

# Safety Initiatives in the Railway Business

## Safety policy and safety objectives

Every day, countless customers use the services of both Hankyu Corporation and Hanshin Electric Railway and for precisely this reason, our mission is to ensure their absolute safety and peace of mind. Our measures to improve safety on a day-to-day basis, and also to ensure safety when problems occur, are all consolidated in the safety policy and objectives described below.

## Hankyu Corporation

### Safety objective

#### Maintaining elimination of accidents for which we bear responsibility

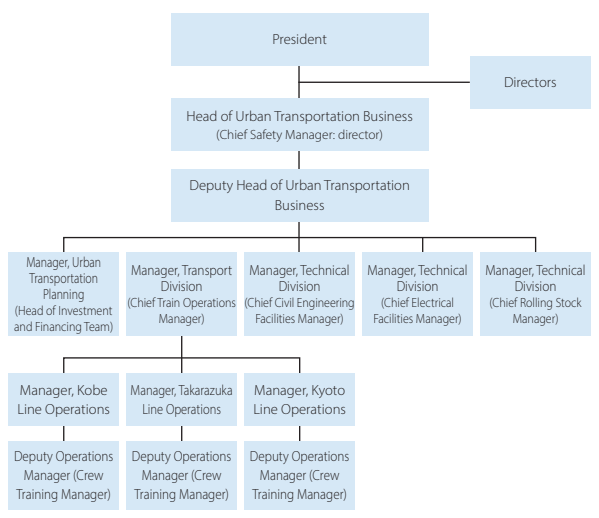
For the fiscal years from fiscal 2015 onward, we again set *elimination of accidents for which we bear responsibility* as our safety objective. This has been our safety objective since 2006, and we will continue to do our utmost to achieve it.

### Safety Policy and Safety Priority Measures

*Provide safe, high-quality transportation services that fully justify public trust—Hankyu Corporation: Safety and comfort*

- Promote awareness to prevent accidents caused by customers
- Heighten employees' safety awareness
- Create open workplace environments
- Conduct training to ensure development of personnel and handing down of skills
- Prevent accident recurrence rigorously by ensuring countermeasure implementation
- Prevent accidents by using accident precursor information and accident examples
- Realise railways with higher safety levels
- Expand and improve emergency responses during natural disasters and other large-scale disasters

### Safety Management System



### Positions and roles

#### ◎ President

The President determines the implementation, the management organisation, and the rules of the railway business and when formulating the Medium-Term Management Plan, which includes facilities and transportation, personnel, investment, and budget, the President verifies and ascertains the situation from the perspectives of safety and feasibility and instructs on improvements.

#### ◎ Chief Safety Manager

In order to prioritise securing the safety of railway facilities and rolling stock and the handling of operations, and to control and manage transportation operations in each division, the Chief Safety Manager works to disseminate safety management regulations and to ensure compliance with related laws and ordinances; to increase awareness of safety as the Group's most important priority; to confirm the implementation of transportation operations, management conditions, and the progress made in implementing the safety improvement measures stipulated in the Medium-Term Management Plan; and to implement improvement measures.

#### ◎ Chief Train Operations Manager

The Chief Train Operations Manager manages operations-related duties, including utilising the employees involved in operations, railway facilities, and rolling stock; setting and revising the operations plan; managing train crews, the operations of rolling stock, and train operations; and providing training for train crews and maintaining their capabilities.

#### ◎ Chief Crew Training Manager

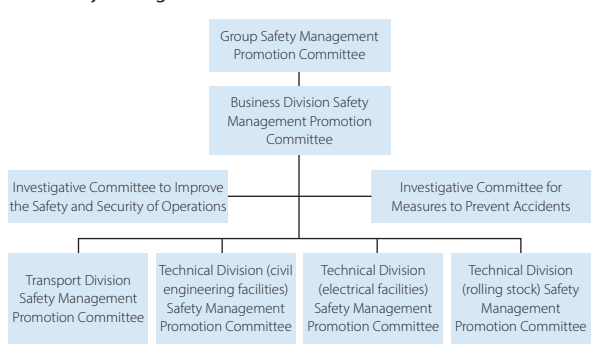
Based on the instructions and orders of the Chief Train Operations Manager, the Chief Crew Training Manager maintains and manages the capabilities of train crews and periodically confirms and submits reports on the progress being made in improving their capabilities.

