

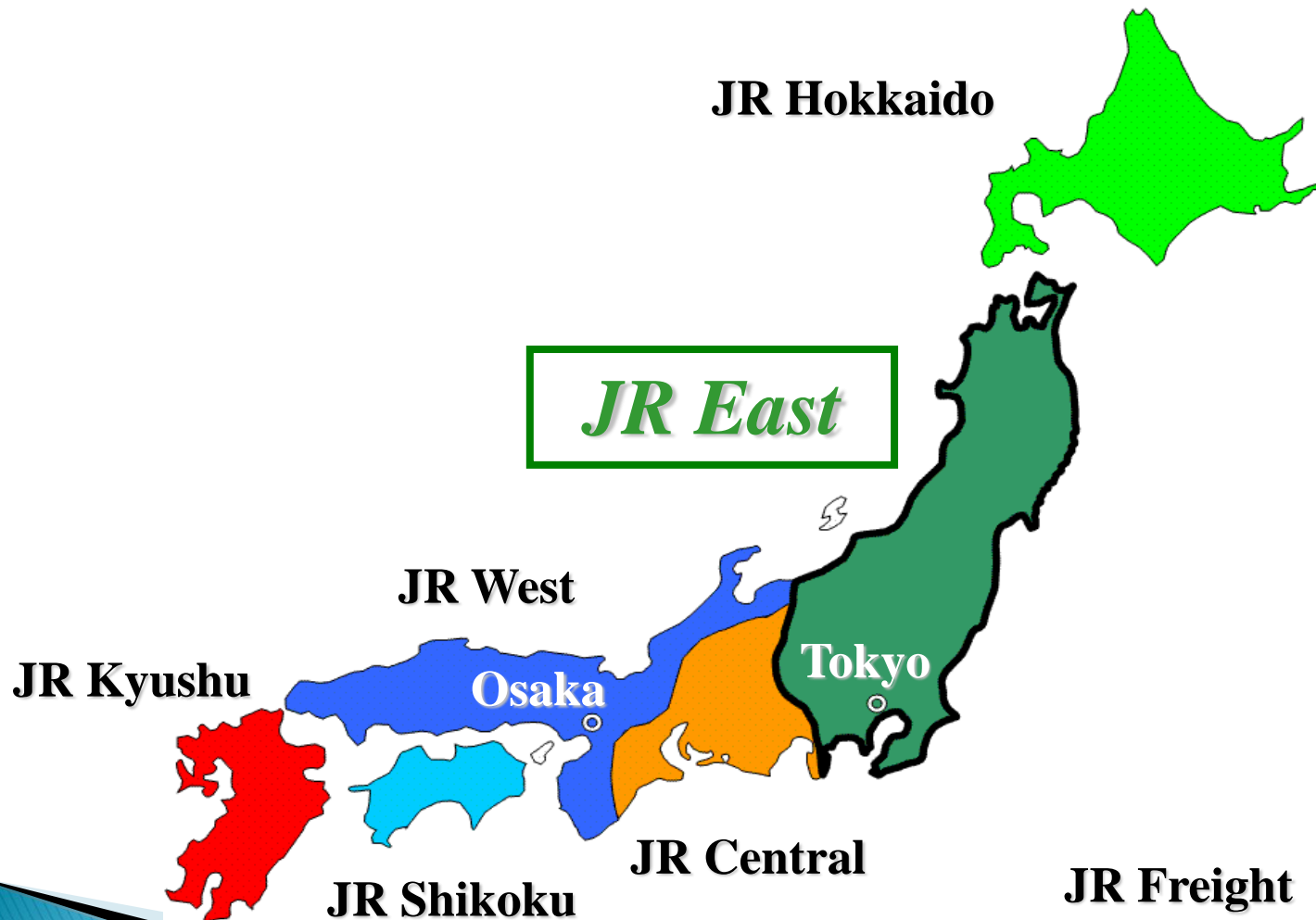
# Safety Measures at Level Crossing of JR EAST

