





# **Where Growth Meets** Responsibility

# Contents







Sustainability at DIAL







Transforming Our Business





Service Excellence

About the Report <b>1</b>
About DIAL <b>2</b>
Delhi Airport- Where Growth Meets Responsibility <b>4</b>
Key Milestones of Delhi Airport <b>6</b>
Message from Managing Director 8
Message from CEO <b>10</b>
Message from COO <b>12</b>
Sustainability at DIAL 14-33
Transforming Our Business 34-45
Service Excellence <b>46-63</b>
Care for Environment <b>64-77</b>
Enhancing Quality of Life <b>78-89</b>
Calendar Year Data <b>90</b>
List of Abbreviations <b>91</b>
GRI Content Index <b>92</b>

Assurance 94



This icon stands for a page that has reference to GRI Index

# **About the Report**

102-10

102-45 102-46 102-50 102-51 102-52

This is the third Sustainability Report of Delhi International Airport Limited (DIAL) and it covers the sustainability performance of DIAL for FY 2016-17 and FY 2017-18. As DIAL publishes the Sustainability Report on biennial basis, this report follows the progress made since the last Sustainability Report for FY 2015-16. This report is prepared based on the Global Reporting Initiative (GRI) Standard and the Airport Operators' Sector Supplement (AOSS). It covers the operational boundary of Indira Gandhi International Airport, which is being operated, maintained and developed by DIAL. The reporting principles and methodology are 'In Accordance' with the 'Core' option of the GRI Standard. The universal standard and relevant topics, specific standard disclosures pertaining to the GRI Standards have been followed while preparing the report. During the reporting period, there are no significant changes to the organisation's size, structure, ownership, or supply chain. The report has covered requisite Reporting Principles for defining the contents of the report.

## **Stakeholder Inclusiveness**

Concerns affecting the organisation and the stakeholders have been identified through various engagement and consultation processes that are used by DIAL in its ongoing activities. Stakeholder's perspectives and expectations have been taken into consideration while selecting and reporting material sustainability concerns in this report with measures and strategies to mitigate the issues.

#### **Sustainability Context**

This report is inspired and aligned to DIAL's vision of being a sustainable organisation, in the sphere of airport operations, on a global scale. The context of reporting addresses economic, social and environmental performance, value created and the organisation's strategy towards attaining sustainable development at Delhi Airport.

## Materiality

This report focusses on those aspects that are material and have a direct or indirect impact or influence on the organisation's ability to create, preserve or erode economic, environmental and social value of our business, stakeholders and society at large.

#### Completeness

This report includes all the key material aspects with clear defined boundaries i.e. entire organisation of DIAL and its stakeholders except where stated otherwise, sufficient to reflect significant economic, social and environmental impacts, and enables stakeholders to assess the organisation's performance in the reporting period. All the information provided is reasonable and appropriate.

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## Validation and Assurance

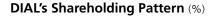
The report is internally reviewed by Sustainability Core Team (SCT) on the basis of GRI Standard reporting principles i.e. accuracy, balance, clarity, comparatively, reliability and timelines. In order to reach and publish an objective and impartial opinion or conclusion on the report, DIAL conducts an independent third-party assurance. The current report has been assured by M/s SGS India Pvt. Limited, an independent third-party assurance provider. They have provided the assurance as per the International Standard for Assurance Engagements (ISAE) 3000 at a 'reasonable level', the statement of which forms a part of this Report.

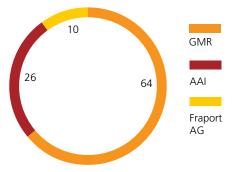




102-1 102-2 102-3 102-4 102-5 Delhi International Airport Limited (DIAL) is a Joint Venture Consortium formed between GMR Group, Airports Authority of India (AAI), and Fraport AG, and is headquartered in New Delhi, India. The concession to operate, manage and develop Delhi's IGI Airport was awarded to the consortium in 2006, following an International competitive bidding process. DIAL entered into Operations, Management and Development Agreement (OMDA) on 4th April, 2006 with the AAI. The initial term of the concession is for 30 years extendable for another 30 years. The airport is spread over an area of 5,106 acres situated in Palam, south-west of New Delhi. The airport has 3 passenger terminals (Terminal 1, 2 & 3) and 3 operating runways namely Runway 11-29, 10-28 and 09-27. Delhi Airport is the primary Civil Aviation hub for India and the National Capital Region of Delhi. The Airports business activities include services to Delhi Airport customers while facilitating safe, secured, efficient and environmentfriendly passenger, aircraft and cargo movements.

Since its inception in 2006, DIAL has consistently raised service delivery standards by providing worldclass passenger services. This transformation has resulted in Delhi Airport being globally recognised by both passengers as well as industry bodies alike. Delhi Airport brings pride to the nation as the "Best Airport" in the world by ACI in the highest category of over 40 MPPA for the year 2017 and many other achievement in the area of Environment & CSR.







Passenger Terminals T1, T2 & T3

Cargo Terminals

**修 8**th

Largest Terminal in the world (T3) and the largest building under one roof to be set up in India post-Independence



Aerobridges



# **Highlights of IGIA - Infrastructures**



Check-in counters (including common-use self-service)



Standard and wide-body baggage reclaim belts with state-of-the-art, 5 level in-line baggage screening systems



Compatibility that allows landing in extremely low visibility conditions

7.84<sub>MW</sub>



Long A-380 compatible runway



Runways Runway 11-29, 4,430 m × 75 m Runway 10-28, 3,810 m × 45 m Runway 09-27, 2,813 m × 45 m



Car Parking in MLCP



Water Treatment Plant





Onsite Solar PV

Hydro (Open Access)

# Delhi Airport -Where Growth Meets Responsibility

Delhi Airport has come a long way in achieving growth parameters such as passenger, ATM, revenue, infrastructural developments and environmental footprints since DIAL took over Delhi Airport. This was made possible through DIAL's effective strategy planning which is structured around the GMR Vision, Values & Beliefs and GMR Business Excellence Model (GBEM) framework. The GBEM symbolises quest for excellence with a spirit of frugality - the essential elements of '**Anushista**'

> During FY 2006-07, the passenger volume was 20.4 million and it has increased by more than 3 folds to reach 65.7 million in FY 2017-18. Similarly, ATM has also increased from 185 thousand yearly movements to 441 thousand yearly movements. This is an indication of Delhi Airport's growth over the years, which makes 'Delhi Airport as India's biggest and busiest airport and one of the fastest growing airports globally'. However, it has ensured that the growth accompanies responsible value creation towards of environment sustainability and social well-being.

> Our primary focus in environment management is to conserve natural resources and act as a socially responsible organisation on global issues, such as climate change mitigations, promoting energy efficient systems and adopting green building infrastructure and conserving natural resource programmes (such as water, fuel and energy conservation) and improve environmental quality in the airport environs. Some of our key Environmental and around achievements are –

- First Carbon Neutral Airport in Asia-Pacific region under Airport Carbon Accreditation of Airports Council International
- Development of green infrastructure that resulted in LEED Gold for New Construction, LEED and IGBC Platinum for Existing building, GreenCo platinum rating etc.

≫ First Airport globally to achieve ISO 50001

- First Airport to have UNFCCC registered CDM project
- Integration of efficient emission reduction systems such as BMEs, battery-operated vehicles, CNG vehicles and fueling station etc.
- ≫7.84 MW Solar power plant
- Efficient water management, 16.6 MLD STP & rainwater harvesting

DIAL's commitment towards social empowerment is ensured through DIAL-CSR team that dedicatedly focusses on development of the nearby communities. The DIAL CSR Works on the following areas-



- >> Preventive health care and sanitation
- >> Promoting education including vocational training
- Service Servic
- >>> Community development

Currently, DIAL-CSR is working with approximately 20,000 people in three communities at Delhi. Delhi Airport's impact of gross value added (GVA) on national income is ₹ 80,724 Cr, which amounts to 0.70% of the national GVA. Delhi Airport has also created 28.39 Lakh jobs considering direct, indirect and enduced effects.

Thus, at DIAL, the growth of the organisation is met while taking into account all sustainability needs specifically leadership commitment, economic value creation, environmental care and building social well-being. Delhi Airport is India's biggest and busiest airport and one of the fastest growing airports globally.



# **Key Milestones of Delhi Airport**

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4<sup>th</sup> April, 2006 OMDA Agreement signed with AAI

6<sup>th</sup> December, 2006 DIAL unveils Master Plan for Delhi Airport

**11<sup>th</sup> December, 2006** Design and Construction contract Awarded to L&T

**17<sup>th</sup> February, 2007** Laying of foundation stone of new integrated T3



7<sup>th</sup> May, 2007 Landing of first A-380 took place in Delhi Airport 2008-09----

**30<sup>th</sup> June, 2008** Modernisation of integrated T2 is completed

₽<u>I</u>/

21<sup>st</sup> August, 2008 Inaugural flight lands on new runway 11-29

**25<sup>th</sup> September, 2008** Delhi Airport's 3rd runway 11-29 is opened for commercial operation

**26<sup>th</sup> February, 2009** New domestic departure terminal 1D is inaugurated



**11<sup>th</sup> April, 2017** ACI Asia-Pacific Green Airports Recognition 2017-Gold Level

# 20<sup>th</sup> June, 2017

DIAL achieves 'Emerging Industry Leader' in BE external Assessment

## 5<sup>th</sup> March, 2018

Best Airport in the world in over 40 MPPA category by ACI **19<sup>th</sup> April, 2016** Delhi Airport rated as the world's best Airport in 25-40 MPPA category by ACI for second consecutive year

#### 19<sup>th</sup> April, 2016

Delhi Airport enhances Solar power capacity to 7.84 MW

#### 22<sup>th</sup> September, 2016

Delhi Airport becomes the first Carbon Neutral Airport in Asia-Pacific region



Delhi Airport rated as the world's best Airport in 25-40 MPPA category by ACI

#### 16<sup>th</sup> March, 2016

Best Airport in Central Asia India and Best Airport Staff Central Asia India by SKYTRAX 2009-10----

<u>ph</u>

**19<sup>th</sup> April, 2009** Commercial operation commenced in new domestic terminal 1D

**16<sup>th</sup> February, 2010** Rated as best improved Airport by ACI



**3<sup>rd</sup> July, 2010** New integrated passenger Terminal 3 inaugurated

₽<u>₽</u>

28<sup>th</sup> July, 2010 International operation starts at T3

**14<sup>th</sup> November, 2010** Domestic operation starts from T3 2011-12

4<sup>th</sup> April, 2011 Terminal 3 becomes the first Airport Terminal building to get LEED NC gold

**13<sup>th</sup> July, 2011** Boeing's 787 Dreamliner makes India debut at Delhi Airport

**11<sup>th</sup> January, 2012** Laying of Foundation stone of Delhi Airport's new ATC tower

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**12<sup>th</sup> February, 2012** Delhi Airport rated World's No. 2 Airport in 25-40 MPPA category by ACI

# 2014-15 ----- 2013-14 ----- 2012-

## 4<sup>th</sup> June, 2014

Delhi Airport rated World's No. 2 Airport in 25-40 MPPA category by ACI for 3rd year in a row

## 26<sup>th</sup> October, 2014

Lufthansa begins A-380 operation from Delhi Airport 5<sup>th</sup> June, 2013

First Airport in India to implement Airport-Collaborative Decision Making (A-CDM) for airport operation

## 26<sup>th</sup> July, 2013

First Airport to achieve UNFCCC's CDM registration for Energy Efficiency project in Terminal 3

# 7<sup>th</sup> September, 2013

Delhi & Birmingham Airports signed MoU to strengthen link between two cities

## 16th February, 2014

First Indian Airport to commission solar power plant in Airside (2.14 MW) 12<sup>th</sup> April, 2012 Receives two award at SKYTRAX-World Airport Awards

**30<sup>th</sup> January, 2013** First Airport worldwide to receive ISO 22301 certification for Business Continuity

## 12<sup>th</sup> March, 2013

Delhi Airport rated World's No. 2 Airport in 25-40 MPPA category by ACI for 2nd year in a row

**17<sup>th</sup> March, 2013** Wins "Highly Commended Award" at 11th Routes Asia

# **Message from Managing Director**



# **Dear Stakeholders**

The aviation sector plays a critical role in economic development by linking business, bringing people together and promoting tourism, worldwide. The Indian aviation sector has been witnessing a double digit growth trajectory, and is the world's fastest growing domestic civil aviation market. This growth curve is expected to continue on account of urbanisation and favourable government policies aimed towards great accessibility across the country. **1**02-14

Delhi Airport has remained at the forefront of this expansion, and is committed to future growth demand by providing superior customer experience through deployment of technology and innovation, while sustaining profitability with care for environment. It is a great place to work, adopting strategic evolution, in its efforts to provide best-in-class quality service to our customers and stakeholders.

As we aim to stand tall amongst the leading airports globally, we also understand that our business aspirations are closely interlinked with those of our stakeholders. Therefore, our continued endeavour is to work as a collaborative IGI Airport community and overcome all economic, social and environmental challenges. This operating model helps us remain committed towards our organisational and social responsibilities, and create long-term sustainable value for all stakeholders.

We have already taken a number of initiatives including developing infrastructure based on the green building principles. These include: adoption of the renewable energy programme, energy efficiency improvements and promoting zero emission and zero discharge programmes in line with our commitment

> This operating model helps us remain committed towards our organisational and social responsibilities, and create long-term sustainable value for all stakeholders.

towards environmental sustainability. The Airport has been recognised with the Carbon Neutral Airport status on account of many initiatives undertaken. This has been possible due to our inclusive approach and with the support provided by each one of you.

As you are aware, we will commence the Phase 3A expansion works soon, to meet the future aviation demands. Hence, it will be critical to ensure minimal disruption to existing operations, delivery of a world-class passenger experience and introduction of technology to enhance operational efficiency at the airport. This will not only support you in

your respective businesses, but also optimise the deployment of resources on-ground. It will also help us remain committed towards our environmental goals, while supporting the passenger growth at Delhi Airport.

I look forward to your continued support in this sustainable journey, to shape the future of Indian Aviation by setting new environmental benchmarks.

**G. B. S. Raju** Managing Director



# **Message from CEO**



# Dear Stakeholders,

At the outset, I would like to acknowledge your sincere efforts and contribution in making Delhi Airport the **World's Best Airport** (above 40 MPPA of ACI's ASQ survey of 2017). We believe in inclusive growth which surely rides on close coordination with our stakeholders and people working at the Airport.

It gives me immense pleasure to share with you the third Sustainability Report of Delhi Airport. In the third edition, we have enhanced the scope of our sustainability reporting from GRI G4 guidelines to GRI Sustainability Standard requirements.

As IGIA is one of the fastest growing airports globally, we envision to transform Delhi Airport as a Sustainable Global Aviation Hub. We wish to achieve this by taking utmost care for the environment while contributing to the local and national economy. Our approach of logical leadership, sound strategy, customer-centricity initiatives has helped us in redefining "the passenger experience" at IGIA. Significant highlights during FY 2017-18:-

- Ranked World's Best Airport in above 40 Million Passengers Per Annum (MPPA) in ASQ 2017 by Airports Council International
- Handled 65.7 million passengers and 963 Thousand Metric Tonnes of Cargo in FY 2017-18. This corresponds to 13.9% and 12% growth of passenger and cargo volume respectively as compared to previous FY 2016-17. As per ACI statistics for year 2017, Delhi Airport is the 16th busiest airport in the world
- A widespread network with connectivity to 70 International and 68 Domestic destinations through 56 Foreign and 8 Indian Carriers respectively

Sontinued focus on:

- Business Excellence through ensuring quality service and safe journey for passengers
- Greenhouse Gas (GHG) management programme in 'Level 3+, Neutrality' under the ACI Carbon Accreditation program
- Resource Conservation through improved energy efficiency, water efficiency, waste and resource management



The sustainability initiatives undertaken by DIAL have earned various national and global accolades. This includes Wings India Award for 'Most Sustainable and Green Airport' 2018 and recognition by ACI under Green Airport Recognition Programme for the year 2017 and 2018.

To cater to the forecast in growth and maintain a focus on passenger safety, security, convenience and sustainable development, and taking up novel airport expansion activities. While we are preparing for the future developments of Delhi Airport, our focus on overall sustainability development remains firm. The master planning of IGIA is to integrate all components of infrastructure with green building concepts and be more technologically efficient.

In addition, DIAL is also working towards empowering social values, through the DIAL CSR. The Foundation works closely with the deprived sections of the society in the focus areas of promoting Education; Health, Hygiene and Sanitation; Empowerment & Livelihoods and Community-based Programmes.

## Our approach of logical leadership, sound strategy, customer-centric initiatives has helped us in redefining the passengers' experience at IGIA

This report summarises the progress of Delhi Airport in FY 2016-17 & FY 2017-18 towards ensuring Sustainability. I take this opportunity to thank each one of you for your continued support. I am sure, collectively, we will strive to maintain our position as #1 Airport in the World.

Videh Kumar Jaipuriar Chief Executive Officer



# **Message from COO**



# **Our Approach towards Sustainability**

Delhi Airport has grown to become the region's major airport hub. Over the years, we have remained focussed on upholding high service standards and operational excellence, while being responsible to our people, the community and the environment.

As the demand for air traffic continues to rise, we must ensure that our operations support the longterm development of the airport ecosystem and our stakeholders.

As the demand for air traffic continues to rise, we wish to ensure that our operations support the longterm development of the airport ecosystem and our stakeholders. All the facilities of Delhi Airport are designed to the highest levels of environmental sustainability and international service standards. Apart from building the necessary infrastructure, we strive to adopt the best operational practices to achieve highest levels of operational excellence. Our sustainability core group is highly focussed to integrate the sustainability framework and strategy in our day-to-day operations for achieving the best results.

**Douglas Webster** 

Chief Operating Officer



# Sustainability at DIAL



# **Sustainability Framework**

We reaffirm our commitment towards ensuring Sustainability in our business at every stage of strategic planning and in day-to-day operations. Creating economic value with care for environment and enhancing quality of life remains our key business deliverable to all our stakeholders and communities. We see sustainability management as one of the key strategic elements in our business opportunities and risk assessments. It also reflects in our mission statement. The key strategic sustainability objectives adopted at DIAL are to "provide superior customer experience, deployment of technology and innovation, sustain profitability, care for environment and be a great place to work". In order to support the Sustainability objectives of DIAL, we have established a Sustainability Framework which is based on four driving elements namely – economic prosperity, service & operational excellence, care for environment and social responsibility.

# Sustainability Pillars of DIAL





## **Economic Prosperity** To sustain profitability and create economic value for

our stakeholders.

To offer a unique experience to every single passenger travelling through Delhi Airport by practising customer orientation, performance driven culture, operational efficiency and

Service Excellence



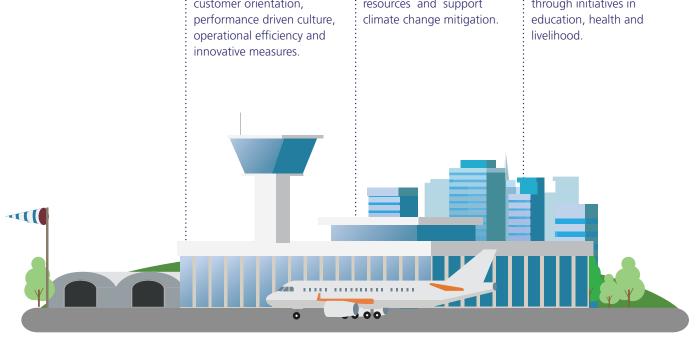
## Care for Environment

To be an environmentally friendly organisation and promote sustainable initiatives to conserve natural resources and support climate change mitigation.



