

KORAIL SUSTAINABILITY REPORT 2015

# Railroad of the Republic of Korea

Devoted to the People, the World and the Future

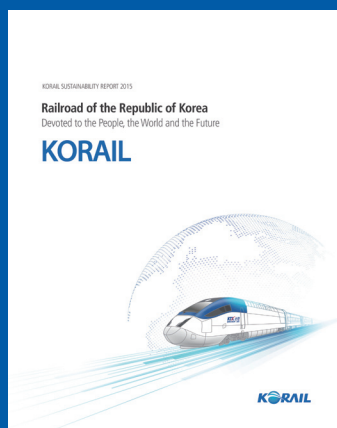
# KORAIL



**KORAIL**



## About this Report



Beginning from 2008, KORAIL has come to publish its 8th Sustainability report this year. This report makes public the activities and performance of KORAIL's sustainability management with our mission of 'the Railroad of the Republic of Korea devoted to the People, the World and the Future' as the center, and contains our endeavor to go forward 'KORAIL for the happiness of the people'. Especially, in the 2015 report, the report was composed of the content focused on the 7 promises presented by KORAIL as the national enterprise.

### Reporting Standard

This report has been made in accordance with the GRI(Global Reporting Initiative) G4 Guideline which is the international standard of the sustainability report and ISO 26000, and we have abided by the G4 Core Guideline. Material issues drawn through the materiality analysis are reported and DMA (Disclosure on Management Approach) for significant issues is included.

### Reporting period and scope

We have reported mainly on the sustainability management activities of KORAIL Head Office and Regional Headquarters from January to December of 2015, including activities of some subsidiaries. We have also included some activities of the first part of 2016 deemed to be significant. We have identified the influence exerted on major stakeholders within KORAIL's value chain by the core issues drawn through the materiality analysis based on the identification method of the boundary suggested by GRI G4, and contained the relevant content together.

### Reporting Assurance

In order to enhance the accuracy and reliability of the content, the report has been assured by independent external agency. The third-party assurance institution has confirmed that this report has abided by the G4 Core Guideline.

### Additional information on the report

There are no significant changes related to scale, structure, base year and ownership vis-à-vis the previous year, and we have separately written some changes related to calculation and content of data and technology as a footnote. KORAIL makes public the sustainability management activities and report through DMA on the homepage. Our sustainability report is published in both Korean and English, and you can download it in PDF file on the homepage. Should you need additional information or have any questions on this report, please contact the following number.

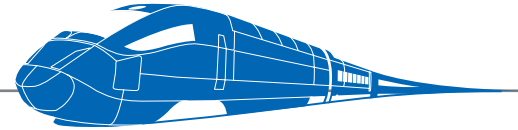
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## CEO Message



Dear  
stakeholders,

I'm pleased to greet you  
this year again followed by last year  
through the sustainability report.

Since 2008, the sustainability report has been a communication platform to share the endeavor and performance of KORAIL for the whole year. Inheriting the tradition and potential energy of the Korean Railroad which had been the national artery and companion of Korean people for 117 years, KORAIL has come up with the unprecedented accomplishments for the past 11 years after having been converted to the Corporation. Especially, in 2015, we truly completed the ninety-minute life zone from one side of the

country to another by stably operating Gyeongbu and Honam KTX and recorded the operating surplus and the net profit amidst the world-wide economic recession and both internal and external environmental changes, thereby preparing for the management foundation capable of continuous development. In the sustainability report published this year, we have contained the extensive management activities of KORAIL, striving for the global competitive edge and the people's affection.

### We will lead the world railroad market by securing the global competitiveness.

Last year, KORAIL laid the foundation for the new railroad development by creating the 5 Railroad Tourism Belts and securing the base for advancing into the continental railroads. Now we will focus on our capabilities needed to become the best railroad operator in the world. We will foster our capabilities all the more to acquire both domestic and international competitiveness for the unfamiliar railroad competition system and upcoming continental railroad era. In this regard, we will establish the collaboration system for discovering and realizing the innovative ideas of the experts from each field and introduce the next-generation information system. KORAIL will dedicate its strenuous efforts until the day when we will lead the global railroad market with our own idea and insight.

### We will realize the best level of the railroad safety in the world.

In KORAIL, safety is the overriding management objective as well as the core value. Improvement of train's speed and service without the secured safety is meaningless. KORAIL has established the preemptive management system applying the know-how of the railroad management and the scientific analytic technique for materializing the railroad safety fit to the expectations of the people, and, as a result, secured an all-time high level of safety, such as improving the safety operation service (defect and accident ratio) by 61.6% vis-à-vis year 2005 when the Corporation was established. From now on, we will detect and fix the parts vulnerable to the safety more promptly by operating the Safety Innovation Headquarter under the direct umbrella of the CEO, and upgrade the safety system through converging the IT technology, thereby realizing the best level of the railroad safety in the world.

### We will establish the sustainable development and management structure.

Last year, KORAIL carried out the intensive innovation, such as reorganization of the business structure centered on the core function and reinforcement of the train operating system et al. Therefore, we could accomplish the operating surplus of around KRW 100 billion for two consecutive years and secure the turning point for continuous debt reduction. We are currently moving forward to build the solid financial structure based on the surplus management. KORAIL will increase the operating profit and form the management structure capable of continuous development with creation of new demand through the establishment the hub system centered on the railroad lines and the optimization of the train operation system, aggressive marketing, the efficient business operation system et al.

### We will provide the excellent and unique customer service fit to the needs of the people.

KORAIL's mission is to make the people feel happy with the railroad. KORAIL has ceaselessly been striving for the people's convenience, such as an upgrade to mobile application, enhancement of train's punctuality rate et al. According to the effort, KORAIL recorded the all-time high point of 96.4 at the 2015 Customer Satisfaction Survey of Public Institutions. In the future, KORAIL will enlarge the service specialized in the socially underprivileged and promote MOT (Moments of Truth) service. In addition, we will create the uniquely impressive service of KORAIL which presents unforgettable memories to the customers through the expansion of the railroad culture contents.

### We will set up productive and cooperative labor-management relations.

Recognizing that just the harmony between labor and management is the prerequisite for existence and continuous growth of the Corporation, KORAIL and its labor union continuously talk and communicate with each other. As a result, we could abolish the seniority-based promotion system which had been a deep-rooted evil for long time and draw the non-dispute settlement for salary and collective agreement for two consecutive years. When the work sharing program (salary peak system) was introduced, we secured the trust by designing the rational system reflecting the opinions of the whole employees and holding the joint debate of labor and management. KORAIL will keep on reinforcing the communication with the site through diverse channels and forming the consensus in policy for all of the executives and staff members to open the golden age of KORAIL.

As a member of the UN Global Compact (UNGC), KORAIL supports the 10 principles of human rights, labor, environment and anti-corruption, and applies the 7 principles of ISO 26000 to major management activities, thereby striving to perform a role of the public enterprise.

KORAIL's sustainability management activities can be diversified and developed all the more when the interest and cooperation of the stakeholders are backed up. I reiterated my heartfelt gratitude to all of you who always express interest and cooperation on KORAIL's sustainability management.

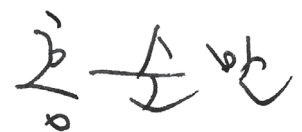
KORAIL will take a big leap forward to becoming the best railroad operator in the world while listening to the voices of the stakeholders all the more and actively supporting overseas expansion and technological development of the railroad industry

I look forward to your unstinting support for the future of KORAIL which will usher a new golden age of the railroad of the Republic of Korea.

1 June 2016

President and CEO of Korea Railroad Corporation

**Soon-man Hong**

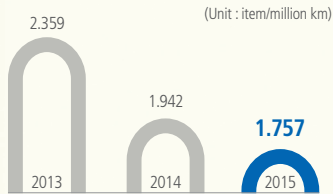




## KORAIL Highlights 2015

### Securing an All-time High Level of Safety by the Preemptive Safety Management

Safety operation service ratio  
(defect and accident ratio)



In order to secure safety matching the expectations of the nation, KORAIL has established a preemptive safety management system applying its know-how of 116-year-old railroad operation and scientific analytic technologies.

Especially, as a result of continuous improvement of the safety facility and system by introducing the all-company safety responsibility goal system and establishing the disaster preparedness system optimized for the feature of the train, we have accomplished the all-time high level of safety, while recording the safety operation service (defect and accident ratio) of 1,757 items/million km.

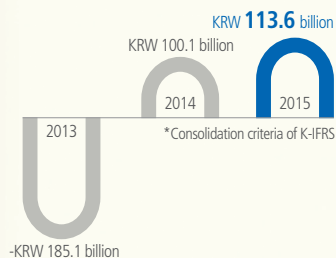
### The Passengers of KTX Surpassing 500 Million People



The passengers of KTX have exceeded 500 million in 11 years and 5 months since its opening. This outcome has been accomplished in 4,194 days since its initial running on April 2004. The running distance of KTX during the period is 0.28 billion km, which is equivalent to traveling

around the earth 6,900 times. We could find out that KTX has brought remarkable revolutionary changes on South Korean's lifestyle, society, economy, and culture through enabling to travel within a day nationwide.

### Achieving Surplus in Operating Profit for Two Consecutive Years



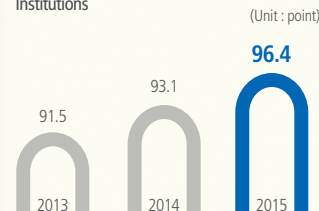
\*Consolidation criteria of K-IFRS

Through active endeavor for generating profit, such as optimization of the Yield Management System(YMS)\*, new opening of Honam High-speed Line and Donghae Line followed by expansion of demand, completion of 5 tourism belts, expansion of

diversified business et al, and by saving costs through strong effort, such as organizational innovation, efficiency of human resources and train operation et al, KORAIL has accomplished KRW100 billion of surplus in operation profit for two consecutive years, together with an all-time high turnover. \* Yield Management System(YMS): the yield management system predicting the demand of train by analyzing the past Big Data and managing the seat depending on the situation

### Achieving an All-time High Customer Satisfaction Rate

Customer Satisfaction Rate of Public Institutions



At 'the 2015 Customer Satisfaction Survey of Public Institutions' targeting 177 public institutions, KORAIL accomplished the performance by getting the highest point of 96.4 ever recorded and acquiring the A-grade for two consecutive years. This performance is resulted from KORAIL's continuous pushing

ahead of promotion of convenience for users, such as opening the next-generation passenger service system, enhancing the convenience of on-line purchase, improving the KORAIL app function et al, and innovation of customer service caring about the disadvantaged group, such as pregnant women, jobseekers et al.





## Awarded Three Categories of Golden Chariot International Transport Award



KORAIL was honored as the triple winner of 'Manager of the Year', 'Excellence in Railroad Transport' and 'Most Effective Transport Safety Project' at the 'Golden Chariot', which is considered the Oscars of the railroad transportation field in the world. The Golden Chariot is the only international award in the transportation field established in 2005 by the Russian Parliament, awarding enterprises or persons having made the biggest contribution to the transport industry, such as railroad, aviation, road and marine transportation. KORAIL's awards in the three categories will become a ground breaking opportunity to achieve recognition of the superiority and safety of Korean railroad internationally, as well as for Korean railroad industry to enter the global market actively.

## Laying the Foundation for Entering the Continental Railroad, like Operating the Eurasian Friendship Express



In order to shape up the connection of railroad between South and North Korea and the SRX (Silk Road eXpress), KORAIL hosted successfully the OSJD (Organization for the Cooperation of Railways) Seoul Railway Summit and the 10th International Freight Conference, and unanimously adopted 'The Seoul Declaration', supporting connection of the railway section between South and North Korea which is uniquely disconnected in the Eurasia railway route. At the same time, while traversing the distance of 14,400km through 10 cities in 6 countries including Berlin, Moscow et al by operating 'the Eurasia Friendship Express', KORAIL spread the consensus on the connection of the continental railroad all over the world.

\* Organization for Cooperation of Railways(OSJD): the Organization of Eurasia International Railroad Transport Cooperation established by the former Soviet Union and Eastern Europe countries  
 ※ Establishing the standard on the railroad transportation agreement and the international transportation standard, such as the international railroad passenger and freight transportation among members

## Completing the Five Railroad Tourism Belt



By developing the Gangwon Clean Belt and West Sea Gold Belt combining the tourism resources, such as the wonderful natural landscape of Gangwon-do, culture of Jeongseon, sea and glow of the setting sun of the West Coast et al with the railroad, we have completed the Five Railroad Tourism Belt. The five railroad tourism belt is the 'KORAIL-type Creative Economy' model bringing effects of tourism demand and work creation, and boosting the regional economy by combining superb-natural-landscape railroad tracks and flag stops of remote area lines with the regional tourism resources in the network form.

## Abolition of the Seniority-based Promotion System and Introduction of the Work Sharing Program



As the side effect of weakening the authority over human resources was revealed due to guarantee of seniority-based promotion regardless of performance and endeavor, we kept on forming a consensus and communicating with all of the employees based on the CEO's strong will and, as a result, agreed to abolish the system of promotion according to years of service on May 2015. In addition, by ultimately agreeing to the introduction of the work sharing program under which the youth's employments are increased with the financial resources saved by cutting a portion of the employees' salary on condition that their retirement is deferred, we have contributed to solving the problem of youth unemployment and enhancing vitality of the organization.







# KORAIL SUSTAINABILITY OVERVIEW

About KORAIL | Business Introduction | Management Value System  
Governance Structure | Ethical Management | Human Rights Management  
Risk Management | Stakeholder Engagement  
Key Issues of the Sustainability Management



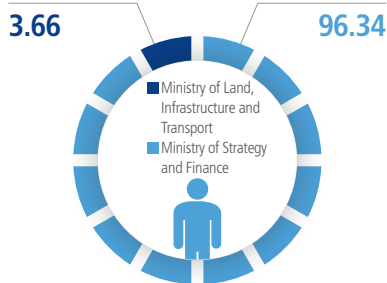
KORAIL  
SUSTAINABILITY OVERVIEW

## About KORAIL

## Corporation Overview

KORAIL is the railroad-operating public enterprise wholly owned by the Government of Korea striving for providing the people with more valuable life and future based on the specialties accumulated for 117 years beginning with opening of Gyeongin Line (33.2km between Noryangjin and Jemulpo) in 1899 and the safe transportation service. We will contribute to the development of the railroad industry and the national economy continuously by enhancing the efficiency and the transparency.

Composition of Shareholders (Unit: %/Ratio of Shareholding)



General Overview

|                                       |  |
|---------------------------------------|--|
| Company Name                          | Korea Railroad Corporation   |
| Date of Establishment                 | 18 September 1899 (KORAIL established on 1 January 2005)   |
| Purpose of Establishment              | We contribute to the development of the railroad industry and the national economy by enhancing the expertise and efficiency of the national railroad operation. (Article 1 of the Korea Railroad Corporation Act) |
| The Competent Authorities             | Ministry of Land, Infrastructure and Transport   |
| Location of the Head Office           | 240, Jungang-ro, Dong-gu, Daejeon Metropolitan City  |
| President & CEO                       | Hong Sun Man   |
| Organization                          | <b>Head Office</b> 7 Headquarters, 6 Offices, 5 Divisions, 62 Departments<br><b>Institutions under control</b> 12 Regional Headquarters, 23 Affiliates   |
| Total Assets                          | KRW 18,198.7 billion   |
| Turnover                              | KRW 5,516 billion  |
| Operating Income / Current Net Income | KRW 113.6 billion / KRW 86.4 billion   |
| Number of employees                   | <b>Prescribed Number</b> 27,981 persons / <b>Current Number</b> 26,607 persons   |

\* General information: as of 2016.06.01, financial information: as of 2015.12.31 (K-IFRS Consolidation)

Overview of Facility and Transport

(As of 31 December 2015)

Number of  
the branch Office **236**

Crew service : 31  
Facility construction : 87  
Vehicle : 28  
Electric signal : 90

Vehicle overview **16,904** cars

KTX : 1,380 cars  
Rolling Stock : 2,841 cars  
Locomotive : 492 cars  
Freight car : 11,076 cars  
Passenger car-Generator car : 1,099 cars  
16 diesel cranes

## Distance of operation

Distance of the railroad  
**3,873.5** km  
(Total 95 lines)

Distance of the double track line  
**2,279.4** km  
(58.8%)

Distance of the electrified line  
**2,727.1** km  
(70.4%)

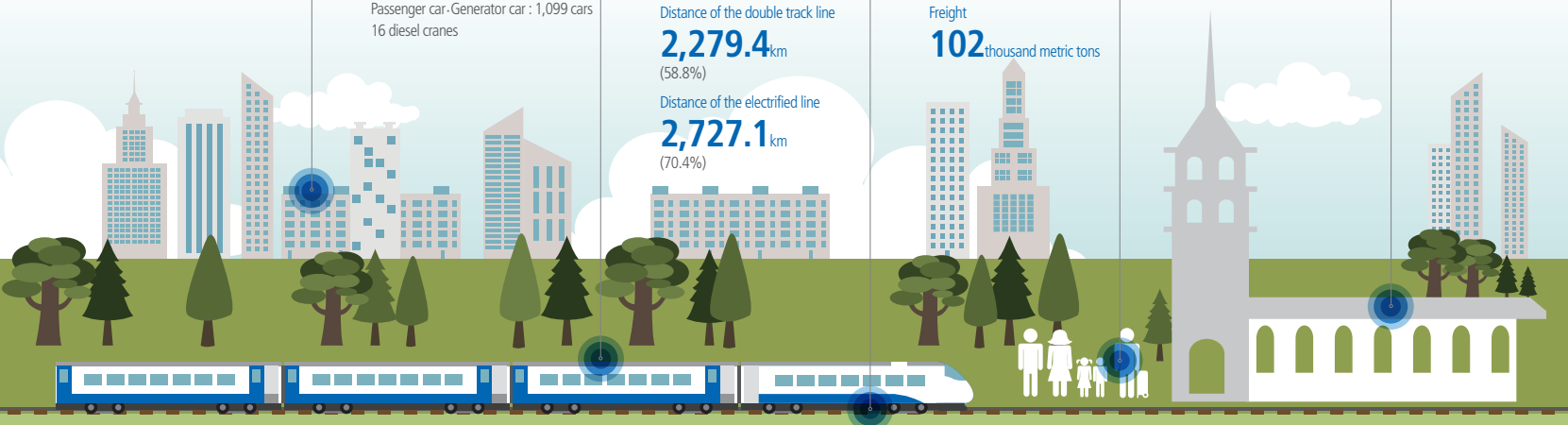
## Average daily ridership

Number of passengers  
**3.496** million

Freight  
**102** thousand metric tons

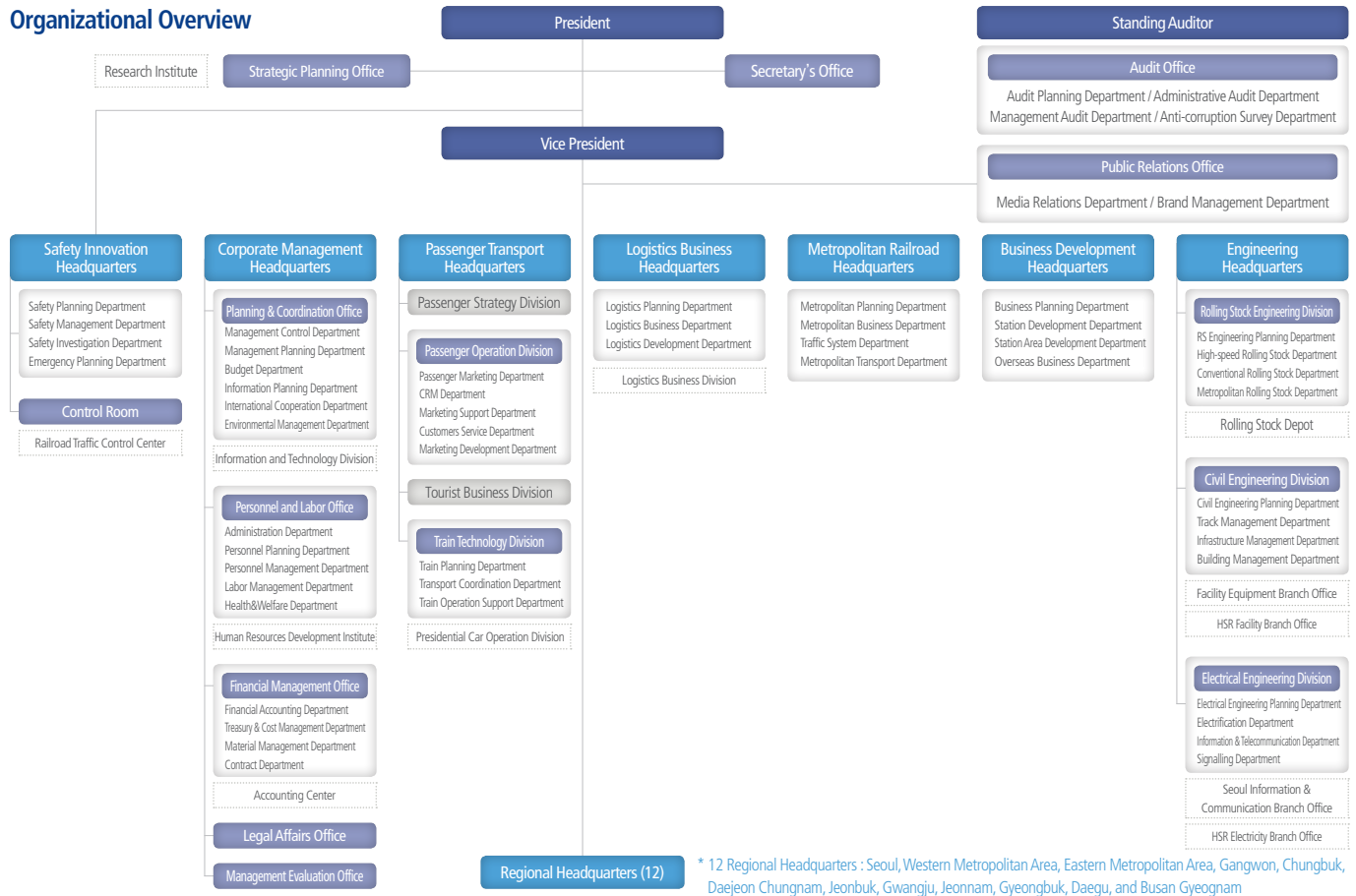
Number of Station **673**

Number of the supervised station : 69  
Number of directly-controlled station : 565  
Number of the signal station : 33  
Number of the signal house : 6





## Organizational Overview



## Affiliates Overview

KORAIL has 5 affiliates for securing expertise through specialization of the business, and plans to create the synergy effect of the management by reinforcing the competitiveness through business adjustment among the affiliates. We support the sustainable growth by reinforcing the revenue base and enhancing the management system of the affiliates.

| Company name                    | Content of business  | Prescribed number (persons) | Capital (KRW 100 million) | Turnover (KRW 100 million) | Ratio of shareholding (%) |
|---------------------------------|--|-----------------------------|---------------------------|----------------------------|---------------------------|
| KORAIL Retail Co., Ltd.         | Operating commercial facilities and media of advertisement                 | 326                         | 60                        | 2,470                      | 100.0                     |
| KORAIL Logis, Ltd               | Logistics business associated with the railroad                            | 73                          | 77                        | 520                        | 92.1                      |
| KORAIL Tourism Development, Ltd | Tourism & leisure, distribution/crew service                               | 836                         | 40                        | 695                        | 51.0                      |
| KORAIL Networks, Ltd            | Station work, operating the parking lot consigned by the Customers Center  | 881                         | 72                        | 836                        | 89.5                      |
| KORAIL Tech, Ltd                | Maintaining railway track/electric facilities, repairing the rolling stock | 47                          | 19                        | 381                        | 97.3                      |

## Overview of the Overseas Offices

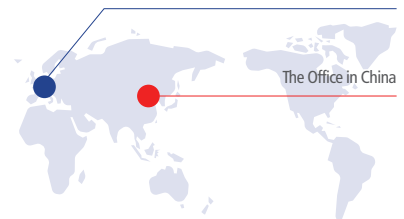
KORAIL operates the overseas offices in France and China for sharing overseas policy of the advanced railway and the know-how of operation. The office in France supports the technology exchange with the European railway institutes, educational consulting and efficient procurement of KTX parts and the office in China supports the Eurasia initiative policy through establishment of the exchange and cooperation network with the countries along the continental railroad line including China's railway and market research of Eastern Europe and Central Asia.

## KORAIL's Affiliates



The Office in France

The Office in China



## KORAIL SUSTAINABILITY OVERVIEW

# Business Introduction

### Major Performance of the Passenger Business

\* Separate criteria of K-IFRS

Turnover (Unit : KRW 100 million)

■ Conventional Transport and Tourism ■ High-Speed Transport

|      |       |        |              |
|------|-------|--------|--------------|
| 2013 | 5,052 | 16,054 | Total 21,105 |
| 2014 | 5,172 | 16,723 | Total 21,895 |
| 2015 | 5,151 | 19,267 | Total 24,418 |

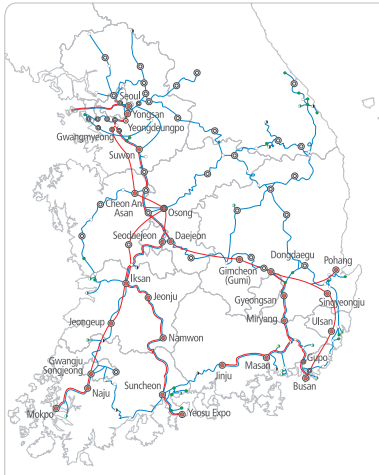
Transported volume (Unit : 1,000 persons)

■ Conventional Transport and Tourism ■ High-Speed Transport

|      |        |        |               |
|------|--------|--------|---------------|
| 2013 | 77,289 | 54,744 | Total 132,033 |
| 2014 | 77,524 | 56,917 | Total 134,442 |
| 2015 | 74,959 | 60,535 | Total 135,494 |

### Route map

■ High-Speed Rail railway route ■ Conventional Rail route



### Major Performance of the Metropolitan Railroad Business

\* Separate criteria of K-IFRS

Turnover of the Metropolitan railroad business (Unit : KRW 100 million)

|      |       |
|------|-------|
| 2013 | 7,218 |
| 2014 | 7,767 |
| 2015 | 8,284 |

Transported volume (Unit : 1,000 persons)

|      |           |
|------|-----------|
| 2013 | 1,098,363 |
| 2014 | 1,135,165 |
| 2015 | 1,140,393 |

## Passenger business

KORAIL generates revenue through passenger transportation and tourism business including KTX and conventional trains (Saemaeul train, Mugunghwa train, Nuriro train, commuters' train, and ITX Saemaeul). KTX, opened in 2004, passed 500 million of accumulated passengers on September 2015 starting from 72,000 daily average passengers in the early days while shrinking the entire nation into a half-day life zone, and records the highest growth rate of domestic public transits, such as taking the market share of 57.0% out of the domestic passenger transport units of which the service distance is 300km or more. In addition, by developing diverse tourism products reflecting customers' needs and travel trend, we completed the 5 Railroad Tourism Belts (Central Region Belt, Southern Province Ocean Belt, Peace and Life Belt, Gangwon Clean Belt, and West Sea Gold Belt) in 2015, while improving the service every year.

### Passenger Business Overview

#### Content of the Business

- High-speed train (KTX)
- Conventional Train (Saemaeul train, Mugunghwa train, Nuriro, commuters' train, ITX-Saemaeul)
- Tourism Business

#### Major performance of 2015

- Passenger business distance : 594.5km for high speed, and 3,059.1km for conventional and tourism
- Annual distance of train operation : 34,808 thousand km for high speed, and 38,215 km for conventional and tourism
- Number of daily train operation : 243 times for high speed, and 332 times for conventional and tourism
- Average daily transportation volume : 166 thousand persons for high speed, and 205 thousand persons for conventional and tourism
- Average daily turnover : KRW 5,279 million for high speed, and KRW 1,411 million for conventional and tourism

#### High-speed train (KTX)



#### Conventional train



#### Tourist train



## Metropolitan railroad business

As the largest operator of the Metropolitan railroad and metro KORAIL operates totally 12 metropolitan lines (Gyeongbu Line, Gyeongin Line, Gyeongwon Line and Janghang Line (line 1), Ilsan Line (line 3), Gwacheon Line and Ansan Line (line 4), Bundang Line, Gyeongui Line and Jungang Line, Gyeongchun Line, and Suin Line). Now, 41 years after the opening of the metro in 1974, the number of its station is 269, increased by 5 times, the number of daily train operation is 2,322 times, increased by 7.8 times, and the number of daily passenger is 3.124 million increased by 15.6 times, thereby becoming the typical means of transportation for the people of the metropolitan area. KORAIL is making a constant effort to be reborn as the metropolitan railroad gaining people's affection and trust by expanding new lines continuously and introducing the ITX-Cheongchun, which is the two-story inter-urban express train jumping over the stereotype, for the first time in Korea.

### Overview of the Metropolitan Railroad Business

#### Content of the Business

- Metro (12 lines and 236 stations)
- ITX-Cheongchun (Yongsan~Cheongnyangni~Chuncheon)

#### Major performance of 2015

- Business distance of the wide range railroad : 525.8km
- Annual distance of train operation : 39,820 thousand km
- Number of daily train operation : 2,315 times
- Average daily transportation volume : 3.124 million persons
- Average daily turnover : KRW 2,270 million

## Logistics Business

KORAIL, operating the comprehensive logistics service, such as warehousing, cargo work et al, based on the railroad transport, is striving for provision of the efficient service, such as fostering intensively the strategic products suitable for the railroad transportation, adjusting the crew service business depending on the seasonal demand et al. The railroad logistic is the energy efficient and eco-friendly means of transport of which the energy consumption and the carbon dioxide emission per unit are only 1/12 and 1/10 of those of the motor truck respectively. In addition, the railroad logistics is capable of mass transportation of more than one thousand metric tons at a time, has no traffic congestions, and is an all-weather safe means of transport hardly influenced by weather, such as snow, rain, wind et al, performing the logistics business at 106 stations of 6 areas.

### Overview of the Logistics Business

#### Content of the Business

- Railroad transport
- warehousing / cargo work
- Inland transport (shuttle)
- KTX parcel delivery / parcel alliance business

#### Major performance of 2015

- Freight business distance : 3,77.0 km
- Annual distance of train operation : 19,546 thousand km
- Average daily transportation volume : 102 thousand metric tons
- Average daily turnover : KRW 1,000 million
- Number of daily train operation : 262 times

## Diversified Business

The diversified business is a diverse life service business centered on the railroad station, including property development, tourism and overseas business connected to the railroad, and provides various services, such as product sales of the small and medium enterprises, experience of local specialties, operation of the conference room et al, utilizing underused spaces in the major station buildings. In 2015, we sought the development in full scale, such as selection of the business operators by promoting the public offering for the station influence areas of the metropolitan cities, such as Susaek, Daejeon et al, and accomplished improvement of the convenience facilities for the passengers and increase of the revenue through complex development of the station buildings, such as Gumi Station, Sungkyunkwan University Station, Dongdaegu Station et al. In addition, we expanded the distribution business by developing the differentiated stores in the station buildings like local restaurants and theme stores. In the overseas business, we have diversified our revenue by broadening the business area from the existing business centered on the export of used vehicles to consulting, operating and maintenance (O&M) of the railroad et al.

### Overview of the Diversified Business

#### Content of the Business

- Providing diverse life service connected to the railroad
- Property development business, tourism business, overseas business

#### Major performance of 2015

- Turnover : KRW 188.5 billion – Lease business: KRW 52.3 billion, distribution: KRW 59.5 billion, advertisement: KRW 22.2 billion, parking lot: KRW 8.9 billion, station building development : KRW 6.9 billion, real estate development: KRW 3.5 billion, overseas business: KRW 6 billion, others: KRW 29.2 billion

- Rent
- Retail Revenue
- Advertisement Revenue
- Revenue from parking lot

- Revenue from development of the station building
- Revenue from the real estate development
- Overseas business

- Other revenue

Lease of the Korea Railroad Corporation's property  
Sales charge on the premise received by KORAIL Retail Co., Ltd  
Revenues from installed advertisement and KTX's image advertisement of Korea Railroad Corporation et al  
Revenue from operating parking lots attached to the stations of Korea Railroad Corporation and other parking lots constructed utilizing the unused property  
Usage fee for the ownership shares of the commercial facilities followed by operation and construction of private capital and complex station buildings  
Revenue from development of the station influence area and unused sites  
Operation and maintenance consulting of the used engine locomotive, export of the used engine locomotive parts, training of the international railroad et al  
Recharging fee of the transportation card, issuance fee of the cash receipt, usage fee of the employee training center, revenue from the in-company venture et al

### Local restaurants

|                        |  |                            |                                |
|------------------------|--|----------------------------|--------------------------------|
| <b>Busan Station</b>   | Samjin Fish Cake, Busan Odeng Fish Cake, Yangsan Soup with Rice, Ggangtong Alley Fried Tofu Stew, Seunggi's Korean Pancake Stuffed with Seed | <b>Dongdaegu Station</b>   | Banwoldang Croquette           |
| <b>Daejeon Station</b> | Seongsimdang, Udon Noodles, Bongji Korean Pancake, Gujeuk Rice with Buckwheat Jelly  | <b>Jeonju Station</b>      | PNB Pungnyeong Bakery          |
| <b>Seoul Station</b>   | Seoul's Sweetheart   | <b>Jecheon Station</b>     | Sunuri Medicinal Herb          |
| <b>Ulsan Station</b>   | Eonyang Bulgogi  | <b>Singyeongju Station</b> | Byeolchaeban (Outhouse Dishes) |
| <b>Iksan Station</b>   | PNB Pungnyeong Bakery  | <b>Gumi Station</b>        | Banwoldang Croquette           |

### Major Performance of the Logistics Business

\* Separate criteria of K-IFRS

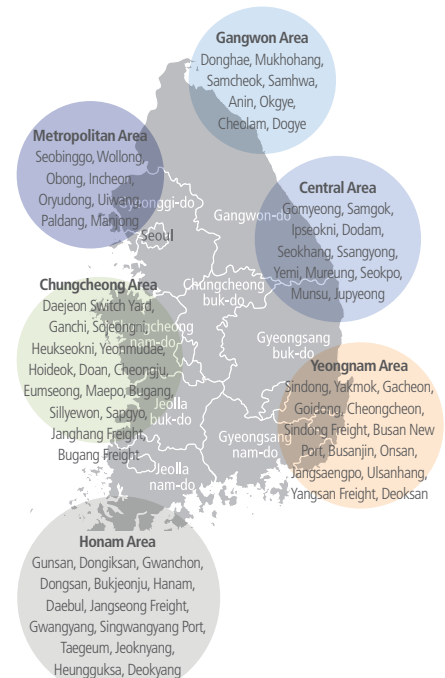
Turnover of the logistics business (Unit : KRW 100 million)



Transportation volume (Unit : 1,000 metric tons)



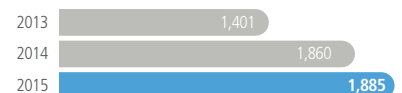
### Major Freight-handling Stations



### Major Performance of the Diversified Business

\* Separate Criteria of K-IFRS

Turnover of the diversified business (Unit : KRW 100 million)



Percentage of revenue from the diversified business (Unit : %)







KORAIL  
SUSTAINABILITY OVERVIEW

## Management Value System

## Vision and Strategy

Marking its 10th anniversary, KORAIL has declared 2015 as “the Year of the Second Foundation, and Take-off” and suggested the New Management in order to cement the new groundwork of 10 years down the road through continuous management innovation. With the mission of ‘the Railroad of the Republic of Korea in harmony with People, World and Future’, we have set up 5 Strategic Directions and 15 Strategic Projects.

|                               |   |   |   |   |  |
|-------------------------------|---|---|---|---|--|
| Management Strategy System    |   |   |   |   |  |
| Mission                       | <b>Railroad of the Republic of Korea in Harmony with the People, the World and the Future</b><br>Enhancing the People's Happiness and Reinforcing the Social Responsibility through Provision of Safe and Convenient Railroad Service, and Contributing to Creation of the New Future of the Republic of Korea through Connection of South-North and Continental Railroad and Promotion of the New Growth Business Centered on the Railroad |   |   |   |  |
| Vision                        | <b>KORAIL, the Happiness of the People</b><br>Enhancing the People's Happiness through Establishment of the Sustainable Management System by Realizing the Creative Customer Value and Innovatively Improving the Organizational Structure  |   |   |   |  |
| Core Value                    | <br><b>Safety First</b><br>Based on the Understanding of Safety as the Best Service and Value, Realizing Non-defect Safety Management over the Global No. 1 Level by Establishing the Perfect Safety Management System on the Basis of the Technological Prowess   | <br><b>Customer Satisfaction</b><br>Putting Top Priority on the Customer Satisfaction in All of the Services, and Creating the Railroad Service Making the People Happy by Providing the Value more than the Customer Satisfaction | <br><b>Changes and Challenges</b><br>For the Sake of Tomorrow Dreamed by the Railroad Families and the People, Pursuing Changes and Challenges Ceaselessly, and Realizing the Dream based on Ardor |   |  |
| Management Policy             | Forging the Advanced Safety System Based on the Cutting-edge Technological Prowess and Establishing the Safety First Management<br><br>Improving People's Happiness and Contributing to Enhancement of the National Competitiveness with Promotion of the Life Culture Centered on the Station Influence Area and the KORAIL-type Creative Economy  |   |   |   | Realizing Debt Reduction and Competitive Corporation by Maintaining the Operating Profit through the Whole Range of the Management Improvement Effort<br><br>Leading the Republic of Korea with the Corporate Culture of Cooperation and Ardor through the Radical Organizational Innovation |
| Management Objectives of 2020 | <b>"0" of Railroad Accident</b><br>Safety operation service : 1,249 items / million km  | <b>Maintaining the Operating Profit</b><br>Operating revenue : KRW 6,809 billion  | <b>Enhancing the Quality of the Customer Service</b><br>Customer satisfaction rate : 96.5 points  | <b>Innovating the Organizational Culture</b><br>Debt ratio : 189.7%<br>Sustainability Management : AAA  | <b>Reinforcing the Competitiveness of the Future Growth Business</b><br>Turnover of the diversified business : KRW 754.6 billion   |
| Strategic Directions          | Establishing the Absolute Safety System   | Building up the Optimal Transport System  | Realizing the Creative Customer Value   | Improving the Organizational Structure Innovatively   | Broadening the Future Growth Engine  |
| Strategic Projects (15)       | ① Establishing the comprehensive safety management system<br>② Securing advanced technological prowess<br>③ Establishing the scientific maintenance system  | ④ Optimizing the demand-oriented train operation<br>⑤ Expanding profit from the strategic transportation<br>⑥ Making efficient biz operation system   | ⑦ Reinforcing the customer satisfaction service<br>⑧ Strengthening the activities for empathy with people<br>⑨ Innovating the brand image   | ⑩ Innovating the future-oriented organizational culture<br>⑪ Enhancing the business management system<br>⑫ Habituating the performance-oriented responsibility management | ⑬ Extending the infrastructure-based multiple businesses<br>⑭ Expanding the business of subsidiaries centered on the core competency<br>⑮ Carrying forward the continental and overseas railway business   |

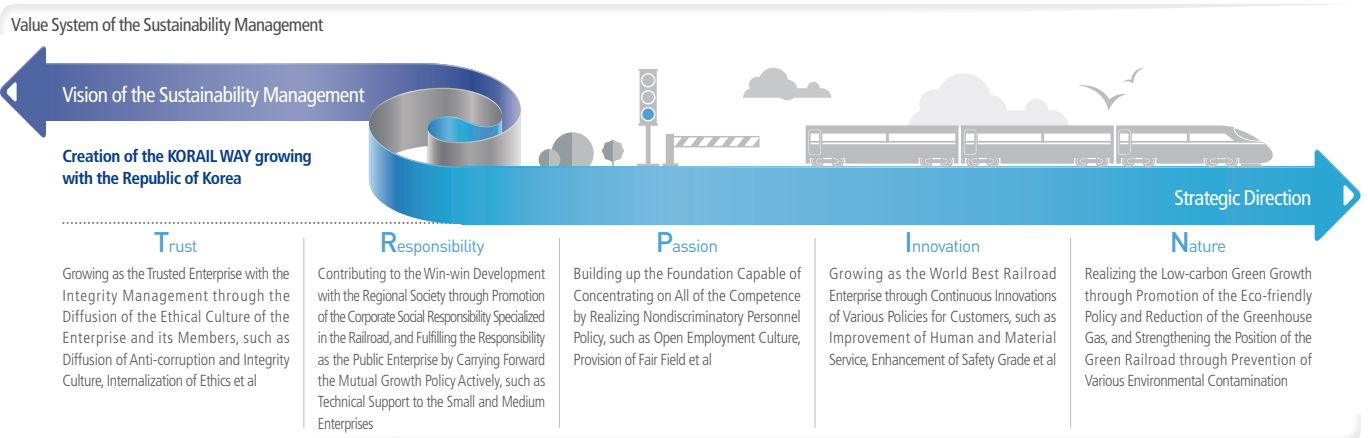


## Sustainability Management System

Since its establishment in 1899, KORAIL has become the driving force of the economic development of Korea as the main transportation artery of the state, and is ceaselessly striving to contribute to the happiness of the people by making the railroads of Korea in harmony with people·world·future. KORAIL is striving to grow as an enterprise capable of becoming the foundation for the further development of Korea by creating values sharable with all of the stakeholders through sustainable management, and, through such endeavors to develop into a world-class railway transportation enterprise.

