Bangalore International Airport Private Limited

Response to AERA's Consultation Paper No. 05/ 2018-19 on Determination of tariffs for Aeronautical Services in respect of Kempegowda International Airport, Bengaluru, for the Second Control Period (01.04.2016 to 31.03.2021) dated 17.05.2018

July 6, 2018

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Disclaimer

This document has been prepared by Bangalore International Airport Private Limited ('BIAL') in response to Airports Economic Regulatory Authority of India's ('AERA' or 'the Authority') Consultation Paper No. 05/ 2018-19 on Determination of tariffs for Aeronautical Services in respect of Kempegowda International Airport Bengaluru ('KIAB' or 'KIA'), for the Second Control Period (01.04.2016 to 31.03.2021) ('the Consultation Paper' or 'CP') dated 17.05.2018.

The purpose of this document is to solely provide a response to the tentative decisions proposed by the Authority in the CP and should not be referred to and relied upon by any person against BIAL.

The response set out below to the CP shall not be construed by any entity as an acceptance by BIAL of the various assumptions undertaken by the Authority in the CP. The response is without prejudice to BIAL's rights, submissions, contentions available to it before various forums, including in proceedings already pending before the relevant authorities, including before the Hon'ble TDSAT.

1. Introduction

Airports Economic Regulatory Authority of India ('AERA' or 'the Authority') has released Consultation Paper No. 5 / 2018-19 on Aeronautical services in respect of Kempegowda International Airport Bengaluru ('KIAB' or 'KIA') for Second Control Period (01.04.2016 to 31.03.2021), ('Consultation Paper' or 'CP') on 17.05.2018.

A stakeholder consultation meeting was convened by the Authority on 18.06.2018 to elicit the views of all the stakeholders on the CP (Refer Annexure 1). At this stakeholder meeting, BIAL presented its preliminary position in respect of the major issues pertaining to determination of Aeronautical Tariffs for KIAB. Further, the Authority solicited written, evidence-based feedback, comments and suggestions from stakeholders including BIAL on the proposals contained in the CP.

We hereby present our observations, suggestions and request in respect of determination of Aeronautical Tariffs for KIAB for the Second Control Period.

2. Order of Telecom Disputes Settlement & Appellate Tribunal ('TDSAT' or 'Tribunal') New Delhi dated 24.05.2018 confirming that the Authority must have regard to the judgement of TDSAT dated 23.4.2018 in the case of Delhi International Airport Ltd. ('DIAL') while finalising tariff order for the Second Control Period of KIAB.

The Hon'ble TDSAT has issued an Order dated 24.05.2018 in Appeal No. 3/2014 in respect of the appeal filed by BIAL in relation to the tariff determination for the First Control Period in respect of KIAB (Refer Annexure 2).

As part of the order, the Hon'ble TDSAT has noted that an early appeal hearing in respect of the tariff determination for the First Control Period for BIAL may take place.

More importantly, considering that the Hon'ble TDSAT has noted that the consultation process for the tariff determination for BIAL in respect of the second Control Period is already underway, and held that "any authority, much less statutory authority, which is to regulate these matters shall have due regard to all the provisions of law including the judgement of this Tribunal."

Therefore, it is clear from the Hon'ble TDSAT's order that the Authority shall refer to the judgment and order of the Hon'ble TDSAT dated 23.4.2018 in the case of DIAL ('TDSAT Order') while carrying out the tariff determination exercise for BIAL for the second Control Period. The judgment of the Hon'ble TDSAT has clarified the law in relation to multiple aspects of tariff determination, which are applicable across the board to all tariff exercises. BIAL requests the Authority to consider the judgement of the Hon'ble TDSAT since a statutory authority is required to consider and apply the principles laid down by an expert tribunal that exercises appellate jurisdiction over the authority. In this case, appeals from orders or directions of the Authority are to be filed before the Hon'ble TDSAT under Section 18 of the Airports Economic Regulatory Authority of India Act, 2008 ('AERA Act'). Therefore, it would be apposite for the Authority to consider the position of law as clarified by the DIAL judgment and apply the principles to the ongoing tariff determination exercise in respect of BIAL. We also request the Authority to re-work the principles and computations for the first control period as well, so as to bring them in conformity with the judgment of the Hon'ble TDSAT.

On the applicability of the judgements of the aforementioned TDSAT Order in the ongoing tariff determination exercise for KIAB, BIAL sought an opinion from Justice Sirpurkar, retired judge of the Supreme Court of India and former chairperson of Airports Economic Regulatory Authority Appellate Tribunal (Refer Annexure 3). Justice Sirpurkar vide para 1.5 of the opinion note acknowledged the similarity of facts between DIAL and BIAL and that the issues considered by the Hon'ble TDSAT in the matter of DIAL were "almost identical". He further stated that despite the above, the Authority had not made any reference to the judgement while issuing the CP. Justice Sirpurkar after documenting the facts of the case opined that the Authority should have reference to the TDSAT Order and apply its principles to the ongoing tariff determination exercise for BIAL. An extract from the aforementioned opinion has been reproduced below,

"... Therefore, it would be apposite for AERA to consider the position of law as clarified by the DIAL judgment and apply the principles to the ongoing tariff determination exercise in respect of the Querist. Pendency of appeals challenging the first tariff order of AERA in the case of Querist cannot deter AERA from revising its views since it is doing so based on the order of Hon'ble TDSAT dated 24.05.2018. AERA will be especially fortified by the observations in the order dated 24.05.2018, by which, AERA is expected to consider the judgment/s of the Hon'ble TDSAT. Therefore, AERA is required to consider and apply the principles laid down in the DIAL judgment. The pendency of the appeals before the Hon'ble TDSAT should not preclude AERA from applying the principles laid down in the DIAL judgment and revising its views, if necessary, according to such principles...

1.9 I am therefore of the opinion that the judgment of Hon'ble TDSAT is bound to be taken into consideration by AERA white considering the proposals contained in Consultation Paper No.5/2018-19, in favour of the Querist."

Accordingly, we request the Authority to consider and apply the Hon'ble TDSAT's order in BIAL's appeal and give due regard to the principles adopted in the TDSAT Order while finalising the tariff order for the Second Control Period in respect of BIAL.

In the sections below, we are submitting our observations and submissions in respect of various positions proposed by the Authority, which we believe may have an impact on BIAL as an airport operator. These proposals may also have a significant impact on our ability to expand the airport infrastructure to cater to a growing demand and provide the desired level of services to the users of the airports.

We hereby present our observations, suggestions and request in respect of determination of Aeronautical Tariffs for KIAB for the Second Control Period.

- 3. Approach adopted towards Regulatory Till and principles of determination of Tariff
 - 3.1. Authority's Proposal No. 1.a
 - 3.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 3.1.1.1. To compute ARR under 30% Hybrid Till for the second control period
 - 3.1.1.2. To consider revenues from Cargo, Ground Handling and Fuel Farm services and Rentals from leasing of space to agencies providing Aeronautical services as Aeronautical revenues, and
 - 3.1.1.3. To consider revenues from Property development activities as Non-Aeronautical activity

3.2. BIAL's Response

- 3.2.1. On Authority's proposal to consider revenues from Cargo, Ground Handling and Fuel Farm services and Rentals from leasing of space to agencies providing Aeronautical services as Aeronautical revenues
 - 3.2.1.1. Treatment of cargo, ground handling and fuel farm ('CGF') and information, communication, technology ('ICT') and Common Infrastructure Charges ('CIC') services

AERA's Treatment

As per the CP, the Authority has provided the following for treatment of CGF:

- "2.5.1 As per the provisions of the AERA Act, the Authority considers the services rendered in respect of Cargo, Ground handling and supply of Fuel (CGF) as aeronautical services."
- "11.2.32 Authority notes that revenue from Cargo Ground Handling, Fuel Farm, ICT and CIC charges are considered as Aeronautical revenues by BIAL (sic)...
- 11.2.33 Accordingly, the Authority considers these revenues as Aeronautical Revenues."

BIAL's Response

Treatment of CGF, CIC and ICT Services and corresponding revenues as per BIAL's Concession Agreement

BIAL notes that the Authority has considered Cargo, Ground handling and supply of Fuel ("CGF") as aeronautical services without considering the provisions of the AERA Act, and especially Sections 13(1)(a)(vi) and (vii). Section 13(1)(a)(vi) provides that the Authority shall take into account concessions offered by the State in an agreement or otherwise. In this context, the Concession Agreement dated 05.07.2004 executed by the President of India through the Ministry of Civil Aviation ('Ministry') provides specific concessions to BIAL that only certain services, which are included within the ambit of 'regulated charges', will be regulated and in respect of all other activities, BIAL shall remain free without any restrictions to undertake the same.

To elaborate, Schedule 6 of BIAL's Concession Agreement ('CA') contains a list of "Regulated Charges" and clause 10.3 of the CA states that "BIAL and/or Service Provider Right Holders shall be free without any restriction to determine the charges to be imposed in respect of the facilities and services provided at the Airport or on the Site, other than the facilities and services in respect of which Regulated Charges are levied." In other words, the CA states that except for regulated charges, BIAL shall be free without any restriction to undertake all other activities.

The powers of the Authority defined under Section 13(a) of the AERA Act states that the Authority must determine tariffs considering concessions offered by the Central Government. An extract of the abovementioned provision has been quoted below,

"to determine the tariff for the aeronautical services taking into consideration — ...

... (vi) The concession offered by the Central Government in any agreement or memorandum of understanding or otherwise;"

The sanctity of Concession Agreements has also been upheld in the recent TDSAT Order dated 23.04.2018 . Para 31 of this Order states that the concessions offered under the two agreements OMDA and SSA deserve consideration by the Authority in a judicious, fair and transparent manner. An extract of Para 31 of the TDSAT Order is as reproduced below,

"In exercise of this power, AERA is required to respect rights/concessions flowing from lawful agreements / instruments / directives of Central Government on policy matters."

Further, Para 36 of the TDSAT Order makes it binding on the Authority to take into consideration the various concessions given to the airport operator. The order says "Since a contractual right/claim has the backing of law, it deserves clear respect."

In line with the judgment of the Hon'ble TDSAT, the CA and the specific concession granted in Article 10.3 in favour of BIAL has to be reckoned by the Authority under section 13(1)(a)(vi). The concession demands that CGF services be kept outside the ambit of regulation. Section 2 begins with a phrase "unless the context otherwise requires"- the context in this case inter alia refers to the concession granted to BIAL under the CA. Any other interpretation would lead to a situation where the freedom to determine charges as per Clause 10.3 of the CA is undermined if activities other than those mentioned in Schedule VI are regulated. Under the CA, BIAL is entitled to carry on CGF and also ICT and CIC activities without regulation. Accordingly, considering CGF, ICT and CIC services and their corresponding revenues as aeronautical would amount to them being treated as "Regulated Charges". Therefore, regulation or tariff determination in respect of such services or reckoning the services as aeronautical is directly contrary to the concessions granted under the CA.

Further, there is no cross-subsidy envisaged in Article 10.3 of the CA, which envisages a dual till. BIAL has agreed for a 30% Shared Revenue Till ('SRT') as a workable solution. In the given circumstance, shifting a charge appearing under "other" charges to a "regulated" charge would be a subsequent setback for BIAL. Hence, treatment of CGF, ICT and CIC services as aeronautical by the Authority would be in violation of the CA.

While BIAL's position is that tariff in respect of the said services should not be determined at all, at the very least, in order to bring about level playing field, since the Hon'ble TDSAT has, in the case of DIAL, held that revenue from Cargo, Fuel Farm and Ground Handling Services would be required to be treated as non-aeronautical revenue, the same position ought to be applied for BIAL as well.

BIAL, therefore, states that section 13(1)(a)(vi) be given effect to by keeping CGF services outside the ambit of regulation without prejudice, and in any event parity and level playing field demand that revenues from the said services like in the case of Mumbai International Airport Limited ('MIAL') and DIAL be treated as revenue from non-aeronautical services.

A review of the Airports Infrastructure Policy, 1997, the 2003 amendments to the Airports Authority of India Act, 1994 which are also to be considered as concessions within the meaning of Section 13(1) (a)(vi) and (vii) assure necessary freedom to entrepreneurs to run the airport/s as a private airport/s with minimal regulation. The CA was executed in this backdrop and when all the circumstances are seen together, there is one inevitable conclusion that the concessions offered to

BIAL should be enforced by the Authority, so that the tariff determination exercise complies with Section 13(1)(a)(vi) and (vii).

We also note that the Authority, while considering CGF services as aeronautical, referred to a letter issued by the Ministry to the Authority dated 24.09.2013 in respect of Consultation Paper No. 14/2013-14 for tariff determination for the First Control Period of BIAL. An extract of this letter is given below,

"... The revenues from cargo, ground handling services and fuel supply which are defined as Aeronautical Services in the AERA Act, 2008 may be reckoned as Aeronautical Revenues and considered accordingly irrespective of the providers of such Aeronautical Services."

BIAL submits that the letter issued by the Ministry refers to the AERA Act while taking such a position. However, the letter issued by the Ministry does not consider Section 13(1)(a)(vi). The letter issued by the Ministry cannot be construed in a manner so as to render a statutory provision nugatory. Additionally, the letter of the Ministry does not consider the import of the phrase "unless the context otherwise requires". The Ministry also does not consider the concession granted to BIAL under the CA. The Ministry letter does not indicate how the concessions granted ought to be factored in the tariff determination exercise. Therefore, the Ministry's letter cannot be considered while considering the issue of treatment of CGF services. In any event, subsequently, the Ministry has taken a specific position in the case of MIAL and DIAL that the OMDA and SSA ought to be respected. It is the Ministry's view, which has been upheld by the Hon'ble TDSAT, wherein it has unambiguously held that the concessions must be respected unless there is an irrevocable conflict. It is, therefore, the test of "irreconcilable conflict" that has to be applied while construing the concession granted to BIAL in respect of CGF services. By applying this test as stated above, the services should not be regulated at all. Therefore, in view of the subsequent stance adopted by the Ministry with regard to the concessions granted and in view of the subsequent judgement of the Hon'ble TDSAT, CGF services ought to be considered as non-aeronautical services.

In addition, BIAL has sought an opinion from Justice Sirpurkar (Refer Annexure 3), on the issue of treatment of CGF services. The rationale provided by Justice Sirpurkar corroborates the fact that CGF services should be treated as non-aeronautical services based on harmonious reading of the CA with the AERA Act. An extract from the submission has been reproduced below,

"Following the ratio in the decision of the Hon'ble TDSAT that agreements and concessions granted are to be respected, and especially considering that Section 2 of the AERA Act commences with the phrase 'unless the context otherwise requires', CGF services should be kept outside the purview of regulation. In the alternative, Section 2, Section 13 and the Concession Agreement can be harmoniously read by treating revenue from CGF services as non-aeronautical revenue in the hands of the Querist."

Further, Justice Sirpurkar also noted that the AERA Act provides flexibility in its definition of aeronautical service based on the context of the individual airport. An extract from his opinion has been reproduced below,

"In expressing this opinion, I lay stress on the opening clause in Section 2 of the AERA Act to the following effect "unless the context otherwise requires". Hence, in the present case, that context has to be construed as the previous Concession Agreement."

Based on the above rationale, learned Justice Sirpurkar has opined that CGF services would be required to be treated as non-aeronautical in the case of BIAL similar to what was done in the case of DIAL. An extract in this regard is given below,

"I am therefore of the opinion that as held in the case of DIAL by the Hon'ble TDSAT, revenue from Cargo, Fuel Farm and Ground Handling Services would be required to be treated as non-aeronautical revenue."

BIAL Submission

Based on the above, BIAL requests the Authority to consider activities pertaining to provision of CGF, CIC and ICT services as non-aeronautical services and correspondingly, any revenues from such activities as non-aeronautical revenues.

3.2.1.2. Treatment of lease rentals from aeronautical service providers

AERA's Treatment

"2.5.4 The Authority also proposes to consider any revenue earned by BIAL from Concessionaires providing Aeronautical services as Aeronautical revenues (For ex. space to AAI etc.)."

BIAL's Response

BIAL would request the Authority to consider the nature of revenue and the end use of the space before determining whether the service is aeronautical or non-aeronautical in nature and consider any rentals from spaces like airline back offices / ticketing counters / training centres etc. as non-aeronautical revenues. For example airline offices for administration, training etc. at the terminal / airport, are not necessarily required in the vicinity of the airport for the airline to function and provide aeronautical services. Airlines have also started placing their ticketing offices in the city besides having one in the terminal building of airports. Provisioning of space for such offices within the airport / terminal would not change the nature of activity, which is similar to commercial real estate. The end purpose of such a venture is not to provide an aeronautical service but to generate non-aeronautical revenues such as lease rentals from various commercial entities such as hotels, car rentals etc. apart from airlines. Hence, lease rentals from commercial spaces should not be considered as aeronautical revenue in the hands of the airport.

Treatment of lease rentals from aeronautical service providers as per AERA & International Civil Aviation Organization ('ICAO')

The Authority vide its CP included airline offices within non-aeronautical services. An extract of Para 2.4.1 of the CP has been presented below,

"2.4.1 ... As an illustrative list, the non-aeronautical services and activities would include duty free shopping, food and beverages, retail outlets, public admission fee for entry into the terminal, hotel, if any provided inside the terminal building, banks, ATMs, **airlines offices**, commercial lounges, spa, car parking, etc. The Authority is aware that this is not an exhaustive list. In addition to the above, individual airport operator may innovate and add more non-aeronautical services so as to improve the passenger conveniences or enhancing ambience of the airport and terminal building."

Further, the Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 ('Airport Guidelines') issued by the Authority acknowledge that airline offices come within the ambit of "Commercial office areas" which as per Form F3 of the above Guidelines are treated as "Revenue Generating Areas" alongside retail, advertisement, ticketing, duty free shops and car parking. An extract from the Airport Guidelines is presented below,

"A5.4.1.7. Existing floor area III square meters of passenger terminal buildings broken down into revenue generating areas for example:

- (a) Retail areas
- (b) Commercial office areas (airlines, other airport Users)
- (c) . Advertisement areas
- (d) Ticketing areas

- (e) Duty free areas
- (D Car Parking Facilities
- (g) Air Cargo Facilities"

Also, ICAO's Airport Economics Manual (Doc 9562), provides a list of "Revenues from non-aeronautical activities". It is pertinent to note that para 4.23 of the Manual containing this list of non-aeronautical activities includes rentals payable by aircraft operators for airport-owned premises and facilities (e.g. check-in counters, sales counters and administrative offices) other than those already covered under "air traffic operations". Further, the Manual explicitly defines Revenues from non-aeronautical sources to include commercial arrangements even though they may apply to activities that may themselves be considered to be of an aeronautical character. The definition from the Manual has been provided below,

"Revenues from non-aeronautical sources. Any revenues received by an airport in consideration for the various commercial arrangements it makes in relation to the granting of concessions, the rental or leasing of premises and land, and free-zone operations, even though such arrangements may in fact apply to activities that may themselves be considered to be of an aeronautical character (for example, concessions granted to oil companies to supply aviation fuel and lubricants and the rental of terminal building space or premises to aircraft operators). Also intended to be included are the gross revenues, less any sales tax or other taxes, earned by shops or services operated by the airport itself."

Based on the above extracts from the Airport Guidelines, CP and ICAO's Airport Economics Manual, there appears to be no reason for considering lease rentals from airlines / concessionaires providing aeronautical services as aeronautical revenues. Lease rentals by virtue of their nature are non-aeronautical, and the Authority has treated them as non-aeronautical in case of Second Control Period for DIAL, MIAL and also in the Authority's recent Consultation Paper No. 30/2017-18 for the Second Control Period of Hyderabad International Airport Limited ('HIAL'). In the circumstance, there is no reason for a deviation from the above treatment in the case of BIAL.

Further, BIAL submits to the Authority that the capital costs incurred towards construction of spaces given out on lease have been considered as non-aeronautical assets as per the asset allocation methodology adopted by BIAL. Considering the above as aeronautical revenue but the corresponding asset base as non-aeronautical would be inconsistent.

BIAL's Submission

BIAL would submit to the Authority to consider lease rentals as non-aeronautical revenues despite them being collected from aeronautical service providers.

3.2.2. Authority's proposal to consider revenues from Property development activities as Non-Aeronautical.

3.2.2.1. Treatment of Property Development as a non-aeronautical activity

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the revenues from property development:

"iii. To consider revenues from Property development activities as Non-Aeronautical activity."

BIAL's Response

No Power to regulate Non-Airport Activity

The Authority has been constituted to regulate aeronautical services. The preamble to the AERA Act 2008 states, "An Act to provide for the establishment of and Airport economic Regulatory Authority to regulate tariff and other charges for the Aeronautical service rendered at the airport......."

Section 13 provides that tariff determination is a function of the Authority. For this function, the Authority has been conferred with powers, *inter alia*, under section 14 of the Act. The Authority, therefore, has limited jurisdiction and it is impermissible for the Authority to directly or indirectly regulate, reckon or consider non-airport activities.

Section 13(1)(a)(v) requires the Authority to consider revenue received from services other than aeronautical services. Section 13(1)(a)(v) is however conditioned by Section 13(1)(a)(v) and the proviso to the 13(1)(a). The services are to be provided as per section 13(1)(a) by major airports. Non-airport activity such as real estate development activity cannot be rightly said to be a service provided by the airport. The word 'Airport' is defined under the AERA Act under section 2(b) and the definition is a restrictive one.

'Airport' means a landing and taking off area for aircrafts, usually with runways and aircraft maintenance and passenger facilities and includes an aerodrome as defined in clause (2) of section 2 of the Aircraft Act, 1934 (22 of 1934)

The word "means" denotes the limited scope of the definition. Non-airport activities going by the classification provided under the Act do not fall within the definition of 'Airport' under section 2(b) and, therefore, cannot be construed as services provided by a major airport. Accordingly, section 13(1)(a)(v) does not and cannot permit reckoning revenue whether in part or in full, from non-airport activities or activities that do not fall within the definition of "airport" under section 2(b) of the Act.

Provisions of Land Lease Deed ('LLD') and CA

Without prejudice to the above, Clause 4.1 of the LLD permits BIAL to undertake both airport and non-airport activities without seeking prior permission. It states that,

"KSIIDC hereby grants permission and consent, to BIAL to use the Site, and BIAL agrees to use the Site in accordance with the Master plan, for the carrying of the Activities...."

As per Schedule 3 Part B of BIAL's CA, commercial property development including hotels, SEZs, business parks, commercial buildings, and commercial complexes have clearly been defined as a non-airport activity. An extract from the CA signed for KIAB is as reproduced below,

"Part 2 - Non-Airport Activities

Non-Airport Activities include the following services, facilities and equipment:

Airport Shuttle transport services (Hotels, City Centre etc.)

Business Parks

Hi-Tech Parks

Hotels

Industrial Parks
Commercial Buildings
Special Economic Zones
Commercial Complexes
Golf Course
Country Club
Food Silos
Independent Power Producing
Production centres like manufacturing factories."

The above non-airport activities also forms part of the CA and are set out in Schedule 3, Part 2. Thus, there is no prior permission /approval required to carry out the non-airport Activities. As per Clause 4.2 of LLD, BIAL can undertake activities other than those mentioned in Clause 4.1 with the prior permission/approval of KSIIDC.

Further, the LLD provides that the "CA excluded area" means that portion of the site containing those Non-Airport Activities not being taken over by the Government of India ('GoI') pursuant to Articles 7.2 or 13.5.2 of the Concession Agreement". The "CA excluded area" would not need to be transferred to along with the other assets of BIAL in case the airport is transferred to GoI. The relevant extract from Clause 3.5 of the LLD corroborating the above is reproduced below,

"3.5 In the event that the Airport is transferred to Gol in accordance with the provisions of Article 13.5 of the Concession Agreement, then upon such transfer, BIAL shall be deemed to have surrendered the Site (with the exception of the CA Excluded Area) and this Deed shall terminate with respect to the surrendered part and KSIIDC shall be at full liberty to deal therewith in the manner it chooses. With regard to the CA Excluded Area, KSIIDC and BIAL will meet to settle the commercial terms for the continuance of the lease in respect of the CA Excluded Area and KSIIDC shall ensure that BIAL has the fights of access necessary for access to the CA Excluded Area."

A definition similar to "CA excluded area" is provided in the LLD for the term "SSA excluded area". An extract from the LLD confirming that "SSA excluded area" would remain with BIAL in the event the airport is transferred to Government of Karnataka ('GoK') is given below,

"3.4 In the event that the Airport is transferred to GoK in accordance with the provisions of Clause 19.4 of the State Support Agreement then upon such transfer, BIAL shall be deemed to have surrendered the Site (with the exception of the SSA Excluded Area) and this Deed shall terminate with respect to the surrendered part and KSIIDC shall be at full liberty to deal therewith in the manner it chooses. With regard to the SSA Excluded Area, KSIIDC and BIAL will meet to settle the commercial terms for the continuance of the lease in respect of the SSA Excluded Area and shall ensure that BIAL has the rights of access necessary for access to the SSA Excluded Area."

Based on the above extracts, it is clear that as per the framework of BIAL's CA and other project agreements, the non-airport activities are allowed to be continued beyond the period where the airport is under concession to BIAL.

Further, the TDSAT Order has upheld the sanctity of Concession Agreements stating "In exercise of this power, AERA is required to respect rights/concessions flowing from lawful agreements / instruments / directives of Central Government on policy matters."

Inconsistency of the Authority's treatment

Further, we would like to highlight that Commercial Development has been kept outside the 30% SRT in the case of private airports including MIAL and DIAL. Accordingly, the Authority's position is not consistent with the Airport Guidelines, AERA Act, and tariff determination of other private airports as mentioned above. This inconsistency in the Authority's treatment is despite the fact that there has been no formal consultation process where the Authority has discussed such a treatment with other airport stakeholders.

BIAL's Submission

BIAL requests the Authority to consider the relevant provisions of AERA Act, BIAL's CA, LLD and TDSAT Order and consider property development as non-airport activity. Accordingly, the Authority is requested to not consider any revenue from such activities towards determination of aeronautical tariffs.

4. Treatment of Pre-Control Period entitlements (over-recovery / shortfall)

4.1. Authority's Proposal No. 2.a

- 4.1.1. Based on the material before it and its analysis, the Authority has proposed to consider the
 - 4.1.1.1. Over recovery for the Pre-control period as detailed in Table 7 Para 3.3.11 of the Consultation Paper in the computation of ARR for the second control period, considering a 40% Hybrid Till.
 - 4.1.1.2. Non-consideration of Pre-Control period shortfall prior to notification of AERA's powers for tariff determination

4.2. BIAL's Response

4.2.1. Treatment of Pre-Control period shortfall prior to notification of AERA's powers for tariff determination

AERA's Treatment

In Decision No. 2 of the Authority's Order No. 8/2014-15 in respect of the tariff determination for BIAL's First Control Period, the Authority held that it would not consider any shortfall/over-recovery prior to notification of its powers in September 2009. An extract from the same is as given below,

"The Authority notes that from the date the powers of the Authority under Chapter 3 of the Act were notified (this date being 1st September 2009) BIAL has not posted any losses in its Profit and Loss statements for the period 2009-10 and 2010-11. Hence the question of considering any Pre-control period shortfall for the purpose of determination of Aeronautical Tariffs for the current control period does not arise."

The Authority's proposal as part of the recent CP is as follows:

"3.3.2 As per the explanation enumerated by the Authority in MYTO-CP1, the Authority proposes to compute Pre-control period shortfall/ over recovery from the period the Authority was formed (September 2009)."

It can be seen that while in the Tariff Order for the First Control Period the Authority had chosen not to consider either prior period losses or gains while computing the tariffs, in the CP, the Authority has proposed to consider only performance of the airport since September 2009 and has ignored the performance prior to September 2009.

BIAL's Response

Authority's jurisdiction to regulate a period prior to the notification of its powers UDF determination by AERA vide Order No. 6/2010-11 for HIAL

Authority may note following extracts from its aforementioned Order, in the matter of revision of User Development Fee ('UDF') at HIAL and an associated letter sent by HIAL to the Ministry dated 02.08.2009 for the upward revision of UDF:

- "2.2 Based on the provisions in the CA and the application made in this behalf by HIAL, the Ministry of Civil Aviation allowed a levy of UDF @ Rs.1000/- (inclusive of taxes) per international departing passenger w.e.f 23.04.2008 and @Rs. 375/ (inclusive of taxes) per departing domestic passenger w.e.f 18.08.2008 (vide letters No.AV.2001S/03/2003-AAI dated 28.02.2008 and No.AV.20036/28/2004-AAI (Vol.IV) dated 18.08.2008 respectively), **on adhoc basis....**"
- "2.3HIAL submitted that in the meanwhile, they had started collecting the provisionally approved domestic UDF @ Rs.375/- departing passenger, under protest. **HIAL also stated that as a result of the lower UDF approved for domestic passengers, they were incurring a substantial loss of Rs.16 crores per month.**"

"4.1 HIAL vide their letter Ref: GHIAL/F&A/UDF/2009-10/2 dated 02.08.2009 addressed to the Ministry, had requested for upward revision of UDF as under.......

4.2 The aforesaid request was transferred by the Ministry for the Authority's consideration in October, 2009....."

Based on the extracts of the Order and HIAL's letter mentioned above, the Authority had considered letter from the Ministry and determined UDF for HIAL from its inception.

It can be seen that the Authority has exercised its powers to determine tariffs for period prior to the notification date. Consequently, nothing precludes the Authority from regulating the pre-control period prior to the notification of its powers.

Impact of TDSAT Order in the case of DIAL directing to consider pre-control period performance while determining tariffs

Further, BIAL would like to draw the Authority's attention to the TDSAT Order, which dismisses a technical plea, which contended that the regulator had no power or jurisdiction to determine tariffs for a period prior to the notification. The TDSAT Order mentions that learned senior counsel, appearing on behalf of FIA (respondent No.2 in Appeal No.10 of 2012) raised a technical issue as given below,

"... source of power for the Regulator is located in Section 13 of the Act which came into effect only on 01.09.2009 and hence the Regulator had no power or jurisdiction to determine tariff from an earlier date of 01.04.2009. As per this submission the tariff prior to 01.09.2009 could have been determined only by the Central Government because AERA was not constituted by then."

The relevant extract from the abovementioned TDSAT Order in response to the plea has been reproduced below,

"67. The aforesaid technical plea has been raised by learned counsels appearing for different respondents as well. In view of a clear and categorical reply that it has no direct bearing with the substance of a tariff formulation exercise, this plea is rejected outrightly for the simple reason that none of the parties are adversely affected on this account."

Further, the Tribunal also held that an **unfinished exercise of tariff formulation by the Central Government could be finished by the Authority** once it was legally constituted. An extract confirming this view from para 67 of the TDSAT Order is replicated below,

"Even if the rightful authority, the Central Government had initiated the exercise of tariff formulation for the period of 5 years beginning from 01.04.2009, it would have remained inclusive and liable to be criticized as an action by an interested party and not an independent statutory authority. Once AERA was legally constituted from September 2009, the unfinished exercise could have been finished only by AERA."

Further, para 67 of the TDSAT Order reaffirms the Authority's jurisdiction over such a period by stating that the tariff determination exercise by the Authority for the period has been within the knowledge of the Central Government, which has issued communications relating to tariff formulation. Hence, in the absence of any objection from any quarters including the Central Government, it would be futile to direct the Central Government to go through the formality of fixing tariffs when Central Government cannot complete that exercise in a meaningful and proper manner so as to avoid retrospectivity and delay.

Additionally, Para 67 of the TDSAT Order mentions that "Section 13 of the Act gives sufficient latitude in selecting an appropriate beginning of the first regulatory term of 5 years subject to rules of transparency and fairness." Hence, there appears no reason why the Authority should not consider determining tariffs for the period prior to the notification of its powers, as it has sufficient latitude in selecting an appropriate starting point for regulation.

Thus, based on the TDSAT Order, it is clear that the Authority has full jurisdiction over the pre-control period and should consider KIAB's operations from the date of commencement of the airport. Further, BIAL has sought an opinion from Justice Sirpurkar on the Authority's jurisdiction over the period prior to the notification of the Authority's powers. An extract from his opinion (Refer Annexure 3) is presented below,

"The principal premise on which AERA refused to consider loss prior to 01.09.2009 was because AERA believed that it did not have jurisdiction to consider shortfall/recovery that transpired before 01.09.2009. However, in view of the categorical finding of Hon'ble TDSAT in paragraphs 66 to 68 that AERA has jurisdiction to consider and determine tariff with effect from 01.04.2009 (i.e., events that transpired even before Section 13 was notified) AERA's principal premise that it does not have jurisdiction is no more correct...

... As the Hon'ble TDSAT has clarified that AERA is empowered and has jurisdiction to consider and fix tariffs for the period prior to 01.09.2009, AERA should exercise such jurisdiction and fix tariffs taking into consideration the expenses and losses incurred by the Querist from the time of incorporation, i.e. even prior to 01.09.2009, and true it up in the current tariff determination exercise."

As stated above, Justice Sirpurkar has opined that the Authority's premise of not having jurisdiction is no longer correct and the Authority ought to exercise its jurisdiction with respect to BIAL's pre-control period prior to 01.09.2009. Justice Sirpurkar also elaborated on the opinion stating that since there cannot be any "compartmentalization in the period prior to notification of AERA and thereafter" and that "consideration of the later period depends on the fact situation in the previous period" it would be reasonable to say that the Authority should take into consideration the expenses and losses incurred by the BIAL from the time of its incorporation.

On Authority's proposal to consider reduction in Initial Project Cost by Rs 69.45 crore based on the Engineers India Ltd ('EIL') report

AERA's Treatment

As per the CP, the Authority has stated the following for reducing the Initial Project cost:

"The Authority had, in MYTO-CP1 Paras 10.34 to 10.41 considered the report submitted by Engineers India Limited (EIL) whereby Opening RAB was reduced by Rs. 69.45 Crores. The Authority proposed to continue with the adjustment for the purpose of arriving at Opening RAB for the second control period also."

BIAL's Response

Dis-allowance of certain capex from the initial capitalization – exercise of jurisdiction of the Authority relating to prior control period

BIAL would like to highlight that while the Authority has not considered performance of the airport for the Pre-Control Period before September 2009, the Authority has disallowed costs incurred even prior to September 2009, based on the EIL report (Disallowance from Opening RAB). This treatment of the Authority of disallowing certain capital expenditure from opening asset base reflects it exercising powers for a period prior to September 2009. This suggests that the Authority has the powers to determine tariffs for periods prior to the notification date.

Context of "ad-hoc" UDF determination for KIAB

A letter from the Ministry (ref: AV 200015/003/2003-AAI dated 03.04.2008) to BIAL mentions that the UDFs approved by the Ministry upon opening of the airport were determined on ad-hoc basis and that a final decision in that regard was yet to be taken. The letter also states that the tariffs were interim in nature and would be finalized at a later date as per the Guidelines of the Ministry and the CA. An extract from the aforementioned letter has been reproduced below,

"3. Once the final audited accounts have been submitted by Bangalore International Airport Limited (BIAL) to Govt. of India, a final decision will be taken on fixation of UDF charges both for domestic and international departing passengers. The ad-hoc UDF would remain in force till the earlier of the following:

- (a) final audited figures submitted by BIAL,
- (b) guidelines for determination of UDF finalized by Ministry of Civil Aviation (MoCA), or
- (c) 3 months from airport opening date.
- The tariff would be finalized thereafter as per the <u>Guidelines of MoCA and the Concession</u> Agreement."

Domestic UDF determined by the Ministry in case of BIAL was issued in January 2009 (ref letter: AV.20036/07/2008-AD) i.e. seven months after the airport commenced operations. In the circumstance, it would not be justified, if BIAL was not allowed to recover such shortfall in revenues when it is clear that the Ministry clearly intended to do so when the Authority was in place.

Hence, the Authority's proposal not to consider the portion of pre-control period prior to the notification of the Authority's powers ought to be re-examined based on the aforementioned letter by the Ministry and with respect to the decisions taken in the recent TDSAT Order.

As highlighted earlier, based on the letter issued by the Ministry (ref: AV 200015/003/2003-AAI dated 03.04.2008), tariffs fixed were ad-hoc in nature and were subject to final tariff determination subsequently. Authority may also note that pursuant to the above mentioned letter by Ministry, BIAL had addressed two letters dated 09.01.2009 and 18.02.2009 to the Ministry requesting for an increase in the UDF and the Ministry had forwarded the same to the Authority for necessary action. Therefore, the reasoning in the MYTO CP1 as recorded in Clause 3.1.2. that the Ministry has not provided any directive to the Authority to carry out the analysis of the ad-hoc tariff fixed by the Ministry is incorrect. As can be seen from these events, the Ministry's tariff determination was ad hoc in nature and a final determination at the hands of the Ministry did not take place. The Authority has incorrectly proceeded on the basis that the Ministry may have taken the same into account. The ad-hoc tariff continued to be in existence till 31.03.2011 and the Authority determined tariff from 1.4.2011 without considering the performance before 01.04.2011. Under such circumstances, BIAL submits that no decision be taken, to its detriment, on an uncertain and erroneous premise by Authority.

The CA of BIAL provides for tariff determination either by The Ministry or by the Independent Regulatory Authority ('IRA') as the case may be. Initially, ad-hoc tariffs were determined by the Ministry where final tariffs were to be determined during a subsequent period. However, the Authority has determined tariffs effective from the First Control Period, after the setting up of the Authority. In this CP, the Authority is proposing to consider tariffs from September 2009 rather than inception of the airport leaving the tariff determination incomplete for the period from inception of airport to September 2009. In lieu of commitments provided by the CA, we request the Authority to determine tariffs since the inception.

Accordingly, BIAL reiterates that the Authority is empowered to take into account pre-airport opening date losses. This can be seen from the fact that, to determine RAB, the Authority has considered assets created on airport opening date viz. assets created in Pre Control Period.

Shortfall suffered by BIAL during the pre-control period

Being a regulated entity, the performance of BIAL has to be adequately compensated considering the shortfall since inception of BIAL rather than from September 2009. Any other approach by the Authority such as consideration of performance from September 2009 will result in a situation where BIAL is not compensated adequately.

Treatment of Authority in first control period towards pre-control period losses – Request Authority alternatively to maintain consistency with Control Period 1

In the first control period tariff determination Authority has not considered either losses or gains generated during pre-control period and considered the performance of BIAL starting form first control period. However, during above CP Authority is proposing to consider performance from Sep 2009 instead of considering full pre-control period. In this regards, BIAL would like to submit that Authority may relook into its approach and alternatively not to consider the partial performance of pre-control period and to consider performance from first control period onwards till the matter gets resolved.

BIAL Submission

Based on the above, BIAL requests the Authority to consider its actual performance during the Pre-Control Period in its entirety, i.e. since its inception, supported by auditor certificates, and allow it to recover the shortfall during such period. In the alternative, BIAL requests Authority not to reduce purported over recovery until such time that the Hon'ble TDSAT decides on this issue.

5. Approach towards truing up of First Control Period Aggregate Revenue Requirement (ARR)

5.1. Authority's Proposal No. 3.a

- 5.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 5.1.1.1. To recalculate ARR and Over recovery for the first control period as detailed in Table 12 Para 4.3.6 of the Consultation Paper and consider the same for computing the ARR for the Second control period, considering a 40% Shared Revenue Till.

5.2. BIAL's Response

5.2.1. On Authority's proposal to consider 40% SRT for the purpose of true-up of Pre-Control Period and First Control Period

AERA's Treatment

As per the CP, the Authority has stated as below for true-up of the Pre-Control Period and the First Control Period:

"i. To recalculate ARR and Over recovery for the first control period as detailed in Table 12 Para 4.3.6 above and consider the same for computing the ARR for the Second control period, considering a 40% Shared Revenue Till.

i. To consider the Over recovery for the Pre-control period as detailed in Table 7 Para 3.3.11 above in the computation of ARR for the second control period, considering a 40% Hybrid Till."

BIAL's Response

Regulatory till prescribed under BIAL's CA

BIAL's CA is a pioneering concession signed on PPP basis. Articles 10.2 and 10.3 of the CA indicate the adoption of Dual Till for tariff determination by mentioning the term "Airport Charges" which are to be regulated and "Other Charges" which BIAL would be free to fix. Despite the fact that CA proposed a Dual Till, the Authority has applied a shared till methodology for BIAL.

Precedents of 30% SRT for PPP Airports in India

The Concession Agreements of DIAL and MIAL, which were awarded subsequent to BIAL and HIAL, had incorporated 30% SRT.

The Ad-hoc UDF determined by the Ministry for BIAL for the period post Airport Opening Date was on the basis of cross subsidization of 30% from non-aeronautical revenue, though the CA did not provide for any cross subsidization from non-aeronautical revenue.

The Authority has based this proposal on the Ministry's letter dated 24.09.2013 to the Authority recommending adoption of 40% SRT in case of BIAL in lieu of the funds required for expansion of the airport. BIAL submits that a consideration of the above letter in its entirety discloses it to be clarificatory in nature. In other words, the letter cannot be considered as a direction by the Central Government under Section 42(2) of the AERA Act.

The Ministry has issued a policy direction (via letter dated 11.06.2015) in the case of HIAL under section 42(2) directing the Authority to consider 30% SRT. It may be noted that in the context of legal framework, both BIAL and HIAL airports have similar Concession Agreements and are structured similarly in terms of land lease agreement, viability gap funding, etc. The Authority itself has taken a stand in HIAL's Consultation Paper for the Second Control Period wherein as per Para 2.14, it has observed that "The concession agreement in the case of Hyderabad is also similar to that of Bangalore." This further corroborates BIAL's position that there should not be any difference in the percentage of shared till between HIAL and BIAL.

Also, as the National Civil Aviation Policy 2016 ('NCAP') envisages a uniform 30% SRT for all major airports (which is accepted by the Authority in Order No.14/2016-17), the supposed differences and distinction in the major airports should not have any bearing on determination of till

methodology. It is true that the NCAP is prospective. However what BIAL is submitting that the Ministry has taken a policy decision that the distinctions and differences in the major airports, if any, are not relevant for determination of till methodology. The direction for Hyderabad airport for first control period further entrenches this position. Therefore, the reasons mentioned in Clause 4.3.3. of the differences in the airports resulting in differential treatment for till methodology may not be correct and it is requested that a uniform approach be adopted. Therefore, BIAL submits that the Authority must treat BIAL on fair and non-discriminatory terms, and adopt 30% SRT for BIAL as well.

Opinion from Former Chairperson AERAAT justifying adoption of 30% Shared Revenue Till

Further, in an opinion sought from Justice Sirpurkar on the appropriate till mechanism to be adopted by the Authority for the First Control Period; he opined that considering the similarity between BIAL and HIAL with respect to their Concession Agreements, a policy directive in respect of HIAL should also be applied in the case of BIAL as well. An extract from his opinion has been reproduced below,

"4.4 MoCA has issued a policy directive dated 10.06.2015 that 30% SRT be applied in case of Rajiv Gandhi International Airport, Hyderabad ('Hyderabad airport or HIAL"). This policy directive has been referred to in Consultation Paper No.30/2017-18 issued in respect of the Hyderabad airport and AERA has proposed to undertake a true up exercise on the basis of 30% SRT for the first control period for Hyderabad airport. Although the policy directive is issued in respect of Hyderabad airport, considering the similarity of both airports and especially in view of the striking similarity in the Concession Agreements of the airports at Bengaluru and Hyderabad, the principle behind the policy directive issued in respect of Hyderabad airport should also be applied in respect of Bengaluru airport by AERA."

Further, Justice Sirpurkar referred to other private airports stating that the Authority may consider that other private airports including Mumbai, Delhi and Hyderabad have been regulated under the 30% SRT for the First Control Period and Bengaluru airport alone is being regulated under 40% SRT. Accordingly, by referring to object of creating a level playing field for the airports, Justice Sirpurkar has suggested to avoid a discriminatory treatment for BIAL stating as follows,

"...The statement of objects and reasons to the AERA Act set out the requirement of creating a level playing field amongst different categories of airports. One of the ways in which AERA can create a level playing field for all private major airports that are similarly situated, i.e. Delhi, Mumbai, Hyderabad and Bengaluru is to ensure that their tariff determination is undertaken on a similar methodology for the first control period as well."

BIAL's Submission

Given the fact that all prior policy evidence points towards 30% SRT, the same needs to be applied in the case of BIAL as well. Accordingly, BIAL requests the Authority to adopt 30% SRT for true up of Pre-Control Period and First Control Period.

6. Regarding Traffic projections

6.1. Authority's Proposal No. 4.a

- 6.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 6.1.1.1. To consider traffic projections as detailed in Table 22 Para 5.3.6 of the Consultation Paper for determination of tariff for the second control period.
 - 6.1.1.2. To true up the traffic of the second control period based on actuals, at the time of determination of tariff for the next control period.

6.2. BIAL's Response

6.2.1. On Authority's proposal on traffic projection and true-up of the same

AERA's Treatment

As per the CP, the Authority has stated as below for true-up of the traffic projection for the Second Control Period and its subsequent true-up:

"5.1.7 The Authority proposes to consider the CAGR as detailed in Para 5.1.2 above for the purpose of computing the traffic projections for the current control period, on the estimated traffic numbers as provided by BIAL for 2017-18."

BIAL's Submission

BIAL as an airport has been growing at a significant rate over the past few years. BIAL has an ambitious pipeline of capital projects, which need to be executed if the airport is to handle its projected passenger volumes.

BIAL is agreeable to the Authority's decision to true-up the actual traffic handled at the airport for the Second Control Period at the time of tariff determination for the Third Control Period. However, as mentioned above, BIAL's ability to handle such increase in traffic will be significantly dependent upon sufficient cash flows being available to BIAL to undertake necessary capital investment and expansion of the airport facilities.

Further, in case of events such as economic downturns, increase in fuel prices, among others there is likelihood of traffic projections not getting materialized. In such a scenario the revenue accruing to BIAL may get hit significantly. Accordingly, we request Authority to allow BIAL to again approach the Authority during the Second Control Period in the above scenario.

7. Regarding Capital Expenditure to be allowed into Regulatory Asset Base ('RAB')

7.1. Authority's Proposal No. 5.a

- 7.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 7.1.1.1 To consider Capital Expenditure detailed in Table 28 Para 6.3.23 in the Consultation Paper for computing the Average RAB and return for the second control period.
 - 7.1.1.2. To true up the Capital Expenditure on actuals at the time of determination of tariff for the next control period, subject to a cap of 10% over the cost as per the Consultant approval for the Projects.

7.2. Authority's Proposal No. 6.a

- 7.2.1. Based on the material before it and its analysis, the Authority has proposed to
 - 7.2.1.1. To consider allocation of assets and between Aeronautical and Non-Aeronautical services as detailed in Paras 7.2.11 above and 7.2.13 above for determination of tariff for the second control period
 - 7.2.1.2. To carry out a technical study on the area used between Aeronautical and Non-Aeronautical in the existing and new terminal once the operations are commissioned and stabilised.
 - 7.2.1.3. To true up the details considered in Paras 7.2.11 above and 7.2.13 above based on the actuals and consider the same in the next control period.

7.3. Authority's Proposal No. 8.a

- 7.3.1. Based on the material before it and its analysis, the Authority has proposed to
 - 7.3.1.1. To consider Regulatory Asset Base as given in Table 34 Para 9.2.4 of Consultation Paper for the purpose of computation of Aggregate Revenue Requirement
 - 7.3.1.2. To true up the Regulatory Asset Base at the end of the Control period based on actuals and based on results of the study on reasonableness of the costs incurred as part of additions to RAB in First Control Period at the time of determination of tariff for the next control period.

7.4. BIAL's Response

7.4.1. Regarding the Asset Allocation for Opening RAB

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the asset allocation:

"3.3.6 The Authority had, in Para 8.24 of MYTO-CP1, detailed the Asset Allocation Ratio proposed to be considered for determination of Tariff for the First Control period. (88.52% Aero as against 91% proposed by BIAL). The Authority proposes to consider the same for the Pre-control period. (Refer Authority's analysis on Asset allocation ratio in Para 7 below)."

BIAL's Response

No rational or scientific basis has been mentioned for considering the opening Asset Allocation Ratio of the First Control Period for the Second Control Period.

The Authority has allocated BIAL's initial RAB based on the asset allocation ratio proposed in the Authority's Order No. 08/2014-15 with respect to the tariff determination for KIAB for the First Control Period. BIAL would like to submit that considering the aforementioned allocation ratio would not be appropriate when BIAL's statutory auditors have scientifically computed the asset allocation between aeronautical and non-aeronautical assets (apart from common use or dual use

assets) as around 91%:9% respectively and presented the allocation in the form of an auditor's certificate.

BIAL's Submission

BIAL requests the Authority to consider the asset allocation ratio of 91%:9% as presented in the Auditor's certificate submitted by BIAL till a study to ascertain the same has been completed.

7.4.2. On Authority's proposal on Asset Allocation for Terminal T2

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the asset allocation for Terminal T2:

"7.2.13 The Authority notes that BIAL has considered asset allocation as 100% Aero for Airside works and as 91% in case of Terminal 2, Forecourts and other landside development works. The Authority notes that the allocation would largely depend on Terminal Building Area allocation between Aeronautical and Non-Aeronautical (which by BIAL's own estimate is 89% and 86% originally and after Terminal 1 expansion). Hence, in the absence of details, the Authority proposes that for Terminal Building works, the Authority will consider an approximate allocation of 85% as Aeronautical and 15% as Non-Aeronautical. This will be reviewed once Terminal 2-Phase 1 is operational."

BIAL's Response

Without prejudice to the above, BIAL is in the process of constructing a new terminal building to handle the projected increase in traffic at the airport. The terminal will be operationalized by March 2021 and based on bifurcation of aeronautical, non-aeronautical and common areas in Terminal T2 design, BIAL has calculated the asset allocation of terminal T2 for Phase 1 as 88%:12% (Refer Annexure 4). BIAL shall share the detailed designs of Terminal T2 separately with the Authority. Accordingly, BIAL would request the Authority to consider the asset allocation ratio of 88%:12% till a study to ascertain the same has been completed. In case, of any differences in the asset allocation ratios between the study and the current asset allocation put forth by BIAL, the Authority has recourse in terms of true-up of tariff for the Third Control Period.

BIAL's Submission

BIAL requests the Authority to consider the asset allocation ratio of 88%:12% between aeronautical and non-aeronautical assets for Terminal 2.

7.4.3. On Authority's proposal to (i) carry out a technical study on the area used between Aeronautical and Non-Aeronautical in the existing and new terminal once the operations are commissioned and stabilised and (ii) true up the details considered in Paras 7.2.11 and 7.2.13 of the CP on the actuals and consider the same in the next control period.

BIAL's Submission

BIAL has noted the Authority's proposal to carry out a technical study on the area used between Aeronautical and Non-Aeronautical in the existing and new terminal once the operations are commissioned and stabilised. While we appreciate the proposal of the Authority to conduct a study, BIAL reserves its right to respond to the outcomes of the study and provide its inputs to the study.

Further, till the time such study is completed, BIAL requests that the allocation ratio as per BIAL submissions above is considered.

7.4.4. On Authority's proposal to exclude capitalisation of Terminal T2 in the RAB for the second Control Period.

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the capitalisation of Terminal T2:

"6.3.15 The Authority notes that BIAL has commenced works relating to Runway and Airside expansion works but the works relating to Terminal Building have not commenced as yet. As the construction activities have not started on the same, the Authority proposes to estimate Terminal Building completion in 2021-22 and accordingly proposes to exclude the same from additions to RAB for the second control period. The Authority seeks detailed explanations from BIAL on the plan of construction for Terminal Building and its expected date of capitalisation."

BIAL's Response

The Authority has considered capitalization of T2 – Phase 1 for Third Control Period (FY 2021-22) as against the capitalization considered by BIAL in FY 2020-21; i.e. in the Second Control Period. BIAL would like to submit that it has completed detailed design of the project and the RFP for EPC Contract for civil, services, roof, façade, and other major systems has already been floated. BIAL has proceeded for tender on an EPC lump sum basis at the completion of the Detailed Design stage instead of at the completion of the schematic design stage. This has significantly reduced design timelines for the EPC design phase.

Also, in order the ensure that the work is completed on time, all critical work elements are made as part of the EPC lump sum scope such that there is a single point of responsibility, thereby minimizing co-ordination and interfacing issues. Currently the EOI and RFP for EPC procurement have already been floated by BIAL with commercial evaluation due by September 2018 and award of works due by early first week of October 2018.

Further, BIAL has been using various technology initiatives to improve the performance of the airport both during construction as well as operations. BIAL plans to adopt latest construction technologies such as Building Information Modelling - BIM (for clash analysis, project reporting purposes), modern document control systems, sophisticated scheduling and monitoring systems for ensuring timely decision making, robust quality and safety systems. Lastly, BIAL has appointed Turner Project Management consultants as the PMC for the PAL 1 works. They will bring global and local experts for fast tracking and achieving the T2 completion target.

Additionally, BIAL submits that DIAL had completed the construction and operationalization of 550,000 sq. m. T3 terminal in 37 months. Similarly, BIAL itself had competed Terminal 1 Expansion in 30 months duration. Given these reference timeframes, BIAL believes that it is well on course to operationalize the T2 terminal in this control period, as shown in Exhibit 1 below.

Accordingly, BIAL requests the Authority to consider the capitalization of T2 in March 2021 and include the asset while determining aeronautical charges for the Second Control Period.

2015 2016 2017 2018 2019 2020 2021 Description Start Finish 03 04 01 02 03 04 01 02 03 04 01 02 3 04 01 02 03 04 01 02 03 04 01 02 03 04 01 02 T2 Phase-1 14 Dec 15 31 Mar '21 Concept Design 14 Dec '15 30 Sep '16 Schematic Design 14 Oct '16 30 Jun '17 Detailed Design 30 Aug 17 30 May '18 Procurement of EPC 31 May '18 01 Oct '18 Award of EPC Contractor 01 Oct '18 01 Oct '18 Award of EPC **EPC Works** 02 Oct '18 31 Mar '21 GFC & Shop Drawings by EPC 02 Oct '18 29 Mar 19 Mobilization of EPC 02 Oct '18 01 Jan 19 Construction & Handover of T2 Phase-1 07 Jan '19 31 Mar 21 Non-EPC Works 01 Dec '18 31 Mar '21 Procurement of Non-EPC works 01 Dec '18 30 Jun 19 01 Aug 19 ICT Implementation Plan 18 Jan 21 Hanging Bells/Veils, Softscape & Special Interiors 07 May '20 31 Mar 21 Handover to Operations 31 Mar '21 31 Mar '21 Handover to Operations

Exhibit 1: Project Schedule for T2

BIAL's Submission

BIAL requests the Authority to consider the capitalization of T2 in March 2021 and include the asset as part of the RAB while determining aeronautical charges for the Second Control Period.

7.4.5. On Authority's proposal to exclude the impact of Goods and Service Tax ('GST')) on the projected capex

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the impact of GST on the project cost:

"6.3.8 The Authority notes that BIAL has requested for additional amounts to be considered due to difference between the Indirect Taxes considered earlier at the time of submissions and the Goods and Services Tax (GST) which is applicable currently. The Authority notes that while the indirect taxes applicable have changed, the amounts to be considered for Capitalisation would be after considering the credits that can be taken on the same. Hence, the Authority proposes not to consider the impact due to GST currently and will evaluate the same after the costs are incurred and capitalized in books."

BIAL's Response

BIAL notes that the Authority has acknowledged the change of indirect taxes applicable in the country. However, it has not allowed an increase in project cost of BIAL to incorporate the same. Mere acknowledgement of the fact and not considering the same while determining aeronautical charges i.e. leaving the same for a true-up at a later stage will cause a significant detrimental impact on the cash flows of BIAL.

BIAL would request the Authority to recognize that it would need to incur GST on capital projects as a cash outflow, and unless the Authority considers it towards BIAL's capital expenditure while determining aeronautical charges, it will deteriorate BIAL's cash flow position during the Second Control Period, until it is allowed to recover the amount during the Third Control Period.

The Authority has taken a view that the amount will be considered for capitalization after considering the GST input credit. BIAL submits that it has already considered GST input credit and accordingly requested for a lower GST rate of $\sim 13\%$ compared to the actual rate of 18%. Detailed workings computing the net GST outflow of $\sim 13\%$ is provided in Annexure 5.

Accordingly, the Authority is requested to consider the project cost as submitted by BIAL on account of the changing indirect tax regime.

BIAL's Submission

BIAL requests the Authority to consider the project cost submitted by BIAL, including the impact of GST on the project cost and not penalise BIAL in terms of significant cash flow issues. Any difference between the GST outflow allowed by the Authority and that incurred on actuals may be subjected to a true-up.

7.4.6. On the matter of additional projects in the Airport User Consultative Committee ('AUCC') stage

BIAL's Submissions

BIAL would like to undertake the following additional projects in the Second Control Period:

Eastern Tunnel Works – The current NH 44 through the existing trumpet and through SW Connectivity road is the only external access available between airport terminal and Bangalore city. The expansion on NH 44 is not possible due to congestion at Hebbal flyover and due to land acquisition constraints. As per Bengaluru Metropolitan Region Development Authority (BMRDA) Structure Plan 2031, intense development is planned around east of Bangalore urban clusters / nodes. Significant other developments in the area e.g. commercial developments at

Doddaballapura and Chikballapura, business parks, IT and hardware parks, KIADB aerospace parks etc. is expected to lead to additional traffic. Accordingly, BIAL has conducted a feasibility study to evaluate options for an alternate access and based on the study it is proposed that the Eastern Tunnel Access road would be feasible and make the airport more easily accessible for the eastern part of Bengaluru city. The construction of the Eastern Tunnel works involves the Phase 1-Early Works which includes construction of Tunnel below cross field taxiway (approximately 300m, only civil works).

220/66 KV Substation - As per KERC, power supply needs to availed at 220KV for power loads above 20MVA. As a result of upcoming facilities, total estimated demand by FY 2020-21 (for aero assets) is likely to be ~33 MVA and the same by 2030 is likely to be ~55 MVA. BIAL pursued with KPTCL to provide up to ~33MVA of power at 66KV level, however, after multiple rounds of discussions, KPTCL has refused BIAL's request. Accordingly, BIAL will have to accept power at 220KV and would require a 220/66 KV Substation.

BIAL has completed the AUCC meeting on 22.06.2018 for both the above projects and the stakeholders have not raised objections to either of the projects (Refer Annexure 6). Accordingly, we would request the Authority to consider BIAL's submissions at the time of finalizing BIAL's aeronautical charges for the Second Control Period.

7.4.7. Treatment of Special Repairs and Sustaining Capital Expenditure

AERA's Treatment

As per CP, the Authority has stated as below with respect to the treatment of Special Repairs/ Sustaining Capital Expenditure:

"6.3.21 The Authority, proposes to consider actual costs capitalised in 2016-17 and 2017-18 and approx. Rs. 200 crores per annum from 2018-19 to 2020-21 in the estimate of Special Repairs / Sustaining Capex for the purpose of the MYTP submissions, on an adhoc basis. The Authority urges BIAL to ensure that the costs incurred towards these are justified based on its need and are incurred based on optimal evaluation of costs and alternates. Expenses actually incurred on these projects would be reviewed in detail and considered for true up at the end of the control period, based on its need and reasonableness of costs spent and after considering any disposal proceeds/ realisations from replaced assets."

BIAL's Response

Other Sustaining Capex

KIAB is witnessing exponential traffic growth and has achieved traffic of ~ 27 million passengers in FY 2017-18. It is expected that the traffic at the airport will further continue to grow and thus maximising the utilisation of the existing terminal capacities through sweating out of assets is necessary to handle the growth till the proposed T2 – Phase 1 Terminal becomes operational.

Facilities need to be augmented to manage the additional passengers and this has led to increase in sustaining capex. Additionally, initiatives such as Aadhar enabled entry and biometric boarding system ("Digi Yatra") are being developed in-line with directions from Ministry of Civil Aviation/Bureau of Civil Aviation Security to use Aadhar and Biometric E-Boarding System to enhance Security and improve Passenger Experience at the Airport as part of the "Digi Yatra" program under the "Digital India" campaign.

BIAL has already submitted the detailed list of sustaining capex / special repairs / minor projects to the Authority, which is forming part of CP as Annexure 4. A need assessment for these capital expenditures was undertaken and a detailed breakup of sustaining capex, minor projects and special repairs individual line item-wise were provided to the Authority. We request the Authority

to consider the same. BIAL would like to submit that its estimates for special repairs/ sustaining capital expenditure was based on detailed estimates of facility augmentation requirements.

Considering the above, the Authority should not proceed on an ad hoc basis. The Authority's justification for considering special repairs at Rs. 200 crores per annum for FY 2018-19 to FY 2020-21 is based on the past trend, which is not a true reflection of the future. The Authority has also not given due consideration to BIAL's technical justifications or any specific justification its own treatment. This is likely to have an impact on airport operations and BIAL may not be able to handle the projected traffic if such capital expenditure is not undertaken. Further, this situation may also aggravate the cash flow deficit expected by BIAL.

BIAL's Submission

BIAL request the Authority to consider special repairs / sustaining capital expenditure / minor projects based on BIAL's estimates and true-up the same at the time of tariff determination for the Third Control Period.

7.4.8. On the matter of truing up the Regulatory Asset Base at the end of the Control period based on actuals and based on results of the study on reasonableness of the costs incurred as part of additions to RAB in First Control Period at the time of determination of tariff for the next control period and capping the true-up of Project Cost to 10%

AERA's Treatment

As per CP, the Authority has stated as below with respect to capping the true-up of Project Cost:

"6.3.24 The Authority notes that the actual cost of Capital Expenditure may vary till the Project is completed. The Authority also notes that the capitalisation/ addition to RAB would vary due to various factors such as the timing of expenditure, manner of funding etc. The Authority therefore proposes to true up the cost based on actuals subject to a cap of 10% over the cost as per the Consultant approval for the Projects."

BIAL's Response

BIAL submits that an appeal is pending against Order No.07/2016-17 in the matter of normative approach for capital costs regulation for major airports passed by the Authority. BIAL understands that Authority appointed RITES to examine the capital expenditure on expansion of BIAL and has considered the RITES report for Capital expenditure. BIAL does not agree with the contents of this report, and reserves its right to challenge the same. Without prejudice to the rights and contentions in the appeal pending on the normative approach adopted by the Authority, BIAL submits that it will endeavour to reduce costs and keep the capital expenditure low.

Complexity of Price Discovery

BIAL request the Authority to appreciate that the Project Cost as computed prior to the implementation of the project is merely an estimate of expenditure to the incurred; and there is a probability that the market responds in a manner that is different from such initial estimates. Market discovery of price is a complex process, and it may not be possible to determine efficient costs prior to the actual competitive bidding. Also, the actual project cost is dependent upon a number of factors such as the cost of raw materials etc. which are beyond the control of an airport operator.

Impact of the TDSAT Order on the Project Cost

Also, in the matter of DIAL's Tariff Order for First Control Period, the Hon'ble TDSAT has upheld the Authority's views that estimation of project cost can only be examined to see if it relates to approved costs and supported by auditor certificates. The Authority's legal counsel observed that "...such costs cannot be re-examined on the yardstick of efficient cost but has to be taken as the

incurred cost only, as appearing in the duly certified books of accounts", which has been accepted by the Hon'ble TDSAT.

Practices and Technologies that would be adopted by BIAL

Further, BIAL assures the Authority that it will be efficient in incurring these costs and adopt robust practices for competitive bidding of project works. BIAL will endeavour to manage capital outlay within estimated project costs and will justify any significant deviations.

Moreover, BIAL plans to adopt latest construction technologies such as Building Information Modelling - BIM (for clash analysis, project reporting purposes), latest document control systems , latest scheduling and monitoring systems for ensuring timely decision making, robust quality and safety systems with a view towards reducing time and cost overruns. BIAL has also appointed Turner Project Management consultants as the PMC for the PAL 1 works for fast tracking and achieving completion targets.

BIAL's Submission

BIAL requests the Authority to remove a cap of 10% of the project cost for true-up and consider the actual project cost based on financial results, backed by auditor's certificates corroborating that these costs were actually incurred and pertained to approved projects. Further, BIAL assures the Authority of its best efforts to execute the projects within the prescribed cap of 10%. In the event BIAL's actual project costs exceed this cap, BIAL will provide the requisite justifications in support of the escalation.

7.4.9. On the matter of reduction in Opening RAB based on Engineers India Ltd ('EIL') Report

AERA's Treatment

As per CP, the Authority has stated as below while reducing the Initial RAB based on EIL report:

"9.2.3 The Authority had, in MYTO-CP1 Paras 10.34 to 10.41 considered the report submitted by Engineers India Limited (EIL) whereby Opening RAB was reduced by Rs. 69.45 Crores. The Authority proposed to continue with the adjustment for the purpose of arriving at Opening RAB for the second control period also."

BIAL's Response

Interpretation of the EIL Report

EIL in its report at Paragraph 11, concludes that, "... The overall impact with respect to the cost of the project may seem to be minor in nature....". EIL report also concludes with respect to a large number of items that, "...costs are less than or equal to normal costs...". In case expenditure incurred is more than costs estimated by EIL, EIL has provided a calculation of the differential. The observation of EIL is relatable only to such costs, which are more than the estimates of EIL. Whereas, if cost incurred is less than or equal to costs estimated by EIL, the differential is not even set out.

Moreover, as stated above, EIL concludes that the overall impact with respect to cost of the project is minor in nature. The statutory auditors of BIAL have accepted the project costs. It has also been adopted by the Board. BIAL therefore, respectfully submits that no deductions be made on the basis of EIL's report.

Based on the above, there appears to be no reason for the Authority to disallow bonafide costs incurred by BIAL and penalise the airport operator.

Impact of the TDSAT Order on the reductions from Opening RAB

Further, BIAL would also like to reiterate the holding in the TDSAT Order. In the proceedings, the Authority itself took a strong position stating that project costs should be examined for incurred cost as per available records and see that it relates to the approved and essential parts of the airport. The Authority's legal counsel maintained that costs should not be re-examined on the yardstick of efficient costs; and has to be taken as incurred costs as appearing in books of accounts. The position of the Authority was accepted by the Tribunal, which acknowledged that it was weighty and deserved acceptance. An extract from the aforementioned TDSAT Order has been presented below,

"88. On the other hand, on behalf of AERA, Mr. Dhir has taken a firm stand that in the task of tariff determination, the project cost can be looked at from a narrow hole, only to examine the incurred cost as per available records and see that it relates to the approved and essential parts of the Airport. According to him, this had to be done on the basis of accounts bearing certificates granted or approved by the Chartered Accountant. His clear stand is that such cost cannot be reexamined on the yardstick of efficient cost but has to be taken as the incurred cost only, as appearing in the duly certified books of accounts. This submission appears to be weighty and deserves acceptance."

Accordingly, disallowing bona-fide incurred project costs would be against the Authority's own stated position.

BIAL's Submission

BIAL requests the Authority to maintain a consistent position in line with its own submission made before the Hon'ble TDSAT, and not disallow Rs. 69.45 crores of actual certified costs incurred by BIAL.

8. Regarding Depreciation for the Second Control Period

8.1. Authority's Proposal No. 7.a

- 8.1.1. Based on the material before it and its analysis, the Authority proposes:
 - 8.1.1.1. To consider depreciation as per Table 32 Para 8.2.10 above to compute Average RAB and depreciation to be considered in ARR
 - 8.1.1.2. To true up the Depreciation based on the actual Capital Expenditure and other factors as per the Order No. 35 on Useful lives
 - 8.1.1.3. To ask BIAL to submit details of Technical evaluation for various asset useful lives considered in estimating the additional depreciation charge and its computations, which will be evaluated and considered at the time of the Order.

8.2. BIAL's Response

8.2.1. Treatment of Land Development Works

AERA's Treatment

As per the CP, the Authority has stated as below with respect to treatment of Land Development Works:

"8.2.5 Authority notes that Land Development works have been considered for Capitalisation with useful life of 20 years. The Authority proposes to consider the same based on the lease period available with BIAL (50 years) and consider this as an adjustment to the depreciation rate estimates in the Consultation Paper."

BIAL's Response

BIAL has undertaken land development works for various projects including New South Parallel Runway ('NSPR'). BIAL had considered capitalization of land development works separately. However, as opined by BIAL's statutory auditor, the land development works (earthworks) should be capitalized along with NSPR Project. Hence, BIAL would request the Authority to consider the expense on Land Development Works as a capital work-in-progress and consider for capitalization with NSPR.

8.2.2. On Authority's proposal to true up the Depreciation based on the actual Capital Expenditure and other factors as per the Order No. 35 on Useful lives of Various Assets

BIAL Submission

BIAL submits that the Depreciation for the current control period may differ from the projections considered for the determination of tariffs on account of factors such additional capital expenditure to meet requirements; replacements etc. – which will have an impact on the actual RAB.

Accordingly, BIAL is in agreement with the Authority's proposal to true up the Depreciation for the current control period, at the time of determination of tariff for the next control period.

8.2.3. On Authority's proposal to ask BIAL to submit details of Technical evaluation for various asset useful lives considered in estimating the additional depreciation charge and its computations which will be evaluated and considered at the time of the Order.

BIAL Submission

The Authority may note that BIAL has undertaken a technical evaluation of the useful life of various assets and a technical note in this regard is provided in Annexure 7.

9. Regarding Operating Expenditure

9.1. Authority's Proposal No. 9.a

- 9.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 9.1.1.1. Consider Operating Expenditure under Hybrid Till as detailed in Table 47 Para 10.3.38 of the Consultation Paper for determination of tariff for the second control period
 - 9.1.1.2. True up the Operating Expenditure for the current control period, at the time of determination of tariff for the next control period
 - 9.1.1.3. Carry out a study for allocation of expenses between Aeronautical and Non-Aeronautical and consider the results of the study, at the time of truing up.

9.2. BIAL's Response

9.2.1. Approach towards projection of employee costs

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the projections of employee costs,

"10.3.7 The Authority proposes to moderate the increase in employee costs considering 10% increase from financial year 2018 onwards instead of increase in rate that has been proposed by BIAL."

Further, as per para 10.3.10 of the CP, the Authority has stated as given below,

"10.3.10 The Authority proposes to reduce employee strength considering a maximum increase of 15% (Changes made to Grade D) for Phase 1. Also, for the expansion, Authority seeks clarification on the number of resources considered and proposes to consider 50% of the increase submitted by BIAL in FY 2021 for the expansion (117 employees) and consider increase of 7% towards incentive payments and 5% on other cost from financial year 2018 onwards and proposes to recalculate the projected Salary cost accordingly."

BIAL's Response

Increase in manpower due to significant increase in traffic

BIAL submits that passenger traffic at KIAB has increased at 10.5% p.a. making it almost 1.8 times higher in FY 2016-17 over FY 2011-12. Further, ATM traffic has increased at a CAGR of around 7%. Given this growth, the airport has undertaken significant capex at the airport.

Increase in manpower due to significant increase in infrastructure facilities

New capacities have been added both on airside and terminal side to cater to this growth. Details of some of the capacity added is as below:

- a) Airside Rapid-exit taxiway (RET) works have enhanced the Airside capacity from ~28 ATMs to ~38 ATMs. Addition of 25 Apron stands means almost 1.5 times capacity compared to FY 2011-12 have allowed additional Aircraft parking
- b) Terminal side With T1A project (Terminal building) capacity increased from 12 MPPA to 20 MPPA almost doubled the capacity and terminal building area.

While traffic has almost doubled (with significantly higher capacity being provided), the headcount has increased merely at a CAGR of less than 2% viz. a total 11% increase in the last 6 years. As can be seen from the above, BIAL has always endeavoured to operate efficiently and has over the last five-six years managed with a lower headcount. However, given the significant increase in traffic and projected traffic growth, a headcount increase has

been proposed. Please note that the additional headcount proposed is on account of the following:

- a) Carry forward / replacement positions previously approved by Board on account of multiple factors including lack of availability of manpower with requisite skillsets
- b) Additional 3% increase in manpower is considered towards regular business growth
- c) Manpower for NSPR Headcount of 235 number are estimated towards NSPR project from FY 2020-21 (post capitalization)

Need for sufficient manpower for future expansion projects - NSPR & T2 Phase 1

The Authority has proposed to reduce the proposed headcount for NSPR of 235 by 50%. We request the Authority to take into consideration that airports need to abide by various prescribed norms of different regulatory bodies like DGCA, BCAS etc. and its manpower requirements are guided to ensure compliance with such regulatory requirements (e.g. a runway would require ARFF personnel as defined in regulations, and reducing these estimates by half would mean that the airport defaults on prescribed safety norms). BIAL's estimates of headcount required is based on technical justifications which have already been shared with the Authority.

We would also like to highlight that works relating to Phase 1 of Terminal 2 are fully underway and it is expected that the project would be completed in FY 2020-21 and the Terminal 2 Phase 1 would be operational in the current Control Period. It may be noted by the Authority that a significant number of personnel for Phase 1 of Terminal 2 would be required much ahead of the scheduled commercial operations of Terminal viz. preparation of terminal operations, etc.)

Not providing the requisite manpower may lead to a significant impact on the day-to-day operations and performance of the airport including deterioration in the user experience. Accordingly, BIAL requests the Authority to consider the expenses based on the technical justifications provided by BIAL and true-up these expenses in the Third Control Period in the event that BIAL's actual expense is lower than the estimates considered in the tariff order.

Provision of adequate compensation for retention of skilled workforce

BIAL has estimated and proposed compensation growth in line with industry benchmarks and further to prevent attrition (as the airport industry is growing, there is huge demand for skilled personnel). The Authority may note that the annual increments are considered at 10% with a nominal 2% market correction once in every three years (in-line with industry practice). Further, it is important to note that certain positions demand for unique skill sets, manpower resource / availability in the market is not in abundance and day by day induction is becoming tougher, and hence the annual 10% increase and 2% market corrections are justified. BIAL would also like to highlight that the incentives and other costs (staff welfare, recruitment, T&D, etc.) are very conservative ~ estimated at 14% and 10% respectively – these are only marginally higher than the past actuals.

BIAL submits to the Authority that it should consider BIAL's estimates of projected salaries towards the determination of final tariffs for the Second Control Period. In the event BIAL is able to save costs and expense out an amount, which is below the estimates used in the final tariff order, a true-up of these expenses based on actuals financial results can be undertaken by the Authority while determining tariffs for the Third Control Period.

Finally, BIAL would like to submit that the personnel cost allocation of 95% Aero is backed with Auditor certificate and workings and hence allocation should be considered at this ratio.

BIAL's Submission

BIAL requests the Authority to consider BIAL's estimates on manpower requirement as well as projects manpower costs towards the determination of final tariffs for the Second Control Period. Further, the Authority may consider true-up of these expenses on actuals at the time of determining tariffs for the Third Control Period.

9.2.2. Approach towards projection of O&M Expenses

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the projections of O&M Expenses:

"10.3.18 The Authority has gone through the clarifications provided by BIAL. The Authority also notes the increased growth in passenger traffic, ageing of Airport and need for higher maintenance. However, the Authority notes that BIAL has estimated a huge increase in O&M Expenditure across the second control period. Also, the Authority notes that BIAL has projected incurring Capital Expenditure for replacement of assets etc. where required. The Authority accordingly hence increase of 15% for estimating Operations and Maintenance Expenditure for the years 2017-18 to 2020-21 from the previous year's cost and proposes to recalculate the expenses accordingly."

BIAL's Response

Operating expenses at an airport are largely driven by the size / scale of infrastructure being managed and the volume of traffic handled at the airport. An increase in operating expenses is justified wherever infrastructure and passenger traffic increase. While the Authority has acknowledged BIAL's clarifications / justifications, it has unfortunately taken a position merely based on the fact that BIAL has estimated a material increase in O&M expenses.

BIAL would request the Authority to consider O&M expenses based on legitimate technical justifications provided by BIAL which include aspects such as increased wear and tear of airside and terminal assets and increased consumables expenditure on account of higher utilization of assets; use of technology such as ATRS, self-baggage drop to meet traffic growth in a capacity constrained environment and new initiatives to improve customer services/experiences. The Authority may note that number of aeronautical assets including runway, taxiway, passenger terminal building are operating above capacity and hence wear and tear is expected to be much higher. This would require more preventive and scheduled maintenance of such assets and hence higher maintenance costs.

Increase in Minimum wages (~ 20%) and its impact on O&M costs

Also, it may be noted that costs towards AMCs have already increased significantly and these are further expected to increase on account of higher labour / manpower costs (maintenance requirements of airside / landside assets are labour intensive). During the previous year the minimum wages have increased by more than 20% thus increasing the cost base which would have a significant impact on maintenance expenses. Further, additional expenses like license fee for ICT services payable to DoT (under discussion by Ministry) have not been accounted currently and hence may have an impact on the expenses.

Additionally, BIAL would like to highlight to the Authority that the mechanism of true-up these expenses at the time of determining tariffs for the Third Control Period is available to the Authority in the event that BIAL's actual expense is lower than that estimates considered in the tariff order. Not considering such expenses can have significant implications on the cash flows of BIAL. Accordingly, BIAL requests Authority consider the O&M costs proposed for the Second Control Period.

BIAL's Submission

BIAL requests the Authority to consider BIAL's estimates of O&M Expenses for the period FY 2017-18 to FY 2020-21 towards the determination of final tariffs for the Second Control Period based on the size / scale of infrastructure being managed and the volume of traffic expected to be handled at the airport and true-up these expenses on actuals at the time of determining tariffs for the Third Control Period.

9.2.3. Approach towards projection of Power and Water charges

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the projections of Power and Water charges:

"10.3.24 The Authority proposes to moderate the increase in power and water charges by 5% per annum in line with the past trends and proposes to recalculate the expenses accordingly. Also, additional recoveries are made by BIAL from concessionaires which is considered as Non-Aeronautical Revenues. The Authority proposes to net off such recoveries from Power and Water costs and consider the net cost as Utilities cost under Operations & Maintenance Expenditure."

BIAL's Response

Power charges have increased at a CAGR of 7% over the last three years which is in line with BIAL's estimates of 7% for the Second Control Period. Further, the per unit power charges increase annually. Therefore, BIAL's estimates for increase in power charges by 7% is in line with the above.

Based on the historic trend, water charges have increased at a CAGR of 7.26% over the last five years from FY 2011-12 to FY 2016-17, which is in line with BIAL's estimates of 7% for the Second Control Period. Further, the per unit water charges are increased once in a period of two-three years. The last revision which happened in FY 2015-16 resulted in these charges to increase by \sim 20%. Therefore, BIAL's estimates for increase in water charges by 7% is in line with the above.

In addition, as per contracts, various third party concessionaires are obligated to pay BIAL for the usage of infrastructure for utilities in addition to the cost of utility charges as levied by various utility providers. We would like to highlight that the charges reduced from operating expenses by the Authority pertain to the charge for provision of infrastructure facilities. These are in fact, revenues earned by BIAL on account of provision of the utility infrastructure and not on account of utilities usage. Further, as per para 4.24 of ICAO's Economic Manual (Doc 9562), payments received for services such as heating, air conditioning, lighting, water, among others are all non-aeronautical in nature (Refer to para 10.2.1 for a detailed explanation on treatment of utility recoveries from concessionaires).

Also, the Authority in its Consultation Paper for the Second Control Period of HIAL has provided a one-time increase in water charges by 25% acknowledging the fact that water charges do increase by such disproportionate amounts every two to three years. An extract from the aforementioned Consultation Paper of HIAL is presented below,

"However, Authority proposes to allow for a one-time escalation in the unit rate by 25% in FY 2018-19 (mid-year of the current Control Period) to compensate HIAL for increasing water tariffs."

BIAL's Submission

BIAL requests the Authority to reconsider its proposal to increase power and water charges by 7%. Further, in case power & water charges do not increase in line with BIAL's estimates, the Authority may true-up the excess expenditure allowed to BIAL at the time of determination of tariffs for the Third Control Period.

9.2.4. Approach towards projection of General Admin Expenses

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the projections of General Admin charges:

"10.3.37 The Authority notes that the past trends on increase in General Admin and Maintenance costs are fluctuating. The Authority proposes to moderate the increase in General & Administrative expenditure to 10% per annum and proposes to recalculate the expenses accordingly."

BIAL's Submissions

BIAL would like to highlight that given the increase in traffic at the airport, there are growing business requirements. To appropriately address these requirements, the estimates for Consultancy for FY 2017-18 is slightly higher mainly towards various new digital initiatives / other business requirements and there after annual increase of 10% considered for Consultancy & Legal, Travel costs and Office costs as per the past trend. The Authority may note that office costs which are the largest contributor to General Admin Expenses, and the key driver for the same is again manpower / labour cost. As highlighted earlier, minimum wages have increased significantly (over 20% last year).

9.2.5. Approach towards allocation of Personnel Costs and General Admin Expenses

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the allocation of personnel costs and general admin expenses:

"10.1.14 Recomputed Aeronautical Ratio of O&M expenses is as given below:

Table 37: Recomputed allocation ratio of Aeronautical Expenses to total expenses, category wise

Cost Element	% of cost considered as Aeronautical
Personnel cost	90%
Operations and Maintenance Cost	Based on asset ratio
Marketing & Advertisement - Others	85%
General Administration Cost	90%
Lease Rent, Property Tax	100%
Utilities Cost (Net)	100%
Insurance	91%

BIAL's Response

No basis for re-allocation of expenses by Authority

The Authority has recomputed the allocation ratio of personnel cost of BIAL based on the department-wise details of personnel cost submitted by BIAL. The Authority has taken its position based on the allocation of commercial, operations, business development, marketing & strategy and engineering & maintenance employees. The Authority has not considered a

specific allocation ratio for the support service costs, which is approximately a third of BIAL's total manpower costs in the years FY 2013-14 to FY 2015-16.

Allocation of expenses by BIAL certified by Statutory Auditor

BIAL however, has submitted an auditor certificate to the Authority, which takes into account all the departments while allocating personnel costs between aeronautical and non-aeronautical. The certificate infers that 95% of personnel costs should be treated as aeronautical expenses. A similar department-wise allocation was done for the purpose of general administration cost. The results of the allocation were that 99% of the general administration expenses were found to be aeronautical.

Accordingly, the Authority must consider the allocation ratio keeping in account all the departments of the airport for personnel and general administration costs towards the tariff determination.

BIAL's Submission

While we appreciate that the Authority would undertake a study to assess the allocation, BIAL reserves the right to review and respond to the study outcomes. In the meantime, BIAL requests the Authority to consider BIAL's submission on the allocation ratio (based on the auditor certificate) for personnel and general administration costs towards the determination of final tariffs for the Second Control Period and true-up these expenses on actuals while determining tariffs for the Third Control Period.

9.2.6. Treatment of Corporate Social Responsibility ('CSR') Costs

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the CSR Costs:

"10.3.34 The Authority noted that BIAL has estimated the CSR cost as part of the Operating Expenditure. Being an appropriation from profits and not related to the Airport Activity, the Authority proposes to not allow CSR expenditure for CP1 and CP2 and proposes to recalculate the expenses accordingly."

BIAL's Response

BIAL wishes to submit that the requirement to spend CSR amount is as per the Companies Act 2013. The Ministry of Corporate Affairs while issuing clarifications to the Companies Act 2013, has through FAQ held that CSR is to be calculated by taking Profit before tax. The same is reproduced for reference:

6 Whether the 'average net profit' criteria for section 135(5) is Net profit before tax or Net profit after tax?

Computation of net profit for section 135 is as per section 198 of the Companies Act, 2013 which primarily is NET PROFIT BEFORE TAX.

Based on the above, as the requirement to spend CSR amount is before tax and is a mandated as per Companies Act, we request Authority to consider CSR for similar treatment to tax. Further if the Authority believes that it has to be spend out of return on equity allowed then the return on equity is to be grossed up to include the amount of CSR as it is not an appropriation of profits and spending is to be made before tax. Thus, it is clear that spending for CSR is not an appropriation of profits but it is an item which is in same line of tax, therefore we request Authority to kindly consider this for grossing up of equity return as it is not an appropriation of profits.

The Authority approach of considering CSR expenses as not related to Airport activities is not in line with ICAO principles. One of the responsibilities of the Airport operator is to make good the impact on the environment, which is also acknowledged by the ICAO Doc 9968 – Report on Environment Management System (EMS) Practices in the Aviation Sector –following points can be noted from the Doc 9968:

- > There is pressure on the aviation industry to balance increasing global demands in air travel with environmental protection is at an all-time high.
- > Local air quality, ambient noise levels, water quality, energy use etc are some of the most prominent impacts of concern.
- On average, the majority of respondents communicated environmental performance through a corporate social responsibility (CSR) report or through their organization's website.
- 44% use CSR Reports as a one of methods for communicating environmental performance by Airports.

Based on the above para, CSR includes many activities and one of the important activities being the environment impact and local area development, and BIAL is also under obligation to comply with ICAO policies as per the CA. Therefore, it is an ancillary activity which BIAL has to carry on along with Airport activities.

BIAL's Submission

BIAL requests the Authority to consider CSR costs in the nature of statutory costs to be incurred by the airport operator and consider the same while determining final tariffs for the Second Control Period.

9.2.7. On truing up the operating expenditure for the current control period, at the time of determination of tariff for the next control period

BIAL's Submission

BIAL submits that the Operating Expenditure for the current control period may differ from the projections considered for the determination of tariffs on account of factors such as changes in passenger traffic, capital expenditure, scale of airport operations etc.

Accordingly, BIAL is in agreement with the Authority's proposal to true up the Operating Expenditure for the current control period, at the time of determination of tariff for the next control period.

9.2.8. On carrying out a study for allocation of expenses between aeronautical and non-aeronautical and consider the results of the study, at the time of truing up.

BIAL's Submission

BIAL has noted the Authority's proposal to carry out a study for allocation of expenses between Aeronautical and Non-Aeronautical and consider the results of the study, at the time of truing up. At this stage, since we are not aware of the terms and scope of such study, we reserve our right to respond to such study at a later date.

However, till the time such study is completed, BIAL requests that the allocation as per BIAL MYTP Submissions is considered.

10. Regarding Treatment of Non-Aeronautical Revenues

10.1. Authority's Proposal No. 10.a

- 10.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 10.1.1.1. Consider Non-Aeronautical Revenues as detailed in Table 58 Para 11.2.43 of the Consultation Paper for determination of tariff for the second control period.
 - 10.1.1.2. Review and true up the Non-Aeronautical Revenues on actuals, at the time of determination of tariff for the next control period.

10.2. BIAL's Response

10.2.1. Treatment of utility recoveries from concessionaires

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the treatment of utility recoveries:

"11.2.26 BIAL has considered revenue collected from concessionaries on electricity, potable water and waste management services as part of utility revenue under Non-Aeronautical Revenue. The Authority has carefully examined the same and proposes to consider these recoveries as a reduction to utility cost (OPEX) and therefore consider the net costs relating to Utilities as Aeronautical after set off."

BIAL's Response

We would like to submit that as part of our contracts with various third party concessionaires, BIAL charges the Concessionaires for the provision of infrastructure for utilities in addition to recovering the cost of utility charges as levied by various utility providers. Accordingly, the amount of revenue recoveries & recovery of charges to the Concessionaires are as below:

- 1. Revenue recoveries for the provision of infrastructure for utilities
- 2. Recovery of cost of utility charges as levied by various utility providers. These are in the nature of pass through charges

As part of its tariff filing, BIAL had already considered the net cost of utilities as part of its Operating Cost projections after deducting any recoveries of pass through charges from the third party Concessionaires.

BIAL would like to clarify that the recovery of revenues reduced from operating expenses by the Authority pertain to the charge for provision of infrastructure facilities as mentioned above. These are revenues earned by BIAL on account of the utility infrastructure provided up by BIAL which are used by the concessionaires and not on account of utilities usage.

BIAL would like to highlight that even the Statutory Auditors have confirmed and accepted that utility recoveries towards provisioning of utility infrastructure is revenue in nature and instead of reducing utility recovery from operating expenses, the same needs to be accounted as revenue. Further, BIAL has been apportioning a concession fee on these recoveries. Hence, we submit that the categorization of the utility recoveries as revenues is the appropriate and consistent approach in terms of generally accepted accounting principles and also in the given general business / commercial practices.

It is also pertinent to note that such utility infrastructure has been set up in those areas of the terminal building, which are occupied by concessionaires; and are hence considered as non-aeronautical asset base for the computation of RAB. Therefore, setting-off such recoveries from aeronautical expenses would be inconsistent.

Further, as per para 4.24 ICAO's Economic Manual (Doc 9562), payments received for services as heating, air conditioning, lighting, water, cleaning and telephone use are non-aeronautical in nature. An extract of the manual has been reproduced below,

"4.24 Other revenues from non-aeronautical activities. All other revenues the airport may derive from non-aeronautical activities. It would also include payments received by the airport for such services as heating, air conditioning, lighting, water, cleaning and telephone use, provided they are not included in the rental or concession fees, and for any services provided to non-aviation entities outside the airport."

Accordingly, BIAL requests the Authority to treat these revenue recoveries from various concessionaires as non-aeronautical revenues instead of reducing these revenue recoveries from utility expenses.

BIAL's Submission

BIAL requests the Authority to consider the recoveries from third party Concessionaires on account of provision of infrastructure as non-aeronautical revenues.

10.2.2.On Authority's consideration of notional revenues from Security Deposits

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the consideration of notional revenues from security deposits:

"11.2.41 These Security Deposits could mean a reduction in the rentals/ charges collected from the respective users. The Authority accordingly proposes to consider a notional revenue on the Security Deposits collected from Non-Aeronautical service providers."

BIAL's Response

BIAL would request the Authority to have reference to its Airport Guidelines on the matter of Revenues from services other than aeronautical services (NAR). Para 5.6.1 of the Airport Guidelines prescribes the manner in which NAR needs to be reviewed, and an extract of the same has been given below,

"5.6.1. The Authority's review of forecast of revenues from services other than aeronautical services may include scrutiny of bottom-up projections of such revenues prepared by the Airport Operator, benchmarking of revenue levels, commissioning experts to consider where opportunities for such revenues are under-exploited, together with the review of other forecasts for operation and maintenance expenditure, traffic and capital investment plans that have implications for such activities."

The Airport Guidelines as given above do not mention the concept of notional revenues. Therefore, the Authority's consideration of notional revenues while reviewing the forecast of non-aeronautical revenues is not in accordance with the prescribed procedures given in the Airport Guidelines.

BIAL would like to submit that the reasoning provided by the Authority that the security deposits could have led to a reduction in the rentals/charges from respective users has no rationale and is not justified. The lease rentals of BIAL for various third party Concessionaires are benchmarked and hence security deposits from non-aeronautical concessionaires are not being accepted in lieu of rental revenue.

Further, these deposits amount to approximately three months' rent, which is a common practice in the real estate business and is intended to protect BIAL against defaults, bad debts and damages caused to property. Security deposits have been used in the ordinary business

operations or have been placed as fixed deposits with banks and such interest income is already considered as non-aeronautical revenues.

Impact of Security deposits in terms of reducing the requirement of working capital

While BIAL has obtained security deposits as a prudent business practice, it is worth mentioning that by investing the proceeds of security deposits into the airport business, BIAL has reduced its requirement for working capital. Accordingly, BIAL is already saving on interest, which would have been incurred on working capital loans, which the airport users would have otherwise had to bear in the form of higher aeronautical tariffs. Despite the above, the Authority has proposed to consider a notional interest on security deposit as NAR resulting in a two-fold setback to BIAL.

Impact of TDSAT Order - return to be provided on Security deposits

BIAL would like to draw the Authority's attention towards the TDSAT Order, which has allowed the airport operator a return on deposits of ~ Rs. 1,471 crore used for funding aeronautical assets, which were earlier given zero return while computing aeronautical charges by the Authority. Vide the above judgement, the Hon'ble TDSAT has upheld that security deposits should be treated as funds of the airport operator, and in the event these deposits are invested in the aeronautical business, the airport operator should be allowed to recover a return on such investment, as part of its aeronautical tariffs. The Hon'ble TDSAT ruled that "Its cost needs to be ascertained and made available to DIAL through appropriate fiscal exercise at the time of next tariff redetermination."

In light of the above ruling where the Hon'ble TDSAT has allowed a return on security deposits in the case of DIAL, the Authority's proposal to assume a notional interest on these security deposits and treat the same as non-aeronautical revenues of which 30% is used to cross-subsidize aeronautical operations is completely contrary to the TDSAT Order.

Inconsistent treatment by Authority

BIAL submits that the Authority's treatment of notional revenues has not been considered in tariff determination of other airports. BIAL requests Authority not to go ahead with above inconsistent approach and any contrary approach will result into discriminatory treatment.

Further, BIAL requests the Authority to not consider notional revenue on security deposit but to allow a return on the proceeds of security deposits, as these have been invested in airport projects.

BIAL's Submission

BIAL requests the Authority to adopt a consistent approach across all airports and to not consider a notional revenue on security deposit but to allow a return on the proceeds of security deposits, as these have been invested in airport projects.

10.2.3.On Authority's consideration of notional land lease rent for the area given to the Hotel Operator as non-aeronautical income

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the consideration of notional land lease rent for the area given to the hotel operator as non-aeronautical income:

"11.2.38 The Authority notes from the actual and projected financials of the Hotel Operations that it will incur a loss. The Authority also notes that there is no income accruing to BIAL, even on the land area given on lease. The Authority accordingly proposes to consider a land lease rent for the area given on lease to the Hotel Operator as non-aeronautical revenue for the purpose of this control period, considering the losses in the Hotel. This would be reviewed again based on the changes in scenarios."

BIAL's Response

BIAL would like to reiterate, and adopt, its response to Proposal 1a for Property Development in para 3.2.2.1. Hotel is part of Non-airport activity, as per Schedule 3 Part B of the CA. It is reiterated that CA does not provide for cross subsidization of any income from Non-Airport activites and also CA provides for non-airport activities to continue beyond the expiry of the concession period, they fall outside the purview of regulation. Therefore, any income from property development should not be considered for tariff determination.

The Authority has considered a notional lease rental from the hotel as non-aeronautical revenue in the hands of BIAL, 30% of which is used to cross-subsidize aeronautical operations despite acknowledging the fact that the hotel subsidiary is currently in losses and such revenues are not accruing to BIAL. The approach of Authority to assume property development business will always generate profits and to assume notional revenues in absence of profits is not prudent. Such an approach affects the internal accruals that are available to BIAL.

In light of the above, BIAL requests the Authority not to consider notional lease rentals from the hotel while determining aeronautical charges for the Second Control Period.

No details were available on the basis of quantum of notional revenues that were arrived as part of CP

BIAL submits to the Authority that either basis or methodology of arriving at notional revenues with respect to land utilized for Hotel being provided in the CP. The potential of rentals from the utilization of the land can be varied depending upon the nature of the non-airport / RE business. It may not be prudent to assume rentals of an arbitrary nature and consider the same for Hotel.

Treatment of Interest earned Security Deposit received from Hotel

BIAL would like to submit Authority that a Security deposit of Rs. 76.5 crore received from Hotel . An interest income of \sim Rs. 55 crore was earned from the above deposit. The interest income earned on this security deposit was considered outside the regulatory purview in the first control period but however the entire interest income generated is proposed to be considered as non-aeronautical revenue and thereby 30% of same was considered for cross subsidization by Authority.

BIAL's Submission

BIAL requests the Authority to consider any revenues and costs from the Hotel business outside the regulatory purview in line with the provisions of its CA and not to consider any notional lease rentals from the hotel while determining aeronautical charges for the Second Control Period.

10.2.4.On Authority's treatment of non-aeronautical revenues

AERA's Treatment

As per the CP, the Authority has projected a few non-aeronautical revenues to increase by 12.5%, which is in line with passenger traffic. The position of the Authority in each of them has been reproduced below,

Landside Traffic

"11.2.6 The Authority notes BIAL submissions above on Non-Aeronautical Revenues, the constraints faced in the Terminal Building and the change in profile of passengers. While it may not be possible to project a higher growth at revenue per passenger level, the Authority proposes to consider an increase in revenue by 12.5% per annum from FY 2018 onwards,

broadly in line with the increase in volume of passengers and proposes to recalculate the revenues accordingly. "

Retail

"11.2.10 The Authority notes BIAL submissions above on Non-Aeronautical Revenues, the constraints faced in the Terminal Building and the change in profile of passengers. While it may not be possible to project a higher growth at revenue per passenger level, the Authority proposes to consider an increase in revenue by 12.5% per annum from FY 2018 onwards, broadly in line with the increase in volume of passengers and proposes to recalculate the revenues accordingly."

Lounge Revenues

"11.2.25 The Authority notes BIAL submissions above on Non-Aeronautical Revenues, the constraints faced in the Terminal Building and the change in profile of passengers. While it may not be possible to project a higher growth at revenue per passenger level, the Authority proposes to consider an increase in revenue by 12.5% per annum from FY 2018 onwards and proposes to recalculate the revenues accordingly."

Flight Catering

"11.2.30 As detailed above, while it may not be possible to project a higher growth at revenue per passenger level, the Authority proposes to consider an increase in revenue by 12.5% per annum from FY 2018 onwards, broadly in line with the increase in volume of passengers and proposes to recalculate the revenues accordingly."

BIAL's Response

Regarding Retail, F&B and Lounge Revenues

BIAL notes that the Authority has considered a substantial increase in the revenues pertaining to Retail, F&B and Lounge services as compared to the revenues projected by BIAL.

However, while BIAL would ideally like to enhance such revenues as much as possible, there are a number of constraints due to which our revenues may not be able to reach the levels provided by the Authority.

Significant impact on provisioning of Non-Aeronautical services due to exponential traffic growth

Firstly, BIAL has witnessed a substantial growth in passenger traffic over the last few years. While BIAL is currently designed to handle 20 million passengers per annum, it is already handling close to ~27 million passengers in FY 2017-18. Based on the projections of the Authority, BIAL would need to handle ~38 million passengers by FY 2020-21. Accordingly, to cater such higher traffic until operationalization of Terminal 2, BIAL may have to increase the aeronautical area and consequently the areas given out on terminal concessions may have to be reduced. This is expected to result in a lower increase in select non-aeronautical revenues including retail, F&B and lounge revenues.

Reduction in Dwell time in Security Hold Area impacting Non-Aeronautical revenues

Secondly, as BIAL's infrastructure gets stretched, more number of passengers would have to be processed through the existing terminal area. With constraints on check-in area / security processing area etc., the passenger queuing / processing time is likely to increase and hence, passengers would take longer time to reach the security hold area. Consequently, passengers spend lesser time in the security hold area where they are most likely to spend on retail, F&B and lounges. Also, there would be constraints on the kitchen area, back of house/warehousing areas which would also have an impact on sales.

Certain business are continuing in MAG

Thirdly, there are a number of concessions like Sim cards, forex & duty free business, which have Minimum Annual Guarantee ('MAG') arrangements with BIAL Airport and are still performing at MAG levels. Additionally, competition from e-commerce platform is making the business proposition tougher for these concessionaires and thus, these concessionaires are forcing BIAL to bring down the MAG.

Short term closure of Business to change in Contracts / Concepts

Additionally, current lounge contracts are due to expire by March 2019. This will require fresh tendering process for selection of a new concessionaire. The on-boarding of a new concessionaire for lounge through market discovery and creation / implementation of new concepts by the new concessionaire is expected to have impact on regular operations of the lounge for a period of 6-9 months and hence impact on the non-aero revenue.

In lieu of above, the Authority is requested to consider growth in retail, F&B and lounge revenues at 5% p.a. based on estimates of BIAL. In case BIAL is able to achieve higher revenue than estimates, the same is available for true-up based on actuals at the time of determining aeronautical tariffs for the Third Control Period.

Landside Traffic revenues – Severe constraints impacting the growth Impact on Landside parking revenue – Severe constraints on parking slots

BIAL as part of its responses has already shared certain practical considerations regarding revenues from parking, taxi and limousine service. The growth opportunity in the parking revenues of BIAL would be constrained on account of the landside expansion works such as the multi-level car park, roadways, others projects which are projected over the Second Control Period. It is likely that more than 50% of the parking slots maybe lost during T2 expansion (flyover proposal). Moreover, proposed relocation of parking areas will be far from the existing terminal which may increase the likelihood of passengers opting for other modes of transport due to inconvenience. Additionally, increase in city traffic is also likely to discourage passengers from travelling to the airport using their own vehicles.

Impact on Landside taxi revenue – Impact due to app taxi and public transport services

Further, the business of airport taxi operators has decreased due to competition from App based taxis and aggregators. The parking space at BIAL is constrained and will not able to accommodate the complete requirements of App based taxi service providers as well. Also, taxi usage is likely to be adversely affected by rising cab fares (due to State government regulations) and competition from public transport systems such as BMTC-buses and direct fly buses.

Impact on Limousine revenue - Continuing to be in MAG since inception of Airport

The limousine concession is currently running on the MAG and may decide to opt out of the Airport. Hence, BIAL's estimate of an annual increase in revenues of 5% p.a. in these revenue streams is a more appropriate estimate of the likely result as compared to a 12.5% p.a. increase considered by the Authority. In case BIAL is able to overshoot this estimate, the Authority would have recourse to a true-up based on actuals at the time of determining aeronautical tariffs of the Third Control Period.

Flight Catering business not expected to increase due to higher growth of LCC airlines

BIAL does not anticipate higher growth on account of passenger growth as there is higher increase in LCC model as against FSC model. Passengers flying on LCC have the option of consuming or not consuming a paid meal, which is not available to passengers flying on full service carriers, where the cost of meal is included within the ticket. This is likely to reduce the growth rate of the airport's revenues from flight catering services. Accordingly, the same revenue per passenger of FY 2015-16 has been considered by BIAL for entire Second Control

Period. The Authority is requested to consider the same towards determination of aeronautical charges for the Second Control Period. In case BIAL is able to overshoot this estimate, the Authority would have recourse to a true-up based on actuals at the time of determining aeronautical tariffs for the Third Control Period.

BIAL's Submission

The Authority is requested to consider the revenues projections from non-aeronautical services as per the submission made by BIAL and to review and true up the non-aeronautical revenues on actuals, at the time of determination of tariff for the next control period.

10.2.5. On Authority's treatment of interest income as non-aeronautical revenues

AERA's Treatment

As per the CP, the Authority has consider the following approach for interest income,

"Authority proposes to consider Interest Income, without any exclusions as Non-Aeronautical Income"

BIAL's Response

Interest income is derived when surplus cash available with the airport operator is invested to earn interest income. Such investments have no relation with non-aeronautical or aeronautical services provided by the airport operator. Given the above premise, such interest income should belong entirely to BIAL and should be outside the regulatory purview. Therefore, it would not be appropriate to treat the same as non-aeronautical income and subject it to 30% SRT.

Authority may note that BIAL has been able to generate the surplus cash through better cash flow management. Such better cash management and surplus cash has facilitated Airport not to avail Working Capital Loan thereby avoiding the requirement of reimbursement of interest on Working capital from the Authority.

BIAL would like to submit that on multiple prior occasions, the Authority has treated interest income for the airport operator as revenue to be kept outside the regulatory purview. For e.g. in the case of Airports Authority of India ('AAI') airports, any interest income has not been considered as non-aeronautical revenues.

BIAL's Submission

BIAL requests the Authority to ensure consistency in its treatment of various building blocks of tariff determination across airports. As has been the treatment of interest income in the case of other airport operators, and considering the manner in which interest income is earned, BIAL submits to the Authority to remove interest income from the regulatory purview and consider it outside the 30% SRT.

10.2.6.On review and true up of the Non-Aeronautical Revenues on actuals, at the time of determination of tariff for the next control period

BIAL's Submission

BIAL submits that the non-aeronautical revenues for the current control period may differ from the projections considered for the determination of tariffs on account of factors such as changes in passenger traffic, passenger spending and consumption patterns, scale of airport operations etc.

Accordingly, BIAL is in agreement with the Authority's proposal to true up the non-aeronautical revenues for the current control period, at the time of determination of tariff for the next control period.

11. Regarding Cost of Equity, Cost of Debt and Fair Rate of Return

11.1. Authority's Proposal No. 11.a

- 11.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 11.1.1.1. Consider Cost of Equity at 16% for computation of Fair Rate of Return
 - 11.1.1.2. To commission a study on Cost of Equity and consider the results of the same at the time of truing up Second control period revenues
 - 11.1.1.3. To consider Cost of Debt at 10.25%
 - 11.1.1.4. To consider the FRoR as detailed in Table 61 Para 12.2.14 of the Consultation Paper for the purpose of computing ARR for the second control period
 - 11.1.1.5. To true up the Cost of Debt based on any changes to Interest rate and to true up the Fair Rate of Return based on changes to the gearing between Equity and Debt considering actual position for the control period, at the time of determination of tariff for the next control period.

11.2. BIAL's Response

11.2.1.Cost of Equity being considered at 16% instead of BIAL submission at 21.48% as per CAPM approach

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the cost of equity:

"i. To consider Cost of Equity at 16% for computation of Fair Rate of Return."

BIAL's Response

BIAL has considered its Cost of Equity at 21.48% compared to 16% proposed by the Authority. As per the Authority's Airport Guidelines, 2011 airport operators need to submit an assessment of cost of equity based on Capital Asset Pricing Model (CAPM) with supporting evidence including:

- i. The risk free rate
- ii. The equity market risk premium
- iii. Equity beta

BIAL has gone precisely by the requirements of the Authority and computed its Cost of Equity using CAPM and submitted the same along with all supporting information. A summary of BIAL's computation of Cost of Equity is as given below,

Components of CAPM	Value	Logic/source
Rf (Risk free rate)	7.86%	10 year average of 10 year bond yield (2005-2015)
Equity Risk Premium (ERP) for India	8.01%	Revised ERP of India as per Aswath Damodaran approach (July 2015)
Asset Beta (Ba)	0.51	As suggested by National Institute of Public Finance and Policy and the Authority in Order No. 8/2014-15
Debt (D)	70	Expected Debt Equity Ratio for BIAL
Equity (E)	30	Expected Debt Equity Ratio for BIAL
D:E	0.7	Expected Debt Equity Ratio for BIAL
Equity Beta (Be)	1.7	Ba/(1-D:E)
Ke (Cost of equity)	21.48%	Rf + Be*(ERP (India))

As BIAL's approach to computing its Cost of Equity is exactly as per the approach adopted by the Authority, there is no reason for the Authority to deviate from its guidelines and propose a lower Cost of Equity for BIAL. Accordingly, BIAL request the Authority to allow it to consider 21.48% as it Cost of Equity.

BIAL's Submission

BIAL requests the Authority to consider the Cost of Equity at 21.48% based on the justification provided by BIAL.

11.2.2.On Authority's proposal to commission a study on Cost of Equity and consider the results of the same at the time of truing up Second control period revenues.

BIAL's Submission

BIAL has noted the Authority's proposal to commission a study on Cost of Equity and consider the results of the same at the time of truing up Second Control Period revenues. At this stage, since we are not aware of the terms and scope of such study, BIAL reserves its right to respond to such a study at a later date.

Further, till the time such study is completed, BIAL requests that the Cost of Equity as per BIAL submissions above is considered for the determination of aeronautical charges. Any surplus or deficit resulting from the proposed study may be considered at the time of true-up.

11.2.3.On Authority's proposal to consider the Cost of Debt at 10.25%

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the cost of debt:

- "12.2.7 The Authority also notes that while BIAL has proposed Interest rate of 11.5% in its submissions, Financial statements for the year 2016-17 indicate that the existing loans have been refinanced with SBI with Interest rate of around 9.9%.
- 12.2.8 Also, the Authority notes that Reserve Bank of India has issued guidelines for setting lending rate of loans under the name marginal cost of funds based lending rate instead of the base rate from April 2016.
- 12.2.9 Considering the above, the Authority proposes to consider an interest of 10.25% for the second control period."

BIAL's Submission

BIAL would submit to the Authority that interest rates are uncertain and fluctuate based on market factors. BIAL assures the Authority of its best efforts of trying to confine its interest outflows to a rate below 10.25% p.a. However, in case the interest rates for BIAL harden over time, BIAL requests the Authority to be considerate on that account and allow a true-up while determining tariffs for the Third Control Period.

11.2.4.On Authority's proposal to consider the FRoR as detailed in Table 61 Para 12.2.14 of the Consultation Paper for the purpose of computing ARR for the second control period and Ring-fencing BIAL's investment in the hotel for the purpose of FRoR

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the determination of Fair Rate of Return ('FROR'):

"12.2.12 The Authority understands that BIAL has invested in subsidiary Bangalore Airport Hotels Limited in December 2013. From the Balance sheet of BIAL as of 31st March 2016, the Authority notes that BIAL has invested an amount of Rs. 2 Crores in Equity of the entity. Also

an amount of Rs. 220.27 crores appear as Long-Term loans and advances as being given to BAHL under "related party disclosures" in the Financial statements. The Authority noted that BIAL has invested funds as Long Term Investments in other businesses not relating to Airport Operations.

- 12.2.13 The Authority proposes to recompute FRoR considering the below factors:
- 12.2.13.1 Exclude Investments in other businesses for computing Equity for FRoR.
- 12.2.13.2 Compute FRoR considering Shareholder funds, Debts and Interest Free State Support Loan.
- 12.2.13.3 Considering changes in gearing in the Business Plan to utilise debt drawings to the maximum. (The Authority understands that the Business Plan projects Debt and Equity and Gearing based on the changes made to ARR)."

BIAL's Response

Contradictions identified in the Authority's Treatment

The Authority has treated hotel as a non-aeronautical activity but ring-fenced / excluded equity investments into the hotel while computing Equity for FRoR. As discussed earlier, the Authority considered revenues from property development as non-aeronautical revenues in the following ways:

- Security Deposit of Rs. 76.5 crore received from hotel is considered as part of tariff determination. A notional interest on these security deposits have been factored in as a non-aeronautical revenues and subjected to 30% SRT
- A notional lease rental has been considered from hotel and treated as non-aeronautical revenues. The Authority has never considered such a notional rental in any of the previous exercises of tariff determinations.

In the normal regulatory practice, investments in non-aeronautical businesses were never ring-fenced /excluded from Equity while computing FROR.

Further, equity investments of BIAL in the hotel are ring fenced for the purpose of computing FRoR. However, the basis for such treatment not explained by Authority in the Consultation Paper. BIAL may have to interpret that investments were excluded from Equity computation as hotel is a non-airport / RE business. The treatment of considering hotel revenues as non-aeronautical and not considering investment in hotel business is a contradiction and inconsistent. Such an approach is to the detriment of BIAL. The above inconsistent approach brings down the values of FRoR, as compared to the FRoR otherwise would have been computed in the normal course, impacting the returns that are made available to BIAL significantly.

It is worth mentioning that while BIAL's investment in the hotel has been ring-fenced from Equity for the purposes of computing FRoR, all the benefits of the hotel, i.e. cashflow support on account of security deposit, interest earned on security deposit, notional lease rentals etc. have been considered for tariff computations. BIAL would like to highlight that this position of the Authority is despite the fact that funds collected from the security deposit of the hotel has also been deployed back into the airport business. Such a treatment is inconsistent and to the detriment of BIAL.

Arbitration award involving the hotel

BIAL would like to highlight that it had to adhere to arbitration award under which it had to acquire hotel Bangalore Airport Hotel Limited ('BAHL'). The Authority is requested to take cognizance of the fact that BAHL has been in losses since its inception before finalizing its regulatory treatment while issuing a tariff order. Also, cash is fungible and cannot be

attributable to specific investment in hotel and hence, not to exclude the investment while computing FRoR.

BIAL's Submission

Based on the above, BIAL requests the Authority to consider the investment in the hotel subsidiary as a non-airport activity and outside the regulatory purview in line with the provisions of its CA.

Further, BIAL also requests the Authority not to exclude BIAL's investment in BAHL from equity while computing FRoR.

11.2.5.On true up of the Cost of Debt based on any changes to Interest rate and to true up the Fair Rate of Return based on changes to the gearing between Equity and Debt considering actual position for the control period, at the time of determination of tariff for the next control period.

BIAL's Submission

BIAL submits that the Cost of Debt and FRoR for the current control period may differ from the projections considered for the determination of tariffs on account of fluctuations in interest rates and changes in capital structure respectively. Accordingly, BIAL is in agreement with the Authority's proposal to true up the Cost of Debt and FRoR for the current control period, at the time of determination of tariff for the next control period.

12. Regarding Taxation

12.1. Authority's Proposal No. 12.a

- 12.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 12.1.1.1. To consider tax outflow estimate (MAT) as detailed in Table 63 Para 13.2.4 above for computation of Aggregate Revenue Requirement.
 - 12.1.1.2. To true up the projections based on actuals, at the end of the control period, in computation of tariff for the next control period

12.2. BIAL's Response

12.2.1.On tax outflow estimate (MAT) for computation of Aggregate Revenue Requirement

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the tax outflow:

- "13.2.1 The Authority noted that Minimum Alternate Tax (MAT) is the minimum tax outflow that the company has to make, on the book profits. The Authority also notes that MAT paid can be carried forward and adjusted against the normal tax payable by the entity on the tax computed on profits from the year after the tax holiday period.
- 13.2.2 The Authority notes that the Authority's guidelines detail that tax payments will be considered for ARR computations. Accordingly, the Authority considers the tax outflow projected based on the Aeronautical P&L as the tax cost to be added to the ARR."

BIAL Submission

BIAL has noted the submission of the Authority. BIAL would like to submit that it is covered under section 80-IA income as per the Income Tax Act, 1961. Accordingly, Minimum Alternate ('MAT') payable on reported profits will have a matching MAT credit (asset) creation available for set off in the next 10 years as per the current applicable provisions of Income Tax Act, 1961.

12.2.2On Authority's proposal to true up the projections based on actuals, at the end of the control period, in computation of tariff for the next control period

BIAL Submission

BIAL submits that the taxes paid for the current control period may differ from the projections considered for the determination of tariffs on account of various factors.

Accordingly, BIAL is in agreement with the Authority's proposal to true up the Taxation for the current control period, at the time of determination of tariff for the next control period.

13. Regarding Working Capital Interest

13.1. Authority's Proposal No. 13.a

- 13.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 13.1.1.1. To consider Working Capital Interest / Fee as detailed in Table 65 Para 14.2.2 of the Consultation Paper for computation of Aggregate Revenue Requirement
 - 13.1.1.2. To true up the projections based on actuals, at the end of the control period, in computation of tariff for the next control period

13.2. BIAL's Response

13.2.1.On Authority's proposal for treatment of Interest on Working Capital

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the interest on working capital:

"14.2.1 The Authority notes that BIAL has projected Working Capital Interest at 12% from first year together with lender / engineer fee for the loans taken. The Authority also understands that as of date, while the Working Capital limits are sanctioned by the bank, these have not been availed.

14.2.2 The Authority proposes to compute WC Interest on the funds estimated as per Financial Model at 9.5% from 2018-19 onwards. Accordingly, the recomputed fee/ Working Capital is as detailed below:"

BIAL's Response

BIAL acknowledges the Authority's statement that these working capital limits have not been availed. The interest rate proposed by the Authority on working capital loans i.e. 9.5% p.a. We would like to highlight that the interest rate considered by Authority is lower than the interest rate allowed on long term finance viz. 10.25% p.a. As the Authority would be aware, interest on short term financing (working capital) are always higher than long term loans. Considering this, we request the Authority to consider working capital interest rate at more than 10.25% p.a. and accept BIAL's estimate of $\sim 12\%$ p.a.

BIAL Submission

BIAL requests the Authority to consider 12% p.a. as the cost of working capital loans for the remaining years of the Second Control Period.

13.2.2.On Authority's proposal to true up the projections based on actuals, at the end of the control period, in computation of tariff for the next control period

BIAL's Submission

BIAL submits that the working capital requirement / interest for the current control period may differ from the projections considered for the determination of tariffs on account of factors such as changes in passenger traffic, O&M expenditure, non-aeronautical revenue etc.

Accordingly, BIAL is in agreement with the Authority's proposal to true up the working capital interest for the current control period, at the time of determination of tariff for the next control period.

14. Regarding WPI

- 14.1. Authority's Proposal No. 14.a
 - 14.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 14.1.1.1 To consider WPI at 3.9% for all the years of the 2nd Control Period based on the results of the latest survey by RBI. The Authority would update this inflation rate at the Order stage based on the latest forecasts

14.2. BIAL's Response

14.2.1.On Authority's proposal to consider WPI at 3.9% for all the years of the 2nd Control Period based on the results of the latest survey by RBI. The Authority would update this inflation rate at the Order stage based on the latest forecasts

AERA's Treatment

As per the CP, the Authority has stated as below with respect to the WPI:

"15.2.2 The Authority proposes to consider inflation forecasts as per the quarterly survey conducted by the RBI in January 2017. As per the "Results of the Survey of Professional Forecasters on Macroeconomic Indicators – Round 44", the median percentage change in WPI over the succeeding five years is projected at 3.9% p.a. An extract of the results of RBI's forecast has been reproduced below:

	Annual Average Percentage change over next 5 years						
	Mean Median Max Min						
Real GVA	7.5		8.4	6.5			
CPI Combined	4.8	4.7	5.4	4.2			
WPI	3.8	3.9	4.6	3			

..."

BIAL Submission

BIAL submits that actual WPI may differ from the projections considered for the determination of tariffs. Further, BIAL as part of MYTP submissions requested for true up of WPI as well, while determining actual performance by the end of tariff period. Accordingly, BIAL requests the Authority to consider the truing up of WPI to actuals at the time of determination of tariff for the next control period.

15. Regarding Quality of Service

15.1. Authority's Proposal No. 15.a

- 15.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 15.1.1.1 The Authority proposes that BIAL shall ensure that service quality at Kempegowda International Airport conforms to the performance standards as indicated in the Concession Agreement over the 2nd Control Period.
 - 15.1.1.2. The Authority proposes not to levy any penalties / rebates against BIAL for the 1st Control Period as BIAL has managed to ensure prescribed levels of service quality during the review period

15.2. BIAL's Response

15.2.1.On Authority's proposal that BIAL shall ensure that service quality at Kempegowda International Airport conforms to the performance standards as indicated in the CA over the 2nd Control Period

AERA's Treatment

As per the CP, the Authority has stated as below with respect to service quality:

"16.2.4 The Authority understands that BIAL has got an ASQ rating of 4.85 in the year 2016 and 4.83 in the year 2017. Hence, the Authority is of the view that BIAL is meeting the required performance standards and there is no need for any penal provisions to be applied on BIAL.

16.2.5 Similarly, for the 2nd Control period, the Authority proposes that BIAL shall ensure that service quality at Kempegowda International Airport, Bengaluru conforms to the performance standards as indicated in the Concession Agreement."

BIAL Submission

As Authority has noted, BIAL continues to comply with the requirements of the CA and over the first two years of the Control Period has exceeded the ASQ requirement (2016-4.85, 2017-4.83). In first quarter of 2018, ASQ score of KIA was 4.89. It can be seen that BIAL continues to meet the minimum requirements and is undertaking all necessary steps to ensure that it continues to meet the performance standards including making necessary capital investments, implementing digital initiatives including Digi Yatra etc.

The inability to take up capital investment due to cash flow issues may hamper operations and ability to handle such high growth in traffic, which may impact the service quality levels.

16. Regarding Aggregate Revenue Requirement

16.1. Authority's Proposal No. 16.a

- 16.1.1. Based on the material before it and its analysis, the Authority has proposed to
 - 16.1.1.1. Consider the Aggregate Revenue Requirement as detailed in Table 67 Para 17.2.2 of the CP as the eligible ARR for the second control period for BIAL.
 - 16.1.1.2. Ask BIAL to submit the Annual Tariff Proposals within 7 days from issue of this Consultation Paper which will be reviewed and put up for stakeholder consultations.

16.2. BIAL's Response

16.2.1.On Authority's proposal to consider the Aggregate Revenue Requirement ('ARR') as detailed in Table 67 Para 17.2.2 of the CP as the eligible ARR for the second control period for BIAL.

AERA's Treatment

Cash Flow Scenarios resulting in negative cash, additional equity infusion and possible default on financial covenants

As per the Authority's estimates (business plan used for the purpose of the CP), BIAL is likely to have a negative cash flow of ~Rs. 7 crores by the end of the Second Control Period. Further, with internal accruals projected as per the Authority's calculations, there is a requirement of an additional equity infusion of ~Rs. 413 crores; considering an average 74% gearing ratio.

Capital expenditure not considered by the Authority

The Authority has only considered Rs. 9,344 Crores of capex of the amount submitted by BIAL, whereas, the total capex requirement (assuming the Authority's estimate of soft costs) of BIAL is around Rs. 10,555 crores. As a result, BIAL will need to fund this deficit of Rs. 1,212 crores through other means of finance.

BIAL Submission

Summary of Equity Deployment till date

BIAL would like to submit that till date, only 2% of the internal resource generation has been disbursed to the equity investors and BIAL has re-invested 92% of the resource generated into the business - either for capacity expansion / servicing debts / running the airport. Authority may note the summary of the Equity and Internal Accrual deployment over the period FY 2008-09 to FY 2017-18

Particular	Amount	%	Comments
Equity and Internal Accrual	3,820		
Deployment of Equity & Accruals			
Dividend Payout	93	2%	Disbursed to Equity Shareholders
Investment in hotel	233	6%	Investment enforced as result of arbitration
 Reinvestment of accruals to Airport business 	2,779	73%	Already reinvested into the business
Cash in hand as on Mar 18	716	19%	To be reinvested into the business

Negative Cash Balance

We would like to highlight to the Authority that even as per their business plan, BIAL's cash balance would be negative in years FY 2020 (Rs. 9 crores O/D) and FY 2021 (Rs. 7 crores

O/D); resulting in inadequate cash for future expansion or even regular operations of the airport. BIAL requires \sim Rs. 70 crores of cash in hand (equivalent to 45 days expenses) to run the airport.

Computing the cash flow requirements of BIAL for Second Control Period

Based on the approved capex, BIAL has estimated the cash flow support required by BIAL for the Second Control Period. BIAL's computation in this regard has been presented below,

Particulars		in Rs. Crores
Amount allowed by the Authority for CP2*	А	9,344
Additional amount not considered by the Authority	В	1,212
Total funding requirement in CP2	C=A+B	10,556
Assuming 70:30 ratio		
Equity + Internal Accrual required in CP2	D=30% x C	3,167
Internal Accrual invested in first 2 years	E	821
Opening Cash Balance before tariff revision	F	716
Cash generated in the remaining years of CP2	G	141
Cash Flow Support required in CP2	H=D-E-F-G	1,489
*CP2 refers to the Second Control Period of BIAL		•

As can be seen, BIAL will need at least an additional cash of ~Rs. 1,489 Crores to be able to fund capital investments in the Second Control Period.

Inability to infuse further equity

We would like to submit, based on the computation by Authority, BIAL would require an equity infusion of ~Rs. 413 crores for future expansion & operational requirements during the Second Control Period. As per the provision of BIAL Shareholder Agreement, the total equity holding of AAI and GoK together should be 26%. Also, the maximum Equity Contribution from AAI is capped at Rs. 50 crore. Since, AAI has cap of Rs. 50 crore which has already been invested by AAI as part of the existing Shareholding, any additional equity infusion to maintain State Promoter equity holding @ 26% should be from GoK. However, the GoK vide letter dated 26.08.2013 to the Authority has indicated their inability for additional equity infusion.

The excerpts of the respective clauses from Shareholders Agreement ('SHA') are reproduced below

"1.1 'AAI Equity Cap' means the maximum Equity Contribution of AAI, not exceeding Rs. 50,00,00,000/- (Rupees Fifty Crore)

7.6 (ii) Subject to the AAI Equity Cap, the combined shareholding of the State Promoters shall be no less than twenty six percentage (26%) of the total paid up share capital and KSIIDC, or its affiliates, shall contribute to such additional amounts to maintain the combined shareholding of twenty six percentage (26%) if the AAI Equity Cap is reached."

Further, the BIAL Board deliberated the matter in the 64th Board Meeting held on 16.05. 2013 and resolved that none of the promoters would be in a position to infuse further equity into the project.

The 64th Board Meeting resolution are reproduced below -

"Infusion of further equity into the project

The Board deliberated the matter further and asked Management to closely work with the Regulator to arrive at the Tariff and on the issue of infusion of further equity, the Board Members stated that none of the promoter would be in a position to infuse further equity into the project"

Possible Default on Financial Covenants

The Authority has considered a high gearing ratio of 74% whereas the acceptable gearing ratio from lenders is 70%. Any debt to be considered higher than 70% would not be possible as there could be issues to comply with the financial covenants.

Based on existing arrangement with the State Bank of India ('SBI'), BIAL has committed to maintaining certain financial covenants including (i) debt service coverage ratio, (ii) interest coverage ratio and (iii) fixed asset coverage ratio each of 1.25. Based on the Authority's business plan, BIAL would default on its financial covenants such as Debt Service Coverage Ratio.

Annual Tariff Proposal ('ATP') Submission of BIAL – Request for an equalized tariff for the entire Second Control Period, in terms of continuing existing tariff

BIAL requests Authority to peruse over the details pertaining to ATP submitted vide its e-mail dated 2.06.2018. However, BIAL would appreciate the opportunity to have an equalized tariff for the entire Second Control Period, in terms of continuing existing tariff as explained in the submission.

Regulatory precedent adopted by the Authority - Cash flow support provided to DIAL

The Authority vide Order No. 40/2015-16 stated that "Decision No.23b. -..... the Authority to grant an additional ARR of Rs. 691.50 Crores as on 01.01.2016 to help DIAL meet its cash deficit over the Second Control Period."

The Authority has taken the above view that it will provide an additional ARR to DIAL to cover for its estimated cash deficit for the Second Control Period so as to avoid default debt servicing, etc.... BIAL too is undertaking huge capital investment to cater to the increasing traffic and in the process of building second Runway and Terminal along with associated projects. It is essential that sufficient cash is available to fund these capex investments and ensure that there is no delay in project execution on account of lack of sufficient funds.

Accordingly, BIAL would request the Authority to consider its below-mentioned proposal on revenue equalization.

16.2.2.On Authority's proposal to ask BIAL to submit the Annual Tariff Proposals within 7 days from issue of this Consultation Paper which will be reviewed and put up for stakeholder consultations.

BIAL Submission on various proposals including plea for revenue augmentation, revenue equalization and cash support augmentation

BIAL was asked to submit the ATP, which would be reviewed and put for stakeholder consultation. BIAL submitted the Annual Tariff Proposal and the Variable Tariff Proposal ('VTP') to the Authority on 06.06.2018. Vide its proposals in the CP, the Authority has taken stand on various issues estimating the ARR and Yield. BIAL wishes to make its submission on the various proposals including plea for revenue augmentation, revenue equalization and cash support augmentation.

As highlighted above in the section on ARR, BIAL is in the process of undertaking huge capital investment to cater to the high growth in traffic. The Authority has considered capex investment to the tune of ~Rs. 9,344 crore; however, an additional amount of ~Rs. 1,200 crore is also expected to be spent during the Second Control Period. There are other capex investments like Terminal T2 Phase 2 and related works amounting to ~Rs. 4,000 crore, which will be invested in the Third Control Period.

BIAL has undertaken accelerated investments including investment in interim terminal development, second runway, Terminal T2 Phase 1 and Phase 2, sustaining capex and associated infrastructure in Second and Third Control Periods. BIAL is witnessing high growth in passenger traffic and the capex investments required to cater to the growth and the

investments are advanced to earlier period than envisaged in Master Plan on account of high growth.

BIAL submits that airport projects are capital intensive in nature and ARR of the airport tends to be substantially higher in regulatory control periods where large projects are under execution like in the case of BIAL. The variation in the tariffs charges over different regulatory periods caused mainly by the implementation of major projects usually result in tariff fluctuations which are undesirable and create an uncertain business environment for all the stakeholders in the sector. The regulatory philosophy and approach ensures higher tariff and increase in cash flows post execution of the projects. However, the need for the cash flow augmentation is required during the project execution phase as the outflows are higher during this period. In case of BIAL, the project execution is underway during the Second Control Period. However, the cash inflow in form of adequate tariff and revenue generation is substantially lower during this time.

Due consideration of the submissions made by BIAL as part of this document by the Authority will enable the airport to augment revenues and cash flows so as to be able to fund these crucial capacity enhancement programs. The nature of projects undertaken by BIAL are capital intensive having long gestation period and there is an inherent mismatch between the timing of cash outflows and inflows, which is likely to cause financial difficulty given the scale of such investment. BIAL would request the Authority to consider necessary revenue augmentation to BIAL for the current control period to have adequate cash flows to fund the future expansion.

In the light of above, BIAL requests the Authority to consider the proposal of allowing BIAL to continue with the existing User Development Fees – Domestic & International - for the balance period of the Second Control period, so as to have adequate cash flow support to undertake the envisaged investments. Such continuation of existing tariff is required in the scenario of cash flow shortfall resulting after final tariff determination, as the case may be. BIAL proposes to submit that any over recovery in the Second Control period will go to reduce the tariff impact for the Third Control Period. The revenue distribution / equalization for Second and Third Control Period will lead to balanced tariff and not result in tariff shock between regulatory periods as well. This will help in overcoming infrastructure bottleneck and planned investment can be undertaken to promote growth.

Expert views from former UK Civil Aviation Authority ('CAA') (2003-10) Regulator Harry Bush on advancing revenue to assure investment and a sustainable price path

Further, BIAL had requested Mr. Harry Bush to draw his experience as economic regulator at the UK CAA (2003-10) and as a regulatory adviser to regulators and airports since on how the RAB based mechanisms used by the Authority should be best designed to facilitate the scale of investment in prospect at BIAL and whether the fast-growing nature of the Indian aviation market poses challenges for these arrangements. At the outset of his note, Harry has explained the nature of an airports investment cycle and its relationship to pricing and regulatory frameworks. Harry pointed out towards the capital intensive nature of airports and specified that they require 'a continuing stream of investment to maintain, modernise, expand and, ultimately, replace facilities'. He further mentioned that while some of these investments result in small ('incremental') increments to the initial investment there are points where traffic growth calls for more 'lumpy' investments in a new runway / terminal which result in a significant increase in the capital base of the airport. Regarding the analysis of the airport investment cycle and its implications for the design of airport regulatory frameworks, Mr. Harry Bush mentioned that,

- "... these should seek to mimic or at least reflect some of the pressures that would obtain in a functioning market they should
- -recognise the centrality of the investment cycle to airport economics and seek to accommodate the periodic lumpiness of airport investment

-ensure that airports entering a heavy investment period should have the cash flows that assist in making the investment financeable and underpin the business case for third party financiers

-create a price profile which is consistent with the higher costs likely to be generated by sizeable investments."

Mr. Harry Bush subsequently spoke about the potential problems with cost-based regulation, where he stated that in conditions of 'steady, slow passenger growth and limited incremental investment' the basic RAB pricing model may lead to relatively stable prices. However, in a fast-growing market that is approaching a 'lumpy' investment, this would not be the case. In such a scenario there could be disjunctions as a result of the following factors,

"-a depreciation profile, reflecting the age of existing assets.

-a reducing price profile that accompanies the 'sweating' of existing assets through traffic growth.

-to be followed in a subsequent regulatory period by a major investment in capacity designed to relieve the congestion which has contributed to the previously reducing price profile

-a resulting mismatch in the profile of regulatory depreciation and projected capital spend reflecting the age of existing assets and the lumpiness of planned investment

-and, as the regulatory asset base diminishes over time due to depreciation, the lower overall returns to the airport further reduce the cash available to the airport operator"

Accordingly, Mr. Harry Bush mentioned that a number of steps can be taken to mitigate impacts of the above and smooth the effect to the benefit of both airports and their customers; especially for major airport projects where the adverse consequences for the stakeholders are likely to be severe. Mr. Harry Bush has therefore discussed a few measures to enhance the RAB framework including (i) lengthening the regulatory period, (ii) remunerating assets in the course of construction ('AICC') and (iii) equalising between regulatory periods to smooth prices and improve cash flows. Regarding the third measure on revenue equalization, Harry mentioned that it involves the movement of revenues between regulatory periods to smooth the impact on prices and to assist in the financeability of 'lumpy' investments where remuneration of AICC alone would not generate sufficient cash flow relief for the airport operator. Here, the revenue the airport receives would deviate from its costs in each period, being above in one but below in another. However, the approach would be consistent with prices reflecting costs over time, while taking these periods together. He also states that transferring revenues between periods enables regulators to retain the forecasting benefits of the shorter period while paying heed to the impact of developments over a longer time period.

Further, Mr. Harry Bush mentions that an interesting point about the three adjustments explained in his note is that they do not result in any extra cost for airlines but re-profile the costs over time to enable the airport to finance the necessary investment. Outcomes of the approach include creating a pricing profile which is more adapted to sustainable development of aviation at the airport and reducing the risk of cash flow impediments to the implementation of investment plans that will benefit passengers and the wider economy.

Lastly, Mr. Harry Bush has commented on whether the faster growth in India makes any difference to his analysis. His view on the matter is that it makes it more urgent to consider how RAB regulation should be adjusted for the following reasons,

"-faster growth means that 'lumpy' investments are likely to be more frequent as demand outstrips supply

-while in the pre- investment period fast traffic growth is likely to have acted to depress prices more speedily and, depending on the pattern of regulatory depreciation, more deeply than it might in more mature economies -as a result, the congestion premium available to airlines in the fares charged to passengers could quickly become significant and itself incentivise recipient airlines to oppose or delay capacity expansion, to the detriment of passengers and the economy"

Mr. Harry Bush has accordingly recommended that in such circumstances regulators "need to weigh up how best to facilitate and incentivise the necessary investment". He has also mentioned that the level of returns available and other parts of the regulatory settlement will be important as well as the availability of cash flows. A detailed note prepared by Mr. Harry Bush has been annexed with BIAL's submission (Refer Annexure 8)

BIAL's Submission

As KIAB is the kind of airport where the above constructs apply, BIAL would request the Authority to allow KIAB to continue levying the existing User Development Fees – Domestic & International - for the balance period of the Second Control period, so as to have adequate cash flow support to undertake the envisaged investments.

List of Annexures

Sl. No	Particulars
Annexure 1	Presentation to stakeholders during Consultation process dated 18.06.2018
Annexure 2	Order of Hon'ble TDSAT in the matter of BIAL dated 24.05.2018
Annexure 3	Opinion by Former Chairperson AERAAT, Justice V S Sirpurkar
Annexure 4	Aero and Non Aero area statement for Terminal 2 Phase 1
Annexure 5	Workings to justify consideration of GST at 13%
Annexure 6A	Presentation made to stakeholders during AUCC meeting held on 22.06.2018
Annexure 6B	Minutes of the AUCC Stakeholder Consultation Meeting held on 22.06.2018
Annexure 7	Technical study on 'Useful Life of Assets'
Annexure 8	Regulatory Note for new investments by Former UK CAA Economic Regulator Harry Bush



Stakeholder Consultation in the matter of determination of tariff for Kempegowda International Airport, Bengaluru for 2nd Control Period

18th June 2018

The need to create capacity at Indian airports

- India is forecast to be the third largest aviation market in the world before 2030
- The Ministry of Civil Aviation (MoCA) is seeking to provide a big push to the country's civil aviation sector, aiming at fivefold growth in passenger traffic to a billion trips a year; This is being pushed under a scheme called Next Generation Airports for Bharat (NABH) Nirman
- Major Indian carriers are forecast to have over 1,000 aircraft based in India (as against about 580 today)
- This scheme constitutes investments to be made in airport upgrade by both the private sector and the state-owned Airports Authority of India (AAI)
- AAI chairman Guruprasad Mohapatra said that increased infrastructure spend in the airport sector is the need of the hour and a substantial funding is expected from the private sector
- Major airlines have welcomed the move and publicly said that this initiative has the potential to transform the Indian aviation sector and make India a global aviation superpower
- Currently, most major Indian airports (Delhi, Mumbai, Bengaluru, Chennai, Kolkata, Hyderabad etc.) are congested
 either from an airside, terminal or landside perspective; In short, all airports are facing a major challenge creating
 adequate capacity in time to meet demand
- Operators need both freedom and flexibility to deliver this capacity in time to meet demand; Failing to do so, will have adverse consequences for both the aviation industry as well as state and national economies

India's current aircraft fleet

Indian scheduled (and non-scheduled commercial) air operators - Fleet Data Quick Reference

Passenger Aircraft	A330	A320	B737	B777	B747	CRJ	ATR	BQ4	ERJ	B787	Total
AirAsia India	-	18	-	-	-	-	-	-	-	-	18
Air-India	-	72**	-	18	3	-	16	-	-	27	136
Air-India Express	-	-	23	-	-	-	-	-	-	_	23
Go Air	-	35	-	-	-	-	-	-	-	-	35
IndiGo	-	159	-	-	-	-	8	-	-	_	167
Jet Airways	8*	-	83	10	-	-	18	-	-	-	119
SpiceJet	-	-	35	-	-	-	-	22	-	_	57
TruJet	-	-	-	-	-	-	5	-	-	-	5
Vistara	_	20	-	-		-	-	_	-	-	20
Zoom Air	-	-	-	-	-	3	-	-	-	-	3
Aircraft Type	A330	A320	B737	B777	B747	CRJ	ATR	BQ4	ERJ	B787	Total
Aircraft Total	8	304	141	28	3	3	47	22	-	27	583



^{**} Excludes non-operating and stored aircraft (ex Indian Airlines);
Excludes Airbus A330 aircraft leased out to Turkish Airlines.;
General note: Aircraft data includes temporarily grounded aircraft

Karnataka – India's growth engine



44.3%

Of the total investment plans for the country were in Karnataka, for the year 2017.

This makes Karnataka as number 1 state in terms of attracting business in the country

Largest skilled workforce in India
Exports of electronics and computer software from the state reached US\$ 62.66 billion 2016-17

Source

Indian Minerals Yearbook 2014, Economic Survey of Karnataka 2017-18 Karnataka State Budget 2018-19,2017-18* - (April-Sept) & Karnataka report by IBEF, 2018 https://www.ibef.org/download/FDI_FactSheet_21February2018.pdf
FDI - Foreign Direct Investment

4

KIA Bangalore







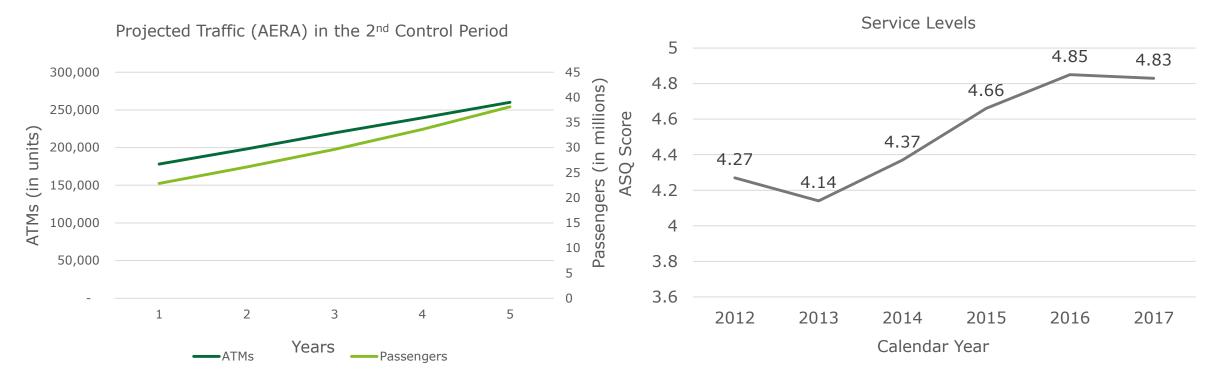




We're effectively tripling in size every 10 years –

In this context,
we need to
have freedom,
flexibility and
ability to cater to
demand

Snapshot of BIAL's Performance



- BIAL has been able to provide high service levels despite its growth. BIAL's current terminal is designed to handle ~20 million passengers p.a. but is already handling ~27 million passengers p.a. in FY 2017-18; by sweating its infrastructure.
- However, BIAL would be required to handle ~38 million passengers p.a. towards the end of the 2nd Control Period. Handling this volume of traffic would require interventions in the form of additional capacity both landside and airside.

Continuous expansion since AoD and Internal accruals generated over the last 10 years have been reinvested in capacity creation and upgradation

Major investments from FY 2008-09 to FY 2017-18:

■ T1A - expansion from 12 mppa to 20 mppa - ~ Rs. 1,500 crore

West Apron extension (25 stands) - ~ Rs. 130 crore

■ Terminal Refurbishment & Forecourt - ~ Rs. 180 crore

Current expansion - ~ Rs. 1220 crore

Balance towards upgradation Capex $- \sim \text{Rs. } 430 \text{ crore}$

Only 2% of the internal resource generation has been disbursed to the equity investors. 92% of the resource generated are ploughed back into the business, either for capacity expansion / servicing debts / running the airport.

FY 2008-09 to FY 2017-18:

Particular	FY 08-09 to FY 2017-18	%	Comments
Equity and Internal Accrual	3,820		
Deployment of Equity & Accruals			
Dividend Payout	93	2%	Disbursed to Equity Shareholders
Investment in hotel	233	6%	Investment enforced as result of arbitration
Reinvestment of accruals to Airport business	2,779	73%	Already reinvested into the business
Cash in hand as on Mar 18	716	19%	To be reinvested into the business

Capacity enhancements to meet traffic growth

The following interim initiatives have been taken to meet the high growth in traffic:

- Interim Terminal Improvements To enhance Terminal building capacity from 20 mppa to 26 mppa, to cater to peak
 hour capacity and improve passenger experience. This includes -
 - Swing gates at security Hold Area (SHA)
 - Baggage reclaim belt No 10
 - Addition of 3 (West Bus) gates
 - Addition of 16 check-in counters/ BHS and
 - Addition of 4 security lanes and other minor projects

Airside Project –

- West Apron development plan of 9 stands
- Rapid Exit Taxiway undertaken to enhance airside capacity.

Digital Initiatives –

- Digi Yatra Initiative Aadhar enabled entry and bio metric boarding system.
- Automated tray retrieval system (ATRS).
- Queue measurement system
- Self baggage drop kiosks
- Self service kiosks, moving/rowing kiosk

Works to improve connectivity to the airport due to growing passenger traffic

The following initiatives have been considered to improve connectivity to the airport:

- **South Access Road** Southwest connectivity which is an alternate access road to the airport. Project works started in Aug 2017 and was opened to pubic in March 2018.
- **Eastern Tunnel Works** It would give connectivity for the eastern part of Bengaluru city. Addresses the security concerns of single connectivity to Airport from NH 44
 - The construction of the Eastern Tunnel works involves the Phase 1- Early Works which includes construction of Tunnel below cross field taxiway (approximately 300 m, only civil works). The tentative construction schedule is planned for June 2018 to June 2019.

Plans for capacity enhancement due to growing traffic

The following projects have been considered to meet the capacity requirements of projected traffic:

- **New South Parallel Runway ("NSPR")** –The augmentation of airside capacity includes Site preparation & earthworks, 2nd Runway, taxiway, aprons, AGL and associated works. Major portion of earthworks has been completed and the NSPR tender has been awarded to Larsen & Toubro. [expected to be completed by December 2019]
- Second Terminal (T2) BIAL had proposed a second terminal (and allied infrastructure) with a capacity of 20 mppa; however it has decided to increase the capacity of T2 Phase 1 to 25 mppa considering the recent growth in traffic. The detailed design of the project is ready and the RFP for the development works has been floated. [expected to be completed by March 2021]
- Landside Development: To cater to increasing traffic, a Multi modal transport hub, extension of Main access road, development of cargo and connecting roads, widening of Trumpet, taxi-hold parking etc. has been planned.
- **Utilities and Other Projects**: This includes Water Tanks at the Booster Pump house, Sewerage Treatment Plant (STP), Central Utility Plant, Aircraft Maintenance, Cargo and fuel farm Site Development, Airport & Airlines Administration offices.
- 220/66 KV Substation With the upcoming facilities, total estimated power demand by 2020-21 is 33 MVA and the same by 2030 is 55 MVA. The power loads above 20MVA needs to be availed at 220KV level. Hence 220/66KV substation needs to be established to meet the upcoming development needs.

Capacity Enhancement and Capex Requirement

- 1. AERA has considered Rs. 9344 Crores of capex submitted by BIAL for terminal, NSPR and other allied projects based on technical evaluation by RITES for both hard and soft costs.
- 2. Total capex requirement (including the projects below) is around Rs. 10,555 crores.
- 3. AERA has not considered approx. Rs. 1212 crores of capex which includes:
 - a) GST impact not considered by AERA (around Rs. 400 crores)
 - b) Eastern Tunnel capex (around Rs. 96 crores), and
 - c) Minor Projects (around Rs. 716 crores) which include:
 - 220 Kv sub-station Rs. 334 crores
 - Digi yatra initiatives Rs. 100 crores
 - Express Cargo Rs. 62 crores

Projected cash flow as per AERA's proposals

Amount in Rs. Crore	2016-17	2017-18	2018-19	2019-20	2020-21
(A) PAT before dividend	185.4	271.1	255.2	304.8	165.9
(B) Depreciation and other Non-Cash adjustment	213.5	238.8	258.5	290.9	345.8
(C) Deferred Liabilities	17.9	12.9	22.7	56.9	87.8
(D=A+B+C) Internal Resource Generation (IRG)	416.9	522.9	536.4	652.6	599.6
Net Working capital changes	268.5	(176.5)	(53.7)	(173.6)	(179.2)
Cash generated from operations	685.3	346.4	482.7	479.0	420.4
Purchase of Fixed Assets	(613.9)	(1,557.8)	(2,553.4)	(2,640.6)	(1,977.8)
Cash generated from Investing	(613.9)	(1,557.8)	(2,553.4)	(2,640.6)	(1,977.8)
Increase / Decrease in Debt (including State Support Loan)	102.4	1,115.9	1,911.4	1,899.0	1,426.4
Dividend	(46.3)	(46.3)	(46.3)	(53.0)	(41.7)
Additional Equity infusion	-	-	-	238.4	174.6
Cash generated from Financing	56.1	1,069.6	1,865.1	2,084.5	1,559.3
Opening Cash	288.1	415.6	273.8	68.1	(9.0)
Closing Cash available	415.6	273.8	68.1	(9.0)	(7.0)

- AERA's Proposal additional funding requirements which includes additional equity infusion of another Rs. 413 crores
- Projected cash flows result in negative cash balances as against minimum working cash flow requirement of Rs. 70 crore for day to day operations.

Cash Flow Support Required to meet expansion requirements

The tariff proposal from AERA does not provide adequate funds to complete the capital projects

Particulars		in Rs. Crores
Capex amount allowed by AERA for CP2 Additional capex amount not considered	Α	9,344
by AERA	В	1,212
Total funding requirement in CP2	C=A+B	10,556
Assuming debt equity ratio of 70:30		
Funding from Debt	(70% x C)	7,389
Equity + Internal Accrual required in CP2	D=30% x C	3,167
Internal Accrual already invested in capex		
for first 2 years of CP2	E	821
Opening Cash Balance as of April 2018 Possible Cash generation in the remaining	F	716
period of CP2(as per AERA ARR proposed		
in the CP)	G	141
Cash Flow Shortfall in CP2	H=D-E-F-G	1,489

- As can be seen, <u>BIAL will need at least an</u> <u>additional cash of ~Rs. 1,489 Crores</u> to be able to fund capital investments and to achieve financial closure.
- The submissions made above on various issues for AERA's consideration is essential for BIAL to be able to bridge this gap of ~Rs. 1,489 Crores.
- Accordingly, AERA is requested to positively consider the submissions made by BIAL on various issues. This will ensure that BIAL is adequately placed to fund the capital investments required to handle the growth in passenger numbers being witnessed at the airport and provide adequate service quality to the airport users.

Consequences of AERA's Proposals on BIAL

Negative Cash Balance

Even as per AERA's business plan, BIAL's cash balance would be negative in years FY 2020 (Rs. 9 crores O/D) and FY 2021 (Rs. 7 crores O/D); resulting in inadequate cash for future expansion or even regular operations of the airport. BIAL requires ~ Rs. 70 crores of cash in hand (equivalent to 45 days expenses) to run the airport.

Possibile Default on Financial Covenants

Based on existing arrangement with SBI, BIAL has committed to maintaining certain financial covenants including (i) debt service coverage ratio, (ii) interest coverage ratio and (iii) fixed asset coverage ratio each of 1.25. Based on the Authority's business plan, BIAL would default on its financial covenants such as Debt Service Coverage Ratio.

Requirement for Infusion of Further Equity

■ BIAL would require an equity infusion of ~Rs. 413 crores for future expansion & operational requirements during the 2nd Control Period. Infusing further equity is not an option for BIAL as neither AAI nor GoK are able to infuse additional equity, and their equity stake cannot dilute below 26% as per the Share Holder Agreement.

The above consequences will jeopardize BIAL's capex plans and could potentially delay the expansion which would not be in the overall interest of the passengers and for development of civil aviation at state and national level.

BIAL's suggestion to bridge cash flow shortfall and to avoid tariff shocks

- As BIAL is undertaking huge capital investment to cater to the increasing traffic, it is essential that sufficient cash is available to fund these investments.
- BIAL requests the Authority to consider continuing the existing User Development Fee over the remaining period of 2nd Control Period to fund the envisaged investments
- Any over recovery in the 2nd Control period will go to reduce the tariff impact for the 3rd Control period.
- The revenue distribution / equalization for 2nd and 3rd Control period will lead to balanced tariff and not result in tariff shock between regulatory periods as well.
- The above revenue equalization will help in overcoming infrastructure bottleneck and BIAL's planned investment can be undertaken in a timely manner to ensure the desired user experience at the airport.
- The Authority has vide its decision in Order No. 40/2015-16, taken a view that it will provide additional support in ARR of Rs. 691.50 crores to cover for its estimated cash deficit for the 2nd Control Period.

Summary of Key Issues in The Authority's Consultation Paper No. 05/ 2018-19

Pre-Control period shortfall prior to September 2009 has not been considered

The Authority has not considered pre-control period shortfall before September 2009 but has considered the pre-control period surplus after September 2009 towards determination of aeronautical charges.

- BIAL's Concession Agreement was signed in 2004 and the airport commenced operations in May 2008. However, the Authority's powers were notified in September 2009, much after BIAL had come into existence.
- The tariffs pertaining to pre-CP were determined on ad-hoc basis and were interim in nature (letter from MoCA dt. 03.04.2008); to be finalized at a later date as per the Guidelines of The Ministry / CA (MoCA or by AERA).
- Impact of TDSAT Order in the matter of DIAL's Tariff Order for 1st Control Period The TDSAT Order mentions in para 66;" an unfinished exercise of tariff formulation by the Central Government could be finished by AERA once it was legally constituted". Further Para 67 mentions that "Section 13 of the Act gives sufficient latitude in selecting an appropriate beginning of the first regulatory term of 5 years subject to rules of transparency and fairness."
- While the Authority has not considered Pre-Control Period before September 2009, they have disallowed costs incurred even prior to September 2009 (Disallowance from Opening RAB); which is in an inconsistency in the Authority's position.
- BIAL's requests the Authority to consider Pre-Control Period in its entirety and allow BIAL to recover the shortfall during Pre-Control Period.

Consideration of 30% SRT for true up of Pre-Control and 1st Control Period

- BIAL's Concession Agreement (CA) is a pioneer concession signed on PPP basis. The CA (Article 10.2 and 10.3) indicates adoption of Dual Till for tariff determination.
- The concession of DIAL and MIAL, which were awarded subsequent to BIAL and HIAL, incorporated 30% SRT clearly. This should have been applied, if not Dual Till as provided in the CA, conservatively even in the case of BIAL as the policy approach should not be different.
- Ad-hoc UDF determined by MoCA for the period post AOD was on the basis of cross subsidization of 30% from non-aeronautical revenue, though the Concession Agreement did not provide for any cross subsidization from non-aeronautical revenue. MoCA approved the UDF on ad-hoc basis and informed BIAL that the final UDF will be determined either by MoCA / AERA subsequently.
- MoCA's issued a letter date 24.09.2013 to AERA recommending adoption of 40% SRT in case of BIAL first control period tariff determination.
- However, subsequently MoCA issued a policy direction in the case of greenfield airport (HIAL) under section 42(2) directing AERA to consider 30% SRT with effective from First Control period.
- In the context of legal framework, both BIAL and HIAL airports have similar Concession Agreements and are structured similarly in terms of land lease agreement, viability gap funding, etc. AERA itself has taken a stand in HIAL's CP for the 2nd Control Period wherein as per Para 2.14, it has observed that "The concession agreement in the case of Hyderabad is also similar to that of Bangalore." Hence, the same policy direction needs to be applied in the case of BIAL as well.
- Accordingly, BIAL requests AERA to adopt 30% shared till for true-up of 1st Control Period and Pre-Control Period.

Issue of Treatment of Real Estate / Property Development

Property development has been treated as non-aeronautical revenue by AERA

- As per Schedule 3 Part B of BIAL's Concession Agreement, commercial property development including hotels, SEZs, Business Parks, Commercial Buildings, Commercial Complexes have clearly been defined as a Non-Airport Activity.
- The Concession Agreement provides that Non Airport Activities of BIAL would continue beyond the concession period. Accordingly, the risk & rewards of the real estate business is left to the promoters and is not intended to be transferred to the passengers.
- Clause 4.1 of the Land Lease Deed clearly permits BIAL to undertake both airport and non-airport activities without seeking prior permission. The Land Lease Deed does not envisage any form of cross-subsidization of airport activities and doing so will go against its principal objectives.
- The recent TDSAT Order in the case of DIAL has upheld the sanctity of Concession Agreements stating "In exercise of this power, AERA is required to respect rights/concessions flowing from lawful agreements / instruments / directives of Central Government on policy matters."
- In the case of DIAL & MIAL, the Authority has considered real estate projects outside the regulatory till. Further, in the case of DIAL's Tariff Order for 1st Control Period, TDSAT has allowed a return to be charged on deposits used for funding aeronautical assets, while computing aeronautical charges by AERA. Therefore, TDSAT has treated real estate outside the regulatory till.
- Regulating a non-airport activity by considering it as non-aeronautical and subjecting it to 30% shared till would be contrary to the powers of the Authority under the AERA Act.
- The Authority is accordingly requested to consider real estate income as non-airport to ensure consistency with BIAL's Concession Agreement and maintain consistency across different airports.

Treatment of Cargo, Ground Handling and Fuel Farm services not as per CA

- As per Article 10.2 & 10.3 of the CA read with Schedule-6, only Landing, Parking, Housing, PSF and UDF are to be regulated. Hence, BIAL is free to determine charges to be imposed in respect of other services such as Cargo, Ground handling and Fuel Farm provided at the Airport or on the site.
- Therefore, considering cargo, ground handling and fuel-farm services as aeronautical charges would indirectly amount to treating them as Regulated Charges; and would defeat the intent of the Concession Agreement.
- For DIAL, MoCA issued a directive to the Authority stating that: "It is seen that Cargo and Ground Handing services are being treated as aeronautical services as per Section 2(a) of the AERA Act (Para 402 of Consultation Paper). However, as per the provision or OMDA and SSA, cargo and ground handling services are categorized as non-aeronautical and the revenues accruing from these services may be treated as non-aeronautical revenue." This was also applicable in the case of MIAL.
- In its Order dated 23rd April 2018 on DIAL's 1st Control Period, TDSAT has directed AERA to honour the rights/concessions under OMDA and SSA and treat revenue from Cargo and Ground Handling charges as non-aeronautical.
- Moreover, the OMDA and SSA for DIAL was given precedence over the AERA Act. The Authority is requested to ensure consistency in its regulatory treatment in the case of BIAL.

Summary of Other issues in AERA's CP

Notional Revenues on Security Deposits

- Authority has considered a notional revenue on the Security Deposits. However, lease rentals at BIAL are benchmarked and hence deposits are not being accepted in lieu of rental revenue. These SDs amount to ~3 months' rent, which is a common practice in the ordinary course of business intended to protect BIAL against defaults, bad debts and damages caused to property.
- The recent TDSAT Order in the case of DIAL for the 1st Control Period allows a return if the airport operator invests the
 proceeds of security deposit in aeronautical activities.
- The Authority is requested not to consider notional interest on security deposits as non-aeronautical revenues.

Disallowance from Opening RAB based on EIL Report

- The EIL report maintains that BIAL's overall costs appear to be in order and further acknowledges that comparison of the cost incurred with respect to the market rates is a complex activity which results in unjustified costs incurred.
- Further, TDSAT in the case of DIAL has accepted AERA's position that costs need to be taken as incurred costs and should not be re-examined on the yardstick of efficient costs. The TDSAT Order in case of DIAL states that in para 88 "The clear stand is that such cost cannot be re-examined on the yardstick of efficient cost but has to be taken as the incurred cost only, as appearing in the duly certified books of accounts."
- BIAL requests AERA to consider the opening RAB as per audited books and not to disallow any capex.

Summary of Issues in AERA's CP

Non-Aeronautical lease revenues received from aeronautical service providers treated as aeronautical revenues

 BIAL would request the Authority to consider the end use of the commercial space before determining whether the area is aeronautical or non-aeronautical in nature. The Authority's Consultation also mentions that airline offices would come under non-aeronautical activities.

Interest income treated as non-aeronautical revenues

• Interest income is derived when surplus cash available with the airport operator is invested to earn interest. Such investments have no relation with non-aeronautical or aeronautical services provided by the airport operator. Further, the Authority has kept interest income outside the regulatory purview in the case of DIAL and HIAL. Accordingly Authority is requested to consider interest outside the regulatory purview.

Treatment of Hotel

1) AERA has treated hotel as a non-aeronautical activity but ring-fenced equity investments into the hotel:

AERA considered property development as Non Aeronautical revenues:

- Security Deposit of Rs. 76.5 crore received from Hotel considered as part of tariff determination.
- Interest income received on security deposit considered as NAR thereby part of the Till.
- Further, a notional lease rental revenue was considered from Hotel and treated as NAR

However, equity investments in the hotel are ring fenced for purpose of computing fair rate of return (FRoR). Such treatment is equivalent to considering the hotel as a non-airport activity. This treatment is inconsistent.

2) AERA has considered notional interest on security deposit and notional lease rental on hotel land

AERA's treatment of notional revenues is unlike its positions in any prior stakeholder consultation. BIAL would request the Authority not to apply a unilateral treatment only in the case of BIAL.

3) BIAL had to adhere to arbitration award which forced it to acquire hotel (BAHL)

- BAHL applied to AAI for building height clearance of 46 meters. However, the NoC received from AAI was with a height clearance for 30.36 meters only, which was also approved by BIAAPA. Due to the height restriction, BAHL contemplated to construct only 154 rooms as against the initial commitment of 321 rooms; and therefore requested BIAL for revision in commercials, extension of time and allotment of additional land in order to complete 321 rooms.
- However, due to the judgement of the Tribunal, BIAL was forced to take possession of the hotel at a fixed sum Rs. 301 crore.

AERA should take cognizance of the above and the fact that BAHL has been in losses since its inception before finalizing its regulatory treatment while issuing a tariff order.

Additional Submission relating to future expansion

Capping true up of project cost

- BIAL wishes to submit that the true-up of project cost would based on actual financial results, backed by auditor's certificates that these costs were actually incurred and pertained to approved projects.
- AERA should take a position which is consistent with that in the TDSAT Order in the case of DIAL which states "...such costs cannot be re-examined on the yardstick of efficient cost but has to be taken as the incurred cost only, as appearing in the duly certified books of accounts"
- Further, BIAL assures the Authority that it will be efficient in incurring costs and adopt robust practices of competitive bidding.

Project cost has not been revised to incorporate GST

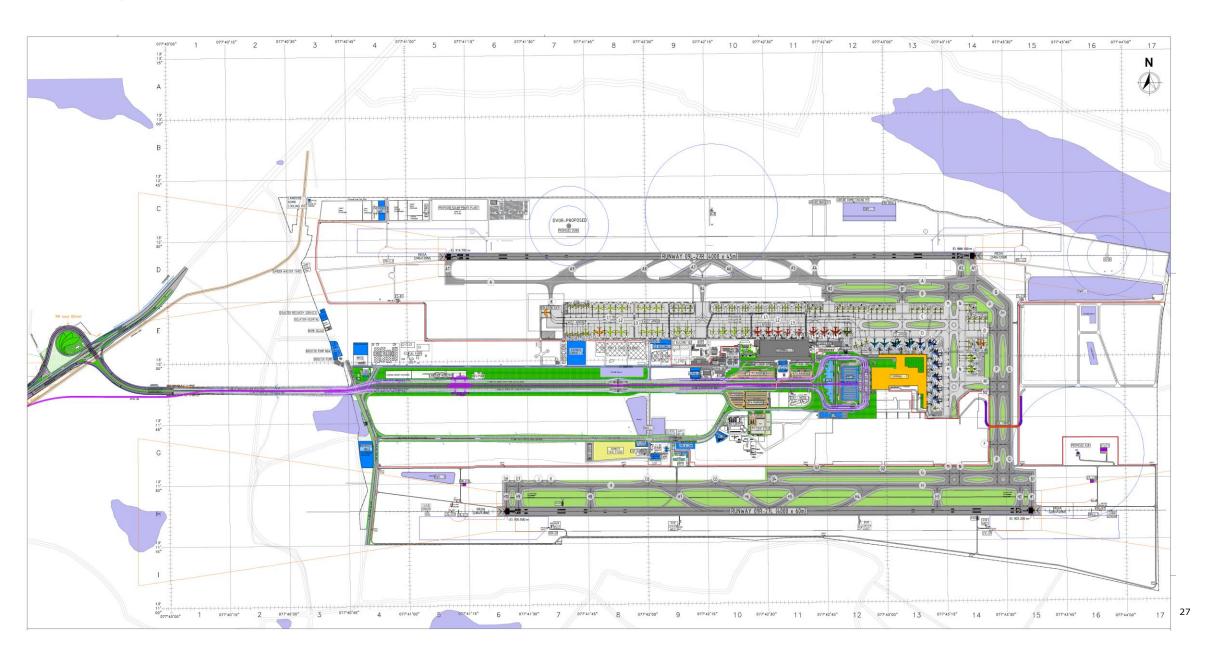
• The Authority has acknowledged that the indirect taxes applicable have changed, but has not allowed an increase in project cost to incorporate the same. The Authority substantiated its position stating that that the amounts to be considered for Capitalization would be after considering the credits that can be taken on the output GST. However, BIAL has already requested for a lower GST rate of 13% compared the actual rate of 18%; which is net of credits.

Additional Projects in the AUCC Stage

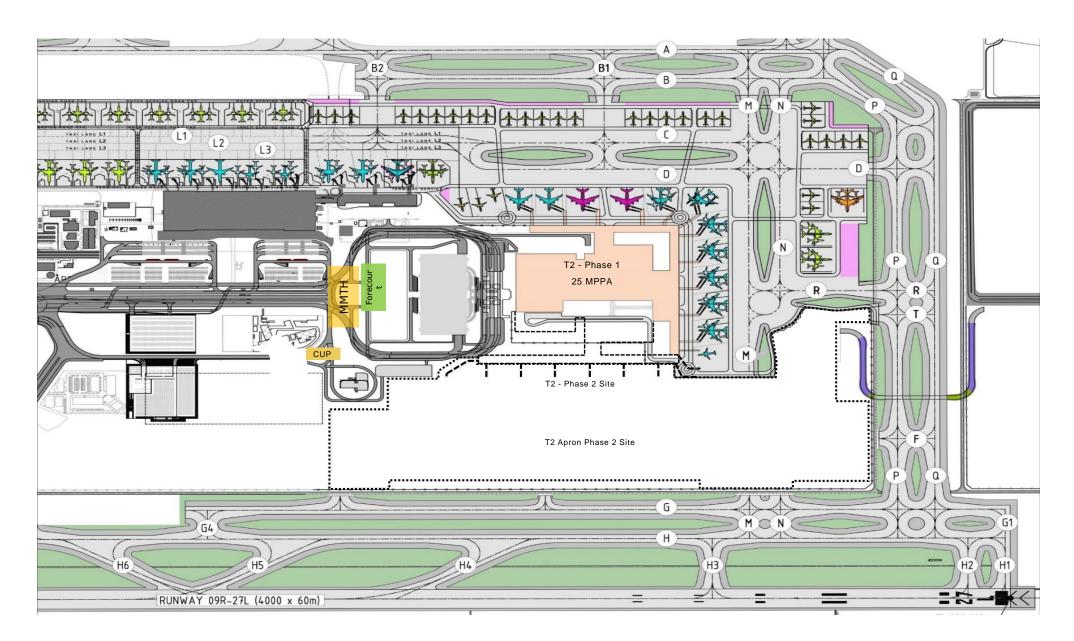
- 220/66 KV Substation As a result of upcoming facilities, total estimated power demand by 2020-21 (For Aero assets) is 33 MVA and the same by 2030 is 55 MVA. As per KERC, power supply needs to be availed at 220KV for power loads above 20MVA. BIAL has organized an AUCC on 22.06.2018 for the project.
- **Eastern Tunnel Works** Currently, there is a single access road for the airport. An alternate is required to for continuity and security purposes. BIAL has organized an AUCC on 22.06.2018 for the project.

T2 - Phase 1 (25 MPPA) - Construction Completion 2021

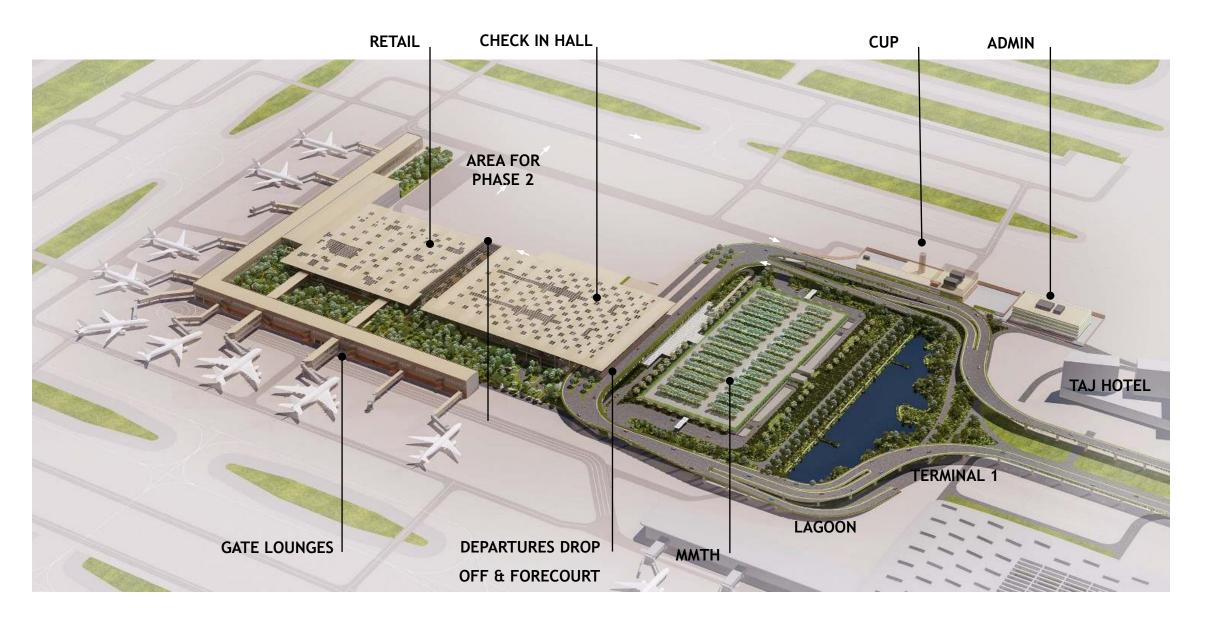
KIAB Layout



T2 Project Layout



T2 Project



T2 Project Delivery – Current Status

All major design activities completed over the last 2.5 years

- Concept Design
 - Completed for Phase1 & 2
 - 9 months duration, Dec'2015 to Sept'2016
- Schematic Design :
 - Completed for Phase 1
 - 9 months duration, Oct'2016 to Jun'2017, 9 months
- Detailed Design :
 - Completed for Phase 1
 - 9 months duration, Aug'2017 and May'2018
 - A very significant phase of the designs where all Employer requirements captured such that minimum designs are carried out by the Contractor. Benefits Scope clarity and better visibility & control on the costs

T2 Project Delivery – Current Status

Procurement Strategy

- One Major EPC Package
 - Warm Shell, Services, Baggage Handling Systems, Passenger Board Bridges, Elevators, Escalators, ICT
 Backbone, Interiors & Finishes.
 - ✓ All major packages for operationalizing T2 in the scope of the T2 EPC Contractor
- Non- EPC Packages Some front end ICT systems, Special Interiors such as Hanging Bells, Veils, Softscape works etc.

EPC Procurement Timelines

•	Expression of Interest	 Floated on 15th Mar 2018
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- Request For Proposal Floated to the shortlisted vendors on 7th Jun2018
- Submission of Proposals End Aug'2018
- Complete Commercial Evaluation End Sept'2018
- Board Approval & Award of Works First Week of Oct'18

Non - EPC Procurement Timelines

Award of All Works – Dec'18 to Jun'19 (inline for completion by Mar2021)

T2 Project Delivery – Project Management Measures

- T2 –Phase 1, minimum interference with airside & landside operational area, greenfield development.
- Simple building design, detailed design completed, minimum scope of design changes.
- Building information management (BIM) system adopted faster design decision making, timely dissemination to all
 execution teams.
- In order to ensure competitive responses from the major contractors, interactions held with large major contractors in the Indian region. Vendors bidding the contract.
- Simple procurement strategy which facilitates better co-ordination and faster construction EPC Contractor single point of design & construction management, minimum contractors
- Evaluation of vendor proposals based on robust construction methodologies, adherence to project timelines

T2 Project Delivery – Project Management

- Progressive project cost estimates development and revalidation Concept level, schematic design level, 30% detailed design level and currently in progress for 100% detailed designs.
- Upon 100% detailed design cost estimate finalization, identification of T2 tender deductible alternatives.
- Turner Project Management Consultants appointed as PMC and is fully integrated with the BIAL projects team. Turners
 global expertise in project management along with the BIAL in-house project team, a very strong combination of skills,
 expertise and airport know how.
- All supporting projects such as landside road networks, utilities development etc. planned to be inline for Mar'2021 completion.

Similar Terminal Projects Comparison

- DIAL Terminal 3 (32 MPPA)
 - 37 months duration,
 - 550,000sqm terminal building
 - Cost plus contract
 - 37 months duration, completed in Jul'2010
- BIAL Terminal 1 Expansion
 - 75,000 sqm of brownfield development
 - EPC Contract & Provisional Sums Contracts
 - 30 months duration , Jun2011 to Dec 2013

T2 – Project Schedule

	.	Finish	2015 201			16	2017					1	2018			2019		2020			2021	
Description	Start		Q3	Q4 Q1	Q2	Q3	Q4	Q1	Q2 ()3 C	(4 Q1	۱ Q	2 Q3	Q4	Q1	Q2 Q:	Q4	Q1	Q2	Q3 Q ₄	4 Q1	Q2
T2 Phase-1	14 Dec '15	31 Mar '21																				
Concept Design	14 Dec '15	30 Sep '16																				
Schematic Design	14 Oct '16	30 Jun '17																				
Detailed Design	30 Aug '17	30 May '18																				
Procurement of EPC	31 May '18	01 Oct '18																				
Award of EPC Contractor	01 Oct '18	01 Oct '18												lack	Aw	ard of	EPC					
EPC Works	02 Oct '18	31 Mar '21																				
GFC & Shop Drawings by EPC	02 Oct '18	29 Mar '19																				
Mobilization of EPC	02 Oct '18	01 Jan '19																				
Construction & Handover of T2 Phase-1	02 Jan '19	31 Mar '21																				
Non-EPC Works	01 Dec '18	31 Mar '21																				
Procurement of Non-EPC works	01 Dec '18	30 Jun '19																				
ICT Implementation Plan	01 Aug '19	18 Jan '21																				į
Hanging Bells/Veils, Softscape & Special Interiors	07 May '20	31 Mar '21																				
Handover to Operations	31 Mar '21	31 Mar '21														Hand	ver	to C	Opero	ations	(

Disclaimer

Being aggrieved by the Authority's Order No. 8/2014-15 pertaining to the 1st Control Period, BIAL has filed an appeal in AERA Appellate Tribunal (AERAAT) vide Appeal No. 3 of 2014. The tariff order for the Control Period 1 is sub-judice and pending for hearing at AERAAT / TDSAT.

The current tariff application of BIAL for Control Period 2 (01st April 2016 to 31st March 2021) is without prejudice to the matters appealed by us in aforesaid Appeal. BIAL reserves its right to amend /revise its tariff application based on the outcome of the aforesaid Appeal including legal and regulatory principles as may be decided by AERAAT in the aforesaid appeal.

Thank You

Justice V.S. Sirpurkar

Former Judge, Supreme Court

Address: "**Devalaya**", Khare Town, Dharampeth, Nagpur - 440010.

Former Chairman, Competition Appellate Tribunal

• Former Chairman, Airport Regulatory Economic Authority Appellate Tribunal

· Former Chairman, Authority for Advance Ruling (Income Tax, Customs, Central Excise, Service Tax)

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LEGAL OPINION

Querist: Bangalore International Airport Limited ("Querist")

The Querist has sought an opinion on the following issues relating to the ongoing tariff determination exercised by the Airports Economic Regulatory Authority of India ("AERA") for the Kempegowda International Airport, Bengaluru:

- 1. Whether AERA is required to revise/reconsider its proposals contained in Consultation Paper No.5/2018-19 or make any modifications to the proposals at the time of issuing a tariff order considering the judgment and order dated 23.04.2018 passed by the Hon'ble Telecom Disputes Settlement and Appellate Tribunal ("TDSAT") in the case of Delhi International Airport Limited?
- 2. Whether the pendency of Querist's appeal impugning the previous tariff order (Order No.8/2014-15 dated 10.06.2014) will preclude AERA from revising its views by relying on the judgment and order dated 23.04.2018 or whether AERA is bound to consider the judgment and order dated 23.04.2018 notwithstanding the pendency of Querist's and Federation of Indian Airlines' ("FIA") appeal against the said tariff order?
- 3. Is AERA required to consider and provide for pre-control period or prior period losses right from the time of incorporation of Querist, i.e., 05.01.2001 upto 31.08.2009 (AERA has considered Querist's financials from 01.09.2009 for determining tariff for the first control period of 01.04. 2011 until 31.03.2016)?



- 4. What is the appropriate till mechanism to be adopted by AERA for the first control period for the Querist?
- 5. Whether AERA is entitled to determine tariff for cargo, ground handling and fuel farm services (collectively "CGF services"). If so, should AERA treat revenue from CGF services as aeronautical revenue or non-aeronautical revenue?

Queries No.1 and 2:

- 1.1 AERA was established by the Airports Economic Regulatory Authority of India Act, 2008 ("AERA Act"). All provisions of the AERA Act, except Chapters III and VI were brought into force on 01.01.2009. Chapter III of the AERA Act which *inter alia* provides for the function of tariff determination was brought into force with effect from 01.09.2009.
- 1.2 AERA, after holding a consultation process, issued the first tariff order being Order No.8/2014-15 for the first tariff period of 01.04.2011 to 31.03.2016. The first tariff order has been challenged by the Querist as well as the Federation of Indian Airlines in Appeal No.3/2014 and Appeal No.1/2014 respectively before the then Airports Economic Regulatory Authority Appellate Tribunal ("AERAAT"). The jurisdiction of the erstwhile AERAAT was transferred to the Hon'ble TDSAT by the Finance Act, 2017 with effect from 26.05.2017. Both the appeals are pending consideration before the Hon'ble TDSAT.
- 1.3 While the appeals were pending, AERA issued Consultation Paper No.5/2018-19 dated 17.05.2018 in respect of Querist for the second control period of 01.04.2016 to 31.03.2021.



- 1.4 By this time appeals had been filed before the Hon'ble TDSAT impugning the tariff order issued by AERA for the first control period for Delhi International Airport Limited ('DIAL'). All such appeals impugning the first tariff order for DIAL were disposed of by a common judgment and order dated 23.04.2018 by the Hon'ble TDSAT.
- 1.5 There is a striking similarity of facts between DIAL and BIAL and the issues considered by the Hon'ble TDSAT in the matter of DIAL are almost identical.
- 1.6 AERA however did not make any reference to the DIAL judgment while issuing Consultation Paper No.5/2018-19 in respect of the Querist for the second control period.
- 1.7 After passing of the DIAL judgment, the appeals filed by Querist and FIA came up before the Hon'ble TDSAT for consideration on 24.05.2018 and the Hon'ble TDSAT was pleased to pass the following order:

 "...Learned counsel for the Appellants pleads for an observation that consultation which is underway for finalizing tariff order for the
 - consultation which is underway for finalizing tariff order for the second control period in respect of the appellant may be held giving due regard to the judgment and order of this Tribunal dated 23.04.2018 in the case of Delhi International Airport Ltd. (DIAL).
 - It goes without saying any authority, much less statutory authority, which is to regulate these matters shall have due regard to all the provisions of law including the judgment of this Tribunal...."
- 1.8 By order dated 24.05.2018 the Hon'ble TDSAT has observed that AERA shall have due regard to judgment/s passed by the Hon'ble TDSAT. Even otherwise, a statutory authority is required to consider and apply



the principles laid down by an expert tribunal that exercises appellate jurisdiction over the authority. In this case, appeals from orders or directions of AERA are to be filed before the Hon'ble TDSAT under Section 18 of the AERA Act. Therefore, it would be apposite for AERA to consider the position of law as clarified by the DIAL judgment and apply the principles to the ongoing tariff determination exercise in respect of the Querist. Pendency of appeals challenging the first tariff order of AERA in the case of Querist cannot deter AERA from revising its views since it is doing so based on the order of Hon'ble TDSAT dated 24.05.2018. AERA will be especially fortified by the observations in the order dated 24.05.2018, by which, AERA is expected to consider the judgment/s of the Hon'ble TDSAT. Therefore, AERA is required to consider and apply the principles laid down in the DIAL judgment. The pendency of the appeals before the Hon'ble TDSAT should not preclude AERA from applying the principles laid down in the DIAL judgment and revising its views, if necessary, according to such principles.

- 1.9 I am therefore of the opinion that the judgment of Hon'ble TDSAT is bound to be taken into consideration by AERA while considering the proposals contained in Consultation Paper No.5/2018-19, in favour of the Querist.
- 1.10 The principles arrived at by Hon'ble TDSAT in DIAL's case will be liable to be considered in favour of the Querist.

Query No.3:Is AERA required to consider and provide for pre-control period or prior period losses from the time of incorporation of Querist, i.e., 05.01.2001 upto 31.08.2009 (AERA has considered Querist's



financials from 01.09.2009 for determining tariff for the first control period of 01.04. 2011 until 31.03.2016)?

3.1 Proposal No.2 in CP No.5 of 2018-19is extracted below:

"Proposal No 2. Regarding Pre-Control Period

- 2.a. Based on the material before it and its analysis, the Authority proposes:
- i. To consider the Over recovery for the Pre-control period as detailed in Table 7 Para 3.3.11 above in the computation of ARR for the second control period, considering a 40% Hybrid Till".
- 3.2 It appears that AERA has decided to consider pre-control period shortfall / over recovery from 01.09.2009, i.e. from the period AERA was formed. In other words, the shortfall or over recovery for the prior period is not being considered. This is evident from clause 3.1.1 which is extracted below:
 - 3.1.1The Authority had detailed in MYTO-CP1 that as the Authority's jurisdiction begins only from the period September 2009 (when the Authority was formed), the Authority did not propose to consider any period before September 2009 while fixing the tariff.
- 3.3 At this juncture, it may be apposite to set out the background of the Querist and the tariffs that were prevailing before tariffs were determined by AERA for the first control period.
- 3.4 In 1994, the Ministry of Civil Aviation ('MoCA') approved the proposal to establish an international airport at Devanahalli in Bengaluru. On



04.05.1999, Ministry of Civil Aviation granted 'in principle approval' for Bangalore International Airport by letter no.AV.20014/002/90-V81.

- 3.5 Querist was incorporated on 05.01.2001 by the Government of Karnataka with 49,997 shares held by Government of Karnataka and its nominees and one share each held by three prominent citizens of the state.
- 3.6 The bidding process was initiated soon thereafter and Request for Proposal ("RFP")was issued on 20.03.2000.
- 3.7 A Shareholders Agreement dated 23.01.2002was entered into between Karnataka State Infrastructure Industry Development Corporation Limited ("KSIIDC"), Airports Authority of India ("AAI") and private promoters. AAI and KSIIDC became 13% shareholders each and in aggregate held 26% shares of Querist under the Shareholders Agreement. On 05.07.2004, a Concession Agreement was executed by the President of India acting through the Secretary, Ministry of Civil Aviation ('MoCA') in favour of Querist. Thereafter, Querist started work towards developing a Greenfield airport, and on 24.05.2008, commercial operations commenced at Kempegowda International Airport Limited, Bengaluru (earlier known as Bengaluru International Airport).
- 3.8 As of airport opening date, Querist adopted the landing, parking and housing charges as was prevalent in other AAI airports. Clause 10.2.2 of the Concession Agreement provides that Querist shall seek approval from MoCA for Regulated Charges. Clause 10.2.4 provides that from the



date the Independent Regulatory Authority ("IRA") has power to approve Regulated Charges, Querist shall be required to obtain approval for Regulated Charges from IRA. Clause 10.2 of the Concession Agreement is extracted hereinbelow:

"10.2Airport Charges

- **10.2.1** The Airport Charges specified in Schedule 6 ("Regulated Charges") shall be consistent with ICAO Policies.
- 10.2.2 The Regulated Charges set out in Schedule 6 shall be the indicative charges at the Airport. Prior to Airport Opening Querist shall seek approval from the Ministry of Civil Aviation for the Regulated Charges, which shall be based on the final audited project cost. The Ministry of Civil Aviation shall, subject to the proposed Regulated Charges being in compliance with the principles set out in Article 10.2.1, grant its approval thereto within a period of sixty (60) days of the date of the application being submitted by Querist.
- 10.2.3 If at any time prior to the date the IRA has the power to approve the Regulated Charges Querist wishes to amend such charges it shall seek consent from the Ministry of Civil Aviation for such amendments. The Ministry of Civil Aviation shall, subject to the proposed charges being in compliance with the principles set out in Article 10.2.1, grant its approval of such amendments within a period of sixty (60) days of the date of the application being submitted by Querist.
- 10.2.4 From the date the IRA has the power to approve the Regulated Charges, Querist shall be required to obtain approval thereof from the IRA. In this regard Querist shall submit to the IRA, in accordance with any regulations framed by the IRA, details of the



Regulated Charges proposed to be imposed for the next succeeding relevant period together with such information as the IRA may require for review. Unless otherwise agreed in writing between the Parties such approved Regulated Charges shall comply with the principles referred to in Article 10.2.1 until the earlier of (i) the date that outstanding Debt in respect of the Initial Phase has been repaid and (ii) fifteen (15) years from Financial Close."

- 3.9 At the time of tariff determination for the first control period i.e., 01.04.2011 to 31.03.2016, Querist had made detailed submissions on pre-control period losses. AERA had issued two consultation papers viz. C.P.No.14/2012 and C.P.No.22/2013 and had thereafter passed tariff Order No.8/2014 dated 10.06.2014.
- 3.10 In Chapter 5 of the tariff order, AERA provided its analysis and findings regarding pre-control period losses. Clause 5.8 of the first tariff order is extracted below:

Clause 5.8 of the Order:

- **5.8** The Authority had analysed the various submissions made by BIAL to MoCA, the contents of the concession agreement and had noted that:
- 5.8.1 BIAL had in November 2007 submitted a letter to the MoCA asking for UDF, calling it a "net deficit to be recovered through UDF" at Rs. 955 per international departing passenger and Rs. 675 per departing domestic passenger stating that "projected revenues from present aeronautical charges without UDF are grossly inadequate to



cover costs for providing airport infrastructure and facilities to passengers at the new airport at international standards".

- **5.8.2**In consideration of this request, the MoCA sanctioned UDF both for per international departing passenger @ Rs. 1070 and Rs. 260 per departing domestic passenger.
- 5.8.3BIAL commercial operations on 24th May 2008.
- **5.8.4**BIAL represented to the MoCA on 9th January 2009 and 18th February 2009 stating that the quantum of the UDF sanctioned by the MoCA is inadequate seeking its enhancement. **The MoCA forwarded** the same to AERA for necessary action.
- **5.8.5**The Concession Agreement between the GoI and Querist stipulates that Querist can charge UDF for the purposes of provision of passenger amenities, services and facilities and the UDF will be used for the development, management, maintenance, operation and expansion of the facilities at the Airport.
- **5.8.6**The AERA Act came into being on 1st January 2009 when the Gol notified AERA Act. The powers of determination of charges of aeronautical services as well as UDF, etc. were conferred to the Authority by the GOI on 1st September 2009 when Chapter 3 of the AERA Act was notified.

(Emphasis Supplied)

3.11 In clause 5.8.4, AERA notes that MoCA had forwarded Querist's request for enhancement of User Development Fees ("UDF") to AERA for



necessary action. Despite this, AERA declined to consider pre-control period losses on the principal premise that AERA has jurisdiction from the date Chapter 3 of AERA Act was notified i.e., 01.09.2009.In para 5.3.4 of the first tariff order, AERA notes that MoCA has not provided any directive to AERA to carry out an analysis of the ad-hoc tariff that had been determined by MoCA. Clause 5.3.4 is extracted below:

- "5.3.4 The Authority notes that BIAL has stated that the tariff determined by MoCA was adhoc and the final determination of the tariff did not take place. The Authority notes that MoCA has not provided any directive to the Authority to carry out an analysis of the adhoc tariff that had been determined by MOCA. Hence, as elaborated in CP 22, the Authority decides not to reckon, in the current tariff determination any period before the Authority's powers were notified effective September 2009."
- 3.12 The Querist has, among others, questioned this decision of AERA in Appeal No.3/2014 which is pending consideration before Hon'ble TDSAT.
- 3.13 One of the issues that fell for consideration before the Hon'ble TDSAT was whether tariffs for DIAL can be determined with effect from 01.04.2009 (and until 31.03.2014) considering that Section 13 of the AERA Act was brought into force only on 01.09.2009. It was contended before Hon'ble TDSAT that tariff prior to 01.09.2009 could have been determined only by Central Government as AERA was constituted on 01.09.2009. The discussion and findings of the Hon'ble TDSAT in this regard are contained in paragraphs 66 to 68 of the judgment and order dated 23.04.2018 and the same are extracted below:



"66. Mr. Ramji Srinivasan, learned senior counsel, appearing on behalf of Respondent No.2 in Appeal No.10 of 2012 opposed the case of DIAL by submitting that DIAL had made an exaggerated demand for 800% increase in the tariff and that put pressure on the Regulator who has allowed approximately 345% increase which itself is high and will put undue burden on the airlines and other stakeholders. He pointed out that Tariff Order is dated 12.05.2012 and since it is for the entire 5 years' period from 01.04.2009 to 31.03.2014, the rate for collecting the Targeted Revenue had to be unusually high to enable collection within a short period of 22 months. This heavy burden was unreasonable and unnecessarily placed upon the stakeholders. He also raised a technical issue that source of power for the Regulator is located in Section 13 of the Act which came into effect only on 01.09.2009 and hence the Regulator had no power or jurisdiction to determine tariff from an earlier date of 01.04.2009. As per this submission the tariff prior to 01.09.2009 could have been determined only by the Central Government because AERA was not constituted by then.

67. The aforesaid technical plea has been raised by learned counsels appearing for different respondents as well. In view of a clear and categorical reply that it has no direct bearing with the substance of a tariff formulation exercise, this plea is rejected outrightly for the simple reason that none of the parties are adversely affected on this account. Even if the rightful authority, the Central Government had initiated the exercise of tariff formulation for the period of 5 years beginning from 01.04.2009, it would have remained inclusive and liable to be criticized as an action by an interested party and not an independent statutory authority. Once AERA was legally constituted



from September 2009, the unfinished exercise could have been finished only by AERA. Clearly, the Central Government had the authority to consult independent expert body for the period between 01.04.2009 and 01.09.2009 when AERA came into existence. The exercise by AERA for that period has been within the knowledge of Central Government which has issued communications relating to tariff formulation. In absence of any objection from any quarters including Central Government, it would be futile to direct the Central Government to go through the formality of fixing tariffs for the 5 months between April 2009 and August 2009 when Central Government cannot complete that exercise in a meaningful and proper manner so to avoid retrospectivity and delay. Further, the Central Government can always adopt and approve the studied view of AERA which it appears to have done by not raising any objections at any stage. Nothing has been pointed out in the OMDA and SSA against such action and Section 13 of the Act gives sufficient latitude in selecting an appropriate beginning of the first regulatory term of 5 years subject to rules of transparency and fairness.

Even the criticism that Tariff Order published in May 2012 is bad for acting retrospectively for the earlier period, in our view deserves to be rejected outrightly. Such objection raised by many of the counsels ignores the entire scheme of tariff formulation which all requires adequate consultation with stakeholders and transparency. The stakeholders are aware of the need as well as principles relating to determination of tariff. Allowing a significant period to escape from the effect of periodic tariff revision, is bound to lead to accumulation of financial burden for all the stakeholders and shall cause difficulty to all, in addition to defeating the very



object and purpose for which the entire exercise has to be undertaken. The purpose of OMDA and SSA as well as object of the Act leave no manner of doubt that same delay in finalizing the tariff for a specified period which has started to run will not require aborting the entire process. There is no adverse effect on any party and no vested rights are taken away if a holistic and broad view of the exercise is kept in mind. Rule against retrospective action by the executive is only to protect the vested rights getting affected from a back date. Benefits can always be granted even from an earlier date. The exercise of periodic formulation of tariff to serve the purposes of OMDA, SSA and the Act is to the benefit of all the stakeholders in the ultimate analysis and hence mere delay in finalizing the tariff order neither requires re-initiation of the entire process nor to apply the revised unwarranted by the provisions of the Act read in conjunction with OMDA and SSA and shall not help any of the stakeholders. Such objection is, therefore, also found to be without any substance."

3.14 The principal premise on which AERA refused to consider loss prior to 01.09.2009 was because AERA believed that it did not have jurisdiction to consider shortfall/recovery that transpired before 01.09.2009. However, in view of the categorical finding of Hon'ble TDSAT in paragraphs 66 to 68 that AERA has jurisdiction to consider and determine tariff with effect from 01.04.2009 (i.e., events that transpired even before Section 13 was notified) AERA's principal premise that it does not have jurisdiction is no more correct. It is true that the Hon'ble TDSAT passed the judgment and order in DIAL's case in the context of whether the first control period for DIAL can commence from 01.04.2009 as opposed to 01.09.2009. However, the



ratio of judgment of the Hon'ble TDSAT is that notwithstanding the fact that Section 13 was notified on 01.09.2009, AERA can determine tariff for a prior period. In Querist's case, MoCA had fixed ad hoc tariffs and in view of the decision of Hon'ble TDSAT in DIAL's case, no useful purpose will be served in requiring MoCA to fix final tariffs for that period only to then enable AERA to true up the same, especially bearing in mind that MoCA had forwarded Querist's requests for enhancements of UDF to AERA. As the Hon'ble TDSAT has clarified that AERA is empowered and has jurisdiction to consider and fix tariffs for the period prior to 01.09.2009, AERA should exercise such jurisdiction and fix tariffs taking into consideration the expenses and losses incurred by the Querist from the time of incorporation, i.e. even prior to 01.09.2009, and true it up in the current tariff determination exercise.

3.15 Since there cannot be any compartmentalization in the period prior to notification of AERA and thereafter, and since the consideration of the later period depends on the fact situation in the previous period, it would be reasonable to say that, as held by the Hon'ble TDSAT, AERA should take into consideration the expenses and losses incurred by the Querist from the time of its incorporation. The judgment of Hon'ble TDSAT has unequivocally held that the previous period is relevant for the consideration of tariff of the further period. I opine accordingly, completely agreeing with the Hon'ble TDSAT's judgment referred to above.

Query No.4: What is the appropriate till mechanism to be adopted by AERA for the first control period?



- 4.1 In the consultation papers issued before the first tariff order, AERA had indicated that single till model was applicable to the Querist. However, in view of the letter dated 24.09.2013 issued by MoCA (referred to in Consultation Paper No.22 of 2013-14) suggesting a 40% shared till approach, AERA adopted a 40% Shared Revenue Till model ("SRT"). However, AERA decided to claw back the difference of UDF computed under 40% SRT and single till in the next control period, as 40% SRT was employed only to facilitate funding for capital expansion of airport facilities by Querist. Among others, this decision of AERA has been impugned in Appeal No.3/2014, which is pending consideration.
- 4.2 In respect of HIAL's tariff order, viz. Order No.38 of 2013-14, AERA has adopted a single till approach on the premise that it has already taken a decision in the airport guidelines that single till is to be adopted. In the first tariff order of the Querist, AERA has further referred to the purported difference between the airports at Mumbai and Delhi on the one hand and Querist on the other, and has held that on account of the inherent differences in the airports, differential treatment is justified (tariffs for MIAL and DIAL have been governed under the 30% SRT model).
- 4.3 However, after passing of the first tariff order of the Querist, the New Civil Aviation Policy dated 15.06.2016 was issued by MoCA. The New Civil Aviation Policy provides for uniform 30% SRT model for all major airports. Moreover, AERA, by Order No.14/2016-17 has decided to, in future, determine tariffs of major airports (other than Delhi and Mumbai as their tariffs are already determined under 30% SRT as per Operation Management and Development Agreement "OMDA") under

30% SRT model. AERA's reasoning therefore that single till is the most appropriate mechanism for determining tariffs for major airports has now been modified by AERA itself in Order No.14/2016-17. In clause 3.1 of Order No.14/2016-17, AERA has unambiguously given up its position that the AERA Act mandates single till and has recognized that adoption of a hybrid till is legally permissible. In clause 4.1 of the said order, AERA has noticed that adoption of single till for some airports and hybrid till for others has resulted in differential treatment and has also caused regulatory uncertainty. In clause 4.5, AERA has stated that Airport Guidelines issued by the authority vide Order No.13/10-11 may be amended to align with the policy of the government.

MoCA has issued a policy directive dated 10.06.2015that 30% SRT be 4.4 applied in case of Rajiv Gandhi International Airport, Hyderabad ('Hyderabad airport or HIAL"). This policy directive has been referred to in Consultation Paper No.30/2017-18 issued in respect of the Hyderabad airport and AERA has proposed to undertake a true up exercise on the basis of 30% SRT for the first control period for Hyderabad airport. Although the policy directive is issued in respect of Hyderabad airport, considering the similarity of both airports and especially in view of the striking similarity in the Concession Agreements of the airports at Bengaluru and Hyderabad, the principle behind the policy directive issued in respect of Hyderabad airport should also be applied in respect of Bengaluru airport by AERA. AERA may take into consideration the fact that Mumbai, Delhi and Hyderabad airports have been regulated under the 30% SRT model for the first control period, whereas, it is Bengaluru airport alone, which is to be regulated on 40% SRT and that too for the first control period only,



which appears to be discriminatory. The statement of objects and reasons to the AERA Act set out the requirement of creating a level playing field amongst different categories of airports. One of the ways in which AERA can create a level playing field for all private major airports that are similarly situated, i.e. Delhi, Mumbai, Hyderabad and Bengaluru is to ensure that their tariff determination is undertaken on a similar methodology for the first control period as well.

- 4.5 In these circumstances, since 1) the Airport Guidelines have been amended; 2) MoCA has decided to treat all major airports on par so far as regulatory till is concerned from the second control period onwards; and 3) HIAL is also proposed to be treated under 30% SRT for the first control period (ref: Consultation Paper No.30/2017-18), to ensure level playing field, the Querist's request for 30% SRT for the first control period can be considered by AERA.
- 4.6 Therefore, in my opinion, AERA would be required to hold that there is practically no difference in DIAL, MIAL and HIAL on one hand and the Querist on the other and the difference, if any, is of no significance. This is particularly true in the light of the New Civil Aviation Policy which is applicable to all the major airports. Therefore, in my opinion, it should be a 30% Shared Revenue Till policy which will be required to be made applicable to the Querist for the first control period.

Query No.5: Whether AERA is entitled to determine tariff for cargo, ground handling and fuel farm services (collectively "CGF services")? If so, should AERA treat revenue from CGF services as aeronautical revenue or non-aeronautical revenue?



5.1 Relevant extracts of Proposal No.1 in CP No.5 of 2018-19 are extracted below:

"ProposalNo.1Regarding Regulatory Till and principles of determination of Tariff

1.a. Based on the material before it and its analysis, the Authority proposes:

•••••

- ii. To consider revenues from Cargo, Ground Handling and Fuel Farm services and Rentals from leasing of space to agencies providing Aeronautical services as Aeronautical revenues."
- 5.2 Querist has taken a consistent position that considering Article 10 of the Concession Agreement read in conjunction with Schedule 6 thereof, all services, other than those which fall within the purview of 'Regulated Charges', must be kept outside the purview of regulation. In the case of DIAL, in accordance with OMDA and State Support Agreement, revenue from cargo and ground handling services has been ordered to be treated as non-aeronautical revenue by the Hon'ble TDSAT by inter alia holding that concessions and agreements are to be respected. The present proposal by AERA to determine tariff for CGF services and consider the same as revenue from aeronautical services renders Article 10 of the Concession Agreement otiose. Following the ratio in the decision of the Hon'ble TDSAT that agreements and concessions granted are to be respected, and especially considering that Section 2 of the AERA Act commences with the phrase 'unless the context otherwise requires', CGF services should be kept outside the purview of regulation. In the alternative, Section 2, Section 13 and the Concession Agreement can be harmoniously read by treating revenue



from CGF services as non-aeronautical revenue in the hands of the Querist.

Fig. 1 am therefore of the opinion that as held in the case of DIAL by the Hon'ble TDSAT, revenue from Cargo, Fuel Farm and Ground Handling Services would be required to be treated as non-aeronautical revenue. In expressing this opinion, I lay stress on the opening clause in Section 2 of the AERA Act to the following effect "unless the context otherwise requires". Hence, in the present case, that context has to be construed as the previous Concession Agreement.

I opine accordingly.

DATED this 29th day of JUNE, 2018

Justice Vikas S. Sirpurkar (Retd).)

former Justice, Supreme Court of India and former Chairperson, Airports Economic Regulatory Authority Appellate Tribunal)

[NOTE : This opinion shall not be used in any legal proceedings]

AERA - TERMINAL 2 AERO & NON AERO AREA STATEMENT								Date 12-06-2018	
				T2 Phase 1 (70-2010		
			- !						
SL No	Category	27620	90985	42323	4630	80564	9523	Total	
		Basement	L0	L1	L2	L3	L4		
Α	Passenger Areas & Aero Functions Area								
i	Kerb (Forecourt)		6792			7604		14396	
ii	Check-in					10880		10880	
iii	Departure Passenger Area		344	300		11146		11790	
iv	Arrival Passenger Area		18208	23466				41674	
٧	Security Screening / Emigriation / Immigriation / Bag Screening		4400			7390		11790	
	Security Screening / Supporting Facilities (Operations & Maintenance Customs Offices, Rest Room etc.,)		3172	121		1875		5168	
vi	Security Holding Area including FLB & Passenger Services		7835			15053		22888	
vii	Passenger dwell areas		5825					5825	
viii	Supporting Facilities (Operations & Maintenance Offices, Rest Room, Corridor etc.,)	5058	5537	1525				12120	
ix	VHT (Escalators, Staircase, Lifts & Shafts)	5143	1504	1381	1145	7318	3934	20425	
Х	Toilets (Passengers)		1733	1968		1292		4993	
xi	Store Rooms (Operations, Maintenance & Authorities etc.,)		1849					1849	
xii	Rest Rooms			190		37		227	
xiii	Baggage Break Up Area	13653						13653	
xiv	Baggage Make Up Area		12979					12979	
XV	Reserved Lounge		237			104		341	
	SUB TOTAL	23854	70415	28951	1145	62699	3934	190997.8	
В	Common Areas								
i	Passage / Corridor								
ii	VHT (Escalators, Staircase, Lifts & Shafts - Non Passengers zone)		343			257	136	736	
iii	Toilets (Non Passengers)								
iv	Utilities (AHU, Electrical, Services, IT Rooms etc.,)	378	16772	10408	3485	128		31171	
٧	Loading Dock	2018						2018	
vi	Landscape		982			483	857	2322	
vii	Store Rooms								
viii	Others including shafts, Tunnels, Ramp & Egress Corridor Miscellaneous etc.,	1370		147				1517	
	SUB TOTAL	3766	18097	10555	3485	868	993	37764	
С	Non-Aero - Outlets with Detail Break / List								
i	Lounges			1467			3018	4485	
ii	Retail Area		2114			9993	1578	13685	
iii	F&B Area		359			6492		6851	
iv	Supporting Facilities (Airline Office, Concessonaires Offices & Other Ticketing Offices, etc.,)			1350		512		1862	
	SUB TOTAL		2473	2817		16997	4596	26883	
	GRAND TOTAL	27620	90985	42323	4630	80564	9523	255644.8	

Summary of T2 Area Statement for AERA						Rev 00	Date 12-06-2018		
AERA Function	Basement	Level 0	Level 1	Level 2	Level 3	Level 4	Total	% of Total Area	
Passenger area & Aero function Areas	23,854	70,415	28,951	1,145	62,699	3,934	190,998	74.7%	87.7%
Common Areas	3,766	18,097	10,555	3,485	868	993	37,764	14.8%	
NON Aero Areas	-	2,473	2,817	-	16,997	4,596	26,883	10.5%	12.3%
Total	27,620	90,985	42,323	4,630	80,564	9,523	255,645		

GST Working

Description	Cost (in Rs.)	Material assumption	Tax on inputs		
DIVISION 01 - GENERAL REQUIREMENTS	21,000,000	0%	-		
DIVISION 03 - CONCRETE	2,728,987,819	0%	-		
DIVISION 04 - MASONRY	254,699,648	0%	-		
DIVISION 05 - METALS	1,535,570,444	0%	-		
DIVISION 06 - WOOD, PLASTICS AND COMPOSITES	2,259,425,847	0%	-		
DIVISION 07 - THERMAL AND MOISTURE PROTECTION	1,467,937,318	0%	-		
DIVISION 08 - OPENINGS	783,436,484	0%	-		
DIVISION 09 - FINISHES	1,859,434,148	0%	-		
DIVISION 10 - SPECIALTIES	449,242,000	75%	60,647,670		
DIVISION 11 - EQUIPMENT	796,000,000	75%	107,460,000		
DIVISION 12 - FURNISHINGS	108,115,000	0%	-		
DIVISION 14 - CONVEYING EQUIPMENT	963,687,036	75%	130,097,750		
DIVISION 21 - FIRE SUPPRESSION	190,464,475	75%	25,712,704		
DIVISION 22 - PLUMBING	281,636,344	50%	25,347,271		
DIVISION 23 - VENTILATING AND AIR CONDITIONING	478,617,049	50%	67,006,387		
DIVISION 25 - INTEGRATED AUTOMATION	217,886,038	0%	-		
DIVISION 26 - ELECTRICAL	1,892,294,038	50%	170,306,463		
DIVISION 27 - COMMUNICATIONS	1,506,991,911	75%	203,443,908		
DIVISION 28 - ELECTRONIC SAFETY AND SECURITY	355,268,533	75%	47,961,252		
DIVISION 31 - EARTHWORK	230,661,997	0%	-		
DIVISION 32 - EXTERIOR IMPROVEMENTS	2,932,868,927	0%	-		
DIVISION 33 - UTILITIES	23,575,547	0%	-		
DIVISION 34 - TRANSPORTATION	3,098,181,250	75%	418,254,469		
DIVISION 35 - OTHER EQUIPMENTS	1,023,658,328	50%	92,129,250		
Murals & Religious art	244,359,819	0%	-		
SUB TOTAL	25,704,000,000		1,348,367,123		
Design (10%)	2,570,400,000	0%	-		
Contingency (10%)	2,570,400,000	0%	-		
PMC & Pre-ops (5%)	1,285,200,000	0%	-		
SUB TOTAL	32,130,000,000		1,348,367,123		
Taxes @ 6% (Service tax considered in submission)	1,927,800,000	0%	-		
TOTAL	34,057,800,000		1,348,367,123		
Input tax credit as % to total cost			4.0%		
Applicable tax rate - GST			18.0%		
Tax			14.0%		

AERA Stakeholder Consultation for Enabling works for Eastern Tunnel Connectivity

&

Establishment of 220/66 KV Substation

June 2018

Agenda

Enabling works for Eastern Connectivity Tunnel

Stage I – Need Identification

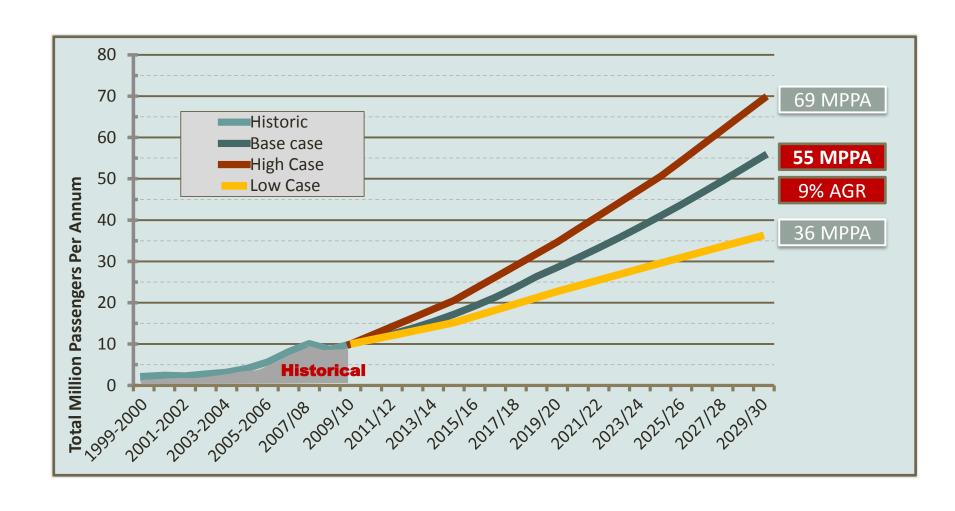
Stage II – Options Development

Stage III – Detail Design

Forecast Review

Traffic Development - Forecast

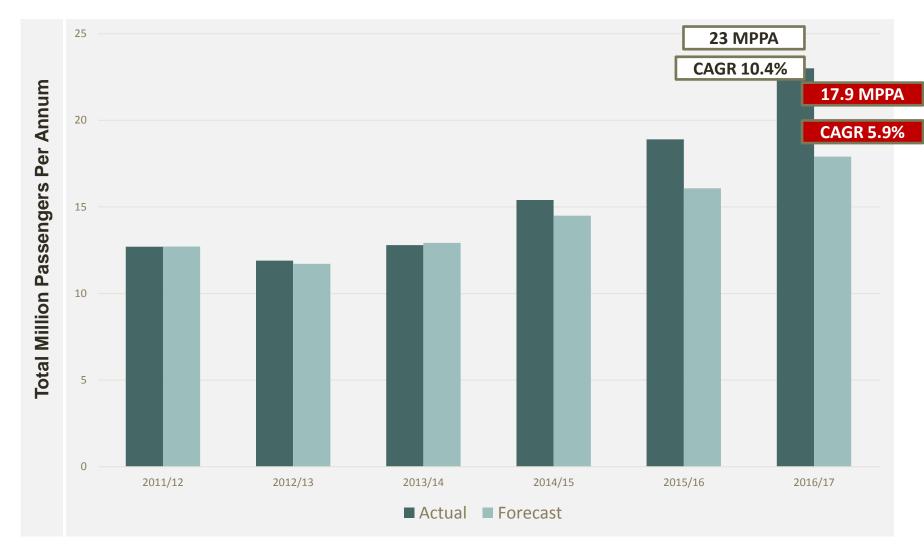




Forecast Review

Traffic Development - Forecast Vs Actual





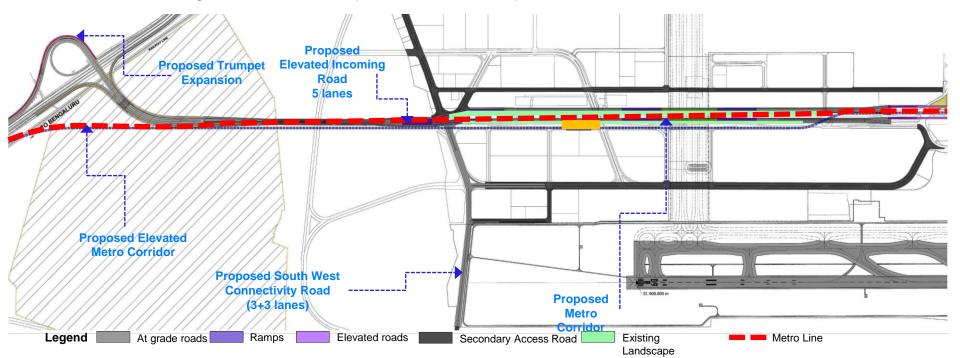
The rate at which actual traffic is growing is almost double the forecasted rate

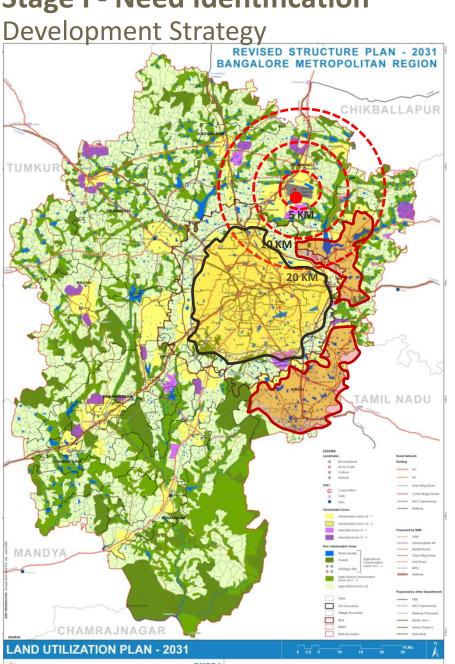
Development Strategy



Infrastructure Limitation

- At KIA, to cater to estimated landside traffic from city to the existing and proposed terminals, additional infrastructure is planned like;
 - Expansion of Trumpet road from 2 lanes to 4 lanes
 - Expansion of Main Access Road (MAR) from 3 lanes to 5 lanes in T2 phase 1 and
 - Provision of additional 2 lanes on MAR in T2 phase 2.
 - Airport metro link to provide the much needed capacity to cater to the ultimate demand of the airport.
- Currently NH 44 (Bangalore Hyderabad road) through the existing trumpet and through SW Connectivity road is the only
 external access available for air passengers to commute between airport terminal and Bangalore city. The road
 infrastructure available on the west is insufficient to cater to the growing traffic demand of 55 MPPA and beyond.
- Expansion on NH is not possible due to congestion at Hebbal flyover and due to land acquisition constraints on NH. Also there is constraint to acquire further land for expanding the trumpet connector to the airport.
- Hence, to decongest it's essential to explore and divert the airport traffic to alternate access routes.





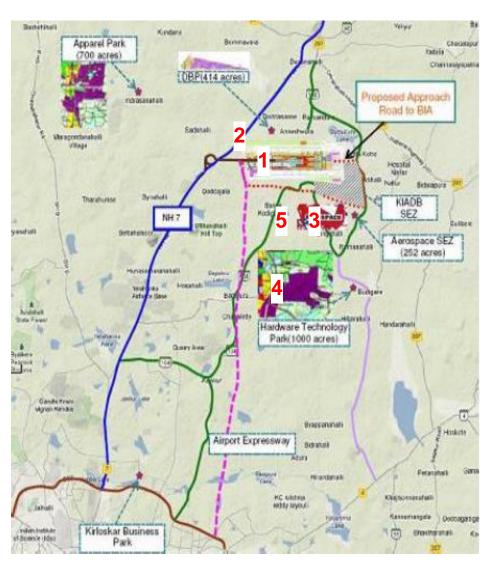


Development in Airport Vicinity

- As per BMRDA Structure Plan 2031, the intense development is planned around east of Bangalore urban clusters / nodes.
- Significant developments are proposed around the airport like KIADB Aerospace Park, Devanahalli Business Park and IT and Hardware Park. Hence, there would be a need of alternate access roads especially to access the Terminals.
- Currently 20-25% of the Airport Traffic from the Eastern part of the city is approaching from Hebbal, which clearly shows need for alternate access to the terminal from eastern side.
- BIAAPA has planned some Commercial developments at Doddaballapura and Chikballapura which may lead to additional traffic to the airport from the east.

Development Strategy of BIAAPA Region





BIAL

Kempegowda International Airport (KIA)
Next Phase new T2 (25 mppa with new RWY)
to cater to >= 55 mppa.

KSIIDC

Devanahalli Business Park (DBP) - 400 acres.

KIADB

- Aerospace Park 979 acres.
- Aerospace SEZ 252 acres.
- Hardware Technology Park 869 acres.

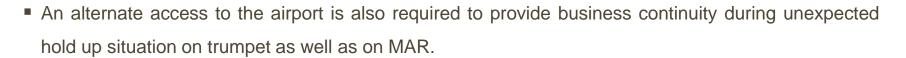
GoK initiative

IT Park - 941 acres.

Development Strategy



Business Continuity



Based on the discussed points, it is clear that an alternate access needs to be provided to the Terminals at KIA to cater growing traffic demand at airport and act as an alternate access to the airport terminal.

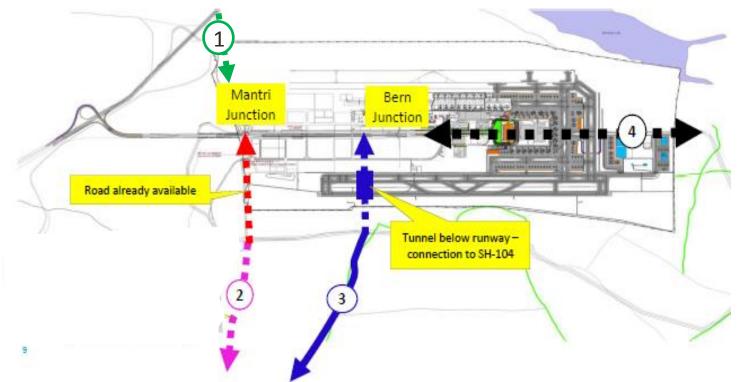
Stage II - Options Development

Option Development Strategy

Assessment of Alternatives

Stage II - Option Development Strategy





Based on identified need, BIAL has identified four alternate connectivity routes to the terminals;

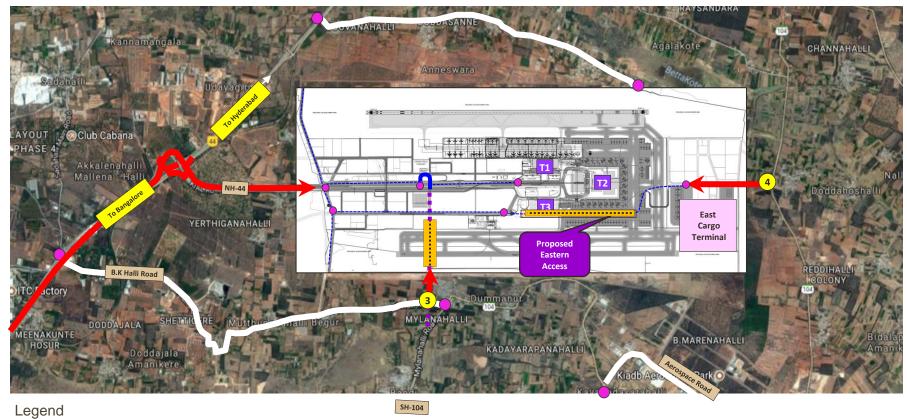
Route 1 - North connectivity from Devanahalli side

Route 2 – Access through Doddajala and South West Connectivity Road from NH 44 (Developed and operational from Mar'18 onwards)

Route 1 and 2 are not feasible options to access the airport terminals as both of these roads ultimately connect to the MAR. These routes also do not cater to the needs of traffic coming from south and east of Bengaluru. Hence these cannot be considered as an alternate access to the terminals.

Stage II - Option Development Strategy





- Option 3: SH104 South Connectivity (Part of Tunnel Approach)
- Option 4: SH104 East Connectivity (Part of Tunnel Approach)

Underpass / Tunnel Portions

More than 50% of the projected passenger traffic load is expected from the East and South over the long term.

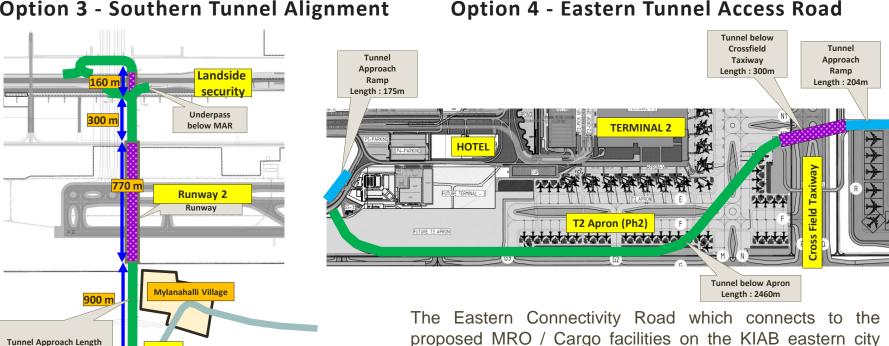
Hence to cater connectivity to these development pockets from and to the terminals, the identified route 3 and 4 are considered as ideal for further evaluation.

Stage II - Assessment of Alternatives

East and South Access Option



Option 3 - Southern Tunnel Alignment



The proposed southern access takes off from SH-104 and connects MAR on west of taxiway crossing with total length of approx. 2.1 Km.

SH 104

The access would have at grade road between SH-104 and airport boundary, tunnel within airside premises an underpass below main access road.

proposed MRO / Cargo facilities on the KIAB eastern city side development pocket is under construction by the PWD.

The proposed eastern access starts as a continuation from this road in the eastern parcel near cargo terminal and extends to the proposed south access road (currently under construction).

The tunnel (as marked in green) would pass through open areas between taxiways & apron with total length of approx. 2.7 Km. Conflict with GSE underpass is evaluated and taken care. Also it does not impact future terminal building T3.

Stage II - Assessment of AlternativesEast and South Access Option

Kempegowda INTERNATIONAI AIRPORT BENGALURU

Option 3 - Southern Tunnel Alignment

- Requires land acquisition for approximately 27,000 Sqm outside KIAB property through densely inhabited area.
- SW connectivity road which is parallel road for access to the airport through the MAR is hardly 1400 m to the west.
- Southern Tunnel again connects to the MAR, thus is not an alternate access to the terminal per se.

Option 4 - Eastern Tunnel Access Road

- Connects airport terminal to eastern part of the city and developments around by a shorter access
- Can be built without impacting the NSPR operationalization date
- Provides business continuity and operational resilience.

Hence, the eastern access road is found to be a better and feasible option given the reduction in traffic load it brings to the other airport access roads



Eastern Tunnel Development

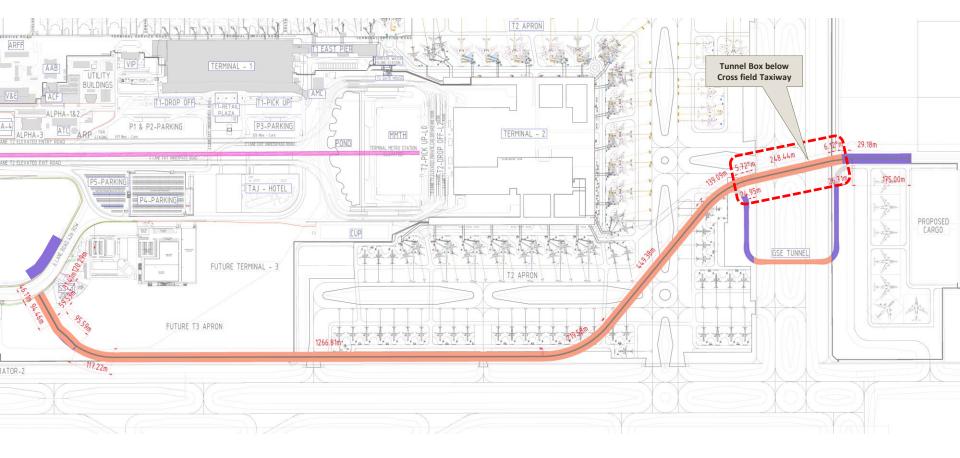
Project Cost

Risk Assessment and Mitigation Measures

Stage III - Eastern Tunnel Development

Eastern Tunnel – Phases of Development (Phase 1 & Phase 2)





- Total length of eastern tunnel is approximately 2,760 m with approach ramps of 175 m on either side of the tunnel and vertical clearance of 5.5 m.
- Total 2+2 lanes with maintenance footpath, drain on either side and a central egress path is planned

Stage III - Eastern Tunnel Development

Eastern Tunnel – Phases of Development (Phase 1 & Phase 2)

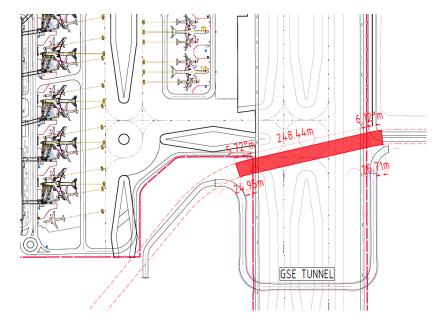


The construction of Eastern Tunnel is planned in two phases;

Phase 1 (Enabling Work) – Construction of Tunnel box of approximately 300 m below east cross field taxiway is planned to be taken up as a part of the NSPR Project.

If this 300 m tunnel is not carried out now and constructed in an operational environment will result in significant amount of temporary works in order to ensure continuous airfield operations.

The construction cost for executing works in the operational environment is estimated to be significantly higher than if constructed currently in a construction environment.



Also, the tunnel box of 300 m is proposed to be closed at the ends after construction and remaining portion of the required tunnel length, approach ramps, pavements, utilities etc. (i.e. Phase 2 works) will be built during the subsequent phases of Airport Development.

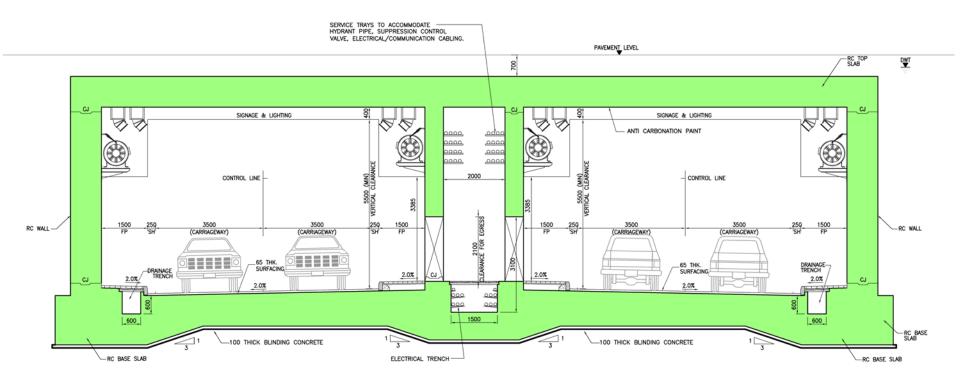
Hence, this Eastern Tunnel enabling works is recommended to be executed now along with the construction of the east cross field taxiways, which is targeted to be operational by Sept 2019.

Phase 2 (Main Works) – Construction of the remaining tunnel, approach ramps, pavement, utilities, signage, lighting and other facilities are planned to be taken up as part of Phase 2 of the Airport Development.

Stage III - Eastern Tunnel Development

Eastern Tunnel Cross Section





TYPICAL CROSS SECTION FOR TUNNEL SCALE: 1:50

Tunnel Section - Box (Cut and Cover)

- 2+2 lanes on either side with footpath for maintenance
- Central corridor electrical and other utilities and egress path
- Vertical clearance is 5.5 m



Eastern Tunnel Development

Project Cost

Risk Assessment and Mitigation Measures

Stage III – Project Cost



Project Schedule

Description of works	Start	Target Completion
Phase 1 Works (300m of tunnel RCC construction) #	Jul'2018	Sept'2019
Phase 2 Works (*) (Remaining tunnel construction/all other remaining work)	Sept'2023	Sept'2026

- (#) The Phase 1 can be put to use only after Phase 2 completion
- (*) The schedule provided is based on Terminal 2 Phase 2 tentative schedule, provided in the MYTP submission. Based on this in case the Terminal 2 Phase 2 schedule is modified, Tunnel Phase 2 construction timelines will be accordingly modified.

Stage III – Project Cost



Phase 1

- Construction of 300 m of RCC Box structure under the East Cross field Taxiway.
- Construction, Design, Project Management, Project Pre-operatives & Contingency Costs 78 Cr Rs

Phase 2

- The Phase 2 works cost estimate is being provided as a tentative cost. BIAL will approach the AUCC separately for Stage 3 for the Phase 2 works
- Balance tunnel construction (Cut and cover tunnel), MEP, Pavement, Lighting, Signage's etc. & all other works for Operationalization will be covered in Phase 2 works
- Construction, Design, Project Management, Project Pre-operatives & Contingency Costs 1033 Cr Rs (2017 price levels).
- Total Project Cost Phase 1 and Phase 2 1,111 Cr Rs (2017 Price Levels)
- Phase 2 construction work shall be taken up along with T2 apron phase 2 works

Break up for capital costs



Rs. In Crore		CP II				CP III			Total
Particulars	2019	2020	2021	2022	2023	2024	2025	2026	Total
Eastern Connectivity Tunnel works- Phase 1									
Construction of tunnel box - 300 Mt works	41	44							86
Eastern Connectivity Tunnel works- Phase 1 Remaining portion of tunnel construction, MEP works , Ventilation, Pavement works, Lighting, Ramp Structure etc.						410	603	509	1,521
Total									1,607

Impact on Passenger Tariff

- The incremental impact on the tariff during the second control period (FY 2017 –FY 2021) towards Eastern Tunnel is less than Rs.1 as there is only a small portion of works being included in second control Period.
- The incremental impact in third control period (FY 2022 –FY 2026) will be around Rs. 10 per pax
- The above workings are only an estimate.
- The decision on levy and quantum of UDF / tariffs would be made by AERA based on the tariff Guidelines and AERA's review of BIAL multi-year tariff proposal.



Eastern Tunnel Development

Project Cost

Risk Assessment and Mitigation Measures

Stage III – Risk Assessment and Mitigation Measures



Sl. No	Risk Definition	Impact	Mitigation
1	Approval Risk		
	BCAS Approval to operate the tunnel under the taxiway/apron operating conditions	Significant impact	Robust and proactive consultation with authorities for approval
2	Construction Risk		
	Sub-surface conditions	Minor to severe impact to project time and cost	Additional geotechnical studies Design solutions
3	Financial Risk		
		Timely availability of resources at a reasonable cost	Signing of financial closure for the entire project
4	Regulatory Risk		
	Change in economic regulatory policy	Impacts on tariff and business conceptualisation	Robust and proactive consultation with authorities for approval

Agenda

Establishment of 220/66 KV Substation

Stage I – Need Identification

Stage II – Options Development

Stage III - Detail Design

Stage I -Need Identification for establishment of 220 /66 KV Substation

Stage I - Need Identification



Current Status

- Power supply from KPTCL, dual source from Begur Substation at 66KV.
- Current power demand for existing facilities 12 MVA
- Contracted/ sanctioned demand 15 MVA

Upcoming Demand

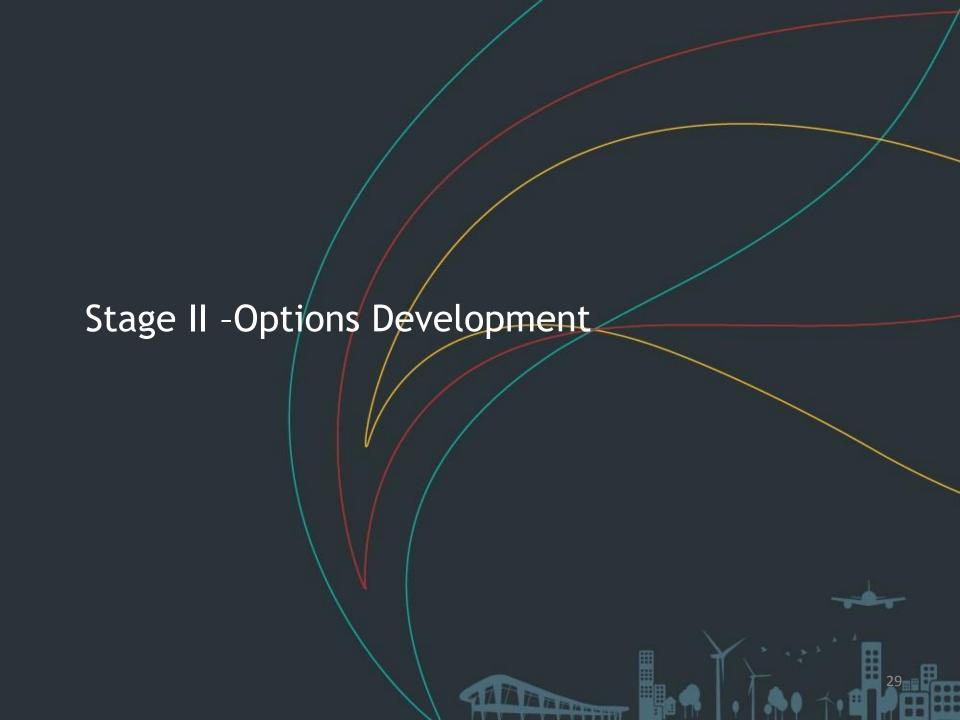
- Upcoming facilities 2nd Runway, Terminal 2 & other related developments.
- Additional load due to the upcoming facilities 21 MVA
- These facilities are expected to be operational by 2020/21
- Total estimated demand by 2020/21 (For Aero assets) 33 MVA
- Total estimated demand by 2030 (For Aero assets) 55 MVA

Stage I - Need Identification



- As per KERC power supply needs to be availed at 220KV for power loads above 20MVA.
- BIAL pursued with KPTCL to provide up to 33MVA at 66KV level.
- After multiple meetings and correspondence with KPTCL over the last one and half years, KPTCL has confirmed that the power will be only provided at 220KV if demand is more than 20 MVA and BIAL's request could not be agreed.

Hence 220/66KV substation needs to be established to meet the upcoming development needs at KIA.





Stage II -Options Development

Option 1: BIAL pursued with KPTCL to supply up to 33 MVA at 66KV, however KPTCL has confirmed power needs to be taken at 220 KV for power above 20MVA.

Option 2: Other power sources

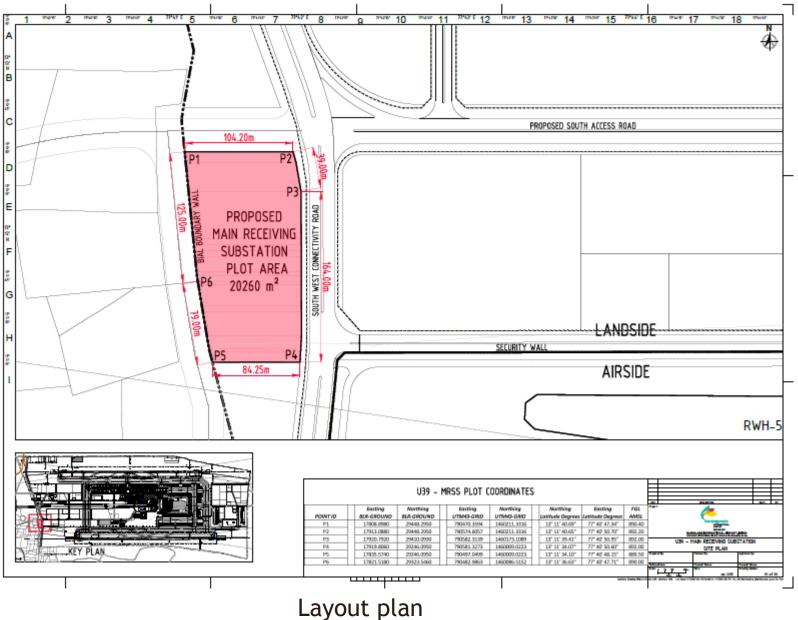
- BIAL is developing solar power. However the total airport demand cannot be met with the solar alternative only, also the peak demand for the airport happens in the night time which cannot be met through solar.
- Gas based power generation is also explored. However, due to uncertainty in reliable gas availability this option is on hold & will be evaluated at a later stage.

Option 3 and recommended option: Develop a 220/66 KV substation to meet future requirements of BIAL.

Stage III - Detail Design and Cost Estimate

Stage III -Detail Design





Stage III -Detail Design and Cost Estimate



- Optimum location for the proposed substation, approx. 3 kms from Begur substation (regular source).
- 3 runs of 220 kv cables regular source 3 kms and alternate source 9 kms.
- Built over an area of 5 acres.
- Self Execution basis under KPTCL supervision.
- Execution Duration 24 months Jan 2019 to Jan 2021
- Project Cost 354 Cr Rs (250 Cr Rs , 20% KPTCL supervision charges, 18% GST. Project cost at 2017 price levels).
 - GIS substation 150 Cr Rs
 - 36 Kms of 220 KV cables and related works- 100 Cr Rs
 - KPTCL supervision charges @20% -50 Cr Rs
 - GST @18% 54 Cr Rs

Project cost and Impact on tariff



Rs. In crore		CP II	
Particulars	2020	2021	Total
GIS substation with 36 Kms of 220 KV cables and related works.	2.44	400	42.4
Incl. KPTCL supervision charges @20% and GST	241	183	424
Total			

^{*}Above cost includes indexation (Rs.31cr) and IEDC (Rs 39)

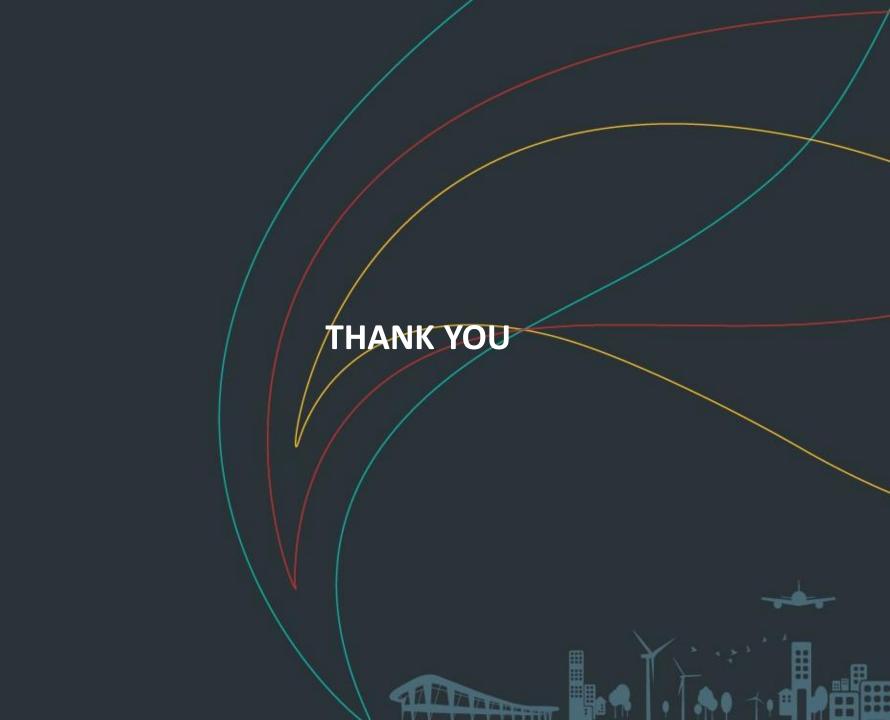
Impact on passenger tariff

- The incremental impact on the tariff during the second control period (FY 2017 FY 2021) towards 220/66Kv sub-station is around Rs. 1/- per pax and ~ Rs. 3/- per pax in third control Period.
- The above workings are only an estimate.
- The decision on levy and quantum of UDF / tariffs would be made by AERA based on the tariff Guidelines and AERA's review of BIAL multi-year tariff proposal.



Risk & Mitigation

Sl. No.	Risk Definition	Impact	Mitigation
1	Land - Right of Way availability	Laying of the 220 kv cables and commissioning of the substation.	Robust and proactive consultation with authorities for approval
2	Financial Risk	Timely availability of resources at a reasonable cost	Signing of financial closure for the entire project





Topics	1. Establishment of 220/66 KV Substation Topics covered I. Need Identification II. Options Development III. Detail Design 2. Enabling works for Eastern Tunnel Connectivity Topics covered I. Need Identification II. Options Development III. Detail Design (for Phase 1)		
Date	Friday, 22 nd June, 2018 at 2:00 PM		
Venue	Jasmine Conference Room, BIAL Project Office, Bangalore International Airport Limited, Kempegowda International Airport, Bengaluru, Devenahalli, Bengaluru 560 300		
List of Participants	Enclosed as Annexure 1		

Bangalore International Airport Limited (BIAL) invited Stakeholders on Friday, 22nd June, 2018 to attend all the three stages of AUCC Stakeholders Consultation on the following proposed projects at Kempe Gowda International Airport, Bengaluru (KIAB or the Airport):

- 1. Establishment of 220/66 KV Substation
- Enabling works for Eastern Tunnel Connectivity involving CAPEX in the 2nd Control Period (FY 2017 to 2021)

Mr. Satyaki Raghunath, Chief Strategy and Development Officer ('CSDO'), BIAL welcomed the participants and provided the background / brief on the two projectss which were placed for Stakeholder Consultation Meeting.

Mr. Mihir Baxi, Deputy General Manager - Airport Planning, BIAL commenced the detailed presentation on the two projects and explained the requirement of conducting the Consultation Process, drawing reference to AERA guidelines.

1. Establishment of 220/66 KV Substation

STAGE I - NEED IDENTIFICATION

BIAL informed the stakeholders that the current power demand across the Airport for the existing facilities is 12 MVA and the sanctioned demand is 15 MVA. Currently, power is supplied by KPTCL through the Begur substation at 66KV.



The present and future power demands of the Airport were presented as below;

Existing load for T1 and associated areas	12 MVA
Additional load due to the upcoming facilities - 2 nd Runway , Terminal 2 & other related developments. These facilities are expected to be operational by 2020/21	21 MVA
Total estimated demand by 2020-21 (For Aero Assets)	
Total estimated demand by 2030 (For Aero Assets)	

The stakeholders were informed that BIAL had requested KPTCL to supply 33 MVA under 66KV level through the existing 66 KV cable. However, KPTCL confirmed that as per the regulatory requirements, the power could only be supplied through 220KV, when demand exceeds 20 MVA. Hence, a 220/66KV Substation needs to be established to meet the long-term power requirements based on upcoming projects at KIAB to meet forecast passenger and cargo growth for the Bengaluru Metropolitan region.

STAGE II - OPTIONS DEVELOPMENT

BIAL had explored several options to cater the future power demand of the Airport.

Option 1;

BIAL pursued an option with KPTCL to supply up to 33 MVA at 66KV. However, KPTCL confirmed that power needs to be availed at 220 KV for power requirements above 20MVA.

Option 2;

Other power sources

- BIAL is developing the option of generating solar power during the day. However, the total airport demand cannot be met with the solar alternative only. Further, the peak demand for the Airport during the night time which cannot be met through solar power.
- BIAL also explored a gas-based power generation option to meet the needs of the Airport. However, due to uncertainty in reliable gas availability, this option was put on hold, although it couldbe further evaluated at a later stage.

It was mentioned that these alternate sources of power cannot be considered as the only source of power for public infrastructure of such critical importance. There is a need to be connected to the power grid at all times for resilience and redundancy. Hence, power will be required to be sourced from KPTCL.



Option 3 and recommended option;

To develop a 220/66 KV substation to meet future requirements of BIAL.

STAGE III – DETAIL DESIGN

BIAL presented the detail design of the 220/66 KV Substation and the salient features of the project;

- ➤ Optimum location for the proposed substation has been identified on the KIAB site, which is approximately. 3 km from Begur substation (regular source) and adjacent to South West Connectivity Road.
- ➤ 3 runs of 220 KV cables have been considered from the regular source 3 km away and an alternate source 9 km away.
- > Expected to be built over an area of approx. 5 acres.
- > Work will be undertaken on a 'selfexecution' basis under KPTCL supervision.
- ➤ Execution duration is expected to be approx. 24 months January, 2019 to January, 2021

Cost Estimates

Rs. in Crore

GIS Substation	150
36 Kms of 220 KV cables and related works	100
KPTCL supervision charges @20%	50
GST @18%	54
Total Project Cost (at the Year 2017 price level)	354

Impact on Tariff

Rs. in Crore

		CP II	
Particulars	2020	2021	Total*
GIS Substation with 36 Kms of 220 KV cables and related works.	241	183	424
Inclusive of KPTCL supervision charges @20% and GST			

^{*}Above cost includes indexation (Rs.31Crore) and IEDC (Rs 39 Crore)

Impact on Passenger Tariff;

Mr. Anand Kumar P, Vice President – Head Controlling and Regulatory Affairs, briefed the stakeholders about impact on passenger tariff as below;

- The incremental impact on the tariff during the Second Control Period (FY 2017–FY 2021) towards the 220/66KV Sub-station would be around Rs. 1/- per passenger and ~ Rs.3/- per passenger in Third Control Period (FY 2022 FY 2026).
- The above workings are only an estimate.
- The decision on levy and quantum of UDF / tariffs would be made by AERA based on the tariff guidelines and AERA's review of BIAL's multi-year tariff proposal.



Risk Assessment and Mitigation Plans

BIAL presented the risk assessment and mitigation plans as below;

SI. No.	Risk Definition	Impact	Mitigation plans
1	Land – Right-of-	Laying of 220 KV cables	Robust and proactive
	way availability	and commissioning of the	consultation with
		Substation.	authorities for approval
2	Financial risk	Timely availability of	Achieving financial
		resources at a reasonable	closure for the entire
		cost.	project.

2. Enabling works for Eastern Tunnel Connectivity

STAGE I - NEED IDENTIFICATION

The actual traffic growth was compared to the forecast completed in year 2013. It was highlighted that the actual traffic is growing at CAGR of 10.4% over the past 6 years instead of CAGR of 5.9% as per the forecast. KIAB handled 23 MPPA traffic in year 2016-17 and 26.9 MPPA in year 2017-18.

Development Strategy

BIAL presented the infrastructure limitations on connectivity to the Airport and briefed the stakeholders on other development aspects in the vicinity of the Airport, which highlight the requirement for alternate access to airport terminals.

BIAL further expressed that in the case of operational interruptions at NH 4 (including at the trumpet interchange, as well as on the main access roads (MAR)), the Airport would necessarily require an alternate access road for business continuity and operational resilience.

It was expressed that there is a necessity for an alternate access to the Terminals at KIAB to cater to growing traffic demand at airport.

STAGE II – OPTIONS DEVELOPMENT (Assessment of Alternatives)

BIAL informed that based on identified needs, four alternate connectivity routes to the terminals were explored;

Option 1;

Route 1 - North connectivity from Devanahalli side



Option 2;

Route 2 – Access through Doddajala and South West Connectivity Road from NH 44 (Developed and operational from March, 2018 onwards)

Routes 1 and 2 were not considered as feasible options to access the airport terminals as both of these roads ultimately connect to the MAR. These routes also do not cater to the needs of traffic coming from south and east of Bengaluru. Hence, these options cannot be considered as an alternate access to the terminals.

In addition, considering the estimate that more than 50% of the projected passenger traffic demand is likely to come from the east and south of the city over long term, two other options - Option 3 and 4 were further evaluated.

Option 3;

Route 3 - SH104 South Connectivity (Part of Tunnel Approach) (Underpass/Tunnel Portion)

Option 4;

Route 4 - SH104 East Connectivity (Part of Tunnel Approach)

Of these two options, the eastern access road (Option - 4) was found to be a better and more feasible long-term option for the following reasons:

- Connects airport terminals to eastern part of the city and developments around it by providing a shorter access route.
- Can be built without impacting the NSPR operationalization date
- Provides business continuity and operational resilience to the Airport.
- Reduces the traffic congestion on the MAR.

STAGE III - DETAIL DESIGN FOR EASTERN TUNNEL (PHASE 1)

Eastern Tunnel development

- The total length of the eastern tunnel is expected to be approximately 2,760 m with approach ramps of 175 m on either side of the tunnel and a vertical clearance of 5.5 m.
- Total 2+2 lanes with maintenance footpath, drain on either side and a central egress path is planned.

BIAL informed the stakeholders that the Eastern Tunnel is planned to be developed in two phases.



Phase 1 (Enabling works);

- Construction of a 'box-tunnel' of approximately 300 m length below the east crossfield taxiway is planned to be taken up as a part of the NSPR Project. (Depicted below)
- If this 300m tunnel is not carried out now and constructed in an operational environment it will result in significant amount of temporary works since we will have to ensure continuous airfield operations.
- The construction cost for executing works in an operational environment (need for boring) is estimated to be significantly higher than building it during the construction period as a 'cut and cover' project.
- Also, the box-tunnel of 300m is proposed to be closed at the ends after construction in Phase 1 and the remaining portion of the required tunnel length including approach ramps, pavements, utilities etc. {i.e. Phase 2 works} will be built during subsequent phases of airport development.
- Hence, the enabling work for the Eastern Tunnel is recommended to be executed now along with the construction of the east cross-field taxiways, which is targeted to be operational by September, 2019.

Cross Section of Eastern Tunnel

BIAL informed stakeholders that the section of the box-tunnel design would be a 'cut and cover' basis and would broadly have the following design guidelines;

- 2+2 lanes on either side with a footpath for maintenance
- Central corridor electrical and other utilities and egress path
- Vertical clearance of 5.5 m

Phase 2 (Main works);

BIAL also informed stakeholders that construction of the remaining tunnel, approach ramps, pavement, utilities, signage, lighting and other facilities are planned to be taken up as part of Phase 2 of the Airport Development.

Project Schedule

Description of Works	Start	Target Completion
Phase 1 Works (300m of tunnel RCC construction) #	July, 2018	September, 2019
Phase 2 Works (*) (Remaining tunnel construction/all	September,	September, 2026
other remaining work)	2023	

^(#) The tunnel can be put to use only after Phase 2 completion

^(*) The schedule provided is based on Terminal 2 Phase 2 tentative schedule, provided in the MYTP submission. Based on this in case the Terminal 2 Phase 2 schedule is modified, tunnel Phase 2 construction timelines will be accordingly modified.



Project Cost

Rs. In Crore

Project Phase	Amount
Phase 1 Works	
Construction of 300 m of RCC Box structure under the East Cross	
field Taxiway	78
Construction, Design, Project Management, Project Pre-operative	
Costs & Contingency Costs	
Phase 2 Works*	
Balance tunnel construction (cut and cover tunnel), MEP, Pavement,	
Lighting, Signage etc. plus all other works for Operationalization	1,033
Construction, Design, Project Management, Project Pre-operative	
Costs & Contingency Costs	
Total (Project Cost – Phase 1 and Phase 2) (Year 2017 Price level)	1,111

^{*} The Phase 2 work cost estimate is being provided as a tentative cost. BIAL will approach the AUCC separately for Stage 3 for the Phase 2 work. Phase 2 construction work shall be taken up along with T2 apron phase 2 work.

Impact on Passenger Tariff

Rs. in Crores

		CP II				CP III			
Particulars	2019	2020	2021	2022	2023	2024	2025	2026	Total
Eastern Connectivity Tunnel work- Phase 1 Construction of tunnel box - 300 Mt work	41	44							86
Eastern Connectivity Tunnel work- Phase 2 Remaining portion of tunnel construction, MEP works, Ventilation, Pavement work, Lighting, Ramp Structure etc.						410	603	509	1,521
Total									1,607

Impact on passenger tariff;

Mr. Anand Kumar P, Vice President – Head Controlling and Regulatory Affairs briefed the stakeholders on the project's impact on passenger tariff as below;

The incremental impact on the tariff during the Second Control Period (FY 2017 –FY 2021) towards Eastern Tunnel is less than Re.1 as there is only a small portion of works being included in Second Control Period.



- The incremental impact in Third Control Period (FY 2022 –FY 2026) will be around Rs. 10 per passenger.
- The above figures are only an estimate.
- The decision on levy and quantum of UDF / tariffs would be made by AERA based on the tariff Guidelines and AERA's review of BIAL multi-year tariff proposal.

Risk Assessment and Mitigation Plans

BIAL presented the risk assessment and mitigation plans as below;

SI. No.	Risk Definition	Impact	Mitigation plans
1	Approval Risk - BCAS approval to operate the tunnel under the taxiway/apron and resulting operating conditions	Significant impact	Robust and proactive consultation with authorities for approval.
2	Construction Risk - Sub-surface conditions	Minor to severe impact to project time and cost	Additional geotechnical studies Design solutions
3	Financial Risk	Timely availability of resources at a reasonable cost.	Signing of financial closure for the entire project.
4	Regulatory risk - Change in economic regulatory policy	Impacts on tariff and business conceptualisation.	Robust and proactive consultation with authorities for approval

The floor was open for the question and answer (Q&A) session for the two projects presented;

1. Question & Answers on 220/66KV Substation Facility

Query 1: Mr. Samuel Prabhakar, Airline Operators Committee (AOC) and Mr. Ujjwal Dey, Federation of Indian Airlines (FIA)

A. Airport being in the State of Karnataka, considering the region as a whole and Airport being an Asset of the State, whether KSIIDC would bear portion of the cost of Sub-station?

It was replied that BIAL would bear entire cost of the project. Further, it was explained that the power supplied through proposed 220 KVA is entirely for the



requirement of the Airport requirements and the same would not be shared outside the Airport.

Representatives from KSIIDC clarified that the 220/66KV project needs to be funded and completed at an entity level without seeking the support of the Government of Karnataka. They then mentioned that the Devanahalli Business Park, which is proposed adjacent to the Airport, would be fully developed by KSIIDC, as an entity without the support of Government.

2. Question & Answers on Enabling works for Eastern Tunnel Connectivity

Query 1: Mr. Devesh Agarwal, Bangalore Chamber of Industry and Commerce (BCIC)

A. BIAL seems to be having sufficient land for development of alternate access to the Airport. Therefore, should BIAL not explore options of connectivity from the Northern side? There is already connectivity from the South and Eastern sides available to the Airport. Currently, there is only a 2-lane Main Access Road used by the passengers and this could be choked in future years. For example, Delhi Airport which has over 65 million passengers, has only 1 MAR to serve multiple Terminals.

BIAL did evaluate the connections from south and north. However, these proposals, if implemented will still connect to the same main access road / MAR. BIAL is also in the process of building additional lanes on the MARto cater to the future demand. The proposed Eastern Tunnel provides an alternate access to the Airport and connects the eastern portion of the city, through SH 104 resulting in the increase in capacity and providing business resiliency.

B. The Government is not infusing any equity into BIAL and it is the responsibility of the Government to provide connectivity to the Airport. Passengers should not be burdened through UDF by executing various projects inside Airport.

The representatives from KSIIDC stated that the Government had initiated the process of developing alternate access to Airport from the south-west and east. The planned development is for the future requirement of traffic to the Airport that is generated from the east and south of Bengaluru.

BIAL informed stakeholders that Airport traffic is growing at a rapid pace and that infrastructure development needs to meet the future demand. The Eastern Tunnel is planned to provide alternate access and increase the possibilities of more connections to the city.

C. In case an Alternate Access Road is built on the eastern side, why should all passengers bear the cost of the Alternate Access Road? BIAL can



explore the option of charging the passengers who actually use such connectivity.

The current regulatory environment does not have any provision for differential UDF. BIAL informed stakeholders that NHAI / Government is the authority, which would decide the levy of toll/charges on the complete Alternate Access Road, and that BIAL does not have any control over it.

D. A portion of the Eastern Connectivity tunnel is proposed to be constructed as cut and cover. Has BIAL considered safety issues while formulating the design? Are there any guidelines for not allowing certain types of commercial vehicles in the tunnel? Has sufficient space inside the tunnel been planned for, considering the emergency situations?

BIAL informed stakeholders that the Airport is proposing the execution of 'enabling works' of the Eastern Tunnel Connectivity in Phase 1 and the proposed box-tunnel design of 2 + 2 lanes with utility corridor is considered for the same and the segment design incorporates the necessary requirements for this stage.

AUCC Stage III – Detail Design, for Eastern Tunnel for full length would be conducted with all necessary design details addressing security and safety requirements.

Query 2: Ms. Pooja, Confederation of Indian Industries (CII)

A. Whether BIAL had considered the Bengaluru Metro alignment which would enter the Airport in the future while formulating options for alternate connectivity?

It was clarified that BIAL has already considered the BMRCL Metro line in the Master Plan. BIAL is in discussion with officials of BMRCL for Metro Alignment at the Airport.

Conclusion:

BIAL concluded the consultation of all the three stages for Establishment of 220/66 KV Substation and Eastern Tunnel Connectivity (except Stage III for Phase 2 of Eastern Tunnel Connectivity) as required by AERA and thanked all the members for their participation.

Encl: Annexure 1 – AUCC Members present list



AUCC MEMBERS INVITED AND PRESENT:

Annexure -

SI No	Organization Invited	Name	Designation
1	Air India	Mr. M.V Joshi	Regional Director, Southern Region
ı	All Illula	Mr. N.S. Chand	Station Manager - Bangalore
2	Airline Operators Committee (AOC)	Mr. Samuel Prabhakar	AOC - Chairman
3	Airports Authority of India	Mr. S.K. Swami	GM CNS CIC
	(AAI)	Mr. Anilkumar S	JGM CNS
4	Air India SATS	Mr. Bobbn Phillip Jose	VP Cargo & PHC
4	All Illula SATS	Mr. V Satish Babu	AVP Customer Services
5	Bangalore Chamber of Industry And Commerce (BCIC)	Mr. Devesh Agarwal	VP
6	Blue Dart Aviation Ltd,	Mr. Chetan V	Senior Manager - AO
	Cargo	Mr. Shyamal Shosh	Flight Safety Advisor
7	Confederation of Indian Industry (CII)	Ms. Pooja	Director
8	Federation of Indian Airlines (FIA)	Mr. Ujjwal Dey	Associate Director
9	International Air Transport Association (IATA)	Mr. Eric Antia	Campaign Manager
10	Jet Airways / Jet Lite	Mr. Ashutosh Shukla	Station Manager
44	Karnatak State Industrial and Infrastructure	Mr. NRN Simha	ED - KSIIDC
11	Development Corporation (KSIIDC)	Mr. Y Sreenivasappa	AGM - KSIIDC
12	Spicejet Airlines	Mr. Ajish P George	Duty Manager
13	TajSATS Air Catering Limited	Mr. Bheem Naik	Manager HR
14	Tata SIA Airlines Limited - Vistara	Mr. Santosh	Station manager
15	True Jet	Mr. Sanjay	Senior APM



ATTENDEES FROM BIAL;

SI. No.	Name	Designation	
1	Mr. Satyaki Raghunath	Chief Strategy & Development Officer	
2	Mr. Bhaskar Anand Rao	Chief Financial Officer	
3	Mr. Mihir Baxi	DGM - Airport Planning	
4	Mr. Anand Kumar P	VP - Controlling and Regulatory Affairs	
5	Mr. Arunachalam S V	GM - COE, Strategy and Development	
6	Mr. Venkatraman H R	VP - Corporate Affairs	
7	Mr. M T Siva Kumar	AVP – Company Secretary	
8	Mr. Arvind Mathur	SVP – ICT	
9	Mr. Premanand Shetti	VP -Projects	
10	Mr. Glen Wilson	VP - Customer Experience & Operations	
11	Mr. Ashutosh Chandra	AVP - Head Real Estate – Business	
		Development	
12	Mr. Prithvi Ponnappa	AVP - Head - Facilities & Minor Projects	
13	Mr. Najam Rao	AVP - Security	
14	Mr. Balamurali	Head – Design	
15	Mr. Sandeep Chaudhari	GM - Head Landside Maintenance	
16	Mr. T A Sreenath	GM - Aviation Safety, ARFF, Emergency & BCM	
17	Mr. Satheesh Seshadri	GM - Finance Controlling	
18	Mr. K J Devasia	DGM - Emergency & Business Continuity	
19	Ms. Pushpa Pandey	AGM - Airside Operations	
20	Mr. Anil Kumar	AGM - AOCC	
21	Mr. Vishal Khettry	AGM - Landside Commercial	
22	Mr. Darshan Singh	AGM - Operations Planning & Project	
22		Coordination	
23	Mr. Sridhar C K	AGM - Aviation Stakeholder	
24	Mr. Mohan V	Manager - Operations Planning	
25	Mr. Vishwas Hegde	Deputy Manager - Secretarial	
26	Mr. Kodanda Bhandari	Senior Executive - Operations Planning	
27	Ms. Lakshmi Subramanian	Secretary to Chief Operating Officer	



MEMBERS INVITED BUT NOT PRESENT:

SI No.	Organization	
1	Air Asia India	
2	Airworks Engg India Limited	
3	Air India Express	
4	Allianze Air	
5	Associated Chambers of Commerce and Industry of India (ASSOCHAM)	
6	Association of Private Airports Operators (APAO)	
7	Airpassengers Association of India (APAI)	
8	Airport Economic Regulatory Authority (AERA)	
9	Air Cargo Agents Association of India (ACAAI – Bangalore Chapter)	
10	ACAAI (Air Cargo Agents Association of India)	
11	Board Of Airline Representatives (BAR)	
12	Bangalore Custom House Agents Association Limited (BCHAAL)	
13	Bharat Stars Services Pvt Ltd (ITP)	
14	Bharat Petroleum Corporation Limited (BPCL)	
15	Bharat Stars Services Private Limited (BSSPL)	
16	Consumer Education and Research Centre (CERC)	
17	Consumer Unity and Trust Society (CUTS)	
18	Express Industry Council of India (EICI)	
19	Federation of Indian Chambers of Commerce and Industry (FICCI)	
20	Federation of Indian Export Organizations (FIEO)	
21	Go Air	
22	Governament of Karnataka (GOK)	
23	Globe Ground India (GGI)	
24	Hindustan Petroleum Corporation Ltd (HPCL)	
25	Indigo Airlines	
26	Indian Oil Skytanking Ltd - Fuel Farm Facility	
27	Indian Oil Corporation Limited (IOCL)	
28	KLM Royal Dutch - Line Maintenance	
29	LSG Sky Chefs	
30	Ministry of Civil Aviation (MoCA)	
31	Menzies Aviation Bobba (B'lore) Pvt Ltd	
32	M/s. Essar Oil Ltd. Essar	
33	Reliance Industries Limited (RIL)	
34	Shell MRPL Aviation Fuels & Services Ltd.	
35	Voluntary Organization in Interest of Consumer Education (VOICE)	

SHASHIKANT MUDDAPUR

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SM/TR/115/18

12th APRIL 2018

TECHNICAL REPORT

This report is prepared in accordance with the instructions received from **M/s. Bangalore International Airport Limited, Bangalore.** The Airport Facility situated at Devanahalli, Bangalore North was visited by me on 14.03.2018 for the purpose of inspection/technical evaluation of Useful Life of Certain Assets installed at the Airport Facility and the details are furnished below:

Name of the Company:

M/s. Bangalore International Airport Ltd.,

Alpha-2, Bengaluru International Airport,

Devanahalli, Bangalore 560300.

Date of Technical Evaluation:

12.04.2018

Purpose of Inspection:

Technical Evaluation in respect of Useful Life of Assets

installed at the Airport Facility.

Members Interacted:

Mr. S. Chandrasekar- VP & Head Fin & Accts, - BIAL

Mr. Saikiran K - Sr. Manager, Finance & Accounts - BIAL

Mr Sasikumar P.V. – Sr. Maintenance Manager, BIAL

Mr. S. Muddapur - Chartered Engineer & Valuer

Preamble:

BIAL presently follows depreciation rates based on useful lives estimated by the Management of the Company in line with rates prescribed under erstwhile Companies Act. 1956 AERA has issued an Order No. 35/2017-18 dated 12.01.2018 taking cognizance of various factors in consultation with major Airports in India and prescribed the "Useful Life" of various assets installed in the Airports in Annexure-I of the said order.

- It is observed that AERA has issued the order in which they had prescribed useful lives for the Airport Specific Assets. For many of the assets, useful lives prescribed by AERA are in line with the Companies Act, 2013.
- The Authority also stated that the Airport Operators can adopt useful lives different from what is prescribed for certain category of assets, supported by technical evaluation. This is also in line with the Provisions under the Companies Act, 2013.
- In this connection, BIAL has requisitioned the services of the undersigned for studying the matter and come out with useful lives of assets.

478, 4TH MAIN, 6TH CROSS, 2ND BLOCK, R.T. NAGAR, BANGALORE 560 032.

Overview:

Airports are vital national resources. They serve a key role in transportation of people and goods and in regional, national, and international commerce. This is where the Nation's aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of State and Central Governments that own and operate most airports.

Introduction:

The construction of the Airport commenced with the signing of a <u>Concession Agreement</u> in July 2004 between the Government of India and Bangalore International Airport Limited (BIAL) and the Airport started its operation on 23rd May 2008.

Under the Concession Agreement the Government of India has given BIAL the exclusive right and privilege to carry out the development, design, financing, construction, operation, and management of the airport for a period of 30 years from its opening date, with an option to extend the concession for another 30 years. The Concession Agreement recognizes that BIAL may carry out any activity or business in connection with handling of aircraft, passengers, baggage, and cargo at the airport.

Statement:

This report is intended for use by M/s. BIAL, Bangalore and is intended only for the determination of Useful Life of Certain Assets.

Information provided by others has been assumed to be correct for the purpose of this report.

It is assumed that there are no hidden or unapparent conditions of the system/assets, which would alter its present appraisal. The relevant records and documents have been verified for the purpose of this report.

Details of Inspection:

The list of Assets have been inspected/verified along with Airport Personnel & their description is as under:

1. Runways

KIAB has a single runway with 09/27 orientation. Runway is constructed with flexible pavement with Markings of Designation, Threshold, Touch Down Zone, Centre-line, Aiming point, Side stripe to aid the pilot. The Runway has RESA of 240m on both ends. The physical dimensions of Runway at KIAB are Length:4000m x Width:45m with 7.5m paved shoulders on either side. The Runway is operational since May 2008 (10 years old). The scheduled maintenance activities are carried out during the weekly Maintenance slot (2.5 hrs.) as provided every Tuesday. Surface rejuvenator course is applied every alternate year which consists of Emulsion spray. Runway is maintained to International standards at all the times by dedicated team. All types of Aircraft including the Airbus A-380 can be operated at KIAB.

The "Useful Life" of the Runway is indicated as 30 years by AERA. I am of the opinion that BIAL having entered into a Concession Agreement which provides technical specifications and design life of the Runway which is 20 years and the Runway being built according to these specifications. Hence, I am of D the view that , the "Useful Life" of the Runway considered as being 20 years by BIAL is justified.

2. Taxiway

KIAB has a parallel taxiway of 4000m length x 25 m width & is connected to Runway by three link taxiway A1, B, A6 and three RETs E,F,G. There are also three link taxiways which connects taxiway to Apron D, H, K. For emergencies it is connected by V roads which are used by CFT.

The "Useful Life" of the Taxiway is indicated as 30 years by AERA. I am of the opinion that BIAL having entered into a Concession Agreement which provides technical specifications and design life of the Taxiway which is 20 years and the Taxiway being built according to these specifications, the "Useful Life" of the Taxiway considered as being 20 years by BIAL is justified.

3. Trumpet Road Access

Trumpet interchange is so called as the design of the ramps and concentric loops resemble spiraling downward and curving design of the musical instrument. Commuters from Kempegowda International airport take left ramp, go into outer loop of Trumpet and continue down ramp straight to terminal.

It's important for major entry points into the city to have distributor like trumpet flyover that allows traffic to flow smoothly in different directions. These have to be high-speed distributors, allowing vehicles to take even the turns without restriction. All this should be accomplished without impacting pedestrian movement as explained experts.

BIAL has constructed this in line with agreement with Government of Karnataka as this Trumpet connects to the main access to NHAI for a tenure of 20 years, I am of the opinion that BIAL designed the Trumpet Road Access (which is connected to Terminal from National Highway) with appropriate specifications considering the increased vehicular traffic, consequently the "Useful Life" of the Trumpet considered as being 20 years by BIAL is justified

4. Canopy

The Canopy structure provides access to the main transportation hub for air passengers. It consists of a structural steel frame covered with full-depth steel roof panels clad. Its design required careful coordination between structures and the engineer of record for the lower portion of the Main Canopy due to the partial support conditions provided. Special evaluation of wind loading on the large horizontal surface is also undertaken and coordinated with the wind consultant for a sturdy and good aesthetics.

Considering the design and weathering and also BIAL is a fast growing Airport, with continuous improvements and structural changes to meet passenger growth, I am of the opinion that the "Useful Life" of the Canopies can be considered as 9 years.

5. Swing Gates

Swing gates are provided to significantly increase both the utilization of facilities, thus reducing the amount needed for any level of traffic and the flexibility of the building, thus enabling it to accommodate easily variations in traffic composition of international and domestic air services.

The Swing Gates are normally made of Glass partition walls that slide on the railings provided for quick changeover in space utilization.

Considering the design and fragility, I am of the opinion that the "Useful Life" of the Swing gates can be considered as being 10 years.

6. Project Office

The New Project Office which has been constructed to accommodate Project Personnel working exclusively on design and establishment of "Terminal-2" building, Runway-2 and services. The design of the Project office ensures that the personnel working on the project are housed and facilitates good working ambience. Further, The project office is constructed with Non – RCC roofing which will later be demolished to make way for further expansion of airport facilities.

I am of the opinion that BIAL has designed the Project Office structure with appropriate specifications considering the duration of the new/ future project and consequently the "Useful Life" of the Project Office can be considered as being 10 years.

7. Landscaping

The <u>widespread landscape</u> is aimed towards maintaining ecological balance and minimizing adverse impact on environment, by controlling erosion and reducing loss of soils in waterways and also assists in reducing in evaporation and soil degradation. The green cover has been carefully selected to cover plants and trees indigenous to the region.

Another extension of the airport's green flaunts a spectacular landscape that is based on Bangalore's reputation as Garden city. Considering the plant life and also frequent maintenance of the landscaping, the lives of the landscaping can be considered as 5 years.

8. Nursery Unit

The 'airport in a garden' is not only captivating but also technologically progressive, with a <u>well-equipped climate control green house</u> for Indoor plants, a 5 acre <u>Plant Nursery</u> and a decentralized automatic irrigation system.

I am of the opinion that considering the structure and specification of the nursery unit the "Useful Life" of the Nursery Unit can be considered as being 10 years.

9. Parking Area

At Kempegowda International Airport Bengaluru, apart from regular parking zones which are laid out keeping in mind passenger ease and convenience, there is Parking Area provided exclusively for Taxi Operators. This has been done since there the number of taxies is large and need to be accommodated separately with facilities provided for drivers.

The "Useful Life" of the Parking Area is indicated as 5/10 years by AERA as applicable to Roads. "Useful DD Life" of the Parking Area considered as being 5 years by BIAL is justified

10. <u>Airport Specific Equipment such as Aero Bridges/ Baggage Handling System/ Escalators/ Elevators/ Travellite/ HVAC Equipments/ Cargo ASRS/ ETV Equipment/ X Ray Machine, RT Set, DFMD, HHMD, Security Equipment.</u>

KIAB is a fast growing airport with rapid passenger growth and high ATM. BIAL is currently using best technology imported Airport Specific Equipments as mentioned above for the convenience of the passengers. I have discussed and consulted with technical team and understand that these Airport Specific Equipments are operated on a Triple Shift basis. It is pertinent to note that these equipments which are working on Triple Shift basis will need higher maintenance and also will have considerable reduction in useful life. Considering the fact that these equipments are operated on a Triple Shift basis, in my opinion, the useful life of these assets can be considered as 7.5 years.

11. Airport Communication Equipment

KIAB uses communication equipments such as PA systems/ TRMS/ IBS etc which is used for its operations at the Terminal. I have discussed and consulted with technical team and understand that these Communication Equipments are operated on a Triple Shift basis. Hence in my opinion, the useful life of these assets can be considered as 7.5 years.

Assessment of Useful Life:

The useful life of an asset is defined in terms of the asset's expected utility to the entity.

The asset management policy of an entity may involve the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits or service potential embodied in the asset. The estimation of the useful life of the asset is a matter of judgment based on the future economic benefit end usage of the assets.

The future economic benefits or service potential embodied in an item of property, plant and equipment are consumed by the entity principally through the use of the asset.

However, other factors such as technical or commercial obsolescence and wear and tear while an asset remains idle often result in the diminution of the value of economic benefits or service potential that might have been obtained from the asset. Consequently, all the following factors are considered in determining the useful life of an asset:

- a) Expected usage of the asset. Usage is assessed by reference to the asset's expected capacity or physical output.
- b) Expected physical wear and tear, which depends on operational factors such as the number of shifts for which the asset is to be used and the repair and maintenance program, and the care and maintenance of the asset while idle.
- c) Technical or commercial obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset.
- d) Legal or similar limits on the use of the asset, such as the expiry dates of related leases.

Appraisal:

In the current assignment of estimation of Useful Life of various Assets installed at the Kempegowda International Airport, the Assets have been classified under <u>9 major headings</u>. It is pertinent to note that under the Concession Agreement, the Government of India has given BIAL the exclusive right and privilege to carry out the development, design, financing, construction, operation, and management of the airport for a period of 30 years from its opening date, with an option to extend the concession for another 30 years.

Further, the <u>Airport Economic Regulatory Authority of India</u> (AERA) has issued an Order No. 35/2017-18 dated 12.01.2018 taking cognizance of various factors in consultation with major Airports in India and prescribed the "Useful Life" of various assets installed in the Airports in Annexure-I of the order.

However it is observed that BIAL, while executing the Concession Agreement had come out with appropriate /exclusive design and specifications for few assets. Keeping in view the above mentioned factors, these assets have been inspected/verified for their brief specifications, wear & tear, type of preventive maintenance carried out, present condition of the assets and accordingly evaluated considering industry depreciation standards, prudence, and experience.

After scrutiny of the relevant documents (Concession Agreement and AERA Order) and the specifications and design of the installed assets by BIAL, I am giving below, the <u>Useful Lives of Assets</u>, which are different than what is specified by AERA in Annexure I to the order No. 35/2017-18 dated 12.01.2018

SL No.	Asset Description	Useful Life in years
1	Runways	20
2	Taxiway	20
3	Trumpet Road Access	20
4	Canopy	9
5	Swing Gates (glass partition)	10
6	Project Office	10
7	Landscaping	05
8	Nursery Unit	10
9	Parking Area	05
10	Airport Specific Equipment such as Aero Bridges/ Baggage Handling System/ Escalators/ Elevators/ Travellite/ HVAC Equipments/ Cargo ASRS/ ETV Equipment/ X Ray Machine, RT Set, DFMD, HHMD, Security Equipment	7.5
11	Airport Communication Equipment	7.5



Remarks:

This Technical Report is for use only of the party to whom it is addressed and no responsibility is accepted to any third party for the whole or any part of its contents.

I hereby further certify that I have neither present nor prospective interest on the Assets appraised or values proposed.

This Technical Report is issued without any prejudice and is based on the details furnished and personal evaluation carried out by me.

SHASHIKANT MUDDAPUR Chartered Engineer & Valuer

S. MUDDAPUR CHARTERED ENGINEER M118314/6 Dt. 30-7-99 478, 4th Main, 6th Cross, 2nd Block, R.T. Nagar, BANGALORE - 560 032. Regulating for major new investment: Advancing revenue to assure investment and a sustainable price path

A note for BIAL by Dr Harry Bush CB

About the author

Dr Harry Bush CB was the member of the UK CAA Board responsible for the economic regulation of UK airports from 2003 to 2010, following a 23 year career in Her Majesty's Treasury and education at Merton and Nuffield Colleges, Oxford. Since leaving the CAA Dr Bush has been an independent regulatory adviser in the aviation sector and more widely, advising both regulators and companies. He is Vice Chair of a major London teaching hospital and sits on the Board of NATS, the UK's regulated air traffic provider.

Introduction

Indian civil aviation has witnessed double digit growth rates in recent times. This has been considerably facilitated by the ability of private airport operators to add to airport capacity at regular intervals, accommodating the aircraft which Indian air carriers continue to add to their fleets. This rapid growth is set to continue. With more than 1,000 aircraft on order, India is on track to become the third-largest aviation market in the world, behind the US and China. This poses challenges for airports in India in planning for and building airport capacity in line with the demands of airlines, and in particular in financing that expansion against a background where airports are under pressure from all aviation stakeholders rapidly to add capacity to ensure that they do not end up being a bottleneck in Indian aviation growth.

This general growth story is reflected at Kempegowda International Airport, Bengelaru (KIA) which served ~27 million passengers in FY 2017-18. This number has grown by ~13.8 per cent per year over the last nine years, a rate of growth that currently shows no sign of abating. The airport projects a passenger throughput of ~38 million passengers per annum by FY 2020-21. This growth reflects the general growth of the Indian economy along with the buoyancy of the tech and other sectors around Bangalore.

The airport was designed to accommodate ~20 million passengers.³ There has been a significant amount of investment over the last nine years designed to maintain and improve the assets and to accommodate more passengers. However, the airport is now approaching the point where it believes that significant investment in new runway and terminal facilities will be required if it is to meet projected demand. Given the regulatory context in India airport operators need to obtain necessary regulatory approvals before commencing their capital projects.

The airport is regulated by the AERA through a price cap derived from a hybrid till building block regime Such arrangements carry the risk that as traffic grows and the airport becomes more crowded prices tend to fall, creating challenges for the best use of increasingly scarce capacity and, in particular, for the financing of the needed new investment.

Against this background, Bangalore International Airport Ltd (BIAL) has commissioned me to consider, drawing on my experience as economic regulator at the UK CAA 2003-10 and as a regulatory adviser to regulators and airports since, how the RAB based mechanisms used by AERA as part of its economic regulation should be best designed to facilitate the scale of investment now in prospect and, in particular, whether and to what extent the fast-growing nature of the Indian aviation market poses challenges for these arrangements.

This paper first considers the nature of the airport investment cycle, the issues this gives rise to and how they would play out in the absence of regulation; it briefly assesses whether a radically different approach to regulation might be appropriate and concludes that pragmatic adjustments to the existing RAB framework are likely to be more practicable; and, finally, sets out a number of adjustments to a RAB-based regulatory system that better incentivise airport investment and make it more financeable. The paper specifically identifies three propositions that should assist in the financing of airport investment and the smoothing of regulated prices, namely the setting of prices in one period in the context of their likely profile subsequently; the remuneration of assets in the

.

¹ IATA report quoted in https://www.livemint.com/Companies/Br6lxw8HLhnWqI3C1g5LVJ/India-seen-becoming-third-largest-aviation-market-by-2025.html

² Figures provided by BIAL

³ Ibid

course of construction; and the transfer of revenues between periods. All are consistent with the proper operation of RAB regulation and ensure that prices reflect costs over time (even if not in each period considered in isolation). They are also consistent with the 'lumpy' nature of airport investment and how it would be financed in a functioning market. It is important to underline that the propositions do not involve any extra cost for airlines but rather a re-profiling of the same costs over time better to enable the airport to finance the necessary investment and to create a pricing profile more adapted to the sustainable development of aviation at the airport.

The proposals made in this paper are focussed on one important facet of economic regulation relating to investment, namely the timing of cash flows and the associated profiling of prices. A regulator will also need to consider broader issues of incentivisation relating to the WACC and the design of facilities to ensure that the airport has the required incentives to bring forward investment in an efficient way. Suffice to say that some of the general points in this paper about the need to design regulation to the specifics of the sector and the airport in question are likely to be relevant to those other issues as well.

Further, while regulators are understandably keen to have predictable rules which both simplify decision making and make it more predictable, it is important that regulation does not become overly mechanistic and automatic, following rules which may have been appropriate (or at least not damaging) in the past but which are rendered problematic by changing circumstances. To avoid this, regulation needs to be clearly grounded in the realities of how regulated markets and entities work.

To consider the questions set me by BIAL it is therefore important, first, to understand the nature and consequences of the typical airport investment cycle.

The airport investment cycle

Airports are, by their nature, capital intensive and will require a continuing stream of investment to maintain, modernise, expand and, ultimately, replace facilities. For much of an airport's life investment is likely to take the form of relatively small increments to the initial investment made in runway, apron and terminal facilities to enable the airport to cope with traffic growth or the changing business requirements or practices of its airline partners. These might involve extensions to terminals, adjustments to taxiways, baggage system changes or a multitude of other refinements that are the everyday business of an airport. This investment might be termed 'incremental'. However, there will come a point where traffic growth means that more 'lumpy' investment in a new runway or a new (or largely extended) terminal is required. This is likely to mean a significant increase in the capital base of the airport which may be magnified to the extent that existing assets have already been depreciated.

Before considering the challenge for regulators in ensuring that airports are in a position to bring forward and finance such a sizeable investment, it is worth identifying how the pressures on an airport would play out in an unregulated airport market where prices are set by the interplay of market forces rather than the determinations of a regulator.

In the run up to a 'lumpy' investment airport capacity will tend to become increasingly scarce as an airport is unable to meet all the demand created by growing traffic. In a functioning market airport prices would therefore increase and with them the cash flows available to the airport operator. At the same time, rising prices would help ration capacity to those airlines and passengers that value it the most. In the period prior to the 'lumpy' investment the airport would therefore be generating the financial wherewithal to help finance the investment while the price mechanism would effectively be testing the strength of demand for capacity at the higher prices that are likely to be

required to remunerate the new investment. These would likely need to be above the (long term) average price level because of the risk of price weakness once capacity is increased.

It is important to emphasise that the increase in airport prices due to demand outstripping available capacity in this scenario of a functioning market would not represent an abuse (or even the existence) of market power. Rather, the interaction of supply of capacity and the demand for it leads to a 'congestion premium' which in an unregulated airport market accrues to the airport which needs to undertake the investment to improve the supply of airport services. In doing so it not only directly provides some of the financing required but demonstrates to third party financiers the strength of the business case for the new facilities. It also establishes a price profile likely to be consistent with the provision of new capacity, enabling all parties better to plan ahead.

In an economically regulated environment there is the same fundamental interplay of supply and demand, with passengers seeing fares increase as demand grows for the constrained number of airline services that the airport can accommodate. However, while the fundamental problem is one of shortage of airport capacity, where airport charges are held below market clearing levels through economic regulation, it is airlines that benefit from the congestion premium. Airline profitability is enhanced, rather than the cash being available to airports to help finance the investment needed to remedy the capacity shortage. The existence and extent of the impact on fares has been clearly demonstrated in the work undertaken in the UK for the Airport Commission process which examined the competing propositions for new runway capacity in the London market.⁴ The Commission found that passengers were already paying airlines substantial premia due to scarce capacity which were likely to increase as capacity became even more scarce.⁵ The additional airline profitability implied by this underlies the high slot values evident in secondary slot trading at London Heathrow and, to a lesser extent, London Gatwick.

This analysis of the airport investment cycle and its relationship to pricing has implications for the design of airport regulatory frameworks. To the extent that these should seek to mimic or at least reflect some of the pressures that would obtain in a functioning market they should

- -recognise the centrality of the investment cycle to airport economics and seek to accommodate the periodic lumpiness of airport investment
- -ensure that airports entering a heavy investment period should have the cash flows that assist in making the investment financeable and underpin the business case for third party financiers
- -create a price profile which is consistent with the higher costs likely to be generated by sizeable investments.

This would be true and necessary for the generality of airports. It is likely to be even more the case for airports operating in high growth environments where 'lumpy' investments are likely to be more frequent and potentially of a greater scale relative to existing asset bases than in more mature, slower growing, aviation economies.

⁴ Frontier Economics, Impact of airport expansion options on competition and choice: A Report prepared for Heathrow Airport, April 2014

⁵ Airports Commission, Final Report, July 2015, Chapter 3. The Commission also identified other costs that passengers were likely to bear from congestion, for instance delay and reduced route choice.

Long run average incremental costs

Recognising amongst other things the importance of future investment to infrastructure costs and therefore the revenues that regulated companies should be allowed, regulators in some sectors have used Long Run Average Incremental Costs (LRAIC) as the basis for price regulation, effectively setting prices according to the cost of the next increment in output. The UK CAA considered in 2008 such an approach to the price regulation of Stansted but, on the advice the Competition Commission (which then had a role in UK airport regulation), did not pursue the idea further. The theoretical attractions of the idea did not outweigh the practical problems involved in defining, for example, the appropriate increment and its cost and the length of the 'long term', in particular given the limited time remaining for regulatory decision-making and the radical nature of the policy departure involved. The Commission recommended, instead, that the CAA should seek to deal with its concerns through adjustment to the existing Regulated Asset Base (RAB) regulation (which is the focus of the rest of this note). The company of the rest of this note).

The CAA's specific concerns, focusing on the impact of regulation on Stansted's local airport competitors, were different from those that obtain in the Indian context but the central thrust is relevant, namely the need to ensure that the form of regulation is consistent with how the airport market operates. This does not necessarily require a complete recasting of existing regulatory mechanisms but, as in the UK, pragmatic adjustment to take account of the actual circumstances of regulated companies and the challenges they face. The rest of this note focusses therefore on adjustments that might be made to existing regulatory arrangements in India better to facilitate needed investment through ensuring that cash flows are available to the airport in a timely way and that there is a price profile more reflective of the future trend of prices - both, as explained above, features that would obtain in a functioning market through the normal operation of supply and demand.

Potential problems with cost-based regulation

The essence of a cost-based RAB approach such as that operated by AERA for Indian airports is that prices, usually expressed per passenger, are derived from the costs legitimately incurred by the airport during the regulatory period. These costs may be offset in part by commercial revenues earned by the airport depending on whether the airport is under a dual, single or (as in the case of KIA) hybrid till. Costs will usually comprise operating costs, the return on capital embodied in the WACC and the return of capital through depreciation allowances on past investment.

In conditions of steady, slow passenger growth and limited incremental investment in maintenance and modernisation, the cranking of the handle on a basic RAB pricing model may lead to relatively stable prices. There may be some jagged edges (for example, depending on the profile of depreciation) but they are unlikely to be of such a scale as to cause major problems for airports or their customers. However, this will not be the case where an airport is in a fast-growing market and approaching a major, 'lumpy' investment. There could well be sharp disjunctions in price between regulatory periods to the detriment of airport financing and airline planning. Such disjunctions are

⁶ Europe Economics, CAA Reference to the Competition Commission for Stansted Airport, April 2008, Supporting Paper IV, Advice to the CAA on the Calculation of Incremental Costs, Appx 1. The main use of LRAIC in the setting of price controls has been in telecoms with its use by other regulators in energy and water more confined to the structuring of charges.

⁷ Competition Commission, Stansted Airport Ltd, Q5 Price Control Review, Appendix C, October 2008

likely to arise where the following are present, often in combination as they tend to be codependent

- -a depreciation profile, reflecting the age of existing assets.
- -a reducing price profile that accompanies the 'sweating' of existing assets through traffic growth.
- -to be followed in a subsequent regulatory period by a major investment in capacity designed to relieve the congestion which has contributed to the previously reducing price profile
- -a resulting mismatch in the profile of regulatory depreciation and projected capital spend reflecting the age of existing assets and the lumpiness of planned investment
- -and, as the regulatory asset base diminishes over time due to depreciation, the lower overall returns to the airport further reduce the cash available to the airport operator

In these circumstances, the operation of a RAB model rigidly tied to specific and relatively short time periods can lead to a declining price profile as congestion increases and capacity becomes more scarce. This can constrain cash flows for an airport embarking on a major investment. Subsequently, to pay for the investment, prices have to be raised by more than they would otherwise have needed to be just at the point where capacity becomes more plentiful. The result is a series of economically perverse and counterproductive outcomes which do not accord, as explained in above, with what would happen in a functioning market. To some extent such outcomes may be an inevitable corollary of RAB based regulation. Depending on the scale of the 'lumpy' investment and the length and intensity of the congestion preceding it, such regulation is likely to lead to some degree of price spikiness as new investment increases costs without (initially) the passenger numbers being available over which those costs can be spread. However, a number of steps can be taken to mitigate these impacts and to smooth the effect to the benefit of both airports and their customers. This is particularly important for major projects where the adverse consequences for all parties are likely to be greatest.

Enhancing the RAB framework

Lengthening the regulatory period

The first potential mitigation would be a lengthening of the period of the price control so that it accords more with the long-term planning horizons of airports. Most airport and other price controls are set for five years. Where major investments are in prospect, such a short period is unlikely to enable the smoothing of (opposing) congestion and investment effects even where the investment straddles the boundary between regulatory periods. In principle, a longer period of ten or fifteen years would be more consistent with airport planning horizons and would enable costs to be averaged in a way that enabled a smoother transition from the congestion to the investment phase of the airport's life. However, the lengthening of regulatory periods brings with it the disadvantages of greater uncertainty. Estimating costs and forecasting traffic to the level of granularity required by *precise* RAB modelling becomes more difficult the further into the future it is done, the more so when the sector is as dynamic, commercially oriented and fast moving as Indian aviation.

Where regulators have gone for longer regulatory periods or multi-period settlements they have often been caveated by a mid-point review which may vitiate the greater certainty that the longer period was intended to impart. Such mid-point reviews mean that companies cannot necessarily count upon the prices defined at the beginning of the period.

It seems unlikely, therefore, that lengthening the regulatory period represents a credible approach to mitigating the problems identified in the previous section. Moreover, it is not necessary to go as far as lengthening the regulatory periods themselves to gain some of the advantages that consideration of pricing over a longer period would bring. It would, alternatively, be possible to pay *more attention* to the likely development of prices in subsequent periods while actually *fixing* them only for the period in question. That would enable the prices being fixed to be informed by how they fit in to a developing profile and would provide the basis for considering the adjustments suggested below.

Remunerating assets in the course of construction

A second mitigation would be to remunerate assets in the course of construction (AICC). Under such an arrangement the return on and, potentially, depreciation of assets would kick in as they are constructed rather than be rolled up to await opening of the facility. The advantages of such an approach in mitigating price spikiness would be the greater the more major the investment and therefore the longer the construction period (Heathrow's Terminal 5 took five years to build). UK regulation of airports has long allowed return on AICC but depreciation has had to await facility opening. However, this has been a pragmatic judgment rather than an issue of principle as the CAA's broader approach to calibrating revenue flows between regulatory periods (see below) indicates.

The airlines have consistently opposed what they term 'pre-funding' of investment. They argue that airports should only be remunerated for investment when a new facility opens. A number of arguments have been adduced, including that airports have access to cheaper capital. However, raising that capital may require both an airport contribution and demonstration that new investment will be remunerated. The regulatory commitment to the investment apparent in remuneration of AICC can therefore be a helpful regulatory contribution to the raising of capital, including by reducing the amount of investment recovery that is subject to demand risk, as well as providing needed airport cashflow. Moreover, as discussed above, the practice is consistent with the outcomes that would be observed in a functioning airports market where it would be the airport that would benefit from any congestion premium in advance of investment in major new facilities. The market would effectively provide the 'pre-funding' through the normal operation of demand against increasingly scarce supply. This is consistent with how markets generally work. While competition will tend to push price towards costs, prices will not necessarily reflect costs in every product segment or every period of time even if they do so over the long run (which of course they may not given product innovation, differentiation etc). Airlines are themselves a very good example of this with fares for individual flights set by the interaction of supply and demand over time. Fares will therefore vary between routes and time periods, with individual fares certainly not determined by cost.

The issue of pre-funding therefore only arises because of the nature of cost-based regulation. The absence of the cash flows that would otherwise be generated by market forces in the run up to

⁸ CAA, CAP 1510, Economic regulation of the new runway and capacity expansion at Heathrow Airport: consultation on CAA priorities and timetable, 2017, Chapter 5. There is specific reference (5.40) to AICC being used 'to help support the efficient financing of Terminal 5 and Terminal 2' and to its use by other UK regulators.

⁹ IATA paper at http://www.iata.org/policy/infrastructure/Pages/index.aspx

major new investment is a result of how regulated prices are calculated. It is an artificial construct of RAB based rules, and within the gift of regulators to modify. The airport would over time still only receive the costs of the investment but the timing would be different (earlier) and the profile of prices correspondingly altered to the benefit of financing the investment.

It is also important to consider airline opposition to pre-funding in the context of their expressed dislike of price spikes. This is understandable. Such spikes make the running of commercial businesses more difficult and can affect the relative profitability of routes and services. However, insistence that airports should only be remunerated when a facility opens aggravates price spikiness because the returns to which the airport is entitled will be rolled up and added to the amount that needs to be recovered when the facility opens. Airline opposition to pre-funding therefore magnifies the price spikes about which they also complain. Remuneration of AICC can assist in creating a smoother, more sustainable price path to the benefit of investor and airline decision making. This is in line with ICAO policies.¹⁰

Equalising between regulatory periods to smooth prices and improve cashflows

A third mitigation could involve the explicit movement of revenues between regulatory periods to smooth the impact on prices and to assist in the financeability of particularly lumpy investments where remuneration of AICC alone would be unlikely to generate sufficient cash flow relief. Where this is done between two periods it would mean that the revenue the airport receives would deviate from costs in each period, being above in one but below in another. However, the approach would be entirely consistent with prices reflecting costs over time, taking the periods together. As identified above, there is anyway an artificiality in short, five year periods in the context of infrastructure businesses which need to plan and invest over much longer periods. Transferring revenues between periods enables regulators to retain the forecasting benefits of the shorter period while paying heed to the impact of developments over a longer time period.

This mechanism, already precedented from 1996, was used by the UK CAA in relation to the development of Terminal 5 which involved the construction of a terminal for some 30m passengers. At a cost of some £5 billion the investment programme of which it was part involved a more than doubling of Heathrow's RAB. 11 A significant price uplift was inevitable given the scale of the capital addition, the prior price declines as outdated assets were sweated and its role as replacement for existing facilities. In light of its modelling the CAA decided to bring forward into Q4 (2003-8) some £300 m of revenues that would otherwise have fallen into the next regulatory period (Q5) after the facilities opened. 12 This degree of pre-funding was motivated particularly by the perceived need to establish a credible price profile. The CAA was concerned that storing more of the price increase to the next price control period would raise questions for investors as to whether such a large price increase would in the event be permitted, given the inevitable strong airline opposition. This bringing forward of revenues was rebated to airlines in Q5 on an NPV neutral basis (using the airport's WACC as the discount factor). 13 As a result, airline customers were held neutral taking the two control periods together but price increases were somewhat smoothed (though still steep) and

 $^{^{10}}$ ICAO, Doc 9082, ICAO's Policies on Charges for Airports and Air Navigation Services, 2012.

¹¹ CAA, Economic Regulation of BAA London Airports (Heathrow, Gatwick and Stansted) 2003-2008 CAA Decision, February 2003, para 4.25

¹² Ibid, para 4.11

¹³ CAA, Economic Regulation of Heathrow and Gatwick Airports 2008-13, CAA Decision, March 2008

investors were assured of the regulator's intentions.¹⁴ In justifying its approach to revenue advancement the CAA related it clearly to the economics of airport operations: 'For large capacity additions it promotes the efficient, economic operation of airports and it is in the interests of users to allow prices to adjust such that prices are relatively higher prior to the capacity coming on stream (when there is excess demand and congestion) and relatively lower when it is completed (when there is less excess demand).¹⁵

The CAA's adoption of between period revenue profiling meant that all three of the adjustments to the RAB methodology described above were used in Q4 and Q5 at Heathrow. Prices in the prior period were set in the context of their likely development in the succeeding period, the airport earned a return on AICC and, given the scale of the investment, an inter- period adjustment was also made. This represented a pragmatic reaction to the scale of the issue the CAA confronted. A similarly pragmatic approach looks likely to inform its approach to the development of a third Heathrow runway, with the CAA recently suggesting that rather than focussing on precise mechanics it would be best to think in terms of profiling regulatory depreciation 'to help ensure an appropriate price path' and also that, given its duty towards consumers, 'airlines will need to accept that our assessment of cost efficiency and the consumer interest may not always align with a cost profile that produces the lowest possible charges, since developing passenger facilities of an appropriate quality, and ensuring a resilient airport are also important objectives for consumers'.¹⁶

It is perhaps worth reflecting on another feature of the development of T5. The terminal was designed for the use of one airline (BA) but was paid for by all, including the (temporary) impacts of the pre-funding. There was, naturally, opposition from other airlines to paying for a facility they would not use but their doing so was in line with normal practice whereby the cost of such facilities is spread among the user base generally. Moreover, benefits cannot be defined as narrowly as use of the terminal itself. Redevelopment of a congested airport also benefits those in other facilities by reducing overcrowding to the benefit of passengers and enabling, through better airfield facilities and layout, greater operational efficiencies from which all can benefit through reduced delays. In the T5 case the development also created the space to permit redevelopments elsewhere that in time benefitted other airlines more directly.

The impact of fast growth

The regulatory mechanisms described above have all been used in the UK, with pre-funding also a feature of regulation in Germany, Latvia, Switzerland, France and Ireland (according to a recent study for the European Commission conducted by consultants Steer Davies Gleave).¹⁷ These are all relatively mature aviation economies. The question that BIAL have asked me to address is what difference the faster growth in India makes to my analysis. My view is that in principle it makes it more urgent to consider how RAB regulation should be adjusted. This is because

¹⁴ In then event price increases in Q5 were greater than envisaged at the time of the Q4 price decision because of the intervening 'liquids' security crisis in 2006 and the resulting need in the UK and elsewhere significantly to enhance security screening processes with resulting cost implications.

¹⁵ CAA, Economic Regulation of BAA London Airports (Heathrow, Gatwick and Stansted) 2003-2008 CAA Decision, February 2003, para 4.19

¹⁶ CAA, Consultation on core elements of the regulatory framework to support capacity expansion at Heathrow, June 2017; CAA, Economic regulation of capacity expansion at Heathrow: policy update and conclusion, April 2018

¹⁷ European Commission, Support study to the Ex-post evaluation of Directive 2009/12/EC on Airport Charges, December 2017, Table 6.4. The position in some other EU member States is less clear-cut. Many had 'no specific rules on pre-financing' but 'sometimes followed' the ICAO guidelines (which of course permit it subject to safeguards).

- -faster growth means that 'lumpy' investments are likely to be more frequent as demand outstrips supply
- -while in the pre- investment period fast traffic growth is likely to have acted to depress prices more speedily and, depending on the pattern of regulatory depreciation, more deeply than it might in more mature economies
- -as a result, the congestion premium available to airlines in the fares charged to passengers could quickly become significant and itself incentivise recipient airlines to oppose or delay capacity expansion, to the detriment of passengers and the economy

In these circumstances, regulators need to weigh up how best to facilitate and incentivise the necessary investment. The level of returns available and other parts of the regulatory settlement will be important as well as the availability of cash flow. Fast growth accelerates the need for lumpy investments but it may also allow new capacity to be filled up more quickly than otherwise.

Regulators have to strike a balance. However, the interesting point about the three adjustments considered above is that they do not involve any extra cost for airlines but rather a re-profiling of the same costs over time to create a pricing profile more adapted to the sustainable development of aviation at the airport and which better enables the airport to finance the necessary investment by reducing the risk of cash flow impediments to the prompt implementation of investment plans that will benefit passengers and the wider economy

It is also worth reflecting that the impact of fast traffic growth on investment risk also needs to be considered carefully. While fast traffic growth offers the prospect of filling up new facilities more quickly than in more mature environments there may well be greater forecasting risk, with the scope for variance around high growth rates potentially greater than in more mature environments. This may in part be a matter to be reflected in the WACC but there could also be a case for mitigating this risk through a mechanism which allowed, for example, under-recoveries against a projected growth profile to be rolled forward to be recovered in future rather than lost.

Conclusion and relevance to KIA

The analysis set out in this paper suggests that regulators should consider carefully the impacts of lumpy investments on airport cashflows and the profile of prices to reduce the risk of investments being delayed (to the detriment of the service offered to passengers) and to create a smoother more sustainable path of prices. There are a number of well-precedented adjustments to the core RAB methodology available to regulators. Their impact is to bring forward revenues into the period of heavy investment spend, thereby easing the airport's cash flows and the resulting access to third party capital as well as raising prices at the point where it is most economically efficient to do so (that is, when the airport is congested). The net result of these adjustments is to favour neither airport or airlines but rather to change the profile of revenues. Prices continue to reflect costs over time, taking control periods together, in line with the general cost based approach.

On the basis of the figures that BIAL have provided to me, which I understand have also gone to AERA, there looks to be a strong case for advancing revenues from future CPs into CP2 when the airport will be investing most heavily. In the absence of such advancement the airport will experience severely negative cash flows at the point of maximum investment spend and there will be an economically counterintuitive pricing path, with prices declining during CP2 (as the airport becomes more congested) and rising very sharply indeed in CP3 as capacity becomes more plentiful. These price increases are driven by increased depreciation as the investment comes on stream and the operating costs and returns associated with massively increased capacity in advance of

passengers filling it up. This is in the nature of the 'lumpy' investment cycle set out in this paper. The resulting price spikiness has been aggravated by the true up in CP2 for the above forecast revenues earned by the airport in CP1, but even allowing for this distortion the price path would be one of decline followed by steep rise.

The resulting situation calls, in my view, for a pragmatic regulatory response which allows KIA a revenue recovery which is more consistent with the economic fundamentals and has precedent elsewhere.