**Masaya Fujita**

**Transport Safety Dept.**

**East Japan Railway Company**

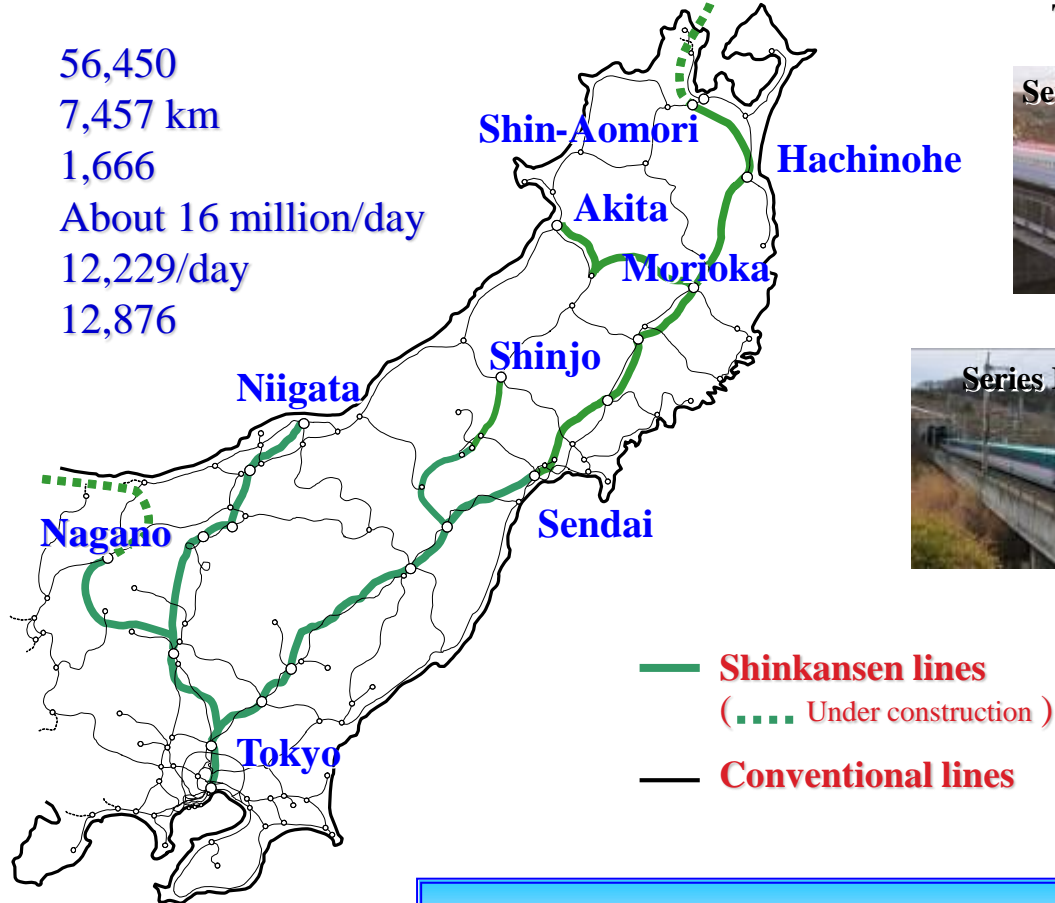
# JR Group Map



# Overview of JR East

( As of 1 April 2017 )

Employees	56,450
Working line-kilometers	7,457 km
Stations	1,666
Passengers carried	About 16 million/day
Trains operated	12,229/day
Units of rolling stock	12,876



The Shinkansen



The Shinkansen



**Shinkansen began operation in 1964.**  
**0 fatalities for over a half century**

# Overview of JR East

**Various numbers  
per day**



**Signal confirmation:  
approx. 1.2 mil.**



**No. of customers: 16.8 mil.**



**Opening and closing of  
doors: approx. 6 mil.**



**Train km:  
710,000 km**



**Opening and closing  
of level-crossings:  
approx. 700,000**

# Overview of JR East



- 1. About level crossing of JR-East**
- 2. Countermeasures for Accidents at level crossings**
- 3. Risk communication**