#### ◎ Other managers and responsible persons

In each division, other managers and responsible persons maintain and manage the facilities they are responsible for in order to ensure there are no obstacles to realising safe transportation.

The safety management promotion committees discuss, investigate, and report on a variety of proposals for transportation safety management. The safety management promotion committees include the Group Safety Management Promotion Committee, on which the President serves as chairperson; the Business Division Safety Management Promotion Committee, on which the Chief Safety Manager serves as chairperson; and the divisional safety management promotion committees.

### The Safety Management Promotion Committees



## Hanshin Electric Railway

### Safety objective

#### Maintaining elimination of accidents for which we bear responsibility

We have maintained elimination of accidents for which we bear responsibility since April 1985 up to the present day.

### Safety Policy

#### Maximum priority on safety

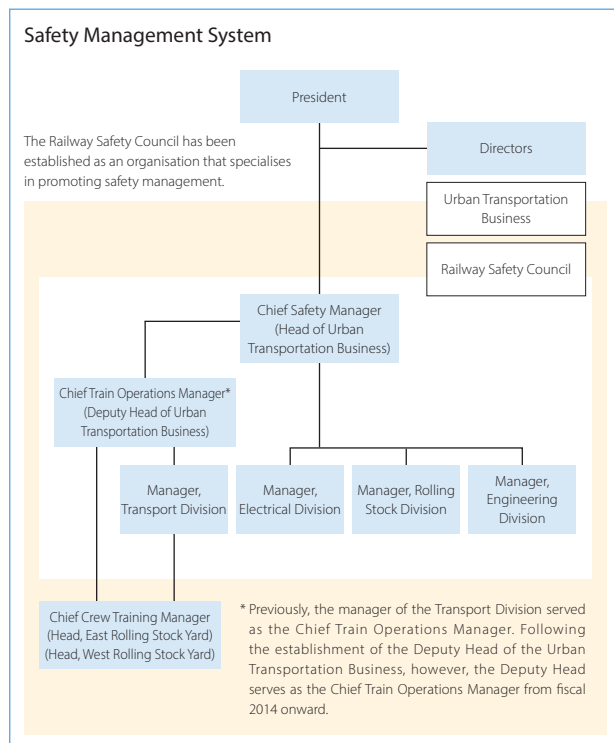
• The president, directors and employees shall do whatever they can to ensure safety of operations, based on the understanding that putting the highest priority on ensuring safety is the mission of railway businesses.

#### Compliance with laws and regulations

• The Company shall comply with all laws and regulations related to safety and apply them rigorously and sincerely in its operations.

#### Maintenance of safety management systems

• The Company shall implement continuous verification procedures to ensure safety management systems are operating appropriately.



### Positions and roles

#### ◎ President

The President has the ultimate responsibility for ensuring transport safety.

#### ◎ Chief Safety Manager (Head of Urban Transportation Business)

The Chief Safety Manager is responsible for overseeing all activities related to ensuring transport safety.

#### ◎ Chief Train Operations Manager (Deputy Head of Urban Transportation Business)

Under the direction of the Chief Safety Manager, the Chief Train Operations Manager is responsible for operations including train operations, maintaining the capabilities of train crews, and other related operations.

#### ◎ Transport Division Manager

Under the direction of the Chief Train Operations Manager, the Transport Division Manager assists in train operations.

#### ◎ Chief Crew Training Manager (the heads of the East Rolling Stock Yard and the West Rolling Stock Yard)

Under the direction of the Chief Train Operations Manager, the Chief Crew Training Manager is responsible for ensuring all crew are properly qualified.

