

Three pillars of JR East Group's Sustainability Report 2018

JR East Group Sustainability Report 2018 presents various efforts by JR East Group in relation to three pillars: Safety, Society, and Environment.

[Safety]

Based on the Group Safety Plan 2018 as our fundamental concept of safety, in this Safety section, we report on our efforts to achieve "extreme safety levels."

[Society]

This section describes initiatives for improving the quality of transport and other services, dealing with areas including inbound customers, contributing to communities through tourism promotion, child care support, and diversity, etc.

[Environment]

This section describes initiatives such as environmental activities, system reforms, and the introduction of new proactive energy reduction guidelines undertaken at each workplace, with the aim of achieving our FY2021 and FY2031 goals towards reduction of the environmental burden.

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GRI content index, JR East Group's materiality and stakeholders, are available on our corporate website.

For the website version of our sustainability report, please go to:

<http://www.jreast.co.jp/e/environment/index.html>

Note: External Assurance on environmental performance and environmental accounting data
KPMG AZSA Sustainability Co., Ltd. has been engaged to provide external assurance on a set of selected environmental performance and environmental accounting indicators so that the reliability of the data is ensured. The particular indicators that are assured are marked with a ☆ for clarity.



Safety

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Our fundamental concept of safety

Since the establishment of JR East, safety has been our top management priority, and we have worked relentlessly to heighten our levels of safety. Our earnest efforts to learn from unfortunate accidents in the past have enabled JR East to further the prevention of future accidents with our continued developments in both tangible and intangible aspects.

To further reduce potential risk, JR East is committed to steadily improve tangible countermeasures and also to ensure that each one of its employees takes all possible intangible measures.

Pursuit of safety measures 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 employees of Group companies and partner companies)."

General principles of Safety

JR East has prescribed General Principles of Safety for the code of conduct for its safety-related employees.

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.
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.



Safety



Society



Environment

Group Safety Plan 2018

Since our establishment, JR East has been implementing a series of five-year safety plans. From April 2014, guided by Group Safety Plan 2018, which is the 6th plan, each of us involved in the railway business committed to improve safety, and JR East as a whole group will continue to challenge ourselves to achieve "extreme safety levels."

In Group Safety Plan 2018, together with redefining the direction we are taking as a company such as preventing accidents resulting from internal factors, we outline specific measures. Additionally, through our ongoing efforts to pass on technologies and promote measures to comprehensively understand the severity of accidents, we aim to further enhance safety management through the fostering of safety-conscious personnel.

Group Safety Plan 2018: 4 Pillars

1 Ingraining the JR East Group's cultures of safety

■ 5 cultures

A culture of proper reporting

The prompt and proper reporting of accidents and incidents, and the prevention of the recurrence of accidents.

A culture of noticing

The recognition and sharing of information regarding the potential sources of accidents in order to prevent accidents and incidents.

A culture of learning

The open and honest discussion and exchange of opinion in investigating the causes of accidents and incidents in order to identify the causes of accidents and to take truly effective countermeasures against their recurrence.

A culture of action

The continuous awareness of others, learning from accidents and incidents which occur in all places of work, not just in one's own workplace, and the implementation of appropriate countermeasures.

A culture of direct meeting and discussion

Safety can be ensured only by taking safe actions. Think and act by yourself. This is at the core of our safety.

■ Stopping trains when we feel it is not safe.

Safe and stable transport is important for our railways. Safety means protecting lives, while stability means ensuring on-time operations of our trains. However, though stable transport is important for us, safety comes first. Trying too hard to keep to schedule sometimes results in not properly following safety confirmation procedures, which leads to risking the safety of train operations. To secure the safety of our railway operations, the whole JR East Group will always follow our code of conduct to

"stop trains"

whenever we feel it necessary for safety reasons.



Train protection drill at General Training Center

■ Sangen Principle: Three Actualities Principle

Accidents and incidents always occur at the Genba.* This means that the sources of accident prevention can also be found at the Genba. JR East continues its search for answers which cannot be found on paper, based on the "Three Actualities Principle" as its standard for action: actual locations, actual objects, and actual people.

*Genba: "Genba" means actual locations, objects, and people directly related to the safety of our operations including points of contact with our customers and fields or workplaces of transport or services.

