# Social

## Measures to Ensure Safety

# What Measures are Being Taken to Ensure Railway Safety?

Safety has been the highest priority for JR East since our establishment, and we have been continuously promoting safety since. JR East is committed to becoming the world's safest railway company under the new "Safety Plan 2008" adopted in FY 2004.

### **Pursuit of Railway Safety**

#### Safety Plan 2008

Since its foundation, JR East has adopted and implemented three 5-year safety plans. The plan that covers the 5-year period beginning in FY 2004 has as its goals "zero passenger injuries and zero employee fatalities" (including employees of group companies). The slogan of the "Safety Plan 2008"1" is "Returning to the Fundamentals and Taking up the Challenge of Safety Again." Under the plan, we will invest approximately 400 billion yen during those 5 years in safety measures to make JR East an even safer railway company.

#### Measures at crossings and stations

In FY 2003, there were a total of 96 accidents, the lowest figure since the company's establishment. Of these, 46 were accidents at railroad crossings. We are taking aggressive action under the "Railroad Crossing



We are installing a variety of safety systems on station platforms, including mats that detect when a person has fallen upon the tracks (left) and emergency stop switches (right).

Accident Prevention Campaign," including the installation of crossing obstruction detectors and large crossing gates.

Railway accidents resulting in injury<sup>\*2</sup> numbered 47, also the lowest figure since the company's foundation. To protect passengers while they are on platforms, we are installing sensors to detect when someone is caught in the doors, mats that detect when a person has fallen upon the tracks, and guide blocks for the visually impaired. We are confident that the low number of accidents is at least in part attributable to such measures and the "Platform Safety Campaign" that has been conducted since FY 1999.

#### Safe railcar operations

JR East is introducing a range of cutting-edge technologies to ensure safe railcar operations. For example, we are digitalizing our automated train control (ATC) systems and installing digital ATC systems for smoother deceleration. We are also installing ATS-P and ATS-Ps systems (automated train stop systems) to bring trains to a halt in response to stop signals.

Installation of ATC, ATS-P, and ATS-Ps





\*1 Safety Plan 2008 Information is available at: http://www.jreast.co.jp/safe/index.html \*2 Railway accidents resulting in injury Accidents involving the operation of trains or railcars that result in death or injury

#### Systemizing maintenance works

In 2002, JR East introduced the *Shinkansen Electricity and Tracks General Inspection Car*, also called *East-i*, as a part of its activities to maintain facilities. The *East-i* improved the safety, efficiency, and accuracy of inspection during high-speed operations on *Shinkansen* and conventional lines.

We have also introduced an Autonomous Decentralized Transport Operation Control System (ATOS) on major track segments in the Tokyo area. With this system, maintenance workers can designate work areas and prevent trains from approaching using handheld terminals, ensuring safety during their maintenance work.

#### **Safety education**

We use a variety of training equipment at the JR East General Education Center and the General Training Centers of branches as tools for employee education on safety systems and ensuring safety. In November 2002, we established the "Accident History Exhibition Hall," emphasizing our social responsibility of learning from past accidents and placing the highest priority on safety.



Practical safety education is conducted at general training centers of branches.

#### Ensuring safety during earthquakes

JR East has decided to expand the installation of systems to stop all trains in the case of a major earthquake in the Tokyo metropolitan area, to include train lines that exist outside the Tokyo area by FY 2004.

If the system detects vibrations in excess of a certain level at two locations along railway line it automatically sends wireless emergency stop signals to all railcars in the vicinity, causing them to stop immediately. This will minimize damage if a major earthquake occurs.

# Safety-related technological development

Since 1999 JR East has been developing a large obstruction detection system that uses image-processing technology as a means of preventing crossing accidents. With the development of inexpensive image-processing technology, it is possible to install such systems at a greater number of locations.

The system has performed well during on-site testing (including tests under fog, heavy rain, and accumulated snow conditions). Testing is being carried out to verify that the system can operate stably under actual conditions and to determine the effects of lightning and high temperatures.

#### **Disaster response training**

We are developing systems in preparation for major disasters. Disaster response training is held regularly, and 12,000 persons participated in comprehensive disaster response training held on September 1, 2003. We have prepared a manual on ensuring passenger safety and regularly conduct safety training for employees.



Disaster response training conducted in September 2003

## JR Bus Kanto drunk driving incident

On August 18, 2003, a JR Bus Kanto Co., Ltd. employee operated a bus while under the influence of alcohol. As a public carrier, this is the sort of incident that we can never allow and which can result in a loss of customer trust. We sincerely apologize to all concerned.

Following this incident, JR Bus Kanto and JR Bus Tohoku implemented full alcohol testing at the time of departure and arrival, and instituted other measures including tighter management controls. We continue to implement bus safety measures under our new 5-year safety plan which includes measures for the complete eradication of the operation of vehicles under the influence of alcohol.