China Southern Airlines Company Limited 2015 Corporate Social Responsibility Report

STA	TEMENT OF THE GENERAL MANAGER	4
1.A	BOUT US	7
	1.1 Corporate Profile	7
	1.2 Corporate Governance	9
	1.3 Corporate Culture	. 10
2. RI	ESPONSIBILITIES	. 12
	2.1 Concept of responsibility	. 12
	2.2 Management of Responsibility	. 12
	2.3 Identification of Major Issues	. 13
	2.4 Communication with Stakeholders	. 16
	2.5 Opportunities and Challenges	. 19
	2.6 Planning for Social Responsibility Management	. 20
3. SA	AFETY	. 21
	3.1 Safety System	. 21
	3.2 Risk Management	. 21
	3.3 Safety Audit	. 22
	3.4 Voluntary Safety Reporting System	. 23
	3.5 Fulfilment of Safety Responsibilities	. 24
	3.6 Safety Performance	. 27
4. EI	NVIRONMENT	. 29
	4.1 Environmental Philosophy	. 29
	4.2 Environmental Policies	. 29
	4.3 Use of Resources	. 30
	4.4 Harmless Processing of Waste	. 31
	4.5 Flying Green	. 33
	4.6 Avocation of Environmental Protection	. 36
	4.7 Active Response to Climate Change	. 36
5. Ci	ustomers and Employees	. 38

	5.1 Attention to Customers	. 38
	5.2 Care for our Employees	. 42
	5.3 Health and Safety	. 49
6. S	ociety	. 50
	6.1 Special flights	. 50
	6.2 Caring for People	. 53
	6.3 Culture and Education	. 57
	6.4 Caring for Children	. 59
	6.5 Volunteers in Action	. 60
7. B	usiness Operation	. 62
	7.1 Economic Performance	. 62
	7.2 Protection of Shareholders' Rights and Equity	. 62
	7.3 Business Ethics	. 63
	7.4 Risk Management	. 64
	7.5 Supply Chain Management	. 66
	7.6 Serving "One-Belt, One-Road" and Promoting Economic Development	. 67

STATEMENT OF THE GENERAL MANAGER

2015 was final year in the "12th Five-year Plan". The external environment was exceptionally difficult and arduous in 2015. Nevertheless, we have upheld our responsibilities and successfully achieved our objectives through innovating systems, seizing opportunities and tackling the challenges. During the entire "12th Five-year Plan" period, we have effectively improved our overall competitiveness. We are operating the world's fifth largest fleet with a total passenger throughput ranked the third in the world. We have achieved remarkable results in our reform and development and are well poised to becoming a world-class international network carrier. Over the last year, we have seen the following accomplishments:

In terms of safety management, we consistently upheld the principle of safety first, strongly focused on the fulfilment of responsibilities; we insisted on attention to details, fully grasped lessons learnt from unsafe events occurred internally and externally, and constantly strengthened the awareness of regulations and understanding of bottom-lines. In addition, we performed comprehensive inspection and elimination of safety hazards hence effectively reduced safety loopholes. Throughout the year, we have completed 2.2 million flight hours; our accumulated safe flight hours has now reached 15.72 million. We also recorded 10,166 hours of general aviation flights. We continued to hold the best safety record of all Chinese carriers of a consecutive 194-month of flight safety and 258-month of aviation security while also ensuring fire safety and public health and safety.

In terms of environmental protection, we practiced the philosophy of green development, continued in our investments to fleet optimization, aircraft retrofit, route optimization, low-carbon travel and the use of new energy sources in order to reduce energy consumption and emission. In 2015, we achieved a total fuel-saving of 25,000 tons and a reduction in CO_2 emission of 78,000 tons.

In terms of passenger services, a number of unfortunate incidents that gained wide public attention occurred. We responded to these incidents with our utmost sincerity, and constructed a standard service procedure aiming to enhance our service competency and quality to special tasks and to passengers with special needs. Our Customer Care Centre was founded in 2015, which has taken over all major and complex customer complaints. The total number of complaints received in 2015 saw a 9.3% reduction over the figure in 2014.

In terms of care to our employees, we increased investment and efforts in perfecting employee benefits and policy on leave and actively improved the work and living facilities. We maximized the effects of the Labor Union and the Communist Youth League and carried out selection of Model Worker, Youth Award and various cultural and sports activities. We also introduced the "Three-year Training Program for New Employees" and paid close attention to retirees hence building a harmonious work environment. In terms of business operations, we proactively responded to the challenge of a substantial depreciation of RMB. We completed a total turnover of 22.48 billion ton-kilometer, a growth of 13.19%; carried 109 million passengers, an increase of 8.43% over 2014. Our revenue recorded an increase of 2.91% and the total profit grew by 3.26 billion RMB. At the same time, we expanded the coverage of e-commerce meeting with the requirement to "Increase the share of direct-sales and reduce commission to GDS" by SASAC. We were the first in discontinuing the payment of domestic basic commission to sales agents, the percentage of direct-sale increased to 32.3%, an addition of 13.5 percentage point over last year.

In terms of fulfilment of social responsibility, we successfully completed commemorative activities of "The 70th anniversary day of the victory of the Chinese people's war of resistance against Japanese aggression", and the flight supports to "The 60th Anniversary of the Founding of Xinjiang Uygur Autonomous Region", "The 50th Anniversary of the Founding of Tibet Autonomous Region" and the two national conferences of the NPC and the CPCC, as well as other major operations such as the transportation of peace-keeping forces, earthquake rescue, evacuation of oversea Chinese. This year, we recorded a total number of 57,000 hours of volunteer work to over 300,000 people, our "Bring happiness and warmth back home" program saw the participation of 3,800 volunteers and admin staff over the past two years, accumulated to over 30,000 hours of service to 350,000 passengers and 4,500 unaccompanied minors, elderly, pregnant women and other passengers with special needs. In 2015, this program received a Gold Award from the 2nd China Young Volunteer Service Program Contest.

Furthermore, in order to enhance our communication with the public and comprehensively understand public demand for social responsibility, we conducted large-scale surveys in 2015 collecting nearly 10,000 comments and suggestions from passengers, investors, partners, suppliers, NGOs, governments and media. Meanwhile, we also held our first ever Public Open Day to continuously strengthen communication with stakeholders, increase our operation transparency.

As we have stepped in 2016, China Southern is at a new stage of development in the first year of the "13th Five-year Plan". The "13th Five-year Plan" period is the decisive stage in finishing building a moderately prosperous society in all respects, it is a strategic opportunity for the transformation of China's civil aviation industry, and also the critical stage for China Southern's to become a world-class carrier. China Southern will adapt to the new situation, new changes and new requirements in this new era. With positive actions and innovative spirits, we will build a healthy, efficient and more competitive new China Southern. A new China Southern that is caring, responsible, ethical, dedicated, honest and credible; a new China Southern that is for the people.

ABOUT THIS REPORT

This is the 9th Social Responsibility Report of China Southern Airlines Company Limited (the "Company"). This report is for the period from January 1, 2015 to December 31, 2015. The content of this report covers the Company and its subsidiaries. In this report, the use of "we", "the Company", "China Southern" or "CSA" refers to China Southern Airlines Company Limited, and its wholly owned and controlled subsidiaries.

References

This report has been prepared in accordance with the following:

- *Guidelines Concerning State-owned Enterprises' Fulfilling Social Responsibilities* published by the State-owned Assets Supervision and Administration Commission (SASAC);
- *Guidelines on Sustainable Development Information Disclosure for Companies Listed in the Shanghai Stock Exchange* published by the Shanghai Stock Exchange;
- Environmental, Social and Governance Reporting Guide published by the HKEx,
- G4 Sustainability Reporting Guidelines (GRI 4.0).

Source of data

Data used in this report were sourced from internal statistics, documents and materials. The Board of Directors of the company and all directors hereby guarantee that this report contains no false records, misleading statements or major omission. The directors accept joint and several liabilities for the truthfulness, accuracy and completeness of this report. This report is certified by Bureau Veritas.

Availability of this report

This report is published in Chinese and English, and in printed and digital format. If there is any inconsistency or ambiguity between the English version and the Chinese version, the Chinese version shall prevail. For more information on our corporate social responsibilities, or to view and download this report, please visit: www.csair.com/en/about/static/shehuizerenbaogao.shtml

The publication of China Southern's corporate social responsibility (CSR) report started in 2007. We were the first airline company in China to publish CSR report. We at China Southern believe that CSR will help the general public to better understand our views and actions in the area of corporate social responsibility, and will promote communication and interaction between China Southern and the wider public, which in turn will help both China Southern and the society in materializing a harmonious win-win situation and sustainable development.

1. ABOUT US

China Southern was founded in 1995, and was listed in both HKEx and NYSE in 1997 followed by Shanghai Stock Exchange in 2003. Our primary business scope covers the provision of scheduled and non-scheduled domestic, regional and international air transportation services for passengers, freight, mail and baggage. China Southern is the largest airline company in China in terms of fleet size, number of routes and annual passenger throughput. China Southern is headquartered at No. 278, Jichang Road, Guangzhou, Guangdong Province of P. R. China. Its official website is <u>www.csair.com</u>.

1.1 Corporate Profile

1.1.1 At a glance

The company logo of China Southern is a blue tail embedded with red kapok. It is the first airline in the world to operate both the Boeing 787 Dreamliner and the Airbus A380. China Southern operates over 2500 flights operated by China Southern to destinations in 38 countries and regions in the world providing close to 300,000 seats on a daily basis. Through close cooperation with other SkyTEAM member airlines, its route network expands to 1057 global destinations connecting 179 countries and regions.

1.1.2 Vision and mission

China Southern aims to be customers' first choice and employees' favorite airlines. It will continue to base in China, focus on Asia-Pacific and connect the World while delivering sustainable economic values with global impact and become the airlines that is best in China, top in Asia and well-known in the World.

1.1.3 Organizational structure

China Southern operates 15 branches of Xinjiang, Northern, Beijing, Shenzhen, Heilongjiang, Jilin, Dalian, Hubei, Hunan, Guangxi, Hainan, Shanghai, Xi'an, Zhuhai Helicopter and Taiwan; as well as 6 controlled subsidiaries of Xiamen Airlines, Guizhou Airlines, Henan Airlines, Shantou Airlines, Zhuhai Airlines and Chongqing Airlines. In addition, 25 domestic sales offices can be found in major Chinese cities such as Chengdu, Hangzhou and Nanjing; and 67 overseas sales offices located in cities including New York, San Francisco, Los Angeles, Paris, London, Amsterdam, Dubai, Sydney, Vancouver, Tokyo and Seoul.

1.1.4 Fleet size

Aircraft Type	Number of Aircraft
B787	16

B777-300ER	7
B777F	12
B77A	4
B757	17
B747F	2
B737-800	240
B737-700	50
B737-300	3
A380	5
A330-300	19
A330-200	16
A321	79
A320	128
A319	43
E190	26
Total	667

*As of December 31, 2015

1.1.5 Route network

China Southern operates an extensive route network with its key hubs at Guangzhou, Beijing, Urumqi and Chongqing. Its network development strategies focus on the strengthening of domestic services, expanding coverage in Asia and increasing connections to Europe, America, Oceania and Africa. New routes have been added to the network in 2015. Intercontinental services including Guangzhou-San Francisco, Guangzhou-Nairobi, Guangzhou-Wuhan-Rome and Guangzhou-Christchurch were launched; services between Guangzhou and the Southeast Asia, Australia and New Zealand were also optimized and increased in their frequencies. In 2015, China Southern operates a network of over 800 passenger and freight routes that consist of 600 domestic routes, 160 international and regional routes, and 16 freighter routes. The total seat kilometer provided to international services has exceeded 30% at its peak. China Southern added 122 new domestic routes, 32 international/regional routes in 2015. We now serve 261 destinations with 1032 routes.

1.1.6 Highlights of new intercontinental services launched in 2015

The Guangzhou – San Francisco service was inaugurated on June 22, marking the first nonstop direct connection of south China and San Francisco. China Southern now provides direct services to four North American hubs of Los Angeles, New York, San Francisco and Vancouver. The new direct service to San Francisco is a key measure taken by China Southern to upgrade its strategic positioning in the North American market. With additional frequencies added to Los Angeles and New York, China Southern is now operating 70 flights a week to the North America, making Guangzhou the No. 1 gateway from South China to North America. China Southern returned to the African market on August 5 with the non-stop Guangzhou-Nairobi service. The launch of this service is an important measure to realize of agreements reached between Chinese and African leaders on improving aviation cooperation between the two regions and streamline cross-national communications. It is also a key milestone of China Southern in seizing development opportunities and further strengthening its internationalization strategy.

Two intercontinental routes of Guangzhou – Christchurch and Guangzhou – Rome via Wuhan were both launched on December 16. The Christchurch service became the first and only non-stop connection to the South Island of New Zealand operated by a mainland carrier; while the Rome service marked the first service to Italy by China Southern, connecting the beginning (Guangzhou) and the end (Rome) of the Maritime Silk Road. With the launch of Rome service, China Southern now connects with 8 destinations in Europe covering most of the top European tourist destinations. China Southern has also increased frequencies to Australia and New Zealand offering a record-breaking 67 flights per week.

1.2 Corporate Governance

Since its foundation, China Southern has strictly abided by relevant national and local laws and regulations and has continued its effort in improving the governance structures. It has regulated and specified duties and obligations for different parties in addition to the setting up of a sound internal control system. These measures have all been included in corporate documents and regulations such as the *Articles of Association, Rules of the Shareholders Meeting, Rules of the Board of Directors,* and *Rules of the Supervisory Committee.*

China Southern has formulated its *Articles of Association* and corporate governance policies based on the regulations in Hong Kong, New York and Shanghai where the Company is listed. Its internal control regulations and practices are also in line with relevant laws, regulations and standards, including the Sarbanes-Oxley Act of the United States of America.

The Shareholders Meeting is the highest governing body of the Company; it is the decision making body of major issues including the rules of operations and plans for investments; approval for profit distribution and loss make-up proposals; election and replacement of directors and supervisors and the determination of their remunerations; and the amendments to the *Articles of Association*.

The Board of Directors of the Company answers to the Shareholders Meeting. The duties of the Board of Directors include the preparation of annual financial budget and account; proposal of profit distribution and loss make-up; decision on acquisition and disposal of assets and venture investment projects as authorized by the Shareholders Meeting.

Audit Committee, Remuneration and Appraisal Committee, Nomination Committee and Strategic Decision-making Committee are operating under the Board of Directors. More than half of the members of the aforementioned committees are independent and nonexecutive directors. Particularly, the Audit Committee is composed entirely of nonexecutive directors. All committees under the Board of Directors are established and operated in full compliance with their governing rules and regulations.

The Supervisory Committee is formed by representatives of the shareholders and the employees. Representatives of the shareholders are elected and recalled by the Shareholders Meeting; representatives of the employees are elected by the employees democratically.

1.3 Corporate Culture

China Southern started building corporate culture in the beginning of the 1990s. On the basis of the shared wisdom and values of all members of China Southern, in 2008, we defined our core values. Our core corporate values consists of five elements, these are: Customer First, Respecting Talents, Striving for Excellence; Continuous Innovation and Return to Society. Our mission of "Let China Southern become customers' first choice and employees' favorite" is also embedded in such values. The China Southern culture is created as the conceptual support to the company's strategic transformation and improvement of its overall level of management. Our corporate culture enhances the solidarity of our colleagues while fostering a harmonious work environment. It is the reflection of today's accomplishment and an expression of driving force, and also mirrors the direction of our development into the future.

1.4.1 Key Business Performance in 2015

• Key performances

In 2015, China Southern operated 2.2 million safe flight hours, an increase of 8.91% over last year and maintained 258 consecutive months of aviation security. We carried nearly 110 million passengers in year 2015, a growth of 8.43%, as well as 1.51 million tons of freight and mail, a growth of 5.46%. Our total turnover has reached 22.39 billion ton-kilometer, achieving an increase of 13.19%.

