

Safety

[Priority commitment goals]



[Related goals]



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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 all people involved with railway-related work, including JR-East, 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.

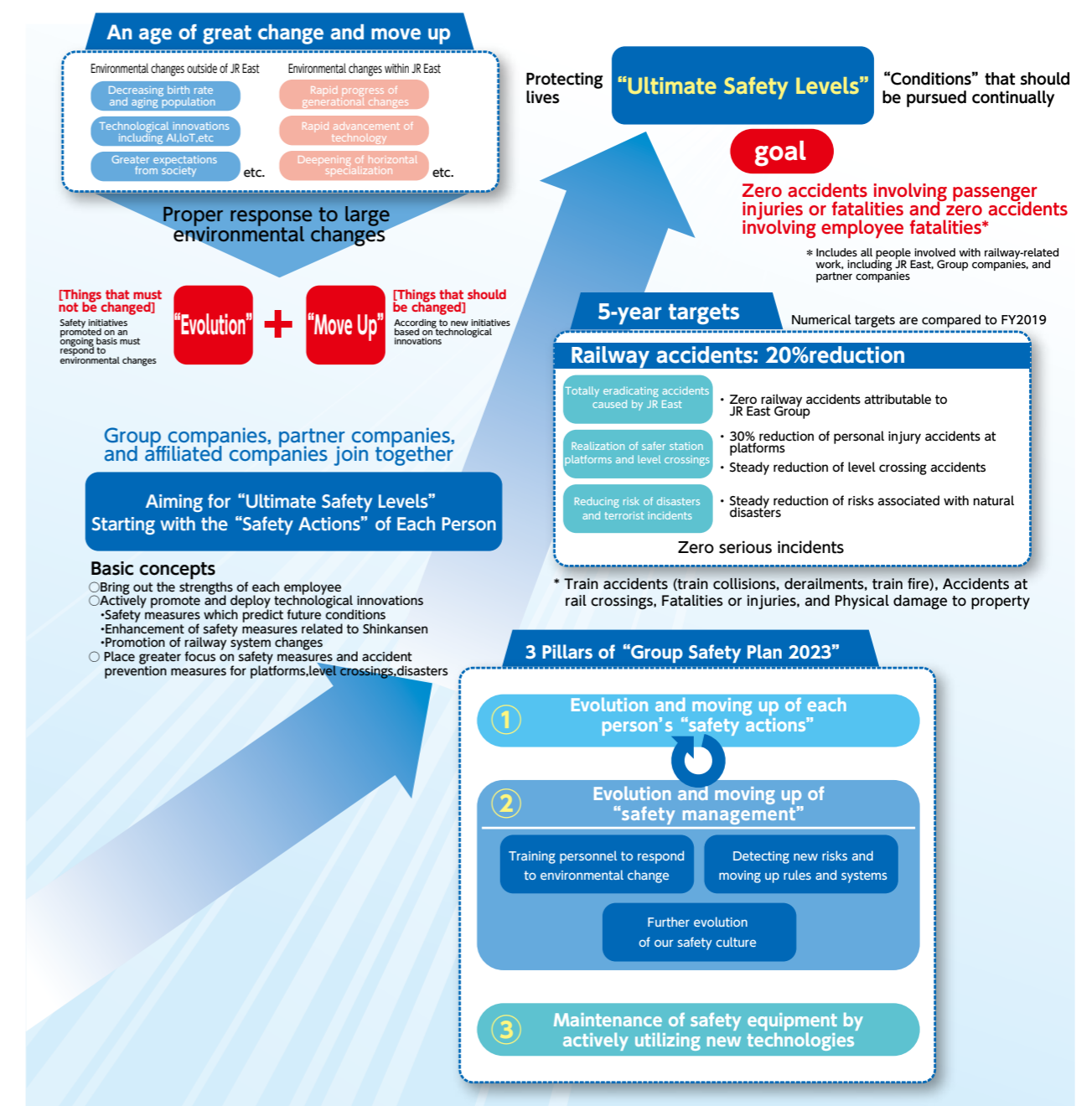
Group Safety Plan 2023

Since our establishment, JR East has been implementing a series of 5-year safety plans. In November 2018, we formulated Group Safety Plan 2023, which is the 7th plan. Together with JR East Group companies, partner companies, and affiliated companies, JR East as a whole group will aim for "Ultimate Safety Levels" starting with the "Safety Actions" of each person.