### Vision and Strategy of the Sustainability Management

KORAIL will pursue the sustainable growth with the specialized activities of social responsibility under the vision of 'the People, the World, the Future, and the Railroad of the Republic of Korea.' KORAIL will become the foundation of Korea's growth by concentrating all the activities in order to realize the mission of the public enterprise and enhance the social value along with the growth of Corporation.



### Promotion System of the Sustainability Management

For strengthening the competence of the systematic sustainability management, KORAIL organizes 10 subcommittees in the different divisions with the Brand Management Department as the center. With the committees composed of both internal and external experts in the different subcommittees as the center, we discover and implement the action assignments for the sustainability of the enterprise, such as economy, society, ethics, environment et al. In addition, by checking the strategy and the roadmap in accordance with the promotion system of the sustainability management, practicing the sustainability management companywide in response to the risk, and, simultaneously, reflecting opinions of various stakeholders in the management activity, we strive for creating the value shared by both the enterprise and the society.

#### Promotion Process of the Sustainability Management



#### Sustainability Management Promotion Subcommittee

|  |   |  |
|--|---|--|
| Management Subcommittee                      | <ul style="list-style-type: none"> <li>Overall control and foreign response of the sustainability management</li> <li>Inspection and consulting service of performance of each field.</li> </ul>                | Brand Management Department                                      |
| Integrity Subcommittee                       | <ul style="list-style-type: none"> <li>Anti-corruption integrity policy and system operation</li> <li>Internalization of the executives and staff members' ethics</li> </ul>                                    | Integrity Inspection Department                                  |
| Corporate Social Responsibility Subcommittee | <ul style="list-style-type: none"> <li>Overall control of the company-wide corporate social responsibility activities</li> <li>Discovery and diffusion of the activities specialized in the business</li> </ul> | Brand Management Department                                      |
| Mutual Growth Subcommittee                   | <ul style="list-style-type: none"> <li>Establishment and Promotion of the Mutual Growth policy</li> <li>Overall control of the SME support policy</li> </ul>  | Material Management Department                                   |
| Personnel Subcommittee                       | <ul style="list-style-type: none"> <li>Compliance with the Labor Standards Act and directing the Governmental policies</li> <li>Employees' competence development and welfare policy</li> </ul>                 | Personnel Planning Department<br>Personnel Management Department |
| Health Subcommittee                          | <ul style="list-style-type: none"> <li>Overall control of the industrial accident prevention policy</li> <li>Operation of the employees' health care program</li> </ul>   | Safety Planning Department                                       |
| Customer Subcommittee                        | <ul style="list-style-type: none"> <li>Establishment and promotion of the policy for enhancing the customer service</li> <li>Operation of the communication channel with customers</li> </ul>                   | Customer Service Department                                      |
| Safety Subcommittee                          | <ul style="list-style-type: none"> <li>Establishment and promotion of the policies related to the railroad safety</li> <li>Operation of the customer safety management system</li> </ul>                        | Safety Planning Department                                       |
| Environment Subcommittee                     | <ul style="list-style-type: none"> <li>Establishment and overall control of the environmental affairs policy</li> <li>Waste management and greenhouse gas reduction policy</li> </ul>                           | Environmental Management Department                              |
| Energy Subcommittee                          | <ul style="list-style-type: none"> <li>Establishment and overall control of the energy saving policy</li> <li>Operation of the energy efficiency program</li> </ul>   |  |

## KORAIL SUSTAINABILITY OVERVIEW

# Governance Structure

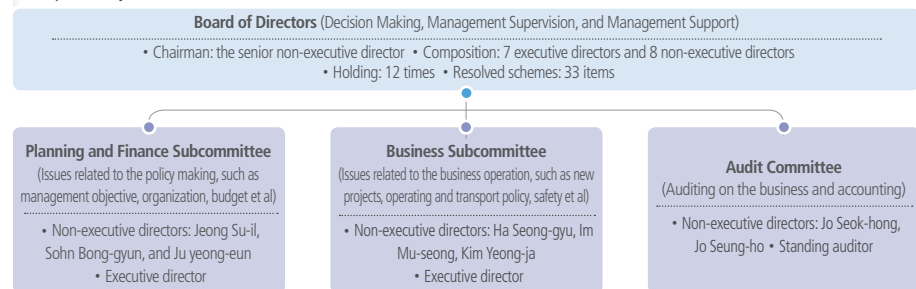
Composition of the Board of Directors (As of 1 June 2016)



## Composition of the Board of Directors

The Board of Directors, in charge of decision making, management supervision and management support, is composed of 7 executive directors who are experts carrying out the policy at the academic circles related to the railroad and at the site of the railroad, including the CEO, and 8 non-executive directors who are experts with learning and experience in the fields of traffic, legal, and economic circles, totally making 15 members. As the senior non-executive performs the chairmanship, the independence of the governance structure is secured. Especially, by appointing women as non-executive directors in order to enhance the social fairness, the ratio of women in the Board of Directors was increased to 13.3% in 2014 from 7.7% in 2013 and the ratio is kept unchanged in 2015. In addition, in order to professionally discuss and solve the core issues in each field, three subcommittees are organized in the Board of Directors.

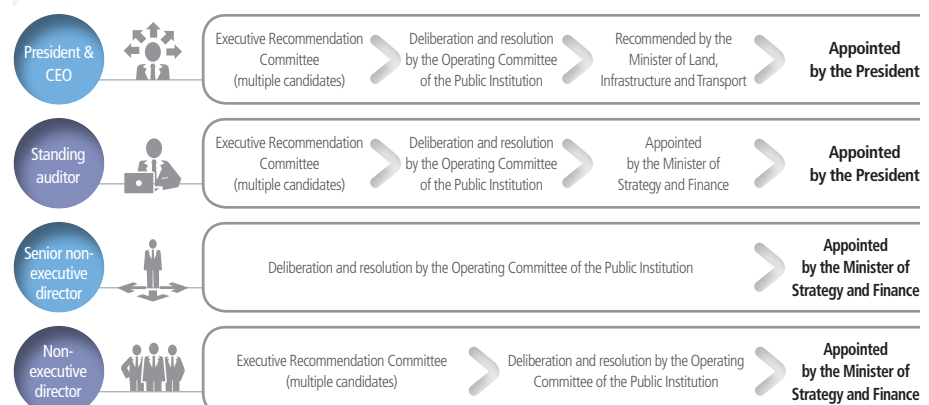
### Composition System of the Board of Directors



## Composition and Management of the Executive Recommendation Committee

By complying with Article 25 of Law on the Operation of Public Institutions (Appointment of the executive of the public enterprise) and the Operational Regulation of the Internal Executive Recommendation Committee, we have prepared for the groundwork for fair recommendation of executives. In order to enhance the appropriateness and representativeness of composition of the Executive Recommendation Committee, we have been securing the experts of various fields, such as the traffic, management, the press, law, accounting et al, as the pool of the external member of the committee, and put hard work, such as expanding the ratio of women's participation by getting recommendation of competent persons from the Ministry of Gender Equality and Family. We have made it a principle to publicly recruit the candidate of the executive by 100%, exclude the candidate recommended by the stakeholders, and make public the minute, thereby securing the transparency and fairness of the system for selection of the executives.

### The Appointment Process of Directors



Holding of the Board of Directors



## Operating of the Board of Directors

The Board of Directors participates in the decision making and the risk management on such issues as management, policy and environment. The Board of Directors exerts itself for reinforcing check of the management control and substantializing the policy making aiming at 'the Establishment of the Virtuous-circle Management Structure through the Vitalization of the Board of Directors and the Entrenched Responsibility Management System'.

The Board of Directors, held once a month periodically, resolved 33 schemes and modification of 8 schemes in 2015. In addition, for substantializing the pre-review of the schemes for the meeting and reinforcing the risk management for the core issues, we have implemented operation of the three-step preliminary deliberation system, regular holding of the board of non-executive directors, and prior explanation of all the submitted schemes. As a result, the weight of comments and the ratio of resolution after modification by non-executive directors were increased by 1.1% point and 15.4% point respectively vis-à-vis the previous year.

### Promotional Strategy for Operating the Board of Directors

| Objective of Operation | Establishment of the Virtuous-circle Management Structure through Vitalization of the Board of Directors and the Entrenched Responsibility Management System   |   |   |   |
|------------------------|--|---|---|---|
| Direction of Strategy  | Vitalizing Check of the Management   | Substantializing the Policy Decision  | Utilizing the Expertise of Non-executive Directors  | Fair Director Recommendation Committee  |
| Action Assignments     | <ul style="list-style-type: none"> <li>Expanding weight of comments by non-executive directors</li> <li>Vitalizing the management proposal and consultation</li> <li>Enhancing the ratio of resolution after modification</li> </ul> | <ul style="list-style-type: none"> <li>Reinforcing the field-communication management</li> <li>Substantializing the preliminary deliberation system</li> <li>Reinforcing the prior explanation of the issues</li> </ul> | <ul style="list-style-type: none"> <li>Expanding meetings of the expertise subcommittees</li> <li>Operating the management advisor system</li> <li>Reflecting the management proposal and consultation in the policy</li> </ul> | <ul style="list-style-type: none"> <li>Securing the propriety of composition of the executive recommendation committee</li> <li>Securing the transparency of operation of the executive recommendation committee</li> <li>Expanding the ratio of women's participation</li> </ul> |
| Performance Indicator  | <ul style="list-style-type: none"> <li>Weight of comments by the non-executive director</li> <li>Operating the preliminary deliberation system</li> </ul>  |   | <ul style="list-style-type: none"> <li>Result of holding the expertise subcommittees</li> <li>Number of the management consultation and proposal and reflection in the policy</li> </ul>  |   |

### Vitalizing Operation of the Board of Directors

We have expansively implemented the site management activities in order to reinforce communication with the site operation. Especially, through review of major challenges, such as the 5 tourist belts, development projects of the station influence area et al, we have drawn totally 23 management consultations including management normalization measures, service improvement plan et al, and then reflected them in the policy. In addition, we could implement effectively the government policy assignments by timely handling the challenges of policy like abolition of seniority-based Promotional System, introduction of the wage peak system et al, and we also led the goal attainment of major challenges by strengthening surveillance and check of significant investment projects, like the financial analysis and inspection on the development of the station influence area.

### Reinforcing the role of the non-executive executives

We have implemented the briefing session of the core challenges, meetings, and explanations by visiting for the non-executive directors to enhance understanding of the challenges of the management and expand the participation in the management, and advanced the support system, such as provision of the management information through on-line home page and introduction of the remote approval et al. In addition, by revising the relevant managerial regulation, we have strengthened the responsibility and authority of the board members. Especially, we have discussed the mutual development plan of the labor and management by holding the joint meeting with the labor representative, and strived for vitalization of communication between the non-executive directors and the staff members by implementing the professional special lectures for the internal executives and staff members.

### Expanding the use of non-executive directors' expertise

By operating the management consultant system in each expertise area of the non-executive director and designation of the director in charge by unit, we have reinforced the policy decision and the customized management support specialized in the expertise areas of the non-executive directors, and contributed to solution of significant challenges of management, such as sale of the Airport Railroad, improvement of the customer service et al by holding the expert subcommittee specialized in the railroad industry. In addition, through active outside activities, such as participations in the international seminars, professional policy forums et al, we have played a leading role for advancing into the continental railroad and publicized the superiority of the railroad.

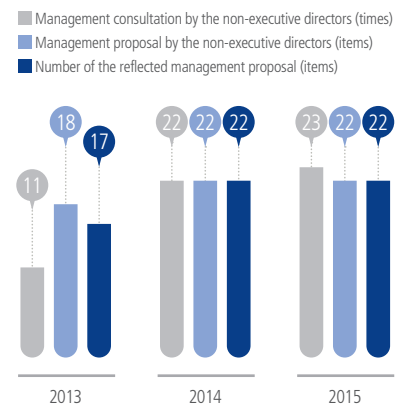
### Operational Performance of the Board of Director

| Category  | 2013   | 2014   | 2015    |
|---|--------|--------|---------|
| Number of the Board of Directors held (times)     | 15     | 12     | 12      |
| Resolved schemes (items)                          | 34     | 40     | 33      |
| Reported schemes (items)                          | 16     | 16     | 16      |
| Rate of the preliminary deliberation (%)          | 100    | 100    | 100     |
| Schemes resolved after modification (items, %)    | 3(8.8) | 2(5.0) | 8(24.2) |
| Rate of attendance in the Board of Directors (%)  | 97.8   | 94.1   | 93.3    |
| Rate of non-executive directors' attendance (%)   | 98.2   | 93.5   | 94.8    |
| Weight of comments by non-executive directors (%) | 68.7   | 69.0   | 70.1    |

### Operational Record of the Preliminary Deliberation System

| Deliberation system                         | Holding (times) | Agenda (item) | Ratio of modification or higher (%) |
|---|-----------------|---------------|-------------------------------------|
| Management Strategy Committee               | 14              | 39            | 25.6                                |
| Investment Deliberation Committee           | 8               | 13            | 38.5                                |
| Management Strategy Practices Committee     | 10              | 19            | 42.1                                |
| Investment Deliberation Practices Committee | 7               | 23            | 39.1                                |

### Record of Using the Expertise of the Non-executive Directors



### Non-executive Directors' Site Activities



## KORAIL SUSTAINABILITY OVERVIEW

# Ethical Management

### Promotional Strategy of the Ethical Management

#### Promotional System of the Ethical Management

KORAIL strives for establishing the transparent corporate culture by setting up the ethical management objectives of the highest level based on the strong ethical management leadership of the management. The Management Control Department is responsible for the ethical management, and carries forward the anti-corruption and integrity activities with the Integrity Investigation Department as the center. Especially, in order to coincide with the pan-government will for eradicating corruption and to get reborn as more clean KORAIL, we have organized the Corruption Eradication Division led by the Executive Vice President and actively discovered and improved the part vulnerable to corruption of the crack between the system and the process, thereby preparing to take off for the integrous corporation.

#### The System Map of the Ethical Management

|                       |  |   |  |  |
|-----------------------|--|---|--|--|
| Vision                | KORAIL, the Happiness of the People  |   |  |  |
| Slogan                | Creating KORAIL WAY growing with and trusted by the Republic of Korea                          |   |  |  |
| Objectives of 2015    | Settling down the integrity corporate culture coinciding with the era of the operating surplus |   |  |  |
| Action System         | Ethical Standards  | Ethics Charter  | Ethics Code                                    | A Code of Conduct of the Executives and Staff Members        |
|                       | Task Force   | <b>The Management</b> <ul style="list-style-type: none"> <li>Management Control Department : Establishing the ethical management system (overall control)</li> <li>Corruption Eradication Division : Discovering and improving the part vulnerable to corruption of the crack between the system and the process</li> </ul> |  |  |
|                       |  | <b>Auditing Office</b> <ul style="list-style-type: none"> <li>Integrity Investigation Department : Integral promotion of anti-corruption and integrity activities</li> <li>Transparent Management Committee : Selection of major policies on anti-corruption and integrity</li> </ul>                                       |  |  |
| Evaluation / Feedback | Internal   | Self-external integrity   | Integrity of the administrator                 | Evaluation of the endeavor for anti-corruption and integrity |
|                       | External   | Comprehensive integrity   | Evaluation of policy for preventing corruption | KoBEX-SM index   |

#### Promotional Assignment of the Ethical Management

In spite of having accomplished operating surplus for the first time since foundation of the public corporation in 2014, KORAIL showed the below-average record in the comprehensive integrity evaluation of the Anti-Corruption and Civil Rights Commission. Therefore by dividing the reasons of the integrity decline both internally and externally and then analyzing them in depth, we have drawn and then carried forward actively the 8 focused implementation assignments for enhancing the integrity, such as diffusion of the integrity culture centered on sharing and communication, reinforcement of the ethical standards, strengthening of public relation on the ethical management activities et al.

#### Factor Analysis

##### Internal Factor

- Insufficient force to induce active participation of site operations department
- Lack of members' critical mind and passive corporate aculture
- Potential feeling of fatigue and anxiety to continuous structural reforms

##### External Factor

- Insufficient control and surveillance system in the contract and the supervision section
- Inherent irrational factors in the contract and management area
- Worrying occurrence of a back-scratching alliance due to small scale of the railroad industry

#### Action Projects



## Practical Activities of the Ethical Management

### Reinforcing the Executive Ability of the Ethical Management

KORAIL has reinforced the behavioral standard of the executives and staff members through revision of the ethical standards and introduced the one strike out system for the violation of the code of conduct of the executives and staff members, thereby maximizing prevention of the corruption. In addition, we have reinforced the executive ability of the ethical management by reflecting the integrity evaluation result of the 2nd grade- or higher-level staff members when calculating their standard annual income and paying the bonus, and also by reflecting major integrity activities in each unit in 'the Anti-corruption and Integrity Endeavor Degree' which is the internal evaluation indicator.

#### Revision of the Ethical Standards

| Category                                   | Main Contents  | Detailed Contents   |
|--|--|---|
| Fair job performance                       | Reinforcing punishment to the inducer of the corrupt act       | Applying the assessment criteria of the disciplinary action leveled up by one grade to provider, proposer and inducer of corrupt act  |
|  | Reinforcing the disadvantage to the actors of corruption       | The staff member submitted to disciplinary measure due to accepting bribe and/or entertainment shall be excluded from bonus, and the promotion restriction period of the corrupt employee shall be added by 6 months. |
|  | Prohibition of requesting special consideration for employment | Making stipulation that all the incumbent employees are prohibited from requesting special consideration for employment for either themselves or others   |
| Diffusion of the sound public post culture | Disclosure of the actors of corruption                         | Preparing the regulation of disclosing the actors of corruption for eradicating the corrupt act   |
|  | Extending the application scope of the code of conduct         | Extending the application scope of the code of conduct to the dispatched workers  |
|  | Strengthening the criteria of accusation                       | Making accusation of the corrupt act, such as misappropriation of public funds (KRW 2 million related to the duty), employment, work performance appraisal, contract et al, compulsory                                |

### Introduction of the Customized Ethics Program

KORAIL has proceeded with the customized ethics education in each level reflecting the CEO's strong will to eradicate corruption. 300 executive members of 2nd grade or higher completed the course of the integrity education course provided by the Anti-Corruption and Civil Rights Commission and implemented the on-site education for propagation, meanwhile the standing auditor implemented the special lecture on the humanities and the integrity making a tour of the whole departments. In addition, for diffusing the integrity culture and reestablishing the recognition in life, we have implemented the systems of CLEAN-5\* and One Strike Out. Moreover, we have strengthened the effectiveness through the consensus education of the ethical management in the forms of musical and role-play by operating 'KORAIL Integrity I', the honorary ambassadors of the integrity composed of the new employees whose careers are less than three years.

\* CLEAN-5 : Prohibiting acceptance of bribe, eradicating the conventional irrationality, eradicating unfair business instruction, eradicating unjustified budget execution, and handling the business transparently

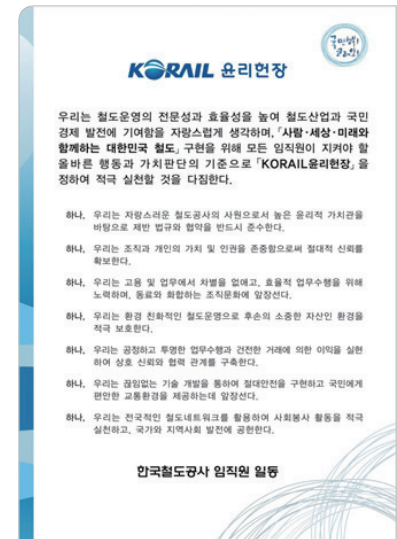
### Endeavor for Autonomous Improvement

KORAIL will make a leap forward an integrous corporation by embedding the ethical management culture with the employees' autonomous endeavor. We have enhanced the transparency of the Personnel Committee by discovering the assignments for autonomous improvement of the system to the factors vulnerable to corruption in each unit and prepared for way to eradicate the delivery of forgery, thereby improving 26 assignments. In addition, in order to prevent the probability of unreasonable requirements and back-scratching alliance by suppliers of the railroad goods, we have introduced the rotation system of the material inspection work, the system of inspecting the material accompanied by other inspector et al, thereby blocking the delivery corruption in advance.

### Diffusion of the Ethical Management Culture

KORAIL implements the integrity consulting for the affiliates and shares the excellent ethical policy. Especially, by standardizing the code of conduct of the executives and staff members in each affiliate and diffusing the policy of anti-corruption and integrity policy, improvement of the autonomous system et al, we have enhanced the level of the ethical management for all the affiliates. In addition, after having been selected as the outstanding case of the ethical management of the domestic railroad sector at the UNGC Fair Play Club, we had the opportunity to introduce KORAIL's ethical management system and practical program, such as the blind evaluation, the anonymity-guaranteed report system et al. As a result of the endeavor for carrying forward the active ethical management, in 2015, the comprehensive integrity of the Anti-Corruption and Civil Rights Commission was the 3rd grade, and evaluation of the anti-corruption was the 2nd grade, moving up by one grade vis-à-vis the previous year respectively. Also, in KoBEX-SM, the external evaluation, KORAIL has accomplished the AAA grade for 7 consecutive years, enhancing the awareness as the outstanding institution for the ethical management.

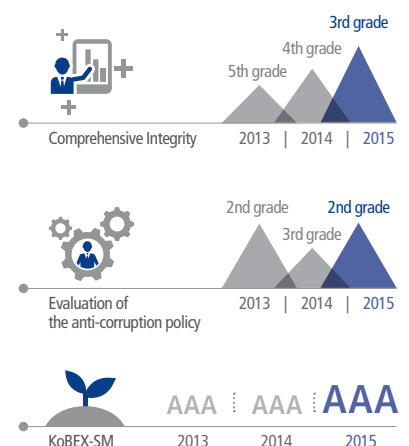
#### Ethics Charter



#### KORAIL Integrity I



#### Major performance of the Ethical Management





KORAIL  
SUSTAINABILITY OVERVIEW

## Human Rights Management

## KORAIL's Human Rights Guidelines

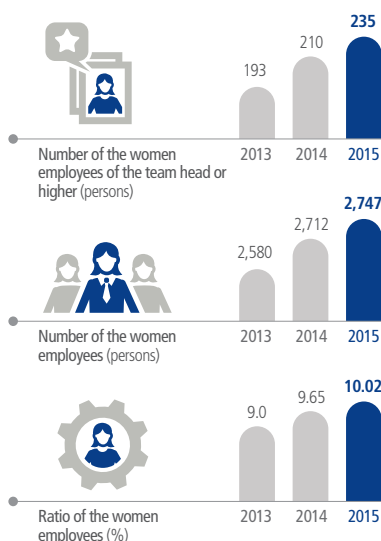
| Guidelines            | Content   |
|-----------------------|---|
| Employment regulation | Article 5 (Parity of treatment), Article 51 (Gender equality and maternity protection), Article 52 (Disposition and promotion)  |
| Personnel policy      | Article 10 (Principles of recruitment)  |
| Collective Agreement  | Article 6 (Parity of treatment), Article 23 (Recruitment of the employee), Article 46 (Collection and protection of personal information), Article 47 (Protection of human rights and prohibition of discrimination), Article 80 (Gender equality and maternity protection), Article 136 (Protection of the temporary position) |

## Articles on the protection of human rights and prohibition of discrimination

## Article 47 of the Collective Agreement (Protection of human rights and prohibition of discrimination)

- ① The Corporation should not violate or damage the union members' dignity and value in the organization.
- ② The Corporation should not practice the discriminatory act of violating the equal right without any rational reason, discriminating on the ground of gender, religion, disability, age, social status, native place, country of origin, ethnic origin, physical condition like appearance et al, marital status, pregnancy or birth, family status, race, skin color, thought or political opinion, sex orientation, medical history et al.
- ③ The Corporation should not treat preferentially, exclude, distinguish or unfavorably treat a specific person without any rational reason in employment.

## Overview of the Women Employees



## Respecting the right of the executives and staff members

KORAIL actively implements protection of the human rights stipulated in the international standard of the social responsibility ISO 26000, relevant regulations and governmental policy. Especially, we do not discriminate against anyone based on gender, physical condition, appearance, educational background, age et al, and reinforce the open personnel policy for women, disabled persons and job applicants. In addition, every year we investigate the negative influence of the human right through checking of the checklist to the human rights management and strive for solving the employees' difficulties through operation of the grievance settlement system et al.

## Guaranteeing the Freedom of Association and Collective Bargaining

KORAIL guarantees the employees' freedom of association and collective bargaining. At present, 4 labor unions are established, and we guarantee the employees' legitimate labor union activities, do not intervene in the operation of the labor union. In addition, we timely provide the representative of the labor union with information necessary for performing the activities, thereby striving for realization of the win-win organizational culture between labor and management.

## Overview of the Labor Union

(As of 31 March, 2016)

| The Labor Union             | Korean Railway Workers' Union           | Korean Railway Industry Trade Union | KORAIL Labor Union | Railway and High-Speed Operation Workers' Union |
|-----------------------------|---|-------------------------------------|--------------------|---|
| Number of the union members | 18,324                                  | 830                                 | 10                 | 5   |
| Date of establishment       | 1945. 11. 1                             | 2004. 1. 19                         | 2012. 12. 31       | 2014. 4. 14                                     |
| Upper organization          | The Korean Confederation of Trade Union | Federation of Korea Trade Unions    | -                  | -   |

## Prohibition on Discrimination

In order to overcome the limitation of women employment depending on the character of the railroad transportation business, KORAIL reinforces the position of women in the organization by striving for training the woman administrators. As of 2015, the number of women employees having position of the Team Head or higher is 235, increased by 11.9% vis-à-vis the previous year, and the number of women employees has been increasing year by year. In addition, we prohibit the discrimination based on the educational background. We employ the high-school graduates on the basis of the limited competition and implement the systematic job training without discrimination on promotion and salary, and treat them on the same footing with the university graduates. KORAIL's initial salary for the new recruit is KRW 28.19 million and we provide salary and welfare without discrimination based upon gender, educational background, temporary position et al.

## Protection of the Human Rights

KORAIL implements faithfully the UNGC 10 Principles, and endeavors to abide by the relevant regulations. Especially, we are actively striving for protecting the human rights, while the CEO acts as the Director of UNGC Korea Association. We will keep on striving for making KORAIL realize the people's happiness by fulfilling the social responsibility as the typical public enterprise of the Republic of Korea.



# Risk Management

## KORAIL SUSTAINABILITY OVERVIEW

### Company-wide Risk Management System

KORAIL strives for preventing the risk factors proactively through the company-wide risk management to management/financial risk, disaster risk, and communication risk. For establishing the efficient response system, we designate and operate the exclusive department by type. We consolidated the risk management work of disaster area carried forward by the Safety Innovation Headquarters, the Wide-area Railroad Headquarters and the Civil Engineering Division to be fit for the characteristic of each department into the Safety Innovation Headquarters, thereby establishing the reasonable operation system, and we also specialized the non-disaster risk, such as business risk, by each exclusive department for reinforcing the power of execution. In addition, in order to manage the investment efficiently and eliminate various risk factors, we operate various committees, such as the Financial Risk Management Committee, the Investment-Project Deliberation Committee, the Overseas Project Risk Management Committee, the Railroad Safety Deliberation Committee et al, for strengthening the safety for the railroad operation.

#### The Exclusive Department by the Risk Type

##### Business risk



##### Investment risk

Office of Planning & Coordination (Management & Planning Department)



##### Financial risk

Office of Financial Management (Treasury & Cost Management Department)



##### Information security

Office of Planning and Coordination (Information Planning Department)



##### Communication risk

Office of Public Relations (Press PR Department)

##### Disaster crisis



##### Natural disaster

Civil Engineering Division (Civil Engineering Facilities Department)



##### Human disaster

Safety Headquarters (Safety Innovation Management Department)



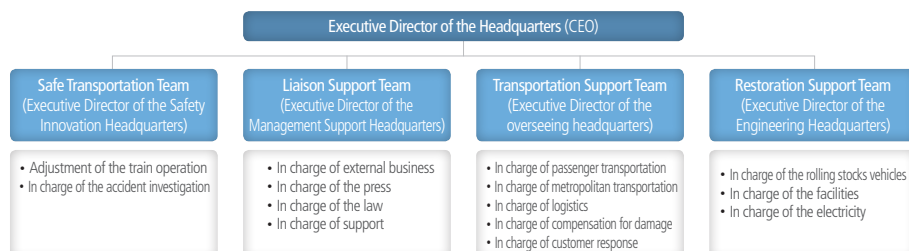
##### Railroad terror

Safety Innovation Headquarters (Emergency Planning Department)

#### Business/Financial Risk Management System

| Risk           | Object of control | System-regulation  | Management system   |
|----------------|-------------------|--|---|
| Financial risk | Market risk       | <ul style="list-style-type: none"> <li>Financial risk management regulation</li> <li>Internal accounting management regulation</li> <li>Crisis response manual</li> </ul>                    | <ul style="list-style-type: none"> <li>Business Information System (BIS)</li> <li>All-company resource management system (KOVIS)</li> <li>Financial risk management system (FRMS)</li> <li>Internal accounting system (ICAN)</li> </ul> |
|                | Liquidity risk    |  |   |
|                | Investment risk   | <ul style="list-style-type: none"> <li>Financial Risk Management Committee</li> <li>Overseas Project Risk Management Committee</li> <li>Investment-Project Deliberation Committee</li> </ul> |   |
| Business risk  | Business risk     | <ul style="list-style-type: none"> <li>Railroad Safety Deliberation Committee</li> <li>Emergency Confrontation Manual</li> </ul>   | <ul style="list-style-type: none"> <li>Safety management system</li> </ul>  |

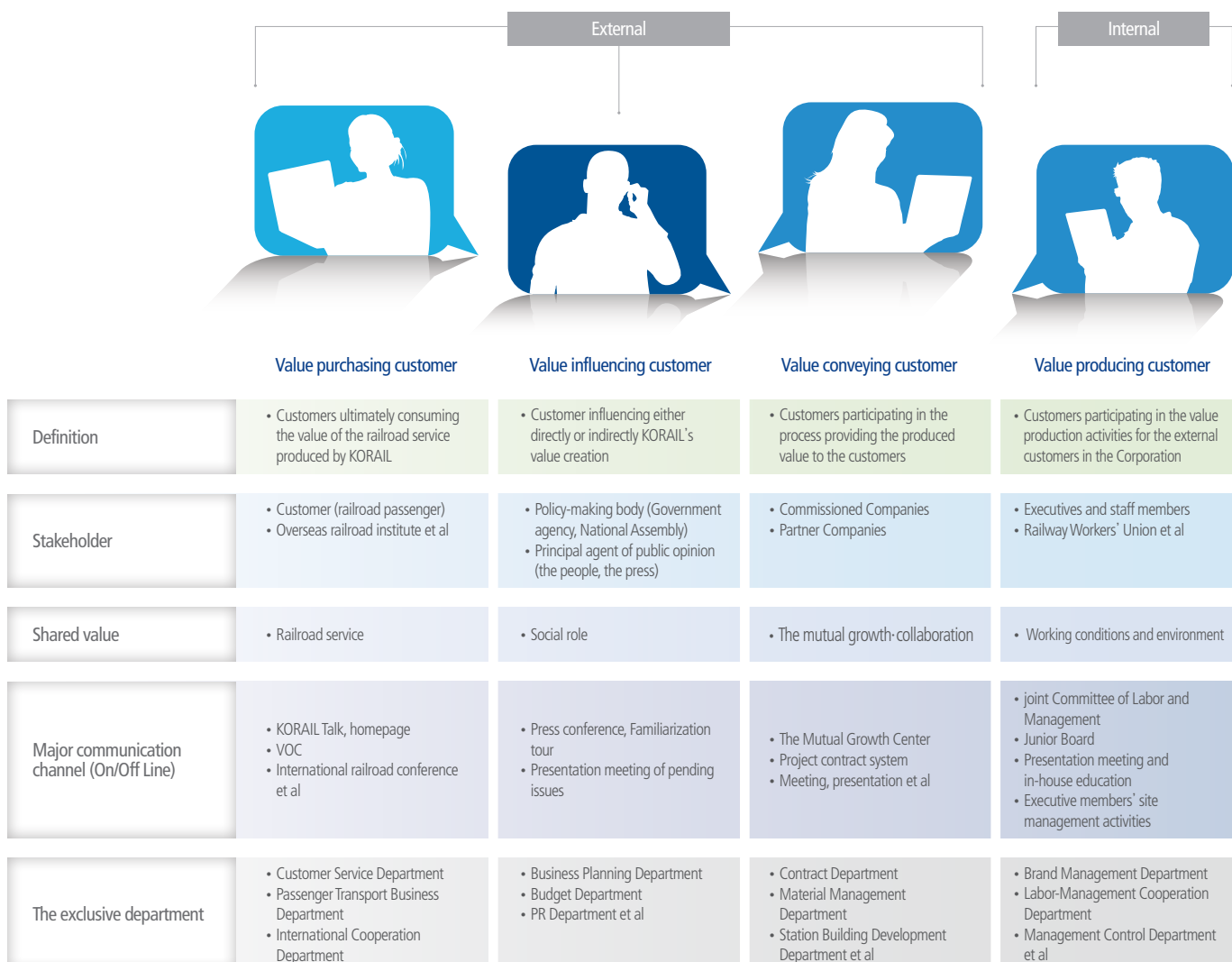
#### Emergency Measure Organization When Disaster Crisis Occurs



### Communication with the Stakeholders

As the uncertainty of the external environment surrounding the corporation is heightened and the requirement of the social responsibility increases, it is important to seek new growth opportunities reflecting various stakeholders' opinions and to manage the risk in advance. Depending on the value flow, KORAIL classifies the stakeholders into value purchasing customer, value influencing customer, value conveying customer, and value producing customer, and listen intently to the voices of the stakeholders. Understanding that communication with the stakeholders through diverse communication channels is the core of sustainable growth and development, KORAIL will realize the people's happiness through the railroad by reflecting diverse opinions of internal and external entities harmoniously.