# **1. About level crossing of JR-East**

## **2. Countermeasures for Accidents at level crossings**

## **3. Risk communication**

# Type of level crossing

## Class 1: With alarms and crossing gates



**6264 / 6860**



# Type of level crossing

## Class 3: With alarms



**200 / 6860**

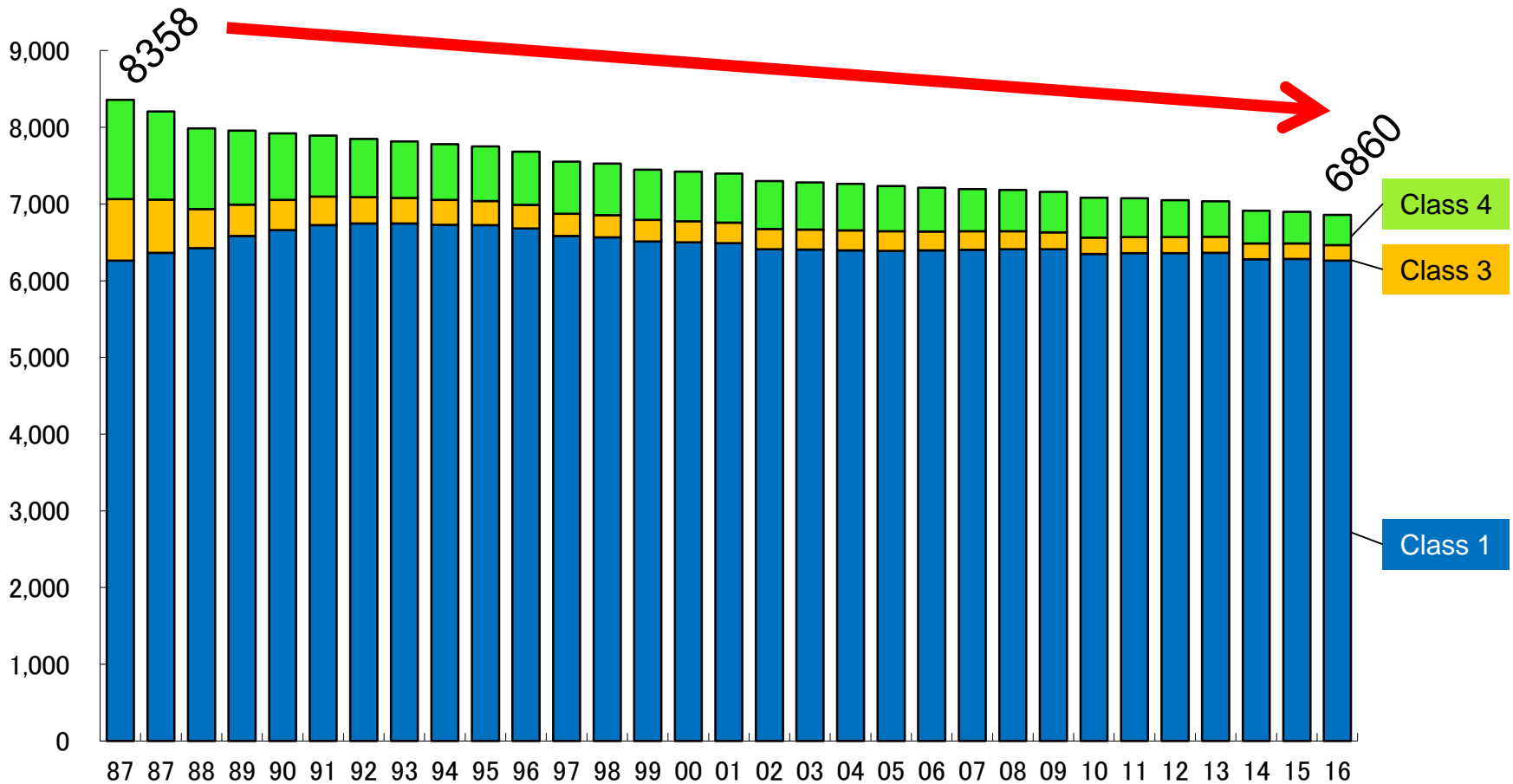