• Main awards

"Cross-strait Enterprise with Outstanding Contribution Award"

"Fastest Growing Business Award" by the Chinese Chamber of Commerce of New Zealand "Charity Star Chart • Best Practice in Charitable Activities of Public Listed Companies"

The first "Excellence in Human Care" award in Guangdong Province

Airbus "A330 Top Operational Excellence Award"

"Outstanding Airlines of Asia" by *Now Travel Asia*

The most prestigious awards in China's logistics sector, the "Gold Flying Horse Award" and "Top 100 Brand Value of Logistics Enterprises"

The "Bring happiness and warmth back home" program received a Gold Award from the 2nd China Young Volunteer Service Program Contest

First Prize in the National Contest of Innovation and Modernization in Management of Transportation Enterprises

China Southern had gained rapid development during the 12th "Five-year Plan" period from 2010 to 2015. Over the past 5 years, the key indicators of passenger throughput, freight and mail throughput and total turnover had increased from 76.46 million, 1.12 million tons and 13.1 billion ton-kilometer to 109 million, 1.51 million tons and 24.2 billion ton-kilometer, an average yearly growth of 7.4%, 6.2% and 11.3%. Our fleet size had grown from 413 to 667 becoming the fifth largest fleet in the world. Number of wide body aircraft grew from 30 to 67, becoming the second largest wide body fleet in China.

Firstly, China Southern persisted in the principle of "Safety First". Our flight crew had grown from 4,080 to 7,465 from 2010 to 2015; we introduced a series of innovative concepts and technologies and became the first airline in China to achieve an accumulated safe flight hours of 15 million.

Secondly, we persisted in strategic transformation. We continued to explore, practice and perfect strategic transformation; our "Canton Route" was created from scratch and has evolved from a mere concept to being rather well-known. Our international transfer passenger number grew by 187%. We are continuing our internationalization process on a path that was created by us.

Thirdly, we persisted in reform and innovation. China Southern saw reform and innovation as the powerhouse to our operation, and strived to build our own competitive advantage. The implementations of overall budget management, adaptation of new IT technology and raising standards in service level helped us in uplifting our overall capability.

Fourthly, we persisted in putting people first. We upheld the principle of reliance to our employees and returning to our employees while consolidating synergies across the company. We also attached great importance to customer first and constantly prioritizing social values, creating a time-honored brand.

2. RESPONSIBILITIES

Through continuous exploration and refinement, we have integrated the management of social responsibility with our wider business strategies, corporate culture and day-to-day operations. We strive to engage with our stakeholders responsibly, continue to drive the harmonious development between the corporate and the society, as well as the environment. We also endeavor to maximize social value with a sustainable development.

2.1 Concept of responsibility

China Southern has been consolidating social responsibility with corporate strategy, constructing a social responsibility conceptual framework that is based on delivering economic benefits for shareholders; creating social values for the society; delivering services for customers; creating opportunities for employees; and flying green for the environment.

As a proud member of SkyTEAM, China Southern along with other member airlines have drafted a Corporate Social Responsibility Statement. This statement sets out the SkyTEAM commitments. China Southern as part of the alliance is committed to ensuring that our development aims for high performance not only from a financial standpoint, but also from a social and environmental perspective. For more information on the statement, please visit: http://www.skyteam.com/en/About-us/People-and-planet/

As the foundation to the fulfilment of social responsibility, China Southern perseveres in complying with the business ethics of lawful employment, lawful operation, honesty and faithfulness, adhesion to publicly recognized business code of conduct and the respect to business credibility. As a main representation of fulfilling our social responsibility, we are persistently building a harmonious and mutually beneficial relationship with our communities. As a key target of social responsibility, we strive to reduce our impact to the environment, and are participating in the global attempt to resolve the dilemma of environment and development.

2.2 Management of Responsibility

China Southern attaches great importance to the management of social responsibility. A complete framework of corporate social responsibility (CSR) management that tallies with China Southern's objectives has been established. This framework contains concept of CSR, CSR strategies, annual plan, projects implementation, audit and assessment. CSR overall planning has been included in the drawing of China Southern's five-year plan, and is being reviewed and adjusted in the three-year dynamic plan. The CSR annual planning is reflected

in the annual assignments of various functions such as safety, service, sales and marking, and operations, and is assessed by the audit office at the end of each year. The establishment of our CSR management framework is key to improving the level of CSR management and the realization of CSR strategic goals.

• Strategies of responsibilities:

Ensure safe flight operation; improve operational quality

Reinforce environmental protection; achieve sustainable development

Enhance social harmony; increase corporate value

• Plans of responsibilities:

Drawing of annual plan; Specification of objectives; Clarification of responsible bodies

• Project Implementation:

Reduction in energy consumption and emission; Reduction in cost and increase of efficiency; Strategic cooperation; Stable business operation; Technology innovation; Service improvement; Caring for the employees; Charity and social work.

• Performance assessment:

Post-factum assessment; End-of-year assessment; Results feedback; "Carrot-and-Stick" measures

2.3 Identification of Major Issues

In accordance with the requirements stipulated in GRI4.0 *Sustainability Reporting Guidelines,* (hereafter refers to as G4) and ESG of HKEx, China Southern for the first time initiated the practice of identification of major issues. In conjunction with the characteristics of the industry and our own situation, we have identified a set of issues that are most related to our business operations and those that have, or may potentially have great impacts to our stakeholders as key points in our fulfilment of responsibilities and communication with stakeholders.

2.3.1 Identifying relevant issues

In connection with our scope of business, we have consolidated the 46 CSR issues raised in the guidelines of G4. We have also added a number of issues that are not required by the guideline but are closely related to the development of China Southern. A total number of 34 CSR issues in 4 main categories have been identified as the foundation of analysis and discussion.

2.3.2 Methods of identification

According to international practice, the identification of major issues is to be expanded on two dimension of "Stakeholders" and "Corporate businesses". China Southern realized major issue analysis through communications with stakeholders and management workshops. Our communications with stakeholders started primarily from the point of view of our stakeholders evaluating the level of significance of each CSR issue; the management workshops started from the point of view of business operation evaluation the level of significance of the same set of CSR issues.

• Communication with stakeholders

The stakeholders of China Southern include investors, government, customers, employees, industry associations, partners, community, specialists, media and other players in the industry. Improving communication with stakeholders and promoting participation of stakeholders is a critical aspect of managing corporate social responsibility. Through quantitative and qualitative analyses, China Southern attempted to find out how our stakeholders understand and evaluate the performance of China Southern on corporate social responsibility. The results of communications will help China Southern to list CSR issues of different category in the order of significance.

In 2015, China Southern conducted research by questionnaire surveys, group discussions and one-to-one interview to understand the views and evaluations of stakeholders on CSR issues.

Meansofcommunicationandtotalnumberofparticipants	Category of stakeholders	Remark on number of participants
Questionnaire survey Valid responses: 7,834	All	459 internal respondents; 7,375 external respondents
Group discussion	Internal	10
22 participants	External	12
One-to-one interview	Government	1
11 interviewees	Industry association	2
	Partner	2
	Other players in the industry	1
	Specialist	1
	Supplier	1
	Institutional investor	1

Community	2
-----------	---

• Management workshops

China Southern held management workshops with 16 senior managers of China Southern with the subject of level of significance of CSR issues. These 16 senior managers came from different divisions with different business sectors and have provided us with their evaluation on the significance of CSR issues.

2.3.3 Results of significance analyses

The results are shown in the matrix below. "Level of significance to business" and "Level of significance to stakeholders" are plotted on x-axis and y-axis respectively. When the indicators appear in the same quadrant, a Matrix for Significance Analysis is created. Through our investigation, 25 CSR issues are of great importance to China Southern, which means China Southern should monitor and manage such issues while disclosing relevant information.

List of con	of corporate social responsibility major issues of China Southern		
Category		Issues	
Overall business operation		1. Compliance to law and regulations	
		2. Establishment of a mechanism for appeals of	
		corporate social responsibility related issues	
Economic	al	4. Continuation in the improvement of economic	
		performance and finance performance	
		7. Establishment of an appropriate procurement	
		process and fine relationship with suppliers	
Social	Product	8. Reduction in flight delay	
	responsibility	9. Assurance of passenger health and safety	
		10. Attention of passenger satisfaction rate	
		11. Appropriateness in marketing and promotion	
		12. Protection of passenger privacy	
		13. Optimization in passenger experience	
		15. Anti-corruption	
	Labor and	17. Establishment of a complete internal	
	dignity at	communication system ensuring a smooth	
work		communication channel between management and	
		all levels of employees	
		18 Protection of employee health and safety at	
		work	
		19 Support to employee training and education	
		20 Ensuring multi-background of employees, equal	
		opportunity and equal pay for equal work	
		21 Attention to employee remuneration and	
		benefits	
	Labor related		
human right		23 No discrimination	

issues	24 No child labor and force labor	
Environmental	27 Attention to amount of resource used and the	
	use of recyclable materials	
	28 Increase in energy efficiency	
	29 Reduction in water consumption	
	31 Control greenhouse gas emission	
	32 Attention to safe sewage treatment and waste disposal	
	33 Sufficiency in the resources invested to environmental protection	
	34 Assistance to airports and authorities in the reduction of aircraft noise pollution	

Missing the matrix

Our stakeholders perceived that most even all of the CSR issues are of "significant" or "highly significant" categories. In which, "Compliance to law and regulation" received the highest evaluation of significance in the categories of overall business operation and economic issues; "Passenger health and safety" and "Employee health and safety" are the two most significant indicators under labor related issues. In terms of environmental issues, carbon emission, energy use and material related issues are of greater significance. We will give this issues particular attention in the following sections.

2.4 Communication with Stakeholders

Having a stable, open and transparent communication mechanism with our stakeholders is an important means in China Southern's implementation of CSR and the promotion of CSR awareness. The aviation industry has numerous stakeholders, in communicating with the stakeholders, China Southern not only benefit the others through our own act of responsibility, but also wishes to extent the philosophy of social responsibility globally by influencing more enterprises and individuals.

[LINK]: China Southern Public Open Day

China Southern held Public Open Day in 2015 to improve communication with our stakeholders and increase transparency of our business operations.

On December 29, more than 60 resident representatives and journalists from national and provincial mainstream media visited China Southern on the Public Open Day. They were introduced with detail of operation support, flight crew training, product and services. They were also invited to visit how a flight was operated and joined a pre-flight briefing with the flight crew. Some representatives have also experienced on-board first-aid and emergency evacuation trainings. Such activity has deepened understanding between the general public and China Southern. In the future, China Southern will organize regular Open Day activities and invite more people to visit China Southern and to understand CNS.

Stakeholder Cor	ncerns	Expectations	Means of communication	Main tasks in 2015
-----------------	--------	--------------	------------------------	--------------------

Investors	Protection of shareholders' benefits; Operation results; Corporate governance; Strategic planning	A continuous and stable return on investment; Healthy corporate governance structure; Complete information disclosure system; Risk prevention system	Regular reports and announcements; General meeting of shareholders; Meetings of Board of Directors; Meetings of Supervisory Board	Released annual and quarterly results reports; Held Meetings of Board of Directors and Meetings of Supervisory Board
Government	Facilitation of local economic development; Provision of job opportunities; Environmental protection	Legal operation; Increase in tax collection; Increase in employment; Energy saving and emission reduction; Clean operation	Special reports; Visits and investigations; Project cooperation; Working meeting; Statistical reports	Participated in the 2015 China International Tourism Expo organized by the People's Government of Guangdong province and supported by Guangdong Bureau of Tourism
Customers	Flight safety; Service quality; Product price; Communication channels and effects	Continuous safety; Quality service; Reasonable price; Quick and attentive response to customer complaints and suggestions	Chain-of-contact service; Customer feedback; Customer relation management; Online service	Established Customer Care Centre realizing an integrated collection, tracking and response system of complaints to all divisions
Employees	Human resource policy; Career path; Protection of employees' rights; Participation to corporate operation	Effective communications; Improve training; Improve employee benefits; Open, fair and healthy human resource policy	Employee Representatives General Meeting; Labor Union; Suggestion, forum, letter box; Training	Introduced Professional Dedication Survey across flight attendants and air marshals; Implemented 7,503 training projects to 300,000 participants; 70% training coverage rate

Suppliers	Credibility; Competency	Ethical operation; Mutual benefit; Co-development	Business negotiations; Meetings and discussion of contracts, agreements, trainings and technologies	China Southern senior management kept close interaction and communication with primary suppliers such as Boeing and Airbus
Financial institutes	Credibility; Development prospects; Financial status; Performance of key indicators	Enhance debt- repayment ability; Reduce risk	Contract negotiations; Business meetings and discussions	Launched mileage accrual cooperation with Société Générale and Agricultural Bank of China
Community	Harmonious community; Environmental protection; Sharing of development gains	Establishment of a communication and interaction mechanism; Increase input to charity	"10-Fen" Care Foundation; Charitable activities; Volunteer works	Built reading corners and reading rooms for students of remote areas and residents with special needs under the "Bookcase of Dreams" projects
Specialists	Management processes; Regulations and standards; Handbooks and procedures	Complete internal procedures; Increase resistance to external risk	Communications, interviews and visits	Invited industry specialists to discuss flight technique, maintenance and engineering, carbon trading and other topics
Media	Corporate social responsibility; Environmental protection; Brand image	Establishment of information disclosure channels; Timely expression of the voice of China Southern	Press conference and journalist forum	Held various press conference at inaugural flights; Invited US Press Representatives to visit China Southern
Other players in the industry	Fair competition; Industry prospects; Innovation in development	Fair competition; Friendly cooperation; Healthy and harmonious industry development	Forum and conferences; Communications	ChinaSouthern,Xiamen Airlines andKLM signed theAgreementofDeepeninginAlliance Cooperationin Shanghai

2.5 Opportunities and Challenges

Nowadays, the development of CSR is intensifying and are showing new characteristics and trend. Internationally, implementing CSR has become an important means for a sustainable development of the global economy. The international society has raised their requirement and constraints to the implementation of CSR of global enterprises. The standardization and legalization of CSR has become a new issues and a new direction. Domestically, implementing CSR is now an effective measure for enterprises to adopt to the "New Normal" of economic development and to boost competitiveness. The society is imposing an increasingly high expectations of sustainable development in economic, social and environmental perspectives. All players from government bodies to industries have actively taken actions in implementing their CSR and practice sustainable development.

With regard to the new trend and new requirements, whether it is to adopt to the changes in operational environment and supervisory policies; or to focus on the needs of our own development, we must raise the standards and level of our works in implementing CSR by perfection in system and increase in investment.

In accordance with our operational situation, in 2015, China Southern reviewed our performance in the implementation of CSR, and conducted a SWOT analysis aiming to continuously increase our competitiveness and cultivating our new competitive edge.

Strengths	Weaknesses
Gradually enhanced concept and	Unaccomplished CSR management
awareness of CSR;	system;
Established clear CSR strategic plan;	Performance evaluation, methods and
Established "10-Fen" Care Foundation	standards of CSR to be improved;
providing sufficient resources for the	Inadequate competence of CSR
implementation of CSR;	management compared to the size of the
A rich culture in CSR practices	company
Opportunities	Threat
A growing understanding of CSR in the	A growing requirement of CSR in the
society;	society;
Increasingly complete CSR standards;	CSR has been raised to national strategy
Expanding cooperation in the areas of CSR	in many countries, which poses higher
	requirement to the implementation of
	CSR;
	Difficulties in achieving certain CSR
	targets due to technical constraints

SWOT Analysis of Corporate Social Responsibility

2.6 Planning for Social Responsibility Management

China Southern will gradually establish and complete a social responsibility management system.

- 1. To establish a full CSR leadership body and execution body.
- 2. To construct a normalized communication mechanism between internal and external parties. To realize the horizontal and vertical unification across different division, different profession and different levels. To homogenize business operations and corporate social responsibility operations.
- 3. To complete the overall deployment of corporate social responsibility, the deepening of work and the system of responsibility implementation.

3. SAFETY

Safety is the cornerstone to the existence and development of an airlines company. It is the primary social responsibility of China Southern. In addition, safeguarding the health and safety of our passengers is also the most concerned issue of our stakeholders. China Southern always treats safety as treading on thin ice, we at China Southern have been adhering to our safety philosophy of "Safety first, People foremost", and have been striving to fulfil our safety values of being "scientific, people-oriented, standardized and sustainable". We uphold the principle of "Safety has no ending, every day is a new start", and propagate this safety principle to our employees and passengers in order to achieve our ultimate goal of "Zero accident".