#### Communication System by Stakeholder



## Communication Activities by Each Stakeholder and Results

| Stakeholder                | Core issues  | Response strategy  |
|----------------------------|--|--|
| Value purchasing customer  | <ul style="list-style-type: none"> <li>Safety has been magnified as the social issue after the disaster of Sewolho Ferry</li> <li>Increased interests and demands on the railway operation system, such as conflict on the sections of KTX when Honam High-speed Railroad was opened</li> <li>Increased interest in the continental railroad, such as the Silk Road Express et al</li> </ul> | <b>Customized service for the customers</b> <ul style="list-style-type: none"> <li>Expansion of customers' participation in safety and service</li> <li>Reinforcement of response to the repeated VOC</li> <li>Adjustment of the train operation system considering customers' opinions</li> </ul>     |
| Value influencing customer | <ul style="list-style-type: none"> <li>Securing the publicness of the railroad et al being magnified as the social issue according to promotion of the railroad industry development plan</li> <li>Providing the information on the government-public enterprise and increasing the availability</li> </ul>  | <b>Realizing the people's happiness through the open management</b> <ul style="list-style-type: none"> <li>Acting as the mediators between the people's benefit and the Government's policy</li> <li>Realizing the Government 3.0, including the open information</li> </ul>                           |
| Value conveying customer   | <ul style="list-style-type: none"> <li>Reinforcing the mutual growth with small and medium enterprises</li> <li>Enhancing the people's convenience by improving the irrational regulations</li> <li>Increasing burden laid on the economy of ordinary persons, such as increase of public utility charges et al</li> </ul>   | <b>Establishing the mutual growth and the fair trade order</b> <ul style="list-style-type: none"> <li>Establishing the proper trade order by improving the regulations rationally</li> <li>Reinforcing cooperation among institutes for alleviating the economic burden of ordinary persons</li> </ul> |
| Value producing customer   | <ul style="list-style-type: none"> <li>The importance of communications with the staff members has increased all the more as the task of the management normalization became the issue in 2015 in a state that the fatigue degree of the organization had been accumulated after improvement of the reckless management in 2014</li> </ul>   | <b>Establishing the corporate culture of consensus and win-win</b> <ul style="list-style-type: none"> <li>Developing the visiting communication activities by the management</li> <li>Reinforcing trust between labor and management</li> </ul>  |

Communication

Open

Cooperation

Sharing

## Major Performance

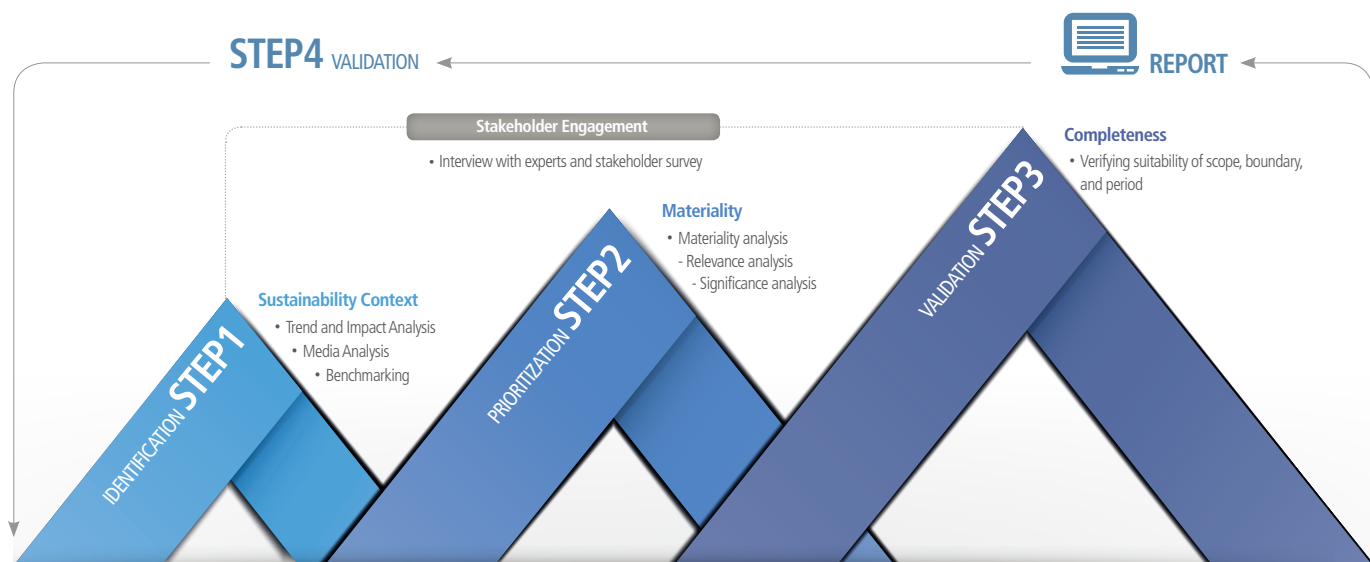
- **Expanding the on-off-line customers' participation and sharing major policies**
  - Vitalizing customers' participation, such as the train game flash mob, the railroad safety protector, operation of the cyber customer evaluation team et al
  - Expanding the policy sharing, such as 36 times of CEO's press interview, distribution of 310 news releases et al
- **Drawing and improving the core goals through the VOC analysis**
  - Through the analysis of repeated VOCs, drawing 5 core assignments for improvement (bad smell in the lavatory, air conditioning of the train, amenities in the train, interface of KORAIL Talk, improvement of Rail Plus), and improving them before everything else.
- **Performing as the arbitrator of the issue when Honam KTX was open**
  - When Honam High-speed Railroad was open, conflict occurred due to difference of opinions on the KTX service sections among the Ministry of Land, Infrastructure and Transport and 6 local governments.
  - Reflecting the stances of the agencies concerned, such as local government et al, we corrected and supplemented the train service plan (2 times)
  - Running KTX To Iksan Station via Seodaejeon Station, and minimizing the inconvenience by increasing Honam Line from 46 times to 48 times and Jeolla Line from 18 times to 20 times
- **Reinforcing the international status of Korean railroad**
  - Successfully holding the OSJD Seoul Railway Summit and the International Freight Conference (May 2015)
  - Forming the consensus and increasing understanding on the advancement to the continental railroad by operating the Eurasian Friendship Express (July ~ August, 2015)
- **Realizing the Government 3.0, such as opening of the train service information et al**
  - Increasing the people's use of the railroad information by providing the real-time service information (operating section, delay time et al)
  - Providing the mobile-customized railroad service in association with major portals (NAVER, Daum Kakao) (service information on the metropolitan subway et al)
- **Settling the Logistics Responsibility Divisional System for soft landing of the Railroad Industry Development Plan**
  - Considering the controversy over privatization et al, introducing the Logistics Responsibility Divisional System through continuous discussion with the Government and the National Assembly
  - Drawing the national policy for securing the competitiveness of logistics, such as "Act on Fostering and Supporting the Railroad Logistics"
- **Reinforcing the communication system for enhancing the people's understanding of major challenges**
  - Reinforcing the cooperation with the press, such as 6 times of explanation by visiting the press, 271 times of meeting and coverage supporting
- **Accomplishing the normalization of management by forming the social consensus on the disposal of the Airport Railroad**
- **Supporting the balanced regional development by establishing the railroad tourism belt connected to the regional tourism resources**
  - Buncheon Station (Santa Claus Village) - Bonghwa-gun, Deongyang Station (Recollection Village) - Boseong-gun, Dorasan Station (Reunification Platform) - Paju-si et al.
  - Developing the communication with the people through culture, such as 'the station having culture' (50 times), KORAIL Symphony Orchestra et al
- **Protecting the rights of the small and medium enterprises (SME's) through improvement of the system et al by directly communicating with SME's**
  - Discovering and reflecting difficulties and suggestions through meetings with the affiliates (8 times) and purchase consultation (6 times) et al
- **Establishing the proper transaction order by rationally improving the regulations**
  - Reinforcing restriction of bidding participation of the unrighteous entities disturbing the market order, such as delivery of forgeries et al (10 items)
  - Realizing the wage of the service contractor's employees when designing the cleaning service of the railroad vehicles
- **Newly establishing the electric charge discount system by persuading the relevant institute (annually saving KRW 9.9 billion)**
  - Reinforcing the consensus by explaining to the relevant institute for restricting the increase of the sales cost et al
  - Newly establishing the forming of consensus for the publicness of the railroad and the discount of the railroad electric charge by 2.5% (Korea Electric Power Corporation)
- **Sharing and diffusing the vision and the core value**
  - Forming the consensus on the core value and the management issues through the site management activities centered on the board of directors
  - Newly creating the on-off line education course for reinforcing the consensus of the management value (Totally 10,235 persons took the collective education course and the cyber course is operated.)
- **Enhancing the employee satisfaction by reinforcing the two-way communication activities**
  - All the employees sharing various conferences and the head of the department using the SNS
  - Employees communicating with each other regularly
  - Operation of 'KORAIL Plaza' system, which is the two-way on-line communication channel between the employee's family and the corporation
  - Expanding the events inviting the employees' families, such as 'the Family Consensus with CEO'
- **The management's visiting communication activities for reinforcing the well-ordering character of the organization**
  - The executive members of the 2nd grade or higher developing the site communication activities through giving up the holidays (1,339 times, and 61,203 persons communicated)
- **Settling the labor-management culture based on the trust**
  - Implementing the extensive communications, such as composing the joint labor-management committee, holding the workshops and panel discussion et al
  - Reinforcing the consensus for the major challenges through faithful and authentic labor negotiations

## KORAIL SUSTAINABILITY OVERVIEW

# Key issues of the sustainability management

### Significance Analysis Process

In order to draw the material issues of the sustainability management, KORAIL has implemented the internal and external environmental analysis based on the sustainability context, materiality, completeness principle and stakeholder engagement suggested by GRI which the international reporting standard.



## STEP1 Identification of Special Issues

### Trend and Impact Analysis

Regarding special issues related to the sustainability management, we have implemented the survey in a dimension of trend/impact/internal competency targeting the executives and staff members, thereby drawing issues related to KORAIL.

### Media Analysis

In order to catch the external recognition objectively for the special issues of the KORAIL's sustainability management, we have drawn the relevant issues by analyzing the articles from January to December 2015.

### Benchmarking

On the basis of the sustainability report of the enterprise carrying forward the sustainable management according to the value creation flow. By organizing the internal and external experts who can represent the relevant group as the interviewees, we inspected the requirements and share value of the stakeholders more closely and then reflected them in the deduction of the core issues.

### Expert Interview

We have proceeded with the expert interviews on April 2016 targeting KORAIL's stakeholder groups defined according to the value creation flow. By organizing the internal and external experts who can represent the relevant group as the interviewees, we inspected the requirements and share value of the stakeholders more closely and then reflected them in the deduction of the core issues.

### Stakeholders survey

By considering KORAIL's legal-financial-operational responsibility and influence to the management, we implemented the survey for 10 days from April 18, 2016 targeting the major stakeholders, such as the executives and staff members, customers, affiliates, Government and regional society et al and drew KORAIL's sustainability management issues contemplated by each stakeholder, which we have reflected in the materiality analysis.

## STEP2 Prioritization

### Result of the materiality analysis

Out of 44 relevance issues drawn through the trend & impact analysis, media analysis, benchmarking and stakeholders' engagement, we have drawn 25 issues (15 trend issues and 10 impact issues) of which the average materiality is 4.14 or higher as the special issues. On the basis of drawn 25 issues, KORAIL has reported the activities and performance of the sustainability management through 7 promises with the stakeholders.

## STEP3 Validation

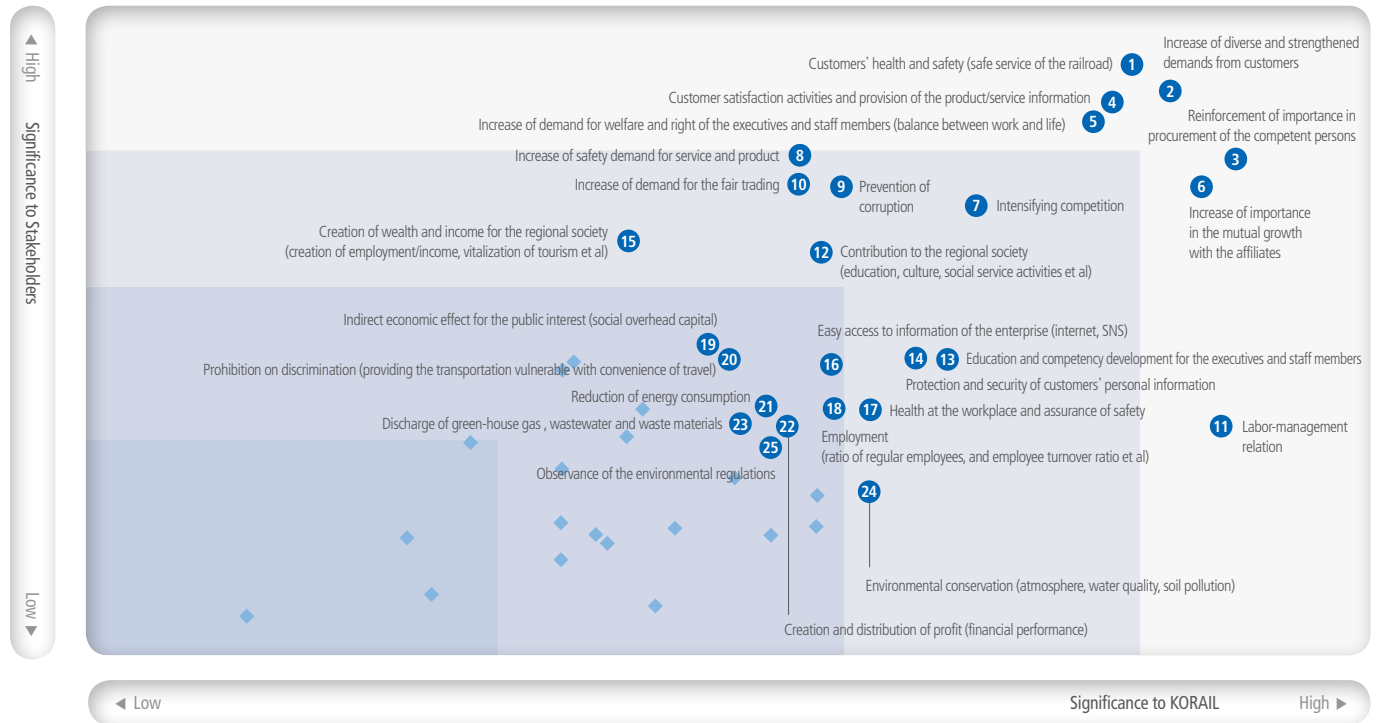
### Validation of the internal stakeholders

We have proceeded with the briefing session aiming at publicizing the analysis process and the result for grasping the material aspect of KORAIL's sustainability management and discussing the core issues of the sustainability management. We have completed examination for the suitability of reporting scope, boundary and period through frequent meeting with the internal persons in charge, as well as the official briefing session.

### Validation of the external stakeholders

For the adequacy of the report making process and the data availability, such as selection of core issues, we have proceeded with the validation of the external stakeholders through the independent validation entity. In addition, we will reflect the stakeholders' feedback posterior to publication of the report when publishing the report in the future.

## Result of the Materiality Analysis



## KORAIL's 7 promises for sustainability management

| 7 Promises   | Relevant issues    | GRI aspect   | Report boundary |          |                   |                  |
|--|--------------------|--|-----------------|----------|-------------------|------------------|
|  |                    |  | Internal        | Customer | Partner companies | Regional society |
| Promise 1. We prioritize our customers' safety.                                      | 1 8                | Customers' safety and health<br>Industrial safety and health                     | ●               | ●        |                   |                  |
| Promise 2. We provide the railroad service making the people happy.                  | 2 4 14<br>16 20    | Labeling of product and service<br>Protection of customers' personal information | ●               | ●        |                   |                  |
| Promise 3. We create the workplace where all the executives and employees are happy. | 3 5 11<br>13 17 18 | Employment<br>Labor-management relation<br>Training and education                | ●               |          |                   |                  |
| Promise 4. We nurture a hope with our partners.                                      | 6 9 10             | Competition hampering act  | ●               |          | ●                 |                  |
| Promise 5. We support our neighbors' dream in the regional society.                  | 12                 | Regional society   | ●               |          |                   | ●                |
| Promise 6. We create the sustainable future value.                                   | 7 15 19 22         | Economic performance<br>Indirect economic effect<br>Energy                       | ●               |          |                   | ●                |
| Promise 7. We protect the clean environment of the earth.                            | 21 23 24 25        | Discharge<br>Wastewater and waste materials<br>Environmental compliance          | ●               |          |                   | ●                |







# The People, dreaming of the world where everyone is happy

**Promise 1.** We prioritize our customers' safety.

**Promise 2.** We provide the railroad service making the people happy.

**Promise 3.** We create the workplace where all the executives and employees are happy.





# Promise 1

We prioritize our customers' safety.



## Business & Social Context

To KORAIL, safety is the absolute value as well as the core value which cannot be traded for anything. As a minor carelessness can lead to a fatal accident in the train service, we make assurance doubly sure for the railroad safety by establishing the 24-hour response system.

## Progress

- Establishing the advanced safety system
- Enhancing the internal and external safety consciousness
- Securing the future-oriented advanced technological prowess
- Reinforcing the preemptive accident prevention and advancing the maintenance

## Future Plan

- Providing the safe railroad service tailored to the people
- Leading the safety field of domestic and international railroad industry
- Reinforcing the scientific safety management based on the advanced IT technology



## Performance

'Golden Chariot International Transport Award', the Oscars of the traffic field  
**Most Effective Transport Safety Project'**



Establishment of 2015 Emergency Preparedness  
**Selected as the Excellent institute (Prime Minister)**



2015 Safety Technology Grand Prize  
**Minister Prize of the Ministry of Public Safety and Security**



Safety operation service (defect and accident ratio)  
**1.757 cases / million km (an all-time high performance)**



Occurrence number of the human error  
**0.611 cases / million km (an all-time low)**



## Interview



**Mr. Kim Yong-won** | Safety Subcommittee member of KORAIL Management Consulting Division

Since operation of KTX, people's perception of the railroad has changed from the romantic railroad travel to the fastest, safe and advanced means of transportation. In addition, KORAIL's safety management system was been reinforced still more, accident and defect has decreased more than in the past and it is still decreasing. However, as accidents great and small which can threaten the life of people and become the social issue often take place, it is true that the people's anxiety has not been relieved perfectly. As both KORAIL and the parties have great damage in case an accident take place, management's detailed safety plan and implementation and labor's active participation and practice are required. Thus, I look forward to the happy KORAIL without any railroad accident and the world best KORAIL loved by the people.

## Safety-First Management

KORAIL regards safety as its top priority mission,

and emphasizes with CEO as the center that 'Safety is the absolute value as well as the core value which cannot be traded for anything.'

Therefore, we have established the safety system putting the people's safety first and reinforced a whole range of safety management cooperation system.

### Performance Management System on the Safety Management

|                                      |  |                                    |   |                                       |
|--------------------------------------|--|------------------------------------|---|---------------------------------------|
| <b>Purpose of establishment</b>      | <b>Contributing to development of the railroad industry and the national economy by enhancing the professionalism and efficiency of the railroad operation</b> |                                    |   |                                       |
| <b>Business goal</b>                 | <b>Safer KORAIL! The railroad making the people happy</b>  |                                    |   |                                       |
| <b>Performance target</b>            | Reducing the number of passengers' damage  | Eradicating human errors           | Reducing the vehicle breakdown              | Reducing the facility defects         |
| <b>Unit business to be evaluated</b> | Advancing the safety system  | Establishing the safety culture    | Enhancing the vehicle safety                | Enhancing the facility safety         |
| <b>Performance indicators</b>        |  |                                    |   |                                       |
| Measurement                          | Safety operation service   | Eradication of human errors        | Vehicle breakdown rate                      | Facility defect rate                  |
| Non-measurement                      | Establishing the safety management system  | Enhancing the safety consciousness | Reinforcing the quality control of vehicles | Securing the safety of the facilities |

### Advancing the Safety System

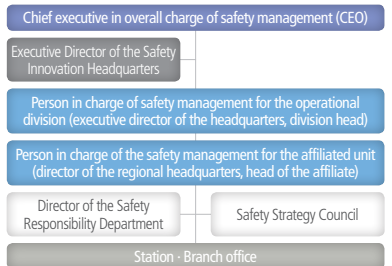
#### Operating the Safety Management System Putting the People's Safety First

KORAIL is establishing the emergency response system putting relief of the people's precious life first. We have standardized the emergency response manual so as to be able to apply at the site immediately at times of crisis, and providing for emergencies by assigning mission to each employee and implementing training repeatedly. In 2015, we implemented totally 4,697 times of emergency response trainings and carried out the expediency education to 8,291 employees. In reality, we carried out the expediency to 620 urgent patients in the stations or trains. In the situation that the overturning accident of a tower crane in the vicinity of Bupyeong Station and the conflagration accident at the Uijeongbu Station could get serious, we took steps promptly and, thus, could save lives and prevent the full-scale accident. Having achieved recognition of such endeavor, KORAIL was awarded 'the Citation of the Excellent Institute for Establishing the Emergency Preparedness (Prime Minister)' and 'Citation of the Excellent Institute for the Disaster and Safety Training of Korea (Minister of Public Safety and Security)' in 2015.

#### Response for Preventing Spread of MERS

When MERS was rampant throughout the country, rendering all the people frightened, KORAIL exerted the corporation-wide effort in order to prevent its spread. For two months from June to July, we operated the Day-and-Night Emergency Operation Facility headed by CEO and maintained the close cooperation system for 24 hours a day with the Government and related agencies. We frequently fumigated and cleaned the station buildings and vehicles, and furnished 154,199 pieces of equipment for preventing spread of MERS, including installation of thermo-vision cameras at major stations. As for the passenger suspicious of MERS, we provided them with masks, checked their body temperature, let them get off the train at the nearby station and guided them to the public health center. In addition, by issuing the white paper on response to MERS, we enhanced understanding and recognition on response of all the people to MERS.

### Organizational System of the Railroad Safety Management



### Joint Training with Related Agencies prepared for the KTX Train Accident



### First-Aid Education



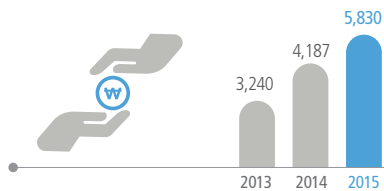
### Citizens' Participation Training prepared for the Subway Accident



### Measures for Preventing Spread of MERS



Safety Budget (Excluding the Vehicle Purchase Expense)  
(Unit : KRW100 million)



Safety Operation Service (Defect and Accident ratio)  
(Unit : occurrence number/million km)

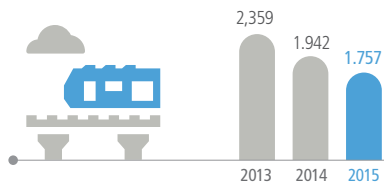
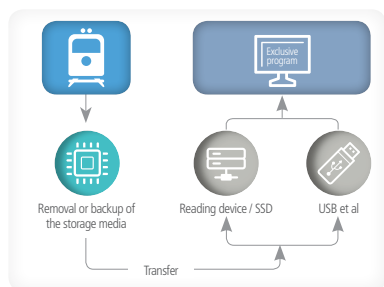
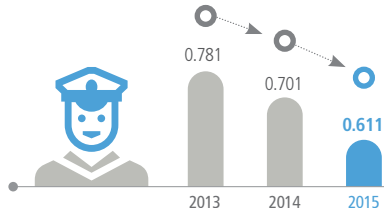


Image recorder in the Engine Locomotive



Occurrence number of the human error

(Unit : occurrence number/million km)



### Management Focused on Safety based on Cooperation and Communication

Based on CEO's strong will for the safety management, KORAIL has increased the amount invested for safety by KRW164.3 billion vis-à-vis the previous year, while pursuing the "safety by 100%". We solve the challenges on safety intensively by implementing the management meeting focused on safety regularly, and the management including CEO share the vision of the safety management and implement the communication activities, crisscrossing the entire country. We have unified the dispersed safety education departments into the Human Safety Center, and enhanced the safety consciousness of all the employees through operation of 'the day of safety inspection' and development of education program for fostering safety - ownership. We implemented the joint inspection 5 times a year by carrying forward 'the joint safety control of constructions adjacent to the railroad track', including Korea Transportation Safety Authority, Korea Rail Network Authority et al, and discovered and solved 47 improvements. In addition, we have prepared for 'the Safety Innovation Measure of the Railroad' with the Ministry of Land, Infrastructure and Transport for realizing the Railroad Safety 3.0 Era, and established the business cooperation system with the safety representative institutes of road, railroad and aviation.

### Removing the blind Spot for Safety

In order to drastically reduce the train accident - breakdown felt by the people vividly, KORAIL has prepared for the comprehensive management plan by introducing the knowhow and scientific analysis technique for the railroad operation. Especially, for the new route of Honam High-speed Railroad, we have a perfect operational system by analyzing the risk factors comprehensively at the initial stage of the opening and establishing and implementing the proactive safety approach, such as competency reinforcement of the operating personnel, reinforcement of the safety management for the new facilities, establishment of emergency preparedness, establishment of the safety investigation system et al. By operating the Operational Preparation Division with the Executive Vice President as the head and Early Stabilization Task Force, we realized the early stabilization, reducing the number of accident and defect by 96% vis-à-vis the opening of Gyeongbu High-Speed Railroad in 2004. In addition, we discovered and improved the goal of the blind spot for safety prone to neglect at the site, and reinforced the prior elimination of the risk factors from the stage of planning and design by improving the safety verification system. Especially, by verifying safety after checking the site for the high-risk projects and implementing the planning and investigation for the accident of high risk and repetitiveness, we strive for grasping the root cause and preventing recurrences. As a result, we have accomplished an all-time high performance in the safety operation service ratio (defect and accident ratio) of which the level is 38.4% of that at the time of foundation of the Corporation.

### Installing the Image-recorder in the Driver's Cabin of the Train

KORAIL has been continuously improving the safety system and facilities for preventing human errors. In 2015, we installed the image recorder in the driver's cabin of the train for the first time in Korea for identifying the cause clearly when the accident occurs and preventing recurrences. By drawing the labor-management agreement with a ceaseless effort for forming the bond of employees' sympathy, we have revised the Railroad Safety Act to make it obligatory to install the image recorder in all the railroad vehicles, and we plan to complete installation until the end of 2016.

### Preventing the Human Error through Improvement of the Safety System and Facilities

In order to prevent the human error, KORAIL has expanded the number of employees subject to prohibition of using the mobile phone while on duty and reinforced the safety-related company regulations and guideline, such as development of app blocking the smart phone. In addition, by installing the triple supplementation facility of preventing employees' careless handling in advance, protecting the system in spite of the mistake, and blocking expansion of the 2nd accident when accident occurs, we have prevented human errors caused by employees' careless handling. Owing to these efforts, the occurrence number of the human error in 2015 was 0.611/million km, reduced by 12.8% vis-à-vis the previous year.

#### Triple Supplementation Facility of Preventing the Human Error

|                        |   |
|------------------------|---|
| Preventing in advance  | Installing the suspended signal apparatus for securing the signal legibility of the signal apparatus likely to error (51 places)  |
| Defense system         | Changing the Automatic Train Stop (ATS) system for preventing the engineer's human error (340 places)   |
| Blocking the expansion | Doubling the power source equipment in the cab for emergencies (509 units) and installing the radio-controlled train protection device for constant local control chamber (60 places) |

## Settlement of the Safety Culture

### Fostering People-Participating Safety Culture

KORAIL has conducted various activities for enhancing the people's safety consciousness. By selecting 820 Railroad Safety Keepers, we have educated them on the railroad safety and cases of accident, method of using various train safety devices et al. We developed 'the safety culture campaign' in our lives at major station plazas, crosswalks et al once a month, and set up the one-company-one-school sisterhood relationship with the schools adjacent to the control station and the track and then implemented the safety education. In addition, by participating in 'the K-SAFETY EXPO 2015' visited by daily average of 4,800 persons, we introduced and promoted the railroad safety technology. As a result of these efforts, we were uniquely awarded 'the 2015 Korea Safety Technology Grand Prize (Minister of Public Safety and Security)' among public institutions.

### Imbuing the Employees' Safety Consciousness

In order to imbue the employees' safety consciousness, KORAIL has been encouraging them to report various hazards around our livelihood using 'the Safety Sinnungo (a website where citizens voice their complaints) of the Ministry of Public Safety and Security', and established 'the KORAIL Safety Sinnungo' and invested it with the role of 'the Safety Keeper' reporting the risk factors while all the employees work or use the train. In addition, we run an idea contest for enhancing the safety culture in the workplace and put such ideas into practical use. Also, by implementing the special lecture by the parties of grave accidents 6 times, we have spread the will of the accident prevention. As for employees' safety culture level, we measure quantitatively measure the 36 items out of 8 indicators including safety consciousness, effectiveness of safety norms and systems, job safety, safety activities et al, every two years and reflect them in the safety management, policy making et al. The level of the safety culture in 2015 was 85.1 points, increased by 7.7% vi-a-vis 2013.

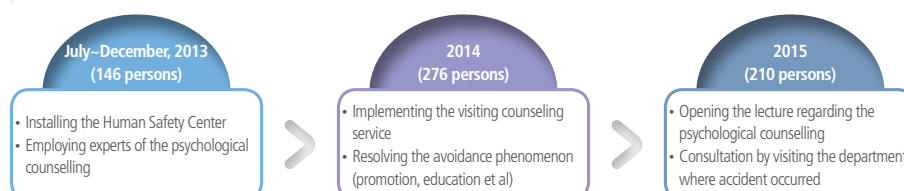
### Fostering the Safe and Healthy Workplace

KORAIL strives for fostering the safe and healthy workplace for happy life of the executives and staff members. While maintaining the certification of the Safety and Health Management System for all 22 departments, we have expanded the labor-management cooperation for diffusing and developing the railroad safety culture by holding labor-management joint workshop, organizing the labor-management joint committee et al. By forming the consultative body of industrial safety and health together in conjunction with subsidiaries, affiliates, contractors et al, we have established the safety management system and performed the customized support for the safety management, such as provision of risk information, consulting, education et al. Owing to the active effort for fostering the safe workplace, the industrial disaster victims were decreased to 69 persons in 2015 from 76 person in 2014, and we were awarded the grand prize in the Service Sector of the 2015 Excellent Cases of Safety and Health Activities.

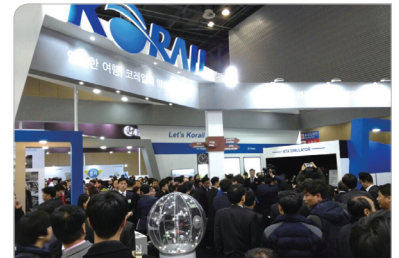
### Supporting the Systematic Psychological Counseling

KORAIL is supporting the systematic psychological counseling for relieving employees' mental stress. After installing the Human Safety Center in 2013, we have remedied employees' anxieties about job stress, home problems et al considerably through continuous consultations, and supported the employees to solve their worries caused by home problems through programs, such as 'the camp where both parents and children get together', 'Knowing our kid's career and aptitude' et al. Especially, by conducting the business agreement with 36 psychological counselling centers all over the country, we support the employees to get counselling at any time in the vicinity of their residence

#### Overview of Supporting the Psychological Counseling



#### Promoting the Safety Industry Exposition

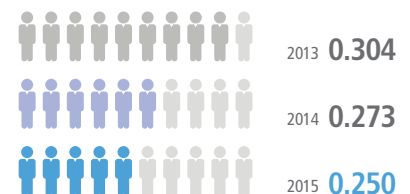


#### Safety Culture Campaign



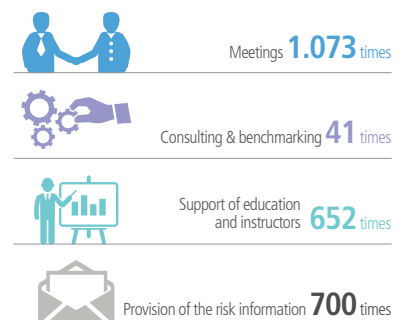
#### Realization Rate of the Safe Workplace

(Unit : %)

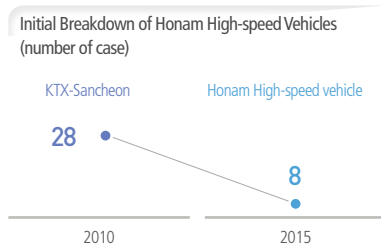
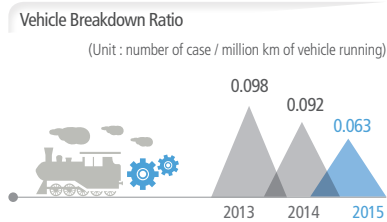


\* Number of the disaster victim / number of the employee

#### Record of the Customized Support to the Consultative Body of the Occupational Safety and Health







## Enhancing Safety of the Railroad Vehicles

### Accomplishing an All-Time low Rate of Vehicle Breakdown

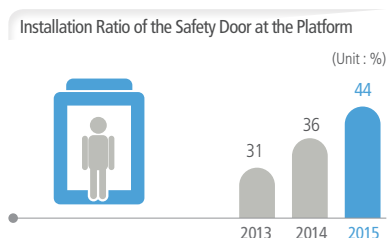
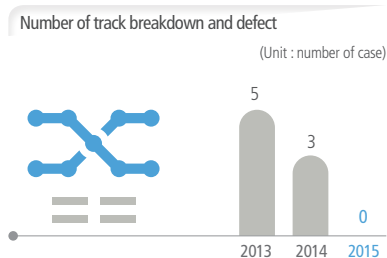
KORAIL has recorded an all-time low rate of vehicle breakdown through the fundamental preventive maintenance for enhancing the safety of the railroad vehicles. We have intensively improved the parts vulnerable to breakdown through the goal of 'TOP 10 for Prevention of Breakdown', eradicated the breakdown caused by the human error through improvement of the vehicle system, and secured the quality of the newly manufactured vehicles through the reliability verification of such vehicles. In addition, we have reinforced the management through proper-time disuse of the decrepit vehicles and analysis of the breakdown and strengthened the system to obligatorily implement the precise safety diagnosis for the 20-years-old vehicles after manufacturing and registration. Owing to these efforts, the vehicle breakdown rate in 2015 recorded an all-time-low 0.063item/million km, which is very low level of one breakdown per 15.788 million km.

### Early Stabilization of Honam High-speed Train Service

As we improved the technical faults of KTX-Sancheon and reflected them (401 items) in the Honam High-speed vehicles, only 8 initial breakdowns for the Honam High-express vehicles took place, drastically decreased compared with KTX-Sancheon (28 items) opened in 2010. In addition, we strengthen the initial response by operating 'the Task Force for the early stabilization measure of the Honam High-speed Railroad', and carried forward not to reach a deadlock for maintenance and stabilization of the Honam High-speed vehicles by expanding the technical training and workforce for the maintenance of the Honam High-speed vehicles.

### Securing Quality of the Railroad Vehicles and Enhancing the Technological Prowess

KORAIL is improving the technological problems at the manufacturing stage of the vehicles through organization and operation of 'the Vehicle Manufacturing and Management Team', and has established the Task Force for stably introducing the distributed-traction-type high-speed vehicle (EMU-250) which will be developed for the first time in Korea. In addition, through the technological monitoring for the railroad vehicles by the engineering department, we have drawn 91 items for improvement and reflected them in the design and manufacturing of new vehicles, and are striving for enhancing the technological prowess of the railroad vehicles through continuous technological education and research and development.



## Enhancing the Facility Safety

### Realizing zero of the Track Breakdown or defect

For the first time since its foundation, KORAIL has realized zero of the track breakdown or defect. We implemented the safety management measure of summer and winter period one month earlier prepared for the seasonal vulnerability of the railroad, and managed intensively the factors incurring defects, such as rail flaw caused by accumulated fatigue. By analyzing the accidents and defects for the last 10 years, we have improved the safety management for the priority control target facilities, and strengthened the safety management for the unsafe facilities beside the tracks, like operating the Safety Check Division exclusively in charge of constructions adjacent to the running track and revising the safety management manual. The breakdowns or defects have been decreasing continuously since 2007 (24 cases), and not a single breakdown or defect took place in 2015.

### Preventing the Daily-Life-Oriented Safety Accident by Strengthening the Safety Facilities

We have solidified the safety facilities of the railroad for preventing the safety accident of the passengers using the train. We are continuously installing the safety foothold and the safety door of the platform in order to prevent foot-falling and falling accidents between the platform and the train. Out of the targeted 232 stations, we have installed them at 93 stations, and plan to complete installation at all the targeted stations by 2017. In addition, we protect the transportation vulnerable by installing the stair slip-resistance facility and the handrail, and install the crash barrier in order to block any jaywalking of the track. Owing to this effort, there were 4 falling and overturning accidents in the platform in 2015, and 14 jaywalking accident beside the track, decreased by 60% and 17.6% respectively vis-à-vis the previous year.



## Establishing the Initial Response Measure Putting Lifesaving First

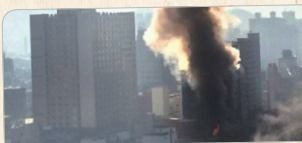
While setting up safety as the top priority and core value, KORAIL is constantly striving for establishing the absolute safety system. Especially, by adding the sensibility to safety after the disaster of Sewolho Ferry, we are establishing the initial response system putting the lifesaving within the golden time first in accordance with the mission by accident type and by person. We strived for settling the initial response system and learning it by experience by implementing the random moving exercise of the Initial Response Team totally 964 times in 2015, and are operating the Overall Crisis Control Center (Operational Situation Room) constantly for 24/7 365 days of the year in order to prepare for disasters or exceptional situation. Based on such effort, we could take active initial response measure and, as a result, minimized the casualties and damage of the train running at the near miss, such as 'the conflagration accident of the apartment near Uijeonbu Station', 'the overturning accident of the tower crane in the vicinity of Bupyeong Station' et al.

### Responding to the Conflagration of the Apartment in the Vicinity of Uijeongbu Station

On January 10, 2015, a conflagration broke out at the apartment adjacent to the track on the premise of Uijeongbu Station. KORAIL gave urgent instruction to the vicinity of the railroad for securing the safety related to the fire, and took a step for fire suppression with close cooperation with the fire station. The employees of the Emergency Response Team hurried to the scene to implement suppression of the fire at the initial stage and rescued two injured persons, actively supporting emergency aid and fire suppression.

#### Time-based Measures

|                     |  |
|---------------------|--|
| About 09:54         | The crewman notified Uijeongbu Station of fire outbreak out in the vicinity of the track   |
| About 09:55         | Operating chamber of Uijeongbu Station reported control, reported to the night-duty room of Uijeongbu Station (outbreak of fire), reported to the fire station(119), and then reported to the police station (112) |
| About 10:00         | The Emergency Response Team, including the head of Station Work Team, local controller et al, arrived at the site  |
| 10:05~15            | Notifying control of electricity and signal  |
| 10:10 ~ 45          | Implementing the initial firefighting work around the sound proof walls and observation of the train   |
| About 10:30         | Rescuing two injured persons (1 woman and 1 man) and transporting them to the hospital   |
| About 10:45         | Stopping both north and south bound train service  |
| About 11:00         | Normalizing both north and south bound train service   |
| About 11:00 ~ 12:00 | Observing the train service and removing the fire residue / Installing the temporary control line at the scene of fire   |



The scene of fire outbreak



Emergency rescue measure



Initial fire suppression of the Emergency Response Team



Cooperating the fire suppression

### Suspension of the Electric Train Service in Gyeongin line Caused by Overturning of a Tower Crane

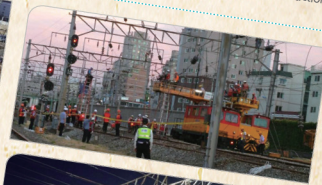
On September 16, 2015, there was an accident that a tower crane (height: 35 meters) at a new construction site of a multipurpose building about 32.3km away from Bupyeong Station fell toward Bupyeong Station, resulting in disconnection of the traction line and power failure between Songnae and Jemulpo. KORAIL promptly stopped service of the train between Bucheon and Incheon, and then implemented the emergency restoration. By taking prompt notification and train protection measure after the accident, we could avoid the fatal accident in advance which could have been connected to collision and derailment while the train was running along the rail.

