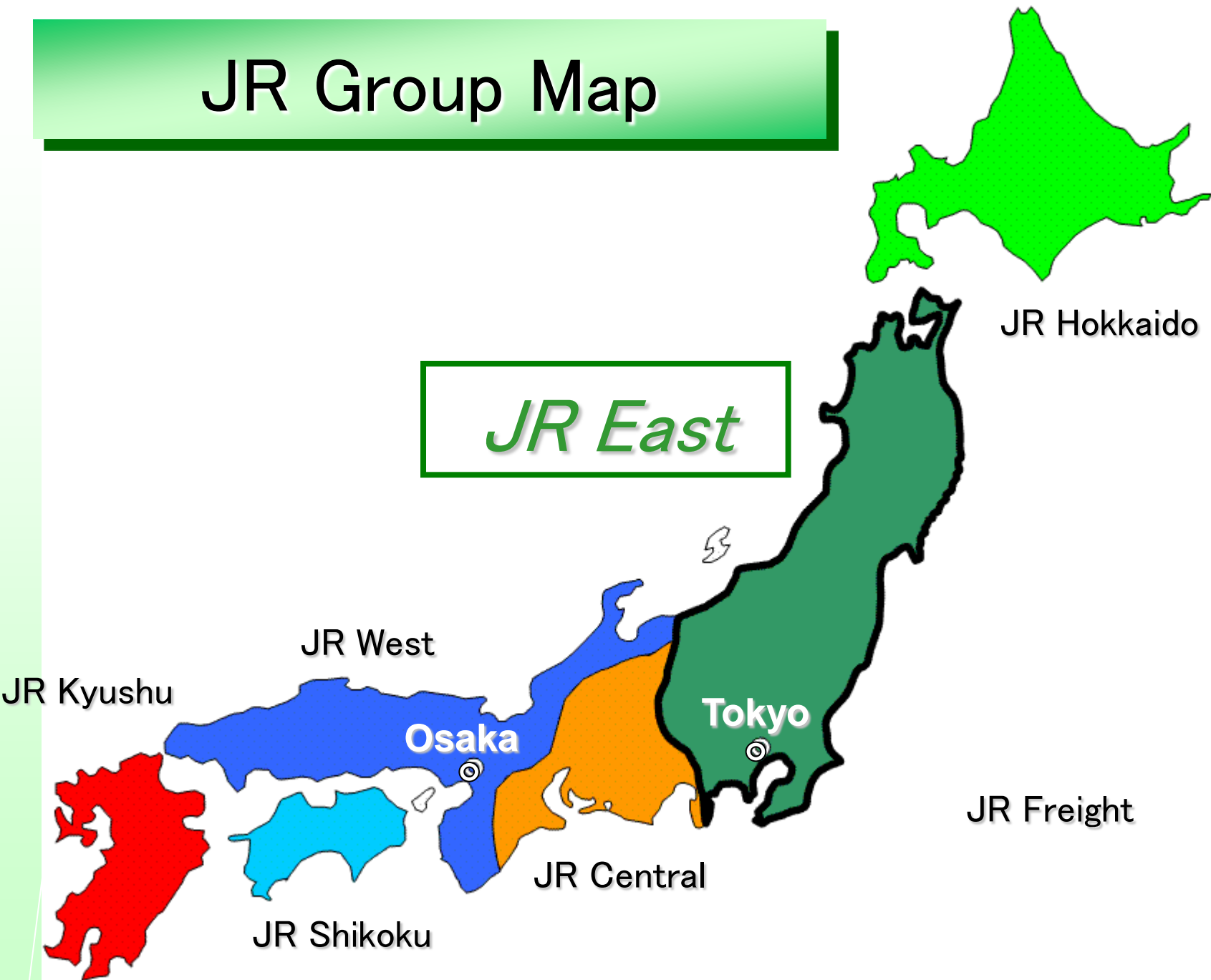
*The 5th Five-year Safety Plan*

*for East Japan Railway Company*

*Tsugio Sekiji*

*East Japan Railway Company*

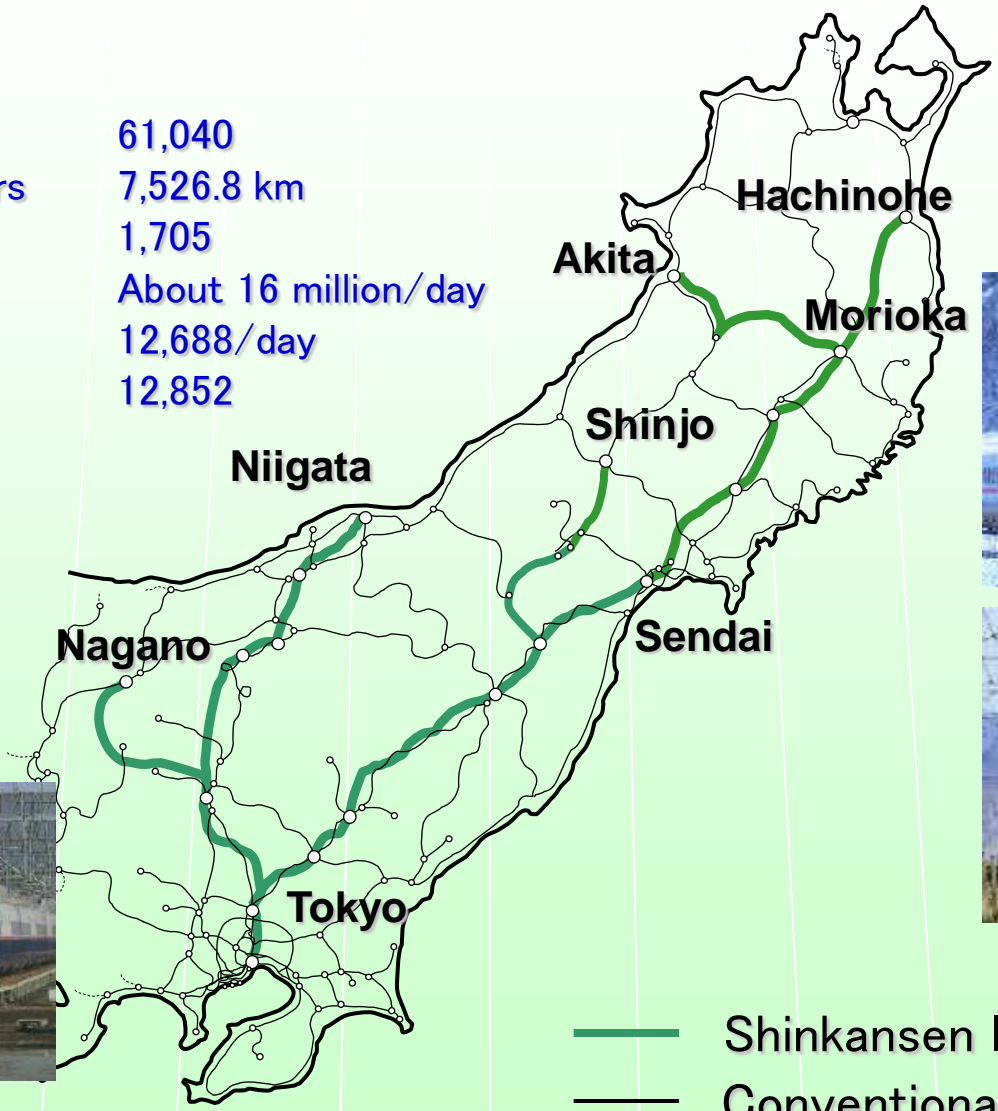
# JR Group Map



# Outline of JR East

(As of 1 April 2009)

Employees	61,040
Working line-kilometers	7,526.8 km
Stations	1,705
Passengers carried	About 16 million/day
Trains operated	12,688/day
Units of rolling stock	12,852



The Shinkansen



The Shinkansen

— Shinkansen lines  
— Conventional lines

# Contents

1. Two perspectives given particular priority  
in the "2013 Safety Vision"
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# Two perspectives

Two perspectives given particular priority  
in the “2013 Safety Vision”

- ① Human resource development and improvement of systems related to safety
- ② Accident prevention through risk evaluation

# Four pillars

## The Four Pillars of “2013 Safety Vision”

- ① Creating a culture of safety
- ② Rebuilding a safety management system
- ③ Taking sure steps to reduce risks
- ④ Promoting active installation of safety facilities

# Four pillars

## The Four Pillars of “2013 Safety Vision”

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# ① Creating a culture of safety

The five “cultures” which make up a culture of safety

## ▪ Correct reporting culture

*Reporting correctly and quickly is very important and the starting point for the prevention of accidents.*