3.1 Safety System

China Southern has formulated a relatively comprehensive safety management system, covering operation, business and management elements. The Safety Management Committee (SMC) is the highest authority over safety management, the Safety and Quality Supervision Division is the functioning body in charge of safety management and safety supervision. Each department takes full responsibility for its own safety performance. The General Manager of each department is the principle person-in-charge who assumes full responsibility for the safety performance; the head of safety management in each department is the representative of safety and quality management, and each employee is accountable for the safe operation at his/her own post.

3.2 Risk Management

China Southern positions risk management at the center of our safety management system, proactively prevents and controls associated risks. We established a daily, weekly, monthly and quarterly close-loop safety supervision system for risk control and mitigation from a safety information management perspective. The execution of each risk mitigation measure is controlled by supervision order.

Daily report. Daily report is distributed with safety issues collected and consolidated from all operational sectors in the company.

Weekly review. Each week, an evaluation review will be carried out to specific safety cases selected from daily reports.

Monthly summary. A safety management summary is carried out each month.

Quarterly ranking. A ranking is produced according to safety performance of each operation units.

Database of risk sources. In consideration of evaluations by specialists, safety risks from daily reports and weekly reviews are selected and stored in the database for internal sharing in order to further enhance the ability in risk control.

In 2015, China Southern implemented overall safety risk prevention and control across the company. Including the issuance of monthly safety risk analysis and safety education case study; adjustment to quarterly safety review and discussion according to safety evaluation mode; implementation of specific risk assessment to key areas such as new routes, special airports, airworthiness and maintenance, general aviation, aviation security, cabin management and the transportation of dangerous goods. We have also used multiple platforms, such as *WeChat* to provide dynamic safety alert, and provided specialized supervision, help and discussion with units that have higher degrees of safety related issues.

3.3 Safety Audit

3.3.1 IOSA audit

IOSA, the IATA Operational Safety Audit is an internationally-recognized and accepted evaluation system designed to assess the operation management and control systems of an airlines. Its scope of evaluation includes organizational management, flight operation, operational control, aircraft maintenance, cabin operation, ground support, freight transportation and aviation security.

All members of the IATA are IOSA registered and must remain registered to maintain IATA membership. As required by the IOSA, all companies included in the IOSA registry must undergo audits every two years. China Southern received the initial IOSA audit in 2006, and has since undergone a number of follow-up audits. Our current validity in the IOSA registry ends on April 28, 2016. China Southern successfully completed the most recent audit at the end of November, 2015.

3.3.2 ISAGO audit

ISAGO, the IATA Safety Audit for Ground Operations was developed based on the successful application of IOSA. Similar to IOSA, ISAGO provides assessment to all ground handling companies worldwide. The aim of ISAGO is to reduce accidents, incidents and injuries in ground operations, improve operational safety and lower operational costs. As China Southern is a ground handling service provider at Guangzhou and Urumqi, we applied to undergo ISAGO audits. In 2015, China Southern ground handling at both stations have successfully completed ISAGO audits and hence become accredited service providers. For any ground handling service provider, having accreditation from ISAGO is beneficial to the improvement of its own safety management system and improve quality of safety operations.

3.3.3 Internal safety audit

China Southern established internal safety audit project following the successful experiences and the best practices of IATA audit projects. We issued *Safety Audit Manual* and audit checklist, developed online electronic audit system; trained internal auditor and conducted internal audit to all branch companies and operation bases every two years. Any deficiencies and issues identified during internal safety audit must be rectified and tracked by auditee. This internal audit system has shown positive effect to safety improvement. According to internal safety audit schedule, in 2015, we have completed internal audits to 8 branch companies.

3.4 Voluntary Safety Reporting System

The Voluntary Safety Reporting System is designed to encourage the voluntary reporting of any information related to safety in order to help us in discovering and identifying potential hazards to prevent the occurrence of incidents and accidents, as well as to achieve the goal of continuance in optimization and perfection of safety management system. China Southern provisionally introduced the Voluntary Safety Reporting System in 2013 and officially launched the system with detailed measures of implementation in 2015.

The scope of the Voluntary Safety Reporting System covers any unsafe events, deviations in organizational management and potential hazards that is not covered in the Compulsory Reporting System. We designed a web-based open portal allowing anonymous reporting from all employees. All reports are kept in strictest confidentiality. We trace and process each report, and provide reward to reports with exceptional values.

This Voluntary Safety Reporting System encourages our employees to not only focus on safety hazards in their own work, but also on any safety hazards upstream to or downstream from their position on the chain of operation. By the end of December 31, 2015, 333 valid Voluntary Safety Reports have bad been received.

[CASE]: Voluntary Safety Report

Subject: Alert to the provision of Tortoise Jelly as part of on-board meals

Content: Safety advice

Description: A flight operated on February 8, load factor 100%, high percentage of children. Meals for this flight was provided with Tortoise Jelly, however no warning information was given to the use by children. This was a severe safety hazard. The chief purser of the flight made a special announcement alerting the intake of Tortoise Jelly by children.

Comments and suggestions: Avoid Tortoise Jelly as part of on-board meals. If provided, written warning must be accompanied to reduce risk of choking.

Feedback on results: Thank you for your suggestions! Cabin Division has issued guidance to Catering Division with regard to the potential risk of Tortoise Jelly. Cabin Division suggested to avoid Tortoise Jelly, as well as other food items that may be potentially hazardous to children. Clear written warnings must be accompanied should such food item is unavoidable.

3.5 Fulfilment of Safety Responsibilities

Flight safety is the paramount concern of China Southern. China Southern aims to continue our efforts in revising safety management approaches and building a solid safety support system and long-term safety structure ensuring that flight safety is the foundation of passengers' trust.

3.5.1 Flight safety

In 2015, China Southern paid close attention to flight safety management regulations and strengthened safety regulations trainings and assessments. Case studies of safety regulations were carried out to enhance understanding among flight crews. We also paid close attention to the risk control of flight operations, highlighting the risks associated with complicated weather, mechanical failure and the launch of new routes, and have developed effective measures while increasing efforts in analyses and advocacy. Meanwhile, we have intensified alerts to operational risk ensuring the competence of each flight crew meets operational requirements. Risk screening of newly appointed captains and new cadet pilots have also been intensified to minimize the risk associated with mismatch in qualification. We have increased our attention to flight techniques, tightened up procedures and standards for the trainings of new captains and cade pilots ensuring conformation to operation standards. Qualifications of all pilots have been traced and updated to eliminate any hazards caused by errors in qualifications. Last but not least, we gave strong focus to flight training with additional attentive given to the progress and quality of new cadets. We have also tightened up assessment standards of the promotion of First Officers, and perfected the assessment standards of the promotion of captains and instructors.

Our safe flight hours exceeded 15 million hours on October 28, 2015, keeping our industry leading position.

3.5.2 Cabin safety

Numerous in-flight turbulence events occurred in 2015. With regard to such events, the CAAC issued urgent notices requiring the strengthening of cabin safety to all carriers. As stated in the notice, safety is the first concern of flight, and ensuring cabin safety is the first responsibility of cabin operation. On-board safety precedes on-board services.

Documents show that weather during the periods from after take-off to reaching cruising altitude, and the start of descend to landing are most unpredictable. Instability and change of wind direction and speed is very common during the change of altitude, hence cause turbulence. CAAC requires that "all service procedures to be completed in the duration from

20 minutes after take-off to 30 minutes before final touch-down" and "no meal service to be provided after the aircraft has entered into descend". Inflight service must make way for safety in this critical 50 minutes.

Following the requirement of CAAC, China Southern reviewed service procedures of all flights with flight times of less than 2 hours, and have adjusted service items on flights operated at different time of day. In order to ensure all service items can be completed 30 minutes before landing, China Southern revised service procedures to a proportion of flights of less than 2 hours, and optimized inflight supplies of food and beverage. Part of these flights now provide light refreshments instead of hot meal services.

As more and more people choose to fly, we have more passengers with no previous flying experiences who are curious to cabin equipment. We have witnessed an increasing number of mis-operation of cabin emergency equipment, such as cabin doors. In connection with these incidents, we revised the warning signs throughout the cabins. Newly designed bilingual warning signs have been posted at cabin doors, emergency exits and lavatory doors to prevent mis-operation by passengers. In addition, we have issued *Guidance to Cabin Door Operation Safety* to strengthen risk management of cabin doors.

3.5.3 Maintenance safety

Through analyzing historical unsafe events, the Maintenance and Engineering (M&E) Division of China Southern raised the "Arrangement – Procedure – Standard" (APS) safety management system as the core starting point of safety management in M&E. China Southern maximally reduced safety risks in daily maintenance works by identifying safety risks and forming operation guidelines in according with the APS scheme. The M&E safety management system has transformed from "results-oriented" to "process control" and "management at source". China Southern M&E has developed over 700 APS projects covering all aircraft types in operation.

[LINK]: Judged by fleet size and operation reliability, China Southern was awarded Airbus "A330 Top Operational Excellence Award", becoming the first Chinese carrier being awarded this prize.

3.5.4 Aviation security

In recent years, the global anti-terrorism situation is increasingly grim. The requirements imposed by civil aviation and immigration authorities of many countries have become more stringent. In order to regulate duty standards on international flights, 730 Air Marshal Certificate holders at Guangzhou underwent special trainings. All air marshals must pass the assessment in order to operate international flights. Furthermore, China Southern promoted the *Handbook of Terrorist Attack Prevention* via *WeChat* platform to the general public aiming to raise public awareness of reaction to terrorist attacks

3.5.5 Ground safety

In 2015, China Southern eliminated the occurrence of serious road transport accidents, theft of vehicles and mechanical accidents. Instructors from the Traffic Police were invited to conduct road safety trainings to vehicle management staff and drivers in Guangzhou.

3.5.6 Transportation of dangerous goods

China Southern closely monitors safety issues associated with the transportation of dangerous goods (DG). We have formulated stringent policy for the transportation of DG with a comprehensive risk evaluation. Firstly, we perform vigorous examination on the qualification of transporting DG at each site. China Southern has signed Agreement of the *Transportation of Dangerous Goods* with airports at home and abroad to vigorously examine the qualifications held by handling agents and managing the operations by standards. Currently, China Southern has 65 DG transportation sites, 39 in China and 26 overseas. These sites cover all cargo routes. Secondly, we strengthened trainings of DG transportation management. At the moment we have 78 DG instructors who can provide trainings to cargo operators, passenger check-in agents, and flight and cabin crew members. Thirdly, we have maintained close liaison with DG accreditation agents. As the types of DG are complex, for accurate identification, China Southern closely cooperates with 12 cargo transportation accreditation agents in Beijing, Shanghai and Guangzhou requesting their assistances in appraising the type of goods and the issuance of appraisal reports to ensure correct loadings of cargo. Fourthly, we implement strict control of DG transportation. In order to prevent shippers declaring DG as regular goods, China Southern on the one hand increased the efforts in advocating DG transportation, posting notices and guidelines of DG transportation at cargo collection counters; on the other hand, we also strictly implement regular visits and inspections to cargo handlers and agents, and request rectification to all problems found.

3.5.7 Emergency management

China Southern pay close attention to emergency management. In order to increase the proficiency in handling emergency situation and improving management level under emergency circumstances, China Southern has held multiple emergency drills with flight, M&E and ground support units in accordance with CAAC standards. China Southern flight CZ3081 from Guangzhou to Bangkok diverted to Sanya Fenghuang International Airport due to fire on July 3, our cabin crew member performed emergency evacuation in full compliance to the standard procedures. All passengers and crew were evacuated safely with only a few passengers suffered minor bruises during evacuation.

3.5.8 Passenger health

China Southern aims to safeguard passenger and public health and safety through various means including weekly release of Monthly Epidemic Newsletter, enhancement in cabin disinfection, issuance of epidemic response measures and health and safety advocacy activities. We recorded zero passenger infection case in 2015.

2015 saw the outbreak of Middle Eastern Respiratory Syndrome (MERS). The epidemic situation worsened since June 2. In response to this, China Southern immediately issued the

Notice of Prevention and Control of MERS Epidemic, preventing the communication of MERS through air travel. Meanwhile, we have further increased cabin disinfection, provided MERS prevention package and thermometer on-board, and also in particular monitored health situations of passengers travelling from Seoul. Prevention kits were distributed to cabin crew, ground service and cabin cleaning teams who were subject to close contact with passengers and aircraft.

3.5.9 Safety inspection

China Southern continued the "Preventing oversights and opposing violations of regulation" safety program in 2015. After the explosion of dangerous goods in Tianjin on August 12, China Southern held two sessions of urgent Safety Management Committee meetings on August 17 and September 1 respectively. *Notice on the Implementation of Comprehensive Safety Inspection* and *Supplementary Notices on the Implementation of Comprehensive Safety Inspection and Further Deepening of the Management of the Transportation of Dangerous Goods* were issued soon after the meetings, followed by the implementation of comprehensive safety inspection and special inspection of dangerous goods. This comprehensive inspection lasted for 20 days, 274 inspectors were dispatched to 16 professional fields in 38 units, and had identified 1,768 issues. All major issues identified were analyzed and discussed on-the-spot with responsible units while rectification plans were proposed with specific time of completion. Meanwhile, a record and documentation system has been established to implement a time-limit safety hazard resolving mechanism

3.5.10 Raising safety awareness

China Southern has been active in the advocacy of safe air travel aiming to raise public safety awareness and increase understanding of safety. For instance, we further explained the reasons behind all the requirements printed on the safety information cards in the seat pockets, explained the reason for the banning of using electronic equipment inflight, the correct procedures at emergency evacuations so as to gain more cooperation from our passengers and to eliminate safety hazards.

[CASE]: On the day of the "2015 National Safety Operation Advocacy Day", our flight attendants surprised passengers waiting at Shenzhen Airport with a flash mob dance. After successfully gaining passengers' attention, a team of pilots, cabin attendants and ground service staff approached surrounding passengers to introduce safety information.

3.6 Safety Performance

We have safely operated 716,000 flights totaling a 2.2 million safe flight hours in 2015, and the accumulated safe flight hours reached 15.72 million with 258 months of aviation security.

Category	Item	2015
Safety Indicators of 2015	Incident per 10,000 flight hour	0.034
	Maintenance incident per 10,000	0.036

flight hour	
Serious maintenance incident per 10,000 flight hour	0.012

N.B. For definitions of indicators used in this table, please refer to CAAC's *Civil Aircraft Flight Incident* (MH/T 2001-2013) standards.

Category	Flight hour	Date of
	(million)	Completion
Number of each	3	April, 2006
	4	May, 2007
	5	June, 2008
	6	July, 2009
million-safe-flight- hour and their date	8	March, 2011
of completion	10	September, 2012
or completion	12	January, 2014
	13	October, 2014
	15	October, 2015

Category	Year	China	National
Category	I Cal	Southern	average
	2005	0.130	0.390
	2006	0.064	0.340
	2007	0.065	0.300
	2008	0.064	0.280
Incident non 10.000	2009	0.089	0.320
Incident per 10,000	2010	0.008	0.384
flight hour	2011	0.000	0.374
	2012	0.036	0.425
	2013	0.020	0.383
	2014	0.012	0.051
	2015	0.034	

N.B. The above is only inclusive of incidents caused directly by China Southern, excludes manufacturer and accident reasons. The above does not include Xiamen Airlines.

4. ENVIRONMENT

Protecting the environment that we are living in is vital to the development and future of the human race. As a responsible enterprise, we are committed to standing by our values of "Green flying, green consumption and green innovation". We are persevering in pushing reduction in energy consumption and emission, taking green development as a critical means of addressing our environmental responsibilities and the sustainable development of the company.

4.1 Environmental Philosophy

Environmental issues are crucial to the sustainable development of the human society. We are closely following the adverse impact that a sharp increase in Greenhouse Gas (GHG) emission has on climate change and biodiversity. We are actively responsive to interim goals and actions advocated by the United Nation, ICAO, IATA and SkyTEAM with regard to sustainable business development, as well as policies on energy saving and emission reduction formulated by the Chinese government. We are taking proactive measures in addressing our environmental impacts by increasing efficiency of energy utilization and reducing emission of GHG, undertaking our responsibilities in environmental protection, ecological balance and sustainable development.

4.2 Environmental Policies

China Southern published its *Corporate Policy of Environmental Protection* in 2007, aiming to continuously increase the level of environmental management through correct policy guidance.