#### Time-based Measures

|   |  |
|---|--|
| <b>First emergency restoration : Going on an emergency restoration of the south-bound line 1 &amp; 2 of the traction line</b> |  |
| About 14:35   | A tower crane overturning between Bupyeong Station and Baekun Station of Gyeongin Line (Between Juan SS and Bugae SP of Gyeongin Line, traction line got tripped and power supply was interrupted.)  |
| About 15:00   | 38 staffs, including the head of Electric Technology Division, arriving at the scene of accident and grasping damaged facilities   |
| About 17:08   | Taking way the tower crane and the portable crane (completing restoration of the track)  |
| About 17:10   | Starting restoration of the south-bound line 1 & 2 of the traction line  |
| About 17:55   | Completing restoration of the signal facilities (15:30 ~ 17:55)  |
| About 21:18   | Completing restoration of the south-bound line 1 & 2 of the traction line  |
| <b>Second urgent restoration : Going on an emergency restoration of the north-bound line 1 &amp; 2 of the traction line</b>   |  |
| 00:30 ~ 04:24   | Connecting trolley wire · messenger wire · feeder, newly installing one span wire under the beam, adjusting the vertical drop support of the catenary mask no.2 (catenary mask no.2) and the tension balancer, newly installing a substitute of the catenary mask, adjusting the traction line et al |



The scene of the crane overturning accident



Going on an emergency restoration





# Promise 2

We provide the railroad service making the people happy.



## Business & Social Context

KORAIL is striving for providing customers with the best customer service 24 hours a day, 7 days a week, and 365 days a year. As the railroad is closely related to the quality of people's living, KORAIL's endeavor directly enhances the people's life. We will strive for making more people enjoy happy life with further efforts.

## Progress

- Improving the customer VOC intensively and providing the customized service  
Reinforcing the service competency and fostering the pleasant travel culture
- Maintaining the world best level of punctuality
- Reinforcing management of information security and protection of customers personal information

## Future Plan

- Innovating the awareness of service and developing the specialized service
- Luxuriously renovating stations and expanding the contents of the railroad culture
- Reinforcing the national consensus activities



## Performance

Customer satisfaction rate for two consecutive years

**A grade**



Customer centered management (CCM)

**Certified for 4 consecutive years**



Punctuality rate of the train

**99.9% (world best level)**



Customer satisfaction rate

**96.4% (an all-time high level)**



Maintaining the certification of the private information management system (PIMS)

**two consecutive years for the first time among the public enterprises**



## Interview



**Lee Hye-yong** | Head of the Bucheon-si Branch of Patrol Mom (the aggregate corporation)

The railroad is Korea's typical public transit and one of the best solutions for incessantly increased traffic congestions and exhaust gases. Therefore, KORAIL should strive for attracting the people through providing easy access and pleasant impression to railroad. Compared to the past, front-line employees' service level and uniform manner have been significantly improved, but it is the time to become the best experts in their fields. In order to make the pleasant and safe railroad trusted by the people, I hope you to continuously strive for enhancement of railroad service regarding each of the customers as your family members.

## Customer Centered Management

KORAIL strives for improving the service quality and enhancing the customers' convenience for the railroad customers' safety and comfort. We are carrying forward the customer centered management activities in order to provide the glad and pleasant travel service, and supporting anyone to use the railroad conveniently through considering the public service. In addition, we are doing our best for development of the products reflecting customers' valuable opinions and improvement of service.

### Highlighting the customer satisfaction service

#### Providing service tailored to customers

KORAIL provides the public bargains service reflecting the people's needs for the customer satisfaction. By gathering people's opinions through 'the Contest of Idea' and then developing the customized bargains, such as 'KTX comfortable to Mom', 'Way to go, Youth', 'Youth Dream', 'Railro Young Pass' et al, we have eased the people's burden and encouraged various customers to use the railroad. In addition, by providing the discount service to the disadvantaged and the men of national merit, we have provided the discount of KRW 110 billion to 15,058 persons.

#### Customized bargains service

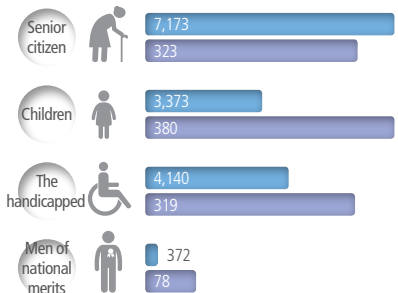
| Product name  | Purpose                                       | Target  | Benefit  | Passenger            | Discount        |
|---|---|---|--|----------------------|-----------------|
| KTX comfortable to Mom                                  | Encouraging birth                             | Pregnant women  | Providing the executive seats at the price of the standard | 8 thousand persons   | KRW 140 million |
| Multi-child happiness                                   | Encouraging birth                             | Multi-child family (5 persons)                                  | Discounting the KTX fare by 30% to the maximum             | 2 thousand persons   | KRW 30 million  |
| Way to go, Youth  | Supporting young people to find jobs          | Job seekers (25~33 years of age)                                | Discounting the KTX fare by 30% to the maximum             | 134 thousand persons | KRW 1.2 billion |
| Youth Dream   | Supporting youth's movement                   | 13~14-year-old youth  | Discounting the KTX fare by 30% to the maximum             | 300 thousand persons | KRW 3.3 billion |
| Congregate, test takers of the scholastic ability test! | Supporting test-takers' entrance examinations | Test-takers of the scholastic ability test and their companions | Discounting the KTX fare by 30% to the maximum             | 34 thousand persons  | KRW 700 million |
| Railro Young Pass                                       | Encouraging the domestic travels              | University students (extending the age from 25 to 28)           | Discounting Railro fare by 50 percent                      | 76 thousand persons  | KRW 2.3 billion |

#### Reinforcing the service competency and fostering the pleasant travel culture

KORAIL has completely reorganized the CS education in order to reinforce the service work competency. We have reinforced the customer service by training 215 professional workforce, including service 86 VOC experts, 74 service managers (employee education and control), 55 service leaders (touchpoint employees) and then assigned them to the site, and has prepared for the customer service manual through analyzing representative 13 cases based on the interviews with front-line employees at the site and the VOC system. In addition, we provide unique pleasure to the customers with surprise events. 300 employees including the CEO performed a flash mob with the customers at 6 stations, and presented gifts through surprise events, such as rock-paper-scissors game, in the train. In order to foster more pleasant travel culture through provision of high-class culture contents, we have implemented the cultural activities 30 times a week on average, totally making 1,526 times, such as orchestral music, B-boying, exhibition of illustrated poems, sharing event et al in stations. Having achieved recognition of the endeavor for continuous customer satisfaction, KORAIL attained 96.4 points in the 2015 Customer Satisfaction Rate, the highest level since the foundation of the Corporation.

#### Public discounts service

The number of people (thousand persons) **15,058**  
Discounted amount (KRW 100 million) **1,100**



#### Flash Mob

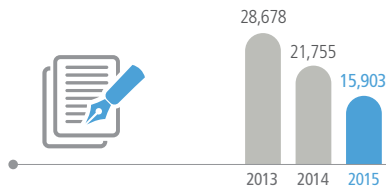


#### Cultural Event in Station





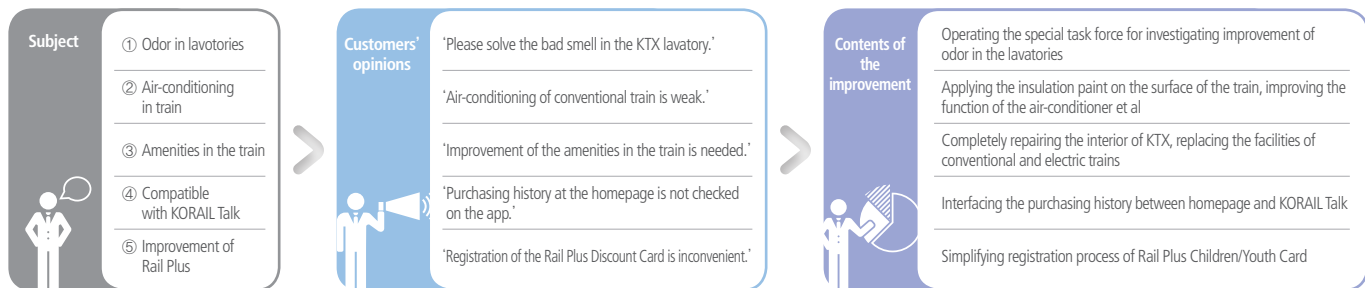
Results of the Complaint VOCs



### Solving the customers' complaints through intensive improvement of VOC

KORAIL receives the customers' complaints through diverse channels for collecting customers' opinions, such as a homepage, a customer center, visiting and letters, real time receipt of text messages, and respond them actively. By listing the repeatedly received VOCs and improvement opinions and selecting the first-priority goals through both internal and external consultations, we have concentrated on raising collective competency. In order to remove odor in lavatories which were the typical VOC item, we operated the investigation task force and reduced the garbage collection cycle from 2 days to 1 day. In order to improve the environment in the train, we completely replaced the inside facilities, such as compartment seats, aisles, lavatories et al, and modified the design, like color et al. In addition, we enhanced the customers' convenience by simplifying the registration of the Rail Plus Card for children and youth. The number of the complaint VOCs in 2015 was 15,903 items, reduced by 26.9% (5,852 items) vis-à-vis the previous year, and we strived for the fundamental improvement of the customers' complaints through the intensive improvement of the 5 VOC assignment

Intensive Improvement of the 5 VOC Assignments



Amenities for the Transportation Vulnerable



### Improving the Convenience of the Transportation Vulnerable

KORAIL is continuously striving for the convenience of train use for the transportation vulnerable. For consideration of the expectant mothers, we increased the number of seats dedicated to the expectant mother by 616 seats, and enhanced the signal legibility by changing the color of seat into a pink color. In addition, we have newly constructed and improved the nursing room in 5 major stations, and continuously installing the wheelchair lift. Moreover, we have manufactured the information equipment helping communication for the developmental disability to use train conveniently. We have prepared the necessary information equipment, such as the name of the station, the number of people, amount et al, in the form of the picture book, and use it as the auxiliary equipment in order to dialogue at the level of the developmental disabilities when issuing the passenger ticket or giving information.

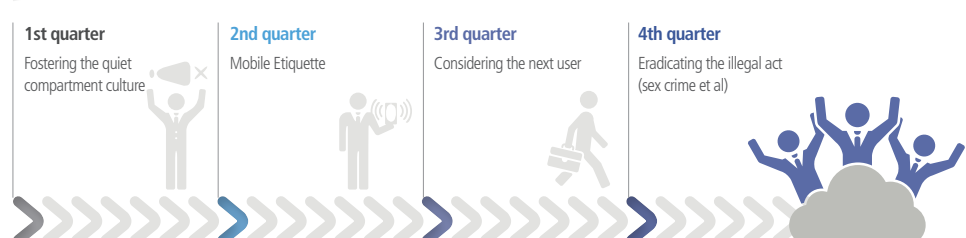
### Fostering the Proper Railroad Etiquette

KORAIL strives for establishing the proper railroad etiquette. Through establishment of the public discount certification system, blocking of the internet illegal ticket posts, joint control by the relevant agencies et al, we prevent illegal rides and unfair trade. In addition, we foster the proper railroad etiquette by implementing the all-year campaign for keeping the basic order through establishment of the quarterly themes, such as 'Fostering the quiet compartment culture', 'etiquette of mobile phone use' et al.

Service manual for the Developmental Disabilities



Year-long Campaign for Keeping the Basic Order



### Maintaining the world best level of punctuality rate

KORAIL is maintaining the world best level of punctuality rate. Though it was apprehended that the punctuality could be lowered sharply in 2015 due to more than 10,000 times of services after opening new KTX lines (Honam High-speed Line and Donghae Line), we accomplished the stabilization early after opening the new lines by efforts, such as the elimination of the delay factors through pre-inspection like test runs et al, solution of the bottleneck phenomenon through overall reorganization of the train service plan, operation of the consultative body for the punctuality of the train et al. KORAIL's punctuality rate (UIC\* standard) in 2015 was 99.90%, increased by 0.02% vis-à-vis the previous year, and maintains the world best level higher than that of Spain, the 2nd best ranker, by 1.1% in the comparison by state. As for the conventional train of which the punctuality is comparatively lower than that of KTX, we accomplished the punctuality of 99.65% by intensively managing the 3 delay factors, such as the bottleneck phenomenon of the specific section, delay in getting on and off, and breakdown of the vehicle.

\* UIC(International Union of Railways) : the International Union of Railway established in 1922

### Improvement of the Transfer Service

In order to improve customers' convenience for transfer, we have built on 42 connecting traffic facilities centered on the stations. For expanding the mass transit connection centered on the railroad, we established 2 transfer centers and 7 traffic squares directly connected from the station to other transportation modes, such as bus, taxi et al. In addition, for diffusion of the eco-friendly travel culture combining the railroad and the bicycle, we have improved the bicycle parking facilities in Daegu Station and Gwangju Station, totally operating 18 bicycle parking lots. Furthermore, in order to enhance the car-driving customers' accessibility to the railroad, we have newly constructed 17 parking lots of both new and existing lines, and expanded the parking space. Besides, we have continuously endeavored to enhance the transfer convenience of the train passengers through construction of transfer passageways and exits, installation of the directional signs of the external connection traffic et al.

### Enhancement of the Customers' Convenience based on the Big Data

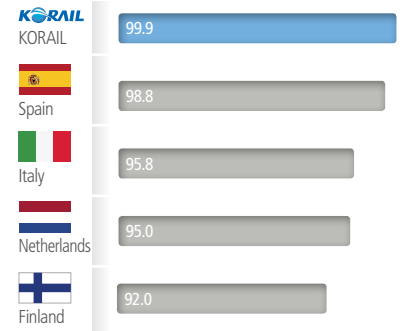
KORAIL is striving for enhancing the customers' convenience by strengthening the customized marketing based on the railroad statistics and the big data technology accumulated for more than 10 years. By introducing 'the First-class Seat Upgrade Service' and 'KTX Bargain Exclusively for Youth' through data-mining of the members' information, such as members' age, usage patterns et al, we have provided the relevant service to 312,000 customers. In addition, by deploying temporary trains or connecting passenger coaches additionally after anticipating the visiting places of 'Railro', the free travel pass product, users through analysis of the surfing trend of the internet portal site, we have minimized the inconvenience caused by the increased congestion in the train.

### Reinforcement of Foreigners' Travelling Convenience

In response to the trend that the inflow of foreign visitors is continuously expanding, we are making various efforts in order to reinforce the access convenience to KORAIL. In order that the passengers may acquire information and buy the tickets by accessing the homepage easily at any place, we have improved the buying procedure and the reserving function of the homepage and reinforced the guidance information. And, in order that foreigners may not feel inconvenient when using the train, we made effort of writing the history guide sign and the route map of the electric train in three languages (English, Chinese and Japanese) and producing the leaflet exclusively for foreigners. In addition, we reinforced the foreigners' travel convenience, such as expanding the using range, partnership discount benefit et al of KORAIL PASS\*, the travel pass exclusively for foreigners, and drastically increasing the overseas distribution channels, thereby obtaining the desired result of increasing the number of users by 6.3% vis-a-vis the year 2014.

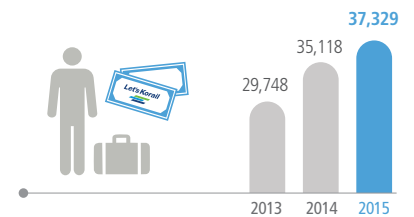
\* KORAIL PASS : travel pass exclusively for foreigners, unlimitedly using KORAIL's trains during the designated period

Punctuality of the High-speed Railroad by Country (%)



\* UIC standard: Less than 15 minutes, arrivals at destination

KORAIL PASS users (foreigners) (Unit : persons)



### Reinforcing Foreigners' Access Convenience to KORAIL

|                                      | Content of improvements  |
|--------------------------------------|--|
| KORAIL homepage in foreign languages | <ul style="list-style-type: none"> <li>Adding the function of reserving the 5 Tourism Belt Trains</li> <li>Capable of printing the output directly after settlement at the homepage</li> <li>Access guide of the tourism trains and conventional trains</li> </ul> |
| KORAIL PASS                          | <ul style="list-style-type: none"> <li>Expanding the use to the 5 Tourism Belt Trains</li> <li>Establishing 612 distributors in 31 countries</li> <li>Concluding more than 50 partnership discount agreement, such as accommodations, restaurant et al</li> </ul>  |

## Enhancing the Customers' Convenience through Improvement of the IT Technological Prowess

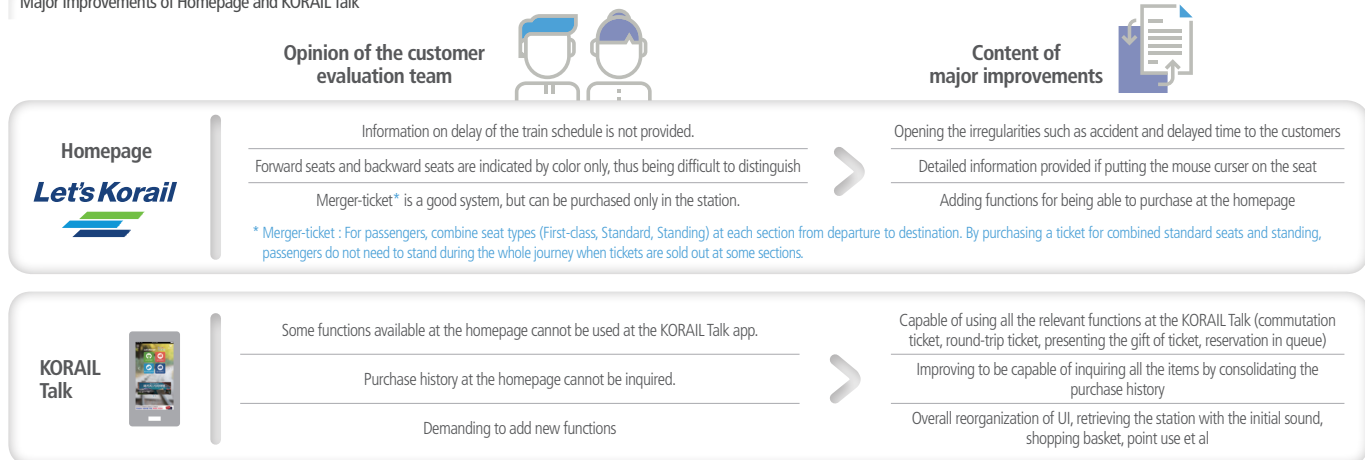
Certification of the Web Access Quality



### Improving the Buying Convenience of the Tickets through Listening to the People's Opinions

KORAIL is securing the competitive advantage vis-à-vis other means of transportation through enhancement of customers' on-line accessibility and settlement convenience. We have collected the improvement opinions for the use of homepage and KORAIL Talk app by selecting 200 persons of the customer evaluation team and reflected such opinions in the improvement of the user UI through the open exhibition of idea and the interviews with users. We have increased the convenience of mobile use by expanding functions, such as presenting the gift of ticket, reservation in queue, use of point et al, through introduction of KORAIL Talk 4.0. In addition, we have introduced the mobile simple payment service through the partnership with Daum Kakao and Samsung and expanded the transfer convenience between the bus and the railroad by providing the real time service information. Also, we are providing the mobile customized railroad service, such as the service information of the metropolitan subway, structures in the station, boarding position et al, through partnership with major portals. Due to such endeavor, the system-related customers' complaints have been reduced drastically, and KORAIL's homepage has attained 'the Web Accessibility Quality Certification Mark' from the Ministry of Science, ICT and Future Planning.

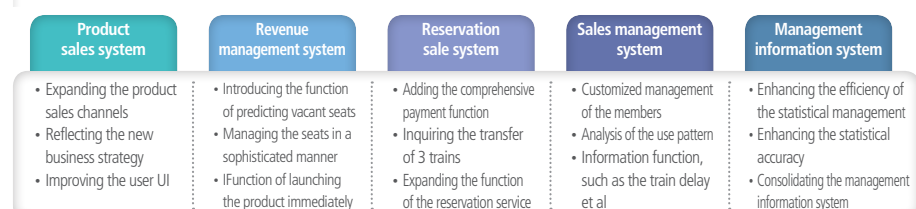
Major Improvements of Homepage and KORAIL Talk



### Establishing 'the Next-generation Passenger Business System' convenient to customers, employees and affiliates

In order to enhance the responsiveness to rapidly changing business environment, KORAIL has reorganized all at once the 5 business systems of product sales system, revenue management system, reservation sale system, sales management system and management information system. For customers' convenience, we added the new payment method, such as mobile payment et al, to the product sales system and made the installment payment with two cards possible, and added the function of inquiring the adjacent station where transfer is possible and selling ticket. In addition, we enhanced the convenience of using the terminal of the ticket window and reinforced the function of demand forecast and statistical control, thereby improving the convenience and efficiency of the system users. Furthermore, we enhanced the operational convenience of the institute by expanding the sales channels of the tourism products and disseminating the state of emergency to all the employees through the emergency message system.

Reorganization of the 5 Business Systems





## Strengthening the Cyber Safety Management

### Establishing the Information Security Management System Connected to the National Security Policy

As the railroad is one of the national core infrastructures, KORAIL has established the information security management system connected to the national security policy in order to accomplish the highest level of the information security of the public institutes. We newly established the Cyber Security Operation Team under direct control of the Chief Information Officer (CIO), increased the workforce in charge drastically, and also newly established the Information Security Management Consulting Division composed of 9 experts from the Government, academics et al, thereby receiving consultation on the information security issues, reinforcement plan et al.

#### Top Priority Assignment to Be Carried Forward on the National Cyber Security

|  |   |  |  |
|--|---|--|--|
| Establishment of the Response System to the Cyber Crisis | Expansion of the National Security Infrastructure | Prevention from the Invasion of the National Core Facilities | Reinforcement of the User Protection and Supervision |
|--|---|--|--|

#### Objective

#### Strategic assignment

#### Promotional assignment

#### Accomplishing the 'highest information security level of the public institutes'

| Substantiating the information security management system  | Sophisticating the information security infrastructure  | Reinforcing prevention and reaction from the infringement  | Reinforcing the activities of personal information protection   |
|--|---|--|---|
| <ul style="list-style-type: none"> <li>Enacting and revising the information security regulation according to the National Information Security Guidance</li> <li>Expanding the budget for the information security organization</li> <li>Operating the Information Security Management Consulting Division</li> </ul> | <ul style="list-style-type: none"> <li>Enhancing the information protection facilities against the new-type cyber threat</li> <li>Improving the function of the document security system</li> <li>Reinforcing the diagnosis of PC weak point</li> </ul> | <ul style="list-style-type: none"> <li>Enhancing the crisis response capability against the cyber invasion</li> <li>Reinforcing the management of major infrastructures</li> <li>Blocking the hacking probability</li> </ul> | <ul style="list-style-type: none"> <li>Maintaining certification of the personal information management system (PIMS)</li> <li>Monitoring constantly the treatment of the personal information</li> <li>Enhancing awareness of the protection of the executives and staff members' information</li> </ul> |

### Strengthening the Cyber Defense Capability

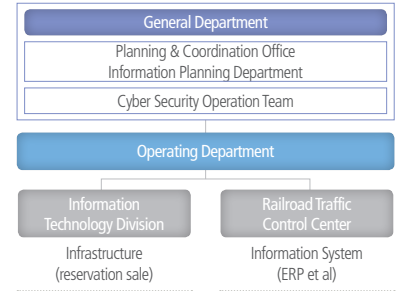
We have secured the safety of personnel security, control of the physical access, account management et al by discovering the security weak point to the national infrastructure operated by KORAIL like the centralized traffic control, train ticket reservation sale system et al. In addition, we have cut off the internet network of the business-use PC's for reinforcing the security, and blocked the risk of work data leakage by strengthening the security function of the document security system (DRM: Digital Rights Management). Especially, as a result of continuous endeavor to strengthen the cyber defense capabilities through totally 9 times of cyber simulation training, we accomplished 'the Best Grade' in 'the Simulation Training for the Cyber Crisis Responses' conducted by Ministry of Land, Infrastructure and Transport, thereby being awarded the citation from the Minister of Land, Infrastructure and Transport. In 2016, we will reinforce the information security all the more by carrying forward the physical division of the work network and the internet network.

### Enhancing the protection level of the customers' personal information

As the institute providing the railroad service used by the entire nation, KORAIL thoroughly protects the customers' personal information. In order to prevent infringement of the personal information, we have prohibited the routine collection and possession of the personal information, and secured the safety of the personal information through reorganization of the internal management system, such as designating the department in charge by the personal information treatment system, giving shape to the shredding method of the personal information et al. In addition, in the consignment work, we thoroughly implement the security education and identification of the service personnel, and manage the access record to the computerized equipment. KORAIL was acknowledged as the best level of the public enterprise group in the diagnosis and evaluation of the personal information management level conducted by the Ministry of Government Administration and Home Affairs, getting the score of 94.07 point, and maintains the PIMS\* Certification for the two consecutive years for the first time as the public enterprise.

\* PIMS(Personal Information Management System) Certification : Certification of the authorized professional organization for the safe management and systematic maintenance of the personal information

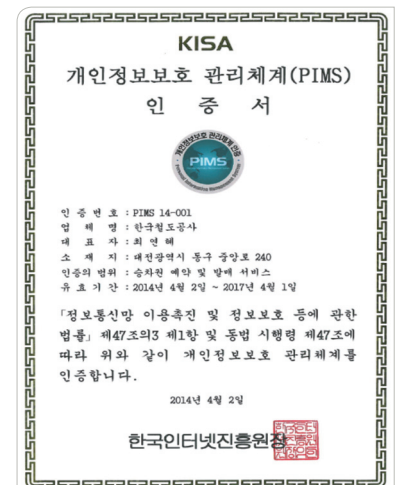
#### Organizational System Chart of the Information Security



#### Triple security controls by National Intelligence Service, Ministry of Land, Infrastructure and Transport, and KORAIL



#### PIMS Certificate



# Promise 3

We create the workplace where all the executives and employees are happy.



## Business & Social Context

The present and future of KORAIL depend on its 27,000 executives and staff members.

Based on the thought of 'Great people, great company' we respect the value of each of the executives and staff members, and spare no investment and compensation for the executives and staff members to improve their quality of life through happy work life.

## Progress

- Diffusing the open employment culture centered on the job performance
- Expanding recruitment of high-school graduates and career-break women
- Securing the customized competent persons transcending the qualification
- Fostering the culture balancing between work and home
- Establishing the win-win corporate culture between labor and management

## Future Plan

- Maintaining fair personnel system centered on the job skills
- Enhancing the balance between work and life by expanding the family-friendly management
- Reinforcing the site communication and the policy consensus forming



## Performance

Creating more jobs for youth than any other public institutes

Selecting recruitment-type interns - Recruiting 80% of interns as the regular staffs



Being certified as the family-friendly enterprise

For 6 consecutive years



Personnel used for the flexible work arrangements

2,259 persons



Abolishing the Seniority-based Promotional System



Introducing the Work Sharing Program



## Interview



**Kim Yeong-hun** | Chairman of Korean Railway Workers' Union

As the representative public enterprise of the Republic of Korea where 27,000 executives and staff members work, KORAIL has a great ripple effect on the society, and Corporation's fulfilment of the concomitant social responsibility is directly linked to the people's happiness. In the nature of the business that people are the biggest asset, as fostering the working condition for the executives and staff members to feel happy and work stably is the important issue directly linked to the railroad safety and the customer service quality, the Corporation should continuously strive for stabilizing the employment, improving the labor conditions and enhancing the personal competency for the members of KORAIL. When all the members can work proudly at the stable atmosphere of the organization, KORAIL will be able to accomplish the sustainable management performance and realize the vision of the people's happiness from the long-term point of view.

## Realizing the happy workplace

KORAIL strives for job creation and prohibits discrimination at all the fields related to personnel matters from recruit to promotion, welfare et al.

In addition, in order that the employees can feel stable at both work and home, we improve the system and support diverse programs.

Especially, by establishing the labor-management relation based on trust and cooperation through expansion of the communication channel with hands-on workers, we diffuse the win-win organizational culture.

### Expanding the socially fair employment

#### Fair and transparent recruitment

As the most significant public enterprise in the university students' job preference, KORAIL contributes to solution of the youth unemployment through continuous expansion of employment. In 2015, by introducing the new recruitment process on the basis of the National Competency Standards (NCS), we proceeded with the transparent and fair recruitment based on the job skills by the series of class for employment. In 2016, we will reinforce the NCS-based recruiting system all the more by shaping up the performance evaluation criteria by selection phase, such as newly introducing the examination of physical strength system reflecting the feature of the railroad industry site

#### Socially Balanced Recruitment

KORAIL has expanded the socially balanced recruitment through consideration for the underprivileged. By discovering various jobs suitable for the flextime and employing 32 flextime employees including 28 career-break women, we have completely implemented the policy recommended by the Government. In addition, we expanded recruitment of the competent persons from the non-metropolitan area through the preferential treatment of long distance area (Gangwon-do and Chungcheongbuk-do) in the selection process, and employed 84 high school graduates in 2015 on the basis of the limited competition in the engineering field. In addition, we continuously implemented the legally obligatory quota with non-discriminatory employment of the disabled, and received credit for having expanded employment of the job seekers, thereby getting awarded the appreciation plaque form the Ministry of Patriots and Veterans Affairs.

Major Results of the Open Employment

| Year                                       |   | 2013        | 2014        | 2015         |
|--|---|-------------|-------------|--------------|
| Prescribed number                          |   | 27,981      | 27,981      | 27,981       |
| Present number                             |   | 27,930      | 27,461      | 26,498       |
| Regular retirement / voluntary resignation |   | 748/83      | 710/102     | 757/83       |
| New recruitment of the permanent employees | Women   | 34          | 149         | 55           |
|  | The disabled                                  | 5           | 6           | 2            |
|  | Regional competent persons (non-metropolitan) | 97          | 230         | 189          |
|  | High-school graduates                         | 42          | 66          | 84           |
|  | Specialized high school                       | 3           | 12          | 17           |
|  | Natural sciences and engineering              | 59          | 205         | 207          |
|  | Recipient of the job-seeking support          | 18          | 45          | 23           |
|  | Total   | 162         | 500         | 319          |
| Recruitment of the temporary worker        | Intern  | 254         | 682         | 382          |
| Out of the total present number            | Women (ratio)                                 | 2,580(9.0%) | 2,712(9.7%) | 2,747(10.0%) |
|  | Women Team Head (ratio)                       | 193(7.5%)   | 210(8.0%)   | 235(7.0%)    |
|  | The disabled (ratio)                          | 971(3.4%)   | 962(3.4%)   | 887(3.2%)    |

#### Improvement of the Recruiting Process

##### Job application and the application review process

- Reducing the weight of the school record and language test record (reducing the evaluation weight by 20%)
- Introducing the evaluation of the career data by work types

##### Written examination

- Newly establishing the evaluation of the vocational competency
- Applying the evaluation of the job performance capability
- Applying the evaluation questions of character and aptitude

##### Oral test

- Verifying the core competency
- Interviewing the candidates for the situation of job experience
- Evaluating the candidate by thematic discussions

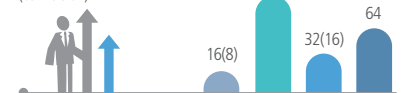
##### Selecting the interns and recruiting the permanent employees

- Implementing the comprehensive evaluation including the practical training, theory, practice et al
- Newly recruiting those with superior job skills

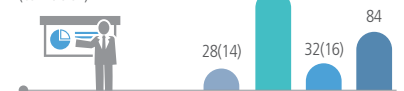
#### Overview of the Socially Balanced Recruitment

- Career-break women (persons)
- Regional competent persons (persons)
- Flextime (persons)
- High-school graduates (persons)

##### Objective of the Government (conversion)



##### Implementation performance (conversion)



##### Achievement ratio (%)





## Supporting the Employees' Competency Development

### Establishing the Human Resources Development Plan

KORAIL has established the medium-and-long-term human resources development strategy connected to the management strategy and, based on this, is striving for the systematic reinforcement of the employees' competency. Aiming at 'Training the first class persons leading the railroad era providing the people with happiness', we support the employees to grow as the experts of their assigned job at the same pace with the 4 strategic directions.

#### KORAIL Learning Model (coeducation)



##### Advance learning

Advance theory education by implementing cyber learning, self-study, preceding assignment et al



##### Main learning

Trainee-participation education, such as practices focused on the practical case



##### Performance evaluation

3-step performance evaluation by the education process course (entering course, midterm course, and final course)

#### Human Resource Development Strategy

##### Objective of the education

##### Training the world best's competent employees leading the railroad era of the people's happiness

##### Strategic direction

##### Strategic assignments

##### Securing the future growth engine

- Training the global competent persons
- Reinforcing the new recruits' competency

##### Establishing the absolute safety system

- Implementing the safety education focused on the practical work
- Training the core competent persons

##### Creating the creative organizational culture

- Reinforcing the sense of ownership
- Fostering the leadership for all employees

##### Improving the organizational structure innovatively

- Substantiating the job training
- Reinforcing the teaching competency

### Improving the Job Training suited to the Introduction of 'KORAIL Learning Model'

KORAIL has developed and introduced 'KORAIL Learning Model', a participatory education. We have made the new learning model, which is the participatory collective education, capable of reinforcing the employees' problem-solving capability and job competency, and diagnosing the level change of the trainees' job competency. In addition, we have prepared for the educational groundwork according to the diagnosis of the personal competency level in the job area. 'KORAIL Learning Model' won the Excellence Award in the 5th Competitive Exhibition of Education and Training conducted by the Ministry of Land, Transport and Infrastructure.

#### Contributing to the Management Performance through Continuous Training of Competent persons

##### Training the consilience-type leaders



##### Main contents

- Training of consciousness reformation for internalizing the core value
  - Special training for fostering the sense of vocation - company loyalty - sense of ownership
- Training the consilience-type leaders for improving the organizational culture
  - SE training and KTX-SERICO education for managers

##### Results of the promotion

- Settling the collective agreement without dispute for two consecutive years
  - Winding up the reckless management
  - Closing the seniority-based Promotional System, and introducing the work sharing program
- Getting awarded the 3rd Republic of Korea's Creative Economy CEO Grand Prize in 2015 following the previous year

##### Training the technology - safety experts



- Training the technical experts for securing the core technology
  - Completing system of the technology education, and education of the advanced engineers and master mechanics
- Substantiating the safety education for realizing the absolute safety
  - Human error prevention education, and safety education focused on the cases

- Securing the top-level safety
  - Safety operation service ratio (defect and accident ratio) reduced by 9.5%
  - Human error reduced by 24.4%
- Getting awarded the 'Most Effective Transport Safety Project' at the 'Golden Chariot International Transport Award', the Oscars of the traffic field

##### Training business - service experts



- Specialty education for jobs of business - marketing area
  - Training the experts of the strategic yield management system(YMS) and product development
- Training the service experts for enhancing the customer service quality
  - Customized education by CS competence stage, VOC expert course et al

- Accomplishing the operations surplus for two consecutive years
  - Operating profits (2014: KRW 103.4 billion, 2015: KRW 114.4 billion)
- Being awarded the National Brand Grand Prize for five consecutive years
- Accomplishing the A Grade of the Customer Satisfaction Rate for two consecutive years

##### Training the competent persons for the future



- Training the reserve workforce of the overseas projects for carrying forward the new business
  - Training the overseas railroad experts and competent persons with ability of foreign languages
- Supporting employees' continuous self-development
  - Implementing the commissioned education of the master's and doctor's courses specialized to the railroad industry

- Enhancing the status of KORAIL at the international society
  - Holding successfully the OSJD Seoul Railway Summit
- The public enterprise most favored by the job seekers
  - 2nd most favored by men, and most favored by women (Job Korea: August, 2015)

### Enhancing the quality of education through active educational support

In order to reinforce the employees' competency of the national level workplaces, KORAIL operates the main office of the Human Resource Development Center and 5 branch offices by nation-wide foothold. We continuously improve the obsolete educational facilities and promote to additionally construct new educational facilities of the branch offices. We are operating the highest-level specialized educational institution in the railroad industry field through participation in the domestic and foreign conferences, commissioned education of the teaching technique, reinforcement of teaching specialty through implementation of teaching evaluation, effort to discover excellent teaching personnel through the contest for famous lecturers et al. The average educational budget per person in 2015 was KRW 317 thousand, increased by KRW 97 thousand (44.1%) vis-à-vis the previous year, and the educational satisfaction degree has been enhanced for three consecutive years through improvement of the training course and the environment.

#### Educational Budget Per Employee (Unit : KRW 1,000)



## Balance between Work and Life

### Vitalizing the Flexible Work Arrangements

KORAIL is striving for enhancing the quality of the employees' life by solving the problem of long-time work. Despite of the limitation of the working system in which shift or alternation workers accompanied by 24-hour work or night shift take up about 63% of the total employees, as a result of active endeavor to vitalize the flexible work, 793 employees' work was changed into the part time work and 1,466 employees used the differentiation of office attending and closing hours.