The Three Actualities Principle

Actual locations:

Visiting actual locations to understand actual conditions

Actual objects:

Viewing actual objects in order to understand actual conditions

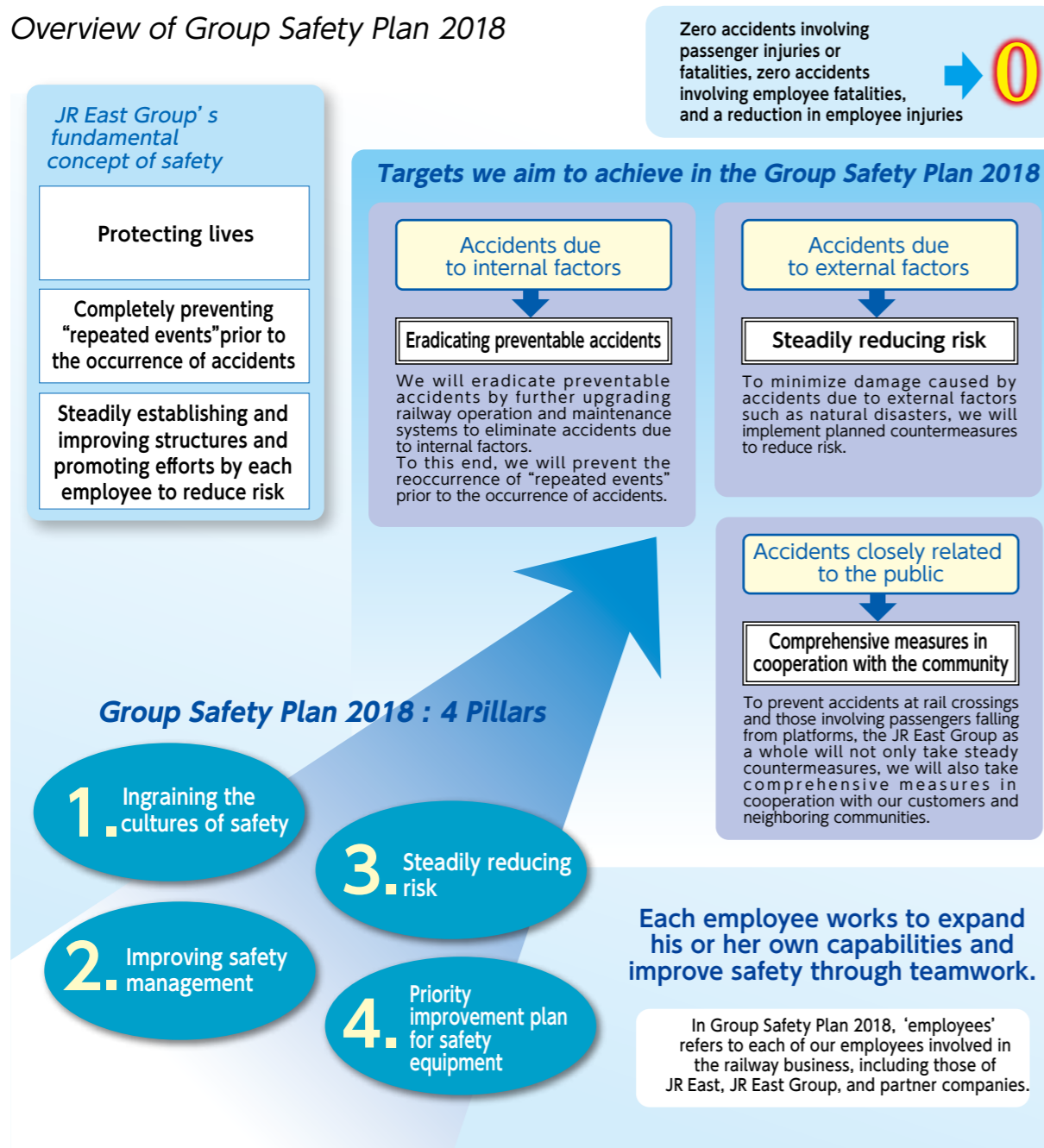
Actual people:

Meeting face to face with people involved to understand actual situations

■ Challenge Safety Campaign

Since the company's foundation, we have been continuing our Challenge Safety Campaign with the aim of encouraging our employees to actively take on the challenge of further improving safety levels, rather than just passively maintaining safety. The campaign aims to encourage each one of our employees to actively endeavor to improve safety levels, think and discuss specific measures with each other and act upon them.