- a. Fully comply with environmental codes of practice set by national authorities, meeting the goal of low emission, and low energy consumption.
- b. Our commitment to environmental protection is based on pragmatic practices and achievable objectives.
- c. Actively raising environmental awareness of the employees, encouraging employees' participation in environmental protection actions.
- d. Ensure the transparency and accessibility of our action plans, and disclose internal environmental protection information to stakeholders.
- e. Working closely with the expectation of stakeholders.
- f. Inclusion and supervision of the environmental performance of subsidiaries.

As part of our wider environment strategy, in 2015, we deployed multiple innovative and technical means to the areas of fleet modernization, aircraft retrofit, route optimization, low-carbon air travel and the use of new energy. We have also actively participated in the emission-reduction market in order to achieve energy saving and emission reduction.

4.3 Use of Resources

The aviation industry is a critical industry in terms of energy consumption and carbon emission. China Southern has enhanced energy management and has formulated a primary energy management system in order to continuously increase the share of renewable energy and clean energy, control emission of greenhouse gases.

4.3.1 Energy consumption

The consumption of resources in China Southern's operations are split across two categories, namely energy and water. Energy consumption consists of fossil-based jet fuel and fuel used on ground operation, such as gasoline, diesel and electricity. In 2014, jet fuel accounted for the great majority of all energy consumed. China Southern consumed 6.77 million tons of jet fuel in 2015; direct emission of carbon dioxide from the burning of jet fuel was 21.31 million tons; our water consumption was 5.61 million tons.

Category	Quantity (tons)	Equivalent Standard Coal (tons)	Share (%)	Equivalent CO2 Emission (tons)	Share (%)
Jet-fuel	6 767 504.70	9 957 706.42	99.10	21 317 639.81	98.91
Gasoline	5 437.40	8 000.59	0.08	16 468.68	0.08
Diesel	6 834.17	9 958.07	0.10	21 439.67	0.10
Coal	3 100.00	2 214.33	0.02	6 448.00	0.03
Electricity	181 000.8 (thousand kWh)	22 233.48	0.22	109 521.14	0.51
Natural gas	29 168.5 (thousand m ³)	38 794.11	0.39	63 149.80	0.30
Liquefied gas	665.38	1 140.66	0.01	1 962.87	0.01
Others	5 320.00	7 827.85	0.08	16 758.00	0.08
Total		10 047 875.51	100	21 553 387.97	100

2015 energy consumption statistics by category

4.3.2 Energy efficiency

The main energy efficiency indicators of China Southern in 2015 are: Total energy consumption was equivalent to 10.05 million tons of standard coal. Collective fuel-burn of all aircraft type was 0.30kg per ton-kilometer.

Year	Collective ton-kilometer Fuel-burn (kg)		
2011	0.29		
2012	0.30		
2013	0.30		
2014	0.30		
2015	0.30		

Overall energy efficiency has been maintained within the target zone from 2011 to 2015.

4.4 Harmless Processing of Waste

4.4.1 Disposal of packaging materials

As an air transport company, the most common packaging materials that need to be disposed of are the plastic and paper packages of on-board meals and beverage. All of these packaging materials are for one-time use only, on average we collect approximately 50,000 pieces of such wastes each day. In consideration of the technological and hygiene requirements for inflight catering and to ensure food safety on-board, China Southern fully complies with national standards GB11680-89 *Hygiene Standards of Paper for Food Packaging Use* and GB27589-2011 *Paper Packaging Boxes for Food* in the packaging procurement process of packaging. Qualified recycling service providers are commissioned to dispose of all packaging materials, and China Southern is able to trace the destinations of the collected wastes. The standard procedure of packaging waste disposal is: Centralized collection of waste materials – Separation of packaging materials – Centralized storage – Collection and disposal by qualified service providers.

[LINK]: Reusable bags for inflight supplies

As single-time plastic bags have adverse effect to the environment, in 2015, China Southern started to use reusable non-plastic bags for inflight supplies. Different types of inflight supplies are packaged in reusable bags of different colors. This is the first attempt of "Management by color" among Chinese carriers.

4.4.2 Cabin waste disposal

Rigorous measures are in place for cabin waste management.

Firstly, specialized service providers are commissioned to handle cabin waste. We have commissioned certified service providers to handle waste. It is clearly stated in the commission agreement that the service provider must be in possession of place (landfills that are approved by regulatory authorities or agreement with such landfills), equipment and professionals. It is also stated that waste collected are only permitted to be reused as raw materials and not to be sold as final products.

Secondly, separate waste collection and disposal is in place. After sterilization, solid wastes are sorted for reusing and recycling. Liquid-solid separation process are applied to non-solid wastes, solidified wastes are then transported for specialized handling while liquid wastes are fully treated before allowing to be discharged.

4.4.3 Disposal of industrial waste

Works carried out during aircraft overhaul is a main contributor to industrial waste. The main industrial waste produced are wastewater and used oil.

China Southern uses purpose-built treatment plants for industrial wastewater. All wastewater are collected and transported through special pipes and pumps to treatment plants for harmless treatments.

Treatments of wastewater are disaggregated to three levels. The primary level removes floating solids in wastewater by oil filtration, grill, neutralization and air flotation. The secondary level removes colloids and dissolved organic pollutant such as COD, BOD and oil by the application of Sequencing Batch Reactor Activated Sludge Process, which has a removal rate of over 90%. The tertiary level further processes non-degradable organic substances and dissolvable minerals by sand filtration and activated carbon filtration.

Treated wastewater are then emitted to the treatment plant at the airport after meeting emission standards. A qualified third-party inspector is also commissioned to carry out water quality test on wastewater produced by China Southern.

The treatment of used oil is conducted in strict compliance to the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste.* The detailed process is: Used oil from each maintenance workshops and remaining oil from aircraft fuel tank – Collection using special vehicles and tanks – Application for the transportation of used oil to local environmental protection bureau – Transfer to qualified used oil treatment service providers – Assistance to the service providers for the transportation of used oil.

4.4.4 Noise control

The main source of noise pollution is the high decibel noise generated by the running of aircraft engines. In order to reduce noise pollution, China Southern mainly took the following three measures. Firstly, at the procurement of engines, China Southern would purchase engine types that are lower in noise level and emission level with priority. Secondly, at ground engine testing, China Southern applied the international practice of constructing stream diversion and silencer facilities for engine ground testing to ensure noise pollution level meets the *Emission Standard for Industrial Enterprises Noise at Boundary*. Thirdly, at aircraft take-off and landing, China Southern uses optimized runway,

optimized path and noise-reduction flight operation procedure to further reduce noise pollution.

4.5 Flying Green

4.5.1 Fleet modernization

Fleet modernization is one of the most important measures in materializing our environmental goals. Over the years we have been replacing aged aircraft with newer ones, increasing fuel efficiency hence reducing adverse impact to the environment. Newer aircraft enjoy a greater safety margin, higher fuel efficiency and lower noise emission. In 2015, China Southern introduced 58 new aircraft, retired 3 aged aircraft. The average age of our fleet was 6.3 years as of December 31, 2015.

Age of aircraft	Number of aircraft in 2014	Share
0-3	211	31.6%
3-6	168	25.2%
6-9	111	16.6%
9-12	91	13.6%
12-15	45	6.7%
Over 15	41	6.1%

[LINK]: China Southern launched cabin retrofit project for 10 A320 aircraft in 2015. This project will install new lightweight seats throughout the cabin. This retrofit will add 14 extra seat to each aircraft while the total weight of cabin seats can be reduced by more than 200kg. It is projected that each retrofitted aircraft will have a fuel saving capability of 34.31 tons.

4.5.2 Retrofitting of winglets

One of the measures in reducing fuel-burn and CO_2 emission is the installation of winglets. 2015 saw the completion of six 737NG aircraft with winglets retrofitted. According to actual operational data, aircraft with retrofitted winglets may achieve an increase of fuel efficiency of up to 1.32%, translated to a reduction of 110 tons of fuel per aircraft per year, and a subsequent reduction in CO_2 emission of 350 tons per aircraft per year. We started retrofitting winglets to our 737NG fleet in 2011 and have now added winglets to 96 737NG aircraft. All of our 737NG are now fitted with winglets.

4.5.3 In-house development of Weight-and-Balance system

China Southern started to develop our own Weight-and-Balance (W&B) system for passenger and cargo in 2010. The Cargo W&B System became operative in May 2014, while the Passenger W&B came into operation in May 2015. While ensuring safety and efficiency, this system is able to reduce fuel consumption from two aspects. First is to resolve over-

fueling by increasing the accuracy in load prediction, second is to optimize Centre-of-Gravity of aircraft by pre-determined objective functions. This system is estimated to produce nearly 10,000 tons of fuel every year.

[LINK]: China Southern's "Research and Application of Next Generation Weight and Balance System" was awarded Second Prize in the National Contest of Innovation and Modernization in Management of Transportation Enterprises in December 2015.

4.5.4 Accurate payload reporting and submission

The amount of fuel for each flight is calculated based on the weights of passenger, freight and mail, which is known as the payload of a flight. If payload is over-estimated, the amount of fuel required will consequentially be over-estimated. This additional part of redundant fuel also carries a weight, the carrying of this part of weight subsequently also consumes fuel, hence the "fuel consumed by carrying fuel". The more accurate the estimation of payload gets, the less amount of fuel is needed to carry extra fuel. Building on the results of previous efforts invested to increase accuracy of payload estimation, China Southern further deepened fuel management in 2015. A Payload Accuracy Task Force was formed to implement payload reporting and submission accuracy improvement tasks on flights with intermediate stops and at main focus cities in China. By December, the average variance of payload estimations had been reduced to 3.23 tons, which is equivalent to an annual saving of 4,786.32 tons of fuel.

4.5.5 Optimization of aircraft Centre-of-Gravity

Studies show that the more forward the Centre-of-Gravity (COG) locates, the more lift force is needed to maintain balance. More lift means more drag. According to Newton's Laws of Motion, the increase of drag needs more thrust, hence an increase in fuel consumption. The optimization of aircraft COG is an effective way of reducing drag and reducing fuel consumption.

China Southern continued research on COG and fuel consumption reduction in 2015. We have determined the optimal boundaries of COG for all aircraft types and set recognition pattern of optimal fuel consumption zone. A *Guideline for Optimization of COG and Reduction of Payload Fuel* has been issued for the implementation of fuel saving. A COG optimization contest was also organized. In 2015, the success rate of COG control had been maintained at 60-70%.

4.5.6 Refined fuel management

In order to further enhance a refined management of fuel and better implement energy saving and emission reduction, China Southern has formed a Fuel Management Leadership Team in 2015 aggregating all fuel related works across the company. This team is responsible for the organizational management, decision-making management, design of standard procedures and the division of functions. A Fuel Management Office operates under the Leadership Team, which is responsible for the formulation, revision and

enforcement of detailed measures, and is also responsible for supervising and coordination various units.

4.5.7 Route optimization

The rationality of route choice affects the overall fuel consumption of the company. CAAC officially inaugurated the Guangzhou-Lanzhou Airspace Optimization Plan in April, 2015. China Southern prepared carefully for the implementation of this plan and formulated detailed measures to support the operation in the optimized airspace. Navigational Database has been updated in accordance to this plan. All flights operated through this airspace on the day of inauguration had been closely monitored. Flight routes of over 300 China Southern flights are benefited by this plan, these flights are mainly from airports in the Pearl River Delta to Xinjiang and Chongqing, as well as flights from Guiyang and other airports in Southwest China and Europe flights from Guangzhou.

Type of Route	Number of flights with optimization potential	Number of flights optimized	Percentage of optimization	Flight time saving (hrs)
Temporary Route	90 318	43 362	48.01%	2 612
Optimized route	75 580	38 409	50.82%	2 910
Total	165 898	81 771	49.29%	5 522

Route optimization in 2015

4.5.8 System real-time analysis

Real-time Inflight Take-off Performance Analysis System was implemented to two aircraft types of Boeing 777 and 737 in March, 2015. Previously, dispatchers must rely on Aircraft Weight Manuals and in consideration of the temperature and speed of wind to calculate the flight data for take-off. After the implementation of this system, dispatchers can now be provided with the latest and most accurate departure data from the airport. In addition, this system also increases accuracy in payload estimate so that extra fuel consumption can be avoided. Meanwhile, this system provides flexible engine thrust calculation allowing minimum thrust, upon ensuring safety to be selected at take-off in order to reduce engine wear and fuel-burn.

4.5.9 The launch of China Southern's first charging station for electric vehicles

The first charging station for electric vehicles was completed and put into use in October 2015. This station can now provide reliable charging solution to our fleet of electric vehicles and will also support our future plan of replacing conventional vehicles with electric vehicles.

The charging station is located in our cargo area at Guangzhou Airport with 26 charging docks for 26 electric vehicles to be charged at the same time. Each electric vehicle has an average daily operation hour of 4.5, and the consumption of electricity is 4 kWh. As

comparison, diesel-powered forklift consumes 2.7 liters of fuel each other, considering the current prices of electricity and diesel, each electric vehicle can produce a saving of 21,600 RMB per annum and a reduction of CO_2 emission of 8 tons.

4.6 Avocation of Environmental Protection

4.6.1 Protection of animal rights

China Southern flight CZ683, the "Love Elephant" took off from Guangzhou to Nairobi on December 10. The flight was decorated with elephant figures and the cabin screens were displaying "Love Elephant" videos. All of the cabin crew members were wearing elephant badges and the inflight magazines all featured elephant-theme front covers.

This was the world's first "Love Elephant" theme flight introduced by China Southern and Tecent Inc. This flight aims to appeal to people to reject illegal ivory trade, to love animals and to protect our common home. Apart from operating on Guangzhou-Nairobi flights, this "Love Elephant" flight has also been operating on various domestic and international routes to raise awareness of more passengers and to involve more passengers into the protection of animal rights.

4.6.2 Advocacy of low-carbon lifestyle

In order to advocate the philosophy of energy saving and environmental protection, China Southern holds Energy Saving Advocacy Week every year. This year, the theme to the advocacy week was "Green Transportation Leads the Modernization of the Transport Industry". We promoted energy saving knowledge through *WeChat* platform. Meanwhile, we also sought suggestions from our employees with regard to energy saving, which received several hundreds of ideas. We will select feasible ones from this pool of ideas and put into implementation.

[LINK]: The young volunteers of Xinjiang Branch held an environmental protection advocacy activity with the name of "The world is our home, let's all love her". In order to highlight the key theme of energy reduction and low-carbon lifestyle, the volunteers cycled around the airport area of Urumqi to appeal to the public. They have also collected signatures from colleagues, set up battery recycle boxes and distributed reusable non-plastic shopping bags to encourage a low-carbon lifestyle.

4.7 Active Response to Climate Change

Government representatives of nearly 200 countries, large enterprises, NGOs gathered in Paris in December 2015 where COP21 was held. The *Paris Agreement* was reached with an aim to control the world's emission of greenhouse gases. This agreement calls for a maximum increase of 2 °C of global average temperature as compared with pre-industrial levels, and strives to control to increase to within 1.5 °C.
As one of the means to control greenhouse gas emissions, carbon trading has gained more and more attention from the international community. China Southern is actively involved in carbon trading, intending to respond to climate change through market mechanisms.

4.7.1 Closely monitoring the progress of ICAO Carbon Trading

ICAO plans to introduce a carbon trading program that involves all international flights in 2016, which is to be formally implemented in 2020. This program will replace the unilateral EU carbon trading program. The goal of the program is to achieve carbon neutral of all international flights after 2020. China Southern pays close attention to the progress of the program and actively study the impacts associated with this program.

4.7.2 Actively participating in Guangdong Carbon Trading

The pilot carbon trading scheme of Guangdong started in 2013. Air transport enterprises in Guangdong (excluding Shenzhen) have been involved to this scheme at the end of 2015. China Southern actively communicates with relevant agencies via e-mail, face-to-face seminars and conferences to provide industry recommendations and complete all works as required.

4.7.3 Closely monitoring the progress of National Carbon Trading

The civil aviation industry became one of the first group of industries to be included in the 2017 National Carbon Trading Scheme in September 2015. In order to adopt to the new state of operation, we have actively participated in industry seminars and professional forums while paying close attention to national policy developments. We have also tracked studies on aviation carbon trading system design, technical standards and other issues; also offered advices and suggestions to relevant authorities to share experience in practices.