#### ◎ Electrical Division Manager

Under the direction of the Chief Safety Manager, the Electrical Division Manager has overall control of items relating to electrical facilities.

#### ◎ Rolling Stock Division Manager

Under the direction of the Chief Safety Manager, the Rolling Stock Division Manager has overall control of items relating to rolling stock.

#### ◎ Engineering Division Manager

Under the direction of the Chief Safety Manager, the Engineering Division Manager has overall control of items relating to track, civil engineering and construction facilities.

**Initiatives to Reinforce the Safety Management System (Using the PDCA Cycle)** | By applying our safety management system (PDCA cycle) to a range of safety initiatives, we are aiming to create a virtuous cycle of improvement based on even higher safety goals.

Revisions to the Railway Business Law in October 2006 required railway companies to create new safety management systems dedicated to transport safety. Under our new safety management system, we are realising even higher levels of safety by applying the PDCA cycle, ensuring compliance with all related laws and regulations, conducting operations that place the highest priority on safety, and fostering greater awareness of safety issues among employees from directors down.



**Safety Management Implementation** | To ensure customers' safety and peace of mind, we implement safety measures for such familiar infrastructure as platforms and railway crossings while undertaking such major initiatives as the construction of grade separations and employee training. The following are examples of measures we implement year in, year out.

**1. Training and Education**

At government designated in-house training centres, Hankyu Corporation and Hanshin Electric Railway foster train drivers, train conductors, and railway station operations personnel. During the training period, trainees hoping to become drivers or conductors receive education on academic subjects and practical skills in accordance with a national curriculum. Also, experienced drivers

act as instructors and provide rigorous one-to-one procedural training. Even after personnel have passed certification exams, we maintain and heighten the skills, awareness, and qualifications of drivers, conductors, and operations personnel by holding safety workshops and seminars and conducting training based on a range of scenarios.



### Training of Drivers, Conductors, and Operations Personnel through an Instructor System

As well as training drivers, conductors, and railway station operations personnel with national certification by providing education on academic subjects and practical skills, Hankyu Corporation implements training under an instructor system. In this system, when trainees who hope to become drivers, conductors, or railway station operations personnel are learning their respective duties, an experienced employee is designated to act as an instructor and provide them with on-the-job training.

On-the-job training with instructors lasts approximately one month for conductors and approximately three and a half months for drivers. The mentoring relationship that this training process engenders promotes the sharing of a strong commitment to safety and never causing an accident. By performing actual duties under the supervision of an experienced instructor, candidates not only acquire knowledge and skills but also an appreciation of the paramount importance of *ensuring safety* in railway operations.

To foster personnel with advanced safety awareness, knowledge, and skills, securing the outstanding instructors that underpin the instructor system is indispensable. Therefore, Hankyu Corporation concentrates efforts on training instructors. The company

appoints as instructors personnel who have at least seven years of operational experience, the recommendation of a superior, and the approval of their division's general manager. Instructors shoulder a considerable responsibility because they must instruct trainees with precision and empathy. At the same time, however, this responsibility provides instructors with an opportunity for personal growth.

The training of drivers and conductors based on the instructor system began roughly 50 years ago. Since then, while adapting the system to reflect changes in current needs, we have kept it at the heart of our safety training.



## 2. Equipment-Based Countermeasures and Equipment Inspections

### Initiatives for Natural Disasters

#### 1. Responding to rain storms

During rain storms, we direct trains to reduce speed or suspend operations based on information obtained from the rain gauges, wind gauges, and water meters installed alongside our railway lines and meteorological information from the Japan Meteorological Agency.

#### 2. Responding to earthquakes

If earthquake early warning systems forecast an earthquake with a seismic intensity of four or above, or if seismographs installed alongside our railway lines detect an earthquake of the same seismic intensity, we immediately begin procedures for the emergency suspension of the operations of trains on line segments in earthquake zones.