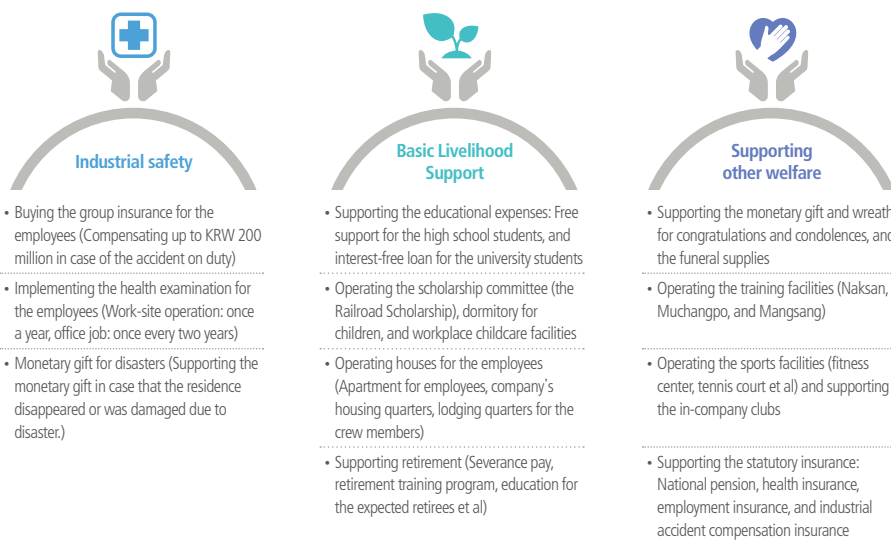
### Fostering the Culture Balancing between Work and Home

By improving the conditions for using the annual leave through advanced grant and deferral system of the annual leave and actively persuading the senior managers of the 2nd grade or higher to use the annual leave, we have encouraged all the employees to use the annual leave. We support KRW 1 million of the preferential support fund to the employees in case of delivering the third child for encouraging the childbirth, and have actively satisfied the Government's birth encouragement policy by continuously expanding the day care center of the workplace on a national scale, as well as fostered the work environment where the employees can devote themselves to work free from all anxieties. KORAIL provides both men and women with the parental leave. The total number of employees who used the parental leave in 2015 was 388, and especially the number of men using the leave was 93, increased by 4.5% compared with that of the previous year, showing the number has been increasing every year. In addition, we have imbued our employees with self-esteem and loyalty to the company by operating the family-friendly programs, such as Family Sympathy, Happy Movie Day, and Family Invitation Event, accompanied by the CEO. As a result, we have acquired the Family-friendly Management Certification for six consecutive years, thereby becoming the leader of the family-friendly enterprises.

### Operating the Rational Employee Welfare Package

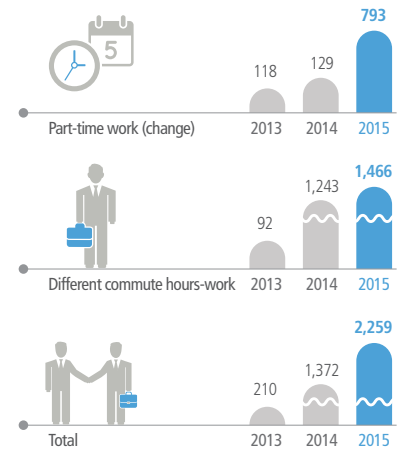
KORAIL is actively implementing the Government's normalization policy of the reckless management and, simultaneously, striving for the enhancement of the employees' welfare sentiment rates and satisfaction rate. In order to prevent employees' collapse of morale caused by limitation of the expanded operation of the employee welfare cost, we regularly grasped and reflected the employees' needs by conducting the survey of the welfare satisfaction semiannually. In addition, we have expanded partnership services between the enterprises for providing actual help to life and fostered the pleasant working environment through improvement of the decrepit working environment. We have enhanced ease-of-use of the welfare system by producing the welfare guide and establishing the welfare sympathy room et al, and the employee welfare cost per person is KRW 1,502.2 thousand, observing the guideline of the Government

#### Supporting Employees' Welfare



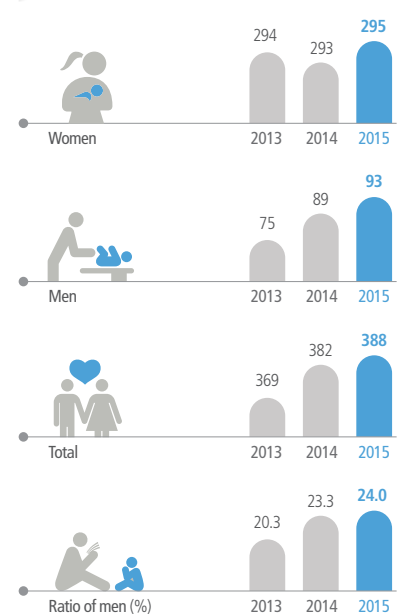
#### Overview of the Flexible Work Arrangements

(Unit : persons)

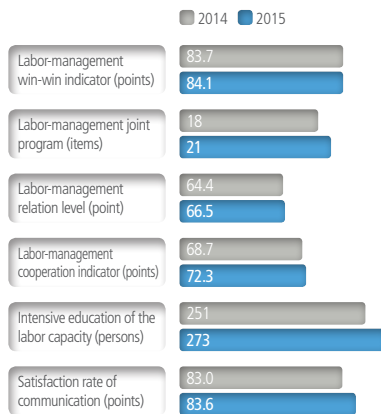


#### Overview of Using the Parental Leave

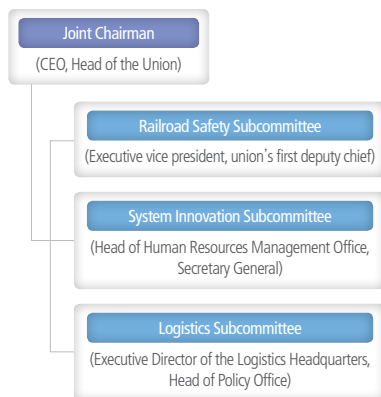
(Unit : persons)



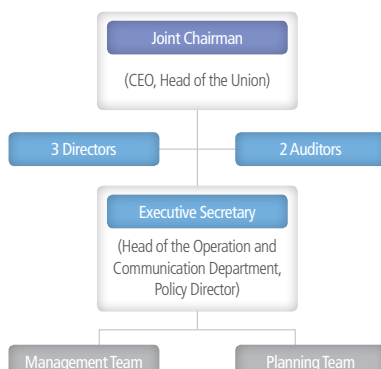
## Major performance in the labor-management relation



## Labor-Management Joint Committee



## Hope Railroad Foundation



## Labor-management Relations of Communication and Harmony

KORAIL desires to found the role model of the public enterprise labor-management relation by building the trust through the transparent communication with the labor union and employees and making the win-win labor-management relation established by both the labor and the management. We are reinforcing the communication and trust all the more through conclusion of peaceful wage bargaining and regular collective agreement and introduction of the KORAIL-type wage peak system conforming to the Government policy.

## Medium-and-Long-Term Strategic System of the Labor-Management Relation

## Performance objective

## Strategy assignments

## Implementation assignment

## Realizing the win-win labor-management relation with communication and trust

| Advancing the labor-management strategy  | Reinforcing the management capacity   | Vitalizing the labor-management communication  | Expanding the cooperation activities   | Rationalizing the collective agreement   |
|--|---|--|--|--|
| <ul style="list-style-type: none"> <li>Reestablishing the strategy system</li> <li>Improving the performance indicators</li> </ul> | <ul style="list-style-type: none"> <li>Reinforcing the site-unit teamwork</li> <li>Fostering the labor capacity by class</li> </ul> | <ul style="list-style-type: none"> <li>Establishing the KORAIL-type communication system</li> <li>Establishing the system for enhancing the labor-management relation level</li> </ul> | <ul style="list-style-type: none"> <li>Creating the management performance by concentrating ability</li> <li>Securing the trust led by the management</li> </ul> | <ul style="list-style-type: none"> <li>Revising the collective agreement infringing the management right and the authority over personnel affairs</li> <li>Implementing the Government policy</li> </ul> |

## Establishing the foundation for the labor-management cooperation

As the KORAIL's labor union is the biggest among all the public-institutes and accordingly has a huge influence on the domestic labor movement, establishing the rational and legitimate labor-management relation is very important. KORAIL is striving for the establishment of the labor-management relation observing the relevant legislation and principle and the active cooperation and communication between labor and management. In order to vitalize the labor-management communication, we have launched the Labor-Management Joint Committee which is the first standing organization for communication between labor and management in KORAIL. CEO and Head of the union become the joint chairman respectively of the Labor-Management Joint Committee, and the management and the executive of the labor union jointly fill the position of the subcommittee director in the railroad safety subcommittee, the system innovation subcommittee, and the logistics subcommittee. By holding the committee meetings totally 26 times in 2015, we resolved the conflicts in advance by discussing the core challenges between labor and management, such as enhancement of the railroad safety, system innovation et al, and the directions of management. In addition, by establishing 'the Hope Railroad Foundation' which is the first labor-management joint foundation of the public sector and performing the social contribution activities altogether, we have enhanced the labor-management relation and reinforced the foundation for realizing the social responsibility. Both CEO and the union head fulfill the position of the joint chairman of the Hope Railroad Foundation respectively, and the executive office is also operated jointly by both the labor and the management.

## Forming the bond of sympathy through vitalization of communication between labor and management

KORAIL has difficulties in communicating and sharing information rapidly due to 673 stations and 243 business places scattered all over the country and diverse patterns of duty, such as shift, alternation, alternate-day et al. In this context, we have established the two-way communication channel with the employees, reinforced the communications with the employees through the joint labor-management conference, the labor-management joint committee, various briefing sessions et al, and smoothly settled significant challenges between labor and management, such as closing of the seniority-based Promotional System, concluding the wage bargaining and collective agreements, introduction of the work sharing program et al.

## Endeavor to communicate between labor and management





## Resolving Challenges through Vitalization of the KORAIL-type Two-Track Communications between labor and management

### KORAIL-type Two-Track Communication Activities

As a large organization lying scattered all over the country, KORAIL has diverse interregional tendencies and there are difficulties of taking a long time to communicate between labor and management. However, we have overcome the difficulty of the communicative environment in significant decision making with the KORAIL-type Two-Track communications separating the union leaders from the site employees. We ceaselessly asked for negotiations with the union executive and reinforced both official and unofficial dialogues with them, such as labor-management panel discussion, labor-management representative meeting et al, and for the site employees, we formed the bond of sympathy with the employees by such efforts as announcement of CEO's letter of plea and statement of the management, face-to-face communication activities with all the employees, real-time provision of information and operation of the opinion collection center, employees' signature collecting movement, the rally calling for agreement between labor and management et al. As a result of such endeavor, we successfully elicited the union executive's acceptance of the negotiation on the seniority-based promotion and participation in the negotiation on the work sharing program.

#### Endeavor for KORAIL-type Two-Track Communication

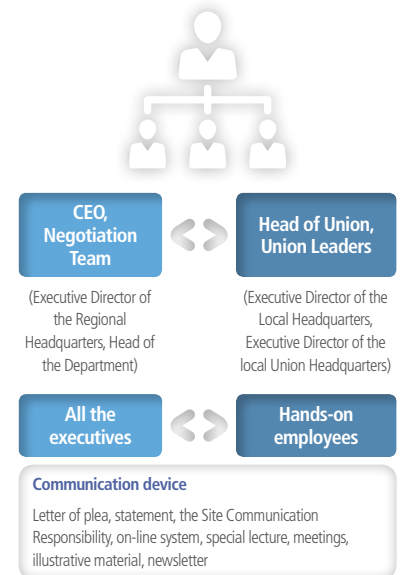
##### Union Leaders

- Calling for ceaseless negotiations to the executive (13 times)
- Reinforcing the unofficial dialogues, such as meetings of labor-management representatives (17 times)
- Holding labor-management joint panel discussions and regional labor-management panel discussions (8 times)
- The executives of the head office, such as the Executive Directors of the Regional Headquarters, talk with and persuade the Executive Directors of local union headquarters and union leaders.
- The heads of sites develop the persuasion and communication activities with the Executive Directors of local union headquarters and union leaders.
- Rally calling for agreement of the work sharing program and delivery of the signed paper to the labor union (October)

##### Hands-on Employees

- Announcing the CEO's letter of plea (45 times) and statement of the management (15 times)
- All the executives of the head office returned the holidays and weekends and developed the face-to-face communication activities with all the employees through 'the Site Communication Responsibility.' (61 thousand persons)
  - \* The responsible communication system matching 216 executives of the head office with each assigned unit
- The executives of the sites develop the man-to-man communication activities with the employees belonging to their sites (27 thousand persons)
- Providing the real-time information by on-line and operating the opinion collection center
  - Rooms for collecting the opinions on closing of the seniority-based promotion and on the wage peak system
- Implementing self-educations and meetings by sharing diverse illustrative material
  - Material for illustration and special lecture (21 items), and promotional material (Having posted 650 thousand copies of 55 items)

#### KORAIL-type Two-Track Communication Strategy



### Closing the seniority-based Promotional System

KORAIL agreed to close the seniority-based Promotional System which had been maintained for 10 years after conversion into the public corporation on May, 2015. The seniority-based Promotional System, allowing promotions of the employees automatically if only a certain period passes, incurred problems, such as hampering the productivity of the organization and lowering the individual competitiveness, as well as causing occurrence of imbalance of personnel by rank. Thus, by drawing the final agreement through active development of labor-union discussions, such as 13 times of negotiation request, 25 times of labor-management meeting and panel discussion et al, and active communications, such as face-to-face site communication activities, operation of on-line opinion collection room, conduction of survey et al, we diffused the performance culture and marked a milestone for resolving the imbalance of personnel.

### Introduction of the Work Sharing Program

Both labor and management agreed on the introduction of the wage peak system on October 2015 for creating jobs for youth and taking off for the first year of the second foundation of the Corporation. Both labor and management agreed to reduce the salary of the employees for two years prior to the regular retirement as follows: 1st grade by 100%, 2nd grade by 90%, 3rd~4th grade by 80%, and 5th grade or lower by 60%. With the saved financial resources through such reduction, we plan to create the jobs for about 2,000 youth for two years from 2016. In addition, by utilizing the employees becoming the object of the wage peak system as the personnel of technology transfer and safety, we will reinforce our competitiveness continuously.



# The World, sharing dreams and hopes

**Promise 4.** We nurture a hope with our partners.

**Promise 5.** We support our neighbors' dream in the regional society.









# Promise 4

We nurture a hope with our partners.



## Business & Social Context

The mutual growth is the way of saving Korea's economy fallen in a low growth swamp with mutual cooperation and win-win between the major firms and the small and medium enterprises (SME), and is not a choice but a must for securing the sustainable competitiveness of the enterprise in a rapidly changing global business environment. In order to perform a social role as the public enterprise, KORAIL recognizes the importance of the mutual growth and strives for serving as a foundation for Korea's growth.

## Progress

- Operating the organization exclusively in charge of the mutual growth (The Mutual Growth Center)
- Vitalizing communications for the mutual growth through various on-off line channels
- Supporting expansion of SME's business and market
- Prevention of affiliates' industrial accidents and safety cooperation

## Future Plan

- Fostering the collaborative enterprise ecosystem
- Securing the best competitiveness of the railroad industry based on the mutual growth



## Performance

Evaluating the mutual growth by Korea Commission for Corporate Partnership

**Good** (upgraded by two steps vis-à-vis the previous year)



Merit in the activities for the mutual growth between the large firm and the SME

**Citation from the Administrator of Small and Medium Business Administration**



The competitive exhibition of the multilateral performance sharing system

**The first prize**



Supporting the purchase loan of the public institutions

**Selected as the best public institution** (four consecutive years)



Purchasing ratio of the SME's products

**76.7%**



Technology transfer to SMEs

**9 cases** (KRW 1,513 million)



## Interview



**Choi Geun-deok** | Senior researcher of T 1 System

In order for KORAIL to be the leader of the technology changing rapidly all over the world not the follower, the mutual growth with its affiliates should be preceded without fail. The mutual growth is also an exit for solving Korea's social problems getting serious day by day, such as income inequality, employment instability et al. KORAIL has actively taken the initiative in establishing the public transaction orders, expanding market and supporting reinforcement of the technological prowess for SMEs. I expect KORAIL to keep on promoting continuous endeavor for technology development with its affiliates and employment stability and dominating new technologies together with the affiliates, thereby establishing a foothold for leading the world.

## Mutual Growth

KORAIL is reinforcing cooperation for securing the best competitiveness of the railroad industry together with SMEs.

By preparing the systematic foothold for fair trade and performance sharing with SMEs and practicing diverse support programs, we will continuously strive for developing collaborative enterprise ecosystem for the mutual growth and win-win.

### Establishing the Foothold of the Mutual Growth

#### Promoting System of the Mutual Growth

KORAIL is striving for fostering the fair win-win corporate culture by securing the best competitiveness of the railroad industry with SMEs and establishing a systematic foothold for collaboration for win-win. Aiming at promoting 'KORAIL for the happiness of the people in harmony with SMEs', we are carrying forward the mutual growth by selecting three strategies and seven top priority projects. Especially, in 2015, in order to enhance the power of executive for the mutual growth and reinforce all the more the support system to SMEs, we expanded the organization exclusively in charge of the mutual growth (The Mutual Growth Center), increasing the number of employees by 15 compared with year 2014 into 46.

#### Promotional System of the Mutual Growth

|                       |   |   |  |
|-----------------------|---|---|--|
| Goal of promotion     | KORAIL for the happiness of the people in harmony with SMEs   |   |  |
| Promotional strategy  | Establishing the companywide SME support system   | Reinforcing the executive power for promoting the mutual growth   | Developing the business model for mutual growth and win-win  |
| Top priority projects | <ul style="list-style-type: none"> <li>Reinforcing the competency of the promoting organization</li> <li>Reinforcing support of fair trade and management stability</li> <li>Vitalizing the communications for the mutual growth</li> </ul> | <ul style="list-style-type: none"> <li>Supporting expansion of SMEs' business and market</li> <li>Reinforcing implementation of policies recommended by the Government</li> </ul> | <ul style="list-style-type: none"> <li>Enhancing support of SMEs' technological prowess</li> <li>Settling the performance sharing system of the collaboration for win-win model</li> </ul> |

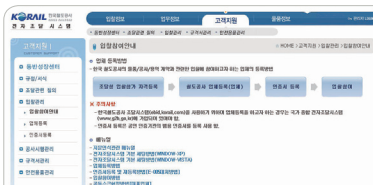
#### Promotional Organization of the Mutual Growth



## The Mutual Growth Center



## EBID System



## Visiting Purchase Consultation



## Visiting Meeting with Affiliates



## Railroad Technology Seminar



## Establishing the Fair Trading Order

KORAIL is establishing the fair trading order by improvement of system and prevention of unfair trading. We have collected SMEs' difficulties and suggestions through lively communications with SMEs, such as meetings with affiliates, purchase consultation et al, and improved 16 systems for protecting SMEs' right and enhancing fairness and transparency.

In addition, in order to strengthen the supervision of payment to the second and third affiliates, we made public the payment overview of subcontract price in real time and operated the report center for eradicating the illegal subcontract, thereby confirming payment by 100% for 99 items, and established the foothold of the fair trading by using the standard contract for all the targets of contract in 2015. Also, we reinforced the fund liquidity support of SME by expanding payments in advance, and actively supported the public purchase loan and, as a result, selected as the most excellent public institution in the filed for four consecutive years.

## Vitalizing Communications with SMEs

KORAIL is supporting the mutual growth through lively communications with SMEs by using diverse on-off line channels. We promptly collect and treat the difficulties and suggestions of SME through the communication channels, such as the Mutual Growth Center, EBID System, Anti-Corruption Center, Barmi Reporting Center, Clean-Call, Customer Information Service et al, and have expanded direct communications with SME through off-line channels, such as business agreement, trial ride event of Honam High-speed Railroad, meetings with affiliates, purchase consultation, product demonstration et al.

## Communication Channels with SME



On-line  
communication  
channels

## The Mutual Growth Center

Guidance of the mutual growth policy, SMEs' business proposal and collection of suggestions (treating 19 cases)

## EBID System

Making public the information on KORAIL's procurement contract by 100% (making public the procurement information and treating 56 Q&A's)

## Anti-Corruption Center

Making public 40 items of information, such as receipt of corrupt acts, KORAIL's integrity policy et al

## Barmi Reporting Center

Perfectly anonymous reporting system for the reporter of the corruption

## Clean-Call

Collecting the difficulties of affiliates and solving difficulties

## Customer Information Service

The service informing the counterparty of the progress including the contract by SNS text message (implemented 3,998 times for 2,620 works)



Off-line  
communication  
channel

## Business agreement for the co-prosperity

Fostering and supporting excellent SMEs (holding product demonstrations)

## Agreeing to raise the technological cooperation fund jointly invested by private and public sector

Raising KRW 2 billion of the SME technology development fund

## Inviting affiliates for field trip of Honam High-speed Railroad

The trial ride event in commemoration of opening of Honam High-speed Railroad, and field trip and meeting at the Honam High-speed Vehicle Maintenance Center

## Meeting with partner companies

Collecting affiliated SMEs' difficulties and suggestions (treating 14 suggestions)

## Purchase consultation, product demonstrations

Supporting SMEs' market (connecting the purchase for KRW5.015 million, and newly registering 10 MROs)

## Railroad technology seminar

Sharing the technological information on railroad, such as localizing core parts and devices of the railroad

## Land, Infrastructure and Transport Technology Fair, and Intellectual Property Fair of the Republic of Korea

Exchanging information on the railroad technology, such as localizing core parts and devices of the railroad



## Supporting Growth of SMEs

### Supporting of SMEs' business and market expansion

KORAIL contributes to vitalization of the regional economy by increasing revenue of small-and-medium travel agencies and regional small businesses. As well as supporting the balanced regional management by completing the 5 Tourism Belts and transforming flag stops into tourist attractions, we have contributed to increase of the SMEs' turnover through development of new products using the train design, such as the traditional liquor in the train-shaped bottle, chocolate, cookie et. Especially, by attracting 23 regional famous restaurants in the station buildings and fostering them as the nationally well-known enterprises, we have brought an effect of the turnover of about KRW30.8 billion and job creation of 238, and also through the contest exhibition of 'the Station Cheongchun Chef', we provided the youth dreaming of the best chef with the opportunity to realize their dreams by supporting them to have stores for foundation. Moreover, by operating 'Agricultural Food Chandeulmaru', the specialized store of the regional specialties produced through procurement of raw materials, manufacturing and processing, and technology development in collaboration with farmers and SMEs, we have attracted more than 360 kinds of goods produced by 62 SMEs, thereby supporting expansion of their market.

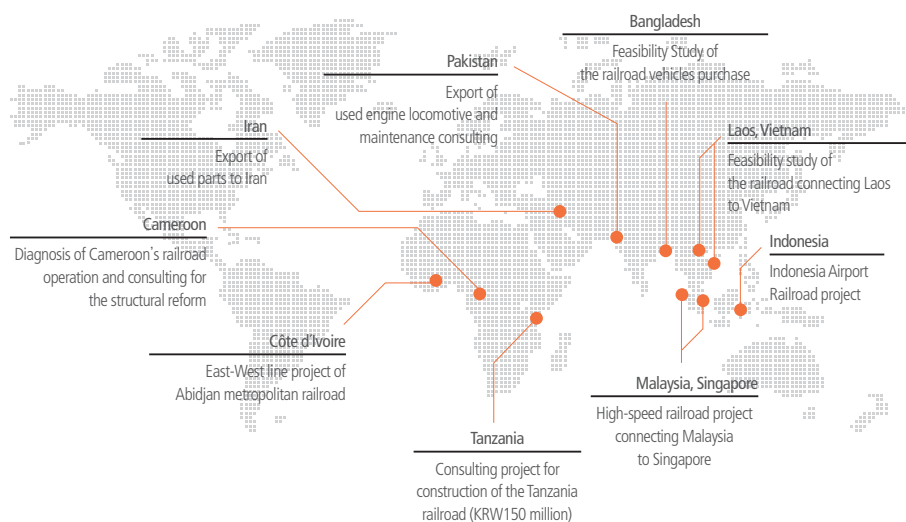
Results of the 5 Tourism Belts and Transforming Flag Stops into the Tourist Attraction

| Category  | Tourism products, such as the 5 Tourism Belts et al   | Transforming flag stops into the tourist attraction  |
|---|---|--|
| Content of promotion  | O-V-S-D-A-G-train, the tourist train visiting marketplaces all over the country, the wine cinema, the sea train et al | Buncheon Station, Santa Claus Village, costume festival at Deungnyang Station, reunification platform at Dorasan Station |
| Turnover of the goods connected to small and medium travel agencies | KRW12.8 billion (KRW7.9 billion in 2014)  | KRW240 million (KRW30 million in 2014)   |
| Contribution to the regional economy                                | KRW275.7 billion of production inducement, 3,484 persons of employment inducement                                     | KRW43.2 billion of production inducement, 546 persons of employment inducement   |

### Joint Advancement into the Overseas Market

In order to overcome the polarization between the large firm and the SME and reinforce the global competitiveness of domestic SMEs, KORAIL has advanced into the overseas market jointly with SMEs using the KORAIL brand, thereby contributing to increase of SMEs' overseas turnover. Accompanied by 11 SMEs and from the same number of countries, we have won contracts of the projects, such as maintenance and sale of used railroad vehicles, education and consulting of the overseas railroad, operation and maintenance of the large-scale railroad infrastructure facilities et al, thereby creating revenue of KRW4.6 billion. We also participated in the Milano Expo jointly with 37 domestic SMEs and supported their development of overseas market by promoting and selling SMEs' products and, as a result, contributed to creating the revenue of KRW1 billion.

Accomplishment of Joint Advancement into the Overseas Market



Traditional liquor in the train-shaped bottle



Regional famous restaurants (Samsong Bakery in Daongdaegu Station)



The second Cheongchun Chef (in Cheongnyangni Station)



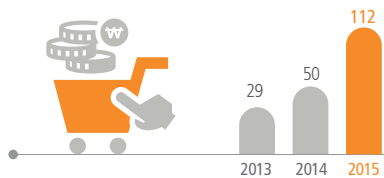
Chandeulmaru



Joint Advancement into the Overseas Projects



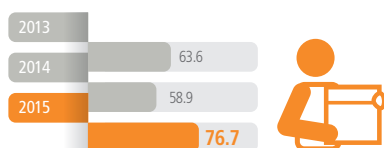
Purchase Record of Newly Developed Products with an Option to Purchase  
(Unit : KRW100 million)



Overview of Registration of the Performance Sharing System Assignment

| Type                                    | Projects of the performance sharing  |
|---|--|
| Supporting the market                   | Developing the tin case of the railroad vehicle model  |
|   | Developing the model train attaching the KORAIL CI   |
|   | Rail-Tel (Railroad + hotel)  |
| Technology transfer                     | Transferring the technology of 'the capacitor exchange-type gate drive'                        |
|   | Transferring the technology of 'the traction line measurement system using the machine vision' |
| Supporting foundation                   | Supporting the commercial facility of 'Station Cheongchun Chef'                                |
| Performance verification (multilateral) | Reliance verification test of the elastic knuckle for the high-speed railroad vehicle          |
|   | Developing and localizing the portable Balise tester   |
|   | Developing the integrated wireless communication device for the crew of the high-speed train   |
|   | Developing and localizing the power supply card (ALM11) of the KTX vehicle's RPU rack          |
|   | Localizing and developing the APT tachometer for the railroad vehicle                          |
| Joint technology development            | Localizing and developing the battery for KTX-Sancheon's power driving car and passenger car   |

Purchase ratio of the SMEs' products  
(Unit : %)



Co-prosperity Evaluation of the Public Institutions



\* Grade system: 4 steps (Excellent - Good - Average - Need to be improved)

### Supporting the technological prowess to SMEs

KORAIL is operating various mutual growth programs for reinforcing the technological prowess and competency of SMEs. We have supported the technology development of SMEs by fostering KRW2 billion of 'the Cooperation Fund for the Technology development Invested by Private and Public Sector\*', and introduced the Technology Notice System for the affiliates to prepare for and carry forward early the industrialization by providing the required technology in advance. In addition, by vitalizing the new product development project with an option to purchase, we have fostered the environment that SMEs can stably develop technologies. Besides, we have contributed to reinforcement of technological prowess and expansion of turnover of SME through the technology transfer of the intellectual property right and support of free job training.

\* The Cooperation Project for the Technology development Invested by the Private and Public Sector: the mutual growth model supporting SMEs' technology development with the fund raised by both Government (the Small and Medium Business Administration) and investment enterprises (large firms, enterprises of middle standing, public institutions)

Process of the New Product Development Project with an Option to Purchase



### Diffusing the Performance Sharing System

By introducing the multilateral performance sharing system, KORAIL is expanding the target of the performance sharing to the second and third partner companies. We have concluded the voluntary promotional agreements for discovering various performance sharing model, such as the technology model including support of joint technology development, technology transfer, functional test et al and the business and market support model for micro enterprises, and for diffusing the multilateral performance sharing system. In addition, we have discovered totally 12 projects for performance sharing system, such as 1 performance verification (multilateral), 5 joint technology developments, 2 technology transfers, 3 market supports, 1 foundation support et al, and then concluded contracts with them. Through such activities, we accomplished such performance as KRW11.5 billion of SMEs' turnover, and saving KRW4.7 billion of purchasing cost, and were awarded the first prize of the public sector at the Competitive Exhibition of the Multilateral Performance Sharing System.

### Preferential purchase of goods recommended by the Government

In order to support SMEs' management stability, KORAIL has set the purchase record of the SMEs' product as the performance indicator and manages it. In order to expand purchase of goods recommended by the Government, we have improved the system, such as implementation of limited competition among social enterprises when contracting a janitorial service, provision of added points to women's enterprises at the time of screening test et al, and have exerted effort in various ways, such as expansion of small and medium construction companies' participation in the construction works, vitalization of direct purchase of materials for construction, expansive holdings of purchase consultation and product demonstrations et al. By its nature, as the railroad vehicle is exclusively produced by large firms and thus, there was a limitation in expanding purchase of SMEs' products, the purchase ratio from SMEs was stagnant around 50%. However, we accomplished a remarkable performance of 76.7% in 2015. Having received credit for such performance of supporting SMEs, we were awarded the citation from the Administrator of the Small and Medium Business Administration.

### Enhancing the internal and external evaluation of the mutual growth

In 'the 2015 Public Institution Mutual Growth Evaluation' conducted by the Ministry of Trade, Industry and Energy targeting the 58 public institutions, KORAIL was uniquely promoted by 2 notches vis-à-vis the previous year, receiving the grade of 'Good.' In this evaluation, KORAIL received a high praise for 'Fostering the prominent companies of the railroad tourism belt and supporting market', 'Enhancing the technological prowess of the SME possessing excellent technology', 'Expanding purchase of SMEs' products', 'Supporting youth's foundation', 'Station Cheongchun Chef' et al.

# Promise 5

We support our neighbors' dream in the regional society.



## Business & Social Context

Today, corporate social responsibility (CSR) is referred to as 'the third type of management,' evolving into innovative efforts to establish the foundation for sustainable development of the community which an enterprise belongs to. The efforts are now regarded not as a one-off show or event for a specific occasion, but something of a core value that needs to be realized in a consistent manner with a firm strategy. Accordingly, KORAIL has strived to implement its CSR activities in a way to help resolve social issues and lead development of the society by fulfilling its core duties and roles as a public railroad operator.

## Progress

- Establishing CSR system
- Conducting social contribution activities in relation with business areas (Railroad Experience Center, Happy Train, etc.)
- Founding an organization (Hope Railroad Foundation) led by both labor and management.
- Providing support for national events and disaster relief.

## Future Plan

- Systematic activities using nationwide railroad networks and expertise
- Stronger collaboration between labor and management in CSR programs



## Performance

The 2015 Korea Social Contribution Awards

**Land, Infrastructure and Transport Minister's Prize**



The 2015 Korea King Sejong the Great Sharing Service

**The National Assembly of the Republic of Korea Strategy & Finance Committee Chairman's Prize**



The sustainable management index (KoBEX SM)

**AAA grade for seven consecutive years**



CSR funds

**KRW 45.2 billion**



Per person hours of social contribution

**13 hours**



## Interview



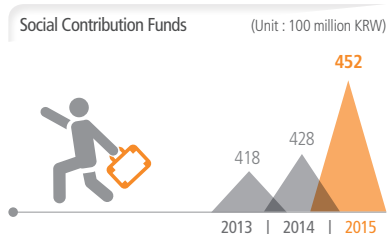
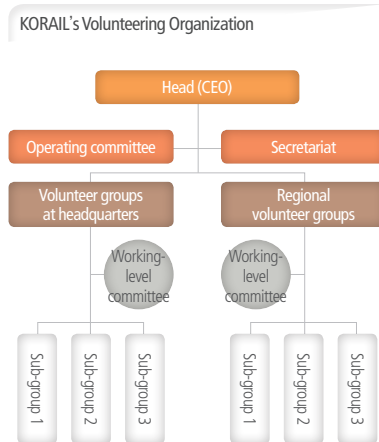
**Ham Yeong-sin** | Executive Director of Daejeon Headquarters, ChildFund Korea

KORAIL's 49 volunteer groups and 430 sub-groups work with regional communities across the nation. Their volunteer services, focused on children from low-income families, make a great contribution to promoting children's welfare. KORAIL's railroad networks and expertise are utilized for these services. KORAIL volunteer programs have been effectively implemented thanks to the robust strategy and networks based on participants' consensus for mutual growth and sharing. Consistent care and support for the socially marginalized is required for KORAIL to sustain its sustainable growth into the future. Children from low-income families, who are now classified as the socially marginalized, will become KORAIL's customers of tomorrow. Support for them in the process will help them grow into a full member of our society and KORAIL secure a better future.



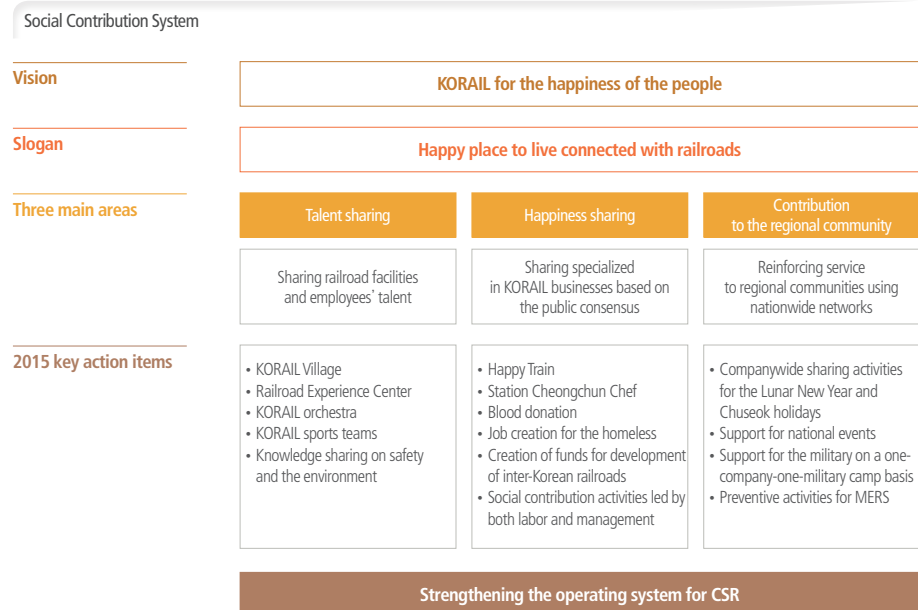
## Corporate Social Responsibility

KORAIL has strived to implement its CSR activities in a way to help resolve social issues and lead development of the society by fulfilling its core duties and roles as a public railroad operator.



### CSR Promotion System

Under the slogan, 'Making a happy place to live connected with railroads,' KORAIL's CSR programs are carried out in three main areas: talent sharing, happiness sharing and contribution to the regional community. KORAIL's CSR programs are systematic, company-wide efforts that utilize the company's nationwide railroad networks and expertise. To enhance the execution capability for volunteer services, it sets rules on volunteer group operations and had CEO, not Vice President, take the leadership position of the group. Also, it maintains close partnerships with external entities and implements programs taking advantage of its own businesses and the attributes of each social welfare agency.



### Securing the Funds for Social Contribution

KORAIL employees make a donation to social contribution funds from their wages every month as they wish—this is called 'donation in love'. About 89% KORAIL employees participate in the program, reflecting their strong interest in social contribution. KORAIL then provides a grant from its budget on a matching basis. These funds are the main source of budgets for the company's CSR activities. In addition, bazaars and fundraising events are held to secure extra income. Thanks to these, KORAIL's social contribution funds raised in 2015 reached KRW 45.2 billion and have been steadily increasing every year.

### Results of Social Contribution Activities

At KORAIL, volunteer activities began with the foundation of the company. With the number of internal volunteer units reaching 430, the duration of volunteer activities done by employees totals 180,000 hours per year and the accumulative number of beneficiaries, 1.2 million in 2015. Not only the financial resources but the time devoted by employees have steadily increased so far, reflecting a culture of social contribution widely established within the company. KORAIL won the Land, Infrastructure and Transport Minister's Prize of the 2015 Korea Social Contribution Award and the Grand Prize of the 2015 Korea King Sejong the Great Sharing Service.

### KORAIL-type Social Contribution Programs

#### Talent Sharing

##### Railroad Experience Center

KORAIL operates 18 railroad experience centers across the nation to provide young students with opportunities to experience railroad jobs. In 2015, the programs, previously focused on cultural themes, were revamped in consideration of the introduction of middle school test-free semester so that students can have practical job experiences, including train engineer, station employee and train manager. The number of visitors to the centers totaled 45,623 in 2015 and KORAIL was certified as the best practice of educational donation once again. In 2016, KORAIL will create a company-wide educational donation unit to promote qualitative growth of the experience program and operate a two-day youth camp to provide more in-depth job experiences.

##### KORAIL Village

KORAIL Village was designed to provide better residential environments for the marginalized people living close to railroads. Employees with electrical and civil engineering expertise participate in the program to improve the residential environments and create a separate space for children to study. In 2015, there were 1,919 employees participated in 162 occasions, benefiting 3,601 local residents.

##### Special Talent Sharing

KORAIL employees demonstrate sharing with regional communities with their special talents. KORAIL symphony orchestra performed 12 times in 2015, including the New Year's concert in Seoul Station and the commemorative concert to celebrate the 116th Railroad Day. Members of KORAIL sports teams serve as coaches in areas of need (e.g. football for children and judo for self-defense for train crews). Others provide consulting services for social and small- and medium-enterprises on issues of safety and the environment.

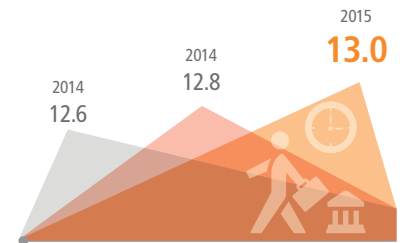
#### Happiness Sharing

##### Happy Train

KORAIL has operated Happy Train for the socially marginalized with a rare opportunity to travel. To commemorate the 70th anniversary of national liberation, 100 members of separated families living in the Seoul Metropolitan Area were invited to a DMZ-train travel to the Baengmagoji station. Participants shared the moments of sorrow and happiness with dispersed families as family reunion events were agreed during their travel. In addition, 330 children from low-income families enjoyed 162 times of train journey featuring children's song.