4.7.4 Attention to Guangdong Carbon GSP

July 2015, the Guangdong Provincial Development and Reform Commission released a Carbon Generalized System of Preference (GSP) pilot program in Guangdong. This program aims to attract more small businesses and the public to participate in low-carbon activities and to cultivate a low-carbon lifestyle. China Southern pays close attention and is engaging in active communication with the Guangdong Provincial Development and Reform Commission to understand the basic principles and progress of implementation of the carbon GSP program, as well as the possibility of connecting carbon GSP with airline companies.

5. Customers and Employees

Customers and employees are the two most important groups of people to China Southern. Their satisfaction are the cornerstone to the development of China Southern. Customers and employees are also of the most concern to our stakeholders. In the survey of CSR major issues survey, items related to customers and employees have the highest share of all. We will therefore report these major issues.

5.1 Attention to Customers

China Southern strengthens communications and interactions with our customers, and identify aspects where our service quality can be improved from within. Meanwhile, we also make use of advanced technologies to help us in delighting customers with our services, providing them with good value-for-money, hence creating a win-win situation and harmonious development.

5.1.1 Attention to customer satisfaction

China Southern always highly value customer experience. We review our products and services from a customer perspective, constantly focus on the changing needs of customers and provide a product design that is closer to customer and closer to market needs. We ensure customers' voices are heard and attended to, and improve our service quality based on customer suggestions.

• Collection of customer feedbacks

Collection of customer feedbacks from various channels – Classification and sorting of feedbacks – Allocation of feedbacks to their corresponding divisions – Proposal of improvement measures by each divisions with timeline – Feedback on improvement – Debriefing on resolved issues

• Customer satisfaction survey

China Southern increased our focus on customer satisfaction in 2015. In addition to existing feedback channels, our customers will now receive SMS message asking for evaluation of service quality after each conversation with our call center. Less satisfactory feedbacks are now traced and followed-up by our customer service representatives. Suggestions and

recommendations are documented and submitted for further review; specific service items will be improved and/or added according to customer feedbacks.

In addition, we have been closely monitoring passenger evaluations on Skytrax, a UK-based air transport service consultancy specializing in airline service quality surveys. We have implemented a satisfaction assessment system by categorizing passenger comments into 8 areas of cabin service, food and beverage, cabin equipment, IFE, delay and cancellation, departure and arrival, transfer service and baggage service. Monthly analyses are carried out item by item to formulate improvement plans.

5.1.2 Attention to customer complaints

We have further streamlined and standardized the customer complaint response procedure, including the establishment of the standard for complaint handling and a remedial system. We actively resolve complaints and increase customer satisfaction through a standardized compensation regime.

• Standardization of complaint handling

In order to further standardize the quality of service complaint management workflow, effectively control complaint handling process and improve customer satisfaction, China Southern established a service quality complaints management procedure. We aim to avoid the worsening of complained cases through a hierarchical complaints handling system. All customer complaints are received by our Customer Complaint Centre. Each case is entered into the Customer Complaint and Feedback System. This system sends each case to its corresponding division and requires a response within 5 working days. All evidence, proof and statements are required to be uploaded to the system for recording purpose. Monthly customer complaint handling meeting is held to share complaint handling situations and develop appropriate improvement measures.

In 2015, China Southern issued *Guideline for the Handling of Passenger Special Circumstances, Notices on the Clarification of Handling General Service Deficiencies,* and *Handbook and Guideline for Handling Common Complaints.* These documents have provided clear guidelines to frontline staff on the handling of common complaints and special circumstances on the spot.

• Standardization of passenger compensation

China Southern has established a passenger compensation standard offering appropriate compensation to passengers who have been affected adversely. In addition to monetary compensation, we have also arranged value-added services for passengers, such as waiving charges on certain value-added services or offer certain service items that a passenger may need at no additional cost.

In 2015, we launched a monetary compensation to customer complaints mechanism and issued the *Regulation on Mileage Compensation to Customer Complaints*. Trials of mileage compensation for cabin hardware defects on long-haul international services have been carried out.

[CASE]: The founding of Customer Care Centre

In order to strengthen our attention to customer care and complaint handling, we founded the Customer Care Centre in 2015, realizing a company-wide integrated complaint collection, trace and feedback system. This center aims at improving customer experience by professional handling of complaints.

5.1.3 Implementation of demand survey

In 2015, we have further increased our focus on understanding customer needs. We conducted surveys on various platforms such as *WeChat* and our official website. 14,000 questionnaires have been collected with different subjects on IFE, cabin air quality and delay service. These surveys have provided solid evidence support to our launching improved IFE products, adding cabin fragrance and improving delay services.

[CASE]: Cabin air quality survey

China Southern initiated a cabin air quality satisfaction survey. Only 30% of all respondents were satisfied with cabin air quality. After analyzing over 4,000 responses, we established a finding that unpleasant odor and dryness are the main cause to this low satisfaction rate. In response to this need, we have launched a Cabin Air Quality Improvement Program, various fragrance products have been tested at different venues and we have now established our own standard cabin fragrance product.

5.1.4 Protection of customer privacy

China Southern respects and protects customer privacy. In order to ensure our staff who have access to passenger data to safeguard passenger personal information and flight records, China Southern has formulated *Passenger Data Protection Agreement* and all such staff are bound by this agreement where the principle and responsibilities of the use of passenger data are clearly stipulated. In the event of illegal data disclosure, China Southern reserves the right to take legal actions. As a result, no data leakage occurred in 2015.

5.1.5 Performances

Classification	Item	Actions	Targets
	Baggage	Implemented baggage transportation rectification. Issued assessment standards for baggage arrival time at Guangzhou	Reduce baggage related complaint rate; Reduce waiting time at baggage reclaim
Ground service	Flight delay	Upgraded delay information provision; Self-service printing of delay certificate and ticket endorsement at Guangzhou hub; Amendment to the <i>Measures of</i> <i>Implementation for Service to</i> <i>Schedule-interrupted Flights</i> , clarified meal and	Improve service during flight delay through information provision, service on-the-spot and compensation

China Southern has implemented a series of measures to optimize passenger experience.

1			[]	
		accommodation standards at		
		flight delay and cancellation.		
		Introduced the "We care for your		
		journey with China Southern"	Additional	
	Dagaangang	product series for passengers		
	Passengers	with special needs.	attention and care	
	with special	China Southern tailor-made	to passengers	
	needs	SpongeBob gift set for children	with special	
		travelling on long-haul	needs	
		international flights		
		Introduced a "Fast-track" service		
		at Guangzhou. Passengers		
		5	Doduco waiting	
	The second second	departing Guangzhou for Sydney,	Reduce waiting	
	Transfer	Melbourne, Brisbane and London	time at	
		are provided with Fast-track	immigration	
		voucher to enjoy Fast-track lanes		
		at destination airports		
		Online check-in, mobile check-in	Provide more	
	Check-in	and SMS check-in introduced to	convenient	
		an additional 58 airports.	services	
		Introduced Chinese productions		
	IFE	on-board premier service.	Improve IFE	
		Increased numbers of Hollywood	experience;	
		blockbusters and latest Chinese	Increase	
		films.	satisfaction rate	
		Introduced Kids Channel		
		Attention to working standards	T 1.	
	Cleanliness	and attitudes among cabin	Improve cabin	
		cleaning team.	sanitation level	
Cabin service		Invited celebrity chef from New	Increase	
		Zealand to design menu for	satisfaction to	
	Inflight dining	Auckland flights.	meals and	
		Introduced meal pre-order	beverages on-	
		service via smartphone APPs	board	
		Added Halal food in International		
		Business and First Class Lounges	Provide	
	Pre-flight	at Guangzhou Baiyun Airport.	personalized meal	
	dining	J	services in airport	
	U U	Added bilingual ingredients label for Halal food.	lounges	
		Established a new interactive		
			Increase matching	
	Marketing and	mode of service and marketing.	between service	
	sales mode	Adjusted service standard to	and marketing	
		better accommodate market	products	
Marketing and		needs.	1	
sales services	Membership service	Upgraded validity terms and	_	
		conditions of mileage.	Increase	
		Gold and Silver Tier members can	membership	
		now enjoy automatic 100%	satisfaction rate	
		mileage validity extension; Blue		

		Tier members can register for mileage validity extension.	
-	yment ethod	Added payment via Q-R code on office website. Passengers are now able to scan a Q-R code generated at the payment stage and complete payment via <i>WeChat Pay</i> on their smart phones.	of payment methods; Provide a more

According to our statistics, young children flying on China Southern's long-haul international services are increasing year by year. As a response to passenger requests, on December 29, we started to offer our young traveler special gift sets to all young children flying on long-haul international services. China Southern is the first carrier in China to offer gift sets to children on-board. This year's gift set come with a theme of "Happy flights with China Southern and SpongeBob". We hope to bring fun and happiness to their journey through the healthy, happy, friendly and passionate cartoon figure of SpongeBob.

Туре	Item	2014	2015
	Flight punctuality rate*	74.13%	67.91%
Service	Valid complaint rate*	0.034%	0.040%
indicators	Through check-in rate	97.1%	99.16%
	Baggage error rate*	0.089%	0.0168%

* For definition and reference data, please refer to materials issued by the CAAC.

5.2 Care for our Employees

Our employees are the creators of China Southern values and the providers of China Southern services. They are the foundation and the essential to the development of the company. The 70,000 employees of China Southern are located in nearly one hundred different places within and outside China. China Southern has established a complete set of human resource management system covering facets of remuneration, recruitment, promotion and vacation leaves. This system ensures the openness, fairness and just in human resource management so that our employees can growth with the company in order for our employees to grow with the company.

5.2.1 Overall employee statistics

China Southern established and improves an employee data collection and statistics system. The total number of employee of China Southern was 71,897 in 2015, including 940 non-Chinese employees, the average age of our employees was 33. In 2015, China Southern received voluntary resignations from 1,047 employees and recruited 4,193 new employees. We have unfortunately seen two deaths in the line of duty, and have recorded a work-related injury rate of $3.18\%^{\circ}$. *This rate is the ratio of the number of injured persons and total number of employees, excluding Xiamen Airlines.

Employee distribution by region:

Region	Male	Female	Total
Guangzhou	10 562	10 500	21 062
China, except Guangzhou	30 223	20 610	50 833
Overseas	477	710	1 187
Total	41 262	31 820	73 082

Employee distribution by education level:

Education level	Count	Percentage
Postgraduate	2 035	2.78%
University degree	28 132	38.49%
Associate degree/Diploma	23 055	31.55%
Vocational school diploma and below	19 860	27.17%
Total	73 082	100.00%

Employee distribution by field and gender:

Field	Male		Female		Tatal	
Field	Count	Percentage	Count	Percentage	Total	
Flight	5 088	6.96%	39	0.05%	5 127	
Service	5 314	7.27%	12 607	17.25%	17 921	
Administration	4 4 2 0	6.05%	1 604	2.19%	6 024	
Operation control	868	1.19%	295	0.40%	1 163	
Maintenance and engineering	7 394	10.12%	691	0.95%	8 085	
IT	463	0.63%	255	0.35%	718	
Marketing and sales	1 696	2.32%	2 677	3.66%	4 373	
Miscellaneous	3 910	5.35%	2 887	3.95%	6 797	
Professional	2 398	3.28%	2 936	4.02%	5 334	

functions					
Others	9 711	13.29%	7 829	10.71%	17 540
Total	41 262	56.46%	31 820	43.54%	73 082

5.2.2 Human resource policy

In order to adapt to the needs of strategic transformation and internationalization, China Southern has established a post-based human resource policy structure. China Southern is exploring and establishing strategies of human resource planning, performance evaluation, training, career paths and salary policy, aiming to formulate a close-loop management system, enabling the transformation of role of human resource management.

• Salary and welfare policy

The salary and welfare policy of China Southern is founded upon the principle of "legal, fair, efficient, and harmonious", based on post value, guided by labor market average and centered on performance evaluation.

Post wage. Post wage consists of basic wage and performance-related pay. Basic wage reflects the difference between critical posts and general posts, as well as core posts and non-core posts; whereas performance-related pay matches the financial performance of the company as well as performance of individual employee. Furthermore, China Southern has also set incentives to different posts.

Insurances and pension. In compliance with rules and practices imposed by local authorities in different operating region, China Southern contributes to compulsory medical insurance, work-related injury insurance, unemployment insurance, maternity insurance and endowment insurance, as well as mandatory Housing Provident Fund (HPF). China Southern has also provided corporate annuity fund and supplementary commercial accident and medical insurances.

Welfare. In accordance with national and local regulations, China Southern has provided its employees a welfare package consists of annual leave, home leave, marital leave and maternity leave.

China Southern has completed the salary and welfare unification across the company in 2015. All employees of China Southern are now enjoy equal pay for equal work. The "Equal Pay for Equal Work" principle is reflected in the amendment to corporate regulations on remuneration, leave and insurances. In the future, we will continue to increase our input to providing more benefits and welfare to our employees.

• Protection of rights

Full compliance to all laws and regulations. We are strictly obedient to international treaties and national laws, respect and protect human rights that are recognized by international standards, and are not involved in any such behaviors that are in violation and disregard to human rights.

Systematic protection of employees' statutory rights. We strict abide by the Employment Contract Law and corporate regulations, endeavor to eliminate all kinds of forced labor, child labor and employment related discriminations. We treat each one of our colleagues with fairness, standardized employment management procedure, and have executed employment contract extension management program. 100% of our employees are protected by employment contracts in 2015. The coverage of collection employment contract ensures the rights of each and every employee are protected under the *Labor Law*.

Protection of special rights of female employees. Following the arrangements of All-China Federation of Labor and the CAAC Federation of Labor, China Southern continued to promote the building of Mother's Room providing special care to female employees. Mother's Room is a specially designed breastfeeding rooms that are private, safe, comfortable and sanitary. Fridge for breast milk, changing tables, sitting areas and power supplies are equipped in the Mother's Room. In 2015, China Southern opened 23 Mother's Rooms across the company.

[CASE]: The two Mother's Room of China Southern Xinjiang Branch are located in Terminal 3 of Urumqi Airport and in the office building of the branch company. These two Mother's Rooms provided pregnant and lactation employees a special place for exchanging childcare experiences and storing breast milk. The Mother's Room in Terminal 3 of Urumqi Airport also provides breastfeeding places for pregnant and lactation travelers.

5.2.3 Internal communication

China Southern believes that an effective internal communication system can achieve great result with little effort. China Southern actively outreach our employees and listen to their suggestions and recommendations by formulation of a smooth internal communication channels. We have also enhanced a democratic management style to promote a more scientific and reasonable decision-making process. In 2015, we took a variety of forms of internal communication to realize a two-way communication from top down and from bottom up.

• Meetings

Meeting is the most common type of internal communication seen in a company. Our regular weekly General Manager Working Meeting listens to the reports and plans from all divisions and provide comments on important matters. Midyear Working Meeting is held in August of every year, while the Annual Working Meeting and Employee Representatives General Meeting are held in January of the next year. Furthermore, Quarterly Working Meetings are held every three months for important business sectors of safety, service and finance management. For the sectors that require higher professional background, such as flight, operations, maintenance and catering, we organize regular special discussion seminars, symposiums, debate and forums in order to enhance professional competency of our employees. We also have regular cross-division project working meetings. Within each division, regular working meetings, democratic consultation meetings are also held to ensure sufficient communication.

[CASE]: China Southern held a Cabin Attendant Professional Skill Contest in 2015. A recordbreaking 11,169 flight attendants participated in the largest professional skill contest in the history of China Southern.

• Surveys

Survey is another important means of internal communication. Surveys are more flexible and allow more opportunities for respondents to freely express their opinions.

In order to understand true opinions of our employees to the company, China Southern launched a Professional Dedication Survey to cabin attendants and air marshals collecting feedbacks on their peer, corporate business operation, corporate management, job returns and work environment. 12,000 responses have been received. This was the first Professional Dedication Survey taken in China Southern, which have provided valuable insights and materials for corporate management decision-making and reform in management.

[CASE]: China Southern Cabin Division launched Letter Box of Employees Voices in 2015, collecting feedbacks on difficulties, thoughts and suggestions from cabin staff. Ground Service Division introduced the "We are family" activity with a theme of "Respect" and "Attention". Public mail box and suggestion box have been set up to collect feedbacks from employees, questionnaire evaluations have also been distributed to all members at the Ground Service Division.