#### 3. Responding to actions of third parties, such as acts of terrorism

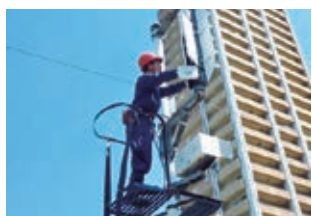
If there is a warning that the actions of third parties, such as acts of terrorism, could cause serious incidents with extremely significant effects on society, or if such a warning calls for continued vigilance, or if suspicious items or persons are discovered or damage is incurred, we take measures appropriate to the threat level.

Further, we have installed security cameras in railway stations and station concourses to prevent crime.



### Maintenance Work: Indispensable for Safe, Comfortable Operations

We have many different types of electrical equipment, including signal safety equipment, secure communication equipment, railway crossing safety equipment, power equipment, railway track equipment, and substation equipment, which we inspect regularly based on prescribed inspection schedules.



Scheduled inspection of a signal



Scheduled inspection of secure communication equipment



Abrasion measurement by an overhead-wire-inspection vehicle



Inspection of substation equipment

Inspection of railway tracks is indispensable to ensuring the safe operation of rolling stock. Further, we implement corrective grinding of slightly uneven parts of rail surfaces to improve ride comfort and implement corrections to reduce noise and vibration.



Railway track inspection vehicle



Vehicle for the corrective grinding of rails

We conduct inspections at our plants to maintain the safety of rolling stock. Regular inspections include train inspections, monthly status and function inspections, main component inspections, and overall inspections. In addition, we conduct unscheduled inspections as required.



A monthly status and function inspection



An overall inspection

### Main Component Inspections

We inspect the main components of power generation devices, running devices, brake devices, and other important devices every four years, or before rolling stock covers a distance of 600,000 km in the course of operations, whichever is the shorter period.





# Principal Risks and Countermeasures

The Hankyu Hanshin Holdings Group's approaches to risks related to businesses and other risks that may be of concern to investors are stated below.

Further, forward-looking statements in this report reflect the Group's assessments as of 31st March 2015. Moreover, these statements do not negate the possibility of the said risks affecting the Group's business results or financial position.

Principal risks	The Group's countermeasures
<b>Risks related to economic conditions</b>	
<ul style="list-style-type: none"> <li>■ Borrowing rates could increase due to changes in financial markets or fund raising from markets could become difficult.</li> <li>■ Sudden changes in financial markets could affect the Group's business results or financial position.</li> </ul>	<ul style="list-style-type: none"> <li>■ The Group limits exposure to the risk of interest rate increases by giving priority to the undertaking of long-term loans with fixed interest rates.</li> <li>■ The Group secures financing by establishing backup lines of credit based on commitment lines set up with correspondent financial institutions.</li> </ul>
<ul style="list-style-type: none"> <li>■ Changes in the economic climate could cause exchange rate volatility.</li> <li>■ Greater-than-expected volatility could affect the Group's business results or financial position.</li> </ul>	<ul style="list-style-type: none"> <li>■ The Group uses forward exchange contracts, currency swap contracts and currency option contracts to mitigate exchange rate fluctuation risk associated with certain foreign currency-denominated monetary payables and receivables.</li> </ul> <p style="margin-left: 40px;">Further, the Group's overseas sales were less than 10% of consolidated revenues from operations as of 31st March 2015.</p>
<b>Risks related to businesses</b>	
<ul style="list-style-type: none"> <li>■ The further aging of society is expected to increase capital investment for safety countermeasures and construction to make facilities barrier-free.</li> <li>■ Due to population decline resulting from lower birthrates, the Group's railways, buses, and taxis could see demand for passenger transportation decrease. Also, demand could decrease in other business.</li> </ul>	<ul style="list-style-type: none"> <li>■ Through continuous initiatives to heighten the value of the Umeda area and other areas served by Hankyu and Hanshin lines, the Group creates line-side areas in which people want to live permanently or visit frequently.</li> <li>■ The Group has set its sights on growing by developing such new markets as the Tokyo metropolitan area market and overseas markets.</li> </ul>
<ul style="list-style-type: none"> <li>■ An accident in the railway business could cause customers great suffering.</li> </ul>	<ul style="list-style-type: none"> <li>■ The Group is keenly aware that being entrusted with passengers' lives is a serious responsibility. Therefore, placing first priority on ensuring the safety of customers is the basis of its business management.</li> <li>■ Based on its strong commitment to putting customers first and giving the highest priority to safety, the Group is implementing a wide range of measures to upgrade tangible and intangible infrastructure and provide customers with improved safety.</li> </ul> <p style="margin-left: 40px;">For details about safety measures in the Urban Transportation Business, please see pages 66 to 70.</p>
<ul style="list-style-type: none"> <li>■ Power supply shortages could disrupt train operations and other services. Also, higher electric utility rates could increase power and other costs.</li> </ul>	<ul style="list-style-type: none"> <li>■ The Group is steadily introducing energy-saving equipment to curb power consumption as much as possible.</li> <li>■ The Group takes rigorous measures to ensure employees are aware of the importance of cost reductions.</li> </ul> <p style="margin-left: 40px;">For details about the introduction of energy-saving rolling stock in the Urban Transportation Business, please see page 43.</p>