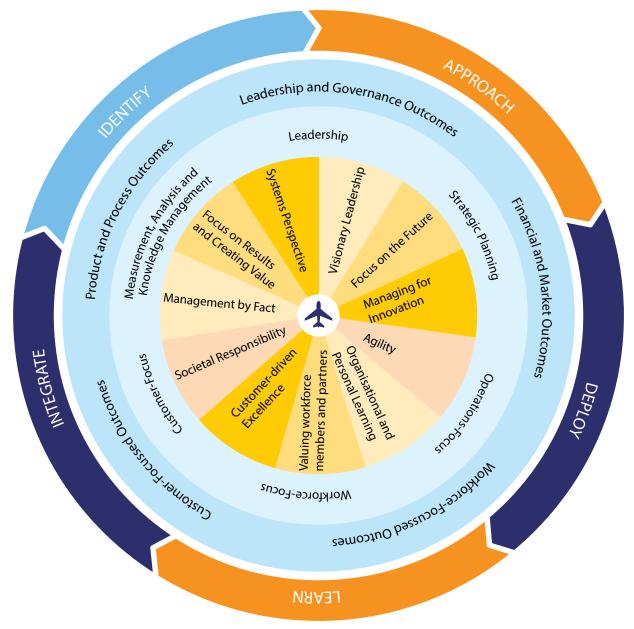
# Enhancing Quality of Life

To promote social development of underserved communities through initiatives in education, health and livelihood.



All the elements of our Sustainability Framework are outlined in this report with a specific programme, management approach, activities, processes, goal with Key Performance Indicators (KPIs), which are managed throughout the organisation by functions and business stakeholders. We have embarked our sustainability journey at DIAL by embracing the GMR Business Excellence Model (GBEM) as a way of life across the airport community. The GMR Group Business Excellence Model (GBEM) enables organisations working at Delhi Airport to have an integrated approach in the journey towards achieving excellence and institution building. It helps in improving organisational performance by adopting best practices in the industry, creating awareness among stakeholders, enhanced capacity building between the organisations through business integrations on processes and results in the areas of Leadership, Strategic Planning, Operational Focus, Workforce Focus, Customer Focus, Measurement, Analysis and Knowledge Management. lt also facilitates communication and sharing of information among organisations and stakeholders, while serving as a working tool for understanding, managing performance, guiding organisational planning and learnings at Delhi Airport.

# **GMR Business Excellence Model (GBEM)**



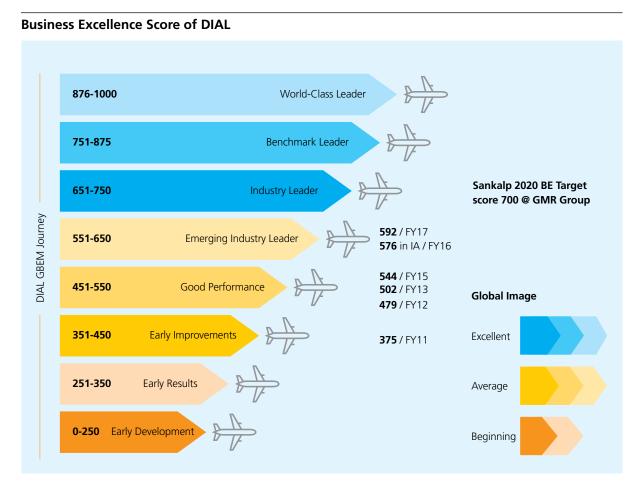
Sustainability at Delhi Airport is ensured through GMR Business Excellence Model (GBEM)

> Great Offers | Deals | Bargains | Services. exp

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18 | Delhi International Airport Limited



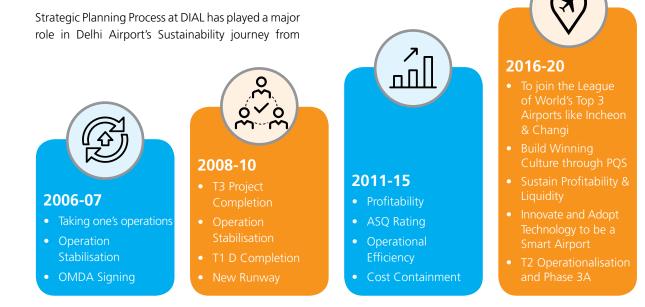
Sustainability at Delhi Airport is ensured through GMR Business Excellence Model (GBEM) which is further guided by the GMR Group's Vision 2020, Values & Beliefs and DIAL's Mission. The strategy planning process and the enabling frameworks at DIAL ensure that the organisation prioritise the requirements while retaining Organisational agility and Operational flexibility to maintain overall business sustainability.

# **Strategic Planning Process at DIAL**



Strategic Planning Process at DIAL is done collectively with the Leadership Team, Senior Executives and Heads of various functions every year. In this process, the progress of last year's initiatives are discussed during environment scan and inviting, stakeholder's inputs etc. This enables the organisation to revisit and co-create the organisation's mission and formulate strategic objectives, initiatives with Key Performance Indicators for DIAL and IGIA. These Objectives and Initiatives are further implemented through Cross Functional Team (CFT) or as a Functional Initiative with specific timelines. Operation stabilisation (in FY 2006-07) to compete and join the league of the world's best airports (in FY 2016-20). This is done by providing:

- Superior customer experience through deployment of technology and innovation.
- >>> Sustaining profitability with care for environment, and
- >>> Being a great place to work as per its mission.



#### **Strategic Direction**

Strategic Planning Process also takes account of "Blind spots analysis" to ensure that all the business assumptions considered for preparing Strategic Plan and Annual Operating Plan are re-evaluated and verified so that no obsolete or incomplete assumptions are taken in decision-making.

# **Sustainability Governance & Management**

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DIAL as an organisation is committed to high standards of Governance in order to meet the demands of various business challenges and to demonstrate the fulfilments of operational, administrative and other business sustainability needs. DIAL's senior leadership emerges from the Group Holding Board (GHB), which is led by the Group Chairman (GCM). Each business is further headed by Respective Business Chairmen (BCMs). In the Airport Sector, the BCM is supported by Business CEOs and Sector Chief Executive Officer (CEO). Further, the airport operation is headed by the Chief Operating Officer (COO), who along with Chief Officers (CXO's) of other functions who reports directly to Business CEO. For the effective and efficient functioning of DIAL, a Steering Committee Members (SCM) has been formed under the Business CEO, comprising all CXO's, who take part in collaborative decision-making and review of business functions including those related to social, environmental and economic decisions of the company. In addition, various governance committees have been formed to meet the requirement of effective governance across the organisation. DIAL's Board of Directors and senior management believe that environment, social and governance factors relevant to DIAL's business are key components to our long-term success. Mr. G.M. Rao Executive Chairman

Mr. G.B.S. Raju Managing Director

Mr. Grandhi Kiran Kumar Executive Director

**Mr. Srinivas Bommidala** Director

Mr. K. Narayana Rao Whole-time Director

Mr. G. SubbaRao Director

Mr. Indana Prabhakara Rao Executive Director

Mr. Suresh Goyal Director

Ms. Gargi Kaul Director (AAI Nominee)

Mr. S. Suresh Director (AAI Nominee)

Mr. A.K. Dutta Director (AAI Nominee)

Ms. Denitza Weismantel Director

DIAL's Corporate Governance framework is based on GMR Group's Vision, Values & Beliefs, while complying with all statutory requirements. It is also governed by various HR policies & guidelines - including the Code of Business Conduct & Ethics (COBCE), for employee welfare and to follow good governance across the organisation. The Group level Disciplinary and Ethics policy defines the practices which are perceived as unethical by the organisation and also governs the mode and extent of

# Management Board

In accordance with the `Memorandum and Articles of Association', DIAL is managed and governed under the overall superintendence and control of the Board of Directors. The Independent Directors are professionals with high credentials, who actively

# **Ethics and Integrity Governance**

DIAL as a company, strictly abides by the law of land and places its highest emphasis on ethical behaviour. The Code of Conduct of the company is expressly laid down in the "GMR Code of Business Conduct & Ethics" document, which has been placed on the Intranet Portal and thus allows all employees at the time of their employment to read and agree to the Code of Conduct, to ensure their business conduct is in line with DIAL policies.

The "Disciplinary and Ethics Policy" of the company clearly lays down the type of behaviours considered to be unethical, how the policy is governed and what type of disciplinary action will be taken in case of non-compliance.

Mr. R.S.S.L.N. Bhaskarudu Independent - Director

Mr. N.C. Sarabeswaran Independent - Director

Ms. V. Siva Kameswari Independent - Director

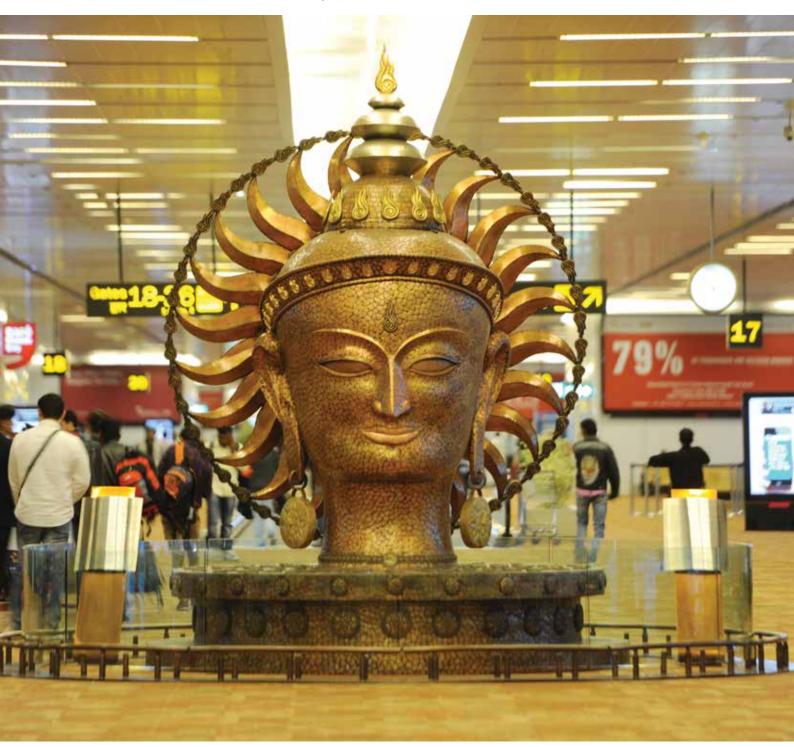
Dr. M. Ramachandran Independent - Director

disciplinary action that may be taken by the organisation. The methods and guidelines to raise alerts on unethical activities in the organisation are well defined in the Group's Whistle Blower Policy which is easily accessible to all employees and stakeholders. DIAL's governance system is also guided by a framework of various internal policies including policies such as Environment Policy, Safety Policy, Energy Policy and Quality Policy etc.

contribute in the deliberations of the Board, covering all strategic policy matters and planned decisions. Key governance principles including the Code of Conduct, Risk Management Framework and Audit Processes are clearly mentioned in the Governance.

From time to time, DIAL conducts awareness sessions for the employees to strengthen employee's commitment for Ethical Business Conduct. The top management always emphasises on GMR Code of Business Conduct & Ethics and its importance for all employees to abide by it at all relevant forums. A Coordination Committee (consisting of CEO's, Director and Head Ethics & Intelligence) has been formed. Periodic meetings are held to discuss areas of concern. Separate committees are formed for addressing issues related to sexual harassment and disciplinary issues which are reviewed periodically.

The Ethics & Disciplinary, Whistleblower and Job Rotation Policies have been developed in which E&I define the anti-fraud measures and a graded system assigning the disciplinary actions to be taken in case of breach of ethics is established. With the help of the inputs received and investigation involved, alert notes are issued to the concerned officer. In case of identified system flaws, system improvement notes are raised and implemented to plug the loopholes. To improve awareness amongst employees, ethics related quizzes are being conducted on Code of Business Conduct & Ethics over online platform. A third-party managed Ethics helpline has been put in place to create an environment which allows people to report wrongdoings without any fear, maintaining confidentiality. The Ethics helpline constitutes a Toll free number, email ID, Post box number and Web channel to maintain confidentiality. These are periodically publicised through wallpapers and e-mailers to reinforce senior management's resolve to promote a conducive environment for ethical behaviour.



# **Defining Our Focus**





DIAL closely follows the GMR Group vision: "GMR Group will be an institution in perpetuity that will build entrepreneurial organisations making a difference to society through creation of value."

# Values & Beliefs:

All employees of DIAL are driven by the seven values & beliefs of the GMR group, and deploy these values by exhibiting such traits while conducting day-today business. Please insert the below line after the yellow highlighted text-

GMR group has selected seven distinguished individuals or entities as icons for representing each

MISSION (2020)

"To be amongst the world's Top 3 airports by providing superior customer experience through deployment of technology and innovation, while sustaining profitability with care for environment and being a great place to work".

of these seven values and beliefs. Being a value driven and customer-focussed organisation, DIAL has developed a practice of making Values & Beliefs as part of the contracts of key suppliers and partners. To reinforce this, continuous communication of the Vision, Mission and Values & Beliefs to key suppliers, partners and customers is performed.



# **Stakeholder Engagement**

Being a customer-centric organisation; our Strategy Planning revolves primarily around creating and balancing value for our customers and other stakeholders to ensure business sustainability at Delhi Airport. Our main offerings therefore are to render safe, secure and efficient infrastructure with superior customer services to all customers. These include Passengers, Airlines, Freight Forwarders and Commercial Property Developers either directly or through our various business partners, service providers and regulatory bodies.

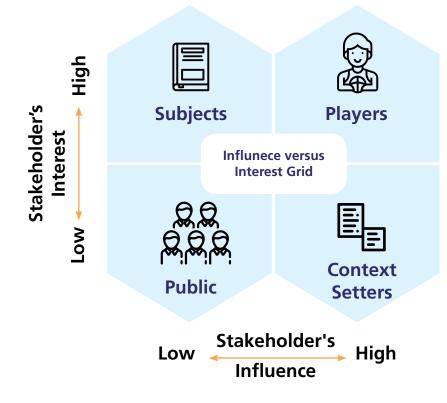
We, at DIAL, believe in maintaining an ongoing engagement with our stakeholders as it paves

# **Stakeholder Mapping**



To have an effective stakeholder engagement at IGIA, DIAL has mapped all stakeholders on the basis of their sustainability interest and sustainability the way for business sustainability and success in business through mutually valued relationships. This also helps to identify and address key concern areas of business; customers and stakeholders etc. who support the core business sustainability and growth. We encourage and emphasise on active participation and involvement of our stakeholders, partners and service providers at each and every step of our business journey. Their inputs are valued and critically assessed for implementation to sustain the operational and business performance. With the involvement of our stakeholders, we have been able to effectively work towards a sustainable organisation from the inception of our business.

influence. For a focussed engagement, various initiatives have been defined and implemented across IGIA.





# Players

#### Description

They have high level of interest, hence, influence and need to be worked closely. They have to be involved in important decisions and engaged on a regular basis

#### Engagement

**Partnership:** There is shared accountability and responsibility. A two-way engagement process is followed leading to joint learning, decision-making and action

## Stakeholders

1. Airlines 2. AAI



**Context Setters** 

#### Description

They can influence but relatively lower interest. The organisation ensures satisfaction by meeting their needs

#### Engagement

**Participation:** The stakeholders are part of the team engaged in delivering tasks or entrusted with a particular responsibility. Engagement process is within the limits of responsibility

## Stakeholders

1. MoCA 2. Media 3. CISF 4. Immigration 5. Customs



## Description

They are interested in organisational activities but have less influence. Information needs to be supplied regularly in order to keep these stakeholders satisfied

## Engagement

**Push Communication:** The organisation engages the stakeholders under particular Subjects, wherein, it broadcasts information to all stakeholders or target groups using various channels such as emails, letter, webcasts, podcasts, videos, leaflets etc.

#### **Stakeholders**

1. Concessionaires - Non Aero and CTO 2. Ground Handlers 3. Passengers 4. Community 5. Employee



## Description

The organisation engages with these stakeholders as and when deemed appropriate

## Engagement

Pull Communication: One-way engagement in which information is made available and stakeholders choose whether to engage with it or not

#### Stakeholders

1. Freight Forwarders 2. Cargo Association

These stakeholders and customers have a direct or indirect influence on DIAL's business sustainability and vice versa. To achieve sustainability in all business units at IGIA, it is imperative to have frequent assessments of identifying opportunities and risks in the IGIA business ecosystems. In this regard, DIAL regularly connects with its stakeholders in meetings, reviews and also through social media, festival/event celebration, employee felicitation programmes and sporting extravaganzas. This helps us to have a more formal and informal, informative and vibrant engagement at airport.

	Stakeholders	Communication Mode	Frequency	Expectation			
		Passenger Survey	М				
102-40, 43	er	Complaint management through feedback form	OG	- Connectivity			
	Passenger	Information through web portal	Р	- Cost Effectiveness			
	asse	Magazines, Brochures and Flyers	Р	- High service standard			
	ě.	Celebration and festivals	Р				
		Presence on Social Networking sites	OG				
		Review Meetings	M/Q/A	- Job satisfaction			
		Strategy Workshop	A	- Career progression			
	e	CEO Communication	ΗY	- Learning & development			
	ő	KM Sessions Idea factory camps 55 session	Р	and knowledge-sharing - Employment terms			
	Employee	KM Sessions, Idea factory camps, 5S session Email, wallpaper and screensaver	r P	- Employment terms			
	Ξ.	Internal employee feedback surveys	P				
		Newsletters - Prerana, Uttar, ARFF, Cargo, Retail	M/Q				
		and Operations					
		Meeting with Airline representatives	C	- Safe, Secure, Efficient			
				infrastructure			
	ght	Scheduled Airline Operator Committee meeting	М	- Connectivity			
	is is	Trainings and workshops	Р	- Cost Effectiveness			
	Airlines and Freight Forwarders	B2B relationship meeting	Р	- High service standard			
	war	Conference and forums	Р	- IT-enabled system and			
	For	GMR IGIA Awards	Р	technologies - Opportunity & Competitive			
	Airl		I	environment			
		Feedback	Р	- Frequent communication,			
				interaction & relations			
		Meeting with service provider	М				
	fe	GMR IGIA Awards	А	- Infrastructure			
	ocia	Trainings and workshops	Р	- Safe, Secure, Efficient			
	Asse			and clean operational			
	ss /	DDD Deletienskie Maatien	P	environment Baliable segmentible and			
	ine	B2B Relationship Meeting	Р	<ul> <li>Reliable, compatible and innovative IT solutions</li> </ul>			
	Business Associate	Conference and forums	Р	- Business Opportunities and			
			I	growth			
	. 4	Meeting with all government stakeholders and	OG	- Regulatory Compliance			
	Government/ Regulators	regulators like AERA & AAI					
	na n			- Frequent communication &			
	sve legi			interaction.			
	ؾ ڡ	Event and Conference	Р				
		Corporate Social Initiatives	OG	- Economic Development			
	ety			- Initiative for green			
	Society			sustainable environment			
	S			- Employee Opportunity & Relationship			
	M-Monthly, P-Periodic, A-Annual, HY-Half Yearly, Q-Quarterly, OG-On-Going, C-Continuous etc.						
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# **Engagement through Social Media**

DIAL has its social media engagement presence on four social media platforms (Facebook, Twitter, Instagram and YouTube). Through these channels, it shares important announcements, updates on airport-related information, videos and pictures of airport and events, national achievements, and handle passenger queries/complaints and effectively engage and connect with stakeholders. This medium resulted in DIAL winning the prestigious Hermes Creative Awards 2018 – Platinum Level under the Social Media campaign category. The award winning campaign was titled #CreatingTomorrowTogether with the core objective to showcase the 25-year long journey of GMR Varalakshmi Foundation (GMRVF), the CSR wing of the GMR Group.