# Type of railroad crossing

## Class 4: Without alarms and crossing gates



**396 / 6860**

# Changes in the number of level crossings



1. About level crossing of JR-East

**2. Countermeasures for Accidents  
at level crossings**

3. Risk communication

# A crossing gate that can be folded outward

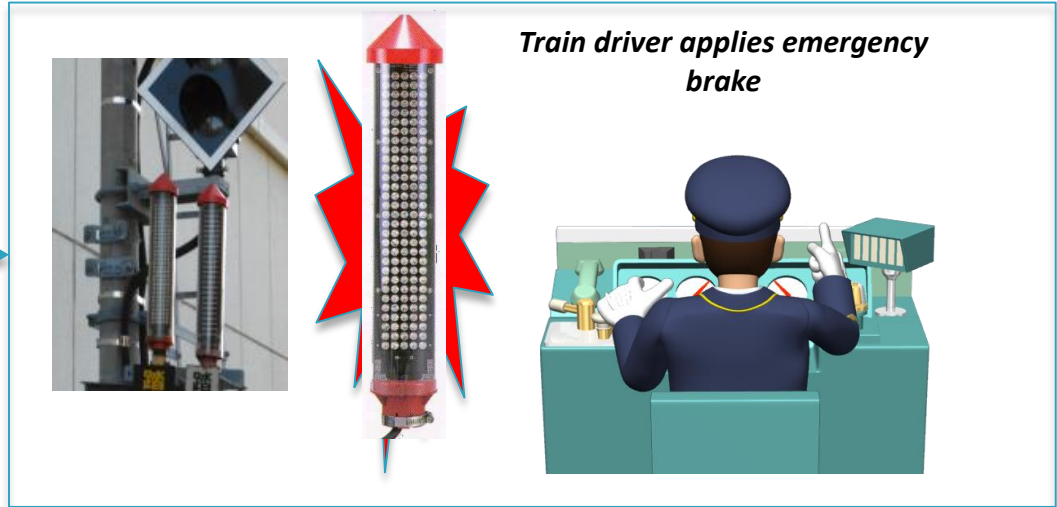


# Level crossing alarm system

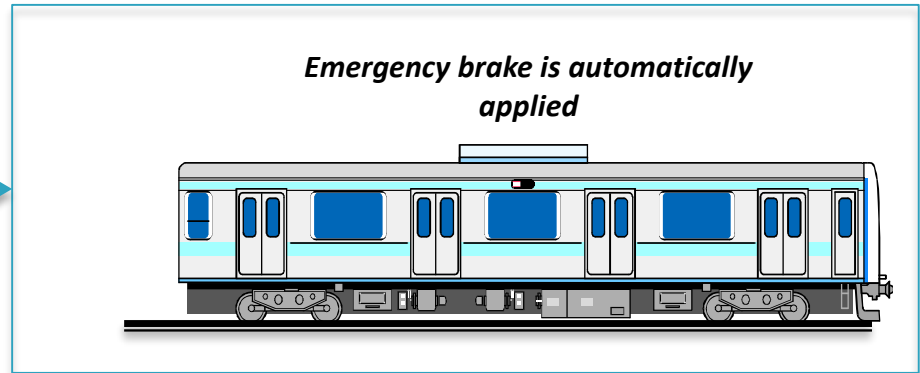