Principal risks	The Group's countermeasures
<ul style="list-style-type: none"> <li>■ A loss of trust in the quality and safety of products and services that the Group sells and offers or in the information it provides about them could lower revenues and lead to a deterioration in business results.</li> </ul>	<ul style="list-style-type: none"> <li>■ The Group ensures the quality and safety of its products and services and the appropriateness of the information it provides about them by confirming compliance with relevant laws and regulations and checking quality and hygiene management and food labelling.</li> </ul>
<ul style="list-style-type: none"> <li>■ Natural disasters, such as earthquakes, typhoons, or floods, or acts of terrorism could significantly damage the Group's businesses or transportation network infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>■ In the areas alongside their railway lines, Hankyu Corporation and Hanshin Electric Railway Co., Ltd. have installed water meters for rivers and rain and wind gauges for collecting observation data. Also, they use real-time information from meteorological observatories to ensure safe train operations.</li> <li>■ If seismographs detect an earthquake with a seismic intensity of four or above, or if earthquake early warning systems forecast an earthquake of the same seismic intensity, the Group immediately begins procedures for the emergency suspension of the operations of all trains on line segments in earthquake zones.</li> <li>■ If the Group recognises that continued vigilance is required with respect to acts of terrorism or other acts, or if suspicious items or persons are discovered or damage is incurred, it conducts crisis management appropriate to the threat level.</li> <li>■ The Group has established emergency response systems for minimising the effect on society in the unlikely event of an incident that causes a long disruption to transportation services or results in a large number of casualties.</li> </ul>
<ul style="list-style-type: none"> <li>■ An outbreak or epidemic of an infectious disease such as severe acute respiratory syndrome (SARS) or a new strain of influenza could restrict economic activities or discourage customers from going out.</li> </ul>	<ul style="list-style-type: none"> <li>■ In preparation for the spread of an infectious disease, such as a new strain of influenza, the Group's core companies have directed the establishment of business continuity plans for each business division. During the outbreak of a new strain of influenza in 2009 and 2010, the Group minimised the effect on its businesses by determining the level of risk through ongoing surveys of each business division in relation to infection rates among employees and their families.</li> <li>■ In the railway business, which provides a particularly important part of society's transportation infrastructure, the Group has established specific response plans in advance. For example, it has prepared multiple timetables based on scenarios envisaging shortages of transportation personnel due to the sudden spread of an infectious disease.</li> </ul>

For further information on risks related to businesses and other risks, please see page 77.