## ▪ Awareness culture

*“Mai hyatto”, the experience of near-accidents, is the hidden sign leading to accidents. If we are aware of the hidden signs leading to accidents and share this information, we can prevent the accidents.*

## ▪ Discussion culture

*We can take proper countermeasures against them only if we discuss them thoroughly, even in cases when we have different opinions, from the viewpoint of investigating their causes*

## ▪ Learning culture

*It is important to utilize the incidents or events occurring in other places and to take countermeasures to prevent accidents; the fault of another is a good teacher. Learning from accidents continually through the Challenge Safety Campaign or from the data book of past accidents will help us prevent accidents*

## ▪ Action culture

*Safety is secured only if we relate reporting, awareness, discussing and learning to safety action.*



## ◎ Building the safety culture of JR East Group

### 【 A culture of safety 】

- Correct reporting culture
- Awareness culture
- Discussion culture
- Learning culture
- Action culture

- Mutual confidence
- Complete honesty
- Continuing efforts

# ① Creating a culture of safety

Details of “Sangen Shugi” , the basis of our company’ s activity

< Sangen Shugi >

- **The actual location:**  
We should go to the actual location to understand what happened and how it happened.
- **The actual things:**  
We should examine the actual objects, such as rolling stock, equipment, machines and tools to understand the circumstances.
- **The actual persons:**  
We should meet face to face with the persons actually involved, to understand their circumstances.

- **Safety issues occur at the actual scene.**
- **The answers to the issues are also at the actual scene.**

Don't you think that going to the actual location is extra work ?

**Seeing, Listening, Feeling and Thinking for Ourselves!**

**Set “Sangen shugi” as our standards for action !**

© Set “Sangen shugi” as our standards for action !

“Gemba Power”<sup>\*1</sup> creates safety — from Isao Endo<sup>\*2</sup>

- Who can sense the sign of an accident if it is not sensed at the actual scene ?
- We should respect the actual scene.
- The management and the actual scene must be unified.

\*1: Gemba Power : The ability to recognize the issues caught by the actual scene and solve the issues of the actual scene

\*2: Isao Endo : Professor, Waseda University business school;  
Chairman, Roland Berger Ltd. Japan

■ Source information

■ Sensitivity ( we go to the actual scene 100 times )

■ We will be able to see what we cannot yet see.

The answers are at the actual scene.

## ② Rebuilding a safety management system

Details of future human resource development and handing down of safety information

### Key safety leaders

- **Thorough knowledge**

Having thorough knowledge concerning weak points, safety rules, equipment, work, and past accident records

- **Instruction ability**

Being able to instruct employees in knowledge that must be understood thoroughly and in weak points that must be overcome

- **Ability to train successors**

Steady development of newer employees who will be their successors

## ② Rebuilding a safety management system

Details of future human resource development and handing down of safety information

### Safety professionals

- We will train employees in leadership and in thorough knowledge of safety rules, train operation rules, and past accident records.
- Safety professionals will formulate the countermeasures against accidents, give advice in abnormal situations, formulate safety measures, and lead the Challenge Safety Campaign.
- Branch offices will develop the safety professionals over the long term, as the employees with knowledge, technologies and good sense concerning safety.

## ② Rebuilding a safety management system

Details of future human resource development and handing down of safety information

### Succession of safety knowledge

- **Organization of chroniclers (narrators of oral-history)**

Having thorough knowledge concerning weak points, safety rules, equipment, work, and past accident records

- **Expansion of the Accident History Exhibition Hall**

Being able to instruct employees in knowledge that must be understood thoroughly and in weak points that must be overcome



- **Compiling a “technical history of safety (an illustrated scroll)” and “serious accidents dictionary”**