4597 Level crossings



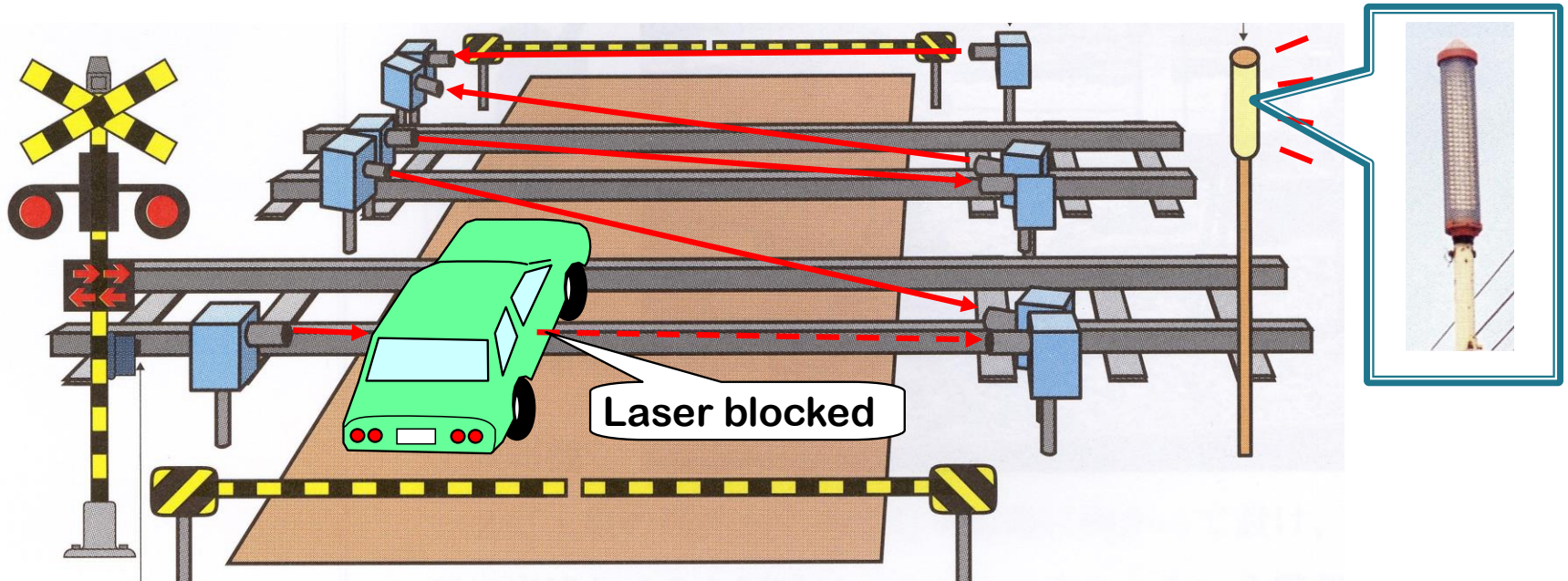
Non  
ATC  
zones



In  
ATC  
zones

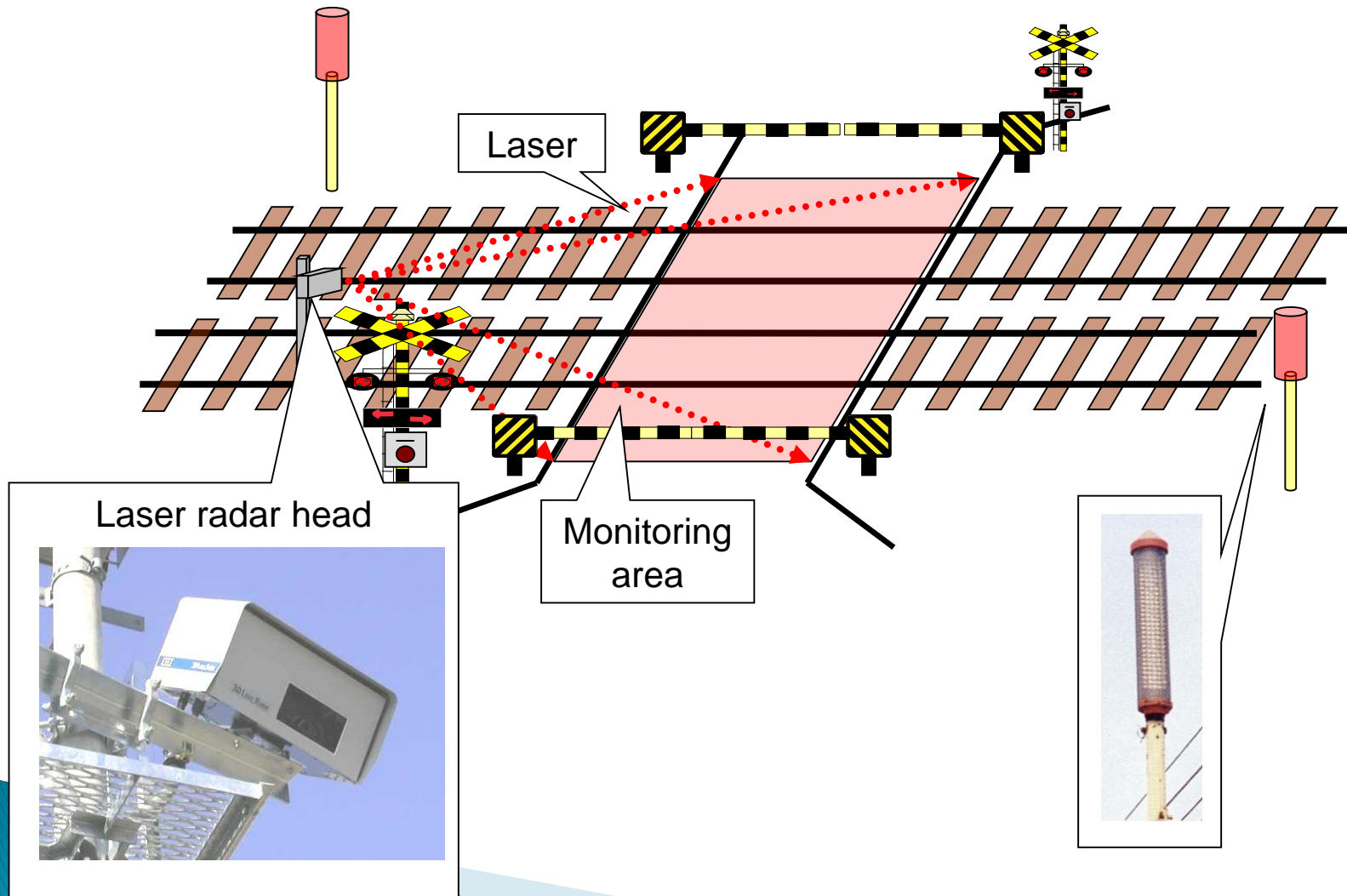


# Obstacle detectors for Level crossing



# Obstacle detectors for Level crossing

Three-dimensional laser radar obstacle detection method





# To make the Level crossing easier to see

A crossing warning device located in a higher position