# **Skylympics - World's first Aviation Multi-sport Event Platform**

To create strong stakeholder engagement, DIAL has come up with the first of its kind innovative Aviation Sports Event in the year 2017. The second edition of the Skylympics comprised a total of 22 teams and was held at New Udaan Bhawan from 16<sup>th</sup> to 18<sup>th</sup> February, 2018. The three-day event witnessed participation of whopping 924 players and backed by more than 50,000 stakeholders in all. Skylympics featured seven popular sports - Cricket, Football, Volleyball, Badminton, Table Tennis, Kabaddi and Athletics. It was inaugurated amid much fanfare and enthusiasm by the national sports icons like Mr. Jagbir Singh, Mr. Harbhajan Singh, Ms. Tanya Sachdev by with various other key aviation personalities.



In the closing ceremony, Indian cricketer Mr. Gautam Gambhir graced the occasion by felicitating the winners in the sports categories. Air India clinched the "Champion of Champions trophy" by bagging the maximum number of gold medals. The winning

# **Felicitating Stakeholders' Efforts**

We recognise efforts of all stakeholders working at Delhi Airport through multiple programmes. These facilitate in setting higher standards, inculcate competitive environment, support in knowledge



#### **Service Legends**

- Service Legends Award seeks to capture people going the extra mile for demonstrating Customer Centricity and are fecilitated as Service Legends of Delhi Airport
- Capture success stories at Delhi Airport
- Share Legends to foster similar behaviours across agencies



sharing of best practices, and competency enhancement. The initiative motivates stakeholders as well as DIAL and IGIA employees.



## Signe de Gratitude

• Signe de Gratitude is a French word which means Sign of Thankfulness and Platform to reward and recognise the best Kaizens and 5S Awards across the Delhi Airport Community



#### **GMR IGI Airport Awards**

• Platform to recognise our business partners on performance parameters in their respective category, based on the defined criteria.



#### **Quality Fest**

 Celebration of Quality Month across the Airport Community, organising various competitions and knowledge-sharing sessions with respect to Continuous Improvement in Projects and Kaizen.



## Kaizenillenial

- DIAL has achieved Kaizenillenial\* by implementing 1000+ Kaizens at DIAL for the 6th year in a row
  - \*Kaizenillenial = Kaizen + Millennial (1000)



## **BLIP Felicitation**

Through this event, we recognise the efforts of all teams whose BLIP efforts have led to a cumulative benefit of ₹ 150 Cr to the airport over the last six years. This year also saw a healthy progress in our BLIP initiative with number of projects increasing from 29 to 50. Number of participants increased from 170 to 235



# **Industry Association:**



DIAL often joins hands with Industry Bodies and Institutes for effective collaborations, knowledge sharing and capacity enhancements. Our engagement with Industry Associations and Institutions such as Airports Council International (ACI), Confederation of Indian Industry (CII), Associated Chambers of Commerce and Industry of India (ASSOCHAM), The Energy and Resources Institute (TERI), World Resources Institute (WRI) etc. enable us to adopt industry best practices and helps in bringing excellence in the setting up of infrastructure, technologies and services. DIAL is one of the founding members of India GHG Programme that enables us to act as a Centre of Excellence in Aviation Environment and Sustainability. This is done by disseminating regional, sectoral and global best practices in the area of Greenhouse Gas (GHG) management and Carbon Neutral initiatives in India. DIAL released the first ever report for Aviation GHG Management, the Aviation Sector report which intends to lay the roadmap for the sector to transition to a low-carbon business model. DIAL is also a member of TERI CSD chapter of "Energy Secure India".

# **DIAL's Sustainability Framework and Unites Nations Sustainable**

# **Development Goals (SDGs)**

**1**02-12

At Delhi Airport, we have aligned our sustainability initiatives with Key SDGs of UN and are working to help make them a reality through various initiatives. As stakeholder expectations around the SDGs evolve, we will further refine our work and reporting on how we contribute to the goals through our business vision and across our operations and value chain.

Chapter	Page Reference	SDGs
Sustainability at DIAL	14	
Ethics and Integrity Governance	21	
Stakeholder Engagement	24	17 Herricos
Transforming Airport Business	34	
Economic Prosperity	45	
Driving Operational Excellence	57	
Employee Occupational Health & Safety	61	15 <sup>III</sup> III III III III III III III III I
Bird & Wildlife Management	62	
Technology & Innovation	65	
Care for Environment	68	
Climate Change & GHG Management	71	
Green Infrastructure	72	
Energy Management	73	
Water Management	77	
Resource Optimisation	79	12 Monthele Meterotoria
Waste Management	80	
Enhancing Quality of Life	82	
Working at DIAL	84	
Corporate Social Responsibility	88	1 Morent     2 Million     3 Mathematicale     4 Million     5 Million       1 Morent     -//>•     -//•     5 Million     5 Million



# **Materiality Matrix**



Material topics are those that reflect an organisation's significant economic, environmental and social contributors; or those which substantively influence the assessments and decisions of stakeholders' business. Key factors considered for deciding materiality elements are:

- The interests and expectations of an organisation to sustain economic, environment and social value for itself, its stakeholders and customers
- Expected or visible significant risks to the organisation
- Expected or visible critical factors for enabling organisational success
- The core competencies of the organisation and the manner in which they may or could contribute to sustainable development

- The main topics and future challenges for the sector reported by peers and competitors on economic, environmental and social value creation
- The business risks associated with relevant and/ or with evolving laws, regulations, international agreements, or voluntary agreements with strategic significance to the organisation and its stakeholders' expected values

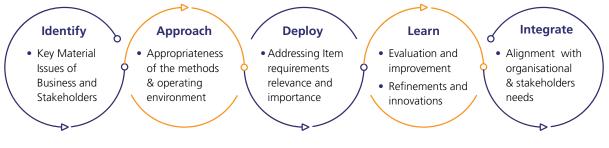
The aspect boundaries and content have been defined using reporting principles prescribed in the GRI Standards. The report covers all operations and businesses of DIAL that fall under its direct operational control; it excludes JVs, associate companies as DIAL has no operational control over them. DIAL operates only Delhi Airport thus the reporting boundary is limited to Delhi Airport only.



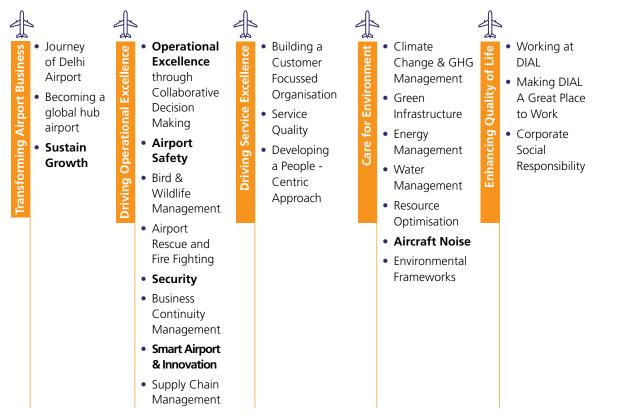
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	Sections in the Report	Торіс В	Topic Boundary		
Material Topics		Internal	External		
Stakeholder Engagement	Stakeholder Engagement	ą	ę		
Safety & Security	Airport Safety Security	ą	ø		
Service Quality	Service Quality	ą	ø		
Operational Excellence	Operational Excellence	ą	ø		
Sustain Growth	Sustain Growth	ą	ę		
Smart Airport & Innovation	Smart Airport & Innovation	ą	ę		
Aircraft Noise Management	Care for Environment	ą	ø		

As per the Sustainability Management Framework at Delhi Airport, the key material issues which pertain to DIAL's sustainability pillars are identified and addressed through systematic concepts and processes by following our GMR Group Business Excellence Model (GEBM).



The key material topics which have been covered in more details in chapters of this report are presented below-



# Transforming Our Business

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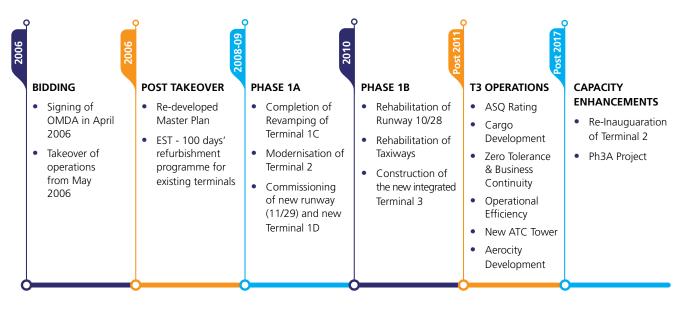
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# **Transforming Airport Business**

The civil aviation sector of India has emerged as one of the fastest growing sectors in India. India is currently considered the third largest domestic civil aviation market in the world. According to International Air Transport Association (IATA), India will displace the UK for the third place in 2025. The Civil Aviation industry has ushered in a new era of expansion, driven by factors such as Low-Cost Carriers (LCCs), Foreign Direct Investment (FDI) in domestic airlines, advanced Information Technology (IT) interventions, growing emphasis on regional connectivity and supported by modern airports.

Delhi's IGIA is one of the key elements of India's Civil Aviation growth story. From handling of 20.5 million passengers in FY 2006-07 to handling more than 65 million passengers in FY 2017-18, Delhi Airport has come a long way. This was possible through a basket of impactful measures, including process, operational improvements apart from creating world-class infrastructure.



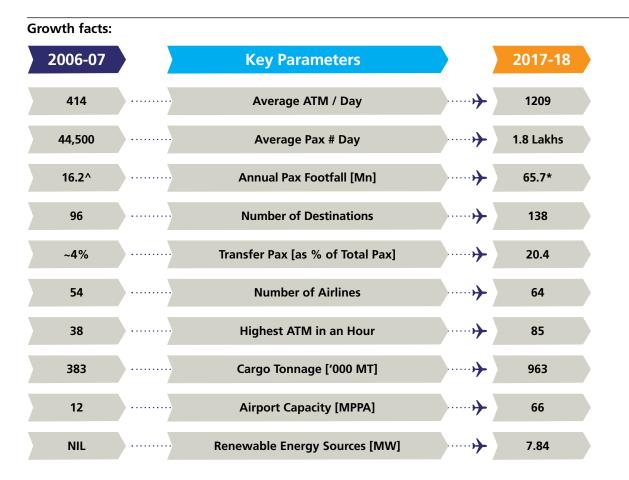
#### **Development Phases**

#### Delhi Airport in 2006-07



### Delhi Airport in 2017-18





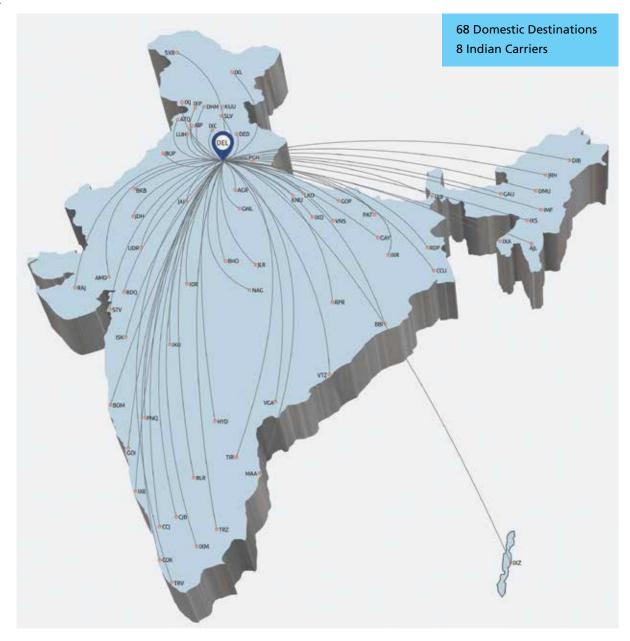
Initiatives/benefits	By How Much?	The Impact
Increase in ATMs per hour	<ul> <li>Maximum movements per hour has been increased from 35 to 75 (Max 85)</li> <li>831 extra ATMs in a week due to increased capacity</li> </ul>	Additional revenues of appox. \$700 million per year for the airlines who operate during these peak hours
Reduction in Hovering time	15-20 mins	Saving of ₹ 45-60 thousand per landing at the peak hours <u>Annual cost reduction of</u> <u>\$50 million - \$70 million</u>
Reduction in Holding time	10-20 mins	Saving of ₹ 13-26 thousand per aircraft during the peak hour Annual cost reductions of \$15 million - \$30 million
Increase in Transfer traffic	<ul> <li>Domestic : 73% instead of organic growth of 22%</li> <li>International : 69% instead of organic growth of 12%</li> </ul>	Transfer traffic increased from 5% at the time of opening of T3 to current <b>22% <u>Additional revenue of</u> <u>~\$130 million for airline industry</u></b>

# **Building a Global Hub Airport**

**1**02-6

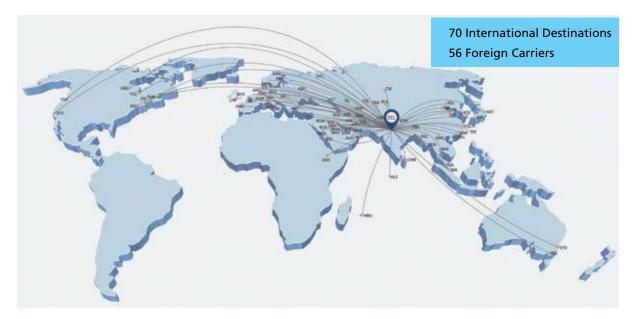
Delhi Airport is seen as a leading Airport in the country in terms of destinations connected, airlines services and passengers being facilitated. Delhi

Airport is connected with **70 international** and **68 domestic destinations** through approximately **56 Foreign** and **8 Indian Carriers** respectively.



Delhi Airport handled **65.7 million passengers** in FY 2017-18. This constitutes almost **21% of the total air passenger traffic of India.** In the International passenger segment, Delhi Airport handled **17.4 million passengers, this is around 27% of the total** 

International passengers of India and in domestic passenger segment, Delhi Airport had contributed 48.3 million passengers i.e. around 20% of total Domestic traffic of India.



Delhi Airport recorded an encouraging overall growth of 13.8% in FY 2017-18 and witnessed 12.2% growth in international traffic as also 14.5% growth in domestic traffic. This is testimony of its matchless services.

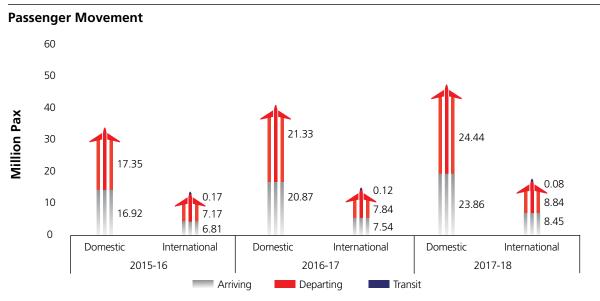


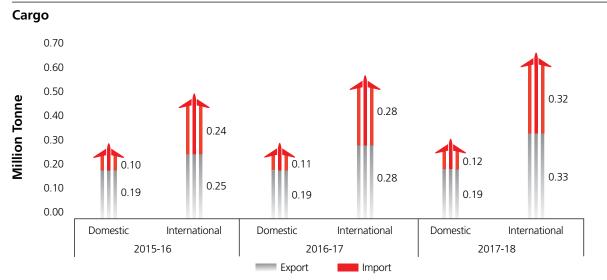
Transfer passengers constitute around 21% of the total passenger throughput of Delhi Airport. It may be noted that prior to commissioning of Terminal 3 of Delhi Airport, the transfer passengers were at a mere 4% of total passenger throughput. This leap in hubbing traffic exemplifies the ease of connectivity for passengers travelling through Delhi Airport to connect to the world. Delhi Airport is an obvious choice of hub for passengers emanating from our neighbouring countries – Nepal, Afghanistan, Bangladesh and Sri Lanka etc.

The airport handled record 963 thousand metric tonnes of Air Freight with a growth of 12.3% YoY. The airport has a combined peak hour demand of 12,494 pax which puts it at par with the busiest airports globally. Delhi Airport ranked 16th in terms of passengers handled in the ACI Top 30 airports list for the calendar year 2017. Delhi Airport also recorded the highest growth of 14% in top 30 airports worldwide. The airport ranked 29th in terms of freight handled in the top 30 list.

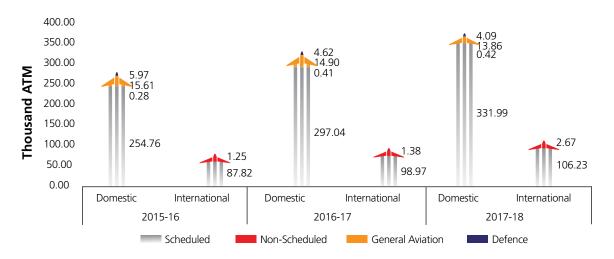
Total Air Freight handled 963 thousand metric tonnes	International Freight handled 651 thousand metric tonnes	Domestic Freight handled 311 thousand metric tonnes
growth 12.3%	growth 16.5%	growth 4.4%
Total ATM 459 thousand (scheduled+ non- scheduled)	International ATM 108 thousand	Domestic ATM 332 thousand
growth 10%	growth 8.5%	growth 11.7%

#### **Delhi Airport by Numbers**





In the previous report, cargo values were mentioned separately for belly cargo and cargo by cargo flights. In the current report, combined values are reported.



#### **ATM Movement**

# **Sustaining Growth:**

Aviation sector not only plays a key role in promoting connectivity and creating jobs but is also an important driver of the economy. It is indeed the most vital sector for linking businesses, bringing people together and promoting tourism worldwide. Airports make greater contribution to the national income and may act as active drivers for the rest of the economy. Studies have also found a link between the growth of airports and impetus to the economy through improvements in productivity. This is achieved by better access to markets, enhancement of links between businesses and provision of greater access to international resources; reduced

#### **Financial Performance**

The Company's EBITDA and PAT came at ₹1,184.45 Cr and ₹38.25 Cr respectively in FY 2017-18 showing a fall from the previous year mainly on account of decrease in revenue due to implementation of second control period tariff which is reflecting a significant

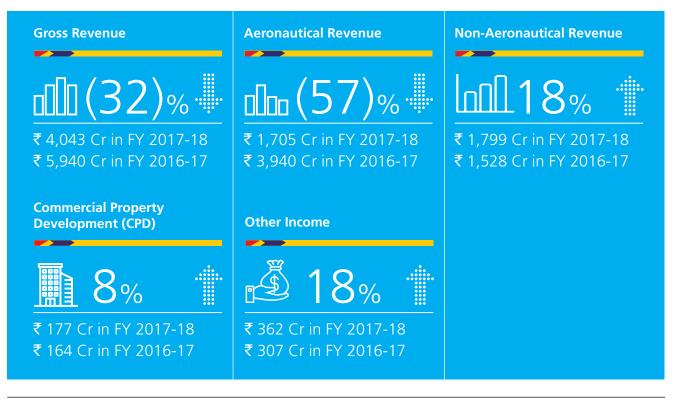
transactions costs; linking of markets and increase in competition within an economy; facilitation of tourism; market integration and scale impacts; and market agglomeration and specialisation. The catalytic effect of IGIA, Delhi is reflected in huge investments made in nearby places of Haryana & Delhi. Thus, IGIA, Delhi and the industrial/institutional development around it presents an excellent example of a synergetic two-way development process. The economic contribution of IGIA, Delhi is substantially high in terms of both employment and value addition. This contribution is likely to increase further in absolute terms with the growth in air traffic.

impact on aero revenue. EBITDA Margin (as a % of Gross Revenue) decreased to 29% in FY 2017-18 from 39% in FY 2016-17 and PAT Margin (as a % of Gross Revenue) decreased to 1% in FY 2017-18 to 10% in FY 2016-17. The summary is shown below:

Particulars	FY 20	FY 2017-18		FY 2016-17	
	In ₹/Cr	% of revenue	In ₹/Cr	% of revenue	
Gross Revenue	4,042.84	100%	5,939.51	100%	(32%)
Less : Annual Fee to AAI	1,761.47	44%	2,634.84	44%	33%
Net Revenue	2,281.37	56%	3,304.67	56%	(31%)
Expenses	1,096.92	27%	972.13	16%	(13%)
Earning before interest, tax, depreciation and amortisation (EBITDA)	1,184.45	29%	2,332.54	39%	(49%)
Finance Cost	579.15	14%	527.25	9%	(10%)
Depreciation and amortisation expense	645.90	16%	638.03	11%	(1%)
Profit before tax and exceptional items	(40.60)	(1%)	1,167.26	20%	(103%)
Exceptional items	-	-	40.80	1%	-
Profit before tax (PBT)	(40.60)	(1%)	1,126.46	19%	(104%)
Tax expense	(78.85)	(2%)	540.50	9%	115%
Profit for the year (PAT)	38.25	1%	585.96	10%	(93%)

#### **Gross Revenue**

Gross Revenue clocked 32%, a decrease on account of fall in Aero revenues due to implementation of second control period tariff. However, positive growth is recorded in Non-Aero and CPD revenues.