Steady development of newer employees who will be their successors

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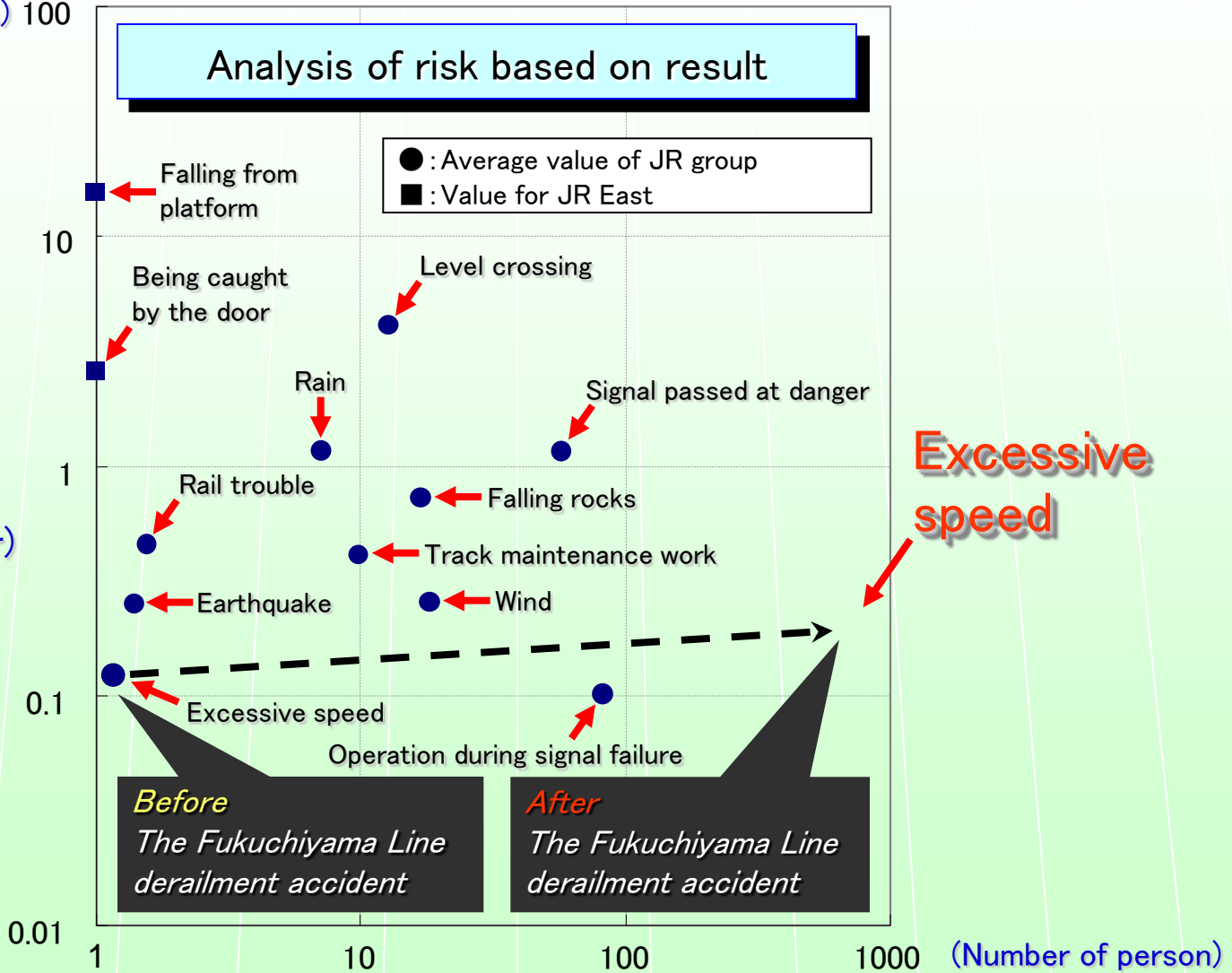
# ③ Taking sure steps to reduce risks

Details of our risk evaluation

(Number of accidents) 100

Analysis of risk based on result

Frequency of occurrence (Average per year)