Overview of Group Safety Plan 2018

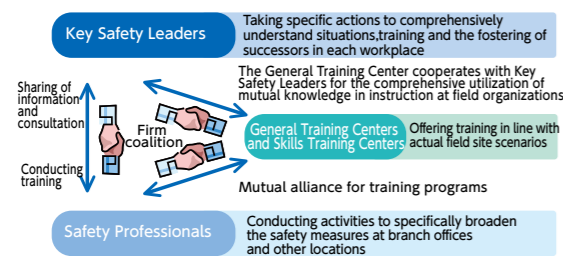


2 Improving safety management

■Fostering safety-oriented personnel

The safety of our operations is supported by our frontline employees. To respond to the rapid changing of generations, we will steadily work on fostering safety-oriented personnel.

■Fostering safety-oriented personnel with a strong mindset in cooperation between Key Safety Leaders, Safety Professionals, General Training Centers and Skills Training Centers



■Fostering capabilities to flexibly respond to disasters

From the Great East Japan Earthquake on March 11, 2011, we have relearned the importance of being prepared for disasters on a daily basis and to think and act by ourselves at a time of a disaster.

To respond to an accident or a disaster immediately after its occurrence, we are required to remain calm to review our choices and make prompt decisions to ensure the safety of our operations and take the necessary actions. By discussing the actions required immediately after the occurrence of an accident or a disaster and preparing ourselves through training on a regular basis, JR East helps its employees to foster capabilities to respond flexibly to an accident or a disaster.

■Steadily passing on necessary technologies

○Passing experiences and knowledge to future generations

JR East will steadily pass on valuable experiences and knowledge that veteran employees possess including the circumstances that led to accidents in the past and the processes that led to the creation of current rules and regulations. We will also continue our efforts to increase the volume of these valuable experiences and knowledge of veteran employees to be shared with future generations.

○Increasing opportunities for employees to learn and challenge themselves

In passing on technologies, we place importance on offering opportunities for each one of our employees to voluntarily learn and challenge themselves and we believe that this will eventually lead them to acquire knowledge of the technologies and improve their capabilities.

○Passing on experiences through the Chroniclers of Safety (narrators of oral history)

We have organized a group of ex-employees from various departments who possess an abundance of knowledge and applied skills in railway safety to act as our "Chroniclers of Safety." These Chroniclers of Safety share their safety-related experiences, such as the handling of accidents in the past, in the hope that they will pass their accumulated experiences and skills down to future generations.

■Providing easy-to-understand learning materials and information

By utilizing ICT technologies, JR East offers an environment for employees to learn whenever needed from various learning opportunities such as Challenge Safety campaigns, regular training and drills, study sessions and individual learning. The necessary materials and information can be easily searched and processed for learning.

○Development and improvement of the safety portal

JR East utilizes its safety portal site via the intranet as its safety-related information platform. Employees can access the necessary educational materials including videos whenever needed.

○Development of e-learning

By utilizing devices such as tablets, we offer e-learning so that employees can learn whenever they want.

■Further increasing the levels of safety through the concerted efforts of the whole JR East Group

To steadily and specifically promote our safety efforts, it is important that we share information and our safety values for the whole JR East Group including group and partner companies. We are committed to ensuring that all JR East Group employees share safety values and to continuing our efforts to further improve the levels of safety in our operations across the whole JR East Group.

■Simplifying to minimize human errors

Devices and equipment requiring complex rules and numerous operations could result in human errors. JR East promotes the simplification of its operations by unifying the specifications of its devices and narrowing down its safety rules and regulations. However, since many of the safety rules have been created from lessons from past accidents, as a condition of this simplification we make sure we understand the background to and objectives of each safety rule.

■Deeply learning the dreadfulness of accidents

By engraving the dreadfulness of accidents in their memory, each one of our employees will take specific actions to prevent them from happening.

○Further utilization of the Accident History Exhibition Hall

Since FY2015, all JR East employees visit the Accident History Exhibition Hall where actual trains from accidents and disasters are exhibited. We also continue to improve the educational materials available at the Accident History Exhibition Hall.

○Publication of major accident encyclopedia

We will continue the publication of our major accident encyclopedia with notes from those who were involved in the accident response at the time.



Accident History Exhibition Hall

3 Steadily reducing risk

■Totally eradicating accidents due to internal factors

Our goal is to eradicate preventable accidents due to internal factors by further upgrading railway operation and maintenance systems. In addition to our risk reduction measures for personnel and management such as education and training, we will take all possible measures such as the utilization of technological developments in ICT, big data, and GPS. We will also review our safety-related procedures and further strengthen the countermeasures we have been putting in place.

To this end, we will focus primarily on preventing the reoccurrence of "events requiring attention" due to the same factors.