Social Contribution Hour per Person

(Unit : hours / person)



Railroad Experience



KORAIL Village Activities



KORAIL Symphony Orchestra



Happy Train for Separated Families



Seat for Sharing and Love



### Seat for Sharing and Love

Pope Francis used KTX to visit Daejeon on August 15, 2014. To commemorate the visit and respect his emphasis on the practice of sharing and love, KORAIL designated the seat used by Pope Francis as 'seat for sharing and love' and has collected KRW 15 million from the seat fare and the amount it donates to match the fare. The fund was awarded to the Roman Catholic Diocese of Daejeon for support for the marginalized people.

Establishing the Hope Railroad Foundation



### Job Creation for the Homeless

KORAIL has helped homeless people achieve self-sufficiency and gain job skills through a rehabilitation program. Since 2012, the program has been implemented seven times with 20 people participating in each occasion. Participants took classes on socialization and cleaning skills for cleaning of the Seoul Station square and nearby streets. By far, 52 people have found a stable job through the program.

### Hope Railroad Foundation

With the Hope Rail Foundation being authorized by the Ministry of Employment and Labor at the end of 2015, KORAIL has become the first public corporation in Korea with a social contribution foundation under the joint leadership of both labor and management. The foundation will offer systematic supports and experience programs for children with a rare opportunity travel by train as well as those from multicultural families, migrant workers and separated families.

## Contribution to the Regional Community

Visiting Military Camps



### Support Meeting the Specific Local Needs

KORAIL's commitment to CSR emphasizes services that meet the specific needs of regional communities in such occasions as national events and disaster relief. For example, it invited 649 persons from multicultural low-income families or single-parent families to 2015 Gwangju Summer Universiade. KORAIL signed a sisterhood relationship with the ROK Transportation Command on a one-company-one-military camp basis, and encouraged military personnel by visiting military camps and donating money at year's end and beginning. This helped boost their morale.

Sharing at Year's End and Beginning



### Safety Kits to Prevent MERS

The outbreak of Middle East Respiratory Syndrome (MERS) reminded the Korean people of the importance of the prevention of infectious diseases. KORAIL prepared safety kits for the socially disadvantaged with a weakened immune system because of imbalanced diet. Kits consisted of dust masks, handwashing agents, sterilizer sprays, medical kits and vitamins, and 150 sets were delivered for marginalized people.

### Company-wide Sharing for Lunar New Year and Chuseok holidays

KORAIL employees participate in sharing events on Lunar New Year and Chuseok holidays. In 2015, they visited 232 welfare facilities across the nation and donated goods of KRW 355 million.

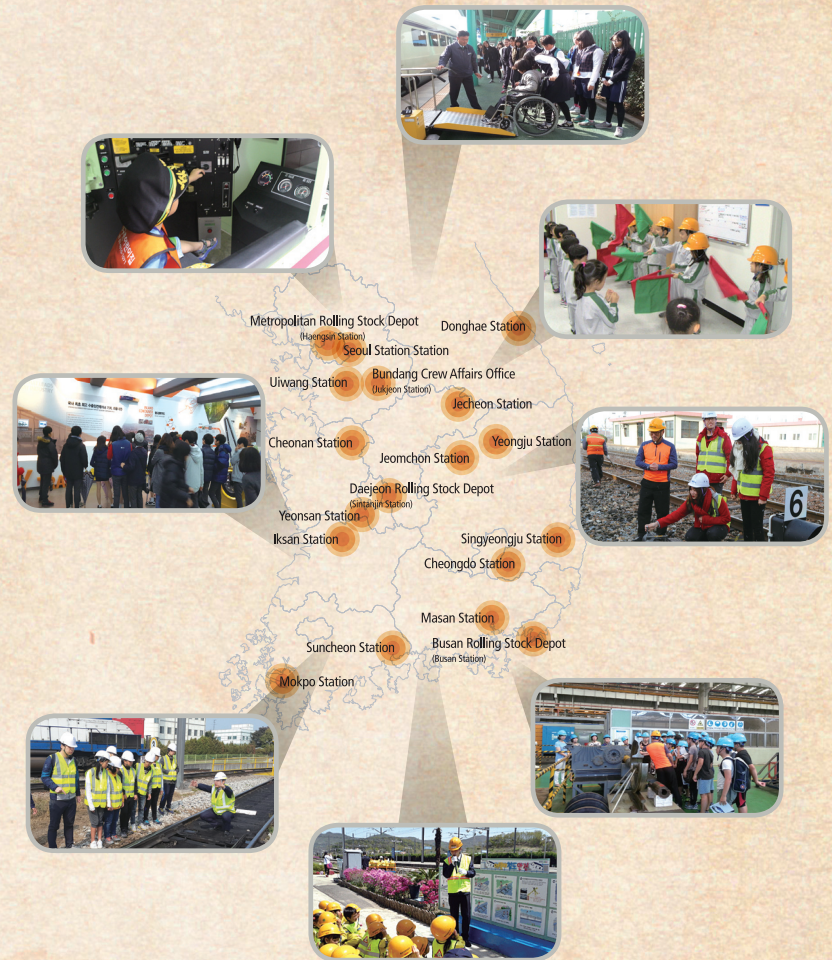


# Today, I am a Train Engineer!

## - Railroad Experience

KORAIL's Railroad Experience Center is aimed at helping students develop their talents and grow healthy and providing opportunities for career exploration and cultural experiences, which are quite limited to regional neighborhoods. The center is operated in 14 train stations, three rolling stock depots and one crew affairs office. At the center, students can experience railroad jobs such as station employee, train engineer and crew, have a tour to railroad history halls and visit car inspection sheds. Descriptions and experiences customized to the specific location of the center are prepared. Programs are also offered for students at schools. The center's programs were revamped to consider the rolling out of the test-free semester at all middle schools from 2016 to help youth have a better understanding of railroad jobs. The center, which started off in 2011, has been established as a representative social contribution program of KORAIL with the number of visitors reaching 278,907 as of December 31, 2015. The program was certified by the Ministry of Education as the best educational donation practice in 2015, following the first certification in 2012.

KORAIL will remain committed to the improvement of the program in quality and quantity in order to fulfill its social responsibilities as a public enterprise.



Essay on  
Railroad Experience

Hello everyone,  
I am OOO at Suncheon Dongsan Girls' Middle School.

My family usually takes train for family vacations. The experience at the Railroad Experience Center was a good opportunity to feel more familiar with railroads. The program began with a briefing on the history of rail transportation. I learned that the first railroad line in Korea was laid down between Jemulpo and Noryangjin in 1896 and Japan laid others, including the Gyeongbu Line to exploit resources. The explanation was easy enough for students of my age to understand.

I was surprised at the fact that there were so many kinds of railroad jobs, including driving, electric vehicle, computing, transportation, civil engineering, construction, and administration. I had an opportunity to drive a locomotive at the driving experience zone, and then moved to the ticket office and saw staff members do their job. Their kindness and skillfulness in helping visitors and especially foreigners were impressive. I thought I needed to have diverse capabilities to do the job. They were also kind to answer my funny questions. The experience was useful for me to think about my career in the future.

I appreciate all at the Suncheon Crew Affairs Office for their kindness and efforts to provide such a valuable opportunity.

"I look forward to a comfortable and safe journey by train with your excellent service!"





# The Future, creating the brighter future

**Promise 6.** We create the sustainable future value.

**Promise 7.** We protect the clean environment of the earth.









# Promise 6

We create the sustainable future value.



## Business & Social Context

KORAIL constantly embraces challenges and changes to better prepare for the future.

By raising the competitiveness in railroad operation and management efficiency, KORAIL succeeded to achieve operating surplus.

Also it continues to implement programs under the Creative Economy initiative to lay the groundwork for a sustainable future.

## Progress

- Operating surplus for two consecutive years
- Completing the five railroad tourism belts
- Opening the Honam High-speed Line
- Laying the groundwork for linking with continental railroads

## Future Plan

- Maintaining surplus by exploring and developing innovative ideas
- Improving business fundamentals to deal with a fiercer competition
- Establishing transportation networks centered around railroad lines



## Performance

Turnover

**KRW 551.6 billion** (record-high)



Operating surplus

**KRW 114.4 billion** (surplus for 2 yrs.)



Net profit

**KRW 86.4 billion**



Rise in global credit rating (Moody's)

**Aa3 → Aa2**



Debt ratio

**283.3%** (fall by 127.6 percent point)

\* Based on consolidated K-IFRS



## Interview



**Jung, Ye-seong** | President of the Future Train Research Institute

Railroads integrate or expand economic zones by increasing access between otherwise separated regions. In this sense, it is the most appropriate method for a balanced development of the national land and the most efficient mode of freight transport beyond national borders. By operating nationwide railroad networks, KORAIL contributes to socioeconomic development of Korea as well as economic development of the country's provinces. The long-term vision of KORAIL's railroad operation would be to help Korea rise to the transportation and logistics hub of Northeast Asia. On the Korean Peninsula, railroads will run through the Military Demarcation Line, opening a channel for communication among the Korean people and facilitating economic cooperation between North and South Korea. Then, this will lay the foundation for Korea's reunification and make it possible to link with the Trans-China Railroad and the Trans-Siberian Railroad. I expect KORAIL to maintain its R&D efforts until this vision is realized.

## Creating the Economic Value

### Distribution of the economic value

KORAIL creates the economic value through the railroad transportation business transporting passengers and freight, the tourism business, the property development projects, the overseas projects et al. In 2015, despite of the risk of the operating loss caused by MERS, we broke an all-time high turnover by active effort for creating revenue, such as expansion of demand followed by the opening of KTX Honam Line and Donghae Line, optimization of YMS (Yield Management System), completion of the 5 Tourism Belts et al. By returning diverse economic values acquired by the management activities to the society and the stakeholders, we have created both direct and indirect ripple effects of vitalizing the national economy and improving convenience of the national life.

#### Creation and distribution of the economic performance

(Unit : KRW100 million)

| category                                     | 2013     | 2014   | 2015    | Remarks   |
|--|----------|--------|---------|---|
| Creation of the economic value(A)            | 47,506   | 51,196 | 61,470  |   |
| Sales  | 45,528   | 48,076 | 52,207  |   |
| Financial profit, disposal of property et al | 1,978    | 3,120  | 9,263   |   |
| Distributed economic value(B)                | 87,470   | 50,497 | 51,948  |   |
| Executives and staff members                 | 21,854   | 19,681 | 21,929  | Wage, allowance, welfare expense, severance payment et al |
| Partner companies*                           | 69,380   | 24,867 | 26,682  | Facilities dues, consignment fee et al                    |
| Investors                                    | 4,557    | 5,389  | 4,802   | Interest expense  |
| Government agencies**                        | (8,739)  | 131    | (1,920) | National tax, corporate tax, local taxes et al            |
| Cusomters/regional societies                 | 418      | 429    | 455     | Corporate social responsibility investment et al          |
| Surplus economic value(A-B)                  | (39,964) | 699    | 9,522   |   |

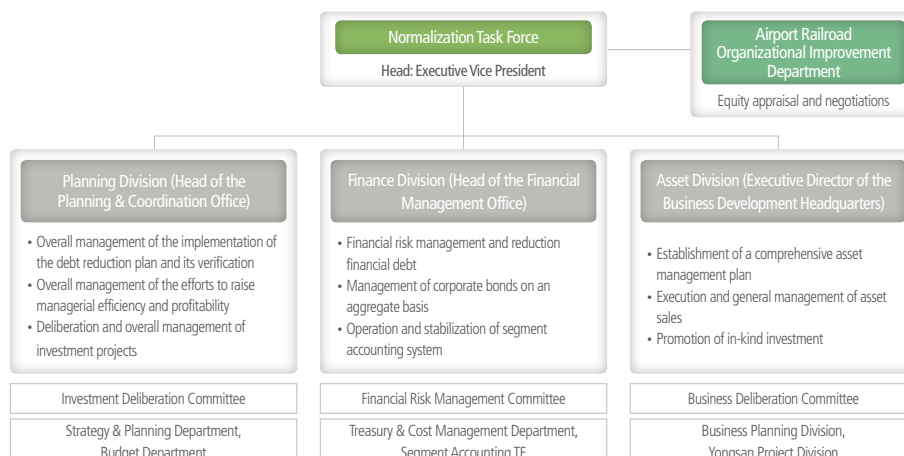
\* KRW4,662 billion of loss incurred due to the revocation of the project agreement for the development of the Yongsan Station Influence area in 2013

\*\* Gains were incurred from current adjustments of corporate income tax in 2013 and 2015

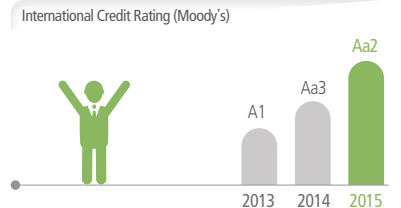
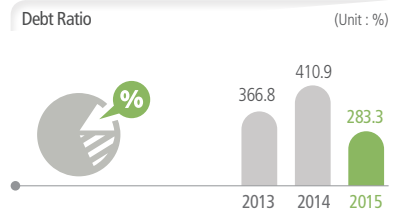
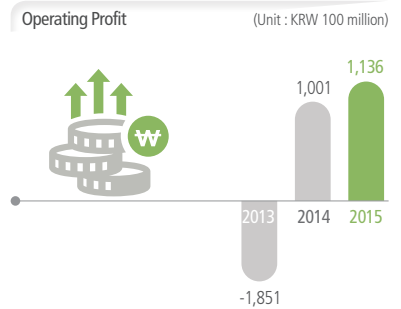
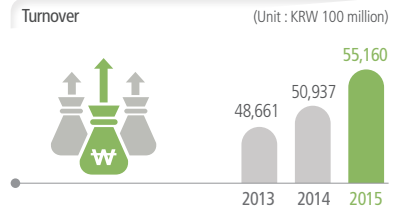
### Enhanced Financial Soundness

KORAIL saw its debt ratio surging to 410.9% in 2014 due to its disengagement in the Yongsan development project and accumulated operating deficit. To deal with this problem, the company formed a normalization task force to implement strong debt reduction measures. Thanks to its efforts to reduce costs and raise profits, it succeeded to achieve operating profits exceeding KRW 100 billion for two consecutive years and its debt lowered sharply by selling KRW 4,618.6 billion worth of assets, including the stake in airport railroads and non-business lands. In line with this, KORAIL's debt ratio dropped 127.6 percentage points year on year to 283.3% and international credit rating rose by one notch from Aa3 to Aa2 by Moody's.

#### Normalization Task Force



\* Based on consolidated K-IFRS





## Realizing the Creative Economy Initiative

### Completing the Five Railroad Tourism Belts

KORAIL responds to the Korean government's Creative Economy initiative by completing the five railroad tourism belts while contributing to facilitation of underdeveloped regional economies. The tourism belts combine railroads, whistle stops and regional tourism resources with a beautiful landscape in a network, creating new tourism demand and jobs and boosting local economies. This represents KORAIL's unique model for creative economy. The railroad tourism belt project was completed in 2015 with the opening of the Gangwon Clean Belt boasting Gangwon province's magnificent landscapes and Jeongseon county's cultural traditions and the West Sea Gold Belt boasting popular attractions such as the West Sea beaches and the glow of the setting sun. The number of tourists to the belts rose 28.6% year on year to 693,000 in 2015. The belts also contributed to facilitation of provincial economies by creating KRW 63.3 billion in production and 800 jobs locally. They were also helpful in bettering the image of KORAIL by winning the Green Goods Prize (O-train), Good Brands Prize (G-train) and Good Designs Prize (G-train).

Five Railroad Tourism Belts

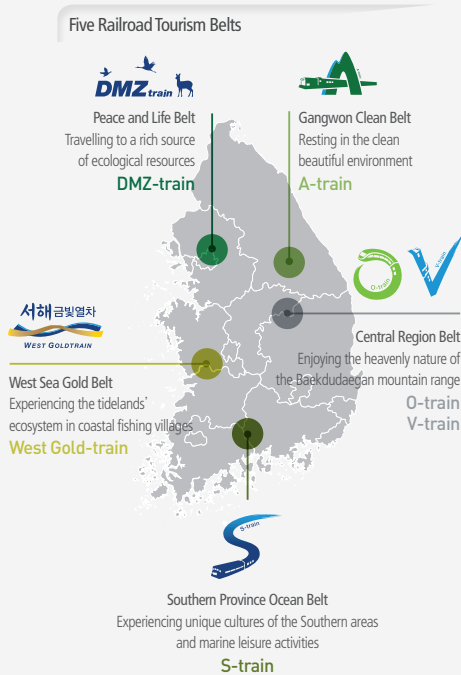
| Classification      | Central Region Belt               | Southern Province Ocean Belt      | Peace and Life Belt                | Gangwon Clean Belt                              | West Sea Gold Belt                   |
|---------------------|-----------------------------------|-----------------------------------|------------------------------------|---|--------------------------------------|
| Name of Train       | O-V-train                         | S-train                           | DMZ-train                          | A-train   | G-train                              |
| Theme               | Remote mountain village           | Culture of the Southern sea areas | DMZ and ecosystem                  | Jeongseon's culture and breathtaking landscapes | Sea and tidelands                    |
| Sector              | Seoul-Cheoram<br>Buncheon-Cheoram | Busan-Boseong<br>Seoul-Yeosu      | Seoul-Dorasan<br>Seoul-Baengmagoji | Cheongnyang-ri-<br>Auraji-gil                   | Yongsan-Iksan<br>Year of development |
| Year of development | 2013                              | 2013                              | 2014                               | 2015  | 2015                                 |

### Creating Themed Tourism Station

KORAIL renovated abandoned whistle stops with a unique theme into popular tourist destinations. This has helped create demand for travel to such stations and contributed to facilitation of local economies. For example, Buncheon Station was renovated to resemble the Santa Clause village in Europe. After the renovation, the village is dubbed as Korea's Zermatt with the daily number of visitors exploding from ten to 1,000. Dorasan Station was renovated with the theme of the platform towards national reunification to commemorate the 70th anniversary of Korea's independence and share wishes of unification at home and abroad. Also, Deungnyang Station with the theme of the memory of the 70s-80s has become popular for its costume play festival and an experience zone. This project attracted 470,000 visitors to the previously abandoned small stations and created KRW 43.2 billion in production and 546 jobs.

### Carrying forward the Eurasia Initiative

KORAIL has worked hard to proceed with the Eurasia Initiative seeking to link the Korean Peninsula with China, Central Asia, Russia and Europe through railroads. In May 2015, the Organization for the Cooperation of Railroads (OSJD)\* Seoul Railroad Summit was held in Seoul with 300 representatives from 25 countries, and the Seoul Declaration showing international support for the connection of inter-Korean railroads and its linking with continental railroads was adopted. Besides, the Eurasia Friendship Express running 14,400 kilometers along the Trans-China Railroad, Trans-Siberian Railroad and Trans-Mongolia Railroad for 19 nights and 20 days was operated, during which sisterhood relationships with six stations were signed and rail transport seminars, held. This helped strengthen cooperative relations externally and build consensus for connection with transcontinental railroads among the Korean people. Also, KORAIL reinforced communication with internal and external parties to build consensus for unification and connection with transcontinental railroads through various activities such as attending at the International Symposium on Eurasian Transport and Logistics and carrying out a unification-related project.



Unification Platform at Dorasan Station



Costume Festival at Deungnyang Station



Eurasia Friendship Express



## Securing Future Growth Engine

### Organizational Reshuffling of Key Functions

In a response to the government's public corporation restructuring plans, KORAIL drew up mid- to long-term personnel management plan and reorganized its key functions. Demand for workforce to ensure increased convenience and safety grew as more KTX lines were launched. To deal with this, KORAIL expanded outsourcing of non-critical functions, including car inspection, repair and maintenance and improved its work processes. About 2,600 employees were relocated in the process. The organizational structure and operating procedures were also enhanced through diverse efforts, including launching of logistics divisions with increased responsibility and formation of a new transportation business task force. To better the efficiency of personnel operation, the one-engineer-per-freight-train scheme was introduced and personnel operation indices, improved. Besides, the number of freight processing stations was reduced from 127 to 106, seeking to create logistics hubs.

### Building the Foundation for Higher Profits from High-speed Lines

With the 11th anniversary of the launching of KTX on 2 April 2015, KORAIL opened the Osong-Gwangju Songjeong sector (183.8km) of the Honam High-speed Line and the Moryang-Pohang sector (35.1km) of the Donghae Line. Setting up of the optimized train schedule drastically reduced the travel time, saving 59 minutes in the sector between Yongsan and Gwangju Songjeong (Mokpo) and 2 hours and 54 minutes from Seoul to Pohang. Following the expansion of railroad lines, intensive monitoring was conducted in the early days of the opening, and it was found that demand was much greater than expected. KORAIL thus promptly adjusted its train schedules, increasing the number of KTX operations by 23.4% from the year before. As a result, it set a new record in the number of passengers at 60,535. Besides, the company upgraded its Yield Management System (YMS) first introduced in 2005 into the next-generation YMS\* for prompt responses to the rise in the number of train operations and market changes. This enabled instant automatic prediction of demand, thereby facilitating product planning and launching mainly for mid- to long-term travelers. Launching of new products utilizing vacancies based on the seat demand prediction boosted the KTX seat operation rate by 1.2 percentage point from the year before from 62.3% to 63.5%.

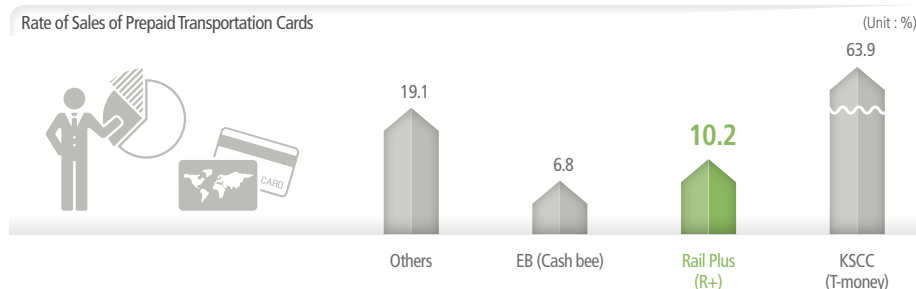
### Laying the Groundwork for Overseas Business

KORAIL actively pursues overseas projects to overcome the limitations of the local market. To strengthen its overseas capability, it nurtured 80 professionals and formed a division to prepare for entry into international maintenance, repair and operations markets. In line with this, KORAIL reinforced its international project management system by streamlining the risk management standard procedures for international bidding and project participation and required the Risk Management Deliberation Committee to review all bidding proposals.

### Implementing the Rail Plus Card Business

KORAIL launched the Rail Plus transportation card to increase the public's convenient use of transportation and enter into a new-growth engine business using its metropolitan information system. The card, which can be used for all transportation vehicles all over the country, resolves travelers' constraint in using different cards operated by different companies in different regions. The card also enabled KORAIL to prepare customized train services based on information collected from diverse public transportation operators. With the card selling well, KORAIL now holds 10.2% share in the prepaid transportation card market, achieving KRW 5.59 billion in the diversified business thanks to the new source of income and cost savings. Moreover, KORAIL is striving to explore a new market segment with the KORAIL Fintech business with mobile concept, automatic recharge and other technological innovations.

Rate of Sales of Prepaid Transportation Cards



### Organizational Reshuffling

#### Organization

- Launching of logistics divisions with increased responsibility
- Segment accounting for car inspection/rental, repair and maintenance
- Formation of a new transportation business task force
- Integration of freight processing stations and creation of hubs



#### Personnel

- Introduction of the one-engineer-per-freight-train plan and raising the efficiency of management support (1,079 persons in 2015)
- Addition of 674 persons for the Honam High-speed Line and other new lines
- Advancement of personnel operation indices



#### Affiliates

- Sale of stake at airport railroads
- Transfer of the operatorship of the Jeongdongjin rail bike business (KORAIL Tech, Ltd → KORAIL Tourism Development, Ltd)
- Withdrawal from online shopping and restaurant operation businesses
- Phased closure of the parking lot business



### Training Overseas Business Professionals

#### Identifying future talents for overseas business (59 persons)

- Supporters for overseas business (35 persons)
- Identifying talents for global projects and developing their capability
- Training international railroad professionals (24 persons)
  - Employees taking classes in foreign language universities (20 weeks), holding professional classes on international railroads (6 weeks)



#### Training professional manpower for the consulting business (21 persons)

- Consigned education conducted by the Korea Engineering & Consulting Association (13 persons)
  - Two classes, including on-the-job training on overseas project exploration
- Consigned education conducted by the International Contractors Association of Korea (8 persons)
  - Six classes, including on-the-job training on international construction and financing



# Promise 7

We protect the clean environment of the earth.



## Business & Social Context

At KORAIL, all officers and employees pay attention to domestic and international responses to climate changes.

To reestablish the status of train as a public transportation method that emits only 70% of greenhouse gases (GHG) from automobiles and absorb demands from automobiles, KORAIL has been doing its best to provide the best possible passenger services.

## Progress

- Advancement of environmental operation and management
- Comprehensive responses to climate changes
- Minimizing release of environmental pollutants
- Realizing social responsibilities through aggressive environmental protection activities

## Future Plan

- Creating new environmental value from railroads
- Expanding the installation and renovation of environmental protection facilities
- Implementing an environment management policy tougher than government regulations



## Performance

ITX-Saemaeul train between Seoul and Busan

Received certification for Carbon Footprint Labeling



CDP best companies coping with climate changes

Special award



GHG emissions per unit distance of train operation

0.81 kg/km (10% reduction from base year)



Investment on environmental facilities

KRW 531 million



Rate of purchase of green products

83.67%



## Interview



**Professor Lee, Dong-in** | Department of Environmental Atmospheric Sciences, Pukyong National University

For more than ten years since the launching of KTX in 2004, KORAIL has realized significant progress and achievements in areas such as passenger safety and convenience and railroad engineering. To raise its long-term corporate value and fulfill social responsibilities, it needs to implement preemptive responses rather than ex-post responses to accidents and disasters stemming from climate changes, landslides and floods. This requires KORAIL to proactively deal with issues regarding the safety and environment of train operation system and climate changes with increased number of experts in such areas as weather, climate, the environment and disaster safety. Regulations on GHG emissions from trains and pollutants from workplaces are becoming tougher. Therefore, I hope KORAIL take leadership in complying with the environmental laws and regulations and show an example by establishing environmental-friendly operating systems before others do.



## Realizing the Environmental Management

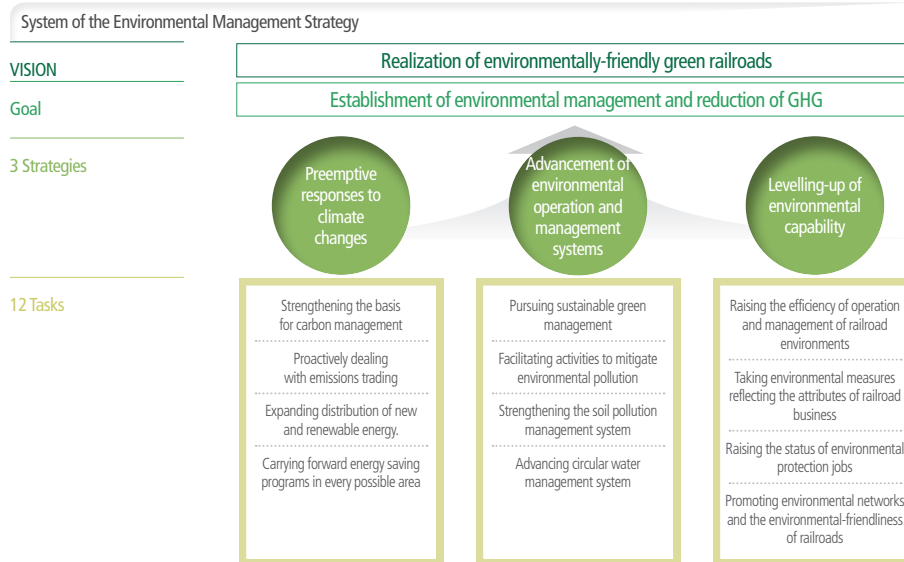
KORAIL will contribute to the achievement of government's emissions reduction policy and meet its environmental responsibilities by utilizing railroad system's excellent energy efficiency. Significant investments are being made to install anti-pollution facilities and improve such facilities in order to minimize release of pollutants at its workplaces. Besides, KORAIL manages its resources based on a policy more stringent than government regulations, minimizing environmental impacts.

### System of the Environmental Management Strategy

#### Vision and Strategy of the Environmental Management

KORAIL strives to realize its vision to achieve low-carbon green growth based on railroad-centered transportation systems and adopt enhanced environmental management practices of the level of advanced railroad organization and companies. To this end, KORAIL executes following environmental management practices:

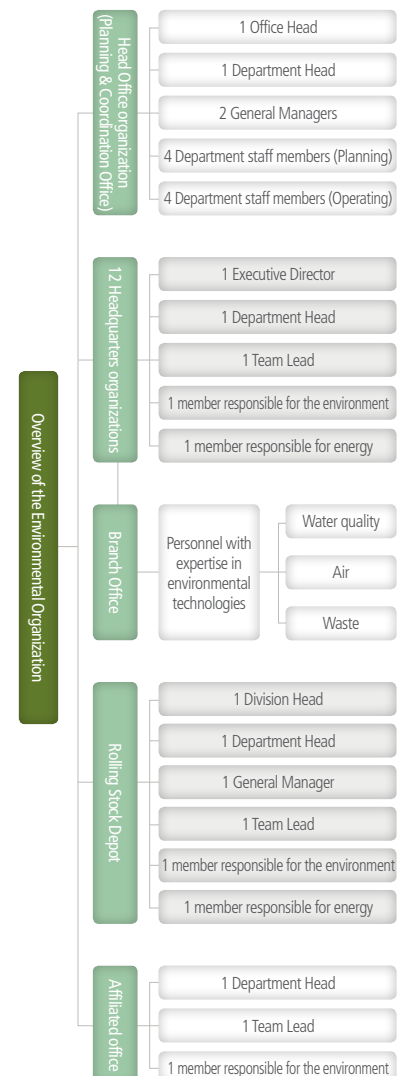
- Company-wide environmental management to minimize release of pollutants
- Establishment of the environmental management system to advance the environmental-friendliness of the transport industry.
- Utmost effort to comply with environmental regulations under international climate arrangements
- Fulfilling social responsibilities through aggressive environmental protection activities



#### Environmental Organizations and Operation

KORAIL's environmental management unit operates under the Planning & Coordination Office to ensure effectiveness. The unit closely works with employees responsible for the environment, GHG and energy in other business divisions while cooperating with external organizations. To ensure the environmental management system functions well, a green network has been created with 61 personnel responsible for the environment. KORAIL also strives to realize environmentally-friendly railroad operation through environmental news clipping service and operation of diverse communities, including technical exchange meetings in the fields of railroads and the environment, environmental consultation council among railroad operators and advisory council on the railroad environment. Taking one step further, it works hard to set the best environmental practice in the transportation area.

#### Composition of Environmental Affairs Organizations



### What is Pro Bono?

**Pro Bono**  
= pro bono publico : for the public good

Pro Bono is a Latin phrase shortened from Pro bono publico. The term was first used for legal advice without commission for individuals or organizations with no money to buy such service. In the past, Pro Bono was concentrated on legal and medical services, but has expanded to include communications, marketing, consulting, engineering, languages and other professional services.

### Support for Pro Bono Work in 2015

#### Small and medium firms

| Partner entities              | Activities  |
|-------------------------------|---|
| 00 Environmental Development  | Technical advice on the air environment and support for compliance with noise and vibration regulations |
| 00 Industry                   | Advice on waste treatment and prevention of water pollution   |
| 00 E&C                        | Consulting on energy consumption patterns and electricity saving  |
| 00 Engineering                | Management of separate storage of waste and education on examples of administrative orders              |
| 00 Environmental Construction | Education on water quality measuring and analyzing methods  |
| 00 TS                         | Consulting on separate collection of industrial waste   |

#### Social Enterprises and Others

| Partner entities               | Activities   |
|--------------------------------|--|
| 00 Cultural Travelling         | Support for hands-on education for separate collection of recyclable materials and rain water recycling system |
| 00 Child Care Center           | Education on the eco-friendliness of trains and green life style practices                                     |
| 00 Welfare Council             | Installation of environmental facilities and education on the use of green materials                           |
| 00 City Child Education Center | Provision of experience with new and renewable energy and environmental and safety education                   |
| 00vill                         | Identification of heavy energy consumers and consulting on energy consumption diagnosis                        |
| 00 Training Institute          | Diagnosis of air pollution and pollution of indoor air conditioning equipment                                  |

## Environmental Pro Bono Activities

KORAIL employees with expertise and knowhow on the environment provide consulting on environmental technical support for SMEs, social enterprises and non-government organizations and participate in environmental education sessions and campaigns. This enables KORAIL to fulfill its social responsibilities and achieve shared growth.

### Environmental Pro Bono Work, the Start of Sharing

KORAIL's Pro Bono work in the environment field is advisory services covering overall issues of the environment from air, water and waste to energy, noise and GHG emissions. The service has been steadily implemented since it began at the Head Office level in 2011 and spread to all organizational levels in 2012.

#### Environmental Pro Bono Board



#### Operation Process



### Major activities

Pro Bono work KORAIL implemented in 2015 includes consulting on professional knowledge for smaller firms, provision of compliance guidelines on environmental regulations and environmental training sessions and environmental campaigns with a number of partner entities.

#### Pro Bono Work in 2015



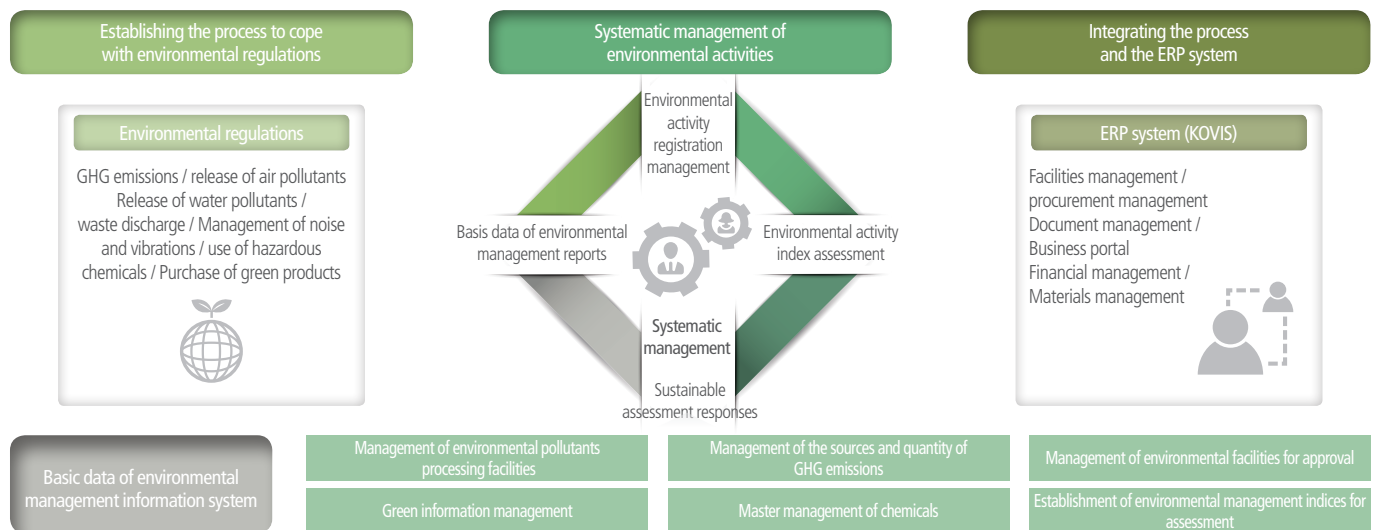
### Scope of Main Activities



- Environmental facilities consulting**  
Dissemination of environmental technologies in such areas as water quality, waste, air, noise and vibration and support for comprehensive environmental management practices, including compliance measures
- Advice on environmental education**  
Support for partner agencies by showing examples of administrative orders and helping them interpret laws and regulations and adopt environmentally-friendly technologies
- Consulting on GHG and energy**  
Support for efficient environmental management by showing how to identify and determine heavy energy consumers and energy saving measures
- Support for environmental campaigns**  
Participation in environmental-friendliness campaigns, including education on environmental management systems and practices of green living styles

## Establishing the Environmental Management Information System

Analysis and management of environmental resources, facilities, investments and information are conducted through the environmental management information system established by KORAIL. By further advancing the system, the company proactively deals with changes in the environment through fast decision making and investments. The process established to cope with environmental regulations was integrated with the enterprise resource planning (ERP) system for systematic management of the company's environmental activities.



### Establishment and Revision of Environmental Policy

All environment-related activities at KORAIL are conducted in accordance with its environmental policy consisting five sections and specific rules covering the scope of applicability, responsibility and the level of authority. The policy has been continuously revised to reflect any change in the regulation environment.

### Investment Management for Environmental Costs

Analysis of environmental investments and costs is conducted in every area of business and the results are reflected in environmental budgeting for the next year. This ensures transparency in the execution of the budget while maximizing the returns on investments.

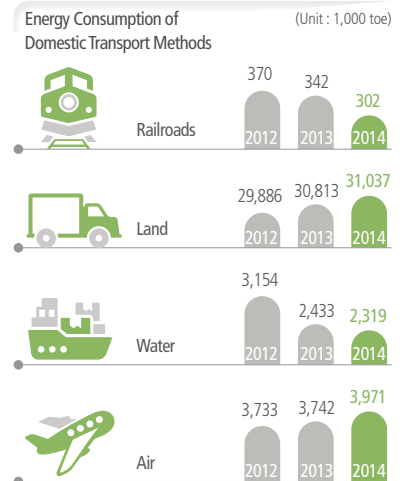
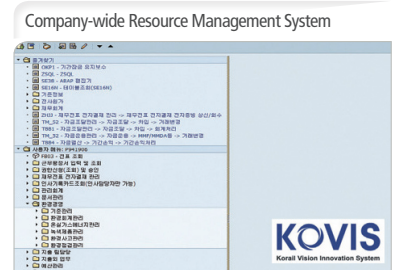
### Disclosure of Environment Information

KORAIL disclose environment information on its website ([www.korail.com](http://www.korail.com)) and through environmental management reports, first published in 2006. By doing so, it provides information on its activities to deal with climate changes and environmental protection activities for stakeholders.