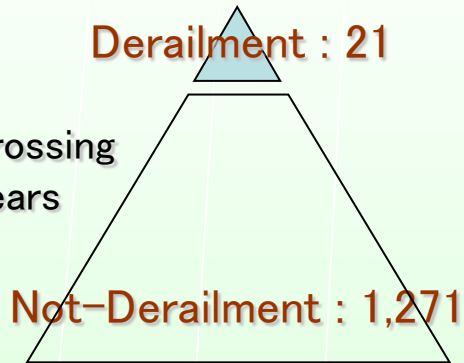
Average casualties per accidents



### ③ Taking sure steps to reduce risks

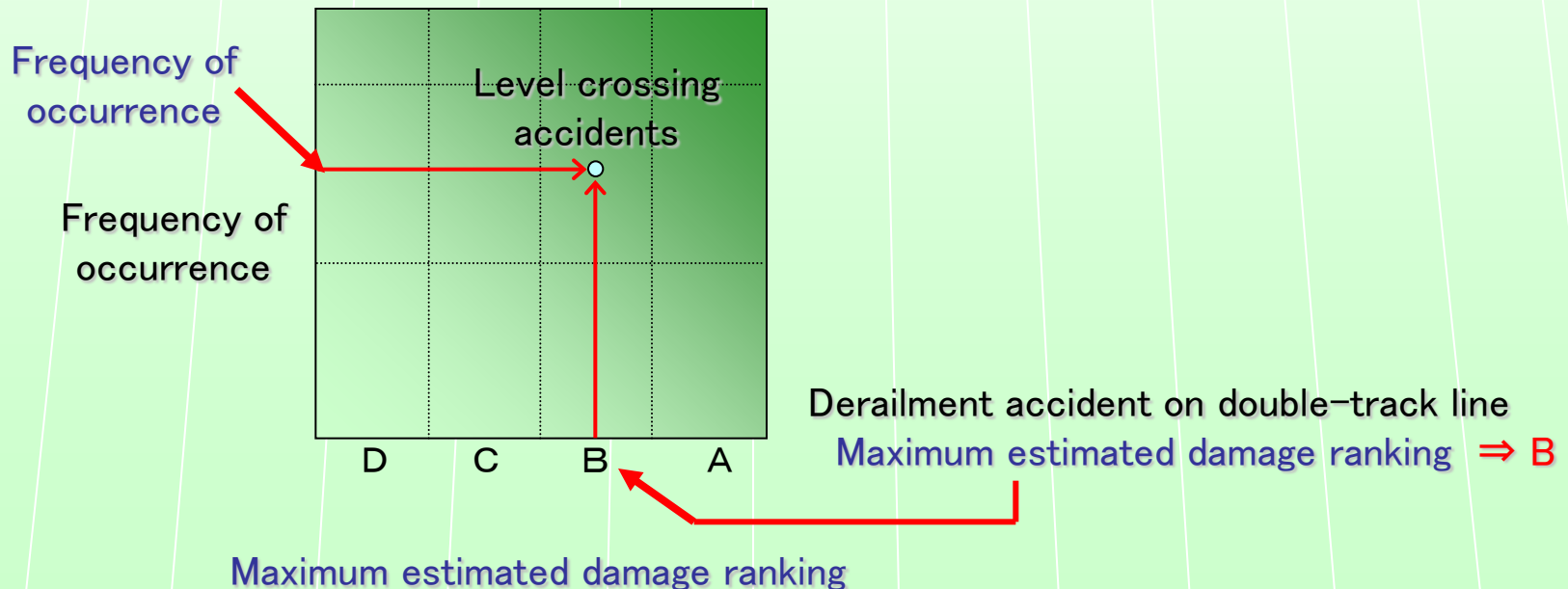
Details of our risk evaluation

#### Example of level crossing accident



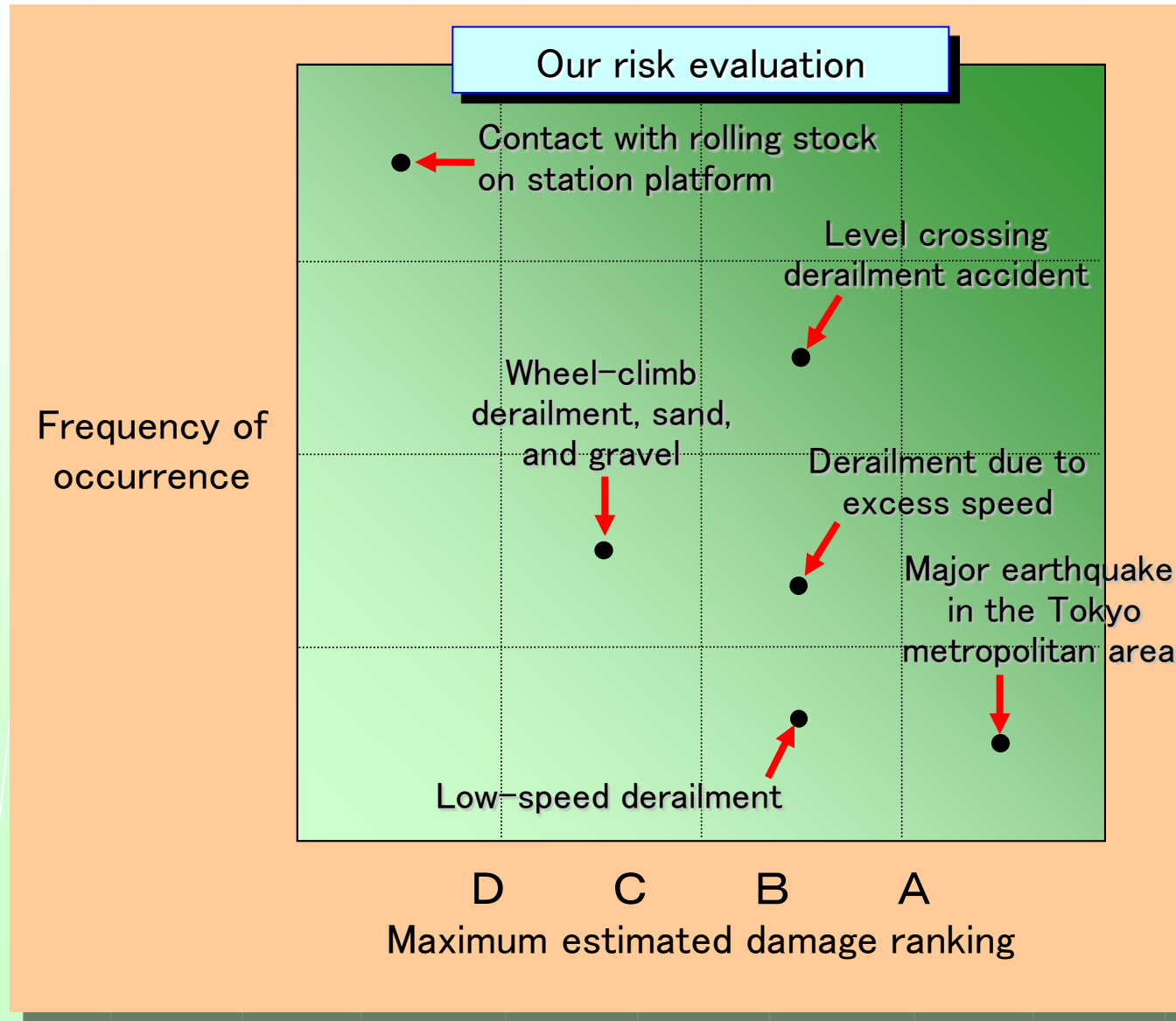
#### Estimated damage ranking

- A: Hanshin-Awaji Earthquake, Tokyo metropolitan area large earthquake (expected damage)
- B: Osutakayama airplane disaster, Tsurumi collision, Mikawashima collision, Fukuchiyama line derailment
- C: Shigaraki-kougen Railway collision, Uetsu Line derailment
- D: People being hit by a train at a station platform



### ③ Taking sure steps to reduce risks

Details of our risk evaluation



◎ According to this evaluation, we will advance the following measures, along with others

#### Countermeasures against Tokyo metropolitan area large earthquake

Detecting and stopping trains at an early stage, examining the earthquake-proof measures on each line

#### Countermeasures against level crossing accidents

Countermeasures that prevent pedestrians from crossing just in front of moving trains, countermeasures against secondary damage, installation of crossing obstacle detectors according to the danger level at crossings outside of the Tokyo metropolitan area.

#### Countermeasures against excessive speed; Countermeasures against miscommunication

For train drivers, the installation of ATS\*-P or ATS-Ps and countermeasures to prevent excessive speed at temporary speed restrictions \* ATS: Automatic Train Stop  
For dispatchers, improving train radio systems and installing a system with automatic communication to drivers and conductors on trains.

#### Countermeasures against low-speed wheel-climb derailment

Constructing an experimental track to investigate the mechanisms of derailments

#### Safety measures for station platforms

Installing movable platform barriers, increasing the number of emergency train stop devices, measures for safety of escalators and elevators, countermeasures that prevent passengers from being hit by trains.

#### Countermeasures against natural disasters

Reliable countermeasures against rock falls and landslips

# Four pillars

## The Four Pillars of “2013 Safety Vision”

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# ④ Promoting active installation of safety facilities

Our safety investments over the 5 years beginning in 2009 will be approximately

**750 billion yen**



# Conclusions

## Ultimate Safety

The wisdom and the efforts of humanity are required to build up safety.

There is no end of safety.



**Thank you for your attention !!**