* "Safety actions": All actions taken to improve the level of safety

JR East "Group Safety Plan 2023" consists of two building blocks: "Evolution" and "Move Up", which are based on 3 Pillars: ① Evolution and moving up of each person's "safety actions", ② Evolution and moving up of "safety management", and ③ Maintenance of safety equipment by actively utilizing new technologies. In consideration of rapid environmental changes both within and outside the Group, we will take specific measures to properly respond to these environmental changes.

Overview of "Group Safety Plan 2023"



3 Pillars of "Group Safety Plan 2023"

1 Evolution and moving up of each person's "safety actions"

Railway safety is supported by the specific actions of each employee toward safety, including "basic procedures", "following rules", and "learning from past accidents". With even greater environmental changes expected in the future, each person must not only execute past initiatives as they are, but must "evolve" them in response to environmental changes, such as by making exhaustive efforts to discover potential risks while understanding the "essence of work." They must also "move up" through new initiatives, such as re-examining familiar work environments which have deviated from actual conditions, and conducting measures for work reforms.

2 Evolution and moving up of "safety management"

To evolve and move up the "safety actions" of each person, the "safety management" of field sites, branch offices, and our head office must become unified for effective evolution and moving up. Specifically, we will focus on "further evolution of our safety culture", "training personnel to respond to environmental change", and "detecting new risks and moving up rules and systems." Additionally, we will proceed with "further arrangement of systems which can allow Group companies, partner companies, and affiliated companies to work safely", and "further safety measures related to Shinkansen".

Further evolution of our safety culture

The safety culture which JR East Group has continually placed great value on, including the "5 Cultures", "CS(Challenge Safety) Activity", and "Three Actualities Principle", is the foundation of various safety initiatives. Through the practice of each person's "safety actions", specifically initiatives such as "discovering risks" and "focusing also on successful points", we will evolve our safety culture even further while responding to environmental changes.

Stop the train if we feel something is dangerous

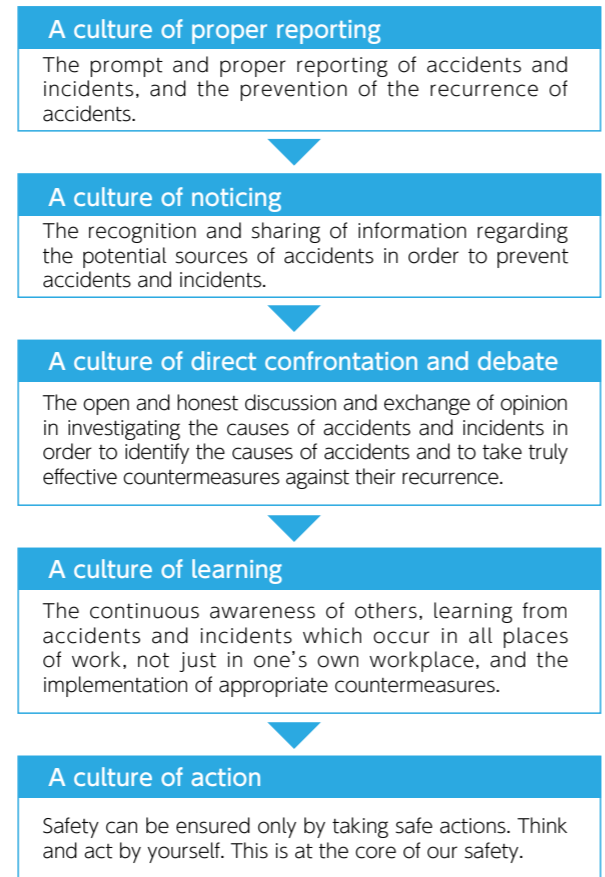
Safe and stable transport is important for our railways. Safety means protecting lives, while stability means ensuring on-time operations of our trains. However, though stable transport is important for us, safety comes first. Trying too hard to keep to schedule sometimes results in not properly following safety



Train protection drills on training tracks

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 firm code of conduct to "Stop the train if we feel something is dangerous."

Further ingraining the 5 Cultures



By taking measures like these, we will practice "safety actions" as part of various initiatives such as the CS Activity and work research, to further ingrain the 5 Cultures.