#### **Direct Economic Impact**

In FY 2017-18, economic value generated by DIAL was ₹ 4,292.65 Cr A major part of the value distributed is payments to the government, accounting for 53% of the total revenue. Since FY 2005-06 DIAL has paid an aggregate revenue share of ₹ 14,976 Cr to the Airports Authority of India.

Total operating cost, excluding payments to employees and government taxes, increased by 11% over the previous financial year. Payment to employees increased by 28% over the previous year; there was a marginal increase in payment to providers of capital during the same period. Total outflow was recorded at ₹3,957.22 Cr and total value retained was ₹ 335.42 Cr.

Amount in Cr	2017-18	2016-17	2015-16
Economic Value Generated	4,292.65	6,918.87	6,173.42
Revenues Economic Value Distributed Payment to Government			
Annual Fee to AAI	1,761.47	2,634.84	2,304.15
• Direct Tax	259.57	398.50	422.87
Indirect Tax	260.11	996.73	872.42
Payments to providers of Capital	579.15	568.05	571.23
Employee Wages and Benefits	165.24	129.47	125.48
Operating Cost*	931.68	842.66	923.06
Economic Value Retained	335.42	1,348.63	954.20

\* Operating Cost includes payment to suppliers, non-strategic investments, royalties and facilitation payments

#### **Indirect Economic Impact of Delhi Airport**

Delhi Airport's contribution to any economic activity is a combination of the contribution of all organisations/agencies operating within the airport's ecosystem. One aspect of the economic impact of the development and operation of an airport is the generation of income and employment for those who support the airport functions and its business. Delhi Airport supports employment directly on-site and in the surrounding area, as well as indirectly across the value chain of airport operations. In addition, the income earned through these direct and indirect activities generate the demand for goods and services in the economy, thus generating further employment and income.

Stages	Impacts
Development of an airport	• Income and employment generated in an airport during the development or construction process
	<ul> <li>Income and employment impact through the multiplier effects; captured through Input-Output analysis</li> </ul>
	Environmental – Airport developmental aspects related to environmental influence
Operation of an airport	<ul> <li>Income and employment generated in the process of an airport's operations</li> </ul>
	• Income and employment impact through the multiplier effects, captured through Input-Output analysis
	Environmental – Airport operation aspects related to environmental influence
airport: infrastructure (may	<ul> <li>Direct users are passengers and freight operators (information captured through primary sample survey)</li> <li>Income and employment generated through investment, tourism</li> </ul>



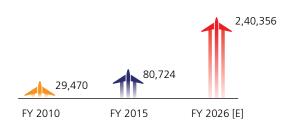
The National Council of Applied Economic Research (NCAER) conducted the Economic Impact Assessment of Delhi International Airport for FY 2014-15. The full report is available in http:// www.ncaer.org/publication\_details.php?pID=281. Following are the key highlights of the study:

The impact of Value Added on national income is ₹ 80,724 Cr, which amounts to 0.70 per cent of the national GVA. If the national impact is taken as a percentage of the GSDP of Delhi, it

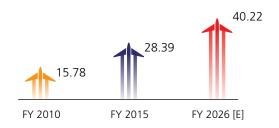
#### **BASED ON NCAER PROJECTION OF TRAFFIC IN 2025-26**

The impact on value added after taking into account the direct, indirect and induced effects as described by impact models Type-II works out to be : ₹ 2,40,356 Cr, 0.60 per cent of the estimated national GVA

#### Total Economic Impact (Economic Value Add) - in ₹ Cr

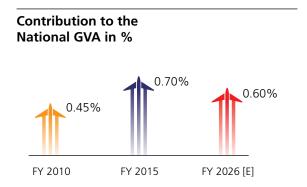


# Employment Opportunities Created by Delhi Airport Operations (in Lakh)

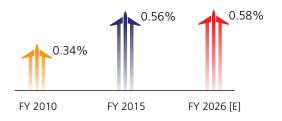


calculates to 17.89 per cent. The value added in terms of US\$ @INR65/US\$ works out to be US\$ 12.42 billion

- Employment creation is worth 28.39 lakh when the direct, indirect and induced effects are accounted for, which amounts to about 0.56 per cent of the estimated total workers in the economy. Out of this, 11.63 lakh are estimated to be employed in the agricultural sector
- The impact on employment after taking into account direct, indirect and induced effects as described by impact models Type-II works out to be : 40.22 lakh, 0.58 per cent of the total estimated workers



#### Contribution to National Employment in %



# Service Excellence



Offer

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## **Building a Customer-Focussed Organisation**

DIAL serves Customers with the support of its service partners which includes Service providers, Concessionaires and Government agencies such as AAI, MoCA, CISF, Immigration, BCAS and Customs etc. Hence the smooth integration of all these services is required to be rendered either by itself, or through its associates to ensure seamless service delivery to the customers viz. Passengers, Airlines, Freight Forwarders and Developers. DIAL considers the developers as their potential customers mainly to improve upon its product offerings to its other customers and stakeholders by developing a worldclass airport city.

DIAL utilises the avenues to keep updated on Customers needs and requirements and to build customer loyalty:

- >>> Regular one-to-one meetings
- Planned meetings of structured bodies and committees (AFC, AOC, BAR, CAFAC etc.)
- Customer feedback forms (such as ASQ forms, airline survey form, freight forwarder feedback form, Delhi Airport website)
- Social Media (Twitter, Facebook)

- Second Se
- Routes Conference, Regular One-to-One Meetings with International Carriers
- Regular One-to-one Meetings with Domestic Carriers
- Separate CAFAC meetings for Domestic and International Freight Forwarders





Inputs received from these mediums form the basis of Customer Listening for DIAL. Further, in order to remain ahead of requirements coming from various customers, DIAL engages consultants through departmental initiatives and, carries out market surveys. Such surveys provides indepth understanding of Customer needs. This enables DIAL to remain ahead of competitors in terms of Customer Service, while various listening methodology provides scope for continuous improvements. In the case of Social Media and webbased technologies, DIAL is engaged on a live time basis with the travelling passenger through its social media channels such as Facebook and Twitter.

In order to measure and improve the quality of service delivery and passenger experience, key Performance Indicators have been established to ensure continued focus in different areas of service delivery. This also enabled DIAL to retain its focus on customer-centricity, cost consciousness, innovation and operation excellence while aiming to provide safe, secure and seamless customer service.

Customer	Requirement	Product Offering
Airline	Efficient Infrastructure	Apron (Runway & Taxiway system), BME, Terminal Building, ATF Fuelling System, Aero Support Concessionaire, Hangar
	Operational & Engineering Support	Online & 24x7 Operations & Engineering Support, EMC
	IT Infrastructure	Check-in system, BRS, CUSS, Boarding gate readers, network
	Secure & Safe Environment	CISF Support, CCTV Surveillance, 5 level baggage screening system
Passenger	Comfortable & Clean Infrastructure	Efficient Check-in System, Good Roads, Terminal Facilities, Ambience & Buggy services for elderly people
	Information	Call centre, Info Desk, Social Media, FIDS, Way-finding Signage
	Essential Services	Wheelchair, Trolley, Emergency Medical, Parking facilities, New PRM process
	Retail Experience	Duty Free, F&B, Entertainment Facility, Lounges, Sleeping Pods, Hotel, SPA Travel Retail Exclusive products, Exclusive launches
	Parking	Terminal parking facilities, Pay & park facilities
	Secure & Safe Environment	CISF Support, CCTV Surveillance
	Regulatory Support	Customs & Immigrations clearance
Freight Forwarder	Market	Cargo Air Freight Station, Cargo Road Feeder Service, For Airport Logistics Centre, Trans-shipment Excellence Centre
	Efficient Infrastructure	Appropriate Location, Reliable infrastructure and facilities
	Operational Support	Online & 24x7 Operations & IT Support through ICMS, Secured access control system
	Secure & Safe Environment	CISF Support, CCTV Surveillance
	Regulatory Support	24x7 Customs clearance for Cargo, infrastructure to regulatory agencies at the airport
Developers	Market	Appropriate sizes, shapes and locations of Assets
	Efficient Infrastructure	Reliable Infrastructure & Utilities Seamless connectivity by road and rail
	Operational & Engineering Support	24x7 Operations & Engineering Support
	Secure & Safe Environment	Electronic Surveillance LEED certification for all assets

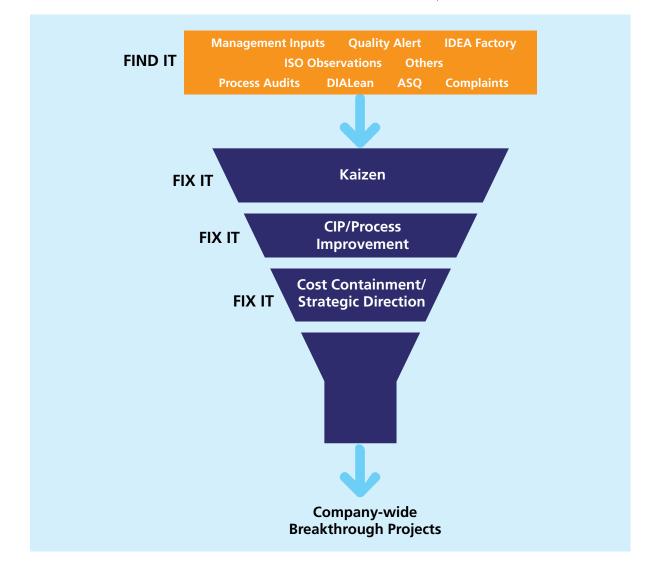
#### **Service Quality:**

DIAL has established an all-encompassing approach to improve its processes & services. Its major inputs derive from:

- Somprehensive, multi-tiered reviews
- Strong culture of layered walk-around
- Various ISO/Non ISO systems' periodic audits & compliance checks
- Service performance

Service quality improvements are carried out through DIALean, CIP & BLIP projects based on PDCA-Juran Methodology. In addition, Kaizen & Idea Factory serve as improvement and engagement tools as well. Kaizen/CIP Culture is well established at DIAL and is also extended to stakeholders. DIAL has also introduced TOC to improve processes pertaining to passenger handling system.

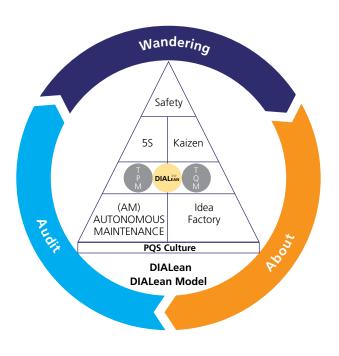
In order to continuously enhance the service quality at Delhi Airport, we follow a **'Find to Fix'** quality model, where inputs from multiple channels are filtered based upon relevance to various initiatives in place at DIAL. This enables teams to arrive at solutions post a robust evaluation process, aimed at delivering and exceeding stakeholders and customers' expectations.



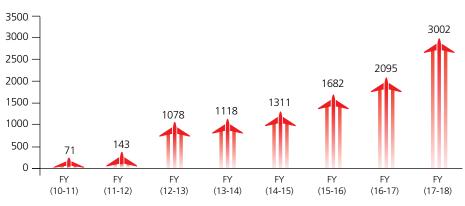
#### **Process Excellence**

The core focus of Process Excellence is maintaining the highest quality of service delivery for our stakeholders and customers, by following a lean methodology called DIALean. Periodic process efficacy studies and audits help to check the passenger interfacing processes at airport. The reports of such audits are utilised to further improve and streamline the processes at the airport. Further, various ISO/Non ISO systems' periodic audits, independent assessments and compliance checks are carried out in a planned manner. Outcomes of all these processes and other similar inputs form a basis for improvement projects commensurate with priority.

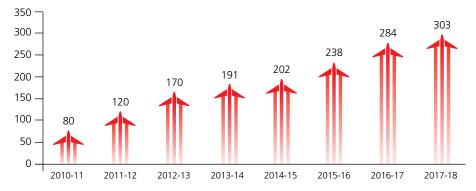
DIAL has received a number of certifications including ISO 9001, ISO 14001, ISO 20001, ISO 27001, ISO 26001, ISO 39001, ISO 50001, OHSAS 18001; thus demonstrates and bears testimony to DIAL's focus towards process excellence.



#### Kaizens at Delhi Airport



#### Number of 5S Zones at Delhi Airport



5S Radar Chart @IGIA		Management System	Standard	Certified Since
<b>Sorting</b> 100% 92%		Quality Management System (QMS)-DIAL	ISO 9001:2008	2007
80% 60%	2	Environment Management System (EMS)	ISO 14001:2004	2009
Sustain         DIALean <sup>40%</sup> Set in Order           77%         20%         89%	3	Occupational Health & Safety Management System (OHSMS)	OHSAS 18001:2007	2012
	4	Energy Management System (EnMS)	BS ISO 50001:2011	2011
Standardise Shine 80% 86%	5	Business Continuity Management System (BCMS)	ISO 22301:2011	2013
	6	Customer Response Management (CRM)	ISO 10002:2004	2011
	7	Service Management System (SMS)	ISO/IEC 20000-1:2011	2012
	8	Information Security Management System (ISMS)	ISO/IEC 27001:2005	2011
	9	Road Traffic Safety (RTS) Management System	ISO 39001:2012	2013

#### **Idea Factory**

At DIAL, we have a creative platform called Idea Factory which is accessible to all DIALites to share their valuable thoughts. For DIAL and IGIA Community, we also conduct Idea Xpress theme based Campaigns with an objective to even reach remote areas to fetch potential Ideas which can further ensure improved overall airport operation, maintenance and superior service quality. A dedicated cross functional team called Idea SQUAD works around Idea Factory in a unique way to raise the level of Idea Factory to higher levels of refinement. Activities like – Spreading awareness through Plays and SKITs on the issues occurring in Idea Factory, Sharing interesting facts and figures about Idea Factory and suggestion scheme of other organisations, Idea SQUAD Camps – where they talk about the journey of Idea Factory and how to motivate others to participate.



<sup>52 |</sup> Delhi International Airport Limited

#### **Developing a People-Centric Approach**

To enable our people in delivering a distinct "Delhi Airport Experience", 'DIAL IGIA Service & Hospitality Academy', also known as DISHA has been fostering a culture of superior customer service amidst the myriad Delhi Airport partners under the flagship of Quality & Service Delivery Department at DIAL. It works on the "AWESOME" framework to make the Airport eco system align towards Customer Centricity and build Customer Satisfaction.



#### **Customer Response Management (CMS)**

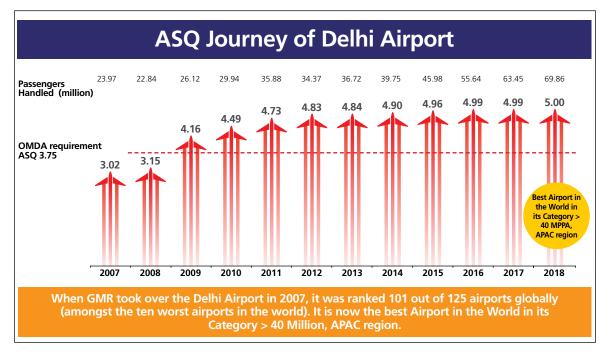
DIAL has adopted an effective Complaint Management System (CMS) which fosters valuable and efficient response and resolution for complaints received. This system is certified in ISO 10002:2014 CMS standard requirements, for responding, recording, reporting and using complaints to improve service delivery. This forms an essential part of providing quality service and acts as an additional measure to Customer Satisfaction. All the complaints are captured and addressed within pre-defined time frames to the satisfaction of the complainants. The effectiveness of the complaint management is measured through the half yearly Customer Satisfaction Survey. This process establishes the confidence with the Customers of the fact that DIAL not only listens and closes the complaint in a timely systematic manner but is also viewed as a transparent and strong partner.



Customer Group	Complaint Management
Passenger	Online Portal DIAL Website Social media like FB & Twitter Feedback Cell Public Grievance Officer – Id was created and populated for passenger awareness through FIDS Scrollers (All locations). Call Center Complaint register placed at partners locations There are Complaints received through Govt. Agencies – AAI/MOCA/DGCA – which are routed to CRM through DIAL-CMS
Airlines	Airline Portal IT Helpdesk EMC Helpdesk
Freight Forwarders (FFs)	Helpdesk at cargo terminals for Freight Forwarders Trade meetings along with cargo concessionaires Complaint registered through emails
Developers	Round-the-clock Helpline for all Complaints from the Developers in terms of infrastructure/utility services in the common areas and systematic process

#### **Airport Service Quality (ASQ)**

Proactively acknowledging, welcoming and offering timely assistance to passengers through a team of approachable, friendly and courteous staff and volunteers has resulted in making the customers as well as the airport community proud of Delhi Airport. DIAL has consistently raised the bar of service and operational excellence, transforming Delhi Airport into a cherished hub of world-class passenger experience backed with robust services, pleasing ambience, best-in-class facilities and a myriad of retail offerings.



# **Driving Operational Excellence**

Operational Excellence is a key focus area at Delhi Airport. It enables us to satisfy the expectations of our primary customers while maintaining a sustainable business model which is economically, socially and environmentally viable. The objective of establishing higher operational efficiency is to accommodate the increasing demand and sustain growth. Operational Excellence ensures high efficiency at adequate costs, optimum utilisation of the infrastructure and resources.

We aim to deliver world-class passenger experience, minimising waiting times at various touchpoints, improving airline On-Time Performance and decreasing their average turnaround time. On-Time Performance or OTP has significant importance to the airlines and passengers. There has been a vast improvement in OTP at IGIA over the last five years. DIAL has also successfully increased the Air Traffic Management (ATMs) from 60 (year 2010) to presently 73 per hour in collaboration with AAI / ATS. This is a significant improvement which avoids aircraft holding delays thereby enhancing capacity of airlines to operate. This achievement has been made possible due to the joint efforts of ATC, DIAL, Airlines and the GH's who jointly initiated and successfully implemented CDM.

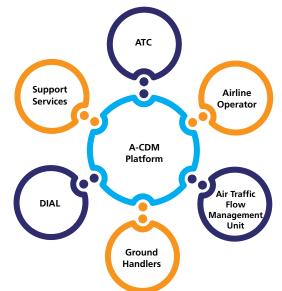
#### **Airport - Collaborative Decision Making (A-CDM)**

The A-CDM platform aims at making the aircraft operation from landing to take-off more precise and predictable and move away from the "first come, first served to best planned, best served." The implementation of A-CDM allows each Airport CDM Partner to optimise their decisions in collaboration with other CDM Partners, knowing their preferences and constraints and the actual and predicted situation.

#### **Benefits of A-CDM**

- Se Enhanced Airport capacity
- Sefined Airlines On-Time Performance
- Improved overall operational efficiency
- 🎾 Save cost
- Seduce delay and emissions
- Enhance trust and understanding with partners





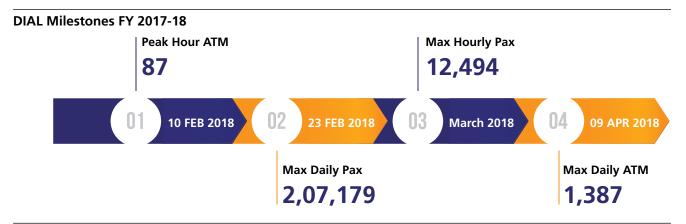


#### **Operational Excellence Progresses:**

Parameter	2015-16	2016-17	2017-18	Target for 2018-19
On-Time Performance (OTP)	82%	77%	77%	80%
ATM Peak Hour Handling Capacity	67	67	73	73
Runway Occupancy Time (ROT) (in sec)	N/A	N/A	71	65
Baggage Handled (million)	40.4	45.2	54.4	NA

In FY 2017-18, Delhi (DEL) achieves the best turnaround performance in the Asia-Pacific region, with a variance of +10.1 between arriving and departing OTP.

It also has the third best departing OTP among this group of airports.



#### **Other Major Initiatives**

#### Automated Performance Capture and Live Tracking Technology

DIAL has been able to test and implement various data analytics tools that are being utilised for monitoring realtime flight operations. The initiative included using a base technology, which is then patched with data analytics tools that provide valuable processes data for monitoring airport performance

#### Smart Passenger Processing

DIAL constantly pioneers in experimenting with new technology to reduce passenger processing time and enhance customer experience, though this initiative is heavily dependent on Government approvals. DIAL is focussing on automation, expanding the use of self check in kiosks and reducing dependence on manual processing systems.

#### **Expansion of Facilities**

With large number of aircraft being introduced to Indian skies, DIAL has been proactive in planning and expanding airfield and terminal capacity to accommodate the demand. DIAL will be constructing a fourth runway and will become the only airport in India to have 4 runaways. DIAL will build the new Domestic terminal is energy smart and equipped in line with international standards. Also, many Indian airports have saturated their capacities and are yet to plan further expansion.

#### **Airspace Capacity Enhancement**

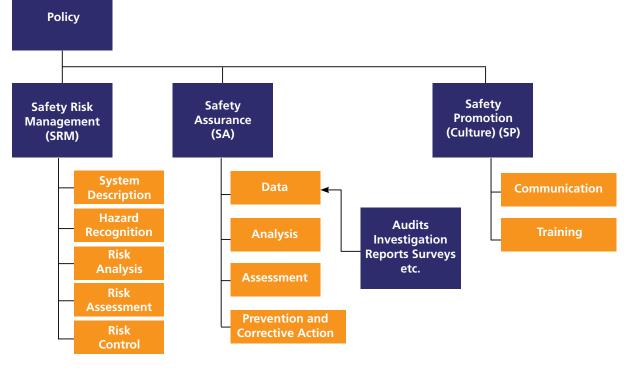
DIAL is pioneering in reengineering Indian airspace in collaboration with internationally acclaimed consultants and Indian air navigation agencies to increase capacity through best practices adhered to Internationally. In this process, DIAL along with its partners will pioneer introducing runway and airspace procedures including parallel runway operational procedures. This will pave the way for other Indian airports to emulate these best practices and increase capacity. The concepts of High Intensity Runway Operations (HIRO) and Time-Based Separation (TBS) technique are some of the pioneering procedures.

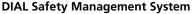
#### **Flight Operations Performance Enhancement**

Airline performances have huge impact on Airport capacity, resource allocation, performance and brandname. DIAL focusses on stakeholder engagement for an inclusive growth of airport and airline operations through adoption of best practices and performance optimisation. The high level Flight Operations Performance Committee (FOPC) is a powerful first of its kind committee in India which focusses on resolving inhibiting factors to a good airport and perk up airline performance. The FOPC are among many other initiatives for resolute action for maintaining and improving performance levels.

#### **Airport Safety**

Ensuring airport safety is one of the key focus areas for achieving operational excellence at Delhi Airport. DIAL ensures the safety of the aircraft, passengers and people through efficient collaboration with all the stakeholders including Airlines, Passengers, Ground Handling Agencies, Fuelling Companies, Catering Companies, Air Traffic Control, Communication and Navigational Services and Security Agencies. Technology plays a vital role in ensuring Aviation Safety and DIAL has ensured that adequate measures have been taken to ensure complete safety in functioning of the Delhi Airport. DIAL has established Safety Management System at IGIA based on the Civil Aviation requirements issued by Directorate General of Civil Aviation, and also in conformance with the requirements of OHSAS 18001:2007.





Safety is a priority. Over the years, Delhi Airport has achieved significant reduction in number of incidents involving Aircraft, Ground Support Equipment, Vehicles or Injuries. Some of the safety initiatives implemented at Delhi Airport are:

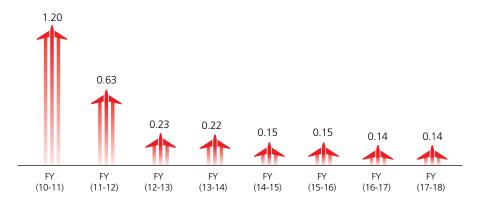
- Implementation of the Safety Management Systems fulfilling all the requirements of DGCA - Civil Aviation Requirements, OHSAS 18001 and ICAO - Annexure 19
- Competency Development with SMS training and other risk based-safety trainings
- Voluntary Safety Reporting and Reward recognition programme
- Safety awareness programme including Safety campaigns

#### **Employee Occupational Health & Safety**

Occupational Health & Safety is a key aspect of every process and system in practice at DIAL. A detailed safety assessment is conducted while undertaking any changes / enhancement to the infrastructure, operations or activities, before initiating any change in infrastructure, operations or activities at DIAL. All employees are given opportunity to participate in Occupational Health and Safety (OHS) programmes. The OHS programmes cover workforce representation, Worker Health and Safety committees which help to monitor and advice on occupational health and safety programmes. Continuous health & safety trainings, counselling, prevention and risk-control programmes are conducted to assist workforce members, their families and community members. The following programmes and trainings are in place for OHS management at Delhi Airport to deal with occupational risks and diseases:

- Hazard Identification and Risk Assessment training
- OHSAS 18001 & Safety Management System education and training
- Audiometry Test, Medical Checkups for disease identification and monitoring, mandatory Eye tests for airside drivers
- Kaizen, 5S, Quality Management System for riskcontrol programmes and controls on OHS
- Awareness on Risks of communicable diseases at the Airport

#### Rate of Airside Incidents per 10,000 aircraft movement



#### **Bird & Wildlife Management**

At the Delhi Airport, multiple wildlife management and conservation techniques have been adopted to minimise the risk of bird strikes and to improve the overall safety and operating conditions at the airport by a dedicated team – the Bird / Animal-Aircraft-Strike Hazard Management (BASHM). The prime objective is to minimise the bird and animal activity in and around the airport premises.

The BASHM team conducts waste management surveys on a regular basis in coordination with

Various Mitigation Measures adopted at the Delhi Airport include:

- >>> Deployment of Bird chasers
- Service Servic
- Bird Proofing measures Spikes
- Bird Scaring Methods Bio-Acoustic/ Pyro-techniques
- Monitoring over the bird attractive areas Open meat shops, Illegal Slaughter houses etc.
- >> Radio Controlled Zone Guns/Handheld boomers
- ᆇ Rodent Control
- Services

Habitat & Turf Management (shifting of grass cutting during night hours)

- >> Information to pilots by ATC about presence of birds
- >> Public awareness through posters
- Strengthening of AEMC (Airfield Environment Management Committees) surveys (Twice in a month)
- Sommunity enrolment
- Series Awareness session to stakeholders
- Species relocation
- Sector Se

local urban bodies and state level government agencies. The findings are communicated to the concerned Government agencies for necessary support including waste and water management improvement in the region. Communication is also maintained with all the stakeholders and customers across multiple operational meetings on the requirements, progress and support of this initiative.

#### Airport Rescue and Fire Fighting (ARFF)

The DIAL ARFF Team works towards saving lives in the event of any incident either at or in the vicinity of the airport. The ARFF service is provided to create and maintain safe conditions, to provide egress routes for occupants and to initiate the rescue of those occupants unable to make their escape without direct aid from an affected aircraft. The ARFF Team consists of trained fire-fighters and is equipped with Rosenbauer (Austria) make Crash Fire Tenders equipped with the latest version of rescue equipment. To ensure a response time of 2 minutes on the operational runway, this team is spread across 4 fire stations, each of which is strategically located.

The ARFF team is responsible for developing and implementing the Airport Emergency Plan (AEP) & Airport Security Programme (ASP). These schemes are prepared in line with the applicable regulatory requirements, ICAO Airport Service Manual Part-7 requirements and comprehensively dealt with

emergency preparedness related to the Airport and its ecosystem. A hot line with the ATC is maintained so that all emergencies are communicated with the fire station immediately.

The ARFF team co-ordinates between the ARFF service at airport and public protective agencies (such as various other department of Airports, local Fire Departments, Police Forces, Airlines, Delhi Disaster Management Authrities (DDMA), hospitals and the Armed forces of the Union) for assistance required while dealing with any emergency situation.

In addition to this, the ARFF plays an active role in emergency situations like Bomb Threats and Hijack situations. To ensure the safety of the passengers, occupants of the Terminal and other buildings, the ARFF team carries out evacuation mock drills on a periodic basis. For smooth evacuation, fire wardens are identified and trained.

No. of Mock Drills Conducted		
2015-16	2016-17	2017-18
14	13	15



#### Security

Similar to safety, security is also one of the critical focus areas for ensuring smooth airport operation at Delhi Airport. DIAL, along with the Central Industrial Security Force (CISF) ensures comprehensive, seamless and structured implementation of security measures at various locations of the Delhi Airport as per the directives/mandates issued by the Bureau of Civil Aviation Security (BCAS). DIAL works closely with CISF and Airline security to ensure high security for Delhi Airport.

At Delhi Airport, DIAL has implemented various security measures across the airport as per the National Civil Aviation Security Programme (NCASP) and Airport Security Programmes (ASP). The primary objective of the ASP is to ensure the safety of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation. The ASP has been prepared by DIAL in coordination with all stakeholders concerned including the Airport Management, Security Services, Commercial Air Transport Operators, Cargo Operators, Cleaning and Catering Operators, General Aviation Operators, Air Traffic Services, Regulated Agents, Firefighting and Rescue Services, Postal and Medical Services, Customs and Immigration Authorities, Refuelling Companies, Aircraft Servicing Organisations, Off-Airport Authorities responsible for law enforcement functions and other tenants on the property under the purview of DIAL.

The ASP also includes reference to Contingency Plans with regard to acts of unlawful interference like hijacking, bomb threats and terrorist attacks. DIAL ensures that all the security personnel deployed for carrying out security functions are appropriately trained and certified as per the NCAS Training Programmes. It is mandated that all DIAL employees undergo a security awareness programme during their induction, as per their onboarding schedule. It is further ensured that all employees of other functionaries seeking access to restricted areas of the airport premises undergo the security awareness programme as well.

In addition to the security programmes and personal vigilance at Delhi Airport, various IT-enabled security features have also been incorprated. IT infrastructure including Firewalls, Fallback System, Data Leakage Protection, Role-based System and Function Access, Unauthorised Access Restrictions, Automated Tracking, Periodic Vulnerable Accessibility and Penetration Testing (VAPT) and SQL Injections, Intrusion Prevention Detection System (IPDS), Antivirus Definitions, Security Operation Center (SOC) Monitoring are used to ensure safe, secure and efficient airport operations.

With regard to Passenger Screening, DIAL has equipped CISF with 74 cabin baggage X-ray inspection system (X-BIS Machines) for strict security requirement at Delhi Airport along with mandated Door Framed Metal Detectors (DFMD), Explosive Trace Detection (ETD) system and Hand Held Metal Detectors (HHMD). Besides these measures, DIAL has installed Inline Baggage Screening System for registered baggage screening of passengers at all terminals.

No. of XBIS	Terminal 1	Terminal 2	Terminal 3	Total
Machines	16	14	44	74

- Over 3,000 CCTV Cameras for 24x7 Surveillance of the entire airport
- Over 2,000 Access Control System integrated with CCTV using unified Alarm System
- City Side Security Vehicle Check on Approach Road, CISF Morcha at Strategic locations, Armed patrolling by CISF, Under Vehicle Scanning System
- Terminal Protection Crash Rated Bollards, CISF Morcha, Blast Resistant Trash Bins, Armed Gate Protection by CISF

>>> In line Baggage Screening

- Pre Embarking Security DFMD, X-BIS, Frisking Physical Babbage Checking
- Perimeter Security State-of-the-art PIDS (Perimeter Intrusion Detection System)
- Sequence Reaction Team of CISF
- Security Operation Control Centre under the control of CISF
- SOCC covers entire airport area and is in constant surveillance of CISF

#### **Business Continuity Management System:**

The Business Continuty Management System of DIAL is prepared in line with ISO 22301:2012 for all of its operations, services and support functions. The objective of the Business Continuity Management System at DIAL is developed with a view to prevent and contain potential disruption to airport operations, business processes, while ensuring safety of human lives and safeguarding its reputation. As per the DIAL BCMS framework, business impact analysis classifies the services/ processes as critical, essential and non-essential. Threat Assessment, Enabler Risk Assessments (Site & Technology), Process Risk Assessments are carried out to systematically identify, analyse, evaluate and treat the risk that may cause disruptive incidents or threaten security at DIAL.

Sr. No.	Programme	Details
1	BCP Awareness Trainings	4 BCP awareness trainings were conducted for all A Duty Managers, Terminal Managers (T1, T2 & T3), AOCC Managers and City Side Managers on Electrical Power Back-up Systems and Communication Flow during crisis.
2	BCP Exercise	A Mock Exercise on Electrical Power Redundancy was conducted on 06.03.2018. All the steps were precisely followed by the P&E Electrical team of DIAL and its contractors.
3	BC Plan – Review & Update	<ul> <li>BC Plans were updated for the following Processes:</li> <li>P&amp;E BHS T3 &amp; T1</li> <li>P&amp;E Mechanical Maintenance</li> <li>P&amp;E (HVAC &amp; PHE)</li> <li>P&amp;E Passenger Security Screening Equipment</li> <li>P&amp;E Power Systems</li> <li>IT</li> </ul>
4	Risk Assessments	• Site Risk Assessment of PCCR1 & PCCR2 were conducted with the help of IT, Civil, Electrical & Mechanical & ARFF teams on 27.12.2017
5	Internal Audits	BCP Internal Audit of Terminal Operations is conducted on 15.12.2017

#### **Smart Airport & Innovation**

To attain higher levels of operational excellence and to deliver a seamless and memorable passenger experience technology plays a crucial role. It is the lifeline of most of the processes at modern Airports. Delhi Airport has an integrated IT system across various operational processes by adopting latest advanced technologies. For example, IT team has introduced an advanced Supervisory Control and Data Acquisition (SCADA) system and Central Monitoring Station (CMS) for Engineering Services, Electronic Point of Sale (EPOS) in Commercial function, for Operations Universal Flight Information System (UFIS) and Flight Information Display System (FIDS), etc.

Technological advancements / upgrades are explored from various sources like best-in-class practices, industry researches, consulting firms, business partners and from national/international forums. These are evaluated by conducting a technical, commercial and financial feasibility study, involving outsourced expertise, if required. The technology solutions thus approved are incorporated / introduced into the existing processes through proper implementation plans, including pilot projects, if necessary.

# Some of the IT initiatives implemented at Delhi Airport are:

- Systems (CUPPS)
- Sommon Use Terminal Equipment (CUTE)
- Scommon Use Self Service Kiosks (CUSS)
- >>> Baggage Reconciliation System (BRS)
- >>> In-line Baggage Screening
- > Boarding Gate Reader (BGR)
- >>> Visual Docking Guiding System

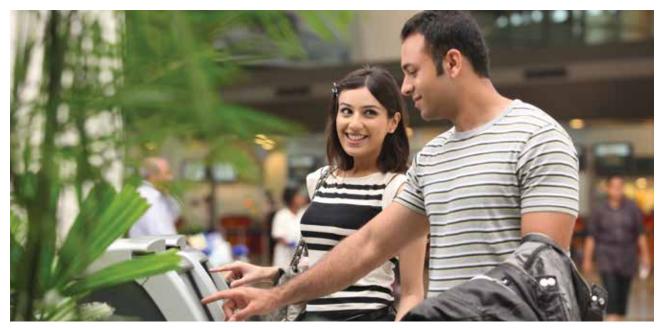


State-of-the-art Airport Operations Control Centre (AOCC) with 4m x 7m Video Wall

At Delhi Airport, we continuously strive to create a work environment that encourages employees to look for continuous improvements and identify and implement innovations. Various best practices from the aviation industry as also from other industries such as Malcolm Baldrige Business Excellence Model, Kaizen, 5S, Theory of Constraints (TOC), Continuous Improvement Projects (CIPs), Bottom Line Improvement Plan (BLIP) and Idea Factory are institutionalised. DIAL also uses the platform of airport conferences on new technologies, IT solutions and future airport trends to further explore and strengthen the innovation culture.

In addition specific focus on organisation wide innovative solutions has been brought by Cross Functional Teams (CFTs) through Strategic Initiatives.

To promote a participative and inclusive innovation culture, DIAL has institutionalised different innovation reward & recognition platforms for acknowledging efforts of the IGIA team members. GMR IGI Airport awards an annual mega event conceptualised on the lines of industry best practices/innovation awards for Airlines, Govt. Agencies, Cargo Partners. Apart from this, Sign de Gratitude, Idea Meet, Indian National Suggestion Schemes' Association (INSSAN) are platforms to honour contributors for incremental innovation brought about through LEAN tools like 55, Kaizen & Idea Factory. The Quality Festival, CIP and BLIP award events are meant to appreciate contributions brought about by adaptive innovation deploying tools such as Juran, TOC and DIAL 4D (systematic problem-solving). All these platforms are meant to recognise the stakeholder's efforts to support new innovations.



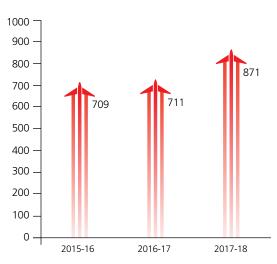
Common Use Self Service (CUSS)

#### Supply Chain Management:

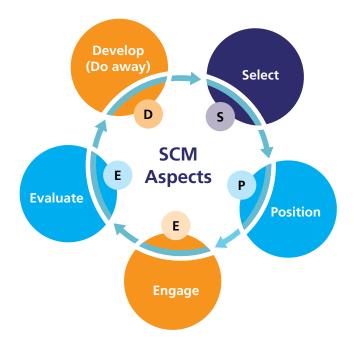
The operation of IGI Airport is supported by a host of service providers, suppliers and business associates. They play a decisive role in overall operational efficiency improvement by ensuring timely delivery of services and products without any compromise on the quality of services and products. DIAL has adopted robust Supply/Service Chain Management (SCM) practices with a focus to help the organisation to become cost effective, yet sustainable. The Supply/ Service Chain Management process is managed through - SPEED viz. Select, Position (Both for Efficiency: Performance Enhancement & Effectiveness: Customer Satisfaction), Engage (for Daily Operations & Sustaining Partnerships), Evaluate, Develop (Improve/ Do Away with non-performing elements).

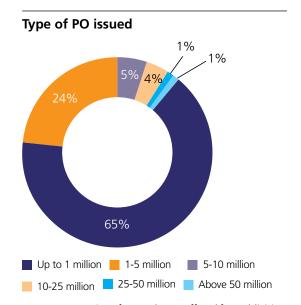
As part of our standard practice, all contractors have to comply with the rules and regulations as mentioned and agreed during the Contract Issuance. On acceptance of the Contract, Contractors abide to follow the requirements as mentioned in the Business Code of Conduct and comply with all provisions of the Contract Labor (R&A) Act 1970, and the rules under EPF & MP Act 1951, ESI Act 1948, Minimum Wages Act 1948, forced and compulsory Labor, corruption, Sexual Harassment, Environment Impact etc.

#### **No. of Suppliers**



In addition, DIAL uses a SMART tool to ensure all its vendors and suppliers are registered online and have signed a SCCBE (Supplier Code of Conduct and Business Ethics). DIAL is also conducting Ethics'





Awareness sessions for vendor's staff and for publicising the Ethics Helpline number for enhancing awareness in observing the organisational ethics.

# Care for Environment



# **Environment Sustainability Management**

Environment Sustainability Management is an integral part of our business strategy which helps in achieving credibility and business sustainability at Delhi Airport. We are committed to conduct our business in an environment-friendly and sustainable manner by minimising the impact of our activities on the environment with necessary pollution control systems and safeguards.

Our environmental objectives are to develop an eco-friendly and efficient infrastructure with high efficient applied, minimum resource consumption by incorporating all required pollution prevention technologies to reduce the building impacts on human health and the environment during the building's lifecycle and airport operation.

Our focus of Environment Sustainability Management at IGIA is to maximise economic and environmental performance of the airport infrastructure and its operation by implementing and monitoring green infrastructure and green company frameworks.

Objectives of Environment Sustainability Management at DIAL:

- Ensure integration of Green Infrastructure principles in the development and operation of Airport infrastructure
- Ensure resource optimisation to conserve natural resources and mitigate climate change impacts

- Ensure efficient management of materials and resources to facilitate waste reduction
- Adopt superior technology for environment protection
- Section 2017 Ensure compliance to all legal requirements

All these objectives are implemented through a set of EMP's. These include Green building concept, Green company framework, GHG Accounting and Management, Compliance Verification Programme, ISO Management Systems, Noise Management System etc. These have helped us in achieving significant results in the areas of environment protection and Sustainable development. As a part of sustainability programme, Key Performance Indicators (KPIs) of each environmental parameter are identified and yearly target is set at the organisation level. The target is further divided among departmental heads and system heads. Daily monitoring and weekly reviews are carried out by respective unit head with their team, followed by a monthly review of KPIs by the CEO.

Delhi Airport has achieved several milestones and records for implementing sustainable green airport initiatives incorporating: modern infrastructural development technique, advanced energy-efficient technologies, environment conscious work culture, collaborative airport partnerships programme with regulators, stakeholders and communities.



"Our aim at Delhi Airport is not just to make buildings greener but also to focus on the growth of the airport in a sustainable manner by illustrating the principles of sustainable development. This is done by integrating the components of green building infrastructure, systems and human resources needs with necessary knowledge, skills and perspectives, together with the IGI Community"

#### Climate Change & GHG Management

The gradual increase in earth's atmosphere's average temperature has been a major concern across the world. Erratic weather patterns and severe natural disasters are observed more frequently around the world. Climate scientists continue to provide evidences that this increase is primarily due to Greenhouse Gas emissions (GHG) from human led activity. As of now, aviation industry contributes to only 2% of the overall GHG emission considering all sectors (IPCC 2004). However, it is increasingly seen as one of the significant contributors to GHG emission as the civil aviation sector is growing each year in terms of passenger movement, ATM and cargo movement.

As the emission of GHGs influencing climatic condition has started impacting human life and businesses alike, it is seen as a key concern by DIAL. Delhi Airport embarked on the journey of GHG management in the year 2010. This includes setting up a mission of GHG management at IGI Airport, strategic objectives and initiatives, well defined Key Performance Indicators (KPI) for each function, monitoring, review and benchmarking of GHG emissions. DIAL has continuously adopted global best practices in terms of process optimisation, enhanced operational efficiency and resource conservation to reduce GHG emissions without compromising on the quality of service delivered as an airport operator. For GHG management, DIAL followed the target-oriented approach of ACI. DIAL is currently certified under "Level 3+, Neutrality", the first airport to achieve Carbon Neutral status in Asia-Pacific Region. Continuous focus on energy and fuel conservation adoption of renewable energy and other less emission intensive processes pursued by Delhi Airport has ably complimented the Carbon Neutral initiatives at this Airport. Apart from this, some noteworthy less emission intensive processes of Delhi Airport include: adoption of A-CDM, Fuel Hydrant System, Fixed Electrical Ground Power (FEGP) & Pre Conditioned Air (PCA), Multimode Connectivity and similar systems to control emissions.



The GHG emission inventory of DIAL is based on ISO 14064 principles and WRI-WBCSD corporate GHG emission standard. DIAL has used operation control for consolidation of GHG emission and the year 2010 was set as base year for the GHG emission inventory, as the Terminal 3 of IGI Airport became operational. In FY 2017-18 the total scope 1 emission was 1052 tCO<sub>2</sub>. This is a significant reduction from the base year emission values for scope 1 emission of 1536 tCO<sub>2</sub>. This was achieved through continuous process improvement, resource optimisation, use of efficient technologies across different verticals of the airport's functions. The scope 1 emission includes - DIAL vehicles, DG sets, Fire drill emission, fire extinguisher emissions etc. Scope 2

emission includes DIAL's electricity consumption required for the operation of the airport. In scope 2 emission, in spite of continuous growth of ATM, passengers and addition of new infrastructure, significant emission reduction was achieved as compared to the base year. The scope 2 emission for base year was 141046  $tCO_2$ . Through continuous efforts of rigorous monitoring, process improvements, integration of efficient technologies, training and skill development of employees, DIAL could reduce the scope 2 emission values to 118, 120  $tCO_2$ . This demonstrates the commitment and efforts put in by DIAL for reducing emission and achieving resource conservation.

GRI 305-1,2	Scope	Unit (tCO <sub>2</sub> )		
		2015-16	2016-17	2017-18
	Scope 1 Emission	982	1047	1052
	Scope 2 Emission	1,10,004	1,06,197	1,18,120

- >> DEFRA emission factors have been used for estimating scope 1 emission
- ✤IPCC values have been used for GWP of GHGs
- Section 2012 Section 2012 Section 2012 Parameters 2012 Section 2012 Parameters 2012 Section 2012 been used for estimating scope 2 emission

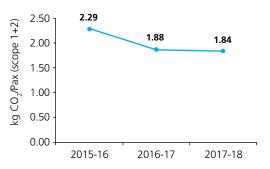
#### Green Infrastructure



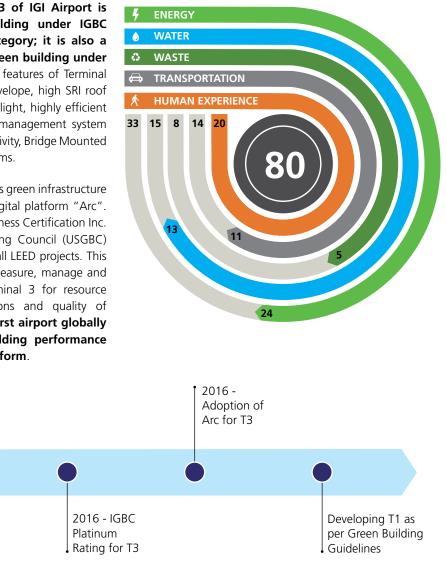
DIAL has adopted green building principles into the design, construction and operation of Delhi Airport. The Terminal 3 of IGI Airport is Platinum rated Green Building under IGBC Green Existing Building category; it is also a LEED India Gold certified green building under new construction. The main features of Terminal 3 are low u-value building envelope, high SRI roof material, maximum use of daylight, highly efficient utilities, an efficient building management system (BMS) and multi modal connectivity, Bridge Mounted Equipment, Fuel Hydrant Systems.

Another addition to IGI Airport's green infrastructure is the adoption of a unique digital platform "Arc". Arc is developed by Green Business Certification Inc. (GBCI) and U.S. Green Building Council (USGBC) the global certifying body for all LEED projects. This platform is used by DIAL to measure, manage and improve performance at Terminal 3 for resource consumption, carbon emissions and quality of space. Delhi Airport is the first airport globally to have adopted, live building performance monitoring and scoring platform.

Specific GHG emmisions (Scope 1&2)



20% reduction in specific GHG emissions achieved in the current year, as compared to FY 2015-16



2011- LEED

India Gold

rating for T3

#### Other Green Infrastructure components of DIAL include:

#### Fuel Hydrant System

Delhi Airport boasts of 16-km long Fuel hydrant network. This system provides safe and clean aircraft fuel supply service through a dedicated fuel circulation line from a common storage facility to the aircraft fuel uplifting point. It also has an intermediate residue collection and filtration chamber which allows smooth and safe uplifting of ATF by a dispenser to the aircraft. The fuel hydrant system prevents soil contamination, water pollution, air emission and supports safe airport operations by reducing leakage, spillage and evaporation losses.

# Fixed Electrical Ground Power (FEGP) & Pre Conditioned Air (PCA)

There are 78 stands at T3 equipped with Fixed Electrical Ground Power (FEGP) & Pre Conditioned

#### **Energy Management**



Energy and its usage are considered as one of the important material aspects for Delhi Airport considering significant amount of energy is required for the operation of this Airport. The major contributors of energy consumption at Delhi Airport are: HVAC, baggage handling system and lighting systems. DIAL recognises that energy conservation measures are extremely important from the perspective of sustainability. Energy Management objectives at Delhi Airport include:

- Establish energy efficiency and system performance measures to optimise energy consumption
- Support ozone protection protocols
- Encourage renewable and alternative energy sources

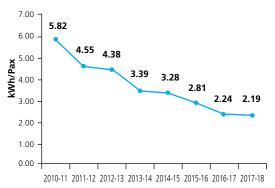
The overall electricity consumed by Delhi Airport includes the electricity demand for the functioning of the airport and requirements of various stakeholders and concessioners operating in the premises. The electricity consumed by Delhi Airport is sourced from grid through M/s BSES Rajdhani Power Limited. To meet powergrid failures, emergency power backups in the form of DG sets are provided at various locations. DIAL has adopted various measures to Air (PCA) units which prevents the use of Auxiliary Power Unit (APU). This reduces carbon emissions due to fuel combustion and APU engine noise.

#### **Multimodal Connectivity**

Terminal 3 is connected through a dedicated metro express line, which helps in reducing vehicular traffic, emission and conservation of fossil fuel resources such as petrol, diesel and CNG. The metro rail station is located within 250 m from the building entrance. In addition to this, 6-lane road infrastructure and northern accesses tunnel helps in reducing traffic conjunction and emission. Parking facility for more than 5,000 cars with natural light system is also available within the T3 infrastructure along with electrical charging facility.

reduce energy consumption. Apart from adopting Green Building concept, the energy reduction measures includes - ISO 50001 energy management system, solar energy, Clean Development Mechanism (CDM] project, Integrated Building Management System (IBMS), energy efficient HVAC & Chiller system, efficient lighting, daylight harvesting and baggage handling system. The implementation of energy efficiency measures have resulted in reducing the specific electricity consumption bv DIAL to 2.19 kWh/passenger. FY 2017-18. This is a significant change from the specific electricity consumption value of 5.82kWh/ passenger from FY 2010-11.

#### **Specific Electricity Consumption**

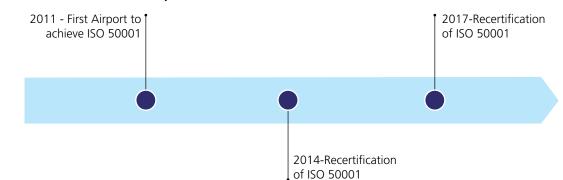


#### **Energy Management System (EnMS)**

To implement efficient monitoring, measurement and verification of energy consumption, DIAL has adopted Energy Management System (EnMS). The Energy Management System at DIAL is certified under ISO 50001:2011 by M/s British Standards Institution (BSI). Delhi Airport is the **First airport in the world to be certified for ISO 50001:2011 Energy Management System. DIAL has also received ACI Green Airport Gold level** 

# recognition for "Energy Management" in the year 2017.

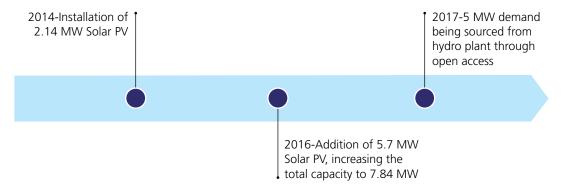
DIAL is also driving a leadership role in energy management at national level through its membership of TERI Council for Business Sustainability on Energy Security Chapter. This body serves as an interface with industry partners and institutions in sharing knowledge, best practices and skills development programmes.





#### **Renewable Energy**

To contribute towards Government of India's drive towards renewable energy, especially in the generation of solar energy and to optimise airport land utilisation, DIAL has installed 7.84 MW grid-connected solar projects in the air side premises of IGI Airport. It is one of the very few airports globally to have a solar plant in the air side. This mega scale installation is one of the unique features at Delhi Airport. The facility was installed after ensuring safety of aircraft operation by conducting a glare and radiation impact study on the airport's operation navigational system and likelihood of pilots being exposed to possible glare while landing on duty. The plant has generated 29,561 MWh of electricity till March 2017-18. This has led to a reduction of 24240 tCO<sub>2</sub> from the environment. DIAL is exploring more sources of renewable energy for use in future, especially within the airport expansion project being planned.



#### Clean Development Mechanism Project (CDM)

The energy efficiency measure at Delhi Airport was registered as a Clean Development Mechanism project under United Nations Framework Convention on Climate Change (UNFCCC) in the year 2013. **Delhi Airport is the first airport in the world to achieve this registration with UNFCCC**. The

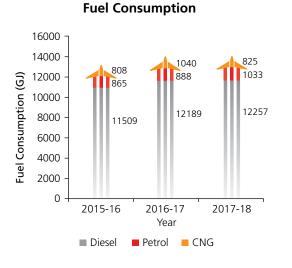
#### Integrated Building Management System

Integrated Building Management System (IBMS) at Delhi Airport provides optimised energy efficiency, indoor air quality, and occupant comfort, and sets the stage for minimal operation and maintenance costs. IBMS controls HVAC systems operations for optimum flow of air and temperature. In addition, it controls lighting as per passenger movement and lux requirement with availability of day lighting. The system also controls indoor air quality in the energy efficiency measures implemented include VVVFD (Variable Voltage Variable Frequency Drives) in Travellators and Escalators, Energy Efficient Chillers, VFD, Energy Efficient Building Envelopes. This project generates more than 16000 tCO<sub>2</sub> reduction in annual energy consumption.

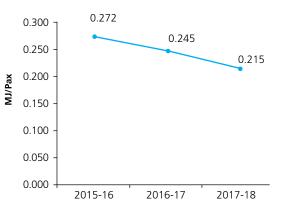
terminal building by allowing intake of fresh air. The entire lighting system is integrated with movement sensors and programmed as per time schedules with provision for optimum use of terminal building zones according to the aircraft gate allocation. The terminal can operate with maximum energy performance by modelling, sensing, optimising data and controlling the electrical outputs to HVAC, Lighting, VFDs, ventilation, escalators and travellators.

Q	
GRI 302-1	

	Fuel	Unit: GJ			
ruei	ruei	2015-16	2016-17	2017-18	
	Diesel	11509	12189	12257	
•	Petrol	865	888	1033	
	CNG	808	1040	825	
	Total	13182	14117	14115	



#### **Specific Fuel Consumption**



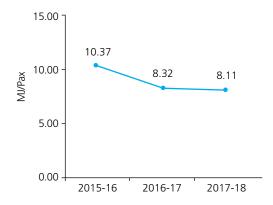
21% reduction in specific fuel consumption in last 3 years

Unit: Million k				
Energy Source	2015-16 2016-17 2017-18			
Electricity	136	130	144	



#### **Electricity Consumption**

#### **Specific Energy Consumption**



22% Reduction in specific energy consumption, in last 3 years

	2015-16	2016-17	2017-18
Total Energy Consumption (GJ)	502890	480349	532690

>For estimation of GHG emission, ISO 14064 standard has been used

> IPCC default values have been considered for conversion of fuel quantity into GJ

## Water Management

Water is an important area of concern across Delhi and India. Thus, it is considered as one of the material aspects. Changes in the pattern of rainfall and weather conditions have resulted in water scarcity in the State and pose a great challenge for an organisation to adopt a sustainable water management concept through water conservation, reuse and recharge. We at Delhi Airport, focus on sustainable development and management of water resources by continual assessment, conservation, augmentation, protection from pollution and safe distribution to meet our business process. The water demand of Delhi Airport is met primarily from the Delhi Jal Board (DJB) supply. Water efficiency at Delhi Airport is continuously monitored through data collection and analysis. Our approach to water sustainability is explained as:

- Establish water efficient infrastructure and systems to reduce water consumption
- Measure and manage the overall water performance
- Maintain quantity and quality parameters of water as per the required standards
- Search Maximise rainwater harvesting

#### **Rainwater Harvesting**

Delhi Airport has installed rainwater harvesting wells to support sustainable water management. To improve the Rainwater harvesting potential, most of these structures are installed in the storm water drains. Water from the roof top of the buildings is collected, filtered and stored in the harvesting

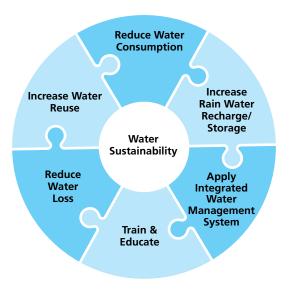
#### Water Treatment Plant (WTP)

To ensure good quality of potable water supply to passengers, DIAL has set up 5 Million Litre per Day (MLD) Water treatment plant. State-of-the-art separation technology system is adopted to process the water to meet the IS 10500 potable water quality as also the criteria defined by the airlines quality management. This involves an automated controlled infrastructure, equipped with energy

#### Water Efficient Fixtures

At Delhi Airport, we use low flow fixtures and appliances for reduced water consumption such as low flush water closets and cisterns. Effective Spill management is implemented to avoid water

- Maximise the use of treated waste water to achieve water positive status
- Raise awareness of the inter-linkages between water and energy through various knowledge sharing media and group discussions, with involvement of stakeholders and participation of cross functional teams
- >> Actively engagement with stakeholders



well. DIAL has installed more than 300 rainwater harvesting structures within the Airport and additional harvesting structures are being planned as a part of future development. DIAL has also set up rainwater harvesting structures outside the airport boundary as a community engagement programme.

efficient filters, pumps and lightings. Variable Frequency Drive pumps with pressure sensors control the pump flow volume by changing the speed and load as per the requirement. WTP infrastructure includes natural aeration, Dual Media Filters (DMF) and Activated Carbon Filters (ACF) followed by low pressure thin film composite Ultrafiltration (UF) and Reverse Osmosis (RO) membrane systems.

pollution and soil contamination. Storm water management is one of the important water management elements.

#### Sewage Treatment Plan (STP)

Sewage Treatment Plant (STP) of 16.6 MLD capacity is operating to treat the waste water generated by Delhi Airport. This plant is equipped with all primary, secondary and tertiary treatment system with high efficient centrifugal sludge ticking unit. It is a biological treatment method with nitrification and de-nitrification treatment process. State-of-the-art circular bio reactor (nitrification and de-nitrification) chamber is energy efficient in the process of being set up. This continuous mixed plug flow bioreactor is selected due to the high rate of biological conversion than the conventional one. It is equipped with high efficient porous membrane diffused aerators to achieve the aeration with less residence time and high rate of air diffusion and mass transfer. Treated water is processed with extended aeration before it is used as irrigation water.

The clarified waste water is further processed through Dual Media Filters (DMF). It comprises of advanced treatment systems such as ultra-filtration (UF) and Reverse Osmosis (RO) to process the waste water for HAVC use. State-of-the-art membrane (UF & RO) system is used to process the biologically treated and filtered water to meet the quality criteria of HVAC system requirement. Entire STP has automated, controlled infrastructure, equipped with energy efficient filters, pump and lightings. Variable Frequency Drives, pumps, sensors and controllers of flow, level and pressure are the main features of this plant.

Q	
GRI 306-1	

STP Parameter <sup>1</sup>	Unit	Limit	Analysis	IVIIN	Max
рН		5.5-9.0	IS:3025 (P-11)	7.17	8.14
BOD (@27°C)	mg/L	≤20	IS:3025 (P-44)	2.8	20
TSS	mg/L	≤30	IS:3025 (P-17)	8	28
0&G	mg/L	≤10	APHA, 22nd Ed.	0	0
COD	mg/L	≤250	IS:3025 (P-58)	20	80
Ammonical Nitrogen as (N)	mg/L	≤50	APHA, 22nd Ed.	0.04	4.86
Nitrate Nitrogen	mg/L	≤10	APHA, 22nd Ed.	1.28	9.18
Dissolved Phosphate	mg/L	≤5	APHA, 22nd Ed.	0.18	4.8

<sup>1</sup>Testing of STP parameters are done on monthly basis

#### Landscaping & Irrigation Systems

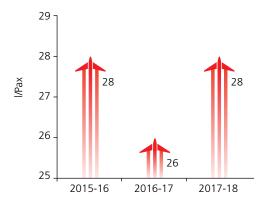
Landscaping and Tree plantations are one of the key green initiatives at IGI Airport. A very intensive and dense landscaping project has been carried out at the IGI Airport to cover more than 120 acres of land using thousands of medium to big shrubs and trees, besides lakhs of ground cover on the available land as per the master plan. DIAL has planted and is maintaining more than 19,000 trees around various water bodies in New Delhi. The entire landscaping is irrigated with treated waste water through drip irrigation and automatic water efficient, water dispensing system.

Q	
GRI 303-1	

Water	2015-16	2016-17	2017-18
Recycled	10,88,994	10,53,089	13,92,060
Reused	100%	100%	100%

100% water recycling & reused

**Specific Water Consumption** 



The increased water consumption is mainly attributed to a larger building infrastructure such as re-opening of Terminal 2.



## **Resource Optimisation**

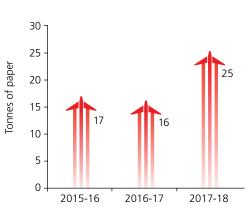
DIAL has adopted various strategies for reducing the dependency on natural resources and environmental impacts due to the busy functioning of this airport. Our sustainability focus is to optimise the use of natural resource by incorporating effective and

#### **Materials Reuse**

Reuse of existing building materials minimises habitat disturbance and reduces environmental impacts associated with the production and delivery of new building products. Salvaged materials have been substituted for new materials, thereby saving material costs. This too enhances the character of the building. The use of local materials strategy supported the local economy and reduced the impacts associated with transportation. All these factors have been incorporated in the terminal buildings.

DIAL has implemented waste paper recycle programmes at Delhi Airport. Since the inception of this programme in FY 2012-13, DIAL has recycled more than 106 tonnes of waste paper. During the last three FY, DIAL has recycled more than 57 efficient infrastructure, methods, performance data and culture at all our facilities. Some of our key focus areas pertain to efficient use and reuse of water, energy efficiency improvement, recycling of papers, fuel conservation, emission reduction etc.

tonnes of waste paper. As part of this programme, the agency exchanged the recycled papers for DIAL's use.



#### Waste Paper Recycling

#### Waste Management

Waste management is an important aspect of environment management. Waste such as Municipal Solid Waste, Hazardous Waste, E-Waste are handled and managed as per regulations. Municipal solid wastes are collected by adopting the two bin systems for effective waste collection and segregation at source. Bins are placed in the entire Delhi Airport infrastructure -- both terminal buildings and airside with appropriate signages directing segregation of waste at source by passengers, concessionaires and all service providers. All the recyclable waste including plastic waste is collected and recycled by the service provider. DIAL has received ACI Green Airport silver level recognition in the year 2018 for waste management initiatives implemented at Delhi Airport. Hazardous wastes are managed as per Hazardous Waste Management Rules. Used Oils and Waste Oils are the waste generated as Hazardous Waste at the Airport which are collected, stored, transported and disposed off as per the Hazardous Waste Management rules. E Waste and used batteries are managed as per regulations; electrical and electronic equipment which are intended to be discarded are dealt with according to the guidelines specified in the E Waste rules. Used batteries are discarded as per the Batteries Management and handling rules. We encourage the use of fly ash content material and the use of discarded building materials for construction.



# **Aircraft Noise**

Aircraft noise is a widespread and growing problem around the globe. Though modern aircrafts have become quieter over the past years, however, the perceptions of aircraft noise impact have not changed amidst the communities living in the vicinities of the airport. So is the case with Delhi Airport.

In order to mitigate the aircraft noise, DIAL along with stakeholders such as Director General of Civil Aviation (DGCA), Air Traffic Controller (ATC), Airports Authority of India (AAI) and Central Pollution Control Board (CPCB) implemented various noise mitigation measures, one of which is monitoring of aircraft noise levels around the airport. The primary motive of this measure is to understand the noise levels in the airport surrounding community and to develop a possible noise mitigation plan. Delhi Airport Noise Monitoring System is designed to monitor and record the aircraft noise in the environs of the airport. The system monitors noise levels at 5 permanent locations. The Noise Monitoring Equipment's (NMT) is placed at each runway funnel area to capture real-time noise level of the aircraft.

At Delhi Airport, ICAO balanced approach is followed to reduce the impact of noise. The Airport has adopted noise reduction measures at source; proper land use planning strategy with government,



incorporated various noise abatement operational procedures and introduced segregated runway operational plan at night to grant a certain amount

#### Noise mitigation measures adopted at Delhi Airport

- Installation of a permanent Aircraft Noise and Track Monitoring System (ANTMS)
- Ban on Operation of Chapter 2 Aircraft at Delhi Airport to be operated between 2200 hrs to 0600 hrs
- Adopting Continuous Descent Approach/Low Power, Low Drag procedures
- Runway mixed mode operations and noise abatement runway use plan

**Environmental Frameworks** 

#### **ISO Management Systems**

At Delhi Airport, all business aspects and associated impacts on society and environment due to our service and operations are assessed and addressed by effective relevant aspect and impact analysis -with necessary action plans and control within the framework of the ISO Management Systems (EMS). EMS provides an organised and formal approach

#### Green Company Framework (GreenCo)

Delhi Airport has adopted the CII-GBC Green Company Framework which assesses the performance of a service sector company, like an Airport operator across 8 environmental parameters, including energy, water, waste, GHG, of relief to the community under the runway funnels. All these initiatives are helping to reduce noise pollution at the Delhi Airport.

- >>> Limitation on the use of Reverse thrust
- Restriction on running of aircraft engines while one the ground
- > Developing noise contours by noise mapping exercise
- Introduction of a noise complaint answering system
- > Use of Fixed Electrical Ground Power unit to minimise ground noise level

towards managing environmental aspects at Delhi Airport. It also provides the platform for review and continuous improvements. DIAL is certified under ISO 14001:2015 for Environment Management System (EMS), ISO 14064:2006 for GHG Accounting and ISO 50001:2011 for Energy Management System.

renewable energy, materials, green supply chain and innovations. DIAL has achieved Platinum rating under this Framework for environmental excellence and has attained international benchmark values.

# Enhancing Quality of Life

V



# Working at DIAL

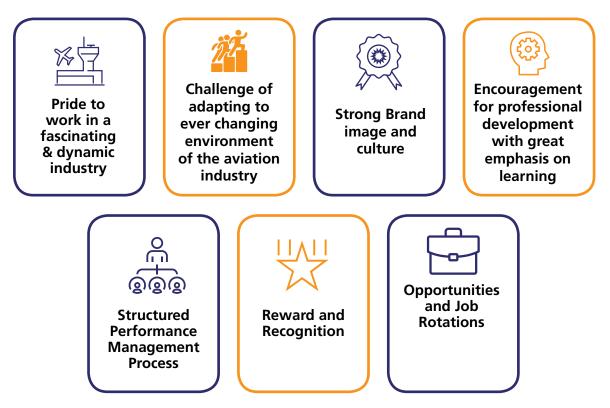
Talent is invaluable, the heart and soul of the Company. DIAL recognises workforce as the fundamental enabler of strategic initiatives & organisational excellence. We understand the importance of talent acquisition, development and retention all of which are a continuous process. It follows the principle of "Right Fit for the Right Job". Team members are employed from diverse educational backgrounds such as Aviation, Hospitality, Engineering, Management, Finance and Law and other disciplines to serve the diverse needs of the business and various stakeholders. This is enabled through our Brand Image and ongoing relationship with institutes and encouraging employee referrals. Keeping in mind the nature of business, DIAL's HR focus also involves Contractors, and Sub Contractors. Issues are addressed through regular meetings with Contractors/Sub contractors, educating them on labour compliances and importance of maintaining industrial harmony in the system.

### Making DIAL A Great Place to Work



We believe our workforce is our greatest asset. At DIAL, we believe that an inclusive culture and a diverse workforce can contribute to the company's success and sustainability by driving innovation and creating trusted relationships between employees, customers, service providers, stakeholders and community partners.

To make DIAL a Great Place to Work (GPTW), we are working on three key areas: improving trust, pride for the organisation, and building a collaborative organisation. A strategic roadmap was created to achieve GPTW objectives by focussing on improvement of skills through job rotation, Internal communication, providing promotions, undertaking team building exercise, arranging skip level meeting and ensuring training and knowledge sharing to employees. To better understand our GPTW status, we undertook a survey covering a total of 1,101 DIAL employees. As per results, 65% of the employees believe that DIAL is a Great Place to Work and the average score of 56 Global Trust Index© statements was 63, both of which are at par with aviation peers. The key focus areas under Great Place to Work are:



Managing workforce related processes and practices to create and maintain a high performance is anchored by the HR department in line with Corporate HR Policies. The aim is to create a work culture where the HR strategy plan is aligned to support the overall organisational strategic objectives. DIAL's strategic challenges are met by realigning & redeploying our work force from time to time as per the business requirement.



## **Inclusion and Diversity**



We have a diverse integrated workforce of 1565 (1352 male and 213 female) employees on the payroll of DIAL. All the employees are full time employees; there are no part time employees. A significant portion of the organisation's activities are carried out by employees. No employees are covered under collective bargaining. The employee data is

compiled from SAP platform which has real-time data. We focus on providing equal opportunities to all employees without any prejudice of region, religion, race or gender as per policy. The primary reason for attrition in DIAL is the opening of new avenues across the aviation sector, around the world.



	Parameters	2015-16	2016-17	2017-18
	Below 30	21	96	222
No. of new hirings	In between 30-50	18	37	57
	Above 50	2	2	3
Training Mandays		13507	11019	13480
Attrition Rate %		6.60%	6.63%	9.21%
Contractual Manpower Deployment (no. of employees)		4802	5895	6701

# **Rewarding our Employees**

DIAL has formulated its workforce policies, services and benefits keeping in mind the different requirements of its defined workforce segments and various statutes. The designing of policies has taken into account the diversity of employees. Some of the benefits are tailored to the needs of the diverse workforce include:

Category	Benefit	Segment
	Telephone Expense Reimbursement	All Segments
	Uniform Policy – Operation Staff	All Segments in Operation Services
	Travel Policy	All Segments
Work Related	Attendance Policy - Operation Staff	Middle Management
	Attendance Policy - Support Staff	Middle Management
	Conveyance Policy	All Segments
	Laptop Policy	Middle & Senior Management
	Company Lease Accommodation	Middle & Senior Management
	Corporate Club Membership	Senior Management
Work Environment	Flexible Compensation and Benefit Plan	All Segments
	Rewards and Recognition Policy	Junior & Middle Management
	Corporate Governance	All Segments
	Leave Travel Assistance	All Segments
	Medical Expense Reimbursement	All Segments
	Leave Entitlements	All Segments
	Marriage Gifts	All Segments
Work-life Balance	Employee Emergency Response Centre	All Segments
work-life Balance	Executive Health Checkup	Middle & Senior Management
	Stress Management Trainings	All Segments
	Health Checkup Camp	All Segments
	Blood Donation Camp	All Segments
	Foundation Day Celebration	All Segments
	Mediclaim Insurance	All Segments
Medical Insurance	Group Personal Accident Insurance	All Segments
	Family Pension through Group Insurance Scheme	All Segments
	TR/Career Planning	Middle & Senior Management
	Professional Development Dialogue	Middle & Senior Management
C	Succession Planning	Middle & Senior Management
Career Development	Competency-based Technical Trainings based on TNI	All Segments
	Behaviour and Leadership Trainings	All Segments
	Performance Management Process	All Segments
	Employees' Superannuation Scheme with LIC	All Segments
Social Security Schemes	Gratuity	All Segments
Schemes	Provident Fund, ESI	All Segments

# In addition to the above policies, DIAL provides facilities for:

- ≫ Crèche
- ⋟ Gym
- 🎾 Canteen
- Semigrative Emergency Management Centre
- A shuttle service for employees to commute between the office area to the Terminals

DIAL regularly organises events like Kids' carnival for employees' children, health check-ups, World Diabetic Day, International Women's Day, Joy of Giving Week, Sports and similar events as Employee Engagement activities to create a feeling of working together as a family. DIAL also participates in various open corporate tournaments. Employees are also entitled to avail parental leave.

DIAL has embarked on the journey of "Great Place to Work" (GPTW). We have adopted various activities and process under different pillars of engagement like:

#### **Cross-functional Dialogue:**

- SKIP level meetings,
- > Job Rotations of high potentials,
- Promotions of Values and Belief,
- Staff dialogues with HODs etc.

#### **Employee Interaction**

At DIAL, two-way communication is encouraged through regular forums such as Top Management / Senior Leadership Communication; Skip Level Meetings, CEOs interactions with work groups, Idea Factory & Departmental monthly communication led by the Departmental Head, Performance Management Process (PMP) dialogue process, Employee Engagement surveys & follow-up by interaction with employees through focus group discussions on an on-going basis.

We focus on building an engaging and motivating work culture by celebrating various festivals, and arranging sports meet, cross functional dialogue platform, star employee lunch, kids' carnival and women's day among others. During the year, we organised Pratibha, our first talent show, to provide employees a chance to continue exploring and nurturing their personal talent. An entertaining, engaging, fun-filled event, Pratibha was arranged by a team of 12 cross functional members and few senior leadership team members. It was received with immense enthusiasm with high participation and commitment across all levels.

#### **Employee Training and Career Development**

DIAL as an organisation has always given emphasis on upgrading the skills of its employees by ensuring development of internal talent. Employee's goals and responsibilities are identified during the Performance Management Process in the annual and mid-year appraisal through self-assessment, and are further validated by their respective appraiser. Capability building of the team is an integral part of PMP process.

DIAL as an organisation has always given emphasis on upgrading the skills of its employees ensuring development of internal talent. High performing employees are job rotated in positions to create



Sustainability Report 2017-18 | 83

a talent pipeline for critical positions. Employees are offered training opportunities through e-learning, classroom training, on-the-job training, special projects, coaching, business simulations & management development programmes etc.

DIAL has structured multi-tier leadership programmes like "Leader Development Programme", "Emerging Leader Programme", 'Young Leader Programme", "Transform Programme" and "Brand Transition Programme" for its employees in collaboration with institutes like IIMs, IMI, MDI, NIT and others with a formal certification process on successful completion. In order to provide scope for career progression for employees, DIAL employees also undergo training that is mandatory as per regulators. DIAL conducts 'Ethics & Fraud' awareness programmes for employees and its vendors in order to provide full knowledge of its detailed COBCE policy as laid down by the company. With a view to promote an open culture of whistleblowing, all new recruits are required to read, understand, accept and comply with the GMR Code of Business Conduct & Ethics (COBCE).

Retirement and other Employee Benefits:

- 🎾 Provident Fund
- Superannuation Fund
- ≫ Gratuity
- 🎾 Leave Benefits



# **Corporate Social Responsibility**

Corporate Social Responsibility (CSR) is an integral part of business at the Delhi Airport. CSR complements and supplements business efforts to make valuable contribution towards the society as a whole. The CSR activities of the DIAL follow an empowerment driven approach rather than a philanthropic approach and all the activities

## **Preventive Health Care & Sanitation**

#### **Health Centre**

The primary objective of the health centre at Savda Ghevra, is to ensure maternal and child health and spread awareness on topics such as ante-natal, post-

#### SAMARTH

SAMARTH Resource Centre provides institutional services like special education, speech therapy, basic physiotherapeutic care, counselling and

#### **Nutrition Centre**

Mrs. Varalakshmi Grandhi and Mrs. Smitha Raju inaugurated the Nutrition Centre at Savda Ghevra J.J. Colony on 31<sup>st</sup> August, 2017. The programme in this Centre focusses on providing healthy

#### **Mobile Medical Units**

DIAL-CSR has launched two Mobile Medical Units in Delhi in September 2017, in association with Help-

#### Life Skill Education Programme

Under the Life Skill Education Programme in Savda Ghevra, DIAL-CSR aims to provide information, referral and counselling services to adolescents,

#### **CSR Highlights**

	<b></b>
2016-17	2017-18
• Every month, 75-80 beneficiaries availed the health care services at the Health Centre in Savda Ghevra	<ul> <li>142 beneficiaries availed the health care services at the Health Centre in Savda Ghevra</li> </ul>
<ul> <li>More than 326 beneficiaries availed physiotherapy services at Samarth Centre</li> </ul>	<ul> <li>223 beneficiaries availed physiotherapy services at Samarth Centre</li> </ul>
<ul> <li>20 differently-abled children enrolled in the SAMARTH programme at Savda Basthi Vikas Kendra</li> </ul>	<ul> <li>25 differently-abled children enrolled in the SAMARTH programme at Savda Basti Vikas Kendra</li> </ul>
<ul> <li>8 children with special needs underwent speech therapy</li> </ul>	<ul> <li>9 children with special needs underwent speech therapy</li> </ul>
• 243 youth benefited from the Life Skill Education Programme	• 100 Individual Sanitary Latrines (ISL) were constructed for households to reduce open defecation in Savda Ghevra
	<ul> <li>2 Medical Mobile Units were launched in Delhi, benefiting about 6,000 community members</li> </ul>

are planned in communities in the vicinity of our businesses.

In FY 2017-18, DIAL celebrated 10 years of dedicated initiatives in CSR. CSR activities are managed professionally by a devoted and enthusiastic CSR team.

natal care and family planning. Ante-natal and postnatal care and check-ups were provided free of cost to women from the community.

facilitating access to the provisions of governmental schemes and policies entitled for Persons with Disabilities (PWDs).

supplementary nutrition and increased awareness on healthy diet, immunisation, gender sensitisation, child care, family planning and safe deliveries in the target area.

Age India. The mobile units run 5 days a week serving 26 locations in Dwarka and Rangpuri regions.

regarding sexual and reproductive health to help them make informed, positive, and safe choices about healthy relationships.

# **Promoting Education including Vocational Training:**

#### **Bala Badis:**

DIAL-CSR Balabadis works towards exploring the innate potential of every child believing that they are each unique. Currently, there are 4 Balabadis

#### After-School Learning Centre (ASLC):

To engage students in productive activities and harness their interest towards learning, DIAL-CSR organised After School Learning activities for school children. Along with the prescribed school

#### Minimum Learning Standard (MLS):

MLS focusses on improving the learning levels of children and bringing them at par with the expected level of learning in terms of their class. In the MLS programme, children between Standard I to

#### KidSmart Programme:

KidSmart Early Learning Centre is operational in a government school in Shahabad Mohammadpur. The KidSmart programme runs to provide quality education to children from disadvantaged - two in Savda Ghevra and one each at Shahabad Mohammadpur and Mehramnagar.

syllabus, children are encouraged to participate in extra-curricular activities. The After School Learning Centre is situated in Savda.

Standard V undergo an assessment, based on the minimum requirement for every class. Depending on the assessment, the children are allotted to level 1, 2 or 3.

communities. There are three educational corners in the KidSmart classroom, focussing on comprehensive learning where children are taught through medium technology, craft and story-telling.



#### Gifted Children (GC) Programme:

The Gifted Children scheme was launched in Delhi on 8<sup>th</sup> September, 2017. This initiative seeks to identify, encourage and financially support the education of meritorious under-privileged

#### Scholarship to Girls:

During FY 2017-18, 22 girls from financially marginalised families pursuing professional courses

children to enable them to realise their full potential through DIAL-CSR and sponsorship from GMR employees.

were given varying amounts of scholarship to enable them to complete their education.

#### **Pratibha Library**

DIAL-CSR provides a repository of books and conducts career counselling services for aspirants for employment or higher education at 'Pratibha Library-cum-Career Counselling Centre', Savda Ghevra. During the reporting period, 280 youth benefited from the facilities at Pratibha Library-cum-Career Counselling Centre'.

2016-17	2017-18
• Reaching out to 104 children within the age group of 3-5 years through 3 Balabadis	• Reaching out to 115 children in the age group of 3-5 years through 4 Balabadis
• 195 students from Std. VI to X benefited from the After School Learning Centres	• 148 students from Std. VI to X were assisted by the After School Learning Centres
• 84 students supported under the Minimum Learning Standard (MLS) programme	• 158 students were supported under the Minimum Learning Standard (MLS) programme
• 393 students benefited at The KidSmart Early Learning Centre in Shahabad Mohammadpur	• The KidSmart Early Learning Centre benefited 330 students
• 86 children could avail clean drinking water through Water filter installed in 3 Anganwadis	• 22 girls from uunderprivileged families, pursuing professional courses were provided with scholarship to complete their education
	<ul> <li>The Gifted Children programme was launched in Delhi.</li> <li>25 economically marginalised, meritorious students were adopted</li> </ul>

## **Empowerment & Livelihood**

#### Support to Individuals for Entrepreneurship

This programme supports self-entrepreneurship by providing partial financial and handholding support and assures ownership of the venture by the beneficiaries. 25 marginalised and disadvantaged individuals from the community were selected through a rigorous process and provided with financial assistance to support existing businesses or to initiate suitable livelihood programmes.

#### **Gender Equality through Women Empowerment**

#### **Enabling Marketing of Products of Women Entrepreneurs (Empower):**

A Centre for Stitching clothes is provided to community women near the airport area. These products are then sold in the Empower shop at the airport terminal in Delhi and Hyderabad.

#### Community-Based Functional Literacy (CBFL):

CBFL is a programme initiated by DIAL-CSR and supported by Tata Consultancy Services to improve literacy level among women in the community

#### SAHELI:

SAHELI is an initiative to assist women from the community at Savda Ghevra to have free access to information on sexual and reproductive health.

#### Support to Women for Entrepreneurship:

10 women were provided financial assistance to improve their existing livelihoods. The beneficiaries were selected through a rigorous process including Market linkages for selling these products are also facilitated. The profit earned post sale of products is distributed to the women involved in the production of these goods.

and promote adult education. 40 adult women benefited from the CBFL programme during this reporting period.

Women also come to the centre to utilise the tailoring machines and learn skills required to work in beauty parlours.

skills, their ambition and eagerness to engage in an individual venture and earn independently.

#### Centre for Empowerment and Livelihood (CEL-D)

DIAL-CSR runs the "Centre for Empowerment and Livelihood" to impart market relevant employable skills and training to underprivileged drop-out youth within the age group of 18-30 years. The Centre spread over 10,000 square feet area is well equipped with classrooms, hostel, mess, workshed, library, seminar hall, playground, open gym and recreational centre. DIAL CSR unit has created partnerships with some of the industry leaders to create employment opportunities for the students.

2016-17	2017-18
• 795 youth trained and completed various courses at the CEL-D, out of which 739 youth have been placed achieving a successful placement rate of 92.95%	• 1,013 youth completed various courses at the CEL-D out of which 925 youth have been placed, achieving a successful placement rate of 91.31%
• 26 women were trained in Computer training through the CBFL (Computer-Based Functional Literacy) programme supported by Tata Consultancy Services, Delhi	<ul> <li>40 women were trained in Computer Skills through the CBFL (Computer-Based Functional Literacy) programme supported by Tata Consultancy Services, Delhi</li> </ul>
• 45 women were empowered through training in designing and making different products; facilitated the marketing of these products to improve their income	• 45 women were empowered through training in designing and making different products, as also providing a market for these products, to improve their livelihood
	<ul> <li>10 women have been provided with financial assistance to invest in self-entrepreneurship ventures</li> </ul>
	• 25 marginalised and disadvantaged individuals were given financial assistance to improve or initiate livelihood programmes

# **Community Development**

DIAL-CSR team is running Community Resource Centre (CRC) at Savda Ghevra to help community to get access to Government schemes by giving them relevant information and by providing resources for leisure and recreation like library, computers, information dissemination, documentary films, folk tales, technical assistance and training on issues important to their living





# **Environmental Sustainability Initiative**

DIAL-CSR team has constructed rainwater harvesting structures in two government schools located at

# Shahabad, Mohammadpur to conserve water and improve ground water level in the surrounding area.

# **Employee Engagement**

Social Responsibility is one of the seven core values of the GMR Group. Since the Group's inception, employees have been encouraged to contribute personal time for community development programmes. This year, focus was given to initiatives like Road Safety Programme, Environment Awareness programme, session on water treatment, Recognition of Prior Learning programme and Yoga session, training on workplace management etc. At the community level, programmes like "Joy of Giving Week", "World Food Day Celebration" and similar worthy events were organised.

2016-17	2017-18
• 70 employee engagement programmes were initiated during the reporting period	• 84 employee engagement programmes were initiated during the reporting period
• 735 employee volunteers and family members contributed 2,667 hours towards participating in community development activities	• 1,174 employee volunteers and family members contributed 2,989 hours towards participating in community development activities
	<ul> <li>5 community development projects were successfully implemented by employees</li> </ul>

# **Calendar Year Data**

#### Passenger million:

	2016	2017	2018
Domestic Pax movement (Million)			
Departing	20.50	23.50	25.78
Arriving	20.02	22.99	25.48
International Pax movement (Million)			
Departing Arriving	7.62	8.60	9.50
	7.35	8.22	9.05
Transit Pax (Million)	0.14	0.08	0.08

#### Cargo million:

	2016	2017	2018
Domestic Cargo Tonnage (in Million)			
Export	0.19	0.19	0.21
Import	0.11	0.11	0.13
International Cargo Tonnage (in Million)			
Export	0.27	0.32	0.34
Import	0.26	0.31	0.32

#### ATM numbers:

	2016	2017	2018
Aircraft Movements (Domestic)	285794	322561	349768
Aircraft Movements (International)	92159	106842	114218
General Aviation	14954	14088	13878
Defence	4867	4420	2843

#### Energy:

Fuel	2016	2017	2018
Fuel			
Diesel (GJ)	12448	11437	14564
Petrol (GJ)	862	1011	1037
CNG (GJ)	1044	876	930
Electricity (MWh)	128016	152000	154318
Passenger (Million)	55.68	63.5	68.90
Direct Energy Consumption (GJ/Pax)	258	210	240
Indirect Energy Consumption (Million kWh/Million Pax)	2.30	2.40	2.24

#### **Emission:**

Parameter	2016	2017	2018
Scope 1 (Direct Emission) tCO <sub>2</sub>	1066	995	1238
Scope 2 (Indirect Emission)	104653	115991	98975
KgCO <sub>2</sub> /Passenger	1.90	1.84	1.45

## Water:

The reused water data on CY basis is presented below -

Year	2016	2017	2018
Recycled water (ML)	1098	1330	1441
Reused	100%	100%	100%

# **List of Abbreviations**

AAI	Airports Authority of India	FY	Financial Year
ACI	Airport Council International	GBEM	GMR Group Business Excellence Model
ACLC	Airport Cargo Logistics Centre	GCM	Group Chairman
AEMC	Airfield Environment Management Committee	GDP	Gross Domestic Product
AEP	Airport Emergency Plan	GHB	Group Holding Board
AERA	Airports Economic Regulatory Authority	GHG	Greenhouse Gas
AODB	Airport Operational Database	GMRVF	GMR Varalakshmi Foundation
AOSS	Airport Operators Sector Supplement	GRI	Global Reporting Initiative
APU	Auxiliary Power Unit	HR	Human Resource
ARFF	Airport Rescue and Fire Fighting	HVAC	Heating, Ventilating, and Air Conditioning
ARMS	Airport Ramp Management and Safety	IATA	International Air Transport Association
ASP	Airport Karip Management and Safety	IBMS	Integrated Building Management System
		ICAO	
ASQ ASSOCHAM	Airport Service Quality	1	International Civil Aviation Organisation
	Associated Chambers of Commerce and Industry of India	IGIA	Indira Gandhi International Airport
ATC	Air Traffic Control	ISO	International Organisation for Standardisation
ATF	Aviation Turbine Fuel	КМ	Knowledge Management
ATM	Air Traffic Management	KPI	Key Performance Indicators
BCM	Business Chairman	LEED	Leadership in Energy and Environment Design
BCMS	Business Continuity Management System	MAG	Management Assurance Group
BCP	Business Continuity Plan	МАНВ	Malaysia Airports Holdings Berhad
BGR	Boarding Gate Reader	MoCA	Ministry of Civil Aviation
BHS	Baggage Handling System	MW	MegaWatt
BRS	Baggage Reconciliation System	NBSMC	National Bird Control Committee
CAMS	Carbon Accounting & Management System	NCAER	National Council of Applied Economic Research
CEO	Chief Executive Officer	NCASP	National Civil Aviation Security Programme
CII	Confederation of Indian Industry	NCR	National Capital Region
CIP	Continuous Improvement Programmes	NMT	Noise Monitoring Equipment
CISF	Central Industrial Security Force	OHSAS	Occupational Health and Safety Management System
CLIT	Cleaning, Lubrication, Inspection & Tightening	OTP	On-Time Performance
CMS	Complaint Management System	PMP	Performance Management Process
COBCE	Code of Business Conduct & Ethics	PPP	Public Private Partnership
C00	Chief Operating Officer	QSD	Quality Service & Delivery
CPD	Commercial Property Development	RMS	Risk Management System
CSR	Corporate Social Responsibility	SCCBE	Supplier Code of Conduct & Business Ethics
CUPPS	Common Use Passenger Processing Systems	SCM	Steering Committee Members
CUSS	Common Use Self Service Kiosks	SCM	Supply/Service Chain Management
CUTE	Common Use Terminal Equipment	SCT	Sustainability Core Team
CY	Calendar Year	STP	Sewage Treatment Plant
DA-CDM	Delhi Airport-Collaborative WDecision Making	Т3	Terminal 3
DDMA	Delhi Disaster Management Agency	TERI	The Energy and Resources Institute
DGCA	Directorate General of Civil Aviation	TSP	Terminal Storage Processing
DIAL	Delhi International Airport (P) Limited	UFIS	Universal Flight Information System
EMS	Environment Management System	UNFCCC	United Nations Framework Convention on Climate Change
ERM	Enterprises Risk Management	USA	United States of America
	Fixed Electrical Ground Power	WB	Whistle Blower

# **GRI Content Index**

Disclosure	Disclosure Title	Chapter	Page No.
	General Disclosure	25	·
102-1	Name of the organisation	World's No. 1 Airport	5
102-2	Activities, brands, products, and services	World's No. 1 Airport	5
102-3	Location of headquarters	World's No. 1 Airport	5
102-4	Location of operations	World's No. 1 Airport	5
102-5	Ownership and legal form	World's No. 1 Airport	5
102-6	Markets served	A Global Hub	6
102-7	Scale of the organisation	Enhancing Quality of Life	85
102-8	Information on employees and other workers	Making DIAL A Great Place to Work	85
102-9	Supply chain	Supply chain	67
102-10	Significant changes to the organisation and its supply chain		1
102-12	External initiatives	DIAL's Sustainability Framework and UN Sustainable Development Goals (SDGs)	32-33
102-13	Membership of associations	Industry Association	31
102-14	Statement from senior decision-maker	CEO message	10,11
102-16	Values, principles, standards, and norms of behaviour	Vision & Mission	26
102-18	Governance structure	Governance & Management	23
102-40	List of stakeholder groups	Table	28-29
102-41	Collective bargaining agreements	Making DIAL A Great Place to Work	84-85
102-42	Identifying and selecting stakeholders	Approach to Stakeholder categorisation	28
102-43	Approach to stakeholder engagement	Table in page 16	27
102-44	Key topics and concerns raised	Materiality Matrix	34
102-45	Entities included in the consolidated financial statements	NA	NA
102-46	Defining report content and topic Boundaries	About the Report	1
102-47	List of material topics	Materiality Matrix Chart	34
102-48	Restatements of information	NA	NA
102-49	Changes in reporting	NA	NA
102-50	Reporting period	About the Report	1
102-51	Date of most recent report	About the Report	1
102-52	Reporting cycle	About the Report	1
102-53	Contact point for questions regarding the report	About the Report	1
102-54	Claims of reporting in accordance with the GRI Standards	About the Report	1
102-55	GRI content index	GRI content index	96
102-56	External assurance	External assurance	94

	Management Appro	pach	
103-1	Explanation of the material topic and its Boundary	Materiality Matrix	35
103-2	The management approach and its components	Sustainability Framework Transforming our business Service Excellence Care for Environment Enhance Quality of Life	16, 38, 50, 70, 84
103-3	Evaluation of the management approach	Sustainability Framework Transforming our business Service Excellence Care for Environment Enhance Quality of Life	16, 38, 50, 70, 84
	Transforming Our Bu	siness	
201-1	Direct economic value generated and distributed	Transforming our business	45
203-2	Significant indirect economic impacts	Transforming our business	46
	Care for Environm	ent	
302-1	Energy consumption within the organisation	Care for Environment	73
303-3	Water Recycled and Reused	Care for Environment	77
305-1	Direct (Scope 1) GHG emissions	Care for Environment	72
305-2	Energy indirect (Scope 2) GHG emissions	Care for Environment	72
305-5	Reduction of GHG emissions	Care for Environment	73-74
306-1	Water discharge by quality and destination	Care for Environment	78
306-2	Waste by type and disposal method	Care for Environment	80
	Enhancing Quality o	f Life	
401-1	New employee hires and employee turnover	Enhancing quality of Life	84
404-2	Programmes for upgrading employee skills and transition assistance programmes	Enhancing quality of Life	87
	assistance programmes		



# **ASSURANCE STATEMENT**

#### SGS INDIA PRIVATE LIMITED'S STATEMENT ON SUSTAINABILITY ACTIVITIES IN THE DELHI INTERNATIONAL AIRPORT LIMITED SUSTAINABILITY REPORT FOR FINANCIAL YEAR 2016-17 AND FINANCIAL YEAR 2017-18

#### NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION:

SGS India Private Limited (SGS) has been commissioned by Delhi International Airport Limited (DIAL) to conduct an independent assurance of its Sustainability Report for FINANCIAL YEAR 2016-17 AND FINANCIAL YEAR 2017-18 ("the Report"). The Report articulates DIAL's sustainability commitments and efforts during the period 1<sup>st</sup> April 2016 to 31<sup>st</sup> March 2017 & 1<sup>st</sup> April 2017 to 31<sup>st</sup> March 2018. The Report focuses on the material sustainability issues corresponding to DIAL's business in New Delhi India over which it has direct management control.

The aim of this verification is to provide a reasonable assurance on the reliability of the report content. The Report is prepared 'in accordance' with the Global Reporting Initiative (GRI) Standard and the Airport Operators Sector Supplement: in accordance with Core option.

#### **METHODOLOGY:**

The verification process included reviewing relevant documentation, interviewing responsible personnel and verifying supporting evidence of the selected data and information presented in the Report based on sampling. Other references such as DIAL Annual Report and other external publications were also cross examined. Accuracy and reliability of the sampled aggregated information and data were tested. Also, DIAL data management mechanism was reviewed to confirm the extent of reliability. The standard and guidelines for the verification process include:

• International Standard on Assurance Engagement 3000 (ISAE 3000) "Assurance Engagement Other Than Audits or Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board.

· GRI Standard and the Airport Operators Sector Supplement

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

**INDEPENDENCE AND COMPETENCE:**SGS was not involved in collecting and calculating data, or in the development of the Report. SGS's activities are independent from DIAL. There is no relationship between DIAL and SGS beyond the contractual agreement for providing the verification service.

#### COMPETENCES OF THE ASSURANCE TEAM

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with Quality Management System (QMS), Environment Management System (EMS), Occupational Health & Safety (OHSAS), Social Accountability (SA) and having rich experience and relevant qualification in the areas of Sustainability Reporting Assurance Verification and Validation Services

#### ASSURANCE OPINION AND CONCLUSION:

Based on the results of the verification process, it is confirmed that the Report has been prepared 'in accordance' with the GRI Standard and the Airport Operators Sector Supplement: in accordance with Core option. We are satisfied that the Disclosures on Identified Material Aspects and Boundaries and Stakeholder Engagement have been addressed in line with the Core requirements of GRI Standard.

The Report exemplifies DIAL commitment to continuous improvement by disclosing its sustainability accountabilities and performance in greater transparency. The report content was determined through a structured and systematic materiality assessment process in which various stakeholder groups were directly engaged. The most material issues are consolidated and presented in the Report.

Overall, the Report provides a balanced representation of DIAL sustainability performance in the reporting period. It is a prudent and reliable presentation of the material sustainability issues of DIAL in an inclusive and responsive manner.

#### **POSITIVE OBSERVATIONS:**

- Very Good Environmental data tracking.
- First carbon Neutral Airport in Asia Pacific Region.
- 'Centre for Empowerment and Livelihoods' CEL-D has very well directed courses & programs. It is doing excellent job to provide under-privileged in the community to learn Live hood Skills.

#### AREAS FOR IMPROVEMENT.

- Sustainability team, engaged for GRI report preparation may have more structured meetings. These meetings may be held at periodic intervals. Progress made towards sustainability goals may be reviewed in these meetings.
- Supplier monitoring tool can be developed for effective controls on Sustainability Parameters

Signed: For and on behalf of SGS India Private Limited

Nilesh Jadhav Director – Certification & Business Enhancement Mumbai, India October'2018

#### WWW.SGS.COM



#### FEEDBACK

We value your feedback and welcome comments on this report or any aspect of our approach to Sustainability Reporting

Please email us at :

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