• Use of multiple means of communication tools

China Southern promotes internal information sharing, corporate culture publicity, awareness of core operation projects and corporate management efficiency through multiple means of communication tools including mass email, Office Automated System, *WeChat* public account of "Youth at China Southern", China Southern Daily, China Southern TV and internal instant messages.

[LINK]: Cabin Division launched "Flight Management Star", "Safety Star" and "Service Star" contests in January 2015. These activities aimed at innovating management style, strengthen professional acceptance and pride.

5.2.4 Recruitment of talents

China Southern respects talents. Externally, we expanded our recruitment channels and optimized the introduction of various talents; internally, we promoted job-based human resource management and created smooth internal job transfer.

• Optimization of Graduate Recruitment Scheme of ground positions.

In addition to the change in cabin attendant recruitment procedure, China Southern has continued adjustment in the procedure of recruiting university graduates for ground positions. Receiving divisions have been involved throughout the recruitment process in order to increase satisfaction of the receiving division. For instance, we have implemented the second "Kapok Camp" ground position internship program, and recruited excellent graduates from Sun Yat-sen University, South China University of Technology, Xiamen University, Wuhan University, Xi'an Jiaotong University and Dalian University of Technology in advance.

• Enhance employer brand-building

China Southern launched "China Southern Campus Club" at Sun Yat-sen University, South China University of Technology and Xiamen University. This branded club will be extended to Wuhan University, Xi'an Jiaotong University and Dalian University of Technology in the future.

• Building a smooth internal transfer channel

China Southern has formulated *Employee Internal Transfer Regulations (Interim)*, and no longer restricts internal transfer due to status. We have established a transfer policy that is based on job requirement and conditions hence directing rational and orderly internal transfer.

5.2.5 Training system

In 2015, China Southern implemented key projects, strengthened the formation of basic management system and training system, and also transformed the practice of training management, hence improved our training quality and efficiency. It is expected to have completed 7,503 training projects in 2015 for over 300,000 employees across the company, the training coverage rate is at approximately 70%.

• Formation of training system for management

Through continuous exploration and practices in the past 5 years, China Southern has provisionally completed the *Corporate Management Training System Scheme*. This scheme illustrates a framework for the provision of various trainings to management teams at operational, administrative and executive levels for their appointment and promotion as well as other special trainings during their terms of appointment on a multi-level, multiphase and multi-area basis.

• Strengthening the formulation of training system

China Southern formulated a management system for internal part-time instructors resolving a series of issues related to the selection, appointment, deployment, assessment and motivation of part-time instructors. This system has built a solid foundation for a standardized management and a stable, healthy and orderly development of our team of part-time instructors.

• Implementation of Three-year Training Program for New Employees

Our Three-year Training Program for New Employees have included employees who joined China Southern within 3 years and are below the age of 30. A mentor-mentee advisory scheme has been set up to improve trainings of business ethics and practical skills as well as providing personal care and attention to our new employees.

[CASE]: China Southern Cabin Division introduced a young cabin attendant training program – "STAFF", which contains five core elements of Professional competence (**S**kill),

General quality (Quality), Professional values ("A"-value), Motivation of professional development (Fighting) and Personal care (Family).

5.2.6 Serving our employees

• Staff Service Centre

The Staff Service Centre (SSC) of China Southern was founded on February 27, 2004. It is the service provider specially designed to meet the needs of our employees. Their missions are "Staff Service Centre serves staff" and "Care for your needs, attend to your benefits". The SSC now offers 27 service products to our employees. In 2015, the SSC *WeChat* public account had nearly 10,000 followers, and provided over 100,000 services. SSC aims to increase employees' sense of belonging through the provision of value-added and innovative services.

• Cultural and recreational activities

China Southern offers a diversified range of cultural and recreational activities to our employees, such as talent contests, sports games, reading clubs, photography competition, calligraphy and painting appreciation series and many more. These activities have promoted cultural sense among our frontline employees and have created a positive harmonious atmosphere.

[CASE]: China Southern held a talent contest at the Staff Service Centre in the terminal building of Guangzhou Baiyun Airport. Organized 2015 "Ankang Cup" Employee Basketball Tournament

• Creating a harmonious atmosphere

China Southern strives to create harmonious atmosphere at workplace via various means. Firstly, we continued to carry out the "Warmth in Winter; Breeze in Summer" program. This summer, China Southern invested 10 million RMB in the purchase of cool beverages and the improvement of frontline working environment, solving real difficulties faced by our frontline employees during the summer heat. Secondly, we continued to make good use of our Mutual Fund for relieving the financial challengers due to serious illness of our employees. In 2015, our Mutual Fund provided assistance of 353,000 RMB to 9 families. Thirdly, we continued to care for our younger employees. In order to help single employees to find their other half, this year, we further improved our internal dating website and added a *WeChat* service platform.

[CASE]: 398 new employees who joined China Southern in 2015 held their own gala show of "Meeting the best of yourself at China Southern" on July 24, the day they completed their induction training. They amazed the audience with dazzling performances of poetry reading, singing, dancing and many more. This gala have also promoted the portraying of their self-images and facilitated communications between new employees and their more senior colleagues.

5.3 Health and Safety

In 2015, China Southern took multiple approaches to ensure the health and safety of our passengers, employees and the public.

• Introduction of a new alcohol testing system

China Southern introduced a new alcohol testing system in 2015 ensuring all members of the crew are tested before each flight. Meanwhile, we have issued the *Procedure for On-the-spot Treatment of Flight Crew Alcohol Abnormality*. 10 cases of alcohol level exceeding limit were found and treated on-the-spot since the implementation of the new procedure. Number of violation cases have continued to reduce, and the no-alcohol-before-flight awareness among flight crew members have been further strengthened.

• Health risk assessment of flight crew

China Southern established a flight crew health risk assessment system which has integrated the concept of risk management into daily health management of flight crews. This system ensures the state of health of our flight crew are in compliance to the requirement of their license and safe operation of flights.

• Counselling service to flight crew

We have actively responded to the Flight Crew Mental Health Care Program initiated by the CAAC by providing assessment and early intervention to flight crew members who may have mental health issues.

• Tighten review of passenger with serious illness

With a responsible attitude to all of our passengers, we strictly review whether a passenger who is suffering from serious or communicable illness is suitable for flying. 134 passenger were denied boarding. We recorded no death of passengers on-board in 2015.

• Food safety

China Southern food safety monitoring covers all of Guangzhou ensuring zero food poisoning case. All catering outposts in Guangzhou are subject to regular tests of coliform group. We aim to guarantee food safety at all catering outposts that provide food and beverage services to our employees.

• Water safety monitoring

China Southern conducts annual test on chemical indicators of water sample obtained from our water station in Guangzhou. 15 test indicators including mercury and lead have all met the national standards. Meanwhile, we pose strict regulations and procedures to operators at water station ensuring water quality on-board our aircraft.

6. Society

Air transport is the fastest mode of transport that reduces the temporal distance between two places, hence increases the efficiency of dealing with major events. This means that the aviation sector must be highly socially responsible. Embracing the advantage of being in the aviation sector, China Southern takes and active role in social development and meet its commitment to social responsibilities.

6.1 Special flights

While maintaining a sound financial performance, we are also committed to fulfilling our responsibilities to the society. For many years, China Southern undertook a number of major emergency air transport mission, such as emergency evacuation of Chinese nationals, earthquake rescue, repatriation of suspects, and received wide public recognition and respect.

6.1.1 Earthquake rescue

Earthquake rescue is a race with time. The catastrophes of earthquake are everyone's concern at China Southern. We are highly responsive and rapid in contributing our efforts to the actions of rescue mission and post-disaster relief, formulating support plan and prepare aircraft for rescue operations in the first instance. Our most experienced flight crew are assigned to such mission, relevant departments are working together seamlessly to create the most synergy in order make sure that no time is wasted before our rescue flights can take-off to the sites of disaster.

• Rescue in Nepal

April 25, a Richter-magnitude 8.1 earthquake hit Nepal. China Southern immediately initiated the contingency plan and were closely liaising with Kathmandu Tribhuvan Airport. Two evening flights were operated the same night after re-opening of the airport, and an additional flight was operated on the following day on top of the 2 scheduled flights. 419 passengers returned home safely while 21 members of the Blue Sky Rescue (BSR) were transported to Kathmandu for humanitarian tasks.

[LINK]: China Southern had maintained close contact with local offices and airport after the earthquake. Flight schedules were adjusted according to the operational state of Tribhuvan Airport while passengers and the general public had been provided with real-time information and alerts via our Weibo page, website and WeChat platforms.

• Supports to rescue team

As requested by the UN, the Canadian Medical Assistance Team (CMAT) had participated in the rescue tasks in Nepal. CMAT made a request to China Southern office in Vancouver on April 30 stating their plan to travel on China Southern flights via Guangzhou to Nepal. CMAT had also notified China Southern that they also needed transportation for 600kg of medical supplies. China Southern's Vancouver office responded quickly and had secured the lowest price for CMAT. Dedicated ground support were provided to CMAT on the day of departure, all 36 checked luggage were protected by China Southern's special luggage covers and were transported with Business Class priority.

China Southern's act of duty was reported and praised by local media including CBC, CTV and GLOBAL TV.

• Rescue in Xinjiang

Jiayituo Gelake Village of Pishan County in Xinjiang is situated by the Teklimakan Desert, and is suffering from inhabitable natural environment. Nearly half of the households of this village are living in poverty, and their sole income source rely on a small amount of livestock and fruit trees. As an enterprise of the Xinjiang-Aid scheme, China Southern sent a special task force of 5 members to this village in 2014. This task force have lived and worked with local villagers and have been striving to assist local households in developing their economy. An earthquake hit this region on July 3 while the task force was visiting local families. The task force immediately organized evacuation and informed offices of China Southern's Xinjiang Branch. An emergency response meeting was held that same afternoon at Xinjiang Branch and rescue tasks were set out to ensure that the rescue team and supplies would reach the affected area in the first instance. Meanwhile, Xinjiang Branch started to advocate for donations among all branch companies and subsidiaries. Over 500 cartons of rescue supplies weighted at 8743kg had been collected in just a few days. On July 12, a new drinking water tank was built with the help of our task force at the village and was able to provide stable source of drinking water during the impact.

[LINK]: Dried apricot is an important source of income for local households. Started in 2014, China Southern made use of our own resources and helped the transportation of dried apricots for the local communities. 2014 alone saw the sale of over 15 tons of dried apricots. This work was continued in 2015 and we have provided additional assistances to the villages including picking of apricots, re-building of houses that were collapsed in the earthquake and the installation of modern drying plants.

6.1.2 Escort of suspects

China Southern operated a special flight CZ8624 from Jakarta to Guangzhou on November 10. Passengers on board this flight included 39 suspects of a large telecom fraud group who were arrested by the police force in Indonesia. China Southern has smoothly completed this flight of escorting suspects back to China after 15 hours of overnight collaboration with all teams.

[LINK]: China Southern responded quickly and treated with highest priority after receiving request of special transportation from the Ministry of Public Security and other departments. Appropriate aircraft, air police, air marshal and flight crew were selected with a special contingency planned prepared for this task.

6.1.3 Transportation for peacekeeping force

Unlike the ordinary charter flights, peacekeeping charter flights are usually long-haul and heavy loaded, special attention needs to be made to route choice, preparation of spare parts, weather and choice of intermediate stops. China Southern has successfully operated 108 charter flights for the peacekeeping force since 2015, transporting 13,512 passengers and 226.5 tons of supplies. Some of the key flights were operated to countries such as Saudi Arabia, Malaysia, South Sudan, Sudan, Mali, Thailand, Tajikistan, Liberia, Burundi and Indonesia.

[CASE]: CZ3001 with 130 peacekeeping force took off from Urumqi on April 2, and arrived safely at the capital city of Juba in South Sudan. This marked the beginning of a series of charter flight operations for the peacekeeping force. Upon receiving the order, China Southern tackled operational difficulties caused by a 24-hour long heavy snowfall, coordinated with various operation and support departments and formulated contingency plans. An optimal flight route of 19,000km with a flight time of 25.5 hours was designed which only requires technical stop at Urumqi and Sharjah.

6.1.4 Response to breaking events

Typhoons *Lin-fa* AND *Chan-hom* hit south and east China coast in succession during July. China Southern held multiple typhoon joint-action meetings and quickly formulated response mechanism. 354 flights were cancelled or combined and 6 direct flight applications were made in order to minimize the impact of these typhoons.

Volcano Mount Sinabung in Sumatra erupted in the beginning of August, and the entire region of Bali in Indonesia was affected. Denpasar Airport was closed for three days. China Southern monitored the situation closely and provided make-up flights in the earliest possible timeslot after the reopening of the airport.

The first flight after the terrorist attack in Paris took off at 6:20am on November 15, 26 hours after the attack. As security level at Paris Charles-de-Gaulle was heightened after the attack on November 13, passengers were faced with much lengthened waiting time at the airport. China Southern Paris office provided assistance to passengers who needed to reschedule or refund of their tickets, and assigned dedicated staff at the airport to help passengers during security checks. Special arrangements to ticket conditions were made for passengers holding tickets issued prior to November 13 with travel dates between November 14 and 20, re-schedule and refund were accommodated at no extra cost to passengers.

6.1.5 Safeguarding passenger transportation during Chinese New Year

Chinese New Year is the busiest season of China Southern's operation. During the 40-day long passenger transportation peak from February 4 to March 15, China Southern operated over 66,000 flights, an increase of 5800 flight from last years. We have carried over 10 million passengers, achieving an increase of 9% over last year's figure.

The Chinese New Year period was rather late on the lunar calendar of 2015, an accumulated demand of winter semester break of students, home-returning during the holiday season of migrant workers and both domestic and abroad travelers have increased the passenger

number drastically. During the 7-day national holiday, over 10,000 domestic and international flights were operated by China Southern, 1.7 million passengers were transported. February 25 alone saw nearly 300,000 passengers traveling on China Southern flights.

[LINK]: For the stay-behind children, "home" is where their parents are. China Southern and *Southern Metropolis Daily* had jointly initiated the "Fly to the south, spend New Year in Guangzhou and Shenzhen" program. This program provided 2000 free air tickets to staybehind children from their places of abode in Hubei, Jiangxi, Guizhou, Sichuan and Chongqing to Guangzhou or Shenzhen so that they could reunite with their parents during the festival.

[CASE]: "Bring happiness and warmth back home"

The "Bring happiness and warmth back home" program is a volunteering service provided by China Southern volunteers and administration staff during peak travel seasons. This program offers support to our front line staff and provides home-returning passengers with ease, happiness and warmth. In the past two years, 3800 staff have participated in the program providing help to over 350,000 passengers with a total service hour of over 30,000. In addition, assistance were also provided to 4500 unaccompanied minors, elderly, pregnant women and other passengers that require special attention.

This program received a Gold Award from the 2nd China Young Volunteer Service Program Contest.

6.2 Caring for People

China Southern feels eternal gratitude to the communities that it operates with. China Southern owes its existence and development to the society. Giving back to the society is therefore and natural choice and an incumbent commitment of China Southern. Taking the advantage of the aviation sector, we focus our efforts on helping the communities, especially on the groups that require extra attention, assisting them in their challenging situations.

6.2.1 Transportation of living organs

• The longest transportation of heart

China Southern flight CZ6378 carrying a living heart few from Guangzhou to Changchun on July 4. This flight covered a distance of nearly 3000km and the entire process took less than 6 hours. Reportedly this was the longest distance a living heart has travelled in China.

In the morning of July 4, China Southern received a phone call from Anzhen Hospital of Beijing. The heart from a legitimate donor needed transportation from Guangzhou to Changchun on-board China Southern flight CZ6378 which was scheduled to depart at 16:40. A living heart can only last for 6 hours after leaving the donor's body, but the flight time alone is 4 hours. In other words, the ground transportation at both departure and arrival ends must not exceed 2 hours, however the usual check-in procedure for domestic flight is

at least 1 to 1.5 hours. It seemed almost a mission impossible, any delay in the process may deprive a life-saving opportunity of the patient.

Time is the most importance resource. After receiving the task, several departments of China Southern started their joint-actions. The CAAC was contacted to apply for priority dispatch at Guangzhou Baiyun Airport. As X-Ray at security check will harm the living heart, China Southern coordinated with security control at Baiyun Airport to exempt the organ from X-Ray screening. China Southern also coordinated internally to bring the arrival time of the previously half an hour earlier.