■Reducing risk of accidents due to external factors

When the Great East Japan Earthquake occurred, the earthquake countermeasures that had been steadily implemented by JR East up to that time proved effective to a certain extent. On the other hand, we continue to acknowledge the importance

of being prepared for unforeseen natural disasters. Additionally, we will steadily reduce the risk of damage being caused by the increasing incidence of natural disasters such as abnormal weather like torrential localized rain and gusts of wind, floods and volcanic eruptions. To minimize damage caused by natural disasters due to external factors immediately after an occurrence, JR East will take planned risk reduction measures.

■Reducing risk of accidents closely related to the public

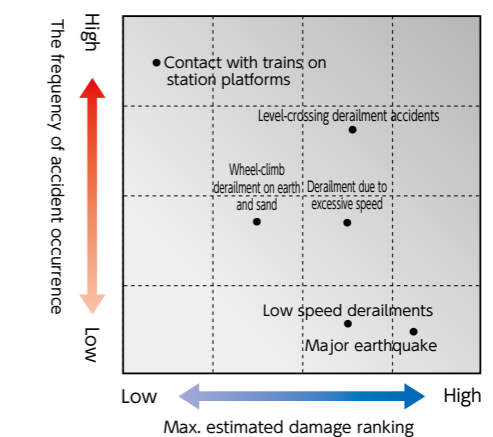
While we steadily take measures against accidents at road crossings and customers falling onto tracks, we continue our efforts to ask our customers and neighboring communities to understand the risks associated with railways and to prevent the occurrence of such accidents.

We will take comprehensive measures including accident prevention campaigns on platforms, escalators, or road-railway level crossings, and the elimination of level crossings in cooperation with local municipalities.

○Further prediction of possible risk and related countermeasures

Though some risk might not be recognized as risk, with changing circumstances surrounding railways some might evolve into a risk to operations in the future. We will monitor the changing risk on a regular basis so that we can predict the possible risk and implement proper countermeasures beforehand.

An example of our risk evaluation methods



By reviewing the changing risk of possible accidents on a regular basis by using risk evaluation methods, we can determine the priority of the necessary countermeasures

4 Efforts to further improve safety levels

■ Safety facilities investment

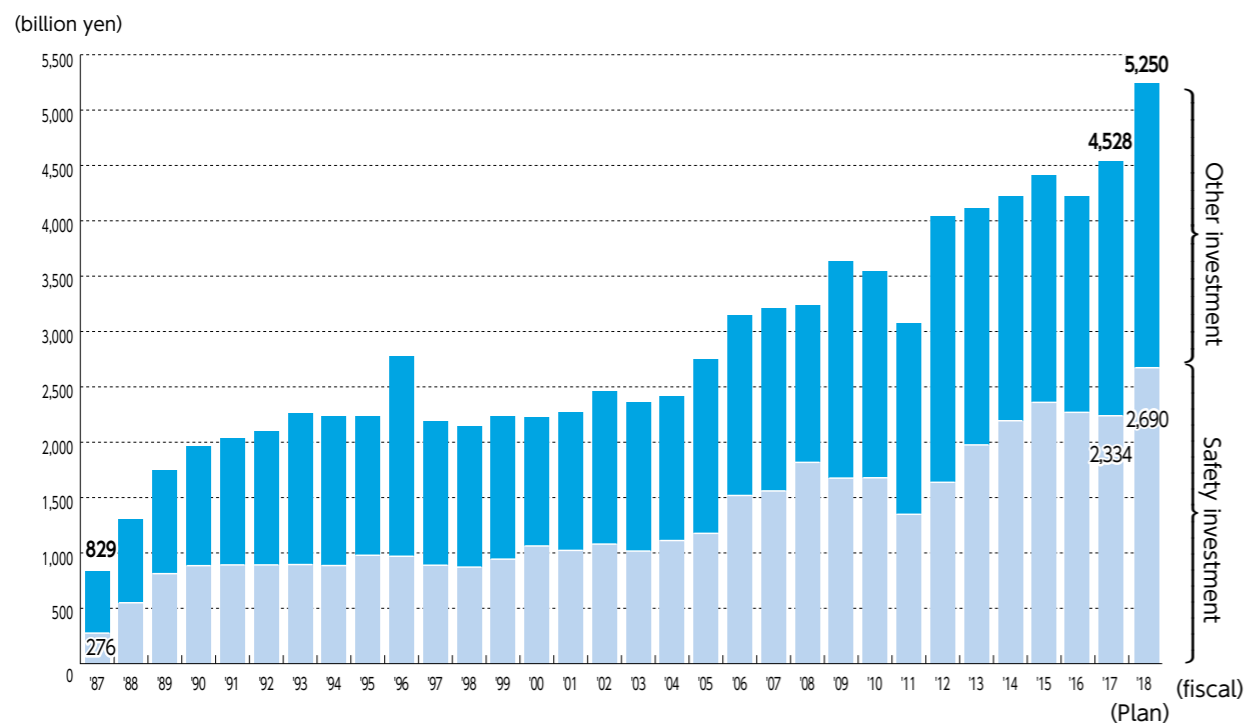
JR East has invested more than 3.9 trillion yen to date following the company's establishment. In our Group Safety Plan 2018, JR East's Five-year Safety Plan, which was announced in Feb. 2014, JR East plans to invest approximately 1 trillion yen in safety measures during the five years from FY2015 to FY2019.