Further energization of CS Activity

Since the company's foundation, we have been continuing our Challenge Safety Activity(CS Activity) 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 Activity 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. While we will work on improvements through the efforts of all employees and without being confined to conventional methods, we will further energize CS Activity by applying various approaches such as Facilitating understanding of the "essence of work" and Exhaustive efforts to discover risks.

Further evolution of the "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 Group continues to 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 (rolling stock, equipment, machinery, tools, etc.)in order to understand actual conditions

Actual people:
Meeting face to face with people involved to understand actual situations



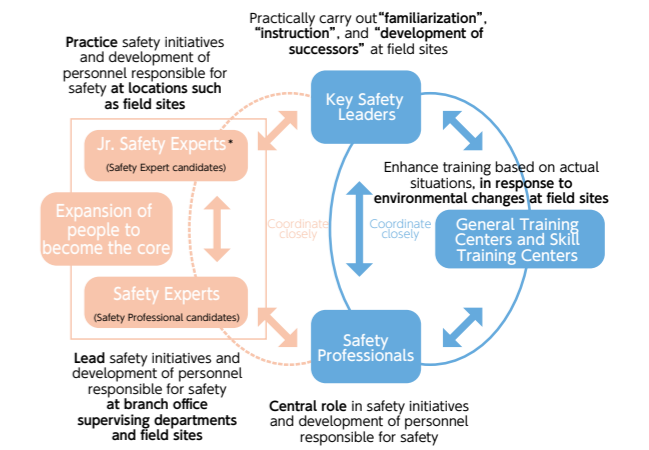
Training personnel to respond to environmental change

For each person to practice "safety actions" in proper response to environmental changes, we must aim to promote training personnel to improve the "motivation" and "skills" of each person.

Systematic "development of personnel responsible for safety"

All employees involved with railways are responsible for railway safety. Under conditions where work methods can change significantly due to systemization or a lack of personnel, it will be critical to develop employees who have greater knowledge, leadership skills, and technical expertise related to safety. To do this, we will proceed the systematic "development of personnel responsible for safety".

Expand "people to become the core of safety initiatives"



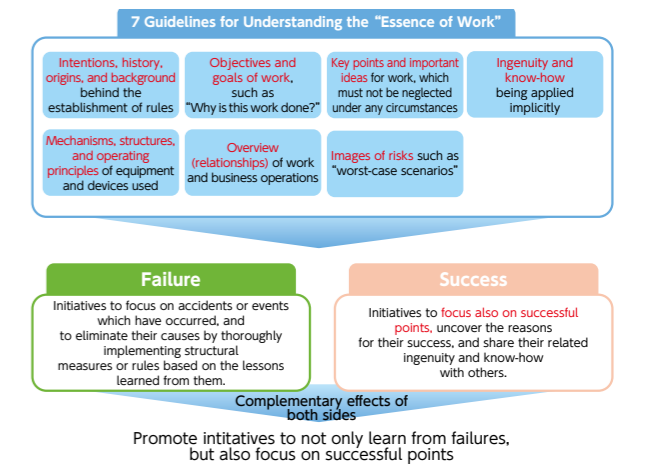
* Personnel who have completed independent development training at their individual branch offices (title will differ depending on branch office)

Develop personnel responsible for safety, with a focus on "people to become the core of safety initiatives" (expansion of range)

By promoting initiatives to improve safety with a focus on "people to become the core of safety initiatives", we will enlarge the number of employees with safety-related knowledge and skills.

Facilitate understanding of the "essence of work"

To properly respond to large environmental changes, it is important to understand the "essence of work". Rather than merely learning the procedures and methods of work, we must be conscious of the "7 Guidelines" which include the purposes of work, the origins of rules, and the operating principles of equipment, to deepen our understanding of the "essence of work."



<Detecting new risks and moving up rules and systems>

By constantly responding to environmental changes and moving up our rules and systems accordingly, we will address new risks.

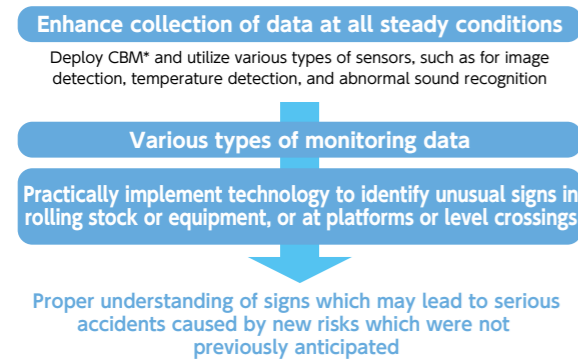
■ Moving up rules and systems, starting with each person's initiatives

We must indicate, share, and discuss problem points and other such matters identified by each person through various initiatives, and connect them to moving up rules and systems together with managers.