[LINK]: 12-minute ground procedure

The Supervisor-on-duty of the day Mr. Liu Jinlong of China Southern's Ground Support Department prepared all documents and procedures in advance and did trials in order to determine the optimal route from check-in counter to the gate. He was at position at 15:00 that afternoon. The doctor with the organ arrived at 16:03. Mr. Liu quickly verified his identity, confirmed documents from the hospital and printed boarding passes. Mr. Liu took the doctor to the pre-arranged green channel at security check and passed all procedures smoothly. An electric cart was already waiting outside the security channel and the doctor was driven to the gate. The entire procedure from the moment the doctor's arrival at the airport to his boarding the flight took only 12 minutes. CZ6378 took on at 16:30 ahead of schedule and landed safely at 20:26, 14 minutes ahead of schedule.

• Emergency transportation of blood samples for suffering sisters

China Southern received a phone call from a local media of Dalian at 9am on August 13, that an 11 year-old girl and her 6 year-old sister are both suffering from congenital rachioscoliosis and talipes equinus. The younger sister was being treated at Xiehe Hospital in Beijing at the time and met a consultation team of doctors visiting from the U.S. The consultation team asked for the blood sample of the older sister and needed the sample to arrive within 4 hours. As this was critical to whether the sisters may be able to stand up and walk upright in the future, their families were very anxious and called the media for help. After understanding the situation, China Southern acted immediately. The next two flights from Dalian to Beijing was scheduled to depart at 10:10 and 13:30 respectively, the flight time was 1 hour. However, taking the 13:30 flight would mean that the arrival of the blood sample exceeding the 4-hour limit while the time left for taking the 10:10 flight was only 70 minutes, and the blood sample was yet to arrive. Time was pressing and the China Southern team was endeavoring with all departments to minimize time needed for the transition of the blood sample.

The blood sample arrived in time and flight CZ6129 took off ahead of schedule. After 2 hours, the sample arrived at Xiehe Hospital in Beijing. The U.S. team of doctors was amazed by the speed and efficiency created by China Southern.

• Relay from Dalian to Shanghai, fulfilling a girl's dream of artificial ear

Flight CZ6523 from Dalian to Shanghai took off ahead of schedule at noon on March 11 in order help Tongtong, a little girl who was suffering from congenital anotia. Tongtong was born with congenital ear deformity and her hearing ability was severely impaired. A

research institute in Shanghai offered to help Tongtong reconstruct an ear with her own rib cartilage after reading her story in the news. China Southern Dalian Branch treated this case with high priority and made sure that her rib cartilage reached the institute in Shanghai within 6 hours.

Vice Director of Wuxi People's Hospital Dr. Chen Jingyu posted a *Weibo* on October 4 that his hospital had acquired a donated lung in Guangxi at 3am that morning, the medical team planned to fly to Wuxi on the 8:20 China Southern's flight from Guangzhou, but due to traffic congestion the medical team arrived at Guangzhou Baiyun Airport at 8:05. Unfortunately even with his prior notification, his team was still denied boarding by China Southern ground staff at Guangzhou.

His Weibo post evoked constant focus from the general public. China Southern did not ignore or divert this incident but responded promptly, and sincere apologies were made to Dr. Chen and his team for not being able to assist. China Southern has in fact provided seamless assistance to numerous medical teams, including Dr. Chen, in their transportation of living organs. China Southern is in deep admiration to the live-saving spirit of the medical practitioners and is also proud of our experience in providing support to the medical practitioners. As Dr. Chen raised in his Weibo post, China Southern is in full support of establishing Green Channels for the transportation of organs. China Southern has taken a leading action in launching a fast-track channel between Guangzhou and Wuxi People's Hospital for transporting living organs in order to ensure timely and effective communication of information. In the future, China Southern will launch Green Channels for the transportation of organs across all branches and subsidiaries. Transportation of living organs for medical use, especially via aviation requires the cooperation of several authorities and departments, and must be in accordance with relevant aviation safety regulations, therefore a state-level transportation procedure should be established. China Southern is willing to participate in the formulation of such standard procedure and to care for more human lives.

6.2.2 Caring for passengers medical emergencies

Passenger safety is of paramount concern of China Southern during medical emergencies of passengers on-board. This is a core responsibility standard that China Southern uploads, even though flight return and diversion may incur additional operating cost. For China Southern, live prevails all. In the meantime, China Southern would like to express our gratitude to the understanding and support given by all other passengers during such incidents.

March 5. Shortly after take-off, a passenger on-board CZ6761 called for help to our cabin crew. This passenger was diagnosed with renal failure and was suffering from physical abnormality induced by strain. The cabin crew took the pulse of the passenger and was closely monitoring the situation during the flight. The captain of the flight contacted medical support at Wuhan airport and this passenger was taken immediately to the hospital after landing.

May 29. 10 minutes after take-off, a 20-month old child on-board CZ3357 en-route from Wuhan to Shenzhen had a medical emergency. The captain decided to return to Wuhan and had arranged medical support. Fortunately, as the flight returned in time, the child was able

to get treated. The guardian of this child had one piece of checked luggage, our ground staff at Wuhan took care of the luggage and carried to the hospital while the passenger was in the hospital accompanying the child. Flight CZ3357 took off again after a short stay.

September 26. CZ6381 just took off from Guiyang heading to Hangzhou. 5 minutes after take-off, a passenger Mr. Li started to feel dizzy, short of breath and pale. The chief purser checked the passenger and moved the passenger to first class while calling for medical help on-board. Unfortunately, there was no medical professionals traveling on that flight, hence the captain decided to divert to the nearest airport at Changsha. We were informed later that Mr. Li was diagnosed of acute coronary occlusion, and was saved thanks to the timely diversion.

November 13. A passenger had a severe medical emergency on-board flight CZ3773 from Nanning to Taiyuan. The crew initiated the On-board Medical Emergency Procedure and had decided to divert to Xi'an. Ambulance was pre-arranged and the passenger was taken to treatment in time.

December 4. A passenger suffering from Hepatitis suddenly had an onset. The On-board Medical Emergency Procedure was initiated, the crew enquired the medical history of the passenger, provided oxygen, broadcasted for medical professionals and requested diversion. At 11:38, the Emergency Procedure was initiated. A&E center was called and full support in place in 6 minutes. At 11:51, the flight diverted and landed at Guangzhou. Ambulance and medical team ready on the apron. At 11:57, medical team boarded the aircraft and transferred the passenger onto the ambulance. At 12:16, the passenger arrived at the hospital. Family members of the passenger kindly declined China Southern's offer of accompanying the passengers to the hospital. All remaining passenger disembarked the aircraft, aircraft underwent sterilization. At 13:27, flight CZ6629 took off again for Hangzhou.

For emergencies, such as passenger medical emergency on-board, China Southern has established a set of procedures. Main steps including firstly the confirmation of diversion airport; secondly the discharge of fuels to avoid overweight at landing; and thirdly the preparation of first-aid treatment, such as arranging ground support, cabin and flight departments to cooperate with the on-board team to assist the passenger(s) after landing.

The average cost of a diversion or a return ranges from 80,000 to 100,000RMB. Take A320 as an example, an emergency diversion of such aircraft would incur an additional cost of 100,000RMB. This cost will rise significantly if diversion is required on a flight operated by wide body aircraft.

In 2015 alone, China Southern roughly diverted or returned 99 flights, on average one flight had to be diverted or returned due to medical emergency of passenger on-board less than every 4 days.

[VOICE]: As reported by media, Mr. Zhang flew with China Southern flight CZ6101 from Shenyang to Beijing on November, 9. Mr. Zhang suffered from severe abdominal discomfort 5 minutes after take-off. He immediately called the cabin crew, however cabin crew member suggested that this may be caused by change in air pressure and did not treat the case. However the pain in Mr. Zhang's abdomen worsened increasingly, the flight crew arranged for ambulance at Beijing Airport. Unfortunately, the cabin crew and the ambulance staff were in dispute over who should carry the passengers from the aircraft, and Mr. Zhang was forced to climb down the staircase into the ambulance under great pain.

With regard to this unfortunate incident, China Southern publicly apologized to Mr. Zhang on our official *Weibo* page on November 23, and internal investigation was also commenced. In the afternoon of November 24, a special meeting was held requesting all relevant departments to review all service regulations and procedures and to improve service quality management. Regarding the problem occurred at coordinating with ground A&E staff, China Southern will review the case and take lessons learnt to improve communications with external departments and optimize our practice procedures.

6.3 Culture and Education

Contributing to the culture and education in the communities that we are operating in is our engagement to our stakeholders, and is our respect to global code of conduct and our commitment to preserve community character and culture diversity. We highly focus on the development of culture and education.

6.3.1 "10-Fen" Care Foundation

Our "10-Fen" Care Foundation was founded on May 13, 2005. The name of this foundation has two meanings: on the one hand, "10-Fen" indicates that we inject 10 Fen (0.1RMB) with every ticket sold into the foundation; on the other hand, it also represents our full commitment to our social responsibilities and our support to charity work.

Throughout 2015, the foundation has funded numerous educational projects to Guangzhou Civil Aviation College, Guangdong University of Foreign Studies, Chongqing University, Hunan University, Civil Aviation Flight University of China, Jilin University, Tianjin University, Dalian Maritime University, Jinan University, Guizhou University, Zhengzhou University and Northeast University of Forestry. A total amount of 1 million RMB earthquake relief fund was donated to the of Pishan and Moyu counties in Xinjiang.

6.3.2 "Bookcase of Dreams"

The "Bookcase of Dreams" program is co-founded by China Southern Young Volunteer Association and "10-Fen" Care Foundation in 2014. It aims to provide reading spaces for students living in remote regions and residents of special communities.

In January 2014, over 1000 books were delivered to the new library at Cenyin Primary School of Long'e Village, Liping County, Guizhou Province by volunteers of China Southern. In March, volunteers visited Guizhou again and delivered books, stationary and school uniforms to 178 students of Weimin Primary School of Maochang Town, Dafang County in the north of Guizhou Province. The volunteers have also helped construction of a new water tank relieving the difficulties in accessing clean drinking water faced by local students. In June, our team of volunteers visited Yujiao School of Nanxi Town, Puning City of Guangdong Province bringing "Bookcase of Dreams" program to Puning area together with the greetings and care from China Southern family.

The "Bookcase of Dreams" started again in 2015. In March, Reading-corner program was launched for a public housing estate in Jinshazhou, Guangzhou. This program was immediately followed by the Reading-corner program at Tianbei Primary School of Tianxin Town, Heyuan City. 17 chests of 1311 books were delivered to the students in the less developed hilly areas of Heyuan City. In June, Reading-corner was launched in Liujia Primary School of Long'e Village, Liping County of Guizhou Province. Volunteers visited local students, understood their difficulties in operation and brought over more books and supplies. In July, volunteers visited Tianxin Town, Longchuan County of Heyuan City and delivered over 1,200 books to Qingshang Primary School, where a Reading-corner was also launched.

In 2015, the "Bookcase of Dreams" program was awarded the "Best Practice of Charitable Projects by Public Listed Companies" and was also awarded Silver Prize in the "2nd China Young Volunteering Services Project Contest".

[LINK]: Building dreams for two years, China Southern has collected over 100,000RMB of funds, over 10,000 books and launched 8 reading-corners under the name of China Southern "Bookcase of Dreams". An estimated of over 2,000 students and left-behind children and over 1,500 low-income households and physically challenged people have been benefited by the program. In the meantime, more than 10 pairs of one-to-one support couples have been created.

6.3.3 Integrating into oversea local communities

• Participation to the Dutch Flower Parade 2015

The 68th Flower Parade was held in Amsterdam on April 25. This annual parade attracted a large volume of local residents and tourists. China Southern made its first debut at the parade becoming the only Chinese enterprise showcasing a richly decorated parade vehicle. Drivers wearing captain's uniform and the Dutch cabin attendants of China Southern were an eye-catching sight at the parade.

• Sponsoring Ferry Race on Australian Day

A ferry sponsored by China Southern won the annual Ferry Race on Australian Day on January 26. The Ferry Race is one of the traditional activities during the Australian Day celebration. China Southern has also sponsored the Sydney Festival, becoming a Leadership Corporate Partner and the Official Airlines Partner for the third consecutive year.

• Sponsoring the Chinatown Food and Culture Festival in Mauritius

As invited by Chinese Embassy in the Republic of Mauritius, China Southern participated in the 11th Chinatown Food and Culture Festival which was held from April 27 to May 3 as a main corporate sponsor. This Food and Culture Festival is held yearly in April and May, and has been the largest carnival event of the local Chinese community for 10 years. This event attracts many local residents and tourists, and has a high impact factor in Mauritius, especially among the Chinese community. The key theme of this event is the presentation of Chinese cuisine and culture. Local media including TV, radio and newspapers always give wide coverage during this event.

• Sending greeting by Flash Mob in Herald Square, New York

On June 25, 30 dancers from all over New York quietly gathered at Herald Square. They started dancing in T-shirts with vivid red Kapoks. A group of China Southern flight attendants holding red Kapoks emerged in the crowd and distributed the flowers to passers-by. This was a special event organized by China Southern in promoting the additional New York service while bringing our kind wishes to fellow New Yorkers.

6.4 Caring for Children

6.4.1 Parent-kid Summer Reading Day

On July 23 – 24, China Southern and McDonald's organized a series of refreshing Parent-Kids Summer Reading Day events at Guangzhou Baiyun International Airport. Uncle McDonald's arrived at the scene and joined our young passengers with interactive games and introduced the wonderful world of reading to the children.

6.4.2 A Charitable A380 flight

A flight from Beijing to Guangzhou operated by one of our A380 welcomed a group of special guests on June 9. This group of lovely kids are schoolchildren at the Guang'ai Charity School of Beijing who had never flown before and were longing for an experience in the air. Jointly invited by China Southern and Airbus China, China Southern fulfilled this dream for them on-board the A380.

This charitable act aimed to provide more opportunities for the children at Guang'ai Charity School to get in touch and explore the outside world. China Southern also advocates our society to offer more care and attention to this particular group of children.

[LINK]: Beijing Guang'ai Charity School is a non-for-profit charity education institution that provides home and education for homeless, forsaken, physically challenged and orphaned children, as well as children living in extreme poverty.

[CASE]: The football team in the micro-film *Dream from the heart* appeared in football tournament

Still remember the group of kids who ran in desert pursuing their football dreams? As introduced in our 2014 CSR Report, the football team of Kavak Village Primary School, Moyu County, Hotan Prefecture of Xinjiang who was the original story behind the micro-film *Dream from the heart*, has made their way out of Xinjiang and flew to Jinzhou in Liaoning province competing in the 5th "Star of the Future Cup" National U12 Football Tournament in 2015. The average age of this dream team of Kavak Village was 10, and was the only non-professional U12 country football team invited to compete in this tournament. They have achieved 6 wins, 2 ties and 2 losses and ranked the fourth all by their own effort. Tireless trainings paid off, they have perfectly interpreted what actions can do to achieving one's dream.

6.5 Volunteers in Action

Indicator	Number
Number of volunteering	1,812
activities	
Total number of	23,853
participating volunteers	
Total service hour	56,817
Total service recipients	316,520
Number of long-term one-	1,268
to-one support pairs	

In 2015, China Southern volunteers provided nearly 57,000 hours of services to over 300,000 people; 1268 pairs of long-term one-to-one support group have been created.

BEIJING: Young volunteers of Beijing Branch visited Yanjing Little Swan Charity School on June 30 and donated supplies for the use of teaching and in canteen and dormitories. This is Beijing Branch's fourth consecutive year of visit to this school since 2012.

HAINAN: Volunteers of Hainan Branch visited children in Sanya Guangming Lianjie Centre for Children of Brain Dysfunction. They assisted the staff at the center in taking care of the children, massaging their spines and helped the children in other rehabilitation exercises. They have also donated supplies such as soymilk machines.

HUBEI: Volunteers of Hubei Branch continued to carry out the "Young Kapok in School" program. This program brought social etiquette and safety workshops to middle schools and primary schools in Wuhan hoping to enrich the school live of children and broaden their horizons. Since the launch of this program, the volunteers have visited 8 schools and conducted 12 workshops, covering nearly 1,000 schoolchildren.