\* Disclosure on environmental performance ([https://info.korail.com/mbs/www/subview.jsp?id=www\\_030612000000](https://info.korail.com/mbs/www/subview.jsp?id=www_030612000000))

## Realizing the Eco-friendly Railroad

Tail transportation was on the decline in the past due to the convenience of cars, except for some inter-city railroad lines. These days, however, the environmental friendliness of rail transportation are receiving renewed attention amid climate changes, energy shortages and destruction of living environments due to rising air pollution and noise. Its superior transportation efficiency compared to roads raised the status of railroad transportation as the best transport method of the 21st century. In addition, when compared to roads, railroads are more economically viable with minimal social costs caused by environmental degradation that can contribute to the achievement of environmental sustainability.



\* Source: 2015 Yearbook of Energy Statistics, Korea Energy Economics Institute

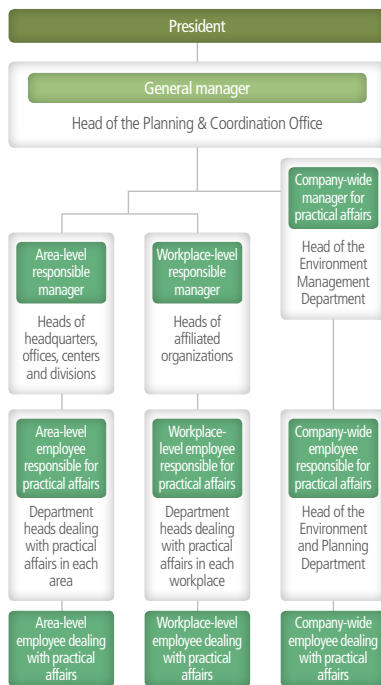


## Greenhouse Gas Management

KORAIL strictly meets the reduction target imposed by the government under the GHG-Energy Target Management System.

Also it set up a reduction target for GHG emissions and energy consumption below the acceptable level and has operated the GHG-Energy Committee to achieve the goal.

### GHG-Energy Management System



#### Company-wide GHG-Energy Committee

Chairman : Executive Vice President  
Main functions : Discussion on major GHG and energy policies

#### Working-level GHG-Energy Committee

Chairman : Head of the Planning and Coordination Office  
Main functions : Working-level discussion on major GHG and energy policies

#### Working-level GHG-Energy Committees at affiliated entities

Chairman : Heads of affiliated entities  
Main functions : Discussion on affiliated entities' major GHG and energy markets

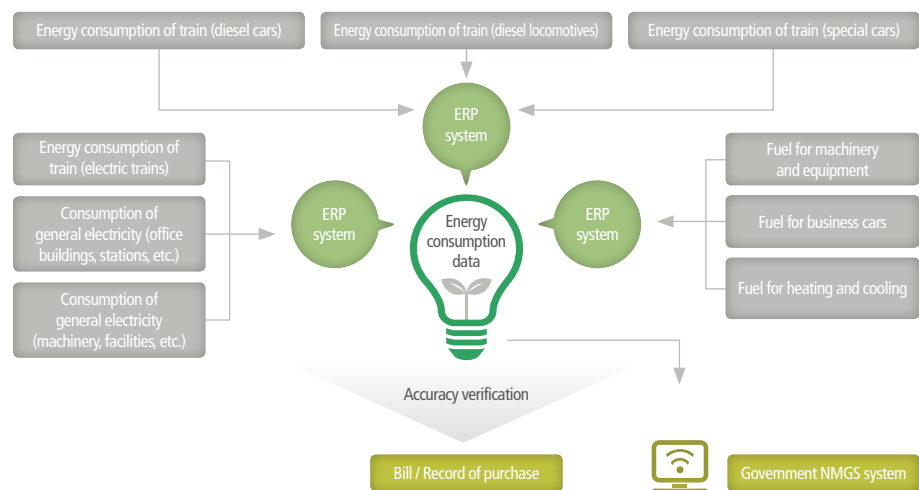
### GHG-Energy Management

#### GHG-Energy Management System

The GHG-Energy Committee and the working-level committee have been operated with full support from the management and on a company-wide network. The committees collect and manage reliable data on GHG and energy consumption through emissions calculations and verification through monitoring, actively contributing to the government's drive for lowering GHG emissions.

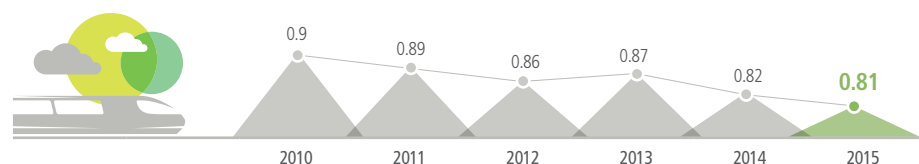
#### GHG Inventory

GHG inventory has been established with the goal of calculating emissions from train operation. Emissions mainly come from energy consumption for train driving and daily routines at workplace. In 2015, KORAIL's GHG emissions per unit driving distance (converted car kilometer) was 0.81kg/km, 10% lower than 0.9kg/km, the average for base years from 2007 to 2009 under the target management system.



#### GHG emissions per unit distance of train operation

(Unit : Kg/Km)

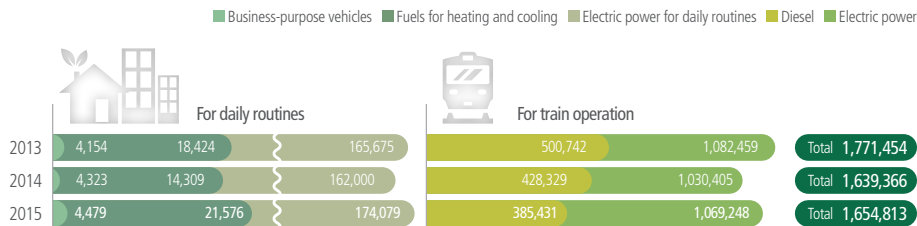


### Overview of the GHG Emissions

In 2015, KORAIL's GHG emissions upped 0.9% from the year before to 1.65 million tons. There were a number of factors that could potentially boost emissions, including the opening of the Honam High-speed Line, increased operation of ITX-Saemaeul trains, addition of new stations or renovation of older ones and expansion of safety facilities and equipment for the physically challenged (e.g. escalators and elevators). Despite these, emissions rose only slightly thanks to the rise of electrical trains, installation of advanced equipment at new and renewed stations, and company-wide every saving campaigns.

#### Overview of the GHG Emissions

(Unit : tCO<sub>2</sub>-eq)



### Efforts for Emissions Reduction







#### Introduction of Low-carbon High-efficiency Trains

KORAIL has expanded the introduction of low-carbon electric cars and the operation of eco-friendly high-speed trains. R&D activities have been conducted to establish environmentally-friendly railroad systems. Specifically, the company acquired 25 latest diesel cars (designated as 7600-plus) by June 2014, and retired Saemaeul diesel cars (PMC) and launched electric ITX-Saemaeul trains in November 2014. As a result, the share of low-carbon high-efficiency trains has risen, boosting the environmental-friendliness of KORAIL trains.

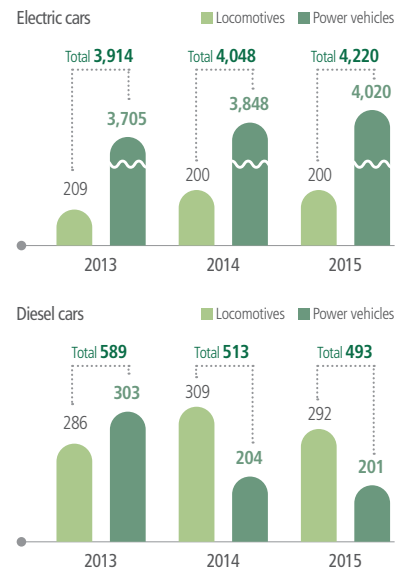
#### External Recognition of KORAIL's Carbon Management

The KTX Seoul-Busan sector was certified for Carbon Footprint Labeling for the first time in the railroad sector in 2011. This was followed by the ITX-Saemaeul Seoul-Busan sector in 2015. The certification, given by the government, officially verifies that strict control of emissions and energy is in place for all processes of services provided by KORAIL and is a demonstration of the eco-friendliness of rail transportation with much lesser GHG emissions than automobiles. In addition, KORAIL voluntarily disclosed information on its responses to climate changes although it was not requested by the Carbon Disclosure Project (CDP) to do so for the CDP Korea 250 Report publication. This led to the receipt of a special prize in the award for best companies coping with climate changes in 2015. KORAIL perceives appropriate responses to climate changes as its social and ethical responsibilities and discloses related information accordingly.

#### Certification for Carbon Footprint Labeling

| Content  | Trains concerned  | Total GHG emissions | Emissions per kilometer | Level                    | Logo  |
|--|---|---------------------|-------------------------|--------------------------|---|
| On the basis of one-person, one-way travel on ITX-Saemaeul (Seoul-Busan) train |  | 12.23kg             | 27.7g                   | 1/6.0 against automobile |  |
| On the basis of one-person, one-way travel on KTX (Seoul-Busan) train          |  | 10.21kg             | 24.1g                   | 1/7.0 against automobile |  |
| On the basis of one-person, one-way travel on Nuriro (Seoul-Sinchang) train    |  | 2.5kg               | 21.5 g                  | 1/7.8 against automobile |  |

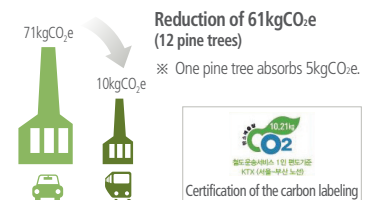
#### Electric and Diesel Cars Holdings



#### CDP Award for Best Companies Coping with Climate Changes



#### Effect of Using KTX for Seoul-Busan in Terms of Planting of Pine Trees



## Energy Management

In a response to the government's drive for efficient use of energy and reduction of GHG emissions, KORAIL strives to lay the groundwork to achieve sustainable low-carbon green growth. For this, it carried out reshuffling of train operation systems and took energy saving measures regarding daily business routines, including heating and cooling and train operation by considering train operation plans.

### Raising the Efficiency of Energy for Train Operation

#### Steady Reduction in Fossil Fuel (Diesel) Use

Combustion of diesel fuel directly emits exhaust and greenhouse gases and makes noise. Therefore, KORAIL has steadily decreased its use of diesel fuels for diesel cars to prevent global warming, minimize air pollution and help create clean living environments.

Use of Diesel by Diesel Cars

| Classification                               | 2013    | 2014    | 2015    |
|--|---------|---------|---------|
| Amount used (kl)                             | 170,798 | 146,098 | 131,466 |
| Amount consumed (TJ)                         | 6,439   | 5,508   | 4,956   |
| Amount of diesel car operation (1,000km-car) | 510,105 | 423,423 | 380,311 |
| Use of diesel per unit distance (L/Km-car)   | 0.335   | 0.345   | 0.346   |

#### Efficient Operation of Electric Cars

With the rise of electric cars in operation, consumption of electric power has been on a steady rise. Nevertheless, consumption of electric power per unit distance dropped about 8% from 2013, a result achieved thanks to increased efficiency of train operation and introduction of electric cars with higher efficiency.

Consumption of Electric Power by Electric Railroad Vehicles

| Classification                                    | 2013      | 2014      | 2015      |
|---|-----------|-----------|-----------|
| Amount used (MWh)                                 | 2,321,625 | 2,208,981 | 2,293,292 |
| Amount consumed (TJ)                              | 22,288    | 21,216    | 22,016    |
| Amount of electric car operation (1,000km-car)    | 1,315,394 | 1,353,693 | 1,421,223 |
| Use of electricity per unit distance (kwh/Km-car) | 1.76      | 1.63      | 1.61      |

#### Energy Saving Practices for Car Driving (ECO-Driving)

KORAIL saved KRW 21.8 billion a year in energy costs for car driving through measures, including cutting load-free driving time of power cars, stopping the engine of cars making a long stop at intermediate, starting and terminating stations, turning off heating, cooling and lighting systems of deadhead trains and running power cars with dead engine.

Diesel Railroad Vehicles



Electric Railroad Vehicles



Saving of Energy for Car Driving (Unit : KRW million)

- Stopping the Engine of Cars Making a Long Stop
- Running Power Cars with Dead Engine

|      |        |     |
|------|--------|-----|
| 2013 | 17,557 | 842 |
| 2014 | 21,370 | 540 |
| 2015 | 21,451 | 321 |



### Energy Management of the Electric Railroad Vehicles

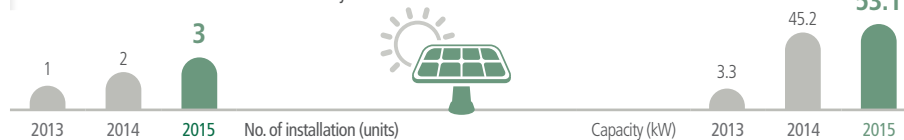
Train driving accounts for 87% of KORAIL's energy consumption and routine consumption for operation of stations, facilities, including depots and signals, heating and cooling and business-purpose automobiles represents only 13%. Of car driving energy, use of electric power has been rising every year as trains are increasingly replaced with electric cars to lower GHG emissions and minimize the discharge of air pollutants and noise while use of diesel has significantly dropped. This has maintained KORAIL's energy consumption for car driving and the resultant impact on the environment at the minimum level.

### Using the New and Renewable Energy

#### Operating the Solar Power Generation Facility

KORAIL has aggressively installed new and renewable energy equipment to train facilities since 2005. As of 2015, an annual average of 600MWh of electricity is generated from its 21 solar power stations with the total capacity of 544.6kW.

Installation of Solar Power Generation Facilities by Year



#### Operating the Geothermal Power Generation Facility

Geothermal power generation has been used for heating and cooling at KORAIL's train facilities since 2009. As of 2015, 23 geothermal power stations are being operated with the total capacity of 4,623.5kW.

Installation of Geothermal Power Generation Facilities by Year



#### Operating the Solar Heat Facility

KORAIL operates 31 solar power facilities for heating and cooling with the total capacity of 401,619kcal. Such facilities will be further deployed to new buildings and when renovating the existing ones.

Installation and Possession of the Solar Heat Facility



Type of Energy Use (Unit : TJ)

| Classification      |                  | 2013   | 2014   | 2015   |
|---------------------|------------------|--------|--------|--------|
| Train driving       | Diesel           | 6,439  | 5,508  | 4,956  |
|                     | Electrical power | 22,288 | 21,216 | 22,016 |
| Routine consumption | Electrical power | 3,411  | 3,335  | 3,584  |
|                     | Heating/cooling  | 321    | 262    | 371    |
|                     | Automobiles      | 58     | 62     | 64     |
| Total               |                  | 32,517 | 30,383 | 30,991 |

Solar Facilities (Gimcheon Station)



Geothermal Facilities (Osong Station)



Solar Heat Facilities (Daejeon Rolling Stock Depot)

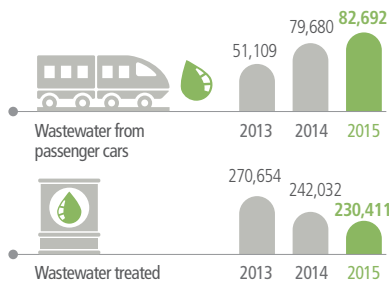


## Environmental Management

KORAIL is committed to proactive environmental management through advanced eco-friendly practices that put the environment before profit. Such efforts include diverse areas from air and water quality management to soil, waste and noise and vibration management.

Emissions of Water Pollutants

(Unit : m³)



Rainwater Reuse System at Yeonsan Station

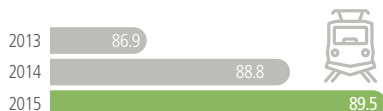


Air Pollution Prevention Facilities



Ratio of Electric Cars

(Unit : %)



### Water Quality Management

#### Emissions of Water Pollutants

KORAIL operates wastewater treatment facilities at stations and branch offices to deal with wastewater from train operation and washing. Its water resource management efforts include installation of water saving and pressure adjustment devices and use of wastewater reclamation system, discharged wastewater recycling and installation of rainwater reuse system.

#### Reasonable Use of Water Resources

Efforts are made at KORAIL to facilitate rainwater reuse and secure sustainable water resources. Water discharged from wastewater reclamation system and wastewater treatment facilities is reused for train washing and sprinkling system at buildings, toilets and gardening. Tight management and operation of rainwater reuse system enables KORAIL to secure stable sources of water and efficient use of limited water resources, thereby actively preparing for water shortages and minimizing the impacts of climate changes.

### Air Quality Control

#### Managing the In-door Air Quality and Operating the Air Pollution Prevention Facilities

Air quality control is a priority for providing clean environments for travelers. For this, KORAIL continuously conducts inspection and improvements of facilities, including air conditioning equipment at underground stations and ventilation systems and cleaning quality evaluation. As a result, air quality at all of its 84 stations (34 aboveground, 53 underground) subject to in-door air quality regulations is now appropriately maintained above the legal requirement. Besides, to improve air quality in passenger trains, KORAIL takes actions such as upgrading of air conditioning equipment, replacing heating and cooling system filters and strengthened cleaning. KORAIL also deployed dust collectors at train depots to control air pollutants released from car repairs and has increased the use of clean electric cars.

Results of In-door Air Quality Measurement in Train Stations

| Classification   | Measuring items             | Standards       | Results (average) |             |             |             |             |             |
|------------------|-----------------------------|-----------------|-------------------|-------------|-------------|-------------|-------------|-------------|
|                  |                             |                 | 2013              |             | 2014        |             | 2015        |             |
|                  |                             |                 | Underground       | Aboveground | Underground | Aboveground | Underground | Aboveground |
| Acceptable level | Find dust particles (μg/m³) | Less than 150   | 79                | 58          | 82          | 63          | 76          | 43          |
|                  | CO <sub>2</sub> (ppm)       | Less than 1,000 | 534               | 490         | 513         | 488         | 501         | 469         |
|                  | Formaldehyde (μg/m³)        | Less than 100   | 18                | 17          | 43          | 24          | 21          | 14          |
|                  | CO (ppm)                    | Less than 10    | 1                 | 1           | 1           | 1           | 1           | 1           |

## Soil Management

### Measurement and Management of Soil Contamination by Railroads

KORAIL monitors soil contamination by railroads by tracking changes in the level of contamination at 24 networked points, including stations designated by the Ministry of Environment. In 2015, soil contamination was measured at below the "Area 1" criteria for concern at all 24 points with the average contamination level showing little change from a year ago in most categories. In the same year, the number of points for inspection for storage and use of wooden ties increased significantly, but there were no breaches of the concerned limits, which otherwise would cause administrative penalties. This was achieved thanks to KORAIL's preemptive actions, including measuring of soil contamination for storage sites of old and new wooden ties, analysis of impacts of such ties on the environment and implementation of soil contamination prevention plans.

#### Process to Measure Soil Contamination at Networked Points



## Waste Management

### Efforts for Waste Reduction

KORAIL selects contractors for waste treatment, operates waste storage sites and designates time for discharge. Also, the company discharges waste to contractors' facilities within applicable jurisdictions and reports any discharge to the Environment Ministry's Allbaro System in compliance with applicable laws. Other efforts for appropriate, transparent treatment of waste include setting up of waste reduction targets for each workplace to facilitate employees' involvement, holding classes with outside experts and selection of waste treatment agencies registered at the Ministry of Environment.

#### Waste Treatment at Workplaces

(Unit : tons per year)

| Classification          | 2013  | 2014  | 2015  |
|-------------------------|-------|-------|-------|
| General workplace waste | 2,127 | 1,370 | 1,956 |
| Classified waste        | 1,712 | 1,292 | 1,588 |

### Efforts for Waste Recycling

General waste discharged from trains and workplaces are separately collected to reduce the overall amount of waste. KORAIL also actively implements waste recycling such as separation of iron scraps from used air filters and brake shoes, recycling of used air hoses and provision of wooden waste for fuel use. In addition to communication campaign for recycling, it actively participates in regional communities' food waste reduction campaigns.

#### Waste Recycling in 2015

(Unit : kg per year)

| Classification | From trains    | From stations  |
|----------------|----------------|----------------|
| Paper          | 306,595        | 482,567        |
| Plastic        | 52,225         | 141,174        |
| Cans           | 28,363         | 106,694        |
| Bottles        | 79,742         | 179,502        |
| Others         | 86             | 53,128         |
| <b>Total</b>   | <b>467,011</b> | <b>963,065</b> |

## Noise and Vibration Management

### Efforts for Reduction of Railroad-induced Noise and Vibration

Railroad-induced noise consists of mechanical noise from propelling apparatus, vibration noise from trains running on rails, wind noise from trains' front heads and pantographs and others, including whistle and warning sounds. To reduce these, KORAIL adopts low noise designs when building new trains, installs long rails and replaces the existing rails with long ones, and uses wind noise prevention techniques.

Ratio of Long Rails

(Unit : %)





# APPENDIX

Performance of Sustainability Management | Compliance with 10 Principles of UN Global Compact  
Report on ISO 26000 Compliance Assessment Results | Third Party's Assurance Statement | GRI G4 Index  
KORAIL's History | Overview of Subsidiaries | Awards and Memberships | Reader's Feedback









## APPENDIX

## Performance of Sustainability Management

## Economic Performance

## Summary of Consolidated Statement of Financial Position

(Unit : KRW 100 million)

| Classification |                            | 2013     | 2014     | 2015     |
|----------------|----------------------------|----------|----------|----------|
| Assets         | Current assets             | 19,698   | 55,188   | 9,527    |
|                | Non-current assets         | 200,949  | 166,893  | 172,460  |
|                | Total assets               | 220,647  | 222,081  | 181,987  |
| Liabilities    | Current liabilities        | 45,605   | 55,492   | 28,067   |
|                | Non-current liabilities    | 127,777  | 123,117  | 106,435  |
|                | Total liabilities          | 173,382  | 178,609  | 134,502  |
| Capital        | Paid-in capital            | 95,803   | 95,989   | 99,890   |
|                | Deficit                    | (80,681) | (84,581) | (82,830) |
|                | Other components of equity | 30,817   | 30,149   | 29,507   |
|                | Non-controlling interest   | 1,326    | 1,916    | 918      |
|                | Total shareholders' equity | 47,265   | 43,472   | 47,485   |

## Summary of consolidated comprehensive income statement

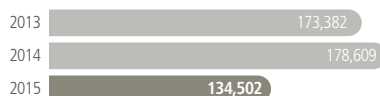
(Unit : KRW 100 million)

| Classification  | 2013     | 2014    | 2015    |
|---|----------|---------|---------|
| Turnover  | 48,661   | 50,937  | 55,160  |
| Cost of goods sold  | 47,466   | 47,205  | 51,089  |
| Gross profit  | 1,195    | 3,732   | 4,071   |
| Selling and administrative expenses                                 | 3,046    | 2,732   | 2,935   |
| Income from operations (loss)                                       | (1,851)  | 1,001   | 1,136   |
| Other income  | 111      | 99      | 227     |
| Other expenses  | 1,195    | 307     | 337     |
| Other income (loss)   | (47,009) | (1,228) | 696     |
| Financial income  | 613      | 1,030   | 1,027   |
| Financial costs   | 5,146    | 6,154   | 5,721   |
| Income on associate and joint venture                               | 240      | 199     | 209     |
| Net loss from continuing operations before income tax               | (54,237) | 5,361   | 2,764   |
| Income tax gain on continuing operations                            | (8,938)  | (41)    | (2,194) |
| Loss from continuing operations                                     | 45,299   | 5,320   | 569     |
| Income from discontinued operations                                 | 1,989    | 1,937   | 1,433   |
| Current net income (loss)   | (43,310) | (3,383) | 864     |
| Current net income (loss) attributed to owners of controlled entity | (43,477) | (3,542) | 823     |
| Current net income attributed to non-controlling interest           | 167      | 158     | 41      |
| Other comprehensive income (after tax)                              | (31,915) | (597)   | 757     |
| Total comprehensive income (loss)                                   | (11,395) | (3,981) | 1,621   |
| Capital attributed to owners of controlled entity                   | (11,567) | (4,139) | 1,581   |
| Non-controlling interest  | 171      | 158     | 39      |

## Assets (Unit : KRW 100 million)



## Liabilities (Unit : KRW 100 million)



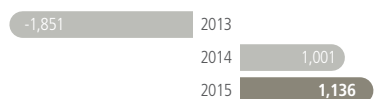
## Capital (Unit : KRW 100 million)



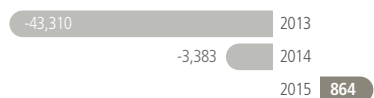
## Turnover (Unit : KRW 100 million)



## Income from Operations (Unit : KRW 100 million)



## Current Net Income (Unit : KRW 100 million)





## Social Performance

| Classification         |   | Unit                                | 2013       | 2014       | 2015        |
|------------------------|---|-------------------------------------|------------|------------|-------------|
| Employees              |   |                                     |            |            |             |
| Employment             | No. of total employees  | Persons                             | 27,930     | 27,461.25  | 26,498      |
|                        | No. employees on term-based contract (male/female)                | Persons                             | 280(15)    | 276(25)    | 278(27)     |
|                        | Under 25 years  | Persons                             | 90         | 59         | 124         |
|                        | 25 to 24 years  | Persons                             | 3,123      | 2,159.625  | 2,334.375   |
|                        | No. employees by age group  | Persons                             | 11,075     | 9,766      | 9,519.625   |
|                        | 35 to 44 years  | Persons                             | 11,261     | 11,910.875 | 11,765.625  |
|                        | 45 to 54 years  | Persons                             | 2,381      | 3,565.75   | 2,754.5     |
|                        | Over 55 years   | Persons                             | 904(3.4)   | 938(3.3)   | 887(3.2)    |
|                        | No. of the disabled employees (mandatory employment rate of 3.0%) | Persons (%)                         | 2,623(9.2) | 2,725(9.7) | 2,988(10.9) |
|                        | No. of the aged employees (mandatory employment rate of 6.0%)     | Persons (%)                         | 18.3       | 18.2       | 18.6        |
| Hiring                 | Average no. of years in service                                   | Years                               | 0.304      | 0.273      | 0.250       |
|                        | Rate of workplace safety  | No. of the injured/No. of employees | 162        | 500        | 319         |
|                        | No. of total newly hired  | Persons                             | 2          | 2          | 13          |
|                        | Under 20 years  | Persons                             | 73         | 243.5      | 123         |
|                        | 21 to 25 years  | Persons                             | 66         | 219        | 143         |
|                        | No. newly hired by age group                                      | Persons                             | 16         | 31         | 31.5        |
|                        | 26 to 30 years  | Persons                             | 3          | 4          | 6           |
|                        | 31 to 35 years  | Persons                             | 2          | 0.5        | 2.5         |
|                        | 36 to 40 years  | Persons                             | 66         | 271.5      | 129.5       |
|                        | Over 41 years   | Persons                             | 96         | 228.5      | 189.5       |
| Resignation            | No. newly hired by regional                                       | Persons                             | 3.3        | 4.0        | 3.8         |
|                        | Metropolitan area (Seoul, Incheon, Gyeonggi-do)                   | Persons                             | 66         | 271.5      | 129.5       |
| Female workforce       | Non-metropolitan area (excluding Seoul, Incheon, Gyeonggi-do)     | Persons                             | 96         | 228.5      | 189.5       |
|                        | Resignation rate (%)  | %                                   | 3.3        | 4.0        | 3.8         |
|                        | No. of female employees   | Persons                             | 2,580      | 2,712      | 2,747       |
|                        | Female employment (mandatory employment rate of 7.67%)            | %                                   | 9.0        | 9.65       | 10.02       |
|                        | No. of female managers (persons of level 2 or higher)             | Persons                             | 17         | 19         | 21          |
| Education              | No. of female leaders of teams or higher units (rate)             | Persons (%)                         | 193(7.5)   | 210(8.0)   | 235(7.04)   |
|                        | No. of the newly hired females (rate)                             | Persons (%)                         | 34(20.5)   | 149(29.8)  | 55(17.2)    |
|                        | Education budget  | KRW million                         | 7,087      | 6,021      | 8,423       |
|                        | Per capita educational costs                                      | KRW 1,000                           | 253        | 220        | 317         |
| Customers              | Per capita educational time                                       | time                                | 28         | 54         | 32          |
|                        | Public Corporation Satisfaction Index (PCSI)                      | Scores                              | 91.5       | 93.1       | 96.4        |
|                        | Satisfaction with customer complaints management                  | Scores                              | 84.5       | 88.0       | 83.5        |
| Punctuality rate       | KTX Punctuality rate (UIC standard)                               | %                                   | 99.63      | 99.88      | 99.90       |
| Partner companies      |   |                                     |            |            |             |
| Support                | Procurement from small businesses                                 | KRW 100 million                     | 6,967      | 6,703      | 6,249       |
|                        | Rate of procurement from small businesses                         | %                                   | 63.6       | 58.9       | 76.7        |
|                        | Financial support   | KRW 100 million                     | 861        | 645        |             |
| Regional communities   |   |                                     |            |            |             |
| Fundraising            | Love Fund   | KRW million                         | 690        | 630        | 589         |
|                        | Matching grant  | KRW million                         | 620        | 603        | 673         |
| Time of voluntary work | Per capita time of voluntary work                                 | Hours                               | 12.6       | 12.8       | 13.0        |

## Environmental Performance

| Classification                          |   | Unit                | 2013      | 2014      | 2015      |
|---|---|---------------------|-----------|-----------|-----------|
| Amount of energy used                   | Diesel for train driving                    | TJ                  | 6,439     | 5,508     | 4,956     |
|   | Electricity for train driving               | TJ                  | 22,288    | 21,216    | 22,016    |
|   | Electricity for business routines           | TJ                  | 3,411     | 3,335     | 3,584     |
|   | Fuel for heating and cooling                | TJ                  | 321       | 262       | 371       |
|   | Fuel for business-purpose automobiles       | TJ                  | 58        | 62        | 64        |
|   | Total                                       | TJ                  | 32,517    | 30,372    | 30,991    |
| GHG emissions                           | Diesel for train driving                    | tCO <sub>2</sub> eq | 500,742   | 428,329   | 385,431   |
|   | Electricity for train driving               | tCO <sub>2</sub> eq | 1,082,459 | 1,030,405 | 1,069,248 |
|   | Electricity for business routines           | tCO <sub>2</sub> eq | 165,675   | 162,000   | 174,079   |
|   | Fuel for heating and cooling                | tCO <sub>2</sub> eq | 18,424    | 14,309    | 21,576    |
|   | Fuel for business-purpose automobiles       | tCO <sub>2</sub> eq | 4,154     | 4,323     | 4,479     |
|   | Total                                       | tCO <sub>2</sub> eq | 1,771,454 | 1,639,366 | 1,654,813 |
| Investments in environmental facilities | Water quality                               | KRW million         | 288       | 179       | 103       |
|   | Air   | KRW million         | 360       | 10        | 153       |
|   | Soil  | KRW million         | 1,753     | 1,145     | 214       |
|   | Waste                                       | KRW million         | 39        | 80        | 61        |
|   | Total                                       | KRW million         | 2,435     | 1,414     | 531       |
| Environmental impact management         | Amount of water reused                      | ton                 | 119,457   | 138,848   | 130,312   |
|   | Rate of reuse                               | %                   | 2.47      | 2.61      | 2.37      |
|   | Amount of waste water treated               | m <sup>3</sup>      | 270,654   | 242,032   | 230,411   |
|   | Amount of (general) workplace waste treated | ton                 | 2,127     | 1,370     | 1,956     |
|   | Amount of classified waste treated          | ton                 | 1,712     | 1,292     | 1,588     |
|   | Recycling of daily waste (trains)           | kg                  | 406,094   | 421,347   | 467,011   |
|   | Recycling of daily waste (stations)         | kg                  | 1,818,163 | 2,657,407 | 963,065   |
| Purchase of green goods                 | Amount of purchase of green goods           | KRW million         | 8,728     | 8,678     | 4,613     |
|   | Rate of purchase of green goods             | %                   | 91.10     | 96.59     | 83.67     |

## Compliance with 10 Principles of UN Global Compact

### APPENDIX

#### Compliance with 10 Principles of UN Global Compact

The principle of the UN Global Compact is based on the following international declaration and agreements.



- The Universal Declaration of Human Rights
- Rio Declaration on Environment and Development
- UN Convention against Corruption
- ILO Declaration on Fundamental Principles and Rights at Work

On May 2007, KORAIL joined 「UN Global Compact」, the international agreement of UN-level for the social responsibility of the business, complying with 10 principles of 4 areas, including human rights, labor, environment and anti-corruption



Human Rights

- Principle 1. Business should support and respect the protection of internationally proclaimed human rights.
- Principle 2. Business should make sure that they are not complicit in human rights abuses.



Labour

- Principle 3. Business should uphold the freedom of association and the effective recognition of the right to collective bargaining.
- Principle 4. Business should uphold the elimination of all forms of forced and compulsory labor.
- Principle 5. Business should uphold the effective abolition of child labor.
- Principle 6. Business should uphold the elimination of discrimination in respect of employment and occupation.



Environment

- Principle 7. Business should support a precautionary approach to environmental challenges.
- Principle 8. Business should undertake initiatives to promote greater environmental responsibility.
- Principle 9. Business should encourage the development and diffusion of environmentally friendly technologies.



Anti-Corruption

- Principles 10. Business should work against corruption in all its forms, including extortion and bribery.



## APPENDIX

## Report on ISO 26000 Compliance Assessment Results

**To KORAIL management and stakeholders,****Standards of Assessment**

Korean Standards Association (KSA) developed the Checklist for Social Responsibility Compliance Assessment in accordance with ISO 26000, the international standards on social responsibility. The ISO 26000 checklist includes performance measurement regarding the process to fulfill social responsibility and seven core subjects (organizational governance, human rights, labor practices, environment, fair operating practices, consumer issues and community involvement and development). With the checklist, KSA assessed how KORAIL fulfills its social responsibility.

**Scope of Assessment**

The measurement covered KORAIL's overall internal and external activities and mid- to long-term strategies, social responsibility activities, process to execute the sustainable management strategies. The results were assessed by reviewing internal documents on applicable policies, performance data and calculation systems.

**Methods of Assessment**

With regard to the publication of the sustainability report, KSA conducted the followings to collect and measure data based on objective measurement standards with focus on divisions and departments.

- Reviewing internal data on KORAIL's sustainability management activities and performance.
- Conducting interviews with employees responsible for each sustainability management issue of KORAIL.

**Results of Assessment**

By receiving 935 out of possible 1000, KORAIL was classified into the phase IV of ISO 26000 social responsibility fulfillment. An organization classified into phase IV means that its members are highly aware of social responsibility fulfillment and its operational systems, policies and practices are well organized.

| Core Subjects | Possible Score | Acquired Score |
|---------------|----------------|----------------|
| Process       | 360            | 348            |
| Performance   | 640            | 587            |
| Total         | 1000           | 935            |

**I. Assessment of Social Responsibility Process: 348 Out of Possible 360**

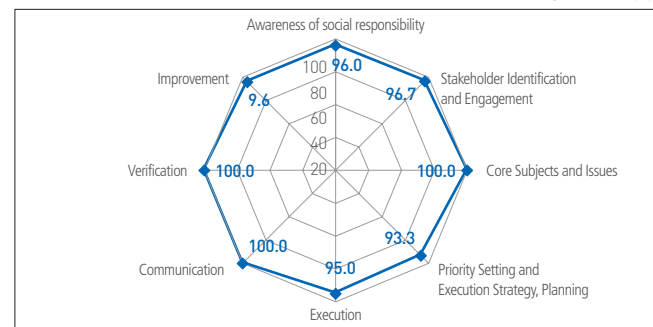
KORAIL demonstrates its commitment to sustainability management in its mission, "Railroad of the Republic of Korea devoted to the People, the World and the Future" and vision, "KORAIL for the Happiness of the People." With the Brand Management Department playing the central role, KORAIL operates ten sustainability management promotion sub-

units devoted to each area and a number of committees to enhance its execution capability to fulfill social responsibility.

We recommend KORAIL to integrate sustainability and social responsibility into its management strategy systems and processes in a practical manner and build a sustainability management performance management system with all seven core subjects of ISO 26000 included.

Results of Process Assessment

[Achievement (%)]

**II. Assessment of Seven Core Subjects: 587 Out of Possible 640**

KORAIL showed an overall high level of performance on seven core subjects of ISO 26000. The performance was especially strong in the areas of human rights, labor practices and fair operating practices.

Results of Core Subject Assessment

[Achievement (%)]

**III. Recommendations for Improvement by Subject**

The followings are subject-specific recommendations for improvement based on assessment results.

**Organizational Governance**

KORAIL supports its directors' decision making by operating a specialized sub-committee within the Board of Directors and has experts from diverse fields as non-executive directors to improve the Board's expertise. We recommend to operate a sustainability management sub-committee within the Board so that decisions regarding social responsibility can be made at the highest decision-making body.



### Human Rights

KORAIL's personnel policy and code of ethics stipulate respect for human rights, employment equality and ban on discrimination and has a robust reporting and handling system for human rights-related complaints. We recommend KORAIL to establish an enterprise-wide human rights management system and conduct due diligence on human rights to partner companies and affiliates.

### Labor Practices

We found KORAIL has made significant efforts to ensure safe working environments and work-life balance for its employees. The corporation has also abolished seniority-based promotion and introduced the wage peak system through active communication between labor and management. We recommend to create a stable work environment to ease employees' sense of instability stemming from frequent changes in personnel policy and expand employee benefits to help them improve their expertise.

### Environment

KORAIL supports responses to climate changes and reduction of GHG emissions by operating railroads, an environmentally-friendly method of transportation. Its efforts to increase low-carbon high-efficiency cars and use new and renewable energy received high scores. In the long-term, KORAIL needs to strengthen its environmental management of soil, waste, noise and vibration above the legal requirements.

### Fair Operating Practices

KORAIL strengthened its supports for SMEs and cooperation for mutual growth by expanding its exclusive unit for mutual growth (Mutual Growth Center) while maintaining anti-corruption policy and systems. To prevent illegal acts from taking place occasionally, we recommend KORAIL to facilitate a reporting channel in which identity of those reporting illegal acts cannot be traced and strengthen penalties for negligence and illegal acts.