■ Promotion of safety measures which predict future conditions

① Promote safety measures which predict future conditions, utilizing big data, AI, IoT, or other resources

In order to properly identify signs which may lead to serious accidents caused by new risks which were not previously anticipated, utilize big data, AI, IoT, and other such resources to promote safety measures.



*CBM: Condition-based Maintenance, an inspection method to constantly monitor the status of facilities.

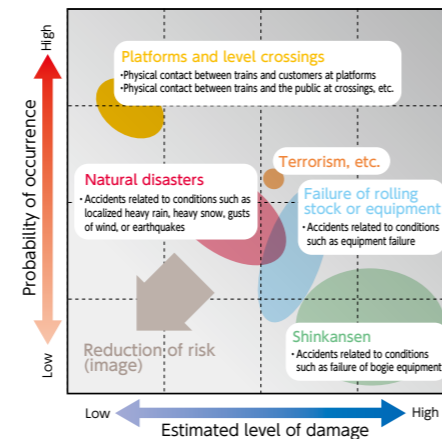
② Introduce risk assessment methods, and examine safety measures and capital investment

Results of risk analysis performed on railway accidents with a 10-year forecast

- Strengthen durability of rolling stock, equipment, etc.
- Safety measures for platforms and level crossings
- Response to natural disasters
- Safety measures related to Shinkansen
- Response to terrorism or other threats

With particular focus on these points, we will steadily reduce the level of risks.

[Risk analysis assuming a state after 10 years]

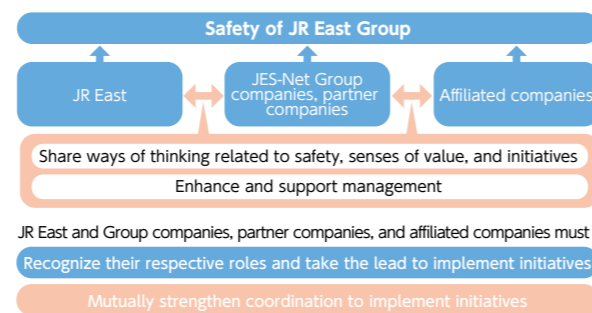


[Estimated level of damage] ⇒ Represents the extent (quantity) of injured customers and employees, harm and extent of damages to JR East Group

<Further arrangement of systems which can allow Group companies, partner companies, and affiliated companies to work safely>

■ Enhancement of safety management together with Group companies, partner companies and affiliated companies

The safety of JR East Group is supported by JR East Group companies, partner companies, affiliated companies, and JR East united as one. In order for JR East Group to join together and improve safety even further, each of them must recognize its role and take the lead to promote initiatives. Furthermore, we must coordinate with each other such as to share values related to safety, and proceed with the enhancement of systems allowing safe work.



<Further safety measures related to Shinkansen>

If a serious accident involving Shinkansen should occur, it is predicted that the resulting damage will be enormous. While properly identifying the changes unique to Shinkansen such as the arrival of concurrent times for equipment renewal, higher speeds, and expansion of networks, we will promote initiatives to understand signs which may lead to serious accidents, and will strengthen our

safety measures related to Shinkansen even more thoroughly than before.

3 Maintenance of safety equipment by actively utilizing new technologies

■ Safety facilities investment

JR East has invested more than 4.2 trillion yen in safety since its establishment. In our Group Safety Plan 2023, JR East plans to invest approximately 1.2 trillion yen in safety measures during the five years from FY2020 to FY2024.

■ Major safety investment in FY2020

In FY2020, JR East will promote the safety equipment maintenance plan of the Group Safety Plan 2023, by steadily implementing the following measures: Strengthening the durability of key facilities; railway system changes using new technology; safety measures on platforms; measures to prevent level crossing accidents, and preparedness against natural disaster.

JR East plans to invest 613 billion yen in total in its facilities and 251 billion yen of that total will be invested in safety.

[Trends in safety investment]