■ Major safety investment in FY2019

In FY2019, JR East will steadily implement measures against large-scale earthquakes, safety measures for level crossings, improvement of safety measures on platforms such as platform doors, improvement of ATS-P, and reinforcement of railway-related security.

JR East plans to invest 525 billion yen in total in its facilities and 269 billion yen of that total will be invested in safety.

[Trends in safety investment]



JR East's safety management organization

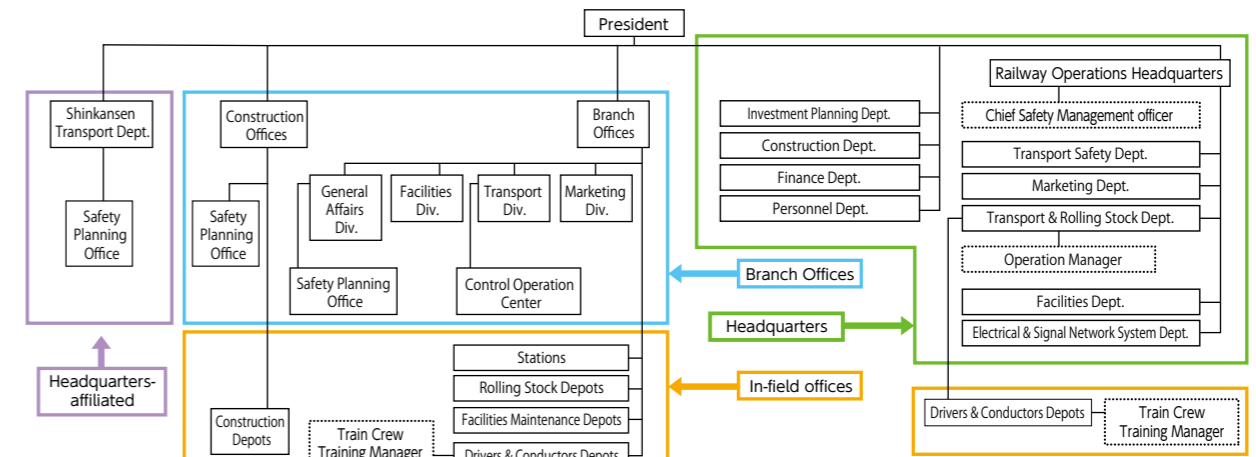
Safety management regulations

In response to a revision of the Railway Business Act, JR East formulated its safety management regulations in Oct. 2006. The safety management regulations make stipulations on various safety management-related matters such as the responsibilities of top management executives in ensuring the safety of operations and on organizational matters such as the selection of chief

safety management officers, operation managers, and train crew training managers. The chief safety management officer is selected from the Director General of Railway Operations Headquarters or its equivalent.

The operation manager is selected from the General Manager of Transport & Rolling Stock Dept. or its equivalent. The train crew training manager is selected from the Manager of Drivers & Conductors Depots.

[Management structure for transport safety]



*The chief safety management officer, the operation manager, and the train crew training manager are terms designated by the Railway Business Act and related regulations.

Railway Safety Promotion Committee

JR East established the Railway Safety Promotion Committee at its Head Office, chaired by the Director General from Railway Operations Headquarters, as its safety promotion network in 1987 at the time of its corporate establishment. The committee aims to improve safety in railway operations and prevent accidents by investigating the causes of major accidents, formulating preventive measures to avoid reoccurrences, and implementing safety-related countermeasures for

facilities and trains.

There are also Regional Safety Promotion Committees at each branch office and the Shinkansen Transport Dept., chaired by the general managers of the branch offices and the department. These committees implement specific measures in cooperation with the Railway Safety Promotion Committee, and investigate the causes of accidents, implement concrete preventive measures, and promote activities to enhance safety in their service areas.