### Consumer Issues

Thanks to the creation of the next-generation passenger transport system, increased convenience of online purchase and updates of its mobile application, KORAIL achieved the highest consumer satisfaction level ever. However, train accidents have occurred from time to time despite safety management has been steadily enhanced. To prevent such accidents, KORAIL needs to do its utmost to have its railroad safety system focused on prevention.

### Community Involvement and Development

With its five railroad tourism belts completed recently, KORAIL further contributes to the development of local communities and creates a new type of travel. In addition, its social contribution foundation jointly led by labor and management and activities based on its business characteristics such as Railroad Experience Center and Happy Train received high scores. We recommend to further enhance social contribution program led by labor and management and continue to strengthen specialized, systematic programs utilizing its nationwide railroad networks

### Conclusion of Assessment

By receiving 935 out of possible 1000, KORAIL was classified into the phase IV of ISO 26000 social responsibility fulfillment. KORAIL is now in the phase of expanding social responsibility activity across all levels of its organization and fulfillment was especially strong in the areas of human rights, labor practices and fair operating practices. We expect that KORAIL, as a specialized railroad operator, continues to increase passengers' convenience in using railroads and secures the highest level of railroad safety, thereby becoming a trusted and respected public organization by stakeholders.



June 7, 2016

Baek, Soo-hyun

Chairman & CEO of Korean Standards Association

*Baek, Soo Hyun*

Since its inception in 1962 under the Industrial Standardization Act, KSA has served as a knowledge service provider promoting industrial standards, quality management and sustainability management practices and matters regarding KS and ISO certifications. Its contribution to sustainable development of the Korean society is especially notable in its activities from local administration of ISO 26000, training and education as a GRI-designate institution and AA1000 certification to implementation of the Korean Sustainability Index (KSI), operation of the UN Clean Development Mechanism (CDM) and GHG target management system certification.

## APPENDIX

## Third Party's Assurance Statement

## KMAR Assurance Statement

To the Readers of KORAIL Sustainability Report 2015:

## Foreword

Korea Management Association Registration Inc. (hereinafter "KMAR") has been requested by of Korea Railroad (hereinafter "KORAIL") to verify the contents of its Sustainability Report 2015 (hereinafter "the Report"). KORAIL is responsible for the collection and presentation of information included in the Report. KMAR's responsibility is to carry out assurance engagement on specific data and information in the assurance scope stipulated below.

## Scope and standard

KORAIL describes its efforts and achievements of the sustainability activities in the Report. KMAR performed a Type 2, moderate level of assurance using AA1000AS (2008) as an assurance standard. KMAR's assurance team (hereinafter "the team") evaluated the adherence to Principles of Inclusivity, Materiality and Responsiveness, and the reliability of the selected GRI G4 indices as below, where professional judgment of the team was exercised as materiality criteria.

The team checked whether the Report has been prepared in accordance with the 'Core Option' of GRI G4 which covers the followings.

- Reporting Principles
- General Standard Disclosures
- Specific Standard Disclosures
  - Generic DMA of each of following material aspects
  - Economic Performance: EC1
  - Indirect Economic Impacts: EC7, EC8
  - Energy: EN3, EN6, EN7
  - Water: EN10
  - Emissions: EN15, EN16, EN18, EN21
  - Effluents and Waste: EN22, EN23
  - Compliance: EN29
  - Employment: LA1, LA2, LA3
  - Labor/Management Relations: LA4
  - Occupational Health and Safety: LA5, LA6
  - Training and Education: LA9, LA11
  - Supplier Assessment for Labor Practices: LA14
  - Labor Practices Grievance Mechanisms: LA16
  - Non-discrimination: HR3
  - Freedom of Association and Collective Bargaining: HR4

- Local Communities: SO1
- Anti-corruption: SO3, SO4
- Anti-competitive Behavior: SO7
- Customer Health and Safety: PR1
- Product and Service Labeling: PR3, PR5
- Customer Privacy: PR8

This Report excludes a data and information of joint corporate, contractor etc. which is outside of the organization, i.e. KORAIL, among report boundaries.

## Our approach

In order to verify the contents of the Report within an agreed scope of assurance in accordance with the assurance standard, the team has carried out an assurance engagement as follows:

- Reviewed overall report
- Reviewed materiality test process and methodology
- Reviewed sustainability management strategies and targets
- Reviewed stakeholder engagement activities
- Interviewed people in charge of preparing the Report

## Our conclusion

Based on the results we have obtained from material reviews and interviews, we had several discussions with KORAIL on the revision of the Report. We reviewed the Report's final version in order to confirm that our recommendations for improvement and our revisions have been reflected. When reviewing the results of the assurance, the assurance team could not find any inappropriate contents in the Report to the compliance with the principles stipulated below. Nothing has come to our attention that causes us to believe that the data included in the verification scope are not presented appropriately.

- Inclusivity
 

Inclusivity is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

  - KORAIL is developing and maintaining stakeholder communication channels in various forms and levels in order to make a commitment to be responsible for the stakeholders. The assurance team could not find any critical stakeholder KORAIL left out during this procedure.



#### ■ Materiality

Materiality is determining the relevance and significance of an issue to an organization and its stakeholders. A material issue is an issue that will influence the decisions, actions, and performance of an organization or its stakeholders.

- KORAIL is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.

#### ■ Responsiveness

Responsiveness is an organization's response to stakeholder issues that affect its sustainability performance and is realized through decisions, actions, and performance, as well as communication with stakeholders.

- The assurance team could not find any evidence that KORAIL's counter measures to critical stakeholder issues were inappropriately recorded in the Report.

We could not find any evidence the Report was not prepared in accordance with the 'Core Option' of GRI G4.

### Recommendation for improvement

We hope the Report is actively used as a communication tool with stakeholders and recommend the following for improvements.

- Integration of management strategy and sustainability management system: KORAIL aims to expand strategic sustainability management and to integrate decision making bodies. On the other hand, KMAR recommends KORAIL to centralize resources and maximize its sustainability performances by integrating management strategy and sustainability management system.
- Improvement of sustainability information management system: Being a foundation of sustainability risk management, data gathering and management practice enhances availability and value of the data. KMAR recommends KORAIL to continuously improve sustainability information management system such as gathering and management practice, and organization in charge.

### Our independence

With the exception of providing third party assurance services, KMAR is not involved in any other 'KORAIL' business operations that are aimed at making profit in order to avoid any conflicts of interest and to maintain independence.

June, 22nd, 2016

*K. H. Park*



**AA1000**

Licensed Assurance Provider  
000-129

## APPENDIX

## GRI G4 Index

| General Standard Disclosures               |  |   |              |                    |
|--|--|---|--------------|--------------------|
| Indicators                                 | Contents   | ISO 26000   | Page         | External Assurance |
| Strategy and Analysis                      |  |   |              |                    |
| G4-1                                       | Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.   | 4.7 / 6.2 / 7.4.2   | 4-5          | 82-83              |
| Organizational Profile                     |  |   |              |                    |
| G4-3                                       | Report the name of the organization  |   | 10           | 82-83              |
| G4-4                                       | Report the primary brands, products, and services.   |   | 12-13        | 82-83              |
| G4-5                                       | Report the location of the organization's headquarters.  |   | 10           | 82-83              |
| G4-6                                       | Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.  |   | 10           | 82-83              |
| G4-7                                       | Report the nature of ownership and legal form.   |   | 10           | 82-83              |
| G4-8                                       | Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)   |   | 10-11        | 82-83              |
| G4-9                                       | Report the scale of the organization, including:<br>- Total number of employees<br>- Total number of operations<br>- Net sales (for private sector organizations) or net revenues (for public sector organizations)<br>- Total capitalization broken down in terms of debt and equity (for private sector organizations)<br>- Quantity of products or services provided  | 6.3.10 / 6.4.1-6.4. / 6.4.3 / 6.4.4 / 6.4.5 / 6.8.5 / 7.8 | 10           | 82-83              |
| G4-10                                      | a. Report the total number of employees by and gender.<br>b. Report the total number of permanent employees by employment type and gender.<br>c. Report the total workforce by employees and supervised workers and by gender.<br>d. Report the total workforce by region and gender.<br>e. Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors.<br>f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries). |   | 10, 77       | 82-83              |
| G4-11                                      | Report the percentage of total employees covered by collective bargaining agreements.  |   | 20           | 82-83              |
| G4-12                                      | Describe the organization's supply chain.  |   | 11, 48-52    | 82-83              |
| G4-13                                      | Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain, including:<br>- Changes in the location of, or changes in, operations, including facility openings, closings, and expansions<br>- Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations)<br>- Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination   |   | 2            | 82-83              |
| G4-14                                      | Report whether and how the precautionary approach or principle is addressed by the organization.   |   | 21           | 82-83              |
| G4-15                                      | List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.   | 6.3.10 / 6.4.1-6.4. / 6.4.3 / 6.4.4 / 6.4.5 / 6.8.5 / 7.8 | 92           | 82-83              |
| G4-16                                      | List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization:<br>- Holds a position on the governance body<br>- Participates in projects or committees<br>- Provides substantive funding beyond routine membership dues<br>- Views membership as strategic  | 6.3.10 / 6.4.1-6.4. / 6.4.3 / 6.4.4 / 6.4.5 / 6.8.5 / 7.8 | 92           | 82-83              |
| Identified Material Aspects and Boundaries |  |   |              |                    |
| G4-17                                      | a. List all entities included in the organization's consolidated financial statements or equivalent documents.<br>b. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.  |   | 10-11, 90-91 | 82-83              |
| G4-18                                      | a. Explain the process for defining the report content and the Aspect Boundaries.<br>b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.   | 5.2 / 7.3.2 / 7.3.3 / 7.3.4                               | 24-25        | 82-83              |
| G4-19                                      | List all the material Aspects identified in the process for defining report content.   |   | 25           | 82-83              |

| General Standard Disclosures               |   |                             |       |                    |
|--|---|-----------------------------|-------|--------------------|
| Indicators                                 | Contents  | ISO 26000                   | Page  | External Assurance |
| Identified Material Aspects and Boundaries |   |                             |       |                    |
| G4-20                                      | For each material Aspect, report the Aspect Boundary within the organization, as follows:<br>- Report whether the Aspect is material within the organization<br>- If the Aspect is not material for all entities within the organization (as described in G4-17), select one of the following two approaches and report either:<br>a. The list of entities or groups of entities included in G4-17 for which the Aspect is not material or<br>b. The list of entities or groups of entities included in G4-17 for which the Aspects is material<br>- Report any specific limitation regarding the Aspect Boundary within the organization |                             | 25    | 82-83              |
| G4-21                                      | For each material Aspect, report the Aspect Boundary outside the organization, as follows:<br>- Report whether the Aspect is material outside of the organization<br>- If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material.<br>In addition, describe the geographical location where the Aspect is material for the entities identified<br>- Report any specific limitation regarding the Aspect Boundary outside the organization  | 5.2 / 7.3.2 / 7.3.3 / 7.3.4 | 25    | 82-83              |
| G4-22                                      | Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.   |                             | 2     | 82-83              |
| G4-23                                      | Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.  |                             | 2     | 82-83              |
| Stakeholder Engagement                     |   |                             |       |                    |
| G4-24                                      | Provide a list of stakeholder groups engaged by the organization.   |                             | 22-23 | 82-83              |
| G4-25                                      | Report the basis for identification and selection of stakeholders with whom to engage.  |                             | 22-23 | 82-83              |
| G4-26                                      | Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.   | 5.3                         | 22-23 | 82-83              |
| G4-27                                      | Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.   |                             | 22-23 | 82-83              |
| Report Profile                             |   |                             |       |                    |
| G4-28                                      | Reporting period (such as fiscal or calendar year) for information provided.  |                             | 2     | 82-83              |
| G4-29                                      | Date of most recent previous report (if any).   |                             | 2     | 82-83              |
| G4-30                                      | Reporting cycle (such as annual, biennial).   |                             | 2     | 82-83              |
| G4-31                                      | Provide the contact point for questions regarding the report or its contents.   |                             | 2     | 82-83              |
| G4-32                                      | a. Report the 'in accordance' option the organization has chosen.<br>b. Report the GRI Content Index for the chosen option (see tables below).<br>c. Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.  | 7.5.3 / 7.6.2               | 2     | 82-83              |
| G4-33                                      | a. Report the organization's policy and current practice with regard to seeking external assurance for the report.<br>b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided.<br>c. Report the relationship between the organization and the assurance providers.<br>d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.   |                             | 82-83 | 82-83              |
| Governance                                 |   |                             |       |                    |
| G4-34                                      | Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.  | 6.2 / 7.4.3 / 7.7.5         | 16-17 | 82-83              |
| Ethics and Integrity                       |   |                             |       |                    |
| G4-56                                      | Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.   | 4.4 / 6.6.3                 | 18-19 | 82-83              |



| Specific Standard Disclosures  |            |   |   |        |                    |
|--------------------------------|------------|---|---|--------|--------------------|
| Aspects                        | Indicators | Contents  | ISO 26000   | Page   | External Assurance |
| Category: Economic             |            |   |   |        |                    |
| Economic Performance           | G4-DMA     | Disclosures on Management Approach  |   | 60     | 82-83              |
|                                | G4-EC1     | Direct economic value generated and distributed   | 6.8.1-6.8.2 / 6.8.3 / 6.8.7 / 6.8.9                   | 61     | 82-83              |
| Indirect Economic Impacts      | G4-DMA     | Disclosures on Management Approach  |   | 60     | 82-83              |
|                                | G4-EC7     | Development and impact of infrastructure investments and services supported   | 6.3.9/6.8.1-6.8.2/6.8.7/6.8.9                         | 62-63  | 82-83              |
|                                | G4-EC8     | Significant indirect economic impacts, including the extent of impacts  | 6.3.9/6.6.6/6.6.7/6.7.8/6.8.1-6.8.2/6.8.5/6.8.7/6.8.9 | 62-63  | 82-83              |
| Category: Environmental        |            |   |   |        |                    |
| Energy                         | G4-DMA     | Disclosures on Management Approach  |   | 64     | 82-83              |
|                                | G4-EN3     | Energy consumption within the organization  | 6.5.4   | 70-71  | 82-83              |
|                                | G4-EN6     | Reduction of energy consumption   | 6.5.4 / 6.5.5   | 70-71  | 82-83              |
|                                | G4-EN7     | Reductions in energy requirements of products and services  | 6.5.4 / 6.5.5   | 70-71  | 82-83              |
| Water                          | G4-DMA     | Disclosures on Management Approach  |   | 64     | 82-83              |
|                                | G4-EN10    | Percentage and total volume of water recycled and reused  | 6.5.4   | 72, 78 | 82-83              |
| Emissions                      | G4-DMA     | Disclosures on Management Approach  |   | 64     | 82-83              |
|                                | G4-EN15    | Direct greenhouse gas (GHG) emissions (Scope 1)   | 6.5.5   | 68-69  | 82-83              |
|                                | G4-EN16    | Energy indirect greenhouse gas (GHG) emissions (Scope 2)  | 6.5.5   | 68-69  | 82-83              |
|                                | G4-EN18    | Greenhouse gas (GHG) emissions intensity  | 6.5.5   | 68-69  | 82-83              |
|                                | G4-EN21    | NOX, SOX and other significant air emissions  | 6.5.3   | 72     | 82-83              |
| Effluents and Waste            | G4-DMA     | Disclosures on Management Approach  |   | 64     | 82-83              |
|                                | G4-EN22    | Total water discharge by quality and destination  | 6.5.3 / 6.5.4   | 72     | 82-83              |
|                                | G4-EN23    | Total weight of waste by type and disposal method   | 6.5.3   | 73     | 82-83              |
| Compliance                     | G4-DMA     | Disclosures on Management Approach  |   | 64     | 82-83              |
|                                | G4-EN29    | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations | 4.6   | 72-73  | 82-83              |
| Category: Social               |            |   |   |        |                    |
| Labor Practice and Decent Work |            |   |   |        |                    |
| Employment                     | G4-DMA     | Disclosures on Management Approach  |   | 40     | 82-83              |
|                                | G4-LA1     | Total number and rates of new employee hires and employee turnover by age group, gender and region  | 6.4.3   | 41     | 82-83              |
|                                | G4-LA2     | Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation | 6.4.4 / 6.8.7   | 43     | 82-83              |
|                                | G4-LA3     | Return to work and retention rates after parental leave, by gender  | 6.4.4   | 43     | 82-83              |
| Labor/ Management Relations    | G4-DMA     | Disclosures on Management Approach  |   | 40     | 82-83              |
|                                | G4-LA4     | Minimum notice periods regarding operational changes, including whether these are specified in collective agreements                      | 6.4.3 / 6.4.5   | 44-45  | 82-83              |

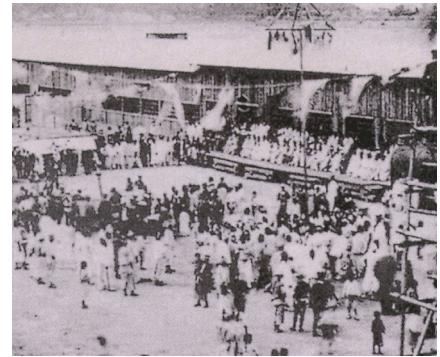
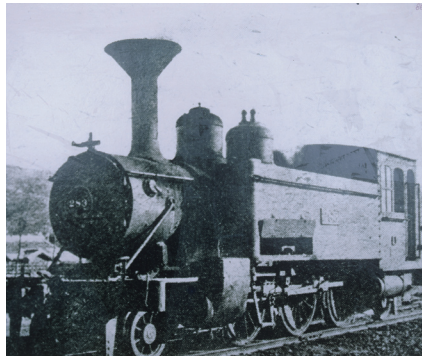
| Specific Standard Disclosures                    |            |   |  |           |                    |
|--|------------|---|--|-----------|--------------------|
| Aspects  | Indicators | Contents  | ISO 26000  | Page      | External Assurance |
| Category: Social                                 |            |   |  |           |                    |
| Labor Practice and Decent Work                   |            |   |  |           |                    |
| Occupational Health and Safety                   | G4-DMA     | Disclosures on Management Approach  |  | 28        | 82-83              |
|  | G4-LA5     | Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs  | 6.4.6  | 31        | 82-83              |
|  | G4-LA6     | Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender   | 6.4.6 / 6.8.8  | 31        | 82-83              |
| Training and Education                           | G4-DMA     | Disclosures on Management Approach  |  | 40        | 82-83              |
|  | G4-LA9     | Average hours of training per year per employee by gender, and by employee category   | 6.4.7  | 42, 77    | 82-83              |
|  | G4-LA11    | Percentage of employees receiving regular performance and career development reviews, by gender and by employee category  | 6.4.7  | 42        | 82-83              |
| Labor Practices Grievance Mechanisms             | G4-DMA     | Disclosures on Management Approach  |  | 40        | 82-83              |
|  | G4-LA16    | Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms   | 6.3.6  | 44-45     | 82-83              |
| Human Rights                                     |            |   |  |           |                    |
| Non-discrimination                               | G4-DMA     | Disclosures on Management Approach  |  | 40        | 82-83              |
|  | G4-HR3     | Total number of incidents of discrimination and corrective actions taken  | 6.3.6 / 6.3.7 / 6.3.10 / 6.4.3                         | 20, 41    | 82-83              |
| Freedom of Association and Collective Bargaining | G4-DMA     | Disclosures on Management Approach  |  | 41        | 82-83              |
|  | G4-HR4     | Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights                                    | 6.3.3 / 6.3.4 / 6.3.5 / 6.3.8 / 6.3.10 / 6.4.5 / 6.6.6 | 20, 44-45 | 82-83              |
| Society  |            |   |  |           |                    |
| Local Communities                                | G4-DMA     | Disclosures on Management Approach  |  | 53        | 82-83              |
|  | G4-SO1     | Percentage of operations with implemented local community engagement, impact assessments, and develop programs  | 6.3.9 / 6.5.1-6.5.2 / 6.5.3 / 6.8                      | 54-57     | 82-83              |
| Anti-corruption                                  | G4-SO3     | Total number and percentage of operations assessed for risks related to corruption and the significant risks identified   | 6.6.1-6.6.2 / 6.6.3                                    | 18-19     | 82-83              |
|  | G4-SO4     | Communication and training on anti-corruption policies and procedures   | 6.6.1-6.6.2 / 6.6.3                                    | 18-19     | 82-83              |
| Anti-competitive Behavior                        | G4-DMA     | Disclosures on Management Approach  |  | 48        | 82-83              |
|  | G4-SO7     | Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes  | 6.6.1-6.6.2 / 6.6.5 / 6.6.7                            | 49-50     | 82-83              |
| Product Responsibility                           |            |   |  |           |                    |
| Customer Health and Safety                       | G4-DMA     | Disclosures on Management Approach  |  | 28        | 82-83              |
|  | G4-PR1     | Percentage of significant product and service categories for which health and safety impacts are assessed for improvement   | 6.7.1-6.7.2 / 6.7.4 / 6.7.5 / 6.8.8                    | 29-33     | 82-83              |
| Product and Service Labeling                     | G4-DMA     | Disclosures on Management Approach  |  | 34        | 82-83              |
|  | G4-PR3     | Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements | 6.7.1-6.7.2 / 6.7.3 / 6.7.4 / 6.7.5 / 6.7.9            | 35-38     | 82-83              |
|  | G4-PR5     | Results of surveys measuring customer satisfaction  | 6.7.1-6.7.2 / 6.7.6                                    | 35        | 82-83              |
| Customer Privacy                                 | G4-DMA     | Disclosures on Management Approach  |  | 34        | 82-83              |
|  | G4-PR8     | Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data   | 6.7.1-6.7.2 / 6.7.7                                    | 39        | 82-83              |

## APPENDIX

## KORAIL's History

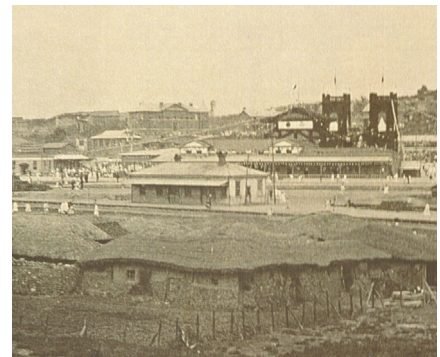
## Before 1900

- 1899 • Opening of the Gyeongin Line from Noryangjin to Jemulpo, Operation of Mogul train with the average speed of 20km/h
- 1899 • The first Mogul-type steam locomotive for the Gyeongin railroad line
- 1899 • Opening ceremony of the Gyeongin Line (Noryangjin station)



## 1901~1960

- 1901 • Launching of the mail service via the Gyeongin Line
- 1905 • Opening of the Gyeongui Line (Yongsan-Gaeseong)
- 1906 • Establishment of the Railway Administration Bureau of the Residency-General (1,791 employees)
- 1925 • Completion of Gyeongseong Station (present Seoul Station)
- 1937 • Designation of Railroad Day



“

**117-year Long History of  
Korean Railroads since  
the First Whistle Blowing  
from the Gyeongin Line**

”

## 1961~1980

- 1963 • Foundation of Korean National Railroad as an external entity of the Ministry of Transportation
- 1969 • Operation of Maengho train between Seoul and Busan with the average speed of 77km/h
- 1973 • Operation of the Jungang subway line (Cheongnyangni-Jecheon)
- 1974 • Opening of the metropolitan subway line
- 1979 • Operation of diesel locomotives built with indigenous technologies





“

## KORAIL-type **Creative Economy** Realizes the **People's Happiness**

”



# KTX 10<sup>th</sup>

## ANNIVERSARY

“

KTX

### Newly Changes the Republic of Korea

”

## 2001 ~ 2010

- 2004 • Opening ceremony for the first phase Gyeongbu high-speed railroad line
- 2005 • Foundation of Korea Railroad Corporation
- 2007 • Opening of inter-Korean freight railroad line
- 2008 • Successful hosting of the International Union of Railroads
- 2010 • Opening of the second phase Gyeongbu high-speed railroad line
- 2010 • Operation of KTX-Sancheon train

## 2011 ~ 2015



## 1981 ~ 2000

- 1980 • Operation ceremony for Domestic Saemaeul power vehicle
- 1985 • Seoul-Busan Saemaeul train with the average speed of 107km/h
- 1999 • Centenary of Korean railroads



- 2012 • Initiation of the operation of ITX-Cheongchun train
- 2013 • Opening of O-, V- and S-Train
- 2014 • 10th anniversary of KTX
- Launching of all-nation compatible Rail Plus transportation card
- Launching of the KTX service of Incheon International Airport
- First operating surplus since the inception of the Corporation
- 2015 • Opening the West Sea Gold-train (G-train) and the Jeongseon Arirang train service (A-train)
- Opening of the Honam High-speed Line and the Donghae Line
- Hosting of the OSJD Seoul Railroad Summit

## APPENDIX

## Overview of Subsidiaries

As of Dec.31, 2015

## KORAIL Retail Co., Ltd

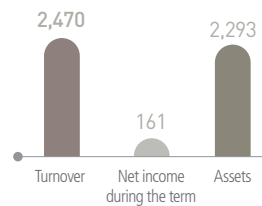


|                       |                                     |
|-----------------------|-------------------------------------|
| Address               | Gukhoe-daero Yeongdeungpo-gu, Seoul |
| Date of establishment | 2004.12.02.                         |
| Number of employees   | 326                                 |

|   |                             |
|---|-----------------------------|
| Capital stock ( KORAIL's equity investment) | KRW6 billion (KRW6 billion) |
| Homepage                                    | www.korailretail.com        |
| Ratio of shareholding                       | 100.0%                      |

## Major business

- **Distribution** : Operating convenient store, specialty store, vending machine et al in the subway station and railroad station building
- **Advertisement** : Developing, selling and managing media of advertisement using railroad facility, rolling stock, store et al
- **Resources distribution** : Shipping and loading of mineral, such as limestone, iron ore et al, using the railroad connected to Mukho Port
- **Win-win logistics support** : Selling goods wholesale and supplying distribution to the small and medium convenient store operated by micro-enterprise
- **Lease** : Leasing shopping district and office in our Head Office building, and holding assets

Principal financial figure  
(Unit : KRW 100 million)

## KORAIL Logis, Ltd



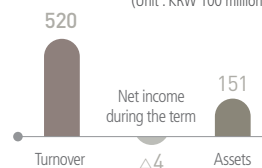
\* Busanjin Station CY - CFS

|                       |                                  |
|-----------------------|----------------------------------|
| Address               | 432, Cheongpa-ro, Jung-gu, Seoul |
| Date of establishment | 2013.12.31.                      |
| Number of employees   | 73                               |

|   |                                  |
|---|----------------------------------|
| Capital stock ( KORAIL's equity investment) | KRW7.7 billion (KRW7.09 billion) |
| Homepage                                    | www.koraillogis.com              |
| Ratio of shareholding                       | 92.1%                            |

## Major business

- **Transportation** : Transporting freight while operating major logistics hubs all over the country
- **Stevedoring** : Operating railroad transportation yard at Busanjin Station, Sappgyo CY, and Busan New Port
- **Forwarding** : International complex transportation service of export · import freight between nations
- **CFS** : Acceptance, delivery and storage of small quantity freight and container loading · unloading service

Principal financial figure  
(Unit : KRW 100 million)

## KORAIL Tourism Development, Ltd



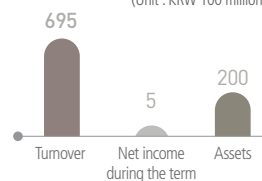
\* Tourist train Haeryang (Rail Cruise)

|                       |                                    |
|-----------------------|------------------------------------|
| Address               | 378 Cheongpa-ro, Yongsan-gu, Seoul |
| Date of establishment | 2004.08.11.                        |
| Number of employees   | 836                                |

|   |                                  |
|---|----------------------------------|
| Capital stock ( KORAIL's equity investment) | KRW 40 BILLION (KRW2.04 billion) |
| Homepage                                    | www.korailtravel.com             |
| Ratio of shareholding                       | 51.0%                            |

## Major business

- **Tourism trip** : Domestic and foreign tourism, tourist train (rail cruise Haeryang, Ocean train et al)
- **Theme park** : Theme park, such as Jeongseon, Gokseong, Hwacheon et al (rail bike, train pension et al)
- **Crew service** : Crew service, such as KTX, saemaeul train et al
- **Distribution service** : Sales service in the train, such as Myeongpum maru of small and medium enterprise et al

Principal financial figure  
(Unit : KRW 100 million)

## KORAIL Tech., Ltd.

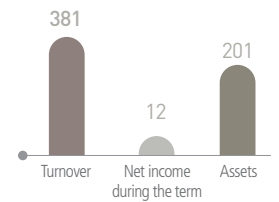


|                       |                              |
|-----------------------|------------------------------|
| Address               | Jungang-ro, Dong-gu, Daejeon |
| Date of establishment | 2004.12.09.                  |
| Number of employees   | 47                           |

|  |                                  |
|--|----------------------------------|
| Capital stock ( KORAIL's equity investment ) | KRW1.9 billion (KRW1.85 billion) |
| Homepage                                     | www.korailtech.kr                |
| Ratio of shareholding                        | 97.3%                            |

## Major business

- **Security** : Security of railroad crossing and major facilities
- **Multiple business** : Railroad track construction, route maintenance of both existing and high-speed lines, and safety inspection of facilities
- **Electricity** : Maintenance service of railroad electric installation, electric work of electric installation, design and supervision task. Information and communication work, and fire-fighting work
- **Rolling stock** : Simple maintenance of KTX, seat maintenance of general passenger car, maintenance of urban-railroad electric train, and maintenance of overseas railroad

Principal financial figure  
(Unit : KRW 100 million)

## KORAIL Networks, Ltd.

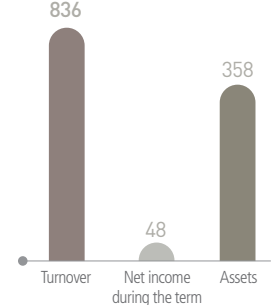


|                       |                                  |
|-----------------------|----------------------------------|
| Address               | Hangang-daero, Yongsan-gu, Seoul |
| Date of establishment | 2004.09.21.                      |
| Number of employees   | 881                              |

|  |                                 |
|--|---------------------------------|
| Capital stock ( KORAIL's equity investment ) | KRW7.2 billion (KRW6.4 billion) |
| Homepage                                     | www.korailnetworks.com          |
| Ratio of shareholding                        | 89.5%                           |

## Major business

- **Parking** : The whole-land-based parking service through development and operation of railroad parking lots
- **Station work** : Operating the station building of passenger railroad, wide-area railroad and airport railroad, integrated facility management based on IT technology, and provision of One-Stop self-ticket service
- **Customer center** : Railroad customer center
- **Car sharing** : Hour-based car rental service based on the all-nation railroad stations
- **Transportation card** : Sales and fare adjustment service of all-nation compatible Rail Plus transportation card
- **KTX special delivery** : A-quarter-of-a-day delivery service throughout the country from major KTX stations
- **IT business** : Distribution of IT solution products, business automation solution, integrated maintenance, and provision of stable reimbursement service

Principal financial figure  
(Unit : KRW 100 million)



## APPENDIX

## Awards and Memberships

## 2015 Awards

| Award  | Grantor  |
|--|--|
| • The Triple Crown of the 2015 Golden Chariot Award (Manager of the Year, Excellence in Railroad Transport, Most Effective Transport Safety Project), the Oscar of the world's transportation industry | Russian Parliament                             |
| • KTX, designated as a great brand in the railroad sector of the Korea Brand Star for four consecutive years   | Ministry of Land, Infrastructure and Transport |
| • Designated as a great brand of the National Brand Awards for five consecutive years  | Ministry of Trade, Industry and Energy         |
| • First Prize in the public corporation sector of Korea Landscape Awards, designated for great landscape   | Ministry of Land, Infrastructure and Transport |
| • Highest brand value in the public brand sector of Korea Highest Brand  | The Korea Economic Daily                       |
| • Honorable mention by Korea Brand for commitment to brand management  | Ministry of Trade, Industry and Energy         |
| • Consumers' Popularity Prize of the Green Goods Prize of the Year   | Korea Green Purchasing Network                 |
| • Certification for consumer-centered management   | Fair Trade Commission                          |
| • Certification for family-friendly management   | Ministry of Gender Equality and Family         |
| • Gold, Silver and Bronze Prizes of Best Restroom Awards   | Ministry of the Interior                       |
| • Designated as an excellent organization in emergency preparedness, Prime Minister's citation   | Ministry of Public Safety and Security         |
| • Safety Technologies Award, designation as a great organization in the Disaster Safety Korea Training   | Ministry of Public Safety and Security         |
| • Grand CEO Prize for Korea Creative Economy for two consecutive years   | The Korea Chamber of Commerce and Industry     |
| • Prize of the National Brand Awards for five consecutive years  | Ministry of Trade, Industry and Energy         |
| • Selected as the best organization in the Evaluation by Public Transportation Operators, Prime Minister Citation  | Ministry of Land, Infrastructure and Transport |
| • Silver Tower Industrial Medal of Korea Design Awards   | Ministry of Trade, Industry and Energy         |
| • Minister of Trade, Industry and Energy Citation at the Convention on Public Procurement Promotion  | Small and Medium Business Administration       |
| • Ranked 2nd among public corporations and 10th in general as the best company to join   | JobKorea                                       |

## Memberships

| Domestic   | Overseas   |
|--|--|
| <ul style="list-style-type: none"> <li>• The Korean Association for Public Administration</li> <li>• Global Compact Network Korea</li> <li>• The Korean Association for Policy Studies</li> <li>• The Korean Society for Railroad</li> <li>• Korean Society of Public Enterprise</li> <li>• Railroad Industry Committee</li> <li>• Korea Integrate Logistics Association</li> <li>• The Knowledge Management Society of Korea</li> <li>• Korea Productivity Center</li> <li>• Organization of Consumer Affairs Professionals</li> <li>• Public Innovation Forum</li> <li>• Pacific Asia Travel Association Korea</li> <li>• Korea Management Association</li> <li>• Korea Railroad Technical Corporation</li> <li>• Seoul Association for Public Administration</li> <li>• Public Organization Audit Innovation Forum</li> <li>• The Institute of Internal Auditors</li> <li>• Korean Society of Transportation</li> <li>• Korean Standards Association</li> </ul> | <ul style="list-style-type: none"> <li>• UN Global Compact</li> <li>• World Congress on Rail Research (WCRR)</li> <li>• International Union of Railroads (UIC)</li> <li>• The Organization for Cooperation of Railroads (OSJD)</li> <li>• SGS certification institute</li> <li>• EURAIL SPEED</li> <li>• Korea-Russia Railroad Exchanges and Cooperation</li> <li>• Korea-China-Mongolia Railroad Exchanges and Cooperation</li> <li>• International Coordinating Council on Transsiberian Transportation (CCTST)</li> <li>• Korea-Japan (Ministry of Land, Infrastructure, Transport and Tourism, JR Kyushu and JR East)</li> </ul> |

# Reader's Feedback

## We Value Your Opinions.

KORAIL published 2015 Sustainability Report to further communication with its stakeholders by disclosing information on the performance of its social responsibility management. We at KORAIL would like to listen to your opinions and reflect them on the next sustainability report publications and business activities.

### 1. Please choose the category you belong to?

☐ Customer   ☐ Employee   ☐ Government   ☐ Local resident   ☐ Partner company   ☐ NGO/Civic organization   ☐ Specialized organization   ☐ Others (   )

### 2. Please choose the channel through which you are aware of this report.

☐ Corporation's website   ☐ Media such as newspaper   ☐ Web surfing   ☐ Corporation's employees   ☐ Seminar/class   ☐ Others (   )

### 3. Please indicate the purpose for which you use this report (You may choose more than one).

☐ To obtain information about KORAIL   ☐ To learn about sustainable management practices of KORAIL  
☐ To compare and analyze the characteristics of the type of business which KORAIL belongs to   ☐ To use for research and educational purposes   ☐ Others (   )

### 4. Choose the social responsibility-related issues in which you are most interested (You may choose more than one).

☐ Communication with stakeholders   ☐ Organizational governance   ☐ Human rights   ☐ Labor practices  
☐ The environment   ☐ Fair operation practices   ☐ Consumer issues   ☐ Participation in and development of regional communities

### 5. Please indicate the issues contained in this report in which you are most interested (You may choose more than one).

☐ KORAIL SUSTAINABILITY OVERVIEW   ☐ Promise 1. We prioritize our customers' safety.  
☐ Promise 2. We provide the railroad service making the people happy.   ☐ Promise 3. We create the workplace where all the executives and employees are happy.  
☐ Promise 4. We nurture a hope with our partners.   ☐ Promise 5. We support our neighbors' dream in the regional society.  
☐ Promise 6. We create the sustainable future value.   ☐ Promise 7. We protect the clean environment of the earth.

### 6. Please indicate the contents which you feel need to be complemented (You may choose more than one).

☐ KORAIL SUSTAINABILITY OVERVIEW   ☐ Promise 1. We prioritize our customers' safety.  
☐ Promise 2. We provide the railroad service making the people happy.   ☐ Promise 3. We create the workplace where all the executives and employees are happy.  
☐ Promise 4. We nurture a hope with our partners.   ☐ Promise 5. We support our neighbors' dream in the regional society.  
☐ Promise 6. We create the sustainable future value.   ☐ Promise 7. We protect the clean environment of the earth.

### 7. Is this report useful to your understanding of KORAIL's sustainable management?

☐ Very useful   ☐ Useful   ☐ So so   ☐ Not useful   ☐ Not useful at all

### 8. Please indicate your level of assessment with this report.

|                               |  |                                       |                                |   |  |
|-------------------------------|--|---------------------------------------|--------------------------------|---|--|
| Comprehension .....           | <input type="checkbox"/> Very satisfactory | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> So so | <input type="checkbox"/> Unsatisfactory | <input type="checkbox"/> Very unsatisfactory |
| Accuracy .....                | <input type="checkbox"/> Very satisfactory | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> So so | <input type="checkbox"/> Unsatisfactory | <input type="checkbox"/> Very unsatisfactory |
| Quantity of information ..... | <input type="checkbox"/> Very satisfactory | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> So so | <input type="checkbox"/> Unsatisfactory | <input type="checkbox"/> Very unsatisfactory |
| Design and composition .....  | <input type="checkbox"/> Very satisfactory | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> So so | <input type="checkbox"/> Unsatisfactory | <input type="checkbox"/> Very unsatisfactory |

### 9. Please write down your opinions on KORAIL's sustainable management or the overall composition and contents of this report.

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