HUNAN: The volunteer team, "Kapok – Small Helps" of Hunan Branch visited the local community of the branch office in March. This marked the opening of a series of volunteering English tutoring program. Volunteers with CET-6 and ProCET-8 qualifications provided free English tutoring to children of low-income families using their off-duty hours. This program was very well received by the parents in the community.

SHENZHEN: The volunteers of Shenzhen Branch initiated visits to children with special needs. They have established a long-term relationship with Nanshan Care Centre for Children with Special Needs and launched a "China Southern Shenzhen Branch Care Station" in the center. Through the establishment of this station, a diversified range of services and supports have been provided to the children at the center.

XINJIANG: A free shuttle bus service team was established by young volunteers of Xinjiang Branch on March 5. The service team has built a green channel from passengers travelling from the bus terminus at the airport to the departure hall of terminals 1, 2 and 3. LIAONING: Young volunteers of Northern Branch visited Shenyang Tongze Centre for Autistic Children. They brought along care from China Southern family with supplies donated through internal charitable group purchase activities.

7. Business Operation

It is the basic responsibility of an enterprise to continue create economic values and ensure inflation-proofing and appreciation of state-owned assets. The fulfilment of corporate social responsibility during business operation is crucial for a prudent operation of an enterprise, it is also critical for its risk management and sustainable development. The economic performance of an enterprise is no in conflict with social and environmental benefits, but rather the fulfilment of social and environmental commitments of an enterprise is a powerhouse to its development.

7.1 Economic Performance

The development of aviation industry is interdependent, mutually promotive and interactional with socio-economic development. The aviation industry is a catalyst to socio-economic development in terms of growth of GDP, provision of employment opportunities, development of supporting industries, improvement of people's living standards and many more. China Southern's global network and business mean that a stable operation of the company provides strong support to our objectives of serving the local society and boosting sustainable development of regional economies.

In 2015, China Southern achieved a total revenue of 111.47 billion RMB, and created a net profit of 3.85 billion RMB for the shareholders. A total amount of 9.28 billion RMB had been contributed to various taxes and funds.

7.2 Protection of Shareholders' Rights and Equity

China Southern upholds an ethical business operation, vigorously implement laws and regulations stipulated by the state and attach great importance to the disclosure of non-financial information. China Southern strives to protect the three rights of the shareholders, namely the right to return-on-investment, right to information and right to participation and supervision; we also endeavor to return our shareholders with sustainable business performances.

Right to Information. China Southern has strengthened day-to-day communication with shareholders. We are holding results press conference in Hong Kong on an annual basis; we are continuing our effort in improving our website and are keeping an accessible communication channel with our small-to-medium investors while providing relevant feedback channel. We regularly release weekly, monthly and quarterly results and feed the suggestions and recommendations collected from our shareholders back to the management in order to improve the standard of operation.

Right to return-on-investment. China Southern has always been focusing on maximizing the equity of our shareholders and maintaining continuous and stable cash dividends. We provided cash dividends to shareholders in the past three years of 2013 to 2015 in the percentages of 19.8%, 22.1% and 20.38% respectively.

Right to participation and supervision. General meeting of shareholders and online voting are the two main methods used to increase and encourage our shareholders to participate in the decision making process of various management issues. We have also added stipulations in our Articles of Association with regard to shareholders' right to nominate directors.

[CASE]: The Connected Transaction Joint Conference System

China Southern has established a joint conference system for any connected transactions, which is administered by Legal, Financial, Audit and the Office of Secretary of the Board. This system is assessed and audited on a regular basis to ensure the fairness and transparency of the system.

7.3 Business Ethics

China Southern's commitment: Operate by law; manage by regulations; be honest and credible; fair play

In order to regulate the business conduct and support a just and fair market, China Southern sees compliance to antitrust regulations as an important corporate policy. Through refining mechanisms and institutions, we have proliferated our policies on the compliance with antitrust regulations to all key positions and have embedded the assessment of compliance with antitrust regulations in our day-to-day operations. We ensure that the company participates in market competition in a fair and lawful manner with the system of antitrust risk management.

China Southern has established the Office for Antitrust Risk Prevention, which is in charge of formulating preventive measures, assessing legal risks associated with antitrust regulations, and the works on exemption declaration. We have issued the Regulation of Antitrust Legal Risk Management, which has further clarified the responsibilities and authorities of relevant departments, risk assessment process and responsive procedures. We have issued the Guideline of the Compliance with Antitrust Regulations, which has identified prohibited actions and suggested issues that worth noting, hence providing a clear guide to conduct for relevant departments. Last but not least, we have also consolidated trainings on compliance with antitrust regulations and made such training a yearly routine session, which covers key personnel at pricing, sales and alliance cooperation.

[CASE]: In 2015, China Southern invited legal counsellors specialized in antitrust laws from leading international law firm to conduct trainings of antitrust laws for staff of related positions in Commercial Steering Committee, Cargo Division and Legal Division. The counsellors have also organized Q&A sessions targeting issues encountered in daily operations. These trainings provided in-depth case studies and analysis of mitigation measures to raise awareness of related staff and increase risk prevention level.

7.4 Risk Management

Risk management is the act of management to prevent the occurrence of risks through a series of actions of risk identification, risk estimation, risk taking and risk monitoring. By taking a combined method of internal risk management and external audit and supervision, China Southern has gradually enhanced the ability in risk prevention and control, especially in the areas of business operation, legal and anti-corruption. A full set of feasible and practical contingency plans have been formulated to reduce the probability of incurrence of losses and also to minimize the level of losses should a risk occur.

7.4.1 Management structure

In terms of organizational structure, China Southern has established a 3-tier risk management system that comprises individual departments responsible for their respective risks, Office for Comprehensive Risk Management and Internal Audit Division. In terms of risk identification, we focus primarily on the strategic, market, operational, financial and legal risks that are closely related to the internal and external business environment, especially in the areas of fleet planning, internationalization, oil market, rate of exchange, high-speed rail, anti-trust and labor policies. In terms of implementation, we have formed a risk management close-loop structure through a corporate level process of risk identification, assessment, mitigation, improvement and feedback. In terms of culture building, we focus on consistent risk management training and a reporting system to the management of change of risk and requirement, aiming to raise the awareness of risk among the entire workplace.

7.4.2 Management of business operation risks

The Renminbi experienced substantial devaluation in 2015. On top of this, China Southern was also faced with the adverse circumstances of tightening in financing and the purchase of foreign currencies. We planned ahead and optimized our debt structure by means of early repayment and broadening of financing channels. We were able to keep our financing cost and risks of foreign exchange rate under control while ensuring our capital needs. Firstly, we strived to reduce capital cost and repay loans with higher interest rates. Secondly, we actively adjust our debt structure in order to prevent financial risks. Thirdly, we made use of flexible leasing and financing tools to ensure the capital needs for fleet acquisition. We have achieved a 0.2% reduction in overall financial lease capital cost while safeguarding the need of debt restructure. Fourthly, we have aggressively broadened our financing channels and advanced the establishment of oversea financing platform so as to meet our oversea financing needs.

Meanwhile, we have also strengthened internal audit and improved system construction. 99 amendments and additions have been made to the financial system, a further 52 items were abolished in order to plug loopholes and to prevent systematic risks.

7.4.3 Management of legal risks

China Southern has structured a compliance management system that corresponds to the actual needs of the company and can reflect our own characteristics. We used prevention of

legal risks, comprehensive risk management and internal control management as the basic means and core components of promoting the construction of a company that is legally compliant.

In 2015, China Southern determined 9 major risks of the year through identification and assessment, and has accordingly formulated relevant management and control measures while conducting dedicated risk management at 11 work units. A chain of legal risk prevention mechanism has been form. Firstly, the oversea legal risk prevention mechanism has been getting more and more mature. As the internationalization process of China Southern deepens, China Southern has adjusted the management of international legal affairs from matrix system to centralized system, which can more effectively utilize resources and ensure major projects and key areas can be monitored and tracked by designated human resources. Secondly, we have strengthened the formulation of regulations in the areas of marketing and sales, capital management, bidding and invitation-to-bid and engineering projects. In 2015, China Southern has formulated or amended the *Rules for Managing Agreement with Passenger General Sales Agents, Regulations of Capital Management (Interim), Detailed Regulation of Co-approval of Capital Use (Interim), Measures for the Implementation of Procurement Management (Provisional), and the Handbook of Basic Construction Engineering Management.*

7.4.4 Internal Control Assessment

In 2015, the scope of China Southern's internal control evaluation has covered 100% of gross operating revenue and over 98% of overall asset value in the consolidated Annual Report under IFRS. An accumulated number of 254 key business procedures and 5,110 sub-procedures have been evaluated, 5,100 flowcharts have been formed and 254 risk and control matrices have been established. 8,196 risk control points have been validated through the evaluation process.

7.4.5 Risk management of working with no corruption

The Central Inspection Team provided feedback to China Southern in February 2015. China Southern has since continued internal inspection and related remedial measures. The inspection team identified a number of issues in the operational areas of sales and marketing, purchasing, maintenance, construction projects and financial management, as well as deficiencies in the act of cleaning up four forms of undesirable working styles of formalism, bureaucratism, hedonism and extravagance, and on the facet of selection and appointment of management. With regard to these problems identified by the inspection team, China Southern has strengthened organization and leadership in this area, deepened internal inspection and correction, and has sustained the high-pressure atmosphere and efforts in promoting the work of inspection and rectification. Thorough investigations have been carried out to any case or personnel who were found in breach of the law or discipline with zero tolerance. Such information have been disclosed to the general public in accordance with the requirement of the Central Inspection Team and regulations for public listed companies.

China Southern has earnestly implemented the rectification and remedial works. Firstly, we have strengthened organizational leadership, further classified and sorted our business processes; we have developed special rectification plans and held implementation meetings

for marketing, freight, infrastructure construction and the Office of Letters and Visits. Secondly, we have targeted investigations on the cases of share ownership in passenger and freight general sales agents of our management, marketing and sales personnel. 12,945 personnel have undergone this investigation, 23 violations were found and treated in compliance to regulations. Thirdly, long-term mechanism has been formulated. We have in particular reviewed, perfected and sorted risk points in over 100 regulations such as the *Detailed Measures of Implementation for Financial Purchases* and the *Management Measures for the Remuneration and Business Expenditures* while suggesting preventive measures.

China Southern has continuously intensified supervision and inspection and has improved restraining mechanism on the use of power. Firstly, we have conducted performance supervision on the implementation of the "Three Importance and One Greatness" decisionmaking system. We have comprehensively found out the establishment, implementation and supervision of the "Three Importance and One Greatness" system, and formulated remedial measures to issues identified. Secondly, the "Eight Rules" have been vigorously implemented. We have taken special investigation and clean-up targeting the stubborn issues including dining using corporate fund, corporate vehicle made for private use, oversea visits, senior management remuneration, expenditure of corporate fund and the excessive use of office spaces.

Education and awareness-raising were also implemented within the company. We have made use of the internet platform to increase propaganda of work without corruption. Q&A sessions and trainings have been conducted on various platforms of Office Automated, internal media and WeChat. Meanwhile, we have organized 403 lecture sessions for 16,678 personnel in connection with most recent anti-corruption trend and case studies in order to strengthen the sense of responsibility among our staff.

China Southern will take the inspection and rectification as an opportunity to build a fine Party culture and keep its organization clean through these remedial measures, and will further transform the working style of its employees, further refine rules and regulations and further standardize the operation of the company in order to eliminate the soil that breeds corruption and to create an upstanding environment for the deepening of reform and the sustainable and healthy development of the company.

7.5 Supply Chain Management

In order to strengthen management on corporate procurement and purchase, China Southern set up the Corporate Procurement Management Committee in 2015. All existing procedures, documents and systems of procurement management on all hierarchy have been reviewed and re-organized. We have improved the level of procurement management by restructuring the procurement management regulatory system based on the principles of quality, efficiency and integrity.

There are three levels in the procurement management system. First is the *Rule of Procurement Management*. This document stipulates on the top level the basic principles, methods and practices of procurement in China Southern. Second is the *Measures of Implementation for Procurement Management*, which provides practical procedures and

standards on the operational level. The third are the detailed implementation measures formulated by each division and work unit, which state clearly the responsibilities and steps to be followed on the implementation level. This new procurement system strengthens the approach of public bidding at procurement. For a certain number of projects that are not suitable for pubic bidding, this system requires clear statement of purpose and such projects to undergo approval procedures. At the same time, a supervision and cross-check and balance mechanism has been formulated to clarify the main responsibility on every step. A *Measures for Supervising Procurement (Interim)* has also been issued to refine the requirement and procedure at supervisory works. In 2015, various supervision and inspection offices within China Southern have participated in 1378 procurement supervision processes.

China Southern issued the *Notice of Requirement for the Disclosure of Procurement Information* stipulating the channel of information dissemination. Throughout the year, all 1739 procurement projects valued at over 200,000RMB have been released for pubic bidding. These information were released on the websites of China Southern Procurement and Bidding, China Procurement and Bidding, International Bidding Network of China. This has reflected a substantial increase in the percentage of procurement projects for public bidding.

In terms of corporate social responsibility of the suppliers, China Southern issued *Supplier Code of Conduct* in 2013, regulation our cooperation with suppliers on aspects of business operation, social and environmental. We are also open to suggestions and recommendations from our suppliers. In 2015, we conducted questionnaire survey to 113 suppliers, collecting feedbacks on the importance of corporate social responsibility. We also intend to raise our suppliers' awareness on corporate social responsibility and increase their understanding in being a socially responsible corporate. In the future, this *Supplier Code of Conduct* will form part of the annex to procurement agreement. China Southern will select socially responsible suppliers with priority.

7.6 Serving "One-Belt, One-Road" and Promoting

Economic Development

Party Secretary Xi Jinping raised the strategic initiative of constructing the "Silk Road Economic Belt" and the 21st Century "Maritime Silk Road", in short, the "One-Belt, One Road". This initiative has been very well received by the international community and gained support from countries along the route. As raised in the *Report on the Work of the Government 2015*, China is set to foster a new environment of all-round opening up, and promote cooperation in the construction of "One-Belt, One-Road". China Southern will actively seize the opportunities brought by the "One-Belt, One-Road" initiative.

China Southern has a strong foundation of route network. In terms of hub construction, Guangzhou City of Guangdong Province is the start point of the "Maritime Silk Road" and Xinjiang is a strategic location on the Silk Road while Guangdong and Xinjiang are two important hub in the China Southern network. On our domestic network, China Southern

has branch offices and serves a large share of the aviation market in 8 out of 14 provinces that are situated along "One-Belt, One-Road". On our international network, China Southern has strong presence in "One-Belt, One-Road" regions of South Asia, South East Asia, Southern Pacific, Central Asia and West Asia. In 2015, China Southern inaugurated new intercontinental services to Nairobi, Rome and Christchurch and regional services to Kota Kinabalu and Nha Trang, further raised our coverage to "One-Belt, One-Road" countries. Nairobi, Rome and Kota Kinabalu are all important cities along "One-Belt, One-Road". Nairobi is the capital city of Kenya, the financial center and media center of East Africa. It is also where the Headquarters of UN-HABITAT and UNEP are located and the largest aviation market of Kenya. Previously, China Southern had been serving the African market via codeshare cooperation with Kenya Airways, a SkyTEAM member. With the launch of the Nairobi service, China Southern will build a solid foundation for the opening of more African service by Chinese carriers and better serving leisure and business travelers between China and Africa. The new Guangzhou-Wuhan-Rome service connects the agricultural industry in Central and West China with Food and Agricultural Organization in Rome, promoting communication between Central - South China and more UN organizations.

In 2014, China Southern carried nearly 4.5 million passengers on "One-Belt, One-Road" routes, in yearly increase of 15.1%. In 2015, China Southern operated 96 routes to 52 cities in 34 countries along "One-Belt, One-Road" with 544 weekly flights, a year-on-year increase of 12%. The "One-Belt, One-Road" region has an economy scale of 21 trillion U.S. Dollars and takes up 24% of the world's freight and service export. The "One-Belt, One-Road" countries are in desperate need of consolidation and development in aviation and logistics. A comprehensive route network and convenient transport will facilitate the booming of regional economy. China Southern will take this opportunity to speed up the network expansion and become an important catalyst to the development of the "One-Belt, One-Road" initiative.