A crossing warning device visible from all directions



- 1. About level crossing of JR-East**
- 2. Countermeasures for Accidents at level crossings**
- 3. Risk communication**

# Awareness campaign for safety



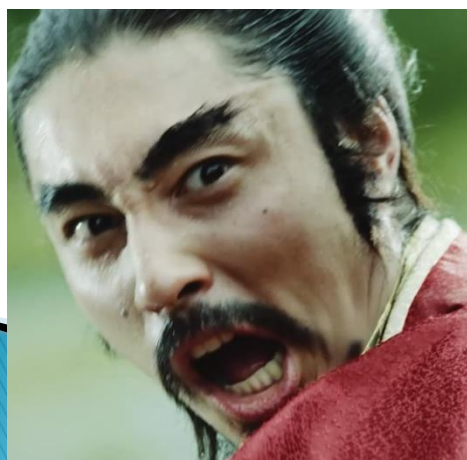
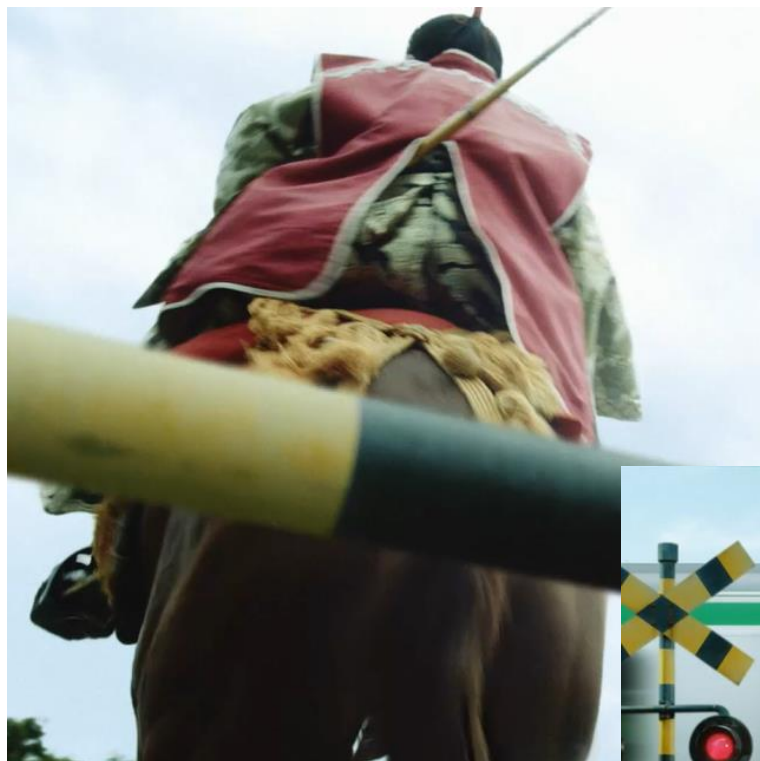
# TV commercial



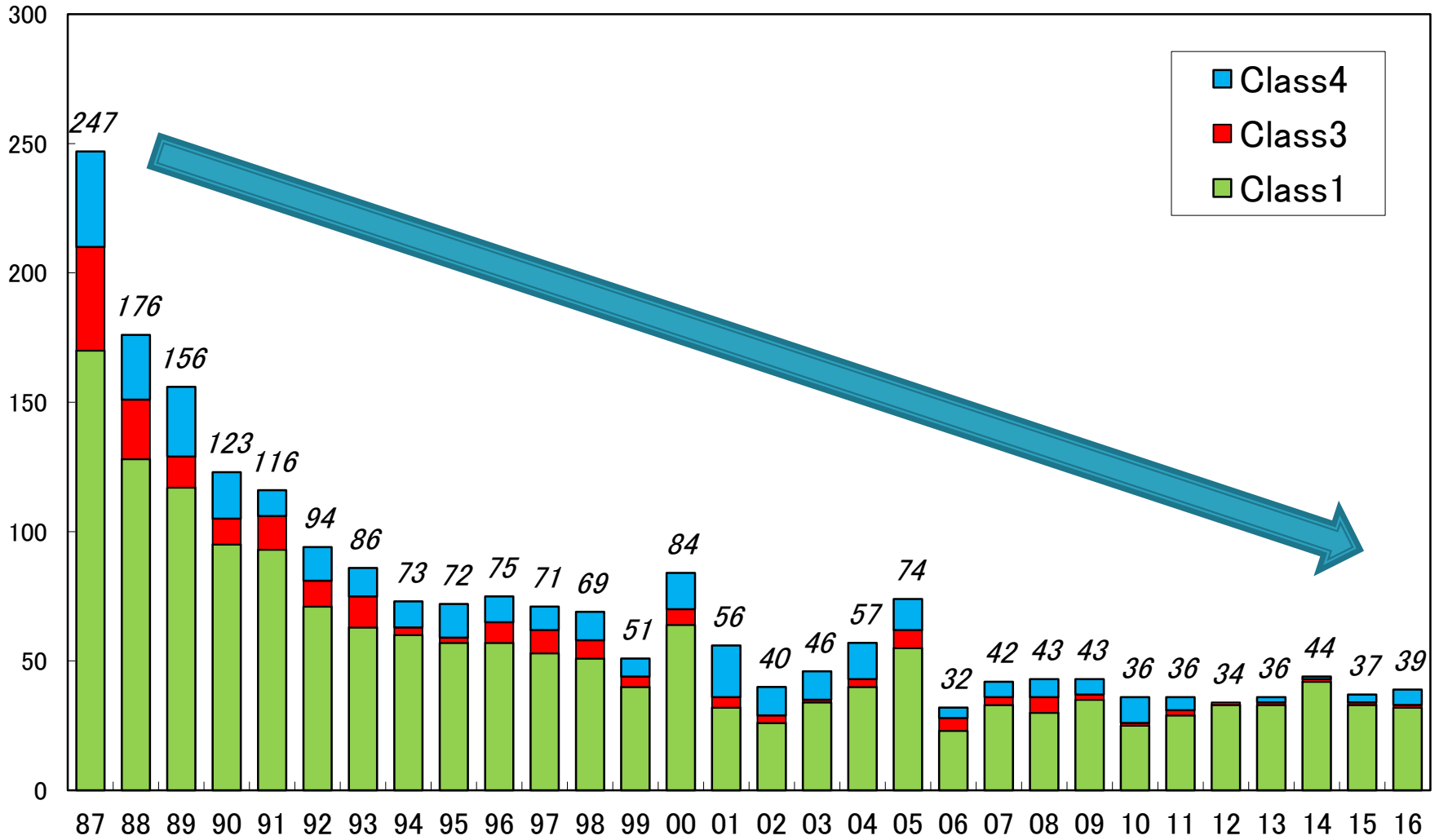
# TV commercial



JR\_EAST\_17NF02.mp4



# Conclusion



Thank you for